REPUBLIC OF THE PHILIPPINES
BANGSAMORO AUTONOMOUS REGION IN MUSLIM MINDANAO
CITY GOVERNMENT OF COTABATO



COTABATO CITY COMPREHENSIVE LAND USE PLAN

C.Y. 2020-2029

MEMORANDUM CIRCULAR NO. 0001 s. 2025

To: **ALL CONCERNED**

Subject: **RATIFICATION OF THE COMPREHENSIVE LAND USE PLAN OF COTABATO CITY, 2020-2029**

Date: **January 20, 2025 / Rajab 20, 1446 AH**

WHEREAS, under the *Bangsamoro Autonomy Act (BAA) No. 13* or the "*Bangsamoro Administrative Code*, the Ministry of Human Settlements and Development (MHSD) is mandated to act as the primary agency for the management of housing, human settlements, and urban development in the Bangsamoro Autonomous Region. It shall be the main planning and policy-making, regulatory, program coordination, and performance monitoring entity for all housing, human settlements, and urban development concerns. Pursuant thereto, it shall ratify the Comprehensive Land Use Plans (CLUPs) of Independent Component Cities in the BARMM.

WHEREAS, with the support of the City Planning and Development Coordinator Office (CPDC) of Cotabato City, the Local Government Unit (LGU) has successfully updated its Comprehensive Land Use Plan (CLUP) for 2020-2029.

WHEREAS, this updated plan embodies the LGU's development vision, to wit:

> **"A smart city with God-fearing, enlightened, and diverse people living in a peaceful, secure, and resilient community with a progressive economy and good governance."**

WHEREAS, this vision provides the framework for the city's spatial and development strategies and serves as a guide for Cotabato City and its surrounding municipalities in formulating their respective land use plans in alignment with regional and national development goals.

WHEREAS, on January 31, 2024, the Regional Land Use Committee (RLUC)-BARMM recommended the adoption of the city's Comprehensive Land Use Plan (CLUP) through RLUCOM Resolution No. 01, series of 2024 entitled:

> **"Endorsing the enhanced Comprehensive Land Use Plan (CLUP) and Zoning Ordinance (ZO) CY 2020-2029 of Cotabato City for adoption and enactment by its Sanggunian Panlungsod"**

WHEREAS, on July 16, 2024, the Sangguniang Panlungsod of the City of Cotabato adopted the plan through Resolution No. 7391, Series of 2024, entitled:

BY: JOHNAICA
Date: JAN 20 2025
Time: 4:30 PM
RELEASED

"A resolution adopting and approving the Comprehensive Land Use Plan (2020-2029) of Cotabato City."

WHEREAS, the Environmental, Land Use, and Urban Development Division (ELUUD) of the Ministry has thoroughly reviewed the submitted plan documents and confirmed their compliance with national standards, guidelines, and required documentation.

WHEREAS, given the foregoing, the **Comprehensive Land Use Plan of Cotabato City for 2020-2029** is hereby **RATIFIED**.

Granted this ____ day of _____ 2025 at the Ministry of Human Settlements and Development, Cotabato City.

ATTY. HAMID AMINODDIN D. BARRA
Minister

REPUBLIC OF THE PHILIPPINES
BANGSAMORO AUTONOMOUS REGION IN MUSLIM MINDANAO
CITY GOVERNMENT OF COTABATO

COTABATO CITY
COMPREHENSIVE LAND USE PLAN C.Y. 2020-2029

Brief Profile of Cotabato City

Republic of the Philippines
Bangsamoro Autonomous Region in Muslim Mindanao
CITY GOVERNMENT OF COTABATO
OFFICE OF THE CITY MAYOR

MESSAGE

Cotabato City has steadily built upon its glorious past to usher in a present that is a source of pride and optimism for our people and an illustrative example for our Maguindanao del Norte neighbors. However, we are not a nation that rests on its laurels. We aspire for the stars. We progress forward. We ascend to greater altitudes. We gain levels.

To increase the level of Cotabato City, we must commence with the end in mind. We must envisage a future in which our city is habitable, resilient, and sustainable. We seek a city that is both culturally and economically vibrant, where governance is a shared responsibility and people are innovative and creative. We have big dreams, but we also stay grounded. We know that our journey as Cotabateños towards the future we want has to take into account changes in the outside world. Also, common sense says that if we want to level up, we should think about our strengths and flaws as a community and as a local government unit. We need to evaluate our skills and resources, especially our land and how it is being used now and how it will be used in the future. This will help us figure out the best way to grow Cotabato City.

I am, therefore, most pleased that we have already crafted the 2020-2030 Cotabato City Comprehensive Land Use Plan (CLUP), which is a product of a series of consultations with various sectors. This document shows us how to get from where we are now to where we want to be. It helps us reach our goal and mission. It is a guide that makes sure our city's limited physical resources are used effectively, efficiently, and productively. It also makes sure that our efforts to level up won't make it harder for Cotabateños to meet their needs and reach their full potential in the future.

Also, the CLUP sets the rules that need to be followed to make sure that our city's growth doesn't hurt the environment or the most vulnerable people in it. Now, let's work together to make this plan come true PARA SA LAHAT!

MOHAMMAD ALI "BRUCE" DELA CRUZ MATABALAO
City Mayor Para sa Lahat

People's Palace, Cotabato City *Office Telefax: (064) 421-8969/552-0691*

Republic of the Philippines
Bangsamoro Autonomous Region in Muslim Mindanao
Local Government Unit of Cotabato City
OFFICE OF THE CITY VICE - MAYOR
Cotabato City
ocvmkutawato@gmail.com/ (064) 557-1244

MESSAGE

May 15, 2023



The Local Government Code of 1991 mandates every local government unit to adopt Comprehensive Land Use Plan which will serve as a blueprint in carving its physical development vis-a-vis its land resources.

Cotabato City has again made a great leap towards bringing forth an inclusive, balanced and sustainable development by formulating the Comprehensive Land Use Plan for the city which is anchored on national strategies priorities and development thrusts and the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) 12-Point Development Agenda taking into consideration the maximum and sustainable use of the city's land resources, food security, socio-economic and infrastructure development, environmental protection, disaster risk reduction management, the city's unique cultural heritage, and most especially the welfare of its populace, striking a balance between appropriate land use and development.

The Comprehensive Land Use Plan of Cotabato City will serve as our guide in the years to come as we trudge towards greater heights of progress and promote the welfare of our populace.

We assure the people of Cotabato City of our burning desire and commitment to deliver excellent, effective, accountable, and inclusive services to our people.

Very truly yours in public service,

JOHARI C. ABU
City Vice Mayor
Cotabato City

FOREWORD

The Local Government Code of 1991 otherwise known as the Republic Act No. 7160 has established two principles that serve as the basis for land use planning for local governments. The policy embodied the “genuine and meaningful local autonomy” to the Local Government Unit to enable them to attain the fullest development as a self-reliant community with the utilization of limited resources as they become more productive partners in nation building.

Furthermore, it is affirmed in Section 1 of Executive Order No. 72 series of 1993 providing the mandate for Local Government Unit to prepare/update their respective Comprehensive Land Use Plan (CLUP), in conformity with the land use planning and zoning standards and guidelines prescribed by the Department of Human Settlements and Urban Development (DHSUD) pursuant to national policies.

This Comprehensive Land Use Plan was initiated and undertaken jointly by the Land Use Technical Working Group of Cotabato City under the leadership of Hon. Atty Frances Cynthia J. Guiani-Sayadi in collaboration with the DHSUD, Regional Office XII.

The CLUP of Cotabato City becomes the official document adopted by the local government as a policy prime-mover that will serve as a guidepost and blueprint in addressing pressing issues and concerns as well as physical and land use development of the City as envisioned by the stakeholders in the coming years. It is comprehensive in the sense that it embraces the entire territorial jurisdiction of the city as it addresses multi-faceted concerns of various sectors. It is comprehensive as it translates the development goals, objectives, and policies into a spatial plan indicating the proper allocation of land, water, and other natural resources taking into account sustainable development without risk to the environment. This document is the principal implementing tool is the Zoning Ordinance.

This CLUP has taken into account Climate and Disaster Risk Assessment so much so that it has restrategize its Spatial Plan departing from the plan of the old CLUP.

ACKNOWLEDGEMENT

The City Government of Cotabato, thru the effort of City Planning and Development Office would like to express its heartfelt appreciation for the invaluable support and cooperation of the following:

- Department of Human Settlements and Urban Development
- Philippine Statistics Authority
- City Government Departments/Offices
- CLUP Technical Working Group

Likewise, the City Government of Cotabato would like to extend its profound appreciation and gratitude to all the stakeholders who in one way or another contributed to the completion of this vital document.

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LIST OF ACRONYMS

ABC	-	Association of Barangay Chairmen
A & D	-	Alienable and Disposable Land
ARC	-	Agrarian Reform Communities
BJMP	-	Bureau of Jail Management & Penology
BFP	-	Bureau of Fire & Protection
ARC	-	Agrarian Reform Communities
CAIAS	-	City Accounting & Internal Audit Services
CAO	-	City Agriculture Office
CBD	-	Central Business District
CASS	-	City Assessor's Office
CBO	-	City Budget Office
CCTV	-	Closed Circuit Television Cameras
CDP	-	Comprehensive Development Plan
CDRRMO	-	City Disaster Risk Reduction & Management Office
CDRA	-	Climate and Disaster Risk Assessment
CEO	-	City Engineering Office
CENRO	-	City Environment and Natural Resources Office
CVO	-	City Veterinary Office
CHO	-	City Health Office
CHB	-	Concrete Hollow Blocks
CICL	-	Children in Conflict with the Law
CLUP	-	Comprehensive Land Use Plan
CLO	-	City Legal Office
COLIGHT	-	Cotabato Light & Power Company
CPDO	-	City Planning & Development Office
CSWDO	-	City Social Welfare & Development Office
CSO	-	Civil Society Organization
CTO	-	City Treasury Office
CRMC	-	Cotabato Regional Medical Center
DENR	-	Department of Environment & Natural Resources
DepEd	-	Department of Education
DHSUD	-	Department of Human Settlements and Urban Develoment
DILG	-	Department of Interior & Local Government
DOE	-	Department of Energy
DOLE	-	Department of Labor & Employment
DOH	-	Department of Health
DPWH	-	Department of Public Works & Highway
DTI	-	Department of Trade & Industry
ECC	-	Environmental Compliance Certificate
ECCD	-	Early Childhood Care and Development
EIA	-	Environmental Impact Assessment
FMR	-	Farm to Market Road
GSO	-	General Services Office
HOA	-	Homeowners Association
HLURB	-	Housing & Land Use Regulatory Board
HRMDO	-	Human Resource Management Office
HUC	-	Highly Urbanized City
ICC	-	Independent Component City
IPRA	-	Indigenous People's Right Act
IP	-	Indigenous People
DA	-	Department of Agriculture
LDC	-	Local Development Council
LGC	-	Local Government Code
LGU	-	Local Government Unit
LTFRB	-	Land Transportation Franchising & Regulatory Board
LTO	-	Land Transportation Office
MCWD	-	Metro Cotabato Water District
MRF	-	Material Recovery Facility
NAMRIA	-	National Mapping and Resource Information Authority
NAPOCOR	-	National Power Corporation
NCIP	-	National Commission on Indigenous People
NEDA	-	National Economic & Development Authority

LIST OF ACRONYMS

NGCP	-	National Grid Corporation
NGO	-	Non-Governmental Organization
NTC	-	National Telecommunication Commission
NHA	-	National Housing Authority
OCM	-	Office of the City Mayor
PESO	-	Public Employment Services Office
PIA	-	Philippine Information Agency
PICE	-	Philippine Institute of Civil Engineers
PSA	-	Philippine Statistics Authority
PNP	-	Philippine National Police
PO	-	People's Organization
SAFDZ	-	Strategic Agriculture and Fishery Zone
SP	-	Sangguniang Panlungsod
PSCB	-	Philippine Statistical Coordination Board
VAWC	-	Violence Against Women Council
UAP	-	United Architects of the Philippines

CHAPTER I - PROFILE OF COTABATO CITY (GENERAL INFORMATION)

1.1 HISTORICAL BACKGROUND

COTABATO CITY is a "city of rivers and creeks," that is sui generis, distinct from other cities. It is at the delta between two rivers, Tamontaka and Rio Grande de Mindanao, a major commercial artery in the heartland of Mindanao. The city is crisscrossed by creeks and rivers which are the source of both agricultural/industrial and domestic water requirements for some rural barangays. Two areas, the P.C. Hill and Timako Hill are considered elevated areas.

The term *Mindanao* or *Maguindanao* was originally given to the town of Cotabato and the adjacent territory. "Mindanao" which means inundatedor that which has been inundated, is derived from the word *danao*, meaning inundation of a river, lake or sea.

Cotabato, on the other hand, derived its name from a stone fort called *Kuta watu*, which was erected by the Muslims on a hill towering above the town. The city's history is officially reckoned to have started way back to the 14th century when a Malaccan prince by the name of Shariff Muhammad Kabunsuan successfully propagated Islam and established the Sultanate of Maguindanao.

However, the earliest written reference to the area may be one by the Chinese. Around 1406, an emissary of the ruler of Maguindanao paid tribute to the Ming Emperor Yung Lo (Chu Ti).

The process of Islamization, which gave the Mindanao settlements a greater shared identity (and which promoted commercial and other ties with Asian neighbors), is considered to have begun around 1460 with the coming of Sharif Awliya from Sumatra and Sharif Maraja from Malacca. The seeds of Islam they planted were nurtured by Sharif Kabunsuan who came from Johore around 1515. He became the first sultan of Mindanao.

Spain's attempt to colonize the area started in 1596, when Captain Rodriguez de Figueroa landed with 1,714 men at the mouth of the Rio Grande de Mindanao. When Figueroa was slain, Spain sent reinforcement, and an off-and-on war lasting until 1899 ensued. Wars between Spain and the trading partners of Maguindanao (like the Portuguese, English, Dutch and Muslims in the Moluccas and Borneo) further disrupted commerce. Spain tried to monopolize the centuries-old commerce with China through the galleon trade from 1593 to 1815. As a result, three centuries of hostilities with Spain stunted development.

Up to the middle of the 19th century, the Maguindanao Muslims were independent people and recognized no authority except those of the datus and sultans. In June 1851, the Spanish forces again visited Cotabato. They occupied Polloc, and converted it into a naval politico-military district. The religious ministration of the town was under the Recollects. With the exception of Parang, the only town inhabited by Christians in 1913 was Cotabato. Upon the establishment of the American-sponsored civil government in 1914, the Christian Filipinos from Luzon and the Visayas migrated to Mindanao.

Under the Americans, Cotabato forged ahead economically. The first decade of the 20th century saw the advent of the telegraph and telephone, building of public schools, a market and a covered dock, and surveys of townsites and soil types.

The second decade saw the first of thousands of families of migrants streamed through the town of Cotabato, on their way to homesteads and agricultural colonies that the national government was then promoting in Mindanao. Transient they were, they increased Cotabato's volume of business. Some of them opted to stay.

The third decade highlighted the construction of roads linking Cotabato with emerging growth centers of Mindanao: Iligan and Davao, through Davao, Bukidnon and Cagayan de Oro. In 1939, the Oblates of Mary Immaculate arrived, bringing among other benefits, education and health care.

The period before the Second World War was one of prosperity despite the lack of manufacturing industries. Rich in natural resources and strategically located, Cotabato drew sustenance from its strong commercial and agricultural bases. More signs of modernization were visible: electricity, steamships, public transportation, telephones, newspapers, wharves, the Provincial Capitol, and the Municipal Building.

The Second World War wrought heavy damage to Cotabato. On April 29, 1942, before the Japanese forces invaded the town after heavy naval bombardment, the retreating Filipino soldiers burned the houses so as to deny shelter to the enemy. Cotabato became a ghost town. Consequently, Lt. Col. Salipada K. Pendatun, Commander of the 117th Infantry Regiment of the Cotabato-Bukidnon area, led a relentless and highly spirited resistance movement against the Japanese. They later aided the liberation of Cotabato on April 17, 1945.

Cotabato, then the capital of the Empire Province of Cotabato (an enormously wealthy territory of 24,915 sq. kms), had to rise from the ashes of war fast. But there were more ashes to come: on February 5, 1945, fire engulfed its entire commercial business district.

The following years, 1949 to 1955, were devoted to reconstruction, rehabilitation, initial development, and the laying of the groundwork for future expansion.

The Municipality of Cotabato, originally the capital of the old Cotabato Province, was made into a first-class municipality by virtue of Executive Order No. 466 on July 1, 1950. Nine years later, on June 20, 1959, Cotabato became a chartered city pursuant to Republic Act No. 2364.

Political Development

As early as 1475, a settlement near the mouth of Rio Grande de Mindanao was already a thriving trade center. The settlement, the forerunner of Cotabato City, was the strategic gateway to the resource-rich hinterlands of economic power, the center where cultures mixed and mutually enriched each other such that it was coveted, and more often violently. Sultan Kudarat reigned during this time. In the intervening years, growth was in trickles. This was largely due to a stifling combination of constant warfare and nature's restlessness in this flood and earthquake prone delta. In 1871, a strong earthquake visited the area and caused the leveling of almost all structures.

In the nineteenth century when Sultan Makakua ruled, roads and wharves were constructed that gave rise to the birth of modern day Cotabato.

External conflict too, claimed a costly toll starting in the latter half of the 16th Century, when Spain attempted to colonize Mindanao and its people. In 1913, migrants from Visayas and Luzon bound for agricultural colonies in Mindanao streamed to their intended destinations. In 1924, the nation's Chinese community, recognizing the needs and potentials of the town of Cotabato with an area of 1,680 hectares had a population of 5,870 and over 200 buildings made of permanent materials and established their own community here.

In 1945, with the withdrawal of the American forces from Philippine soil, the vast untapped resources of Mindanao became the focal attention of the national government in the face of gigantic economic challenges as the new nation emerged. Under the late President Manuel Roxas, an aggressive propaganda program was designed to attract settlers to Mindanao under the slogan "Mindanao is the land of Promise". Many landless families in the Visayas and Luzon responded to the call. The influx of migrants from Luzon and Visayas islands who intermingled with the Christians and Muslims in the area (together they now comprise the present Cotabateños) was not without accompanying social and cultural problems for it was only natural that the growing society and diverse cultural heritage, customs and traditions and developed some tensions. But on the whole, it has opened up previously uninhabited and rich hinterlands.

After the Second World War, the town started rebuilding from the ravages of war. No sooner has it felt the initial gains from its laborious efforts of development when another tragic setback was encountered on February 5, 1949 when the entire commercial district went up in flames. The years in the 1940s were marked with increased rates in criminality, especially burglaries. The post-war years proved to be difficult.

From 1945 to 1950, revenues generated totaled to only P 217,812.00. However, it improved the following year, yielding P247,160.36. Before the end of the decade, Congressman SalipadaPendatun felt that the town could now stand on its own and progressive enough to merit the status as a city, and accordingly filed a bill in Congress for the change in status. On June 20, 1959, President Carlos P. Garcia signed in law – RepublicAct 2364 which made Cotabato a chartered city. Even then, there were those who doubted whether the infant city continue raking in enough income to support its local government and its people. The challenges were met when in the ensuing year, Cotabato City realized an income of some P120 million.

Historically, it could be said that settlement in Cotabato City became a pronounced phenomenon some five hundred years ago when Dipatwan Qudarat reigned. During this time, Cotabato City was the seat of power and it developed as the capital town of Mindanao in the 17th Century.

Generally, the city exhibited higher levels of growth both in terms of population and income as compared to the rural areas. Urbanization rate in Cotabato City were among the highest in the country, aside from Iligan City, as migrants from the countryside moved into the area for better employment opportunities. This has, as a result, added to the problems on housing and employment, and at the same time scaled down the rural area's prospect for more production. This movement of people to the city is partly explained by the fact that urban residents have higher family income, the city has the center or urban life offers services and amenities which the rural folks hardly have access to. To check this widening gap between the city core and rural areas would require that planning for the next couple of years would have to focus more on rural development by providing basic social services and locating specialized services in identified nodal points for development.

Cotabato City remains as the biggest and fastest growing agglomeration in Central Mindanao. It continues to be the main "suction pump" of the region, pulling in many skilled and ambitious migrants who are pushed by poverty and low employment from the rural areas and secondary urban centers.

Internally, Cotabato City continues to become quite overcrowded in relation to the parts of the region; its density had grown over that of the surrounding ring of administrative units. But the city's population is gravitating outwards, indicating a "nodal" core and fast developing suburbs. This outward population shift is generally the result of mixed and obsolescent land uses, overpopulation, traffic congestion and other related factors in the urban core.
Cotabato City was then the regional government center for Region XII. Today, it is the seat the Autonomous Region in Muslim Mindanao. Its population has grown tremendously, largely brought about by migrants drawn to the city to satisfy their needs for education and other services as well as economic opportunities.

On September 19, 2001 Executive Order 36 or known as the Reorganization of Administrative Regions in Mindanao was issued by the President Gloria Macapagal Arroyo; this placed the city as part of the newly reconstituted Region 12 along with five (5) other cities namely: Cotabato City, General Santos City, Kidapawan City, Koronadal City and Tacurong City, four (4) provinces, namely: North Cotabato, Sarangani, South Cotabato and Sultan Kudarat; and forty-five (45) municipalities.
On March 30, 2004, Koronadal City was designated as the new Regional Center and seat of SOCCCSKSARGEN, pursuant to Executive Order 304, series of 2004.

For the past years, Local Chief Executives of the City held their offices at the old City Hall but with the political resolve of Mayor Muslimin G. Sema to transfer the seat of power to a more auspicious and comfortable location, he facilitated the construction of the present City Hall (*now popularly known as Peoples' Palace* at a 4-hectare City Government property at Malagapas, Barangay Rosary Heights 10. It was June 20, 2006 during the celebration of the 47thAraw ng Kutabato that it was inaugurated.

Japal Juanday Guiani, Jr. was elected Mayor in May 2010. The entry of Guiani administration into the leadership arena in Cotabato City in 2010 saw a brighter future and a new development height for the long static city of the South. In his first year in office, Mayor Guiani had to face a gargantuan task of overturning the extremely serious problem of peace and order in order to introduce socio-economic development programs. At that time, Cotabato City was tagged as "kidnapping and bombing" capital of the South. For decades, the city had been plagued by all sorts of problems – political conflicts and vendetta, kidnappings, killings, *rido* or family feuds, and many other forms of criminalities.

It should be noted that Cotabato City, now belongs to BARMM, is surrounded by municipalities of the province of Maguindanao that belonged to the then Autonomous Region in Muslim Mindanao, now BARMM or Bangsamoro Autonomous Region in Muslim Mindanao, known as stronghold of the revolutionary armed groups such as Moro National Liberation Front and Moro Islamic Liberation Front, and other rebel groups, lawless elements, private armed groups, kidnap for ransom groups, and several organized and unorganized lawless elements.

Mayor Guiani pursued vigorously drastic reforms to restore peace and economic development of the city. As initial step, he organized the chambers of commerce and industry here, leaders of the non-government organizations (NGOs) and people's organizations (POs) church leaders and Muslim clerics in a joint effort to seek the assistance of the national government to help restore the peace and order. As a result, the 7th Marine Brigade Landing Team (MBLT-7) of the Philippine Marines was sent to Cotabato City. Through his initiative, the Task Force Kutawato was also organized.

From thereon, the peace and order situation in Cotabato City started to improve. Mayor Guiani slowly gained back the confidence of the businessmen/investors, most of whom transferred their business to other places.

Along with the peace and order programs, he also instituted effective administrative and financial management, enhanced taxation, and revenue generation that eventually elevated the city from a third class to “First Class” city in just a short period of time.

During his term, Mayor Guiani pushed for more infrastructure projects in the city. One notable project of Mayor Guiani was the construction of the modern and state of the art double “A” standard Halal Slaughterhouse and Hog Slaughterhouse. The halal slaughterhouse is the first and only mechanized halal slaughterhouse in the entire country.

It was also during his time that the Permanent Evacuation Center, the Women Crisis Center, Cotabato City Youth (Juvenile) Formation Home, Water Supply System Projects for the far-flung Barangays of Tamontaka 4 and 5, Farm to Market Roads, were constructed.

In 2013, Mayor Guiani pushed for the passage of the following Ordinances as measures to help protect the environment, as follows: an “Ordinance Strictly Prohibiting the Use, Selling and Distribution of Non-biodegradable Plastic as Secondary Packaging Material and Non-Biodegradable Styrofoam as Food and Beverage Containers”; an “Ordinance Institutionalizing Water, Sanitation and Hygiene in Day Care Centers” ; “Ordinance Strictly Prohibiting the Cutting and Destruction of Mangroves in the City of Cotabato”; “ Ordinance Prohibiting the Use of Modified Exhaust Pipes of Motorcycles”; “Ordinance Establishing Water Conservation Programs in Cotabato City.” .

Mayor Japal “Jojo” Guiani, Jr. died on September 22, 2016, barely three months in his third term. Following the law of succession, then City Vice Mayor Atty. Frances Cynthia Guiani-Sayadi assumed the mayoralty post after the death of Mayor Guiani. Mayor Guiani-Sayadi continued the vision of his late brother mayor and also instituted her own development plans and programs for Cotabato City.

Realizing the importance of peace and security and people’s discipline, Mayor Guiani-Sayadi conceptualized the implementation of the RONDA PATROL, a nightly patrol in every nook and corner of the city’s 37 barangays along with the police, military and barangay officials personally led by her. RONDA is also an acronym for Revitalized Operation and Neutralization of Addiction and Anomalies. It is one of the best practices of Mayor Guiani-Sayadi administration. Aside from the RONDA, Mayor Guiani-Sayadi also implemented “discipline hour” or curfew hours. Citing the tremendous success of the RONDA Patrol, as a very effective means of curbing or suppressing criminalities, the Philippine National Policedeclared Cotabato City the “Safest City” in Mindanao and the “Second Safest City” in the entire Philippines.

Owing to the influx of both local and foreign investors during the administration of Mayor Guiani-Sayadi because of the improved peace and order, Cotabato City became one of the fast-growing economies in the South. From an almost isolated city, Cotabato City also became a tourist destination. In 2015, the city was declared by the Department of Tourism to have the second highest tourist’s arrivals among the cities in SOCSSARGEN Region (Region 12). This status has been maintained until this year.

When the Guiani Administration assumed leadership in 2010, the city had only a meager annual budget of P300-million. Every year, the city's budget grew by an average of 12.5% annually. In the year 2019, Cotabato City has reached a P1-billion mark.

As a result of the increased income, the city government was able to implement dozens of primary infrastructure projects such as road concreting, road improvement, drainage system concreting and other vital infrastructures. Malls, department stores, food chains, restaurants, gasoline stations and other new establishments mushroomed during Guiani-Sayadi administration.

Realizing the need to accommodate tremendous tasks due to the city's fast-growing economy and the influx of both local and foreign investors, the swelling of trade, commerce, business and employment transactions that require faster and efficient service, Mayor Guiani-Sayadi thought of modernizing the operation of the city government through computerization.

Now, the operation of some of the city's Departments and Offices are fully computerized. The computerization also includes the IPAAD or the Integrated Public Advisory and Analysis Display Solution. The IPAAD project is bundled with license plate recognition cameras installed along strategic streets and roads that can detect/sense various physical features of all vehicles passing bye, thereby enhancing security protection of the city.

Mayor Guiani-Sayadi embarked on very ambitious projects of proposing an international airport and seaport for Cotabato City in partnership with Chinese Government.

The multi-billion-dollar project will be constructed under a Public-Private Partnership (PPP) scheme. The project will create at least 30 thousand jobs.

Mayor Guiani-Sayadi pushed for the establishment of Septage Management System facility in Cotabato City; and also passed an Ordinance regulating the installation of billboards, streamers and tarpaulin in the city as means of protecting environment. It was during her time that the Foreshore Management Plan and the Forest Land Use Plan were formulated.

Programs for the development of the children, youth and senior citizens were also strengthened. Multi-million Children Park and Senior Citizen Center building were constructed. The Guiani administration achieved for Cotabato City numerous national and local prestigious awards and citations.

The city is a recipient of the most coveted awards such as the "Seal of Good Housekeeping", "Seal of Good Local Governance", "Top 2 in Government Efficiency", "Most Competitive City", "Top Ten Most Business-Friendly", "Seal of Child-Friendly Local Governance", Best Tourism Organization", "Zero Maternal and Neonatal Tetanus Program", among others.

PREVIOUS AND PRESENT LOCAL CHIEF EXECUTIVES

From the time of its creation, reign of government changed from one hand to another. The first duly elected Mayor of Cotabato City was Datu Mando U. Sinsuat, Sr. who served for the following terms: 1947 to 1951 and from 1952 to November 16, 1967. His was the longest administration. He was defeated in his bid for reelection in 1967 by Teodoro V. Juliano who served as City Mayor from November 17, 1967 to February 28, 1980. Again, Mayor Teodoro V.

Juliano served again, Mayor Teodoro V. Juliano served from March 1, 1980 to March 5, 1984 and again from May 12, 1984 to March 19, 1986, the City's leadership changed hands with the election of Mayor Juan J. Ty. The youngest Local Chief Executive to take the reign of governance. So far to administer the city's local government unit was Ludovico D. Badoy. He first served as Officer-In-Charge from March 30, 1986 to December 2, 1987. Mr. Arthur P. Bueno and Dr. Lydia Mercado were likewise appointed as Officers-in-Charge after Badoy and served for one (1) month and three (3) months, respectively. Mayor Badoy was officially elected as City Mayor during the elections in May 1988 up to 1992. With the passage of the Local Government Code 7160 in 1991, his third term ended in 1998. The then Vice Mayor Virgilio L. Leyretana assumed office from Feb. 10, 1998 to June 30, 1998. In 1998 local elections, Muslimin G. Sema served from July 1, 1998 to March 7, 2001. Mayor Rodel M. Mañara served for three months from March 8, 2001 to June 30, 2001. Again, mayor Sema served for three terms from July 1, 2004 to 2010. Mayor Japal J. Guiani also served for three terms from July 1, 2010 to Sept 22, 2016. In Sept 23, 2016 - Jun 30, 2019 Atty.Frances Cynthia Guiani-Sayadi assumed as mayor by way of succession due to the death of mayor Japal Guiani. Mayor Sayadi was elected in the 2019 election and served from July 1, 2019 to June 30, 2022. All these elected/appointed officials had significantly contributed to the city's present state of development during their administration. In the recently concluded 2022 election, Mayor Mohammad Ali "Bruce" D. Matabalao won and assumed office from July 1, 2022 to present

Local Chief Executives		
NAME	**PERIOD OF ADMINISTRATION**	**WAY OF ASSUMPTION**
Alejandro Dorotheo	Aug. 21 1935	Elected
Jose S. Lim *(built Old City Hall)*	1941-1944)	Elected
Atty. Pacifico Gutierrez	1947	By virtue of EO 92, s. Of Aug. 18, 1947
Datu Mando U. Sinsuat	1947-1951, 1952-1959, 1959- Nov. 16, 1967	Elected
Teodoro V. Juliano	Mar 1, 1980-Mar 5, 1984	Elected
Juan J. Ty	Feb. 3, 1975- Feb. 28, 1980	Elected
Teodoro V. Juliano	Mar. 1, 1980- Mar. 5,1984	Elected
Juan J. Ty	May 12, 1984- March 29, 1986	Appointed
Ludovico D. Badoy	March 20, 1986- Dec 2, 1987	Appointed
Arthur P. Bueno	Dec. 3, 1987-Jan. 2, 1988	Appointed
Dra. Lydia Mercado	Jan. 3, 1988-Apr. 1988	Appointed
Ludovico D. Badoy	May 1988-Jun 30, 1992/July 1, 1992-July 30, 1995/July 1, 1995-Feb. 9, 1998	Elected
Virgilio L. Leyretana	Feb 10, 1998-Jun 30, 1998	Assumed Office
Muslimin G. Sema	July 1, 1998- Mar 7, 2001	Elected
Rodel M. Mañara	Mar. 8, 2001-Jun. 30, 2001	Elected
Muslimin G. Sema	July 1, 2001-Jun. 2004/July 1, 2004-June 30, 2007/July 1, 2007-June 30, 2010	Elected
Japal J. Guiani, Jr.	July 1, 2010-June 30, 2013/July 1, 2013-June 30, 2016/July 1, 2016-Sept 22, 2016	Elected
Atty. Frances Cynthia Guiani-Sayadi	Sept 23, 2016- Jun 30, 2019	By Succession
Atty. Frances Cynthia Guiani-Sayadi	Sayadi- July 1, 2019-June 30, 2022	Elected
Mohammad Ali C. Matabalao	July 1, 2022 – present	Elected

Last May 2022 elections, Mayor Mohammad Ali C. Matabalao was elected into office. The focus of his administration on the first 100 days is to provide free hospitalization assistance for all. Fifty million pesos has been allocated for program. Complementing the KBL program of Vice Mayor Butch Abu, 10 million pesos worth of burial assistance is to be allocated by the city government. The drainage master plan has been set to be formulated. In fact, the construction of drainages in various barangays have begun. The mayor shared that educational scholarship program for all 37 barangays shall be launched.

With the support of Sangguniang Panlungsod, the services experienced by senior citizens, PWDs, at solo parents shall be enhanced:

A. house-to-house delivery of the social pension of senior citizens No more standing ques at city government during pay-out.
B. The Disabled Person Affairs Committee will work for the welfare of the PWDs.
C. Whole Implementation of the provisions under Expanded Solo Parents Act.

The administration has planned to facilitate the rehabilitation and reopening of Mega market. Moreover, there will be additonal police visibility and installation ng CCTV cameras on all corners at strategic areas of the city. Existing Traffic Code is to be amended and installation ng traffic lights shall be researched. The market code shall be revised in order to cater the present needs of the city. A Database System shall be created for profiling each resident of barangays of Cotabato City to speed up the assessment when they seek the help of the City Government.

Inter-faith dialogue shall be institutionalized. It shall be ensured that the council of leaders that will be assembled consists of different sectors and religious organizations. Creation of the Cotabato City Sports Council and provision of appropriate funding support to revitalize sports in Cotabato City. Revitalize Cotabato City Tourism Council and enactment of tourism code.

The curfew hours will be suspended. Instead, implementation of discipline hours will be continued for underaged constituents. Continuous support will be given to business sectors.

Numerous projects from the BARMM government have entered. Multiple key ministries have visited and expressed their intention of collaborating on various big-ticket projects. Recently, the city government has granted housing to certain barangays through the funding support of the Ministry of Human Settlements and Development. Many streetlights have been installed on public roads. The People's Palace has undergone renovation and repainting.

Set of Present Elected Officials (2022-2025)

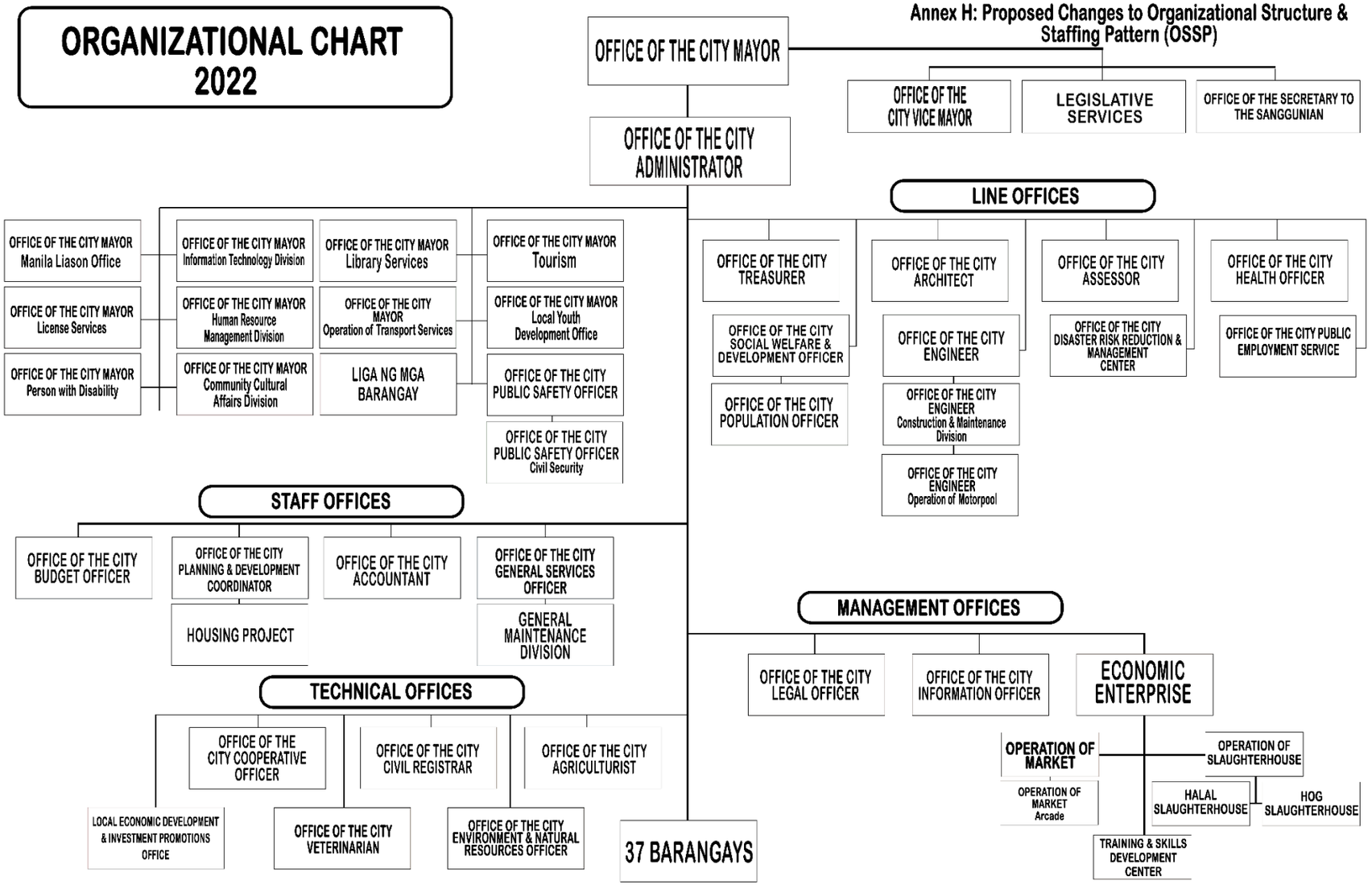
- Local Chief Executive - Hon. Mohammad Ali C. Matabalao - City Mayor
- Legislative Council:

Hon. Johari C. Abu - City Vice Mayor, Chairman SP
Hon. Florante L. Formento - City Councilor
Hon. Hunyn C. Abu - City Councilor
Hon. Kusin S. Taha - City Councilor
Hon. Japal G. Guiani III - City Councilor
Hon. Abdulrakim O. Usman - City Councilor
Hon. Guiadzuri A. Midtimbang II - City Councilor
Hon. Henjie M. Ali - City Councilor
Hon Morauf A. Pasawiran - City Councilor
Hon. Abdillah J. Lim - City Councilor
Hon. Danda N. Juanday - City Councilor
Hon. Anthony P. Ross - City Councilor, ABC President
Hon. Amy Lynn M. Dolores - City Councilor, IP Representative
Hon. Talib M. Abo III - City Councilor, SK Representative

- **Barangay Officials: (2023 – 2025)**

NAME OF BARANGAY	BARANGAY CAPTAIN	NAME OF BARANGAY	BARANGAY CAPTAIN
1. Poblacion Mother	Hon. Nasser A. Usman, Jr.	20. Rosary Heights 9	Hon. Israel A. Datukaka
2. Poblacion 1	Hon. Mohamad Ali B. Mangelen	21. Rosary Heights 10	Hon. Najm Nur G. Sinarimpbo
3. Poblacion 2	Hon. Bai Johaira S. Madag	22. Rosary Heights 11	Hon. Joharto U. Binangon
4. Poblacion 3	Hon. Juhair Akmad Toti	23. Rosary Heights 12	Hon. Melissa Faye S. Ayunan
5. Poblacion 4	Hon. Rahina L. Ayuanan	24. Rosary Heights 13	Hon. Julkharnain O. Sinarimbo
6. Poblacion 5	Hon. Rahima P. Pusaka	25. Bagua Mother	Hon. Norhassim A. Pasawiran
7. Poblacion 6	Hon. Mahatheer L. Ayunan	26. Bagua 1	Hon. Mohammad Modifh A. Midtimbang
8. Poblacion 7	Hon. Solaiman U. Adtong	27. Bagua 2	Hon. Fahad B. Singh
9. Poblacion 8	Hon. Baisla D. Sema	28. Bagua 3	Hon. Shieri G. Deguchi
10. Poblacion 9	Hon. Nasrudin E. Mohammad	29. Tamontaka Mother	Hon. Datu Mohammad Ali Jawani A. Sema
11. Rosary Heights Mother	Hon. Almeihda B. Arumpac	30. Tamontaka 1	Hon, Akmad B. Ural
12. Rosary Heights 1	Hon. April L. Morales	31. Tamontaka 2	Hon. Joven A. Pangilan
13. Rosary Heights 2	Hon. Christopher Anthony G. Coraza	32. Tamontaka 3	Hon. Zailon A. Kasan
14. Rosary Heights 3	Hon. Omar A. Pasawiran	33. Tamontaka 4	Hon. Thong L. Gayak
15. Rosary Heights 4	Hon. Mohahida S. Omar	34. Tamontaka 5	Hon. Datun S. Diocolano
16. Rosary Heights 5	Hon. Fidel Dino M. Espino	35. Kalanganan Mother	Hon. Datu Bimbo A. Pasawiran
17. Rosary Heights 6	Hon. Mohammad Nur R. Oyod	36. Kalanganan 1	Hon. Hasna P. Kato
18. Rosary Heights 7	Hon. Mohammad Sayed Azzarouk A. Sema	37. Kalanganan 2	Hon. Datu Edris A. Pasawiran
19. Rosary Heights 8	Hon. Alan B. Arumpac		

CITY GOVERNMENT OF COTABATO – ORGANIZATIONAL STRUCTURE



1.2. Human Resource/Demographic Profile

1.2.1 Population Composition by School-Age, Working-Age, Dependent-Age Group and Sex, Year 2015

Table DE1 shows the population composition by school going age, by level of education, working age, labor Force and dependent population as of the 2015 Population Census, by sex and sex ratio. The city has a total school going population of 137,210 ages 3-22 years old whereby the male comprises a total population of 67,871 or 49.46% from the total school going population, while the female population recorded a little higher at 69,339 or 50.53%, this make the sex ratio of 98%. The school going population breaks down into four (4) levels of education: For the Pre-school (aged 3-6 years old) the city has a total population of 28,928; Elementary (7-12 years old) registered the largest population for the school going children at 42,280; followed by Secondary (13-18 years old) with a total count of 41,547 and the least is the tertiary level (19-22 years old) at 24,455 students.

Table DE-1. Population Composition by School-Age, Working-Age, Dependent-Age Group and Sex, Year 2015

Age Group	Both Sexes	Male		Female		Sex Ratio
		No.	%	No.	%	
School going population						
Pre-school (3-6)	28,928	14,993	52%	13,935	48%	1.08
Elementary (7-12)	42,280	21,289	50%	20,991	50%	1.01
Secondary (13-18)	41,547	20,031	48%	21,516	52%	0.93
Tertiary (19-22)	24,455	11,558	47%	12,897	53%	0.90
Working Age (15-64)	185,950	89,476	48%	96,474	52%	0.93
Labor Force (15 and over)	187,285	90,113	48%	97,172	52%	0.93
Dependent Population	112,273	56,737	51%	55,536	49%	1.02
Young Dependents (0-14 Yrs. Old)	103,797	52,800	51%	50,997	49%	1.04
Old Dependents (65 Yrs Old & over)	8,476	3,937	46%	4,539	54%	0.87

Source: Computed based on latest NSO/PSA data on household population by age group
Note: Sex ratio = (No. of male/No. of female) x 100

The Philippine Statistics Authority (PSA) defines *Working Age Population* as referring to persons aged 15 years old and over who are present at the time of visit whose usual place of residence is the sample household regardless of their length of stay in the household. The city has recorded a total of 185,950 persons in the Working Age Population (15-64 years old) of which 48% comprise the male and 52% female with a 93% sex ratio. *Labor force* is defined as referring to the population 15 years old and over, who are called workforce, in abled-bodied, willing people who are currently employed or looking for work. The city has a total of 187,285 individuals belonging to the *Labor force* with the same sex ratio proportion with the *working age. Dependent population* refers to a population that does not work and relies on others for the goods and services they consume. There are 2 kinds of dependent population, the young dependents comprising the ages 0-14 years old and old dependent comprising ages 65 and over. The city has a total dependent population of 112,273 or 37.5% from the total population; 34.7% belongs to the young dependents and about 2.8% are old dependents.

1.2.2 Population Distribution by Age Group and Sex CY 2015 and 2010

Table DE-2 Illustrates the population distribution by age bracket and by sex for the time period 2010 compared to 2015. In 2010 the city total population was at 271, 609 having 133,380 males, slightly lower than the female population at 138,229. In 2015 Census recorded a total population of 299,438 that is an additional 27,829 persons from the previous census, with total male population of 146,934 and the female at a constant slightly higher with the male at the total count of 152,504. The young dependents comprise the ages from 0-14 years old recording a total of 95,204 in 2010 and reached 103,993 in 2015, they are the group who are unable to support themselves and depend on their providers to survive. The children population ages 0-17 years-old registered at 114,560 or 41.21% from the total population in 2010 with 57,293 male and the female slightly lower at 57,267 children. In 2015 the children population went up to 124,956 children with male population at 63,013 and the female again slightly lower at 61,943.

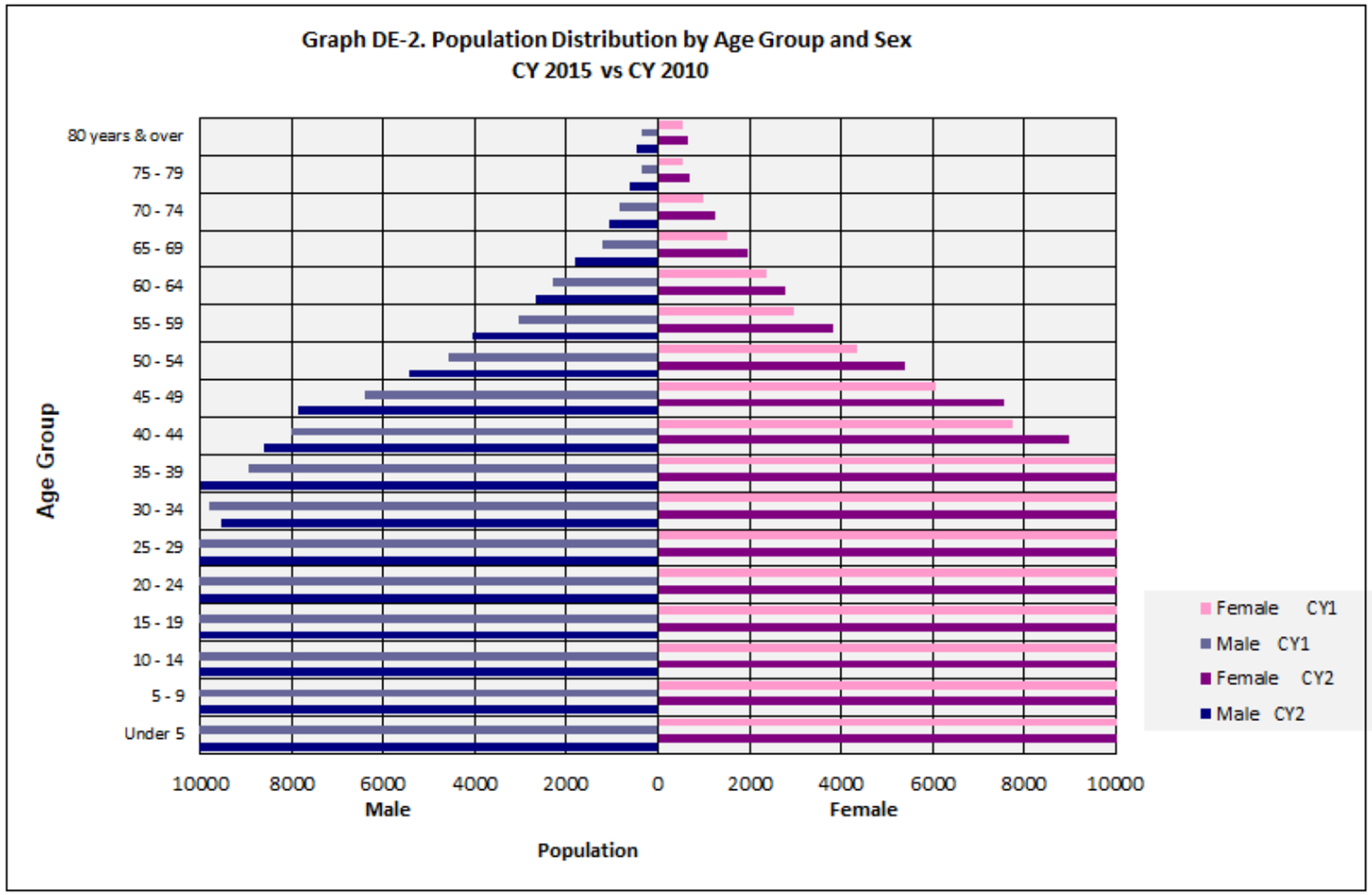
The labor force or the working population range from ages 15-64 years old composed of 170,037 individuals in 2010 and reached 186,956 in 2015, this group supports the dependents both young and old. The old dependents belong to ages from 64 years old and over recorded a total count of 6,368 Senior Citizens in 2010 and 8,489 in 2015. The Women in Reproductive Age (WRA) comprising the ages 15-45 years old registered a total of 77,799 women or 29% from the total population in 2010 and 78,834 in 2015. The widest population group for both 2010 and 2015 were from the age bracket 5-9 years old.

Table DE-2 Population Distribution by Age Group and Sex CY 2015 and 2010

Age Group	Censal Year 2 (2015)			Censal Year 1 (2010)		
	Male	Female	Total	Male	Female	Total
Under 5	-17,725	16,537	34,262	-15,130	14,660	29,790
5 - 9	-18,007	17,293	35,300	-16,787	16,262	33,049
10 - 14	-17,236	17,195	34,431	-16,149	16,216	32,365
15 - 19	-16,521	18,246	4,767	-15,379	16,882	32,261
20 - 24	-13,707	15,369	29,076	-12,695	13,923	26,618
25 - 29	-11,610	12,822	24,432	-11,362	12,660	24,022
30 - 34	-9,552	10,894	20,446	-9,803	10,494	20,297
35 - 39	-10,008	10,986	20,994	-8,944	10,006	18,950
40 - 44	-8,631	9,000	17,631	-8,017	7,773	15,790
45 - 49	-7,857	7,583	15,440	-6,399	6,061	12,460
50 - 54	-5,438	5,396	10,834	-4,569	4,355	8,924
55 - 59	-4,046	3,846	7,892	-3,058	2,974	6,032
60 - 64	-2,654	2,790	5,444	-2,297	2,386	4,683
65 - 69	-1,810	1,955	3,765	-1,231	1,532	2,763
70 - 74	-1,063	1,257	2,320	-836	985	1,821
75 - 79	-606	683	1,289	-365	528	893
80 years & over	-463	652	1,115	-359	532	891
Total	146,934	152,504	299,438	133,380	38,229	271,609

Source: National Statistics Office/Philippine Statistics Authority/Municipal Records

Figure 1 Population Distribution by Age Group and Sex



1.2.3 Urbanization Levels for the Past 20 Years

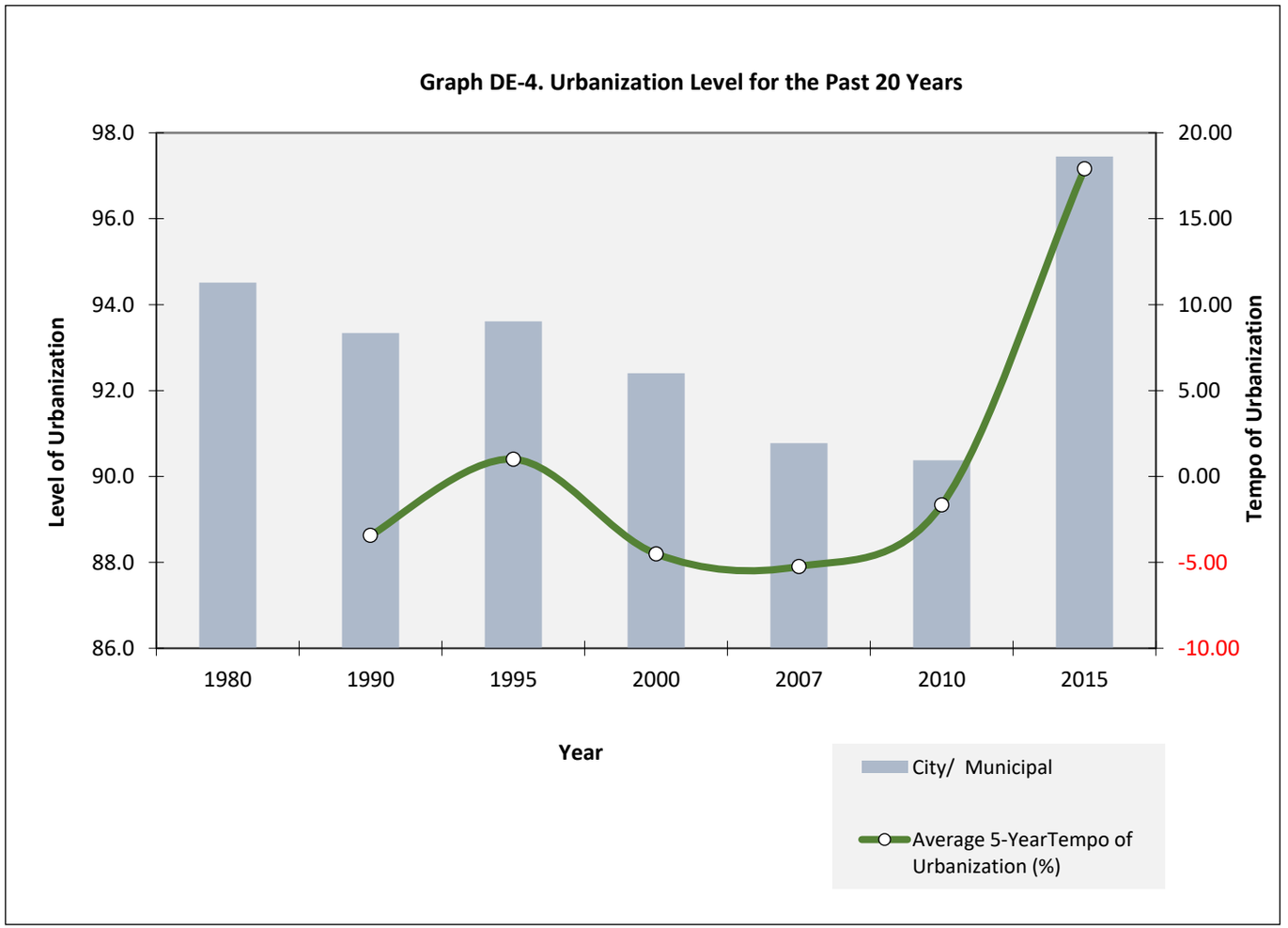
In 1980 the city recorded a total population of 83,871, of which the urban population is at 79,270 and 4,601 inhabitants in the rural barangays, this means the city is 94.5% urban level; in 1990, after 10 years, a rapid increase of 4.96% in the urban population, it has reached to a total of 118,601 urban dwellers and recorded more than 45% increase for rural areas at 8,464; from 1995 to 2000 showed a decreasing pattern of -4.50% or 92.4% urban; and in 2007 showed the biggest lift from 2.04% to 7.91% urban tempo reaching a total urban population of 235,245 and then turn in a sudden drop to the lowest point of 1.47% urban tempo. And in 2015, normalized the urban tempo to 3.76 % urban growth, registering a total of 291,790 urban inhabitants and only 7,648 rural dwellers in 2015.

Table DE-4. Urbanization Level for the Past 20 Years

Year	City/Municipal Population			Average Yearly Population Growth Rate (%)		Average 5-YearTempo of Urbanization (%)	Level of Urbanization (%)	
	Urban	Rural	Total	Urban	Rural		City	Provincial
1980	79,270	4,601	83,871				94.5	45.5
1990	118,601	8,464	127,065	4.96	8.40	-3.43	93.3	44.8
1995	137,398	9,381	146,779	3.17	2.17	1.00	93.6	44.0
2000	151,400	12,449	163,849	2.04	6.54	-4.50	92.4	45.2
2007	235,245	23,908	259,153	7.91	13.15	-5.24	90.8	47.0
2010	245,637	26,149	271,786	1.47	3.12	-1.65	90.4	
2015	291,790	7,648	299,438	3.76	-14.15	17.91	97.4	

Notes:
Average 5-Year Tempo of Urbanization (%) = (Ave. Urban Pop'n Growth Rate – Ave. Rural Pop'n Growth Rate)
Level of Urbanization = Urban Population/Total Population) x 100

Figure 2 Urbanization Level for the Past 20 Years



1.2.4 Household Population by Urban and Rural Barangay and Average Household Size, Year 2015

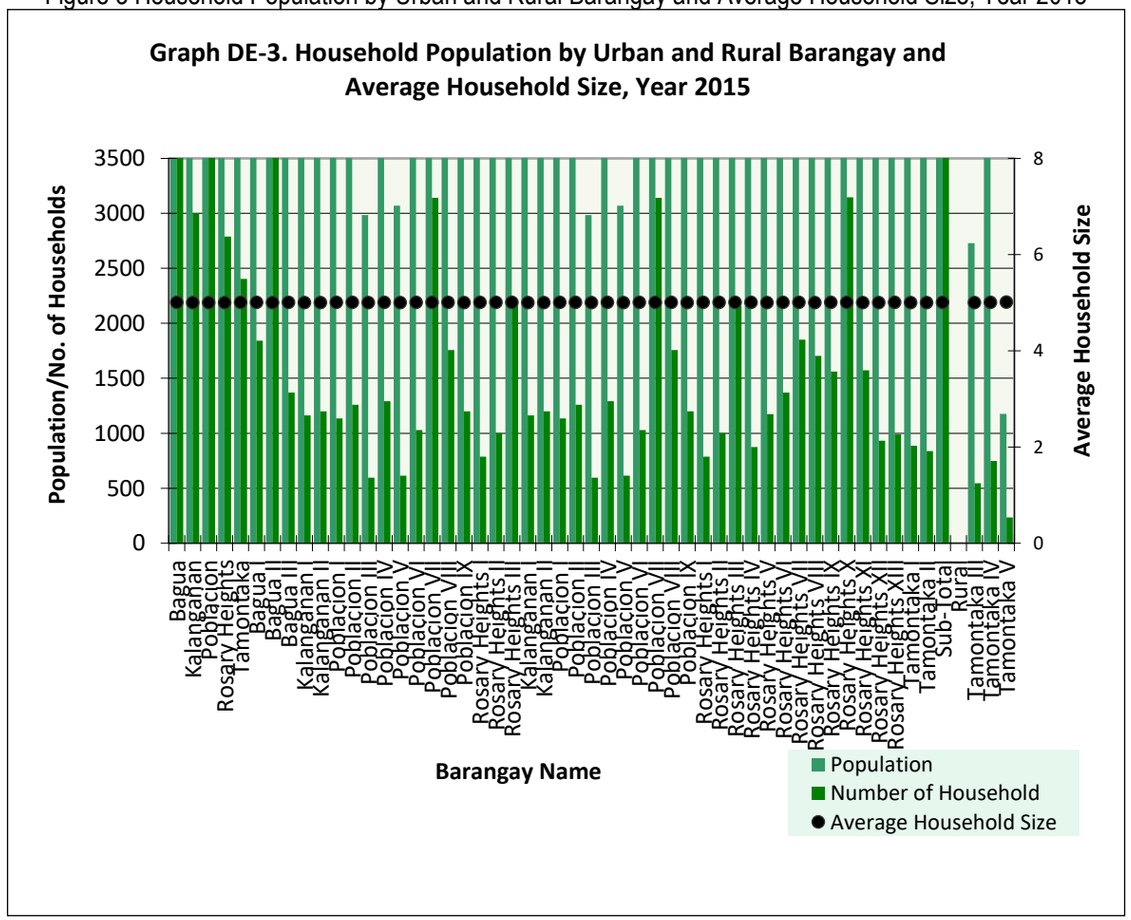
Table DE-3. Household Population by Urban and Rural Barangay and Average Household Size, Year 2015

Barangay	Population	Number of Household	Average Household Size
Urban			
Bagua	18,137	3,627	5.00
Kalanganan	15,019	3,004	5.00
Poblacion	20,734	4,147	5.00
Rosary Heights	13,943	2,789	5.00
Tamontaka	12,027	2,405	5.00
Bagua I	9,206	1,841	5.00
Bagua II	19,720	3,944	5.00
Bagua III	6,847	1,369	5.00
Kalanganan I	5,808	1,162	5.00
Kalanganan II	5,999	1,200	5.00
Poblacion I	5,677	1,135	5.00
Poblacion II	6,302	1,260	5.00
Poblacion III	2,985	597	5.00
Poblacion IV	6,456	1,291	5.00
Poblacion V	3,070	614	5.00
Poblacion VI	5,151	1,030	5.00
Poblacion VII	15,712	3,142	5.00
Poblacion VIII	8,786	1,757	5.00
Poblacion IX	5,998	1,200	5.00
Rosary Heights I	3,931	786	5.00
Rosary Heights II	5,006	1,001	5.00
Rosary Heights III	10,786	2,157	5.00
Rosary Heights IV	4,377	875	5.00
Rosary Heights V	5,870	1,174	5.00
Rosary Heights VI	6,846	1,369	5.00
Rosary Heights VII	9,257	1,851	5.00
Rosary Heights VIII	8,524	1,705	5.00
Rosary Heights IX	7,802	1,560	5.00
Rosary Heights X	15,732	3,146	5.00
Rosary Heights XI	7,864	1,573	5.00
Rosary Heights XII	4,664	932.8	5.00
Rosary Heights XIII	4,947	989	5.00
Tamontaka I	4,423	885	5.00
Tamontaka II	4,184	837	5.00
Sub-Total	**291,790**	**58,355**	5.00
Rural			
Tamontaka III	2,730	546	5.00
Tamontaka IV	3,741	748	5.00
Tamontaka V	1,177	235	5.00
Sub-Total	**7,648**	**1,529**	5.00
Total	**299,438**	**59,884**	

Source: National Statistics Office/Municipal Records

The DILG guidelines for the formulation of Comprehensive Development Plan (CDP) and the Philippine Statistics Coordination Board (PSCB) defines the urban areas as follows: 1) If a barangay has a population of 5,000 or more, then a barangay is considered urban or; 2) If a barangay has at least one establishment with a minimum of 100 employees, a barangay is considered urban, or 3) If a barangay has 5 or more establishment with a minimum of 10 employees, and 5 or more facilities within the two kilometer radius from the barangay is considered urban. The city has 37 barangays - 34 barangays are identified urban with a total population of 291,790 or 58,355 households, using the average household size of 5 for Cotabato City and 3 barangays were classified as rural with only 7,648 population or a, 1,529 household. Hence the city is 97.43% urban and 2.57% rural. Registering a total population of 299,438 and total household of 59,884 for Census Year 2015 for both rural and urban areas.

Figure 3 Household Population by Urban and Rural Barangay and Average Household Size, Year 2015



1.2.5 Population Density, Gross Density and Built-Up Density, Year 2015

Population Density refers to the number of people living in each unit of area. Hence, the city has a total Land Area of 17,599 square hectares and presently has a density of 17.014 persons per square hectares.

1.2.6 Population Density by Barangay Year 2015

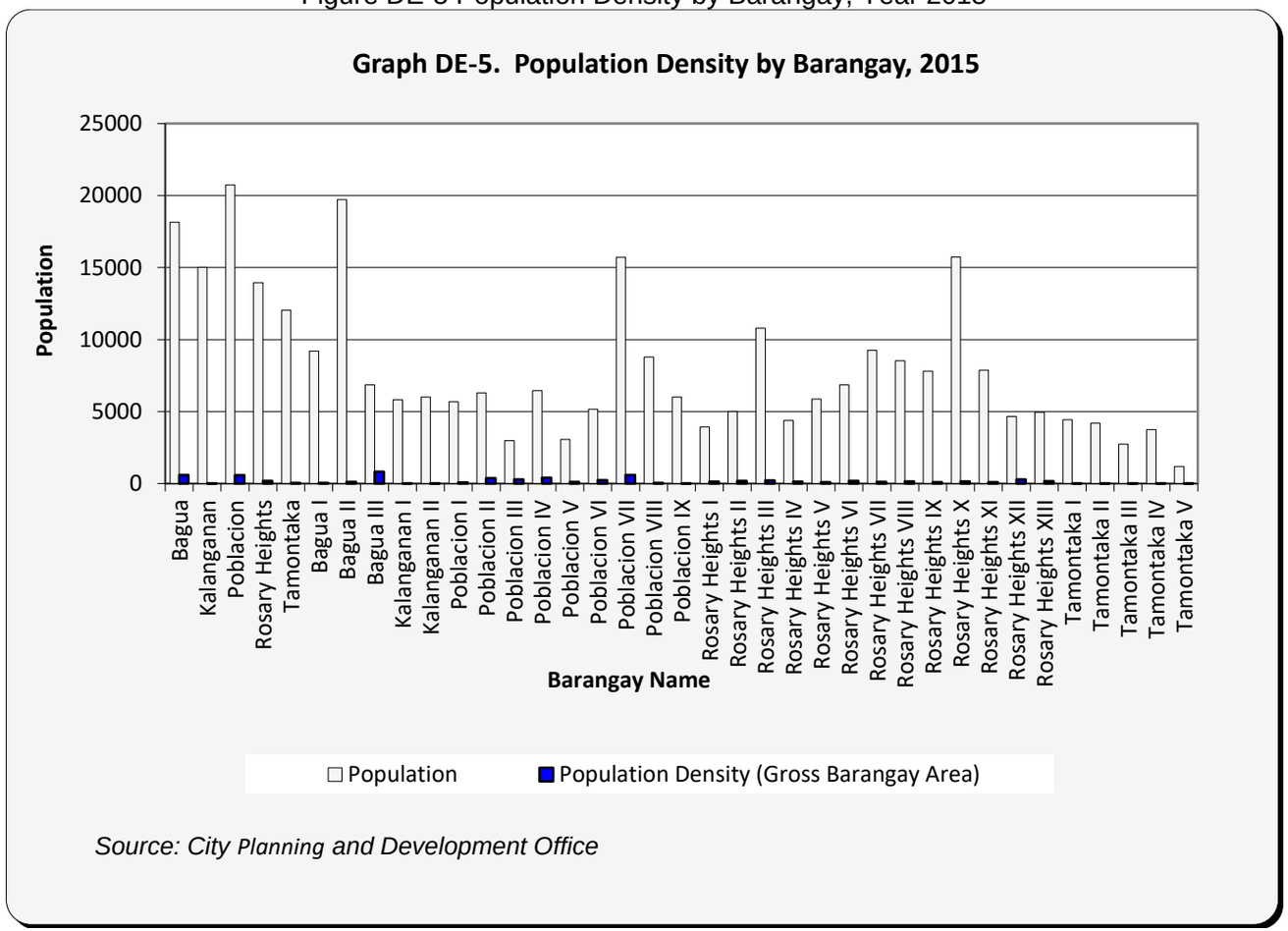
The table below shows the population density by barangay, and it registered that in 2015 the most densely populated barangay is Barangay Bagua 3 at 821 persons per square hectare, followed by Barangay Bagua Mother at 599 persons per square hectare, next is Poblacion Mother at 583 persons per square hectare, while the least dense barangay is Tamontaka 5 at less than 1 person per square hectare, followed by Tamontaka 4 at 2 person per square hectare and third is Kalanganan 2 at 3 persons per square hectare.

Table DE-5. Population Density by Barangay, Year 2015

Barangay	Population	Gross Area (ha)	Population Density (Gross Barangay Area)	Barangay	Population	Gross Area (ha)	Population Density (Gross Barangay Area)
Urban				Rosary Heights IV	4,377	32.53	135
Bagua	18,137	30.28	599	Rosary Heights V	5,870	59.96	98
Kalanganan	15,019	2,206.63	7	Rosary Heights VI	6,846	38.66	177
Poblacion	20,734	35.59	583	Rosary Heights VII	9,257	81.56	114
Rosary Heights	13,943	77.44	180	Rosary Heights VIII	8,524	59.67	143
Tamontaka	12,027	315.40	38	Rosary Heights IX	7,802	85.14	92
Bagua I	9,206	185.71	50	Rosary Heights X	15,732	104.56	150
Bagua II	19,720	176.36	112	Rosary Heights XI	7,864	84.77	93
Bagua III	6,847	8.34	821	Rosary Heights XII	4,664	16.25	287
Kalanganan I	5,808	1,158.65	5	Rosary Heights XIII	4,947	31.60	157
Kalanganan II	5,999	2,107.52	3	Tamontaka I	4,423	280.92	16
Poblacion I	5,677	68.24	83	Tamontaka II	4,184	461.88	9
Poblacion II	6,302	17.19	367	**Subtotal**	**291,790**	**9,698**	**30**
Poblacion III	2,985	10.71	279	**Rural**			
Poblacion IV	6,456	15.96	405	Tamontaka III	2,730	525.62	5
Poblacion V	3,070	28.13	109	Tamontaka IV	3,741	1,880.48	2
Poblacion VI	5,151	22.72	227	Tamontaka V	1,177	5,494.90	0
Poblacion VII	15,712	26.66	589	**Subtotal**	**7648**	**7,901.00**	**7**
Poblacion VIII	8,786	166.92	53	**Total**	**299,438.00**	**17,599.00**	**17**
Poblacion IX	5,998	1,594.27	4	Notes:			
Rosary Heights I	3,931	28.98	136	Population Density = Population divided by Gross Area			
Rosary Heights II	5,006	27.92	179				
Rosary Heights III	10,786	50.88	212				

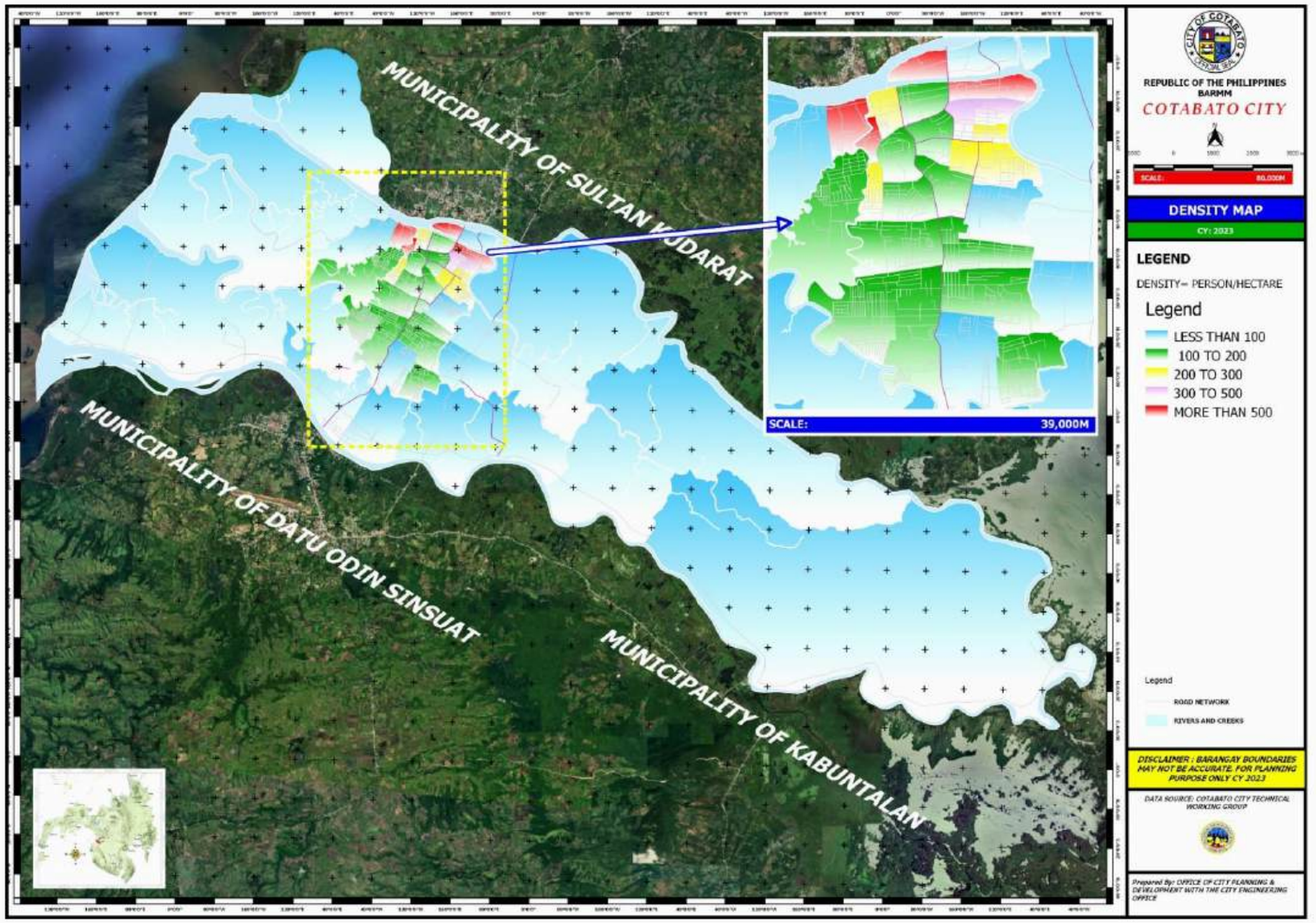
Source: City Planning and Development Office

Figure DE-5 Population Density by Barangay, Year 2015



Source: City Planning and Development Office

DENSITY MAP


MUNICIPALITY OF SULTAN KUDARAT
MUNICIPALITY OF DATU ODIN SINSUAT
MUNICIPALITY OF KABUNTALAN
SCALE: 39,000M
REPUBLIC OF THE PHILIPPINES
BARMM
COTABATO CITY
DENSITY MAP
CY: 2023
LEGEND
DENSITY= PERSON/HECTARE
Legend
LESS THAN 100
100 TO 200
200 TO 300
300 TO 500
MORE THAN 500
Legend
ROAD NETWORK
RIVERS AND CREEKS
DISCLAIMER : BARANGAY BOUNDARIES MAY NOT BE ACCURATE. FOR PLANNING PURPOSE ONLY CY 2023
DATA SOURCE: COTABATO CITY TECHNICAL WORKING GROUP
Prepared By: OFFICE OF CITY PLANNING & DEVELOPMENT WITH THE CITY ENGINEERING OFFICE

1.2.7 Historical Growth of Population

The 1st Census was conducted in 1903 recording only a total population of 1,103 inhabitants, next was in 2018 registering the city population at 5,870 with a growth rate of 11.79% from the first census, the biggest growth rate recorded in the history of the city in a period of 15 years; then a drop in growth rate was recorded in 1939 at only 2.65% in 21 years. 1948 recorded the second highest growth rate at 8.05% in just a 9 years interval, registering a total population of 20,407; 1960 and 1970 nailed the growth rate at 5% or slightly higher. 1975 registered the second lowest growth rate, registering only an additional of 5,913 individuals to its population from 1970 or 1.86%; 1980 and 1990 again peg its growth rate at 4.56% and 4.24% respectively; the down trend in growth rate continues in 1995 and 2000 at 2.93% and 2.22%. 2007 registered the third highest growth rate at 6.77% in only 7 years, the highest increase in terms of additional individuals of 95,304, registering a total population 259,153; 2010 recorded the lowest growth rate at 1.58% in only 3 years with registered total population of 271,609 and the latest census resulted a total population of 299,438 holding the record of third lowest growth rate at 1.97% in 5 years.

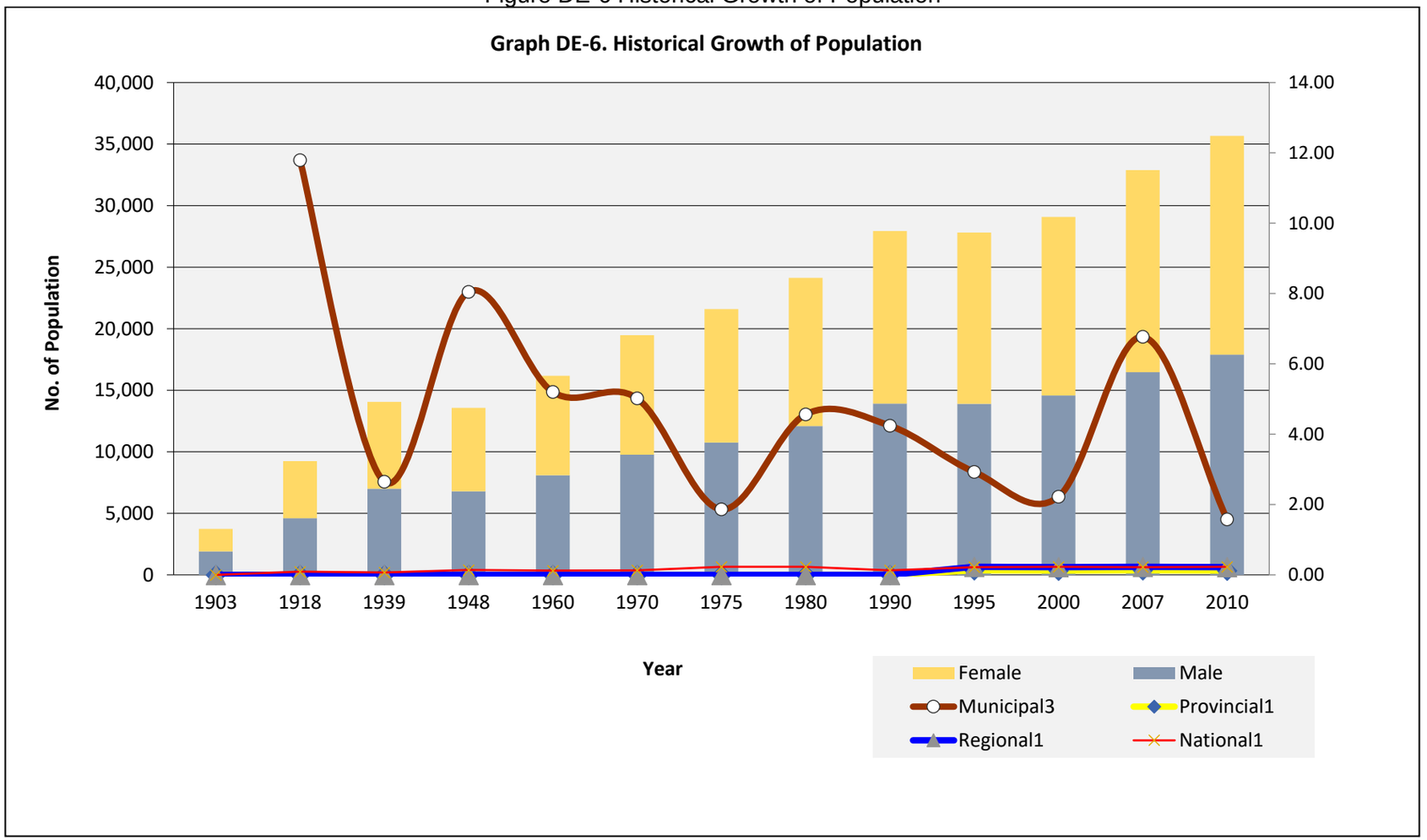
Table DE-6. Historical Growth of Population

Year	City						Annual Growth Rate (%)			
	Population[1]			Increase/Decrease[2]						
	Male	Female	Total	Male	Female	Total	City[3]	Provincial[1]	Regional[1]	National[1]
1903	541	562	1,103			-				
1918	2,880	2,990	5,870	2,339	2,428	4,767	11.79			
1939	4,988	5,178	10,166	2,108	2,188	4,296	2.65			
1948	10,014	10,393	20,407	5,025	5,216	10,241	8.05			
1960	18,401	19,098	37,499	8,387	8,705	17,092	5.20			2.87
1970	30,023	31,161	61,184	11,622	12,063	23,685	5.02	5.30	6.32	3.03
1975	32,924	34,173	67,097	2,902	3,011	5,913	1.86	0.26	1.44	2.75
1980	41,155	42,716	83,871	8,231	8,543	16,774	4.56	3.54	4.73	2.66
1990	62,351	64,714	127,065	21,195	21,999	43,194	4.24	3.07	3.37	2.33
1995	72,024	74,755	146,779	9,674	10,040	19,714	2.93	2.30	3.25	2.32
2000	80,401	83,448	163,849	8,376	8,694	17,070	2.22	2.29	2.69	2.36
2007	127,166	131,987	259,153	46,766	48,538	95,304	6.77	2.19	2.41	2.04
2010	33,380	138,229	271,609	6,214	6,242	12,456	1.58	3.39	2.68	1.57
2015	146,934	152,504	299,438	13,554	14,275	27,829	1.97	2.27	1.90	1.70

Source: NSO/PSA

Use latest annual growth rate from Table DE-15

Figure DE-6 Historical Growth of Population



1.2.8 Crude Birth Rate and Crude Death Rate for the Past Three Years (2015-2017)

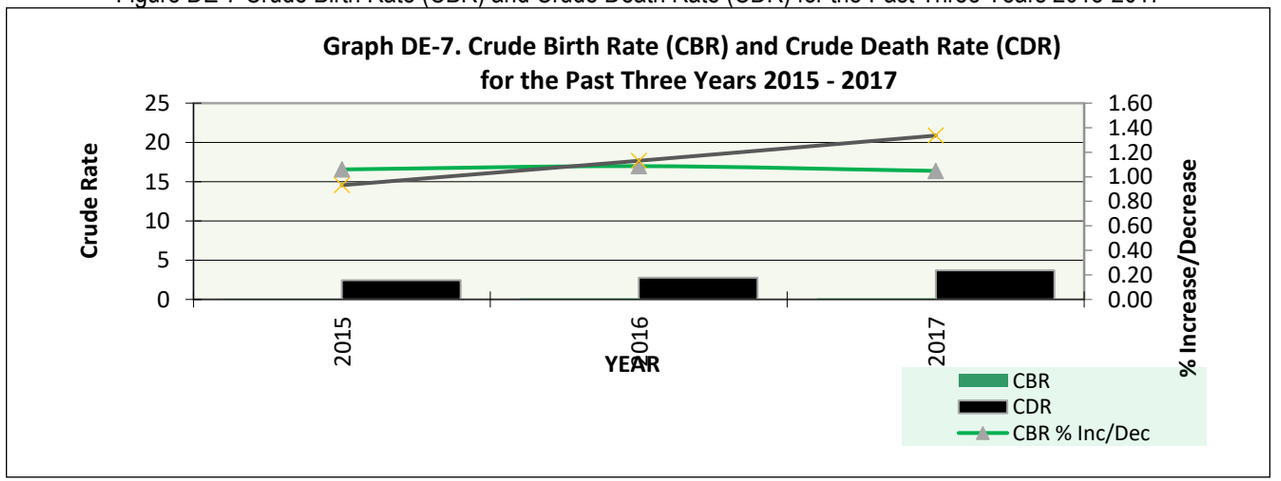
The City Health Office reported a gradual increasing trend in Crude Birth Rate, it has recorded 10.95% in 2015 and 11.90% in 2016, but slightly dropped in 2017 by 1.05%. The city is the seat of the Cotabato Regional and Medical Center (CRMC), a public tertiary hospital that caters to all health care needs from the neighboring towns, and this directly affects the crude birth rate and death rate for the city as all cases were recorded in Cotabato City.

Table DE-7. Crude Birth Rate (CBR) and Crude Death Rate (CDR) for the Past Three Years/Planning Period (2015- 2017)

Period	CBR	% Increase/Decrease from Previous Year	CDR	% Increase/ Decrease from Previous Year
2015	10.95%	1.06	2.45	0.93
2016	11.90%	1.09	2.77	1.13
2017	12.47%	1.05	3.7	1.34

Notes:
Crude Birth Rate (CBR) refers to the number of live births per 1,000 mid-year population
Crude Death Rate (CDR) refers to the number of deaths per 1,000 mid-year population

Figure DE-7 Crude Birth Rate (CBR) and Crude Death Rate (CDR) for the Past Three Years 2015-2017



1.2.9 Literacy Rate of Population 10 Years Old and Over by Sex, 2015

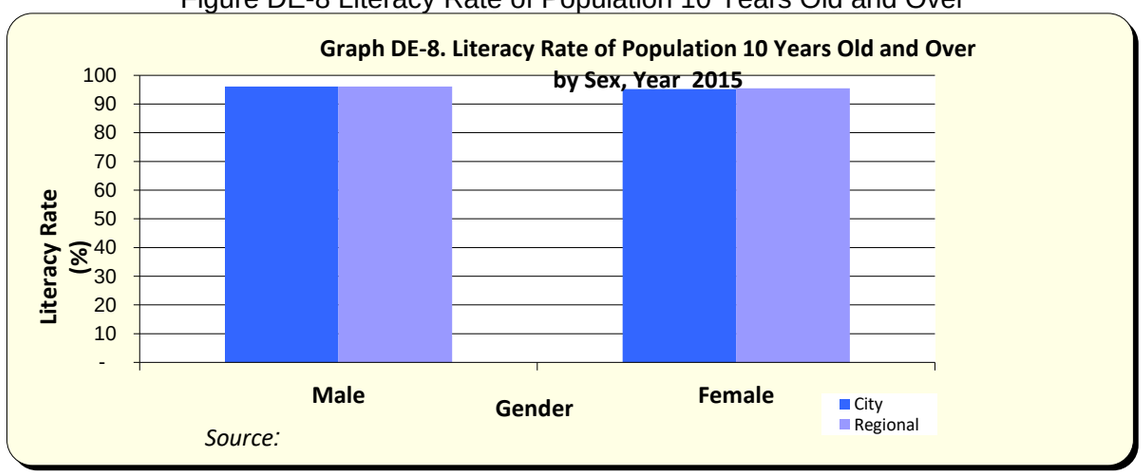
The city Literacy Rate as of 2015 for both sexes is 96%, the male also participated with 96% literacy rate and comprises a total population of 106,897 while the female is at 95% or a total of 112,971, slightly down by 1% with the male counterpart. This means that both male and female in Cotabato City show almost similar levels of literacy with females slightly more literate. Region XII shows a mirror like image with the city having a total Literacy Rate of 96% for both male and female and also 96% for male and 95% for females. However, the city Illiteracy rate is recorded at only 4% for both sexes with only 4% for the male and 5% for the female. Again the Region shows an identical pattern of 4% illiteracy rate for the entire region for both male and female and 4% goes to male and 5% to female.

Table DE-8. Literacy Rate of Population 10 Years Old and Over, by Sex Year 2015

Indicator	City						Regional					
	Male		Female		Both Sex		Male		Female		Both Sex	
	No.	Rate %	No.	Rate %	No.	Rate %	No.	Rate %	No.	Rate %	No.	Rate %
Literate	106,897	96	112,971	95	219,868	96	1,708,529	96	1,631,938	95	3,340,467	96
Illiterate	4,305	4	5,703	5	10,008	4	69,392	4	77,934	5	147,326	4
Total (Population >10yr)	1,202		118,674		29,876		1,777,921		1,709,872		3,487,793	

Note:
Rate (%) = (No. per indicator/Total population > 10 yr) x 100

Figure DE-8 Literacy Rate of Population 10 Years Old and Over



Source:

1.2.10 Mother Tongue Distribution among Households Year 2015

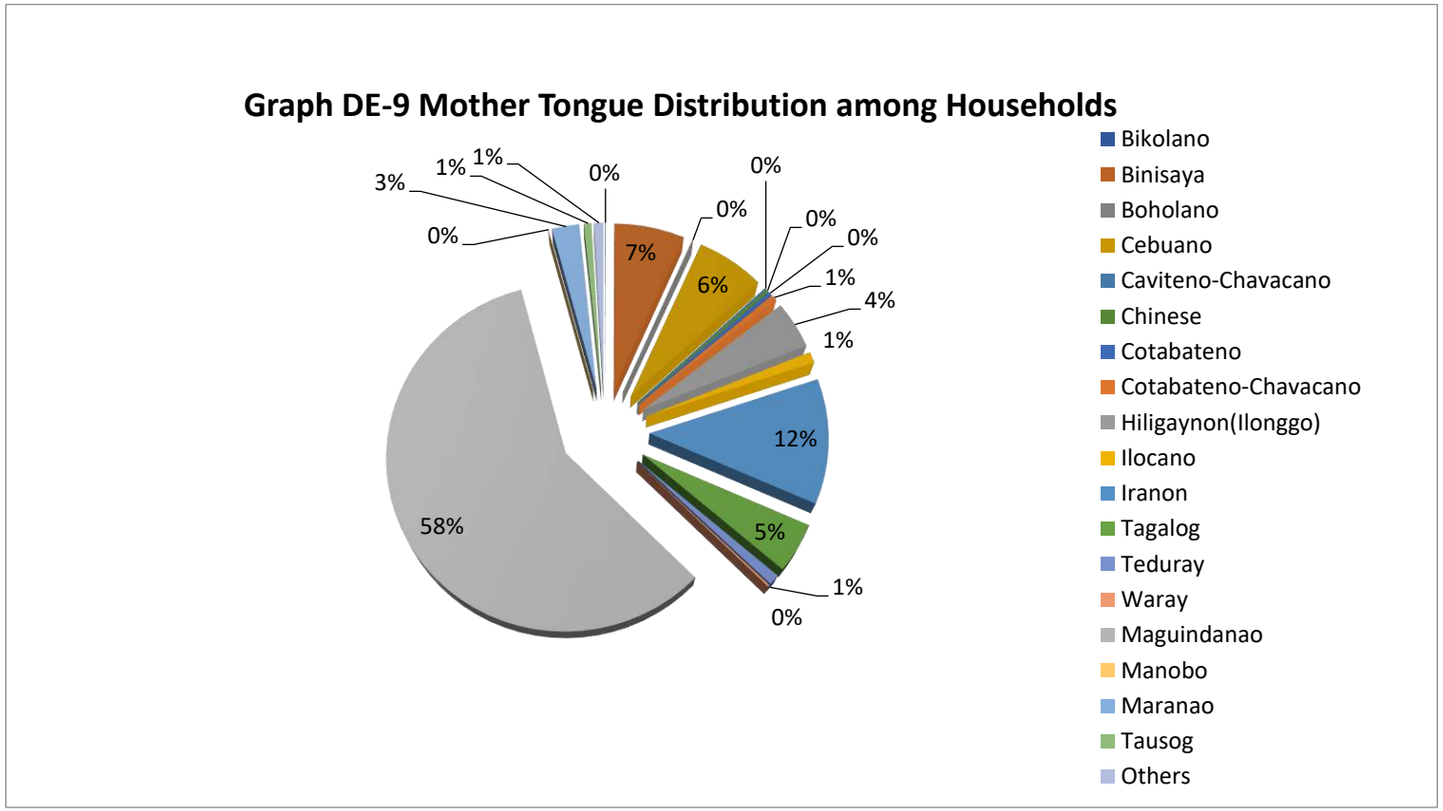
The latest disaggregated record for population distribution by Mother Tongue by the Philippine Statistical Authority (PSA) was during the Population Census 2010. For planning purposes, the office has projected the population distribution by mother tongue for 2015 by using the participation rate of the given languages below. The table shows that the city is a majority Maguindanao speaking community comprising 58% of the population, followed by Iranon at 11.7%, 6.53% are Binisaya, and 6.38% were Cebuano, and the rest belong to relatively other local language. This shows that Cotabato City is predominantly composed of Maguindanaoan communities. However, in general, Tagalog is the medium of communication.

Table DE-9 . Household Population by Mother Tongue, Year 2015

Mother Tongue	Household No.	% of Total Households
Bajao	236	0.078789731
Bikolano	176	0.058908210
Binisaya	19,570	6.535497719
Boholano	269	0.089835020
Cebuano	19,117	6.384177255
Caviteno-Chavacano	459	0.153161346
Chinese	723	0.241523661
Cotabateno	942	0.314422571
Cotabateno-Chavacano	1,737	0.580245868
Hiligaynon(Ilonggo)	13,363	4.462665081
Ilocano	3,095	1.033470909
Iranon	35,150	11.738565364
Tagalog	13,898	4.641230593
Teduray	2,924	0.976403580
Waray	505	0.168624751
Maguindanao	174,735	58.354472790
Manobo	65	0.021722402
Maranao	7,638	2.550725491
Tausog	2,160	0.721257396
Others	2,678	0.894300263
Total	299,438	100

Source: Census of Population, NSO/PSA

Figure DE-9 Mother Tongue Distribution among Households



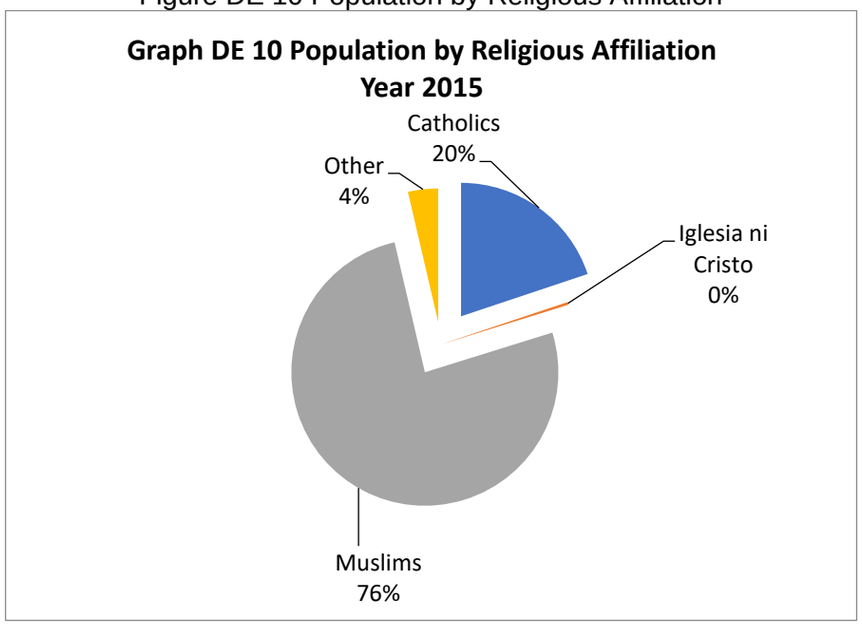
1.2.11 Population by Religious Affiliation, Year 2015

Table DE-10 shows the population distribution by Religious Affiliation in 2015. The Muslims and/or Islam have the greatest number at 228,036 which is 76% of the entire population. Roman Catholic is second at a count of 59,493 which is 20%. Iglesia ni Kristo had the least number at 989 or less than 1 percent of the total population. Others were distributed from other religious affiliation registering a total of 10,920 or 4%.

Table DE-10. Population by Religious Affiliation, Year 2015

Religious Affiliation	No. of People	% of Total Population
Catholics	59,493	20%
Iglesiani Cristo	989	0%
Muslims	228036	76%
Other	10920	4%
Total	299438	100%

Figure DE 10 Population by Religious Affiliation



1.2.12 Inventory of Religious Establishment, Year 2019

Figure DE 10 Population by Religious Affiliation

Barangay	Name of Religious Establishment	Type of Religion	Area (sq m)	Hazard Susceptibility (H/M/L)								Used as Evacuation Center (Y/N)
				Fl	Tc	Eq	Vo	Ln	Ts	Su	Others	
Bagua Mother	Masjid Al Ansar (Mahad)	Islam	360.47	H					M			N
	Masjid Amir BinnKhatab	Islam	77.25	H					M			N
	Masjid Dumama	Islam	305.21	H					M			N
	Masjid Muttakim	Islam	149.87	H					M			N
	Masjid Nahda	Islam	106.81	H					M			N
	Masjid Noor	Islam	112.01	H					M			N
	Masjid Palacala	Islam	122.67	H					M			N
	Masjid Sampalo (Lao)	Islam										N
	Sr.San Roque Chapel	Catholic	1186.21	H					M			N
Bagua 1	Masjid Abubakar Sidiqq (SKC)	Islam	241.44	H					M			N
	Masjid Al Husain	Islam	288.71	H					M			N
	Masjid Amir Ahmad Mohamaad Al Saadi	Islam	286.6	H					M			N
	Masjid Bajunaid	Islam	110.69	H					M			N
	Masjid DarulUnsing	Islam	147.09	H					M			N
	Masjid Iqra	Islam	217.47	H					M			N
	Masjid MidtimbangUdasan	Islam	159.54	H					M			N
	Masjid Norodin	Islam	144.1	H					M	L		N
	Masjid Omar	Islam	33.62	H					M			N
	Masjid Pagalungan	Islam	156.16	H					M			N
	Masjid Piang	Islam	244.93	H					M			N
	Masjid Rahmani	Islam	211.87	H					M			N
Bagua 2	Masjid Rahman	Islam	102.55	H					M			N
	Masjid RajamudaBudtong	Islam	98.62	H					M			N
	Masjid Waqaf	Islam	121.49	H					M			N
	Masjid UmmolMuhminin	Islam	110.61	H					M			N

Barangay	Name of Religious Establishment	Type of Religion	Area (sq m)	Hazard Susceptibility (H/M/L)								Used as Evacuation Center (Y/N)
				Fl	Tc	Eq	Vo	Ln	Ts	Su	Others	
	Masjid Hadji Abubakar Kambal Al Islamiya	Islam	100.49	H					M			N
	Masjid Fatmah	Islam	152.75	H					M			N
	Masjid Al-Ittihad	Islam	389.32	H					M			N
	Masjid Al Ayob	Islam	142.86	H					M			N
	Masjid Rahmaniya	Islam	142.86	H					M			N
	Masjid Albayan	Islam	65.69	H					M			N
	Masjid Khalid Binn Waled	Islam	70.71	H					M			N
	Masjid Raja BansaSahifa	Islam	164.03	H					M			N
	Masjid Abdulraof	Islam	27.84	H					M			N
	Masjid Purok Magungaya	Islam	68.98	H					M			N
	Masjid Ibadur Rahman	Islam	102.55	H					M			N
	Masjid Usman	Islam	278.96	H					M			N
	Masjid Mlok	Islam	48.4	H					M			N
	Masjid Kutabato Islamic Center	Islam	1293.73	H					M			N
	Masjid Haya AydulKabisiRahima Allah	Islam	87.02	H					M			N
Bagua 3	Masjid Amina	Islam	86.65	L					M			N
	San Vicente Ferrer	Catholic	117.72	L					M			N
	San Pedro Chapel	Catholic	53.95	L					M			N
RH Mother	Masjid NurulHuda	Islam	301.65	L					M			N
	Masjid Camsa	Islam	64.49	L					M			N
	Masjid Attayniyah	Islam	112.52	L					M			N
	Masjid Samama Compound	Islam	185.17	L					M			N
	Masjid Macadar	Islam	120.63	L					M			N
	Masjid AsSafah	Islam	161.91	L					M			N
	Masjid Maniri	Islam	142.09	M					M			N
	Masjid Ampatuan	Islam	204.36	M					M			N
	Masjid Nurul Iman	Islam	128.61	L					M			N
	Our Lourdes Chapel	Catholic	46.27	L					M			N
	Immaculate Conception	Catholic	231.96	L					M			N
	Our Lady Of Fatima	Catholic	121.46	L					M			N
	Our Lady of Rosary Parish Church	Catholic	1,909.05	L					M			N
	Masjid Al Hidaya DPWH	Islam	264.57	L								N

Barangay	Name of Religious Establishment	Type of Religion	Area (sq m)	Hazard Susceptibility (H/M/L)								Used as Evacuation Center (Y/N)
				Fl	Tc	Eq	Vo	Ln	Ts	Su	Others	
RH 1	Sto. Niño Chapel	Catholic	231.26	VH				M	M			N
	St. Michael Archangel	Catholic	391.47	VH				M	M			N
	Four Gospel Church	Protestant	603.92	L					M			N
	Masjid Tantawan	Islam	25.44	VH				M	M			N
RH 2	Our Lady of Fatima	Catholic	85.02	L								N
	Imaccculate Concepcion Cathedral	Catholic	2449.83	L								N
	Our Lady Of Lourdes Chapel	Catholic	146.89	L								N
	Our Mother of Perpetual Help Chapel	Catholic	197.59	L								N
	Pit SenyorSto. Niño Chapel	Catholic	129.45	L								N
	Masjid Ampatuan	Islam	86.46	L								N
RH 3	Masjid DR. Blah K. Usman	Islam	205.03	L								N
	Masjid Al Rahman	Islam	93.19	L								N
	Masjid Maulana	Islam	232.73	L								N
	Masjid Doton	Islam	100.51	L								N
	Masjid Abubakar	Islam	124.88	L								N
	Masjid Al Huda	Islam										N
	Masjid Lauban	Islam	221.11	L								N
	Masjid Nora	Islam	107.19	L								N
	Masjid Sampulna	Islam										N
	Sr. Santo Nino Chapel	Catholic	66.55	L								N
	Sr. San Agustin	Catholic	48.36	L								N
	ArchibishopMonguea Chapel	Catholic	675.04	L								N
RH 4	Masjid Al Burhan	Islam	648.77	L								N
	Masjid Purok Dimaseray	Islam	104.9	L								N
	Masjid CCSPC	Islam	201.02	L								N
	Christ the King	Protestant	282.75	L								N
	Bible Babtist Church	Protestant	279.35	L								N
	St.Eugene De Mazenod Chapel	Catholic	304.93	L								N
	Sr. Santo Nino CHAPEL	Catholic	94.18	L								N
	Dr.P Ocampo High School	Catholic	987.02	L								N
RH 5	Masjid Hidaya	Islam										N

Barangay	Name of Religious Establishment	Type of Religion	Area (sq m)	Hazard Susceptibility (H/M/L)								Used as Evacuation Center (Y/N)
				Fl	Tc	Eq	Vo	Ln	Ts	Su	Others	
RH 5	Masjid Andig	Islam	90.57	L								N
	Masjid Khairan	Islam	172.69	L								N
	Masjid 5th Street	Islam	69.89	L								N
	Masjid Bin Usman	Islam	26.83	L								N
	Masjid Al MadinaIslamiya	Islam	313.03	M								N
	Mother Perpetual Church	Catholic	158.5	L								N
	IglesianiKristo	Protestant	1552.23	L								N
RH 6	Masjid AL-Qraifi	Islam	201.21	L								N
	Masjid Al-nur	Islam	93.32	L								N
	Masjid Bahrain	Islam	126.29	L								N
	Masjid Al Huda	Islam	151.01	L								N
	Masjid Hidaya	Islam	382.66	L								N
	Masjid BDA	Islam	827.2	L								N
	Masjid Al-Bumabarak	Islam	132.51	L								N
	Jesus Christ Church	Protestant	742.35	L								N
	Our Lady of Mediatrix Church	Catholic	487.18	L								N
	Immaculate Conception	Catholic	92.49	L								N
RH 7	Masjid Barter	Islam	147.47	L								N
	Masjid Sidik	Islam	376.7	L								N
	Masjid Al-Aqsa	Islam	122.3	L								N
	Masjid Mangulamas	Islam										N
	Masjid AL-Adza	Islam	140.03	M								N
	Masjid Abdulrahman	Islam	151.69	L								N
	Masjid Dawwah	Islam										N
	Masjid Kalilintad	Islam	188.56	M								N
	Masjid Darussalam	Islam	115.31	L								N
	Masjid Al-Mansoor Albuahir	Islam	102.76	L								N
	Church of Christ	Protestant	387.11	L								N
	Sta. Cruz Chapel	Catholic	250.51	L								N
RH 8	Masjid Dimapanat	Islam	215.59	L								N
	Masjid Jaffar BinnMokalid	Islam	26.67	L								N

Barangay	Name of Religious Establishment	Type of Religion	Area (sq m)	Hazard Susceptibility (H/M/L)								Used as Evacuation Center (Y/N)
				Fl	Tc	Eq	Vo	Ln	Ts	Su	Others	
RH 8	Masjid Unged	Islam	156.56	H								N
	Masjid Ohood	Islam	101.68	L					M			N
	Masjid Division	Islam	35.16	L								N
	Masjid Inon	Islam	54.64	L								N
	Saint Joseph The Worker Parish	Catholic	1371.71	L					M			N
RH 9	Masjid Gufran	Islam	56.31	L					M			N
	Masjid Kunesa	Islam	57.76	L					M			N
	Masjid Samama	Islam	21.6	L					M			N
	Masjid Em Manor	Islam	195.47	L					M			N
	Masjid Rahma	Islam	19.66	L					M			N
	Masjid Binembakan	Islam	33.04	L					M			N
	Masjid Al-noor	Islam	656.62	L								N
	Chapel Sto. Nino	Catholic	193.42	L								N
	Church of Christ	Protestant	193.42	L								N
	Church of Refuge New Life	Protestant										N
	San Isidro Church	Catholic	23.62	L								N
RH 10	Masjid Altihadya	Islam										N
	Masjid AsSandre	Islam										N
	Masjid Yusof Kasuyo	Islam							M			N
	Bai Mombu Amp. (Masjid)	Islam										N
	Anchor Bay Evangelista Church	Protestant										N
	Mandanas Elem School	Catholic/Islam/Protestant							M			N
	Bishop Palace	Catholic	913.71	L								N
	OND Mother House	Catholic										N
	New Horizon Southern Baptist Church	Protestant							M			N
	Assemble of God Family Fellowship	Protestant	78.41	L								N
	Masjid CRMC	Islam	103.79	L								N
	United Pentecostal Church	Protestant										N
	Episcopal Church	Protestant	273.94	L								N
	Marian Movement of Priest	Catholic										N

Barangay	Name of Religious Establishment	Type of Religion	Area (sq m)	Hazard Susceptibility (H/M/L)								Used as Evacuation Center (Y/N)
				Fl	Tc	Eq	Vo	Ln	Ts	Su	Others	
RH 10	A4 College of Peace & Wise	Catholic/Islam/Protestant										N
	Good Sheperd	Protestant										N
	Masjid Al Hidaya	Islam	264.57	L								N
	Masjid Midtimbang/Ampatuan	Islam	167.8	L					M			N
	Masjid Al-Sharip	Islam	220.18	L					M			N
	Masjid Rajah Buayan	Islam										N
	Masjid Saqafah	Islam	188.99	L					M			N
	Masjid Canizares	Islam	90.54	L								N
	Masjid Abduljabbar	Islam										N
	Masjid Nur alhuda	Islam	23.58	M					M			N
	Masjid Taubah	Islam	21.94	L					M			N
	Masjid Balabaran	Islam	121.46	H					M			N
	Masjid Al hudaBagundang	Islam	60.65	M					M			N
	Masjid UmmoFalih	Islam	132.18	L					M			N
	Masjid Khadigyah	Islam	52.8	M					M			N
	San Isidro Labrador	Catholic	23.62	L								N
	Sr. Sto. Niño Canizares	Catholic	215.49	L								N
RH 11	Masjid Morsid	Islam	58.29	L					M			N
	Madrasah Morsid	Islam	91.88	L					M			N
	Masjid Al Haqq	Islam	153.02	L					M			N
	Masjid Fatima	Islam	43.57	L					M			N
	Masjid Alison	Islam	220.34	L								N
	Masjid Al Wihdah	Islam	71.37	L					M			N
	Masjid Al Musineen	Islam										
	Masjid KhalizhahraniyTalapas	Islam	114.3	L								
	Chapel San Roque	Catholic	137.25	L								
	Our Lady of Peñafrancia	Catholic	406	L								N
	San Antonio Four Square Gospel	Protestant	70.42	L					M			N
	San Antonio De Padua	Catholic	109.53	M					M			N
	United Penti Costal Church Phil	Protestant	175.6	H					M			N

Barangay	Name of Religious Establishment	Type of Religion	Area (sq m)	Hazard Susceptibility (H/M/L)								Used as Evacuation Center (Y/N)
				Fl	Tc	Eq	Vo	Ln	Ts	Su	Others	
	San Pablo Sacred Heart	Catholic	599.59						M			
RH 12	Masjid Al-Rahman	Islam	64.28	L					M			N
	Masjid Zamzam	Islam	326.48	L					M			N
	San Antonio Padua 1	Catholic	50.2	M					M			N
	San Antonio Padua 2	Catholic	220.1	L					M			N
RH 13	Masjid Abubakar Kimpo	Islam	120.12	L					M			N
	Masjid Jainab	Islam	110.95	L					M			N
	Masjid Jaime NurolIslami	Islam	407.62	L					M			N
	Kingdom Hall Jehova'sWittnesses	Protestant	212.18	L					M			N
Pob. Mother	Masjid Al-Tujjar	Islam	59.88	L								N
	Masjid A-Lil Amir	Islam	48.1	L								N
	Masjid Nurul Islam	Islam	99.57	M								N
	Masjid Sogiya	Islam	74.86	L								N
	Masjid Solano Buliao 1	Islam	11.37	L								N
	Masjid Pindulonan	Islam	118.61	L								N
	Masjid Ali Macarban	Islam	80.92	M								N
	Masjid Abubakar As Siddiq	Islam	76.72	L								N
	Masjid IB'N Omar	Islam	49.89	L								N
	Masjid Campio	Islam	166.1	M								N
	Masjid Ulandangen 2	Islam	92.63	L								N
	Masjid Haron	Islam										N
	Masjid SiddikhLumayon	Islam	115.34	M								N
	Masjid Lumayon 1	Islam	176.63	M								N
	Masjid Al Motaire	Islam										N
	Masjid Bangsamoro	Islam	53.88	M								N
Pob. 1	Masjid Tawbah	Islam	85	M								N
	Masjid DatuLukes	Islam	480.83	H								N
	San Isidro Labrador Chapel	Catholic	45.41	VH								N
Pob. 2	Masjid Daud	Islam	109.6	L								N
	Masjid Baital	Islam	83.47	M								N
	Masjid Motaire	Islam	316.22	L								N

Barangay	Name of Religious Establishment	Type of Religion	Area (sq m)	Hazard Susceptibility (H/M/L)								Used as Evacuation Center (Y/N)
				Fl	Tc	Eq	Vo	Ln	Ts	Su	Others	
	Bahay Maria Chapel	Catholic	121.01	L								N
Pob. 3	Masjid Hja. Subia (Doton)	Islam	437.16	M								N
	Masjid Sampulna	Islam	50.6	L								N
	St.Joseph Chapel	Catholic	90.32	M								N
Pob. 4	Masjid Al Salaama	Islam	0.094156	L								N
	Seventh Day Adventist Church	Protestant	318.67	L								N
	Southern Babtist Church	Protestant	696.83	L								N
	Our Lady Fatima Church	Catholic	470.99	L								N
Pob. 5	Queen of Peace	Catholic	1997.46	L					M			N
	Sta. Clara Chapel	Catholic	170.79	L					M			N
	Bell Church	Catholic	341.2	L					M			N
	Masjid Takwa	Islam	143.37	M					M			N
	Masjid Razzak	Islam	150.83	L					M			N
	Senior Santo Niño	Catholic	201.96						M			
Pob. 6	Masjid Al Abasi	Islam	462.34	M					M			N
	Masjid Sulaiman	Islam	47.14	M					M			N
Pob. 7	Masjid Hannan	Islam	166.97	VH					M			N
	Masjid Aisha	Islam	54.94	VH					M			N
	Masjid Salih Ali Azhrani	Islam	50.55	VH					M			N
	Masjid Yusofi	Islam	266.44	VH					M			N
	Masjid Lauban	Islam	97.32	M					M			N
	Masjid Hasanah	Islam	35.63	VH					M			N
	Masjid Sultan	Islam	144.84	VH					M			N
	Masjid Abubakar	Islam	69.55	VH					M			N
	Masjid Al Aman	Islam	73.75	VH					M			N
Pob. 8	Masjid KITFI	Islam										N
	Masjid Rahman	Islam										N
	Madrasah Najiyat	Islam										N
	Masjid Bai Laga Al Islamiyah	Islam										N
	Masjid Datu Ali Basah	Islam										N
	Masjid Datu Dema Kalantungan	Islam										N

Barangay	Name of Religious Establishment	Type of Religion	Area (sq m)	Hazard Susceptibility (H/M/L)								Used as Evacuation Center (Y/N)
				Fl	Tc	Eq	Vo	Ln	Ts	Su	Others	
Pob. 9	Masjid Bqi Maria Pinadtaya	Islam										N
	Masjid Rampak	Islam										N
	Masjid Sakargiling	Islam										N
	Masjid Shuhada al islam	Islam										N
	Masjid Al Rasheed (purok dalubagan)	Islam										N
	Masjid Adzis	Islam										N
	Masjid Hidaya	Islam										N
	Masjid Piqaw Dawah Islamiya	Islam										N
	Masjid Pinguiman Original	Islam										N
	Masjid Pinguiaman 1	Islam										N
	Masjid Moro Islamiyah	Islam										N
Kal. Mother	Masjid Saripa Guiad	Islam							H			N
	Masjid Muslimin	Islam	145.35	VH					H			N
	Masjid Khalid Binn Waled	Islam	321.12	VH					H			N
	Masjid Datu Ali Ayunan	Islam	223.7	VH					H	H		N
	Masjid Matabalao Maulana	Islam	102.49	VH					H	H		N
	Masjid Bacol Islamiyah	Islam	216.41	H					H	M		N
	Masjid Arap	Islam	126.96	H					H	L		N
	Masjid Nasser Bansalao	Islam	143.93	H					H	H		N
	Masjid Basser (Sangingan)	Islam	70.41	H					H	M		N
	Masjid Dante Pasawilan	Islam	80.5	H					M			N
	Masjid Failol	Islam	182.4	H					M			N
	Sr. Santo Niño Chapel	Catholic	251.33	VH					H	M		N
	Knight Of Columbus	Catholic	484.11	H					H	H		N
Kal. 1	Masjid Kalanganan 1	Islam	221.89	H					M	L		N
Kal. 2	Majisd Baiwalk	Islam	176.15	H					H	H		N
	Masjid 1 (Kal 2)	Islam	106.28	H					H	H		N
	Masjid 2 (Kal 2)	Islam	104.45	H					M	M		N
	Masjid 3 (Kal 2)	Islam	87.51	H					M	L		N
	Masjid 4 (Kal 2)	Islam	52.14	H					M			N

Barangay	Name of Religious Establishment	Type of Religion	Area (sq m)	Hazard Susceptibility (H/M/L)								Used as Evacuation Center (Y/N)
				Fl	Tc	Eq	Vo	Ln	Ts	Su	Others	
	Masjid 5 (Kal 2)	Islam	102.89	H					M			N
	Masjid Al Abassi	Islam	219.02	H					H	H		N
	Masjid Anawi 14 (White Mosque)	Islam	310.08	H					M			N
	Masjid Ashia	Islam	102.77	H					H	H		N
	Masjid Datu Manguda Ibad	Islam	124.01	H					M			N
	Masjid Guinakit	Islam	106.12	H					H	H		N
	Masjid Ibrahim	Islam	29.92	H					M			N
	Masjid Kuwait	Islam	427.07	H					H	H		N
	Masjid Orphan	Islam	343.81	H					H	H		N
	Masjid Shiek Hassan	Islam	206.75	H					M			N
	Grand Mosque	Islam	14181	H					H	H		N
Tam. Mother	Mosque 1 (Tam MB)	Islam	100.31	H					M			N
	Mosque 2 (Tam MB)	Islam	303.63	H					M			N
	Mosque 3 (Tam MB)	Islam	481.8	H					M			N
Tam. 1	Tamontaka 1 Masjid	Islam	73.99	M					M			N
	Tamontaka 2 Masjid	Islam	130.93	H					M			N
	Masjid Saqafa	Islam	122.45	H					M			N
	Masjid DarolMarhama	Islam										N
	Masjid Aisha Sultan Alkhiyaily	Islam	375.38	H					M			N
Tam. 2	Tamontaka 2 Masjid	Islam	102.4	M								N
	Masjid Ibrahim Nanding	Islam	74.21	M								N
Tam. 3	Masjid Pagalamatan	Islam	639.78	H								N
	Masjid Al Hassan Ala	Islam	150.18	H								N
	Tamontaka 3 Masjid	Islam	104.42	H								N
	Masjid Shiek Muhammad Zayd Al Zayd	Islam	103.75	H								N
Tam. 4	Masjid 1 Tamontaka 4	Islam	139.1	H								N
	Masjid 2 Tamontaka 4	Islam	278.9	M								
	Masjid Al Rahma	Islam	229.07	H								N
	Masjid Najma Alkaire	Islam	215.91	H								N
	Masjid SabahaAwdhasshamrie	Islam	67.75	H								N
	Masjid RasdidAlalAmadi	Islam	87.4	H								N

Barangay	Name of Religious Establishment	Type of Religion	Area (sq m)	Hazard Susceptibility (H/M/L)								Used as Evacuation Center (Y/N)
				Fl	Tc	Eq	Vo	Ln	Ts	Su	Others	
Tam. 5	Tamontaka 5 Masjid 1	Islam	122.88	H								N
	Tamontaka 5 Masjid 2	Islam	185.84	H								N
	Tamontaka 5 Masjid 3	Islam	130.74	H								N
	Tamontaka 5 Masjid 4	Islam	160.56	H								N
	Tamontaka 5 Masjid 5	Islam	453.92	VH								N
	Tamontaka 5 Masjid 6	Islam	53.71	VH								N
	Tamontaka 5 Masjid 7	Islam	198.18	VH								N
	Tamontaka 5 Masjid 8	Islam	231.37	VH								N

Indicate level of susceptibility for all hazards: High (H), Moderate (M), Low (L)
Notes:

Types of hazards – Flood (Fl), Tropical Cyclone (Tc), Earthquake (Eq), Volcano (Vo), Landslide (Ln), Tsunami (Ts), Storm Surge (Su), Others (e.g. coastal erosion, sea level rise, land subsidence,liquefaction, strong wind, change in temperature, change in rainfall, etc.)
Evacuation center - indicate if used as evacuation center; Yes (Y), No (N)

1.2.13 Labor Force Population by Sex and Employment Status, Year 2015

Labor Force Population refers to those individuals ages 15 to 65 years old. Cotabato City comprises a total of 185,950 working population or 59.3% share from the entire population. Ninety three point five percent (93.5%) of the city's Labor Force population are gainfully employed, of which 45.9% are male and 47.6% female, and only 6.5% are unemployed, 8.2% of which were unemployed females. The Regional situation of labor force recorded a total labor force participation rate of 65% or 831,072 belonging to 15 years old and over. And a total of 806,970 are gainfully employed (97.1%) and only 24,102 are unemployed (2.9%).

Table DE-12. Labor Force Population by Sex and Employment Status, Year 2015

Sex	City					Region XII					
	Population 15 Yrs and Over	Employed	%	Unemployed	%	Population 15 Yrs and Over	Employed	%	Unemployed	%	*Not in Labor Force
Male	89,476	85,315	45.9	4,161	4.7			0.0	-	0.0	
Female	96,474	88,548	47.6	7,926	8.2			0.0	-	0.0	
Both Sexes	185,950	173,863	93.5	12,087	6.5	831,072	806,970	97.1	24,102	2.9	

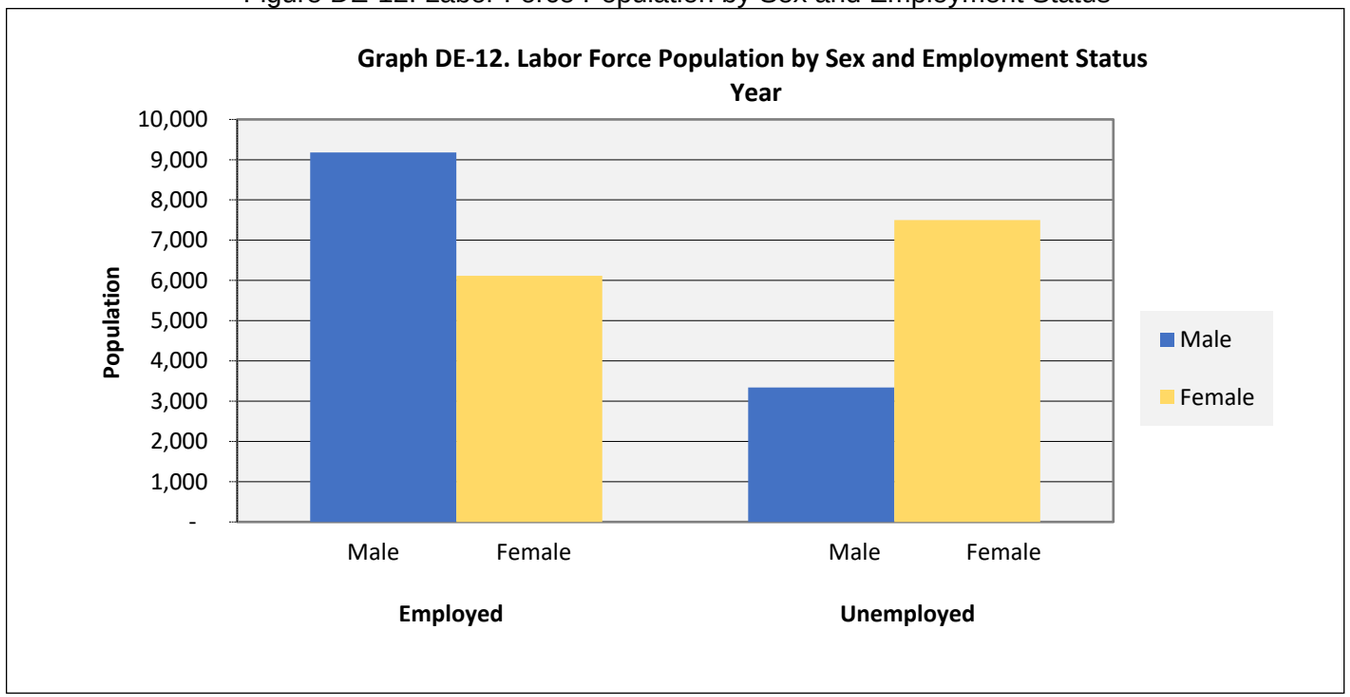
Notes:

Refer to Table DE-1 to fill up column 2 for the city/municpality. For data on province, use NSO data.

$$\%\ \text{Employed} = \frac{\text{Employed Population X 100}}{\text{Population 15 Yrs and Over 100}}$$

$$\%\ \text{Unemployed} = \frac{\text{Unemployed Population X 100}}{\text{Population 15 Yrs and Over}}$$

Figure DE-12. Labor Force Population by Sex and Employment Status



12.14 Household Population 5 Years Old and Over by Highest Educational Attainment, Year 2015

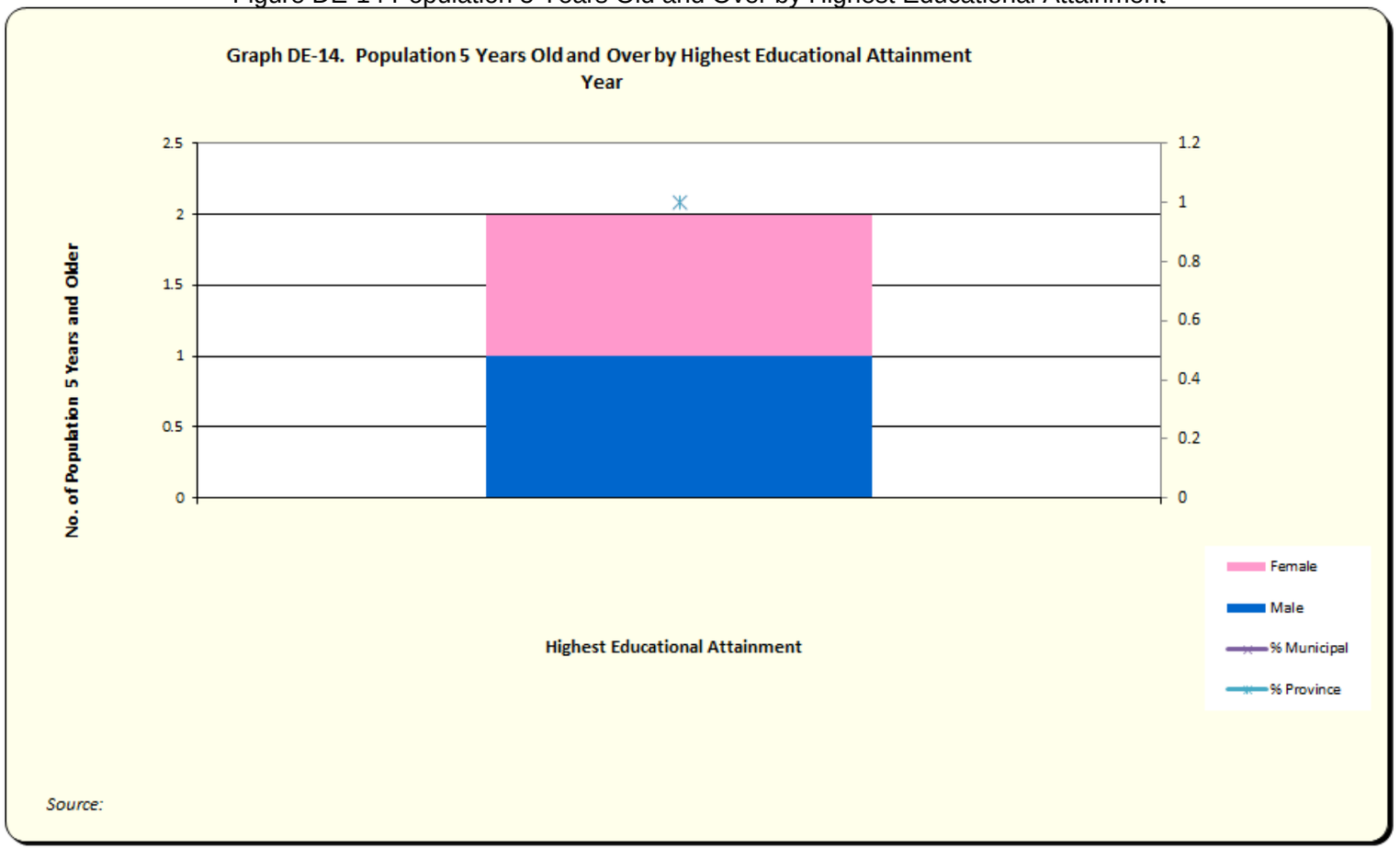
Table DE-14 Shows the household population 5 years old and over by highest educational attainment as of the population census result 2015 for Cotabato City and Region XII. The city is composed of 3% population with a pre-school educational attainment, that goes the same with the region. Thirty-seven percent (37%) acquired elementary level, while the region is slightly higher at 41%; 33% of the population attained Secondary Level and the region at 36%; 3% of the city constituents have Tech-Voc courses while the region slide down at 2%; 23% achieve College Level and/or graduated with degree courses while the region only at 17% College Level or professionals; and less than 1% having post baccalaureate degree, also same goes with the region. Male dominate in terms of numbers from the preschool to elementary level but shift to female at Secondary, Vocational and College Level. Male slightly dominates in Post Baccalaureate degree.

Table DE-14. Household Population 5 Years Old and Over by Highest Educational Attainment, Year 2015

Highest Educational Attainment	City						Regional	
	Male		Female		Both Sexes		Both Sexes	
	No.	%	No.	%	No.	%	No.	%
Pre-School	4,165	4	3,857	3	8,022	3	125,443	3
Elementary	45,180	38	44,306	36	89,486	37	1,530,691	41
Primary (Grade 1-3)	25,109	21	24,114	19	49,223	20	832,668	22
Intermediate (Grade 4-6)	11,142	9	11,051	9	22,193	9	290,032	8
Graduate	8,929	8	9,141	7	18,070	7	407,991	11
Secondary	39,139	33	42,027	34	81,166	33	1,369,431	36
Undergraduate	18,141	15	19,676	16	37,817	16	618,665	16
Graduate	20,998	18	22,351	18	43,349	18	750,766	20
Technical/Vocational Course	3,418	3	3,528	3	6,946	3	78,517	2
Voc-Undergraduate	28	0.02	45	0	73	0	3,174	0.1
Voc-Graduate	3,390	3	3,483	3	6,873	3	75,343	2
College	26,719	22	30,335	24	57,054	23	652,251	17
College Undergraduate	17,298	15	19,140	15	36,438	15	348,463	9
Academic Degree Holder	9,421	8	11,195	9	20,616	8	303,788	8
Post Baccalaureate	250	0.21	243	0.20	493	0.20	5,158	0.14
TOTAL	118,871		124,296		243,167		3,761,491	

Note: % = (Total No./No. per level) x 100

Figure DE-14 Population 5 Years Old and Over by Highest Educational Attainment



12.15 Population Projection

The City's actual count during the Population Census in 2020 is 325,079 with an average Growth Rate of 1.72% and the city Average Household size at 4.9 or more or less 5 persons for every household. The city's projected population and household population using the above growth rate will reach approximately a total count of 354,014 by 2025 with 70,803 households, making an average additional count of more or less 5,787 persons per annum. By 2030, we are expecting to reach 385,525 individuals in the city or about 77,105 households.

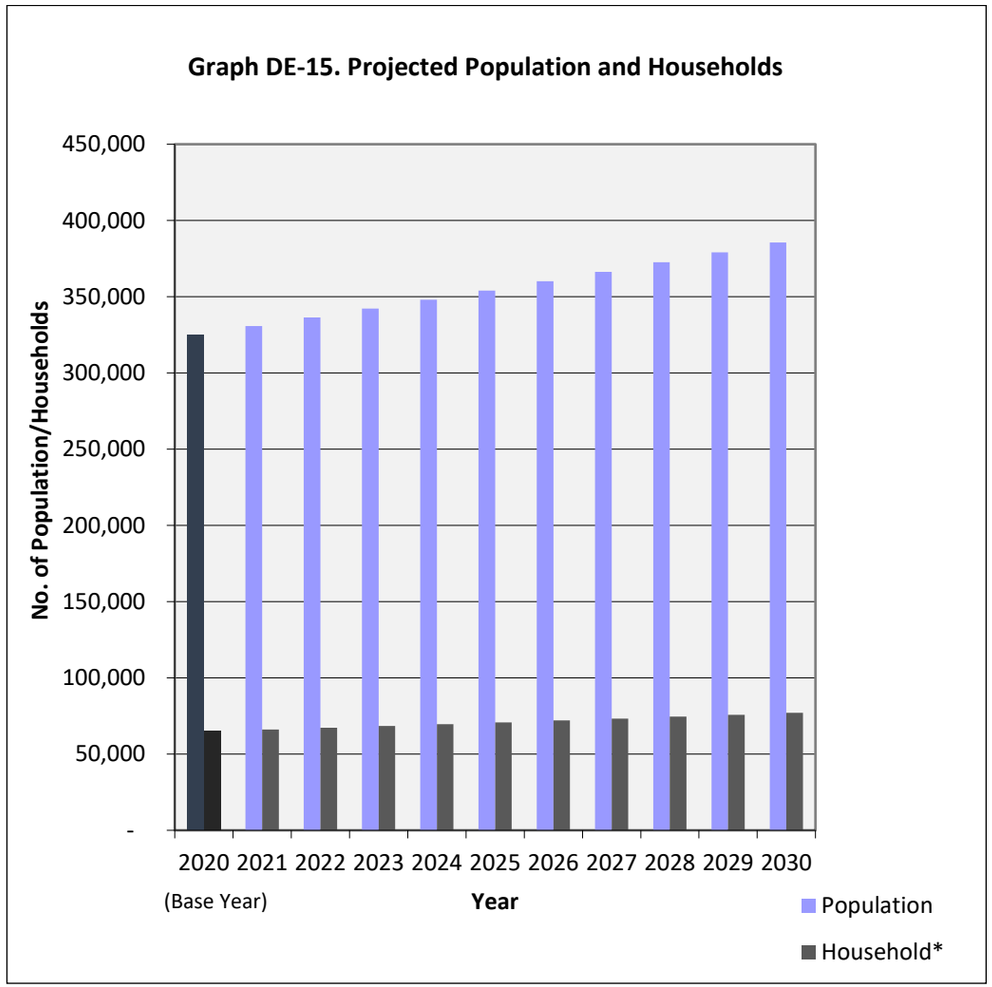
a. Projected Population and Households

Table DE- 15. Projected Population and Households
Annual Population Growth Rate:1.86%
Average HH size: 5

Year	Population	Household*
2020	325,079	65,016
2021	330,670	66,134
2022	336,358	67,272
2023	342,143	68,429
2024	348,028	69,606
2025	354,014	70,803
2026	360,103	72,021
2027	366,297	73,259
2028	372,597	74,519
2029	379,006	75,801
2030	385,525	77,105

Source: NSO/PSA
Note:
Use latest annual population growth rate derived from Table DE-6
**Using the average household size derived from Table DE- 3*

Figure DE-15 Projected Population and Household



b. Projected Population by Barangay, Year 2020-2030

Table DE-16 shows the City Population Projection by barangay using 2015 as the base year to 2030, computing an annual average Population Growth Rate of 1.86% and applying participation rate by barangay and classified according to urban and rural barangays. The city identified 34 Urban Barangays in 2015 with a total population of 291,790 urban settlers or a 97.47% urban tempo and only 7,648 Rural settlers of 2.55%. Barangay Poblacion Mother being the most populated barangay has a participation rate of 6.92% from the total population. In 2020, the city has approximately 22,735 citizens, by 2025 it will reach 24,930, and in 2030 is expected to reach 27,336.

Barangay Bagua 2 ranks second (2nd) as Most populated barangay having a 6.59% share from the total population. In 2020, they are about 21,623 residents. By 2025, they will have 23,711 residents and is expected to reach 25,999 by 2030. Barangay Tamontaka 5 is the least populated barangay, classified as rural barangay with only 0.39% share from the total population. In 2020, it has a population of only 1,291 people. By 2025, it will reach about 1,415 individuals, and is expected to reach 1,552 by 2030.

Table DE-16. Projected Population by Barangay, Year 2020-2030

BARANGAY	2015	Participation Rate (PR)	Population										
			2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
TOTAL	**99,438**	**1**	**28,341**	**334,448**	**340,669**	**347,005**	**353,460**	**360,034**	**366,731**	**373,552**	**380,500**	**387,577**	**394,786**
Urban													
Bagua	8,137	0.0606	19,888	20,258	20,634	21,018	21,409	21,807	22,213	22,626	23,047	23,476	23,912
Kalanganan	5,019	0.0502	16,469	16,775	17,087	17,405	17,729	18,058	18,394	18,736	19,085	19,440	19,801
Poblacion	0,734	0.0692	22,735	23,158	23,589	24,028	24,475	24,930	25,394	25,866	26,347	26,837	27,336
Rosary Heights	3,943	0.0466	15,289	15,573	15,863	16,158	16,458	16,765	17,076	17,394	17,718	18,047	18,383
Tamontaka	2,027	0.0402	13,188	13,433	13,683	13,938	14,197	14,461	14,730	15,004	15,283	15,567	15,857
Bagua I	9,206	0.0307	10,095	10,282	10,474	10,668	10,867	11,069	11,275	11,485	11,698	11,916	12,137
Bagua II	9,720	0.0659	21,623	22,026	22,435	22,853	23,278	23,711	24,152	24,601	25,058	25,525	25,999
Bagua III	6,847	0.0229	7,508	7,648	7,790	7,935	8,082	8,233	8,386	8,542	8,701	8,862	9,027
Kalanganan I	5,808	0.0194	6,369	6,487	6,608	6,731	6,856	6,983	7,113	7,246	7,380	7,518	7,657
Kalanganan II	5,999	0.0200	6,578	6,700	6,825	6,952	7,081	7,213	7,347	7,484	7,623	7,765	7,909
Poblacion I	5,677	0.0190	6,225	6,341	6,459	6,579	6,701	6,826	6,953	7,082	7,214	7,348	7,485
Poblacion II	6,302	0.0210	6,910	7,039	7,170	7,303	7,439	7,577	7,718	7,862	8,008	8,157	8,309
Poblacion III	2,985	0.0100	3,273	3,334	3,396	3,459	3,524	3,589	3,656	3,724	3,793	3,864	3,935
Poblacion IV	6,456	0.0216	7,079	7,211	7,345	7,482	7,621	7,762	7,907	8,054	8,204	8,356	8,512
Poblacion V	3,070	0.0103	3,366	3,429	3,493	3,558	3,624	3,691	3,760	3,830	3,901	3,974	4,048
Poblacion VI	5,151	0.0172	5,648	5,753	5,860	5,969	6,080	6,193	6,309	6,426	6,545	6,667	6,791

BARANGAY	2015	Participation Rate (PR)	Population										
			2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Poblacion VII	15,712	0.0525	17,229	17,549	17,875	18,208	18,547	18,892	19,243	19,601	19,965	20,337	20,715
Poblacion VIII	8,786	0.0293	9,634	9,813	9,996	10,182	10,371	10,564	10,760	10,961	11,164	11,372	11,584
Poblacion IX	5,998	0.0200	6,577	6,699	6,824	6,951	7,080	7,212	7,346	7,483	7,622	7,764	7,908
Rosary Heights I	3,931	0.0131	4,310	4,391	4,472	4,555	4,640	4,727	4,814	4,904	4,995	5,088	5,183
Rosary Heights II	5,006	0.0167	5,489	5,591	5,695	5,801	5,909	6,019	6,131	6,245	6,361	6,480	6,600
Rosary Heights III	10,786	0.0360	11,827	12,047	12,271	12,499	12,732	12,969	13,210	13,456	13,706	13,961	14,221
Rosary Heights IV	4,377	0.0146	4,799	4,889	4,980	5,072	5,167	5,263	5,361	5,460	5,562	5,665	5,771
Rosary Heights V	5,870	0.0196	6,437	6,556	6,678	6,802	6,929	7,058	7,189	7,323	7,459	7,598	7,739
Rosary Heights VI	6,846	0.0229	7,507	7,646	7,789	7,934	8,081	8,231	8,385	8,540	8,699	8,861	9,026
Rosary Heights VII	9,257	0.0309	10,151	10,339	10,532	10,728	10,927	11,130	11,337	11,548	11,763	11,982	12,205
Rosary Heights VIII	8,524	0.0285	9,347	9,521	9,698	9,878	10,062	10,249	10,440	10,634	10,832	11,033	11,238
Rosary Heights IX	7,802	0.0261	8,555	8,714	8,876	9,041	9,210	9,381	9,555	9,733	9,914	10,099	10,286
Rosary Heights X	15,732	0.0525	17,251	17,571	17,898	18,231	18,570	18,916	19,267	19,626	19,991	20,363	20,741
Rosary Heights XI	7,864	0.0263	8,623	8,783	8,947	9,113	9,283	9,455	9,631	9,810	9,993	10,179	10,368
Rosary Heights XII	4,664	0.0156	5,114	5,209	5,306	5,405	5,505	5,608	5,712	5,818	5,927	6,037	6,149
Rosary Heights XIII	4,947	0.0165	5,425	5,525	5,628	5,733	5,839	5,948	6,059	6,171	6,286	6,403	6,522
Tamontaka I	4,423	0.0148	4,850	4,940	5,032	5,126	5,221	5,318	5,417	5,518	5,620	5,725	5,831
Tamontaka II	4,184	0.0140	4,588	4,673	4,760	4,849	4,939	5,031	5,124	5,220	5,317	5,416	5,516
Sub-Total	291,790	0.9745	319,955	325,906	331,968	338,143	344,432	350,838	357,364	364,011	370,782	377,678	384,703
Rural													
Tamontaka III	2,730	0.0091	2,994	3,049	3,106	3,164	3,223	3,282	3,344	3,406	3,469	3,534	3,599
Tamontaka IV	3,741	0.0125	4,102	4,178	4,256	4,335	4,416	4,498	4,582	4,667	4,754	4,842	4,932
Tamontaka V	1,177	0.0039	1,291	1,315	1,339	1,364	1,389	1,415	1,442	1,468	1,496	1,523	1,552
Sub-Total	7,648	0.0255	8,386	8,542	8,701	8,863	9,028	9,196	9,367	9,541	9,718	9,899	10,083

Notes:

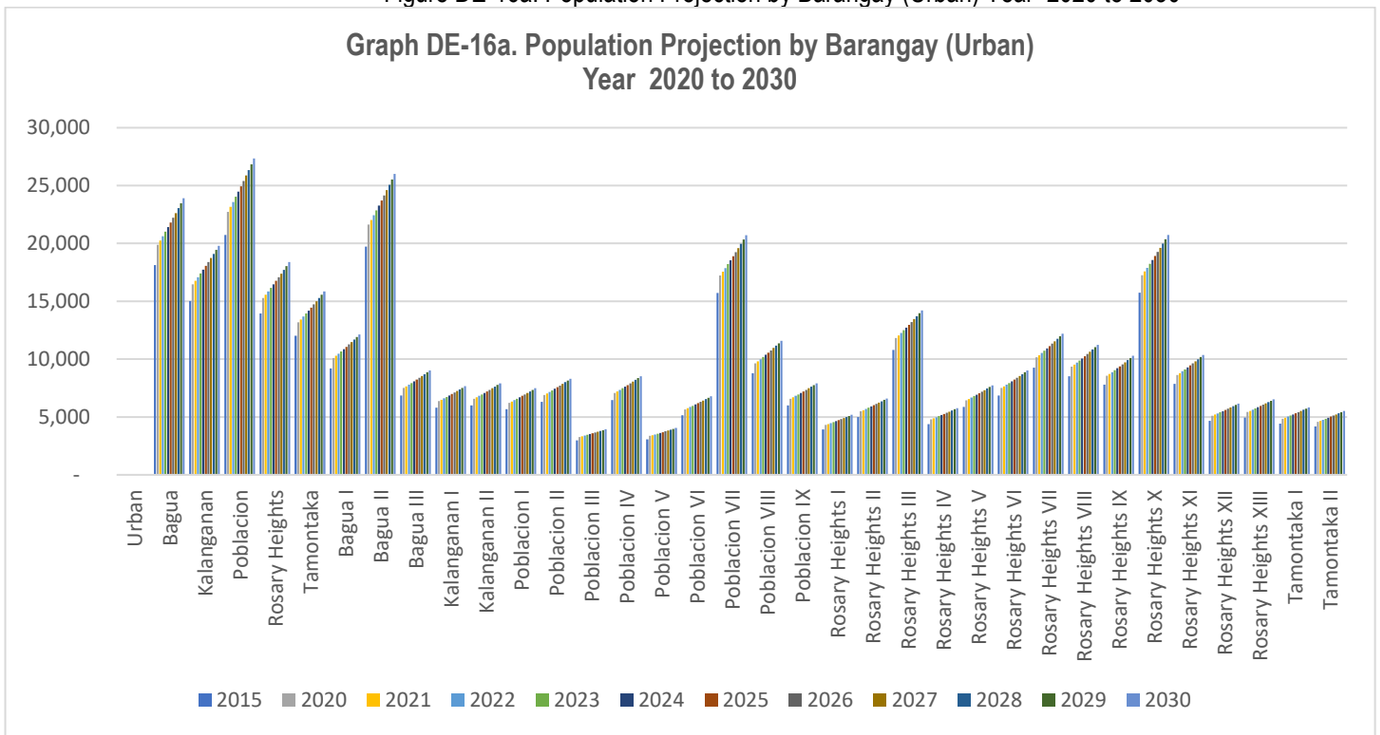
** Use latest census data*

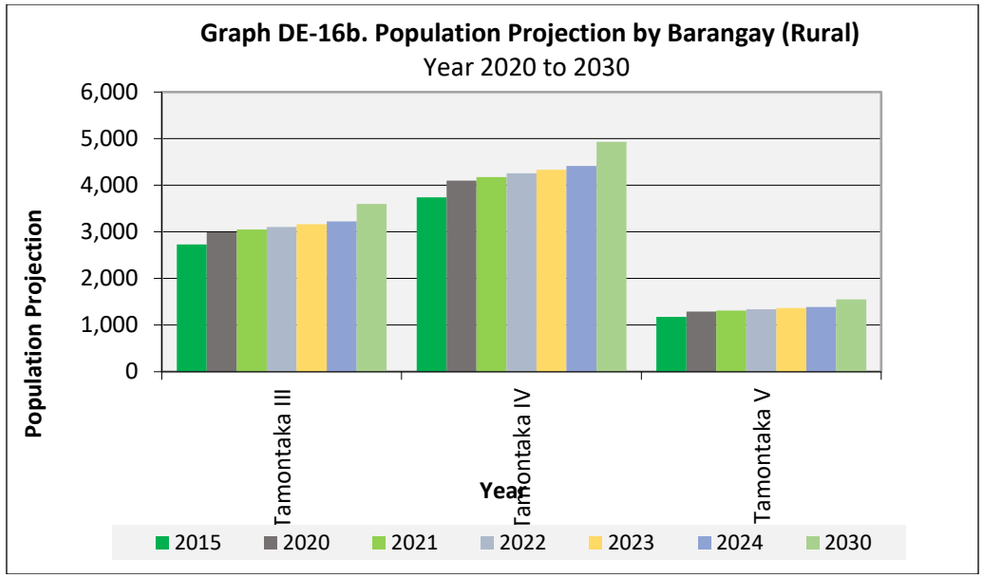
PR = Brgy. Pop'n / Pop'n of city

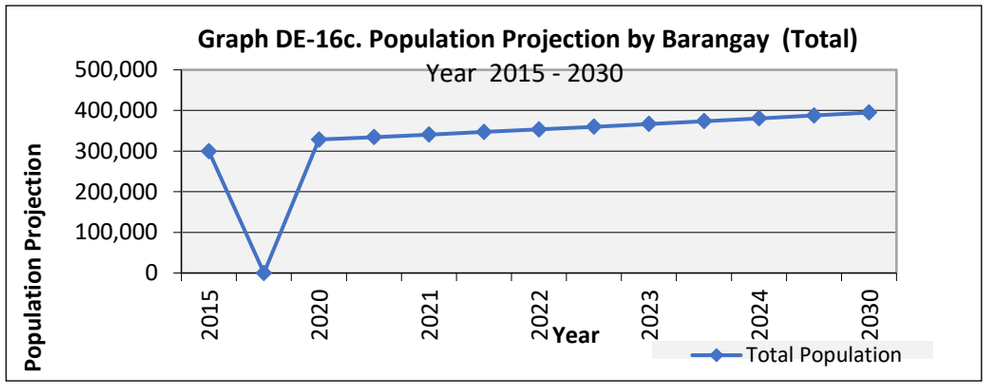
Pop'n projection per Brgy. = PR of Brgy. X ProjectedPop'n of city

See Table DE-15 for projected population of city

Figure DE-16a. Population Projection by Barangay (Urban) Year 2020 to 2030







c. Projected School-Going Age Population, Labor Force and Dependent Population

Table DE-17 Shows the City Projected Population Distribution by School-Age Population, Labor Force and Dependent Population. Using the 2015 population as the base year and population growth of 1.86% and applying participation rate by age group for planning purposes, the city recorded a total of 137,210 School Going population in 2015, comprising the ages from 3 to 22 years old. They share 0.46% of the entire population. By 2021, the city will have a total projected count of 150,454 students, adding by an average of more or less 2,207 pupils annually. By 2025, they will reach to 164,977 learners, and is expected to increase to 180,901 pupils by 2030.

Labor Force Population or the Working population are composed of 15 to 65 years old. They are the people who provide to the dependent population for their subsistence. In 2015 they comprise a total of 185,950 individuals or 62% of the entire population. By 2021, there will be 207,691 workers in the city growing by more of less 3,624 persons per year. The labor force will register a total of 223,580 by 2025, and is expected to increase to 245,161 by 2030.

Dependent population are those belonging to ages 0-14 years old or otherwise known as young dependents. The second (2nd) set are those belonging to 65 years old and over or known as the old dependents. They comprise 38% of the population, 35% of which are the young dependents and only 3% elderlies. The Young dependents will register a count of 115,933 youngsters by 2021 while the Senior Citizens at only 9,467. By 2025, the city will have 124,802 young dependents and 10,191 elderly dependents. By 2030, there will be 136,848 young dependents and 11,175 elderly dependents.

Table DE-17. Projected School-Age Population, Labor Force, and Dependent Population

Grouping	Base year	Participation Rate	Projected Population										
			2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Population	299,438		8,341	334,448	340,669	347,005	353,460	360,034	366,731	373,552	380,500	387,577	394,786
School going population	137,210	0.46	0,454	53,253	156,103	159,007	161,964	164,977	168,045	171,171	174,355	177,598	180,901
Pre-school	28,928	0.10	1,720	32,310	32,911	33,523	34,147	34,782	35,429	36,088	36,759	37,443	38,139
Elementary	42,280	0.14	6,361	47,223	48,102	48,996	49,908	50,836	51,782	52,745	53,726	54,725	55,743
Secondary	41,547	0.14	5,557	46,405	47,268	48,147	49,043	49,955	50,884	51,830	52,794	53,776	54,777
Tertiary	24,455	0.08	6,816	27,314	27,822	28,340	28,867	29,404	29,951	30,508	31,075	31,653	32,242
Labor Force	185,950	0.62	3,899	07,691	211,554	215,489	219,497	223,580	227,739	231,974	236,289	240,684	245,161
Dependent	112,273	0.37	3,110	25,400	127,732	130,108	132,528	134,993	137,504	140,062	142,667	145,320	148,023
Young (0-14)	103,797	0.35	13,816	15,933	118,089	120,286	122,523	124,802	127,123	129,488	131,896	134,350	136,848
Old (65 and over)	8,476	0.03	9,294	9,467	9,643	9,822	10,005	10,191	10,381	10,574	10,771	10,971	11,175

Source: Computed based on NSO/PSA Data

Notes: PR = Population of grouping / Total population Projection per year = PR x projected total population

d. Doubling time of growth rate of population

The highest population growth rate was recorded in Population Census 1948. This was the time after the war that the Republic intends to rise up from its devastation. The sudden lift in population was attributed to the economic program of President Manuel Roxas, who push the economic development towards Mindanao which was known and bearing a popular slogan of “Mindanao as the Land of Promise”.

The increase in population between the period 1970-1975 was attributed to the Peace and Order issues. The city was surrounded with towns and municipalities affected by armed conflict and became host to fleeing evacuees for safety, medical services, temporary shelter and food supply.

During this period the city is a booming city, it offers trading services because of the presence of small shipping line from and going to Zamboanga, Pagadian, Ilo-ilo and other parts of the country, which popularized the barter trade. The port and airport activity pushed to the stability of commercial businesses. The city is also known for offering quality education because of the establishment of Private Educational Institution such as the Notre Dame Schools and Cotabato Chinese Institute (CCI). It has also good source of power/energy and potable water supply. The health institution is also located in the city both public (Cotabato Hospital at the foot of PC Hill) and private (Notre Dame Hospital).

Table DE. 18. Population Growth and Growth Rate, Cotabato City, 1903-2015

Censal Year	Population	Additional Population	Growth Rate (%)	RANK
March 02, 1903	1,103			
December 31, 1918	5,870	4,767	1.23	least
January 01, 1939	10,166	4,296	6.36	
October 01, 1948	20,407	10,241	8.05	highest
February 16, 1960	37,499	17,092	5.2	
May 06, 1970	61,184	23,685	5.02	
May 01, 1975	67,097	5,913	1.86	
May 01, 1980	83,871	16,774	4.56	
May 01, 1990	127,065	43,194	4.24	
September 01, 1995	146,779	19,714	2.74	
May 01, 2000	163,849	17,070	2.39	
Aug. 1, 2007	259,153	95,304	6.53	2nd highest
Aug. 1, 2010	271,786	12,633	1.8	
Aug. 1, 2015	299,438	27,652	1.86	

Source: PSA

During the 1980 to 1990, though the city is surrounded with towns and municipality with peace and order issues, it remains the center of trading and commerce in the region. The presence of financial institution, as hub for education, hospital and medical services, home of the Regional seat of Government and ARMM, and center of Media, and reliable source of energy and water were among the strength of the city.

From 1990 to 1998, this was during the administration of then Pres. Cory Aquino. The administration of Mayor Badoy responded to the economic reform of the said administration by introducing transparent government and infrastructure development, like opening and concreting of roads, introducing the socialized housing program and delivery of basic social services that resulted to the vibrant economy of the city.

In 2000 to 2006, selective declaration of Martial Law was declared in Mindanao due to the Maguindanao Massacre in Nov. 23, 2009, peace and order issues escalated in the area. The city being the seat of ARMM, hosted temporary residents in the city and latter resettled. The incoming residents from various towns with various culture and beliefs, carrying issues of poverty and survival, somehow contribute to the rising crime incident in the city. Hence, many of the locals experienced and/or victims of crime. These incidents created a chilling effect to city residents and many of the old-time residents and the Filipino Chinese opted to move to other towns.

The sudden increase in population in 2007 was attributed to the land dispute and geographical claim somewhere in Pikit Municipality and its neighboring towns plus the taking over of Camp Abbubakar during the administration of Pres. Estrada created mass evacuation to the city coming from affected areas.

The declaration of PD 304 in March 30, 2004 or known as the transfer of Regional Seat from Cotabato City to Koronadal City, has become mandatory. Affected families has slowly moved to the new regional seat for economic and security reasons. In 2010 the population growth stabilized due to improving peace and order situation marking only the population growth at 1.80%, a wait and see period, and slightly increases in 2015 at 1.86% that slowly creating a good economic climate due to stable peace and order.

The table below shows the projected growth of the city from 2016-2053 at an average Population Growth Rate of 1.86%, hence, the city is growing by an average of 5,665 or more people per year. The city projected population by 2020 is at 328,342 and will reach about 394,787 people by 2030. Applying the average Population Growth Rate (PGR) of 1.86% annually, the city population is projected to will double its size by year 2052, or within 37.26 years with an estimated population count of 592,165, a little faster compared to 2010 PGR at 1.80% which will double in 38.5 years.

Table DE 19 Population Projection by Year, 2015-2053

YEAR	ESTIMATED POPULATION	YEAR	ESTIMATED POPULATION
2015	299,438		
2016	305,008	**2035**	432,893
2017	310,681	**2036**	440,944
2018	316,460	**2037**	449,146
2019	322,346	**2038**	457,500
2020	328,342	**2039**	466,010
2021	334,449	**2040**	474,677
2022	340,670	**2041**	483,506
2023	347,006	**2042**	492,500
2024	353,461	**2043**	501,660
2025	360,035	**2044**	510,991
2026	366,731	**2045**	520,495
2027	373,552	**2046**	530,177
2028	380,500	**2047**	540,038
2029	387,577	**2048**	550,083
2030	394,787	**2049**	560,314
2031	402,129	**2050**	570,736
2032	409,609	**2051**	581,352
2033	417,227	**2052**	592,165
2034	424,988	**2053**	603,179

Source: Office of the City Planning and Development Coordinator

e. Fertility Rates in Cotabato City in comparison with the Region

Cotabato City shows the lowest fertility rate among its neighboring province and follow a decreasing trend from 2.9% in year 2000-2005; slightly down at 2.7% in 2005-2010; decreasing again to 2.52% in year 2010-2015 and probably at 2.34% by year 2015-2020. This must be attributed to the massive awareness on reproductive health of the city and to the new normal lifestyle of modern women that are now more conscious of their career and economic and family security. The highest fertility rate was from Sarangani Province, followed by Sultan Kudarat and the lowest was registered to Cotabato City and next lowest is South Cotabato Province. The table is sourced from the 2015 Regional Social and Economic Trends issued by the Philippine Statistics Authority (PSA) Regional Office XII, which shows regional and provincial projection on Fertility Rates from 2000 to 2020 at a medium assumption.

Table DE-20 Projected Total Fertility Rates by Province/City 2000-2020
(Medium Assumption)

Province/City	2000-2005	2005-2010	2010-2015	2015-2020
Region XII	4.04	3.77	3.51	3.27
Cotabato	4.16	3.87	3.61	3.36
South Cotabato	3.74	3.49	3.25	3.03
Sarangani	4.59	4.28	3.98	3.71
Sultan Kudarat	4.21	3.92	3.65	3.4
Cotabato City	2.9	2.7	2.52	2.34

f. Life Expectancy in Cotabato City

Table DE-21 shows the Cotabato City life expectancy at birth by sex. Registering an expectancy for the male for year 2000-2005 at age 64.23 and showing an improving life expectancy for the preceding year at age 66.23 during the period 2005-2010, moving at the age 67.73 for the period 2010-2015 and projected to reach the age of 68.93 by year 2015-2020. The female shows a higher life expectancy than male. They achieve the age of 68.70 during the period 2000-2005, and continue to improve in 2005-2010 at age 70.70, reaching the age of 72.20 for the period 2010-2015, and projected to reach the age of 73.7 by 2015-2020.

Table DE-21. Projected Life Expectancy at Birth by Sex, Cotabato City, 2000-2020

Sex	2000-2005	2005-2010	2010-2015	2015-2020
Male	64.23	66.23	67.73	68.93
Female	68.7	70.7	72.2	73.7

1.3 PHYSICAL FEATURES

Physical Features and Environmental Condition

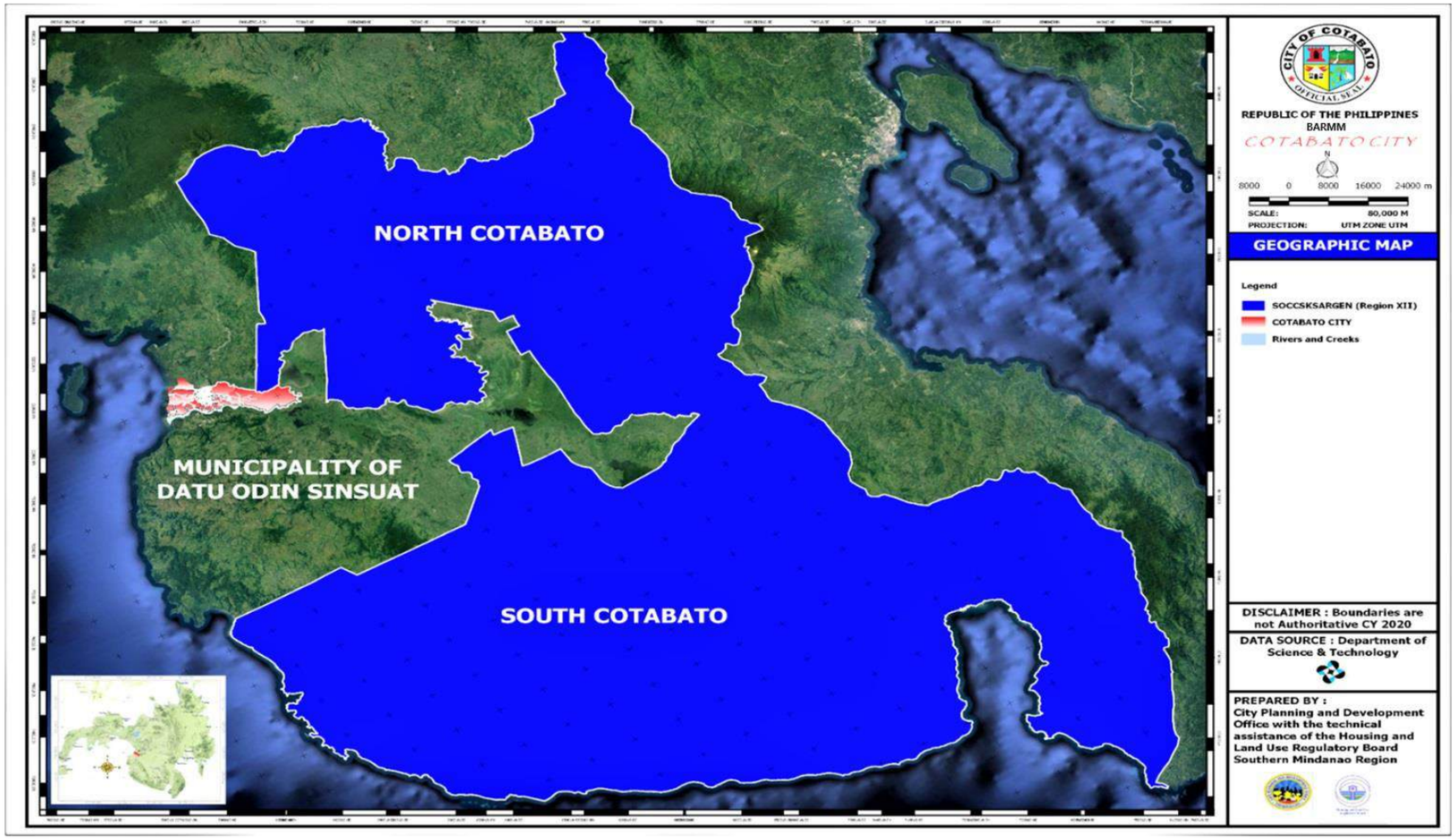
The City exercises territorial jurisdiction over thirty-seven (37) barangays enclosed by a land mass that is traversed by tributaries originating from the two (2) rivers, the Rio Grande de Mindanao and Rio Grande de Tamontaka. The two (2) big rivers basically surround the city from the north and southern part making it virtually a delta. The City is characterized by a palpable landscape of flat to undulating slope except for the two (2) elevated areas, the Pedro Colina (PC) Hill and the Timako Hill. Since the city is largely flat, there is no major erosion anywhere in the city.

The city's territory is largely made up of a soil called "Tamontaka clay" which is known to have a high fertility level. This in essence, is a good land which can be both cultivated and suited for urban development as well. While Tamontaka clay makes up the eastern part of the city and the western part onward to the Illana Bay is composed of Faraon clay which is known to be moderately good lands that are suitable for limited cultivation and less appropriate for urban development due to its soil characteristics. It is the second largest soil type comprising the city's territory following Tamontaka clay. Currently, settlements and other urban development take place in lands whose soil is classified as San Manuel Clay. This soil can be cultivated safely and requires very simple soil management practices with high density for urban development.

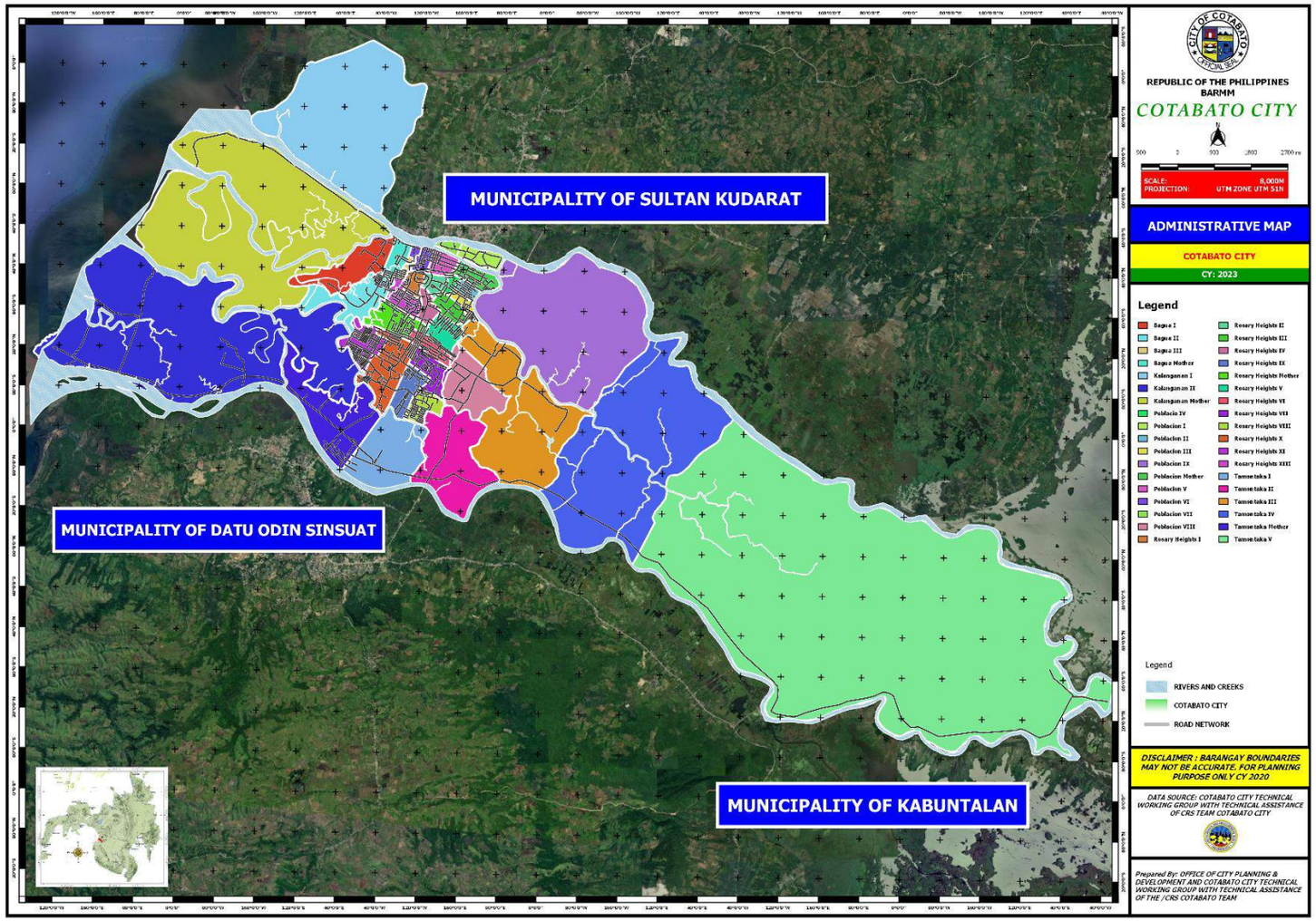
1.3.1 Geographic Location

COTABATO CITY is situated in the northwest portion of Maguindanao. It lies 7'138'44.02 North Latitude and 124'14'32.06 East Longitude It is approximately 689.9 nautical miles southeast of Manila and is more or less 220 kilometers away from Davao City. The city is bounded on the North by the municipality of Sultan Kudarat with Rio Grande de Mindanao as boundary; on the East by the municipality of Kabuntalan; on the South by the municipality of Dinaig, now Datu Odin Sinsuat (DOS), Maguindanao with Rio Grande de Tamontaka as boundary; and on the West by Illana Bay.

Map 1 Geographic Location



Map 2 - Political Boundaries



Cotabato city is composed of Thirty-seven (37) Barangays, it is bounded by the municipalities of Sultan Kudarat in the North, Datu Odin Sinsuat on the South, Kabuntalan on the East and Illana Bay in the East.

1.3.2 Land Area by barangay

The city is bounded on the north by the Municipality of Sultan Kudarat (with Rio Grande de Mindanao as the boundary) on the east by the Municipality of Kabuntalan, on the south by Municipality of Datu Odin Sinsuat (all of Maguindanao province) and by Illana Bay, part of the Moro Gulf, on the west. In its entirety, the city extends a total area of seventeen thousand five hundred ninety-nine hectares (17,599 has.) with thirty-seven (37) barangays, of which thirty (30) are urban areas and the remaining seven (7) are rural barangays, per PSA classification. Please refer to Table 8.

Barangay Political Subdivision

The City comprises thirty-seven (37) barangays, thirty-four (34) of which are classified as urban and seven (3) rural barangays. Most urban barangays are situated in the hub of the city occupying smaller land area vis-a-vis rural barangays.

Table 1 shows the list of barangays and their corresponding land area in hectare while Figure 3 shows their administrative boundaries.

Table 1
List of Barangays and their Corresponding Area

BARANGAY	LAND AREA (IN HAS.)	AREA OF RIVERS AND CREEKS	TOTAL AREA	PERCENTAGE (%) DISTRIBUTION
URBAN BARANGAYS				
Poblacion Mother Barangay	30.7918	4.388	35.1798	0.20
Poblacion I	57.5143	11.089	68.6033	0.39
Poblacion II	16.4244	1.179	17.6834	0.10
Poblacion III	10.1916	0.704	10.8956	0.06
Poblacion IV	15.3372	-	15.3372	0.09
Poblacion V	26.7162	1.600	28.3162	0.16
Poblacion VI	18.1750	4.126	22.435	0.13
Poblacion VII	20.4890	6.433	26.9220	0.15
Poblacion VIII	154.5802	12.222	166.8022	0.95
Poblacion IX	1,493.20	131.266	1,594.4660	9.06

BARANGAY	LAND AREA (IN HAS.)	AREA OF RIVERS AND CREEKS	TOTAL AREA	PERCENTAGE (%) DISTRIBUTION
Bagua Mother Barangay	30.5929	-	30.5929	0.17
Bagua I	168.2113	17.374	185.5853	1.05
Bagua II	164.1562	12.438	176.5942	1.00
Bagua III	8.1381	0.587	8.7251	0.05
Kalanganan Mother Barangay	1,932.1689	274.489	2,206.6571	12.53
Rosary Heights Mother Barangay	76.4834	0.842	77.3254	0.44
Rosary Heights I	28.3376	-	28.3376	0.16
Rosary Heights II	27.8227	-	27.8227	0.16
Rosary Heights III	49.0584	1.823	50.8814	0.29
RosaryHeights IV	32.2544	-	32.2544	0.18
Rosary Heights V	58.7535	1.154	59.9075	0.34
Rosary Heights VI	38.2920	0.433	38.7250	0.22
Rosary Heights VII	79.1271	2.026	81.1531	0.46
Rosary Heights VIII	56.5504	2.996	59.5464	0.34
Rosary Heights IX	83.7966	2.064	85.8606	0.49
Rosary Heights X	102.1058	2.870	104.9758	0.60
Kalanganan I	953.9659	204.566	1,158.5319	6.58
Kalanganan II	1,853.4339	253.964	2,107.3979	11.97
Tamontaka I	211.9555	68.960	280.9155	1.59
Tamontaka II	369.7770	92.100	461.8770	2.62
RURAL BARANGAYS				
Tamontaka III	299.0363	226.468	525.5043	2.98
Tamontaka IV	1,635.5742	244.774	1880.3482	10.68
Tamontaka V	4,725.7033	769.878	5494.7813	31.22
Total	*15,186.0000*	*2413.000*	*17.599.00*	*100%*

Source: City Planning and Development Office, City Assessor's Office

1.3.3 Slope/Topography

The city has a general landscape of level, very gently sloping to undulating to steep. Seventy (70%) percent of its total land area is below sea level. There are only two (2) existing elevated areas in the city, the historic PC hill and the Timako Hill with an altitude of 49 meters and 194 meters respectively.

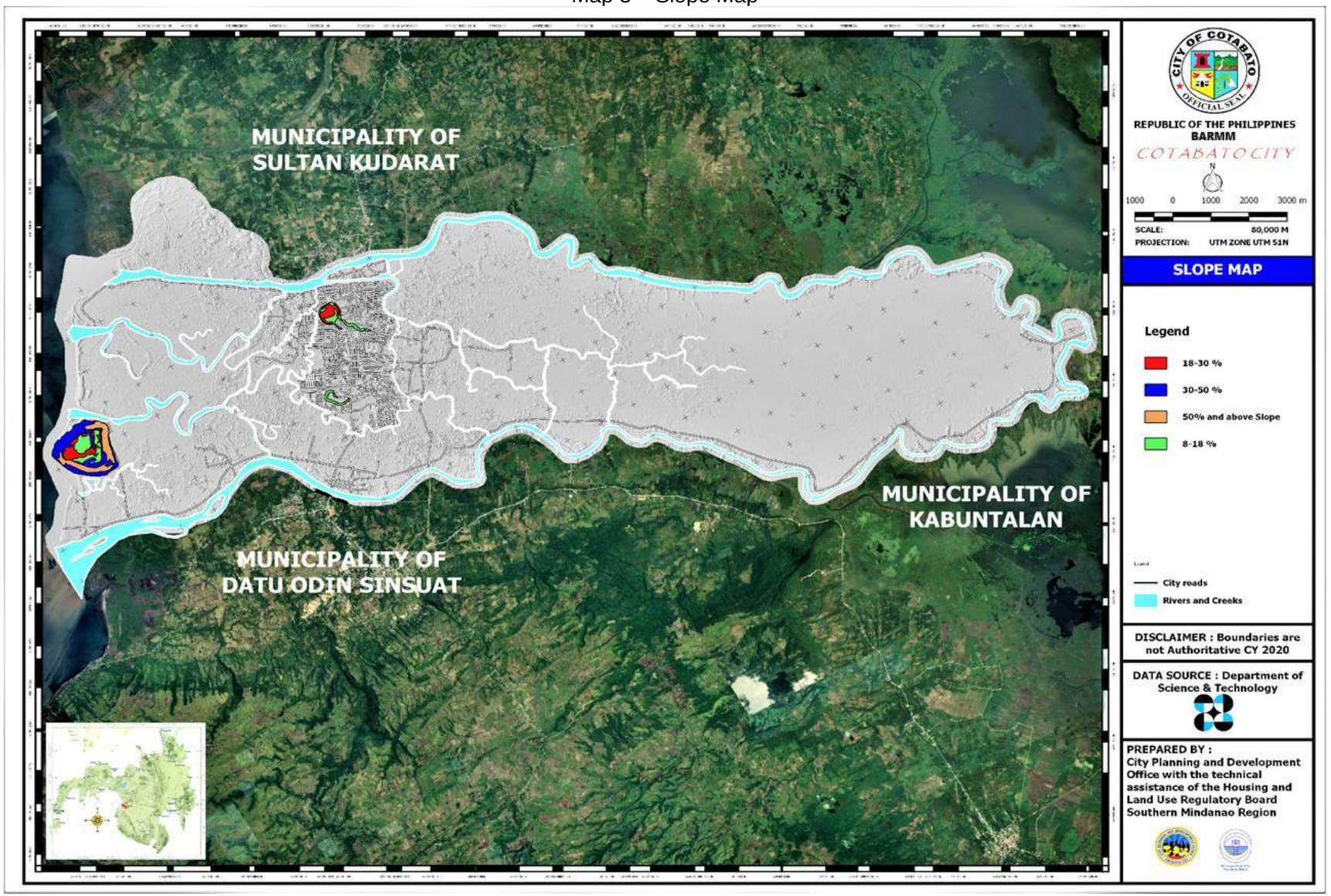
There are only two (2) categories of slope classes in the city: The zero to 8% slope or the flat to undulating lands, and the 30%-50% slope or the steep areas. A significant 85% or 14,978 hectares of its total land area fall under 0-8% slope while about 1% or 208 hectares are areas with a slope ranging from 30 to 50%.

Table 3 Slope Classes

Slope Ranges	Land Area (In has.)	% of city's territory
0 to 8% (level to undulating)	14,978	85
30% to 50% (steep)	208	1
Rivers and creeks	2,413	14
Total	17,599	100.00

Source: Bureau of Soil and Water Management

Map 3 – Slope Map



1.3.4 Land Classification

Alienable and Disposable Lands

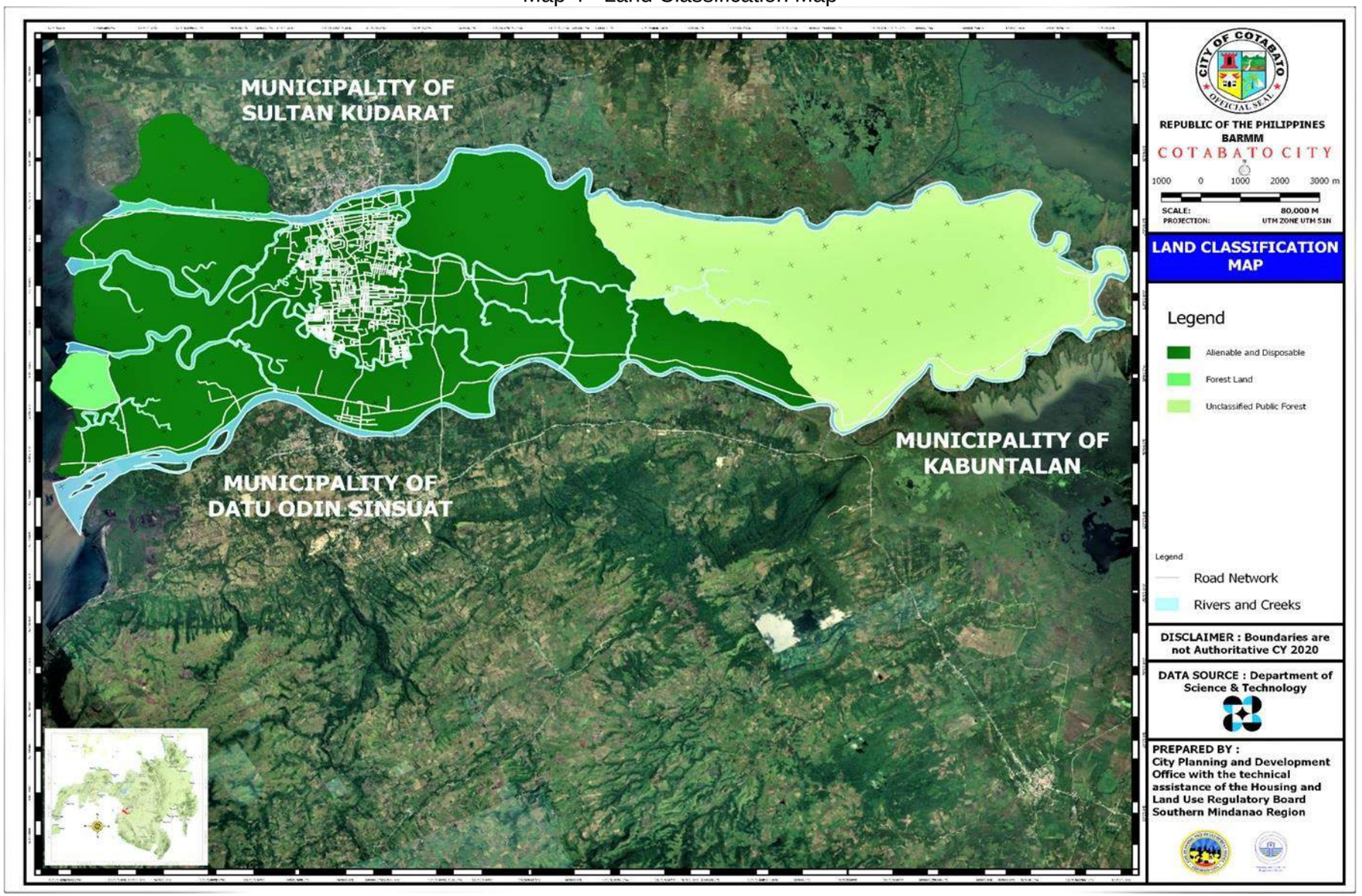
Under the 1987 Constitution lands are classified either as public domain or private lands. Public Domain is considered lands for public use or for government use and those which are unappropriated. Unappropriated use is further classified into Non-Disposable and Non-Alienable; and Alienable and Disposable (A & D). and Non-Alienable and Non-Disposable which includes national parks, mineral lands and forest lands.

Theoretically, lands are classified either as Alienable and Disposable or forestlands. This classification is based on slope. Areas with slope 0-18 percent are A & D lands while those beyond 18 percent are considered forestlands. Alienable and Disposable lands are further classified as lands for agriculture, residential use, institutional use, educational use, commercial use and industrial areas. Below is Table 9 showing the Alienable and Disposable lands and other land classification of the city.

Table – 2 Distribution of Alienable and Disposable Lands (Existing)

LAND USE CATEGORIES	EXISTING LAND USE AREA (ha)	Percent to Total
Forest and Forest Land	3,449.00	20.00%
Agriculture	8,620.94	48.98%
Fishery	1,528.99	8.69%
Urban Use Areas		
Residential	540.01	3.05%
Commercial	56.48	0.32%
General Institution	48.88	0.28%
Special Institution	1.84	0.01%
Parks & Recreations	2.94	0.04%
Tourism	0.66	0.00%
Cemetery	5.02	0.03%
Infrastructure	3.55	0.02%
Industrial	-	0.00%
Open Space (Vacant Lot)	708.35	4.02%
Planned Unit Development	-	0.00%
Roads	218.27	1.24%
Water Uses		
Rivers and Creeks	2,413.80	13.72%
Total	17,599.00	100%

Map 4 - Land Classification Map



1.3.5 Rock formations / Land forms /Soil

There are three (3) types of soil in the city. They are Faraon Clay, Tamontaka Clay and San Manuel Clay Loam. The most dominant soil type is the Tamontaka Clay, which makes up 46.10% or 8,108.50 hectares. The other two (2) are Faraon Clay covering 6,475.50 hectares or 36.8% of the city's total area and the San Manuel Clay Loam which covers an area of 486 hectares or barely 2.70% of the city's total area.

Table 4 Soil types and area by hectares

SOIL TYPE	AREA (IN HAS.)	% TO TOTAL CITY'S TERRITORY
Tamontaka clay	8,108.50	46.10
Faraon Clay	6,475.50	36.80
San Manuel Clay	486	2.70
Unclassified	116	0.70
Rivers/creeks	2,413	13.70
Total	17,599	100.00

Source: Bureau of Soil and Water Management

1.3.6 Land Capability Classes

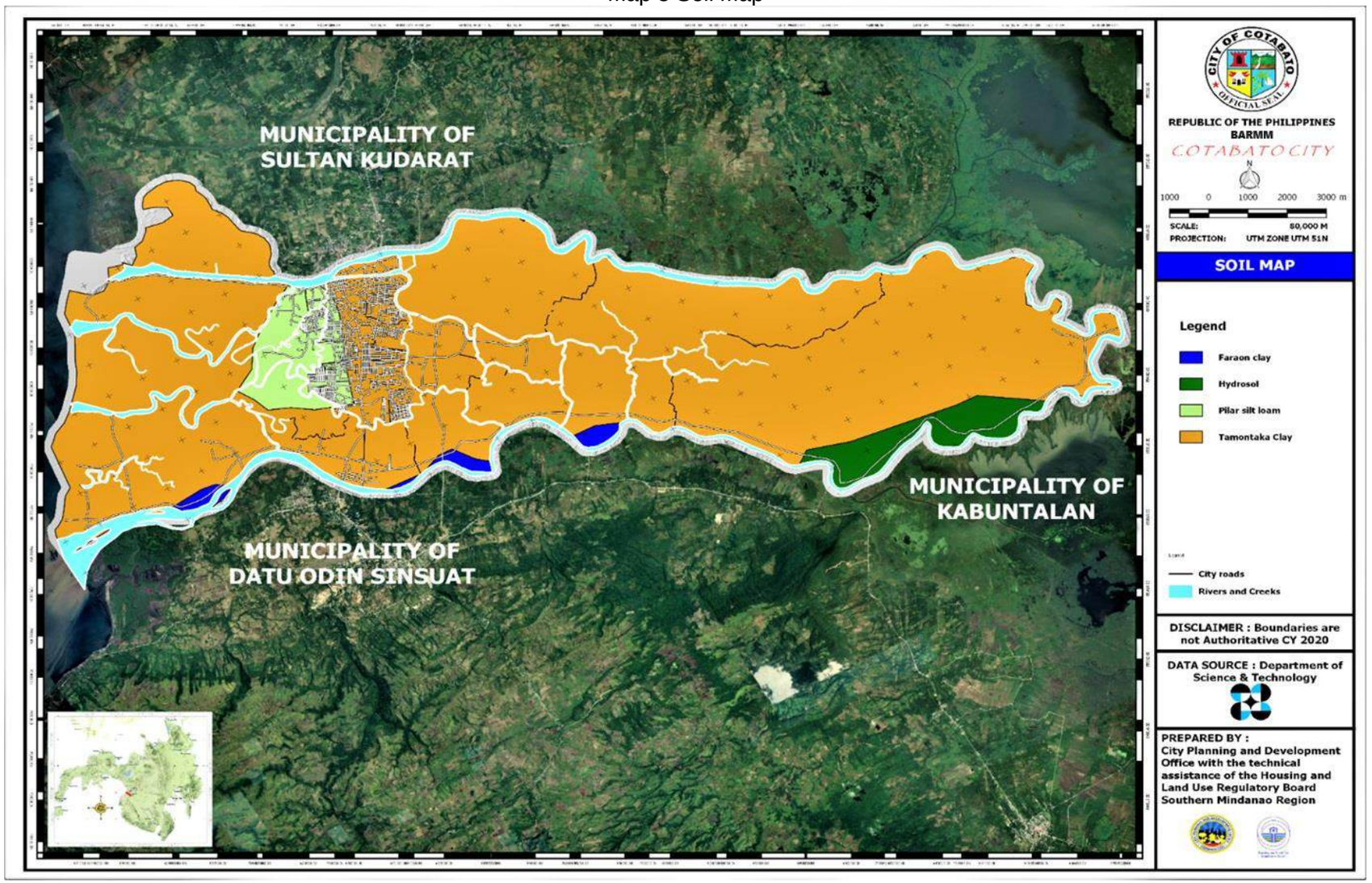
Land capability refers to the ability of the land to support either agricultural or built-up/urban uses. For Cotabato City, the land capability is classified as De (fairly good land), Ce (moderately good land), and A (good land). Based on these soil types, the city is best suited for agricultural crop production of limited arability and has low density for urban development. Below are the land capability and soil limitation of each type of soil.

Table 5 Soil Classification and its Capability

Soil Classification		Land capability	Soil limitation
Ce (Tamontaka Clay)		Medium density urban development, less suited for agricultural development; requires careful and soil management practices Moderately good land	Moderate erosion, inadequate internal drainage, severe water(wetness) very poorly drained Can be cultivated with caution
De (Faraon Clay)		Limited arability; low density urban development -fairly good land	Erosion prone; slight water (wetness); poor internal drainage, good external drainage. -requires very careful management procedures
A (San Manuel Clay Loam)		Best suited for high density urban development, good land for intensive agriculture	Zero to very slight limitation, good external and internal drainage. -simple management practices required

Source: Bureau of Soil and Water Management

Map 5 Soil Map



1.3.7 Coastal Resources

Coral Reefs

No coral formation was found along the coastal waters running from barangay Kalanganan I, Kalanganan Mother Barangay up to Timako point in Barangay Kalanganan II.

Only one (1) species of seagrass was found and recorded on the entire of coast of Kalanganan, namely *Halodulepinifolia.* It has an average density of 4,322.22 and an average biomass of 1,267.56 grams (wet weight) and 277.779 grams (dry weight).

Mangrove Forest

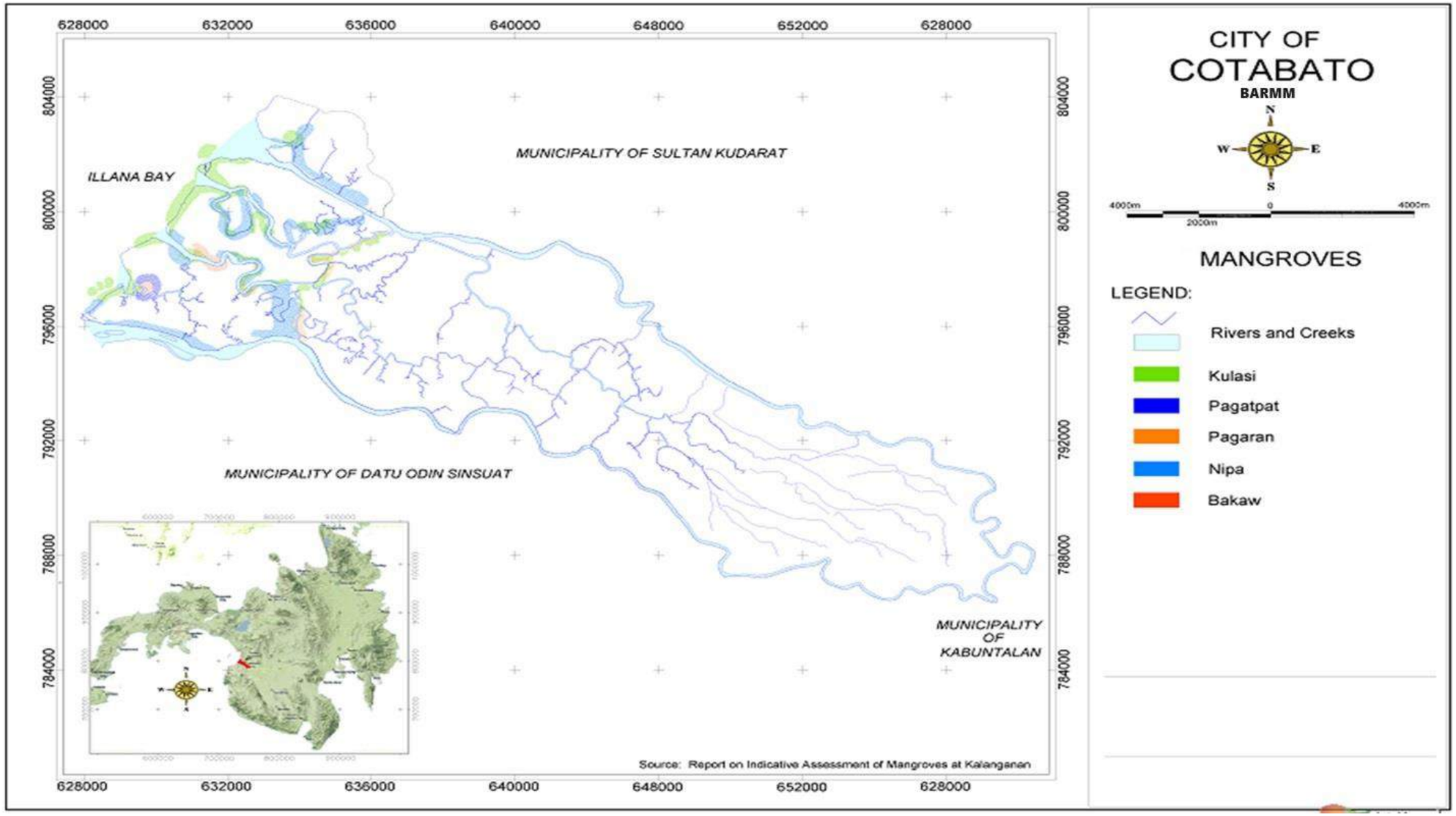
Based on the indicative inventory and mangrove assessment conducted in 2002, there are eight (8) mangrove species found along the coast and riverbanks of Barangays Kalanganan. The said assessment, however, covers only the area along the coast and riverbanks of the coastal barangays. It does not include those mangroves situated in the interior portion of the same barangays.

Table 6 Mangrove Plants in the Three (3) Coastal Barangays of Cotabato City

Barangay	Common Name	Scientific Name	Family
Kalanganan	Kulasi	*Osborniaoctodonta*	Myrtaceae
	Pararan	*Sonneratia alba*	Sonneratiaceae
	Pagatpat	*Sonneratiacaseolaris*	Sonneratiaceae
	Nipa	*Nipa fruticans*	Palmae
Kalanganan I	Pagatpat	*Sonneratiacaseolaris*	Sonneratiaceae
	Kulasi	*Osborniaoctodonta*	Myrtaceae
	Pararan	*Sonneratia alba*	Sonneratiaceae
Barangay	Common Name	*Scientific Name*	Family
Kalanganan II	Kulasi	*Osborniaoctodonta*	Myrtaceae
	Pararan	*Sonneratia alba*	Sonneratiaceae
	Nipa	*Nipa fruticans*	Palmae
	Bakao	*Rhizophora mucronata*	Rhizophoraceae
	Api-api	*Avecinaofficinales*	Avicenniaceae
	Saging-saging	*Aegicerascorniculatum*	Myrssinaceae
	Kabadak-badak	*Scyphiphorahydrophyllaceae*	Rubiaceae

Source: Report on Indicative Assessment of Mangroves at Kalanganan

Map 6 Mangrove Map (2002)



1.3.8 Freshwater Resources

Surface Run-off the city is traversed by various rivers and creeks as shown below, basically, making the city an island of islands.

Table 7 Rivers and Creeks

NAME OF RIVERS/CREEKS	LOCATION	LENGTH (KM.)
Rio Grande de Mindanao	Bet. Illana Bay and Mun. of Kabuntalan	34.144
Rio Grande de Tamontaka	Bet. Illana Bay and Mun. of Kabuntalan	22.30
Cut-off channel	Bet. Illana Bay and Rio Grande de Mindanao	3.20
Kalanganan River	Bet. Illana Bay and Rio Grande de Mindanao	8.10
Lugay-lugay river	Bet. Kalanganan river and rio Grande de Mondanao	2.10
Bagua River	Bet. Miwaruy creek and manday river	2.40
Manday River	Bet. Tarbung river and Rio Grande de Mindanao	3.90
Tarbung River	Bet. Miwaruy creek and Pagalamatan creek	6.60
Matampay river	Bet. Rio Grande de Mindanao and Mun. of Kabuntalan	17.60
Pagalamatan river	Bet. Tarbung River and Rio Grande de Mindanao	0.32
Kakar creek	Bet. Pagalamatan river and Matampay river	2.95
Kamasi creek	Bet. Pagalamatan river and Matampay river	2.00
Dangkalan creek	Bet. Rio Grande de Mindanao and Matampay river	2.65
Lisbong creek	Bet. Rio Grande de Mindanao and Pantakan creek	1.60
Pantakan creek	Bet. Rio Grande de Mindanao and Matampay river	2.20
Tiogon creek	Bet. Rio Grande de Tamontaka and Matampay creek	1.60
Miwaruy-Neugen Creek	Near Rio Grande de Mindanao in Kalanganan2	

Source: City Planning and Development Office
City Assessor's Office

1.3.9 Groundwater Resources

There are two (2) types of ground water in the city: the confined and the unconfined. Confined groundwater is contained in the limestone aquifer underlying Colina hill and the slightly elevated terrain occupied by various barangays of Rosary Heights. The unconfined groundwater is contained in the broad alluvial deposit which underlies more than 90% of the city's land area. This is found in the barangays of Tamontaka.

In October of 2001, the Mines and GeoSciences Bureau (MGB) of DENR XII conducted a Geology, Geohazard and Groundwater Resources Assessment in Cotabato City. Below are their findings.

Confined Groundwater resources in Barangays Rosary Heights 6, 9, 10, and 13 have the following attributes:

DO level slightly below the minimum requirement set by DENR Department Administrative Order (DAO) 34 standards (Surface Water Class AA standard is used as reference since the groundwater is used for drinking purposes). However, such condition is still normal for groundwater resources and remains acceptable.

Water was generally free from suspended particles as exhibited by the turbidity value ranging from 0.0 – 0.5 nephclometric turbidity units (NTU) and presence of Iron was also undetected.

Salinity was not greater than 1000 mg/l. Water is considered saline if the Total Dissolved Solids (TDS) value is greater than 1000 mg/l.
Samples taken from the water suppliers (privately owned deep wells) exhibited TDS values above the standard of 500 mg/l. These dissolved solids contributed to high conductivity values measured greater than the limit set at 1 000 µS/cm. Such dissolved solids cause the water to be extremely hard due to the geology of the place as a limestone area (high concentration of calcium carbonate) which causes the aquifer to have temporary hard water.

Unconfined Groundwater resources in Barangays Tamontaka 3 and 4 have the following characteristics:
DO values were far below the minimum requirement (reference is Surface Water Class AA)
Clarity of water was still acceptable since the turbidity readings of 2.2 and 2.0 NTU for BarangasTamontaka III and IV, respectively were within the acceptable value of 5 NTU.

Total dissolved solids and conductivity value from two stations of the same barangays were within the standard
Tamontaka III yielded an iron concentration above the set standard
Though, these sample stations in these barangays are not limestone area, water was hard. The presence of iron (Fe^{2+}) may have contributed to the hardness of water.

Only trace amounts of iron were detected in Tamontaka IV and water is moderately soft.

1.3.10 Climate

Atmospheric Temperature

The annual temperature profile of Cotabato City shows very small seasonal variation. Its annual mean temperature is 26.8 ºC higher than the national average of 25 .6ºC

Based on the modified Corona Classification of Climate, Cotabato City belongs to Type III climate. Areas classified under Type III climate have no pronounced seasons, although it is relatively dry from November to April and wet during the rest of the year.

Rainfall

The average annual rainfall of Cotabato City (2,273.8mm) is slightly lower than the Philippines annual average rainfall of 2,533.4 mm. The period from December to March is relatively dry with average monthly rainfall less than 100mm. About 70% of the total annual rainfalls in the area accumulate from May to October with its maximum during the month of August with 3237mm. The annual total number of rainy days is 198.

1.3.11 Natural Hazards / Constraints

Flooding

More than half of the city's land area is considered to be below sea level such that the same is susceptible to flooding during long period of precipitation within or from upstream municipalities.

On a few occasions, the city has been struck by flashflood during long period of rain. This was aggravated by heavy siltation and clustering of water hyacinths along the major rivers of the city that caused obstruction to the flow of the river and overspilled at low lying barangays. To make matter worst, Simuay River of the adjacent Municipality of Sultan Kudarat changed its course and exited at Rio Grande de Mindanao.

Barangays Poblacion 8, 9 as well as Barangays Tamontaka 1,2,3,4 and 5, among others, are areas most susceptible to flooding. They are low in elevation and lies near the Rio Grande de Mindanao. The Rio Grande de Mindanao and Rio Grande de Tamontaka are the outlets of what is considered to be the Cotabato-Agusan River basin.

The government and the Presidential Task Force on Mindanao River Basin Rehabilitation and Development (PTF-MRBRD) and other non-government organizations have done so much to improve the situation. Periodic dredging of silt and clearing of water hyacinths from Rio Grande de Mindanao has reduced the chance of flooding. The table below shows the barangays that were affected by flooding.

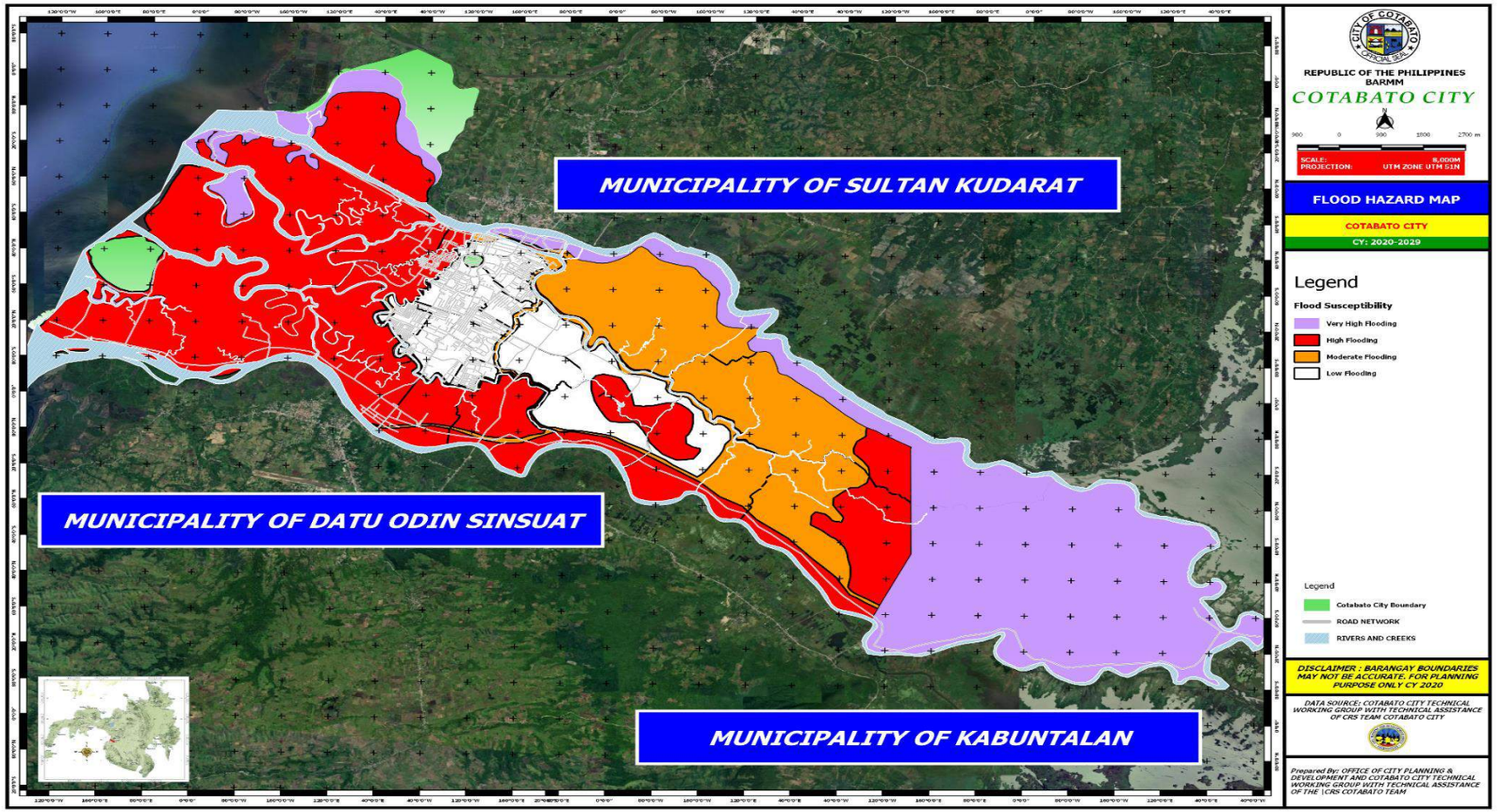
Table 8. Flood Risk Areas

High risk	Low risk	No apparent risk
Tamontaka I - 5, MB	Tamontaka MB	
Poblacion 1,2,3,7,8,9 MB	Poblacion 1-7, MB	
Rosary Heights 3, 5, 6, 7, 8, 9	Rosary Heights 2, 3, 5 -13, MB	Rosary Heights 1, 4, 5, 6, 7, 10, 13
Bagua MB, 1-3	Bagua MB, 1-3	
Kalanganan MB, I	Kalanganan MB, 1, 2	

Source: CDRRMO

Barangays that appear in both in high and low risk means that they were only partially submerged by flood.

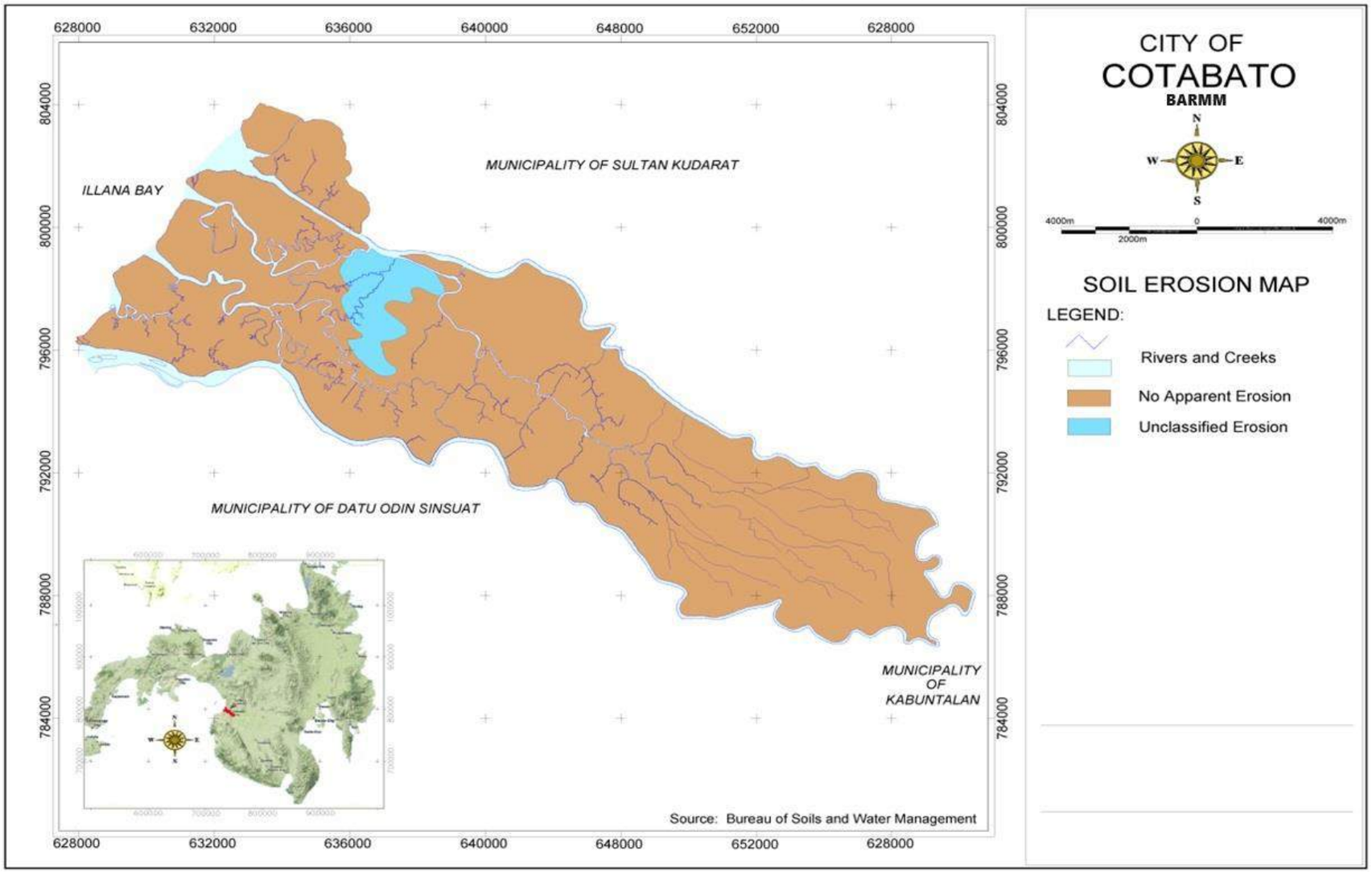
Map 6 Flood Map



Erosion

There are two (2) types of erosion in Cotabato City, namely: the Eo (no apparent erosion) and Eu (Unclassified erosion). The former occurs in less than gentle slopes and mostly devoted to rice production covering around 14,427 hectares or 82% of the entire city's territory. The other 749 hectares of the city's land area are considered as unclassified erosion, while the remaining 2,413 hectares are for rivers and creeks.

Map 7 – Soil Erosion Map



1.4 HAZARD PROFILE

1.4 Inventory of Hazard

1.4.1 Hazard Maps and Data Sources

Hazards Maps	Source/s	Scale	Remarks
Flood Susceptibility	Mines and Geosciences Bureau	1:50,000	Depicts areas susceptible to floods, classified as high, moderate, and low with supplemental information on floods heights. Available are selected regions, provinces and municipalities/cities. Map availability can be viewed at http://gdis.denr.gov.ph/mgbviewer/
	Philippines Atmospheric, Geophysical and Astronomical Services Administration (PAGASA), Office of Civil Defense (READY Project)	1:50,000, 1:10,000	Identifies areas prone to floods representing a worst case scenario. Available are selected provinces and municipalities/cities generated through the READY Project. Map availability can be viewed at http://www.ndrrmc.gov.ph/
	Department of Science and Technology – Nationwide Operational Assessment of Hazards Project (DOST-NOAH)	Various Map Scales	Flood hazards of selected areas within 18 major river basins. Provides flood inundation zones are based from 5, 10, 25, 50, and 100 year rainfall recurrence interval, with indicative flood heights. Map availability to selected areas can be verified at http://noah.dost.gov.ph/
Storm Surge	Philippines Atmospheric, Geophysical and Astronomical Services Administration (PAGASA), Office of Civil Defense (READY Project)	1:50,000	Depicts areas prone to storm surge. Available are selected provinces and municipalities/cities generated through the READY Project. There are 3 indicators Low (Blue: <1 meter), Moderate (Orange: 1-2 Meters) and High (Red >3 Meters). Map availability can be viewed at http://www.ndrrmc.gov.ph./
Earthquake Induced Landslide	Philippine Institute of Volcanology and Seismology (PHIVOLCS), Office if Civil Defense (READY Project)	1:50,000	Composite earthquake induced landslide map based on hypothetical maximum credible earthquake scenarios. Available are selected provinces and municipalities/cities generated through the READY Project. Map Availability can be viewed at http://www.ndrrmc.gov.ph/ and http://www.phivolcs.dost.gov.ph/
	Philippine Institute of Volcanology and Seismology (PHIVOLCS)	1:250,000	Indicative regional scale susceptibility map depicting areas prone to earthquake induced landslide. Levels of susceptibility expressed as the minimum critical acceleration to trigger landslide. Map availability can be viewed at http://phivolcs.dost.gov.ph/
Tsunami	Philippine Institute of Volcanology and Seismology (PHIVOLCS)	1:50,000	Areas depicting tsunami inundation zones with supplemental information on flood heights based modeling parameters (i.e. maximum credible earthquake magnitude and earthquake source). Available for selected Provinces. Map availability can be viewed aat http://www.phivolcs.dost.gov.ph/

Table A-3 Summary of Projected Changes in Climate Variables in Cotabato City

Climate Variable	Observed Baseline (1971-2000)	Specific Change Expected and Reference Period	General Changes Expected in Climate Variables	Information about Patterns of Change
1	2	3	4	5
Temperature	• 27.6oC during the DJF	• moderate, lower at 28.6oC by 2050 during DJF	• Increasing in temperature for all seasons expected in 2050	• Slightly more warming in MAM, and in the JJA season
		• moderate, median at 28.8oC by 2050 during DJF		
		• moderate, upper at 29.4oC by 2050 during DJF		
	• 28.3 C during MAM	• moderate, lower at 29.3oC by 2050 during MAM		
		• moderate, median at 29.5oC by 2050 during MAM		
		• moderate, upper at 30.1oC by 2050 during MAM		
	• 27.5oC during JJA	• moderate, lower at 28.5oC by 2050 during JJA		
		• moderate, median at 28.6oC by 2050 during JJA		
		• moderate, upper at 29.3oC by 2050 during JJA		
	• 27.6oC during SON	• moderate, lower at 28.6oC by 2050 during SON		
		• moderate, median at 28.8oC by 2050 during SON		
		• moderate, upper at 29.4oC by 2050 during SON		
Rainfall	225.3 during the DJF	256.6 during DJF	increased in rainfall amount for all season	Onset of rain during MAM has the highest amount of rainfall
	•399.1 during MAM	517.3 during MAM		
	• 635.3 during JJA	688.9 during JJA		
	• 553.6 during SON	2050 during JJA		
		586.2 during SON		

1 IPCC, 2013: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Planter, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)].
Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, p. 11.

1.4.2 Records of Previous Disaster

The last recorded major flood that placed the city's entire downtown area and immediate areas underwater occurred in 1960. Water level in almost all of the affected areas was waist-deep causing the shutdown of power supply. Use of public transport vehicles halted to a standstill and residents moved from one place to another with the use of wooden paddle-run bancas, bamboo rafts and makeshift boats made from steel drums cut in half vertically. Flooding lasted for almost a month but business went on as usual although on a very limited scale. Classes in all levels were suspended.

As an aftermath to this infamous flood, the National Government sent in a dredger in the city aptly called "Damayan" to clear the *Rio Grande de Mindanao* of silt materials and deepen the river bed. All dredged materials extracted were dumped in and around the downtown area (now known as the Central Business District) and its immediate areas to increase ground elevation by about 1.5 meters. Owners of residential buildings and business establishments renovated the structure of their properties to adjust to the new ground level.

At that time, it can be surmised that no government instrumentalities (recording such incidents) are based in the city so much so that it could not be ascertained whether the extent of damage to lives and properties caused by that historical event was properly documented nor could it be traced from the archives of the City Government.

Cotabato City Hit by a Succession of Flooding

Cotabato City prides itself as being located outside of the typhoon belt but nonetheless, it was not spared from the wrath of three (3) flooding incidents in a span of four (4) years reckoned from 2008-2011. Two (2) of the flooding incidents were caused by strong typhoons that did not hit the city directly. In the last incident, no typhoon was recorded but flooding was precipitated by heavy rains that went on for days on end.

The effects of *Typhoon Frank* in 2008 was felt when tons of water hyacinth, coming from Liguasan Marsh, amassed at the Delta Bridge and practically closed that part of the Rio Grande de Mindanao causing water run-offs to spill over to low-lying areas and inundated thirty-two (32) barangays at varying levels. Disaster and Relief Operations spearheaded by the City Government took place from June 21, 2008 – August 22, 2008.

The disaster and relief operations of the City Government used up the amount of ₱3,600,000.00 from its Calamity Fund while thirty-one (31) barangays provided counterpart funds from their own Barangay Calamity Fund amounting to ₱767,121.00, for a total ₱4,367,121.00. A total of fifty-eight (58) agencies/instrumentalities from the civil society, academe, foreign donor agencies, business chambers, national line agencies, local government units and kind-hearted individuals donated assorted foodstuff, used clothing, rice, personal necessities and provided manpower support to help the flood victims.

A year after, another weather disturbance code named *Typhoon Jolina* wreaked havoc to the city residents in thirty-two (32) barangays. The City Government again was kept busy with Disaster and Relief Operations conducted from July 31, 2009 – August 15, 2009. The amount of ₱2,950,000.00 from the Calamity Fund was allocated for these operations. At least thirteen (13) agencies/entities from the civil society organizations, academe, media, business sector and national line agencies provided logistical support to augment the intervention of the City Government. To give shelter to the affected families,

eight (8) schools were used as temporary evacuation center complemented by twenty-three (23) more facilities consisting of tents, chapels, mosque, day care centers and madrasas.

In the aftermath of this incident, it was recommended that the Disaster Relief Management Plan has to be reviewed and called for the parallel activity at the barangay level especially those located in flood-prone areas to come up with their own Barangay Disaster Management Plan anchored on the city's Disaster Management Plan.

In 2011, the flood that struck the city was caused by similar phenomenon that happened in 2008 but on a grander scale. Prior to the incident, there was no typhoon expected to hit any part of Mindanao but torrential rains were already hitting some parts of the island particularly from the northeastern front (Agusan – Bukidnon areas) and southeastern front (South Cotabato to Sultan Kudarat including Maguindanao). Heavy rains went on for about two weeks dumping huge amount of rainwater. By the natural course of the Mindanao River Basin (MRB), these waters would go streaming down Rio Grande de Mindanao and Tamontaka River.

The streaming waters brought down immense quantity of water hyacinth building into a virtual blockade starting from the Delta Bridge at both sides of the river spanning to almost thirty (30) hectares. All but two (2) of the total thirty-seven (37) barangays of the city went under water.

Disaster and Relief Operations were conducted from June 07, 2011 – July 28, 2011. The City Government allocated the amount of ₱5,364,000.00 for this activity. Well-meaning civil society organizations and other aggrupations be it from the private or government sector and foreign-funding institutions with sub-offices based in the city immediately responded and helped the City Government in coping with the latest disaster that affected almost the entire area of the city. The composition though was more diverse and expansive as it included not only local political leaders from parts of Mindanao but national leaders as well (a number of Senators figured prominently in this endeavor and personally came over to the city) who took turns in distributing assorted material assistance directly to the victims housed in evacuation centers.

Although the number of casualty is lower (2 persons) compared to the flood in 2008 (9 persons), the number of affected families soared to as much as 64% compared to the same incident. The total number of affected individuals comprised to 1/3 of the city's entire population.

Extended welfare assistance were provided to families who could not return back to their places of abode even as floodwaters have receded because their houses have been damaged and needs rehabilitation. Others who were able to return have to be assisted also to gain back their lost livelihood.

Table A-4 Records of Previous Disaster

Hazard Events and Description	Affected Barangays	No. of casualties (Number of Individuals)			No. of affected		No. of houses damaged		Damage to properties in Philippine Pesos (PhP)					Source of Information
		Dead	Injured	Missing	Persons	Families	Totally	Partially	Infra	Agri	Inst.	Private/ Comm'l	Total	
Typhoon Orduja (July,2017)	26	0	0	0	111,175	22,235				19,650,000.00			19,650,000.00	
Typhoon Egay (June 11, 2011)	30	0	0	0	113,225	39,112	0	0	0	13,100,000.00	0	0	13,100,000.00	
Typhoon Jolina July 31, 2009					146,723	36,051	40	367						
Typhoon Frank June 21, 2008 – August 22, 2008.	32				101,160	2,317	148	2,974						
Earthquake (August 1976)	37	3,351	2,227	1,379	43,534	8,707								

On August 16, 1976, a devastating earthquake on the Cotabato Trench caused destruction on the island of Mindanao - the southernmost and largest of the Philippine Islands. The destructive tsunami that was generated in the Gulf of Moro and in the Celebes Sea killed about 8,000 people in coastal communities in North and South Zamboanga, North and South Lanao, North Cotabato, Maguindanao and Sultan Kudarat (Mindanao), and in the neighboring Sulu Islands.

This was the worst earthquake and tsunami disaster in the history of the Philippines. Also, the Indonesian Hydrographic Office reported that unusual wave activity affected the islands of Sulawesi (Celebes Island) and Borneo.

The quake was widely felt throughout the region. PAGASA in the Philippines gave the following Modified Mercalli Scale Intensities for Mindanao and the islands to the north.

- Intensity VII - Cotabato City; Jolo-Sulu; Zamboanga City
- Intensity VI - Basilan City; Pagadian City; Dipolog City; Malaybalay-Bukidnon
- Intensity V - Cagayan de Oro City; Davao City; General Santos City
- Intensity IV - Dumaguete City; Hinatuan Surigao del Sur; Tagbilaran-Bohol; Cebu City; Surigao-Surigao del Norte
- Intensity II - Roxas City; Iloilo City; Tacloban City; Legaspi City; Palo-Leyte; Catbalogan-Samar
- Summary of s field reports on main shock ground motions *(source: PAGASA)*

1.5 Physical /Infrastructure Resources (Inventory of Maps and Tables)

1.5.1Transportation Network (Internal and External Linkages)

1.5.1.1 Road Network

The road network systems within Cotabato City are categorized as national roads, city roads, and barangay roads. These road networks also vary in surface type. Some of which are already asphalt overlayed, some are concreted or are called Portland Cement Concrete Pavement, some are gravel surfaced, while there are a few which are still unpaved earth roads. Through the years, the city's infrastructure development can be widely seen on its road network systems expanding its linkage by about 11.27% from 2009 to 2020. As of year 2020, the total length of the roads of Cotabato City is already at 218.271 kilometers. Of this total length, about 2.99% at 6.531 kilometers are already asphalt overlayed, 62.55% at 136.53 kilometers are Portland Cement Concrete Pavement, about 34.28% at 74.832 kilometers are gravel-surfaced, and the remaining 0.17% at 0.378 kilometers are still unpaved earth roads.

Despite the rapid improvement of the city's road network system over the years, there are still portions of the roads that needs immediate improvement, upgrading, and/or maintenance, especially in barangays that relies on farm to market roads to support their small income-generating operations. It is observed that developing the roads on the rural areas of the city are less complex than improving the roads in the central business districts. The problem with the roads on the commercial areas of the city are their narrow widths inadequate to cater large volume of vehicles. Expanding these roads became more challenging and impractical because the lot areas adjacent to the roads which may potentially increase the width of the roads are still properties privately owned by individuals with complete titles. In some cases where widening is possible, issues abound particularly on the road-right-of-way (RROW). Thus, the City Government works to resolve these issues and pave the way to improve these road infrastructures.

As of now, the volume of vehicles in both major and minor roads of the city continuously increase and aggravate the city's traffic. To resolve traffic issues in the city, the LGU has been implementing absolute-no-parking along the national roads no right-side parking on some selected streets of the city, and enforcement of traffic ordinances and other traffic policies. Aside from these, the city LGU is also planning on implementing re-routing schemes as to utilize some city roads for public transport use.

The table IF-2 below shows the inventory of the city's roads with their respective classification, width, length and surface type. In addition to that, it also shows the projected degree of susceptibility of these roads to flooding, storm surge, tsunami, landslide and other hazards. As for the flooding, almost all the roads are at medium to low susceptibility to flooding except for the entire barangay Rosary Heights 1 which is situated at the PC Hill and are not susceptible to flooding. However, due to its high elevation, it was mapped to have some of its roads to be moderately susceptible to landslide. This is the same with some of the roads located on and near the Timako Hill of the barangay Kalanganan 2 also mapped to have moderate susceptibility to land slide. Aside from these hazards, there are also roads that are low to highly susceptible to tsunami and storm surge. These are the roads directly located near the open seas at the Illana Bay especially for the barangays Kalanganan Mother, Kalanganan 1, and Kalanganan 2, as well as their adjacent barangays including some roads located at barangays Poblacion 5, 6 and 7, and Bagua Mother, 1, 2, and 3.

Table IF-2. Inventory of Roads by System Classification and Type of Pavement, Year 2020

Unique ID for road	Road Name	Classification	Road Surface Type														Hazard Susceptibility (H/M/L)							
			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Poblacion Mother Barangay																								
12CCO001	Purok Buliao 1 Road	Brgy Road	9.55/6.12	0.523	0.52313	100.00%			0.00%			0.00%					M							
12CCO002	Purok Buliao 2 Road	Brgy Road	5.44/3.95	0.365	0.3654	100.00%			0.00%			0.00%					L							
12CCO003	Doña Blanco Street	Brgy Road	13.27/8.11	0.182	0.18249	100.00%			0.00%			0.00%					M							
12CCO004	Purok Lumayon 4 Road	Brgy Road	8.32/4.24	0.15	0.14958	100.00%			0.00%			0.00%					M							
12CCO005	Purok Lumayon 3 Road	Brgy Road	9.80/5.72	0.11	0.11039	100.00%			0.00%			0.00%					M							
12CCO006	Purok Lumayon 1 Road	Brgy Road	5.29/4.21	0.241	0.24071	100.00%			0.00%			0.00%					M							
12CCO007	SK Pendatun Extension	City Road	10.42/5.32	0.977	0.57185	58.51%			0.00%		0.40555	41.49%					H							
12CCO008	Japal Jojo Guiani Street	Brgy Road	7.13/4.70	0.235	0.23503	100.00%			0.00%			0.00%												
12CCO009	Road 1	Brgy Road	7.04/4.10	0.082		0.00%			0.00%		0.08226	100.00%												
12CCO010	Road 2	Brgy Road	7.09/4.12	0.082		0.00%			0.00%		0.08237	100.00%												
12CCO011	Road 3	Brgy Road	7.04/4.10	0.083	0.08324	100.00%			0.00%			0.00%												
12CCO012	Road 4	Brgy Road	7.07/4.10	0.083		0.00%			0.00%		0.08314	100.00%												
12CCO013	Road 5	Brgy Road	7.10/4.08	0.083		0.00%			0.00%		0.08327	100.00%												
12CCO014	Unnamed road	Brgy Road	15.53/5.77	0.19	0.19024	100.00%			0.00%			0.00%												
12CCO015	Buliao Road A	Brgy Road	6.24/4.07	0.036	0.03616	100.00%			0.00%			0.00%												
12CCO016	Buliao Road B	Brgy Road	5.95/3.71	0.057	0.05739	100.00%			0.00%			0.00%												
12CCO017	Jose Lim Street Extension	National Road	13.15/7.71	0.228	0.2282	100.00%			0.00%			0.00%					H					M		
12CCO018	Don Rufino Alonzo Street	City Road	23.05/16.17	0.111	0.11122	100.00%			0.00%			0.00%					L							
12CCO019	Martinez Steet	Brgy Road		0.19	0.19024	100.00%			0.00%			0.00%					L							
12CCO020	Anacleto Badoy Street	National Road		0.313	0.31309	100.00%			0.00%			0.00%					M							
SUBTOTAL				4.325	3.588	82.97%	-	-	0.00%	-	0.737	17.03%	-	-	-	-								-
Poblacion I																								
12CCO021	Purok Datukaka Street	Brgy Road	5.17/	0.267	0.26703	100.00%			0.00%			0.00%					VH							
12CCO022	Purok Lushin Khan Road	Brgy Road	5.13/	0.407	0.40711	100.00%			0.00%			0.00%					VH							
12CCO023	RS Buan Road 1	Brgy Road	7.17/	0.196	0.19601	100.00%			0.00%			0.00%					M							
12CCO024	RS Buan Road 2	Brgy Road	6.47/	0.44	0.17474	39.70%			0.00%		0.26545	60.30%					M							
12CCO025	Unnamed road	Brgy Road	5.50/	0.066		0.00%			0.00%		0.06603	100.00%												
12CCO026	Purok Turion 1 Road	Brgy Road	5.54/	0.954	0.369	38.69%			0.00%		0.58463	61.31%					VH							
12CCO027	Anacleto Badoy Street	National Road		0.582	0.5818	100.00%			0.00%			0.00%					VH							
SUBTOTAL				2.912	1.996	68.54%	-	-	0.00%	-	0.916	31.46%	-	-	-	-								-

Unique ID for road	Road Name	Classification	Road Surface Type															Hazard Susceptibility (H/M/L)							
			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Poblacion 2																									
12CCO028	SK Pendatun Avenue	City Road	9.82/6.89	0.635	0.44141	69.56%			0.00%		0.19313	30.44%					L							
12CCO029	Atienza Street	Brgy Road	10.52/5.08	0.035		0.00%			0.00%		0.03511	100.00%					L							
12CCO030	Deocesan Street	Brgy Road	6.60/5.22	0.271	0.10863	40.16%			0.00%		0.16188	59.84%					L							
12CCO031	Tiburcio Chavez Street	Brgy Road	10.89/3.25	0.398	0.13826	34.75%			0.00%		0.25959	65.25%					L							
12CCO032	Aurora Soriano Street	Brgy Road	12.00/5.16	0.263	0.17139	65.10%			0.00%		0.0919	34.90%					M							
12CCO033	Doña Pilar Street	City Road	11.03/4.51	0.27		0.00%			0.00%		0.26969	100.00%					L							
12CCO034	Doña Teresa Street	City Road	9.61/4.09	0.288	0.04131	14.35%			0.00%		0.24662	85.65%					L							
12CCO035	Charles Quintana Street	Brgy Road		0.151	0.01585	10.47%			0.00%		0.13553	89.53%					L							
12CCO036	Gunsang Street	Brgy Road	6.56/2.78	0.107	0.09514	89.33%			0.00%		0.01136	10.67%					M							
12CCO037	Suraik Macmod Street	Brgy Road	5.93/4.00	0.157	0.1376	87.73%			0.00%		0.02	12.27%					H							
12CCO038	Hamsa Rampak Street	Brgy Road	6.63/2.88	0.076		0.00%			0.00%		0.07618	100.00%					H							
12CCO039	Macacua Watamama Street	Brgy Road	5.00/2.90	0.058		0.00%			0.00%		0.0579	100.00%					H							
12CCO040	Road 1	Brgy Road	8.50/4.19	0.218	0.21822	100.00%			0.00%			0.00%												
12CCO041	Road 2	Brgy Road	5.60/2.67	0.095	0.06428	67.86%			0.00%		0.03044	32.14%												
12CCO042	Anecleto Badoy Street	National Road	11.66/7.00	0.346	0.34556	100.00%			0.00%			0.00%					L							
SUBTOTAL				3.366	1.778	52.81%	-	-	0.00%	-	1.589	47.19%	-	-	-	-								-
Poblacion 3																									
12CCO043	Doña Teresa Street	City Road	9.74/4.10	0.291	0.2453	84.40%			0.00%		0.04534	15.60%												
12CCO044	Estrella Street	Brgy Road	9.75/4.02	0.263	0.16	60.88%			0.00%		0.10304	39.12%					H							
12CCO045	Don Jesus Street	City Road	11.23/4.17	0.178		0.00%			0.00%		0.17759	100.00%					L							
12CCO046	Don Cesar Street	City Road	16.90/4.45	0.364	0.36	100.00%			0.00%			0.00%					M							
12CCO047	Don Abelardo Street	City Road	10.00/5.00	0.188	0.19	100.00%			0.00%			0.00%												
12CCO048	Doton Street	Brgy Road	7.55-5.35	0.269	0.26	95.33%			0.00%		0.01258	4.67%												
12CCO049	Anecleto Badoy Street	National Road	0/7.00	0.211	0.21	100.00%			0.00%			0.00%					L							
12CCO050	Fausto Tamse Road	City Road	0/5.47	0.21279	0.21	100.00%			0.00%			0.00%												
12CCO051	Notre Dame Avenue	National Road	0/7.29	0.191	0.19	100.00%			0.00%			0.00%												
SUBTOTAL				2.168	1.83	84.39%	-	-	0.00%	-	0.339	15.61%	-	-	-	-								-

Unique ID for road	Road Name	Classification	Road Surface Type														Hazard Susceptibility (H/M/L)							
			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth										
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	FI	Tc	Eq	Vo	Ln	Ts	Su	Others
Poblacion 4																								
12CCO052	Notre Dame Avenue Extension	National Road	15.16/11.88	0.437	0.437	100.00%			0.00%			0.00%					L							
12CCO053	SK Pendatun Avenue	City Road	15.55/	0.337	0.34	100.00%			0.00%			0.00%					L							
12CCO054	Fausto Tamse Road	City Road	9.27/5.75	0.46192	0.46	100.00%			0.00%			0.00%					L							
12CCO055	Quezon Avenue	National Road	20.00/15.89	0.12	0.12	100.00%			0.00%			0.00%					L							
12CCO056	Don Abelardo Street	City Road	9.56/4.00	0.254	0.25	100.00%			0.00%			0.00%					M							
12CCO057	Don Cesar Street	City Road	16.13/5.25	0.251	0.25	100.00%			0.00%			0.00%					L							
12CCO058	Doña Teresa Street	City Road	9.69/4.05	0.24	0.1	100.00%			0.00%		0.13726	57.26%					L							
12CCO059	Don Jesus Vilo Street	Brgy Road	15.30/10.97	0.108	0.06	100.00%			0.00%		0.05	48.57%					L							
12CCO060	Don Antonio Marquez Street	Brgy Road	4.76/3.52	0.297	0.14	100.00%			0.00%		0.15	51.91%					L							
12CCO061	Dona Lugarda Blanco Street	City Road	11.01/5.88	0.1833	0.18	100.00%			0.00%			0.00%					L							
12CCO062	Fatima Street	Brgy Road	5.44/3.51	0.117	0.12	100.00%			0.00%			0.00%					L							
12CCO063	Don Tomas Martinez Street	Brgy Road	9.37/4.29	0.137	0.08	100.00%			0.00%		0.05528	40.25%					L							
12CCO064	San Isidro Street	Brgy Road	5.57/3.32	0.229	0.07	100.00%			0.00%		0.15932	69.51%					L							
12CCO065	Doña Pilar Street	City Road	6.55/3.37	0.238	0.07	100.00%			0.00%		0.1669	70.04%					L							
12CCO066	Soriano Street	Brgy Road	2.84/2.00	0.102	0.1	100.00%			0.00%			0.00%					L							
12CCO067	Doña Consolacion Martinez Street	Brgy Road	5.24/6.86	0.13	0.098	100.00%			0.00%		0.03175	24.48%					L							
12CCO068	Deocesan Street	Brgy Road	5.95/3.03	0.272	0.102	100.00%			0.00%		0.16957	62.44%					L							
12CCO069	Road from Brgy Hall Dona Lutgarda Blanco Street	Brgy Road	4.76/3.64	0.095	0.095	100.00%			0.00%			0.00%					L							
12CCO070	Tomas Martinez Street	Brgy Road	10.35/6.45	0.13	0.098	100.00%			0.00%		0.03175	24.48%					L							
SUBTOTAL				4.14	3.182	76.86%	-	-	0.00%	-	0.958	23.14%	-	-	-	-								-

Unique ID for road	Road Name	Classification	Road Surface Type														Hazard Susceptibility (H/M/L)							
			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth										
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Poblacion 5																								
12CCO071	Don Rufino Alonzo Street	City Road	18.24/10.09	0.59	0.586	100.00%			0.00%			0.00%					L					M		
12CCO072	Quezon Avenue	National Road	16.60/12.65	0.73	0.727	100.00%			0.00%			0.00%					L					M		
12CCO073	Jose Lim Street	National Road	16.08/11.49	0.55	0.551	100.00%			0.00%			0.00%					M					M		
12CCO074	Japal Guiani Street	City Road	17.49/6.49	0.48	0.48	100.00%			0.00%			0.00%					M					M		
12CCO075	Rajah Tabunaway Boulevard	City Road	6.45/5.80	0.26	0.255	100.00%			0.00%			0.00%					M					M		
12CCO076	Maguindanao Creek	Brgy Road	5.01/3.60	0.26	0.258	100.00%			0.00%			0.00%					M					M		
12CCO077	SK Pendatun Avenue	City Road	15.27/9.59	0.53	0.53	100.00%			0.00%			0.00%					L					M		
SUBTOTAL				3.39	3.39	100.00%	-	-	0.00%	-	-	0.00%	-	-	-	-								-
Poblacion 6																								
12CCO078	Raja Tabunaway Boulevard	City Road	14.69/7.05	0.394	0.394	100.00%			0.00%			0.00%					M					M		
12CCO079	Sinsuat Avenue	National Road	15.70/6.88	0.523	0.523	100.00%			0.00%			0.00%					M					M		
12CCO080	Jose Lim Street	National Road	17.58/11.32	0.341	0.341	100.00%			0.00%			0.00%										M		
12CCO081	Dorotheo Tabunaway Street	City Road	18.21/12.67	0.293	0.293	100.00%			0.00%			0.00%					M					M		
12CCO082	Polar	Brgy Road	7.87/4.85	0.086	0.086	100.00%			0.00%			0.00%					M					M		
12CCO083	Abdullah Piang Street	Brgy Road	9.85/4.62	0.088	0.088	100.00%			0.00%			0.00%					M					M		
12CCO084	Bonifacio Street	City Road	18.89/6.13	0.548	0.548	100.00%			0.00%			0.00%					M					M		
12CCO085	Tondo 1	Brgy Road	5.21/3.73	0.111	0.111	100.00%			0.00%			0.00%										M		
12CCO086	Palma Street	Brgy Road	9.57/5.18	0.203	0.203	100.00%			0.00%			0.00%					L					M		
12CCO087	Salem Bagis Street	Brgy Road	3.91/2.98	0.116	0.116	100.00%			0.00%			0.00%					L					M		
12CCO088	Don Roman Vilo Street	City Road	17.08/12.73	0.29	0.29	100.00%			0.00%			0.00%					M					M		
12CCO089	Don Rufino Alonzo Street	City Road	18.24/10.09	0.386	0.386	100.00%			0.00%			0.00%					M					M		
12CCO090	Mabini Street	City Road	14.69/7.05	0.334	0.33406	100.00%			0.00%			0.00%										M		
SUBTOTAL				3.715	3.715	100.00%	-	-	0.00%	-	-	0.00%	-	-	-	-								-

Unique ID for road	Road Name	Classification	Road Surface Type														Hazard Susceptibility (H/M/L)							
			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Poblacion 7																								
12CCO091	Road to Datu Siang	Brgy Road	4.30/3.33	0.098	0.0984	100.00%			0.00%			0.00%					VH					M		
12CCO092	No Name (Road 1)	Brgy Road	6.07/4.01	0.061	0.0607	100.00%			0.00%			0.00%					VH					M		
12CCO093	No Name (Road 2)	Brgy Road	6.22/4.02	0.155	0.0779	50.43%			0.00%		0.07659	49.57%					VH					M		
12CCO094	Datu Siang Road	Brgy Road	10.22/5.28	0.311	0.3113	100.00%			0.00%			0.00%					VH					M		
12CCO095	No Name (Road 3)	Brgy Road	5.78/	0.368	0.3678	100.00%			0.00%			0.00%					VH					M		
12CCO096	No Name (Road 4)	Brgy Road	3.01/	0.193	0.193	100.00%			0.00%			0.00%					VH					M		
12CCO097	No Name (Road 5)	Brgy Road	3.34/	0.063	0.0633	100.00%			0.00%			0.00%					VH					M		
12CCO098	No Name (Road 6)	Brgy Road	3.31/	0.065	0.065	100.00%			0.00%			0.00%					VH					M		
SUBTOTAL				1.314	1.237	94.17%	-	-	0.00%	-	0.077	5.83%	-	-	-	-								-
Poblacion 8 - Datu Sema Balabaran Kalantungan																								
12CCO099	Road to Kit Fhi	Brgy Road	10.62/4.45	0.915	0.915	100.00%			0.00%			0.00%												
12CCO100	Road 1	Brgy Road	10.01/5.31	0.307	0.307	100.00%			0.00%			0.00%												
12CCO101	Rosales Street Extension	Brgy Road		1.202	1.11	92.42%			0.00%		0.0911	7.58%					M							
12CCO102	Road 2	Brgy Road	7.8/4.09	0.103		0.00%			0.00%		0.10257	100.00%												
12CCO103	Road 3	Brgy Road		0.191		0.00%			0.00%		0.19053	100.00%												
12CCO104	Road 4	Brgy Road		0.083		0.00%			0.00%		0.083132	100.00%												
12CCO105	Road 5	Brgy Road		0.062		0.00%			0.00%		0.06245	100.00%												
12CCO106	Road 6	Brgy Road		0.168		0.00%			0.00%		0.16811	100.00%												
12CCO107	Road 7	Brgy Road	10.75/5.01	0.487	0.487	100.00%			0.00%			0.00%												
12CCO108	Road 8	Brgy Road	8.21/4.04	0.172		0.00%			0.00%		0.17193	100.00%												
12CCO109	Road 9	Brgy Road	4.49/3.01	0.085		0.00%			0.00%		0.08514	100.00%												
12CCO110	Road 10	Brgy Road	8.65/4.61	0.171		0.00%			0.00%		0.1709	100.00%												
12CCO111	Road 11	Brgy Road	10.67/7.57	0.182		0.00%			0.00%		0.18239	100.00%												
12CCO112	Road 12	Brgy Road	10.52/6.72	0.586	0.586	100.00%			0.00%			0.00%												
12CCO113	Cotabato City East Diversion Road	City Road	10.64/7.01	4.005	4.01	100.00%			0.00%			0.00%					H							
SUBTOTAL				8.72	7.411	85.00%	-	-	0.00%	-	1.308	15.00%	-	-	-	-								-
Poblacion 9																								
12CCO114	Biniruan Road 1	Brgy Road	8.25/6.10	0.718	0.4877	67.91%			0.00%		0.23047	32.09%					M							
12CCO115	Biniruan Road 2	Brgy Road	6.32/4.73	0.474	0.474	100.00%			0.00%			0.00%					M							
12CCO116	Biniruan Road Extension	Brgy Road	8.47/5.21	0.866	0.8658	100.00%			0.00%			0.00%					M							
12CCO117	Unnamed road	Brgy Road	9.86/4.95	1.74	1.7401	100.00%			0.00%			0.00%												
SUBTOTAL				3.798	3.568	93.93%	-	-	0.00%	-	0.23	6.07%	-	-	-	-								-

Unique ID for road	Road Name	Classification	Road Surface Type														Hazard Susceptibility (H/M/L)							
			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Bagua Mother Brgy.																								
12CCO118	Del Pilar Street	Brgy Road	6.44/	0.368	0.3682	100.00%			0.00%			0.00%					H					M		
12CCO119	Road 1 (Banati)	Brgy Road	4.81/	0.171		0.00%			0.00%		0.171	100.00%					H					M		
12CCO120	SK Pendatun Avenue	City Road	12.69/	0.042	0.04	100.00%			0.00%			0.00%					H					M		
12CCO121	Zailon Street	Brgy Road	7.30/4.95	0.226	0.16	71.60%			0.00%		0.06418	28.40%					H					M		
12CCO122	Purok Palmonera Street	Brgy Road	5.64/3.20	0.262	0.19	71.95%			0.00%		0.0735	28.05%					H					M		
12CCO123	Datu Kadir Datumanong Street	Brgy Road	8.67/5.13	0.556	0.56	100.00%			0.00%			0.00%					H					M		
12CCO124	Kima Road	Brgy Road	8.94/4.21	0.379	0.22	57.79%			0.00%		0.1601	42.21%					H					M		
12CCO125	Jose Lim Sr Avenue	National Road	9.94/7.51	0.49	0.49	100.00%			0.00%			0.00%					H					M		
SUBTOTAL				2.495	2.026	81.21%	-	-	0.00%	-	0.469	18.79%	-	-	-	-								-
Bagua 1																								
12CCO126	Jose Lim Sr Avenue	National Road	9.49/7.51	0.254	0.25	100.00%			0.00%			0.00%					H					M	M	
12CCO127	Purok Matanog Road	Brgy Road	11.34/6.34	0.236	0.24	100.00%			0.00%			0.00%					H					M		
12CCO128	Purok Manisan Road	Brgy Road	5.78/4.15	0.512	0.21	41.61%			0.00%		0.29879	58.39%					H					M		
12CCO129	No Name (Road A)	Brgy Road	5.10/3.40	0.045		0.00%			0.00%		0.04459	100.00%					H					M		
12CCO130	Purok Dangkalangan Road	Brgy Road	7.58/3.83	0.083		0.00%			0.00%		0.08253	100.00%					H					M	L	
12CCO131	Purok Pagalungan Road	Brgy Road	8.09/5.05	0.507	0.51	100.00%			0.00%			0.00%					H					M		
12CCO132	Datu Usman Mampen Street	City Road	5.66/5.06	0.271	0.27	100.00%			0.00%			0.00%					H					M		
12CCO133	Purok Tabanga (B) Road	Brgy Road	5.53/3.70	0.358		0.00%			0.00%		0.35756	100.00%					H					M		
12CCO134	No Name (Road B)	Brgy Road	5.59/3.32	0.141		0.00%			0.00%		0.14142	100.00%					H					M		
12CCO135	Lugay-lugay Street	Brgy Road	6.88/4.11	0.553	0.55	100.00%			0.00%			0.00%					H					M		
12CCO136	Chio St (B) Street	Brgy Road	5.19/2.77	0.042		0.00%			0.00%		0.04173	100.00%					H					M		
SUBTOTAL				3.001	2.034	67.79%	-	-	0.00%	-	0.967	32.21%	-	-	-	-								

Unique ID for road	Road Name	Classification	Road Surface Type														Hazard Susceptibility (H/M/L)							
			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Bagua 2																								
12CCO137	Sultan Kawasa Street	Brgy Road	7.16/4.06	0.144	0.03	17.63%			0.00%		0.11865	82.37%					H					M		
12CCO138	Shariff Awliya Street	Brgy Road	9.65/4.95	0.199	0.17	85.12%			0.00%		0.02965	14.88%					H					M		
12CCO139	Putri Tonina Street	Brgy Road		-													H					M		
12CCO140	No Name (Road 2)	Brgy Road	9.49/4.60	0.274		0.00%			0.00%		0.27365	100.00%					H					M		
12CCO141	No Name (Road 3)	Brgy Road	9.30/4.75	0.269	0.09	32.44%			0.00%		0.1819	67.56%					H					M		
12CCO142	Fatima Street	Brgy Road	5.89/4.00	0.185		0.00%			0.00%		0.18492	100.00%					H					M		
12CCO143	Mahad	Brgy Road	6.01/3.81	0.401	0.32	79.94%			0.00%		0.08045	20.06%					H					M		
12CCO144	No Name (Road 4)	Brgy Road	10.01/	0.172	0.1	59.89%			0.00%		0.06891	40.11%					H					M		
12CCO145	No Name (Road 5)	Brgy Road	9.81/5.10	0.483	0.25	51.73%			0.00%		0.23333	48.27%					H					M		
12CCO146	No Name (Road 6)	Brgy Road	7.40/5.47	0.186		0.00%			0.00%		0.18622	100.00%					H					M		
12CCO147	No Name (Road 7)	Brgy Road	9.50/6.00	0.153	0.06	42.01%			0.00%		0.08888	57.99%					H					M		
12CCO148	No Name (Road 8)	Brgy Road	10.03/5.53	0.123		0.00%			0.00%		0.12274	100.00%					H					M		
12CCO149	No Name (Road 9)	Brgy Road	9.81/5.05	0.176		0.00%			0.00%		0.17567	100.00%					H					M		
12CCO150	No Name (Road 10)	Brgy Road	9.00/5.16	0.238	0.05	21.65%			0.00%		0.18622	78.35%					H					M		
12CCO151	Al-itihad Road	Brgy Road	10.14/4.55	0.416		0.00%			0.00%		0.4159	100.00%					H					M		
12CCO152	Datu Usman Mampen Street	City Road		0.589	0.59	100.00%			0.00%			0.00%					H					M		
12CCO153	Ramon Rabago (Espino) Street	City Road	9.23/5.24	0.306	0.31	100.00%			0.00%			0.00%					H					M		
12CCO154	1st Street Tanghal	Brgy Road	6.33/3.72	0.235		0.00%			0.00%		0.23488	100.00%					H					M		
12CCO155	2nd street Tanghal	Brgy Road	6.51/4.06	0.241		0.00%			0.00%		0.24056	100.00%					H					M		
12CCO156	3rd street Tanghal	Brgy Road	6.48/4.15	0.237		0.00%			0.00%		0.23654	100.00%					H					M		
12CCO157	No Name (Road A)	Brgy Road	6.44/4.09	0.071		0.00%			0.00%		0.07129	100.00%					H					M		
12CCO158	No Name (Road B)	Brgy Road	6.31/4.25	0.21	0.1	48.33%			0.00%		0.10828	51.67%					H					M		
12CCO159	No Name (Road C)	Brgy Road	7.53/4.01	0.053		0.00%			0.00%		0.05349	100.00%					H					M		
12CCO160	No Name (Road D)	Brgy Road	6.31/3.98	0.067		0.00%			0.00%		0.06675	100.00%					H					M		
12CCO161	No Name (Road E)	Brgy Road	6.49/4.60	0.07		0.00%			0.00%		0.06996	100.00%					H					M		
12CCO162	No Name (Road F)	Brgy Road	6.53/4.43	0.147		0.00%			0.00%		0.147147	100.00%					H					M		
12CCO163	No Name (Road G)	Brgy Road	6.01/3.89	0.088		0.00%			0.00%		0.0884	100.00%					H					M		
12CCO164	No Name (Road H)	Brgy Road	10.54/4.84	0.147		0.00%			0.00%		0.14656	100.00%					H					M		
12CCO165	No Name (Road I)	Brgy Road	10.11/5.10	0.167		0.00%			0.00%		0.1671	100.00%					H					M		
12CCO166	Pastor Kimpo Street	City Road	7.18/4.95	0.333	0.17	50.40%			0.00%		0.16499	49.60%					H					M		
12CCO167	Espino	Brgy Road		0.371	0.14	37.23%			0.00%		0.23276	62.77%					H					M		
12CCO168	Mangungan Street	Brgy Road		2.064	2.06	100.00%			0.00%			0.00%					H					M		
12CCO169	Road A	Brgy Road	5.10/4.36	0.291		0.00%			0.00%		0.29108	100.00%					H					M		
12CCO170	Road B	Brgy Road	5.20/4.12	0.088		0.00%			0.00%		0.08754	100.00%					H					M		
12CCO171	Road C	Brgy Road	6.88/2.88	0.158		0.00%			0.00%		0.15823	100.00%					H					M		

Unique ID for road	Road Name	Classification	Road Surface Type														Hazard Susceptibility (H/M/L)							
			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
12CCO172	Road D	Brgy Road	7.01/5.69	0.111		0.00%			0.00%		0.11089	100.00%					H					M		
12CCO173	Road E	Brgy Road	5.42/4.01	0.276		0.00%			0.00%		0.27626	100.00%					H					M		
SUBTOTAL				9.737	4.438	45.57%	-	-	0.00%	-	5.3	54.43%	-	-	-	-								
Bagua 3																								
12CCO174	Springfield Road	Brgy Road	5.90/4.12	0.071	0.07	100.00%			0.00%			0.00%										M		
12CCO175	Mabini Street	City Road	10.97/6.10	0.499	0.4992	100.00%			0.00%			0.00%					M					M		
12CCO176	SK Pendatun Avenue	City Road	13.06/8.28	0.189	0.19	100.00%			0.00%			0.00%										M		
SUBTOTAL				0.76	0.76	100.00%	-	-	0.00%	-	-	0.00%	-	-	-	-								
Rosary Heights Mother Barangay																								
12CCO177	Sinsuat Avenue	National Road	15.70/6.88	0.513		0.00%		0.51276	100.00%			0.00%					L							
12CCO178	Ramon Rabago Avenue	National Road	11.05/6.22	0.912	0.912	100.00%			0.00%			0.00%					L							
12CCO179	Road 1	Brgy Road	10.79/5.23	0.08		0.00%			0.00%		0.08	100.00%					L							
12CCO180	Road 2	Brgy Road	9.74/5.77	0.101		0.00%			0.00%		0.101	100.00%					L							
12CCO181	Tandang Sora Street	Brgy Road	10.68/4.15	0.154	0.15	100.00%			0.00%			0.00%					L					M		
12CCO182	Maunawain Street	Brgy Road	11.00/4.19	0.149	0.15	100.00%			0.00%			0.00%					L							
12CCO183	1st Street	Brgy Road	8.05/4.09	0.099	0.1	100.00%			0.00%			0.00%					L					M		
12CCO184	2nd Street	Brgy Road	5.84/3.89	0.075	0.02	23.04%			0.00%		0.057	76.96%					L					M		
12CCO185	1st Road	Brgy Road	7.05/3.72	0.078		0.00%			0.00%		0.078	100.00%					L					M		
12CCO186	2nd Road	Brgy Road	6.54/3.47	0.069		0.00%			0.00%		0.069	100.00%					L					M		
12CCO187	3rd Road	Brgy Road	8.67/4.31	0.068		0.00%			0.00%		0.068	100.00%					L					M		
12CCO188	4th Road	Brgy Road	4.12/2.23	0.07		0.00%			0.00%		0.07	100.00%					L					M		
12CCO189	St Maria Street	Brgy Road	11.87/6.08	0.266	0.27	100.00%			0.00%			0.00%					L					M		
12CCO190	St Barbara Street	Brgy Road	10.03/6.39	0.34	0.23	68.81%			0.00%		0.106	31.19%					L					M		
12CCO191	Pascual Street	City Road	9.80/4.10	0.288	0.29	100.00%			0.00%			0.00%					L					M		
12CCO192	Purok Maunawain Road to Macapagal Street	Brgy Road	9.92/4.97	0.188	0.19	100.00%			0.00%			0.00%					L							
12CCO193	1st Road	Brgy Road	4.43/3.08	0.136	0.07	50.24%			0.00%		0.068	49.76%					L							
12CCO194	2nd Road	Brgy Road		0.197	0.07	34.83%			0.00%		0.128	65.17%					L							
12CCO195	Road A	Brgy Road	6.55/4.56	0.105		0.00%			0.00%		0.105	100.00%					L							
12CCO196	Road B	Brgy Road	6.39/3.31	0.103		0.00%			0.00%		0.103	100.00%					L							

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			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
12CCO197	Road C	Brgy Road	6.87/3.91	0.099		0.00%			0.00%		0.099	100.00%					L							
12CCO198	Road D	Brgy Road	5.59/3.44	0.102		0.00%			0.00%		0.102	100.00%					L							
12CCO199	Roales Street (B)	Brgy Road	9.51/5.60	0.399		0.00%			0.00%		0.399	100.00%					H					M		
12CCO200	(B)	Brgy Road	7.40/5.03	0.311	0.05	17.56%			0.00%		0.256	82.44%					L							
12CCO201	Purok Balikatan (A) Road	Brgy Road	10.02/5.27	0.18		0.00%			0.00%		0.18	100.00%					L					M		
12CCO202	Purok Balikatan (B) Road	Brgy Road	8.79/5.42	0.309	0.06	18.40%			0.00%		0.252	81.60%					L					M		
12CCO203	(B)	Brgy Road	8.71/3.88	0.063		0.00%			0.00%		0.063	100.00%					L							
12CCO204	6th Road	Brgy Road	9.25/5.03	0.247	0.08	30.87%			0.00%		0.171	69.13%					L							
12CCO205	5th Road	Brgy Road	8.15/5.4	0.193	0.09	47.79%			0.00%		0.101	52.21%					L							
12CCO206	4th Road	Brgy Road	10.01/4.41	0.35		0.00%			0.00%		0.35	100.00%					L							
12CCO207	3rd Road (B)	Brgy Road	9.14/6.1	0.338		0.00%			0.00%		0.338	100.00%					L							
12CCO208	2nd Road (B)	Brgy Road	9.07/4.84	0.172	0.07	39.35%			0.00%		0.104	60.65%					L							
12CCO209	1st Road (B)	Brgy Road	8.40/5.71	0.314		0.00%			0.00%		0.314	100.00%					L							
12CCO210	Macapagal Street	City Road	9.73/5.99	0.628	0.63	100.00%			0.00%			0.00%					L					M		
12CCO211	Soledad Sousa Circuit Road	City Road	10.49/5.99	0.421	0.22	51.35%			0.00%		0.205	48.65%					L					M		
12CCO212	Purok Sibuyan (B) Road	Brgy Road	11.62/4.98	0.242		0.00%			0.00%		0.242	100.00%					L							
SUBTOTAL				8.358	3.636	43.51%	-	0.513	6.13%	-	4.209	50.36%	-	-	-	-								
Rosary Heights 1																								
12CCO213	Sinsuat Avenue	National Road	15.70/6.88	0.674		0.00%		0.67421	100.00%			0.00%												
12CCO214	Carmen Lumibao Street	Brgy Road	11.76/5.39	0.315	0.315	100.00%			0.00%			0.00%												
12CCO215	San Juan Street	Brgy Road	10.33/4.52	0.059	0.06	100.00%			0.00%			0.00%												
12CCO216	Road 1	Brgy Road	10.88/6.60	0.097		0.00%			0.00%		0.09702	100.00%												
12CCO217	Sausa Street	Brgy Road	11.00/6.25	0.506	0.51	100.00%			0.00%			0.00%												
12CCO218	Veterans Avenue	City Road	8.19/6.18	0.775	0.77	100.00%			0.00%			0.00%									M	M		
12CCO219	Heroes Road	Brgy Road	6.41/3.58	0.554	0.55	100.00%			0.00%			0.00%									M			
12CCO220	Road 2	Brgy Road	11.16/8.38	0.099		0.00%			0.00%		0.0992	100.00%												
12CCO221	Road 3	Brgy Road	6.77/3.09	0.07	0.02	29.78%			0.00%		0.0489	70.22%												
12CCO222	TV Juliano Avenue	City Road	13.36/7.02	0.534	0.53	100.00%			0.00%			0.00%												
SUBTOTAL				3.683	2.763	75.04%	-	0.674	18.31%	-	0.245	6.66%	-	-	-	-								

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			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth										
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Rosary Heights 2																								
12CCO223	1st Road	Brgy Road	3.62/3.00	0.092	-	0.00%			0.00%		0.092	100.00%					L							
12CCO224	2nd Road	Brgy Road	3.50/3.00	0.107	-	0.00%			0.00%		0.10673	100.00%					L							
12CCO225	Road 2	Brgy Road	0/5.75	0.09	0.004	3.94%			0.00%		0.086	96.06%					L							
12CCO226	Road A	Brgy Road	4.44/3.33	0.055	0.06	100.00%			0.00%			0.00%					L							
12CCO227	Road 1	Brgy Road	4.29/3.16	0.078	0.07	95.61%			0.00%		0.00341	4.39%					L							
12CCO228	Dap-dap Road	Brgy Road	7.15/5.03	0.288	0.12	41.34%			0.00%		0.16881	58.66%					L							
12CCO229	Road B	Brgy Road	6.62/5.83	0.057	0.03	45.74%			0.00%		0.03114	54.26%					L							
12CCO230	Road 3	Brgy Road	9.65/4.69	0.127		0.00%			0.00%		0.12725	100.00%					L							
12CCO231	Angel Bacani Street	Brgy Road	9.13/3.86	0.201	0.2	100.00%			0.00%			0.00%					L							
12CCO232	Clemente Alino Street	Brgy Road	9.57/4.13	0.229	0.23	100.00%			0.00%			0.00%					L					M		
12CCO233	Notre Dame Avenue Extension (Fly-Over)	National Road	11.42/8.29	0.455	0.45	100.00%			0.00%			0.00%					L							
12CCO234	Notre Dame Avenue Extension	National Road	12.83/6.95	0.391	0.39	100.00%			0.00%			0.00%					L					M		
12CCO235	Moreno Subdivision Road	Brgy Road	5.74/4.15	0.204	0.11	53.88%			0.00%		0.09416	46.12%					L							
12CCO236	Road to Bormaheco	City Road	9.40/6.70	0.585	0.59	100.00%			0.00%			0.00%					L							
12CCO237	Road to NDU Back Gate	Brgy Road	9.59/5.18	0.413		0.00%			0.00%		0.413	100.00%					L							
12CCO238	Quezon Avenue	National Road		0.551	0.55	100.00%			0.00%			0.00%					L							
SUBTOTAL				3.92	2.799	71.38%	-	-	0.00%	-	1.123	28.62%	-	-	-	-								
Rosary Heights 3																								
12CCO239	Road 4	Brgy Road	7.42/4.11	0.243	0.243	100.00%			0.00%			0.00%					L							
12CCO240	Road to San Vicente	Brgy Road	8.43/4.02	0.066	0.07	100.00%			0.00%			0.00%					L							
12CCO241	Road 3	Brgy Road	7.94/4.12	0.103	0.1	100.00%			0.00%			0.00%					L							
12CCO242	Lauban Street	Brgy Road	6.17/3.18	0.087	0.09	100.00%			0.00%			0.00%					L							
12CCO243	Notre Dame Avenue	National Road	9.17/5.17	0.131	0.11	86.32%			0.00%		0.018	13.68%					L							
12CCO244	Shariff Road	Brgy Road	11.89/5.02	0.267	0.27	100.00%			0.00%			0.00%					L							
12CCO245	No Name	Brgy Road	6.00/3.19	0.037		0.00%			0.00%		0.037	100.00%					L							
12CCO246	Sultan Maetem Ave	Brgy Road	8.59/5.53	0.549	0.44	80.31%			0.00%		0.108	19.69%					M							
12CCO247	5th Street Urban Poor	Brgy Road	7.27/5.24	0.078	0.04	50.31%			0.00%		0.039	49.69%					M							
12CCO248	4th St Urban Poor	Brgy Road	6.50/4.12	0.205	0.21	100.00%			0.00%			0.00%					L							
12CCO249	No Name	Brgy Road	6.50/3.82	0.068		0.00%			0.00%		0.068	100.00%					L							
12CCO250	3rd st Urban Poor	Brgy Road	7.92/4.79	0.134		0.00%			0.00%		0.134	100.00%					L							

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					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
12CCO251	2nd St Urban Poor	Brgy Road	6.95/4.18	0.151	0.15	100.00%			0.00%			0.00%					L							
12CCO252	1st St Urban Poor	Brgy Road	5.58/3.59	0.173	0.12	66.97%			0.00%		0.057	33.03%					L							
12CCO253	Datu Alamansa Street	Brgy Road	7.76/4.00	0.377	0.35	92.00%			0.00%		0.03	8.00%					L							
12CCO254	De Mazenod Street	National Road	13.05/	0.496	0.496	100.00%			0.00%			0.00%					L							
12CCO255	Road 2	Brgy Road	9.29/5.99	0.301	0.18	58.57%			0.00%		0.125	41.43%					L							
12CCO256	Datu Liwa Candao Street	Brgy Road	8.87/5.90	0.439	0.44	100.00%			0.00%			0.00%					L							
12CCO257	Purok Lapu-Lapu Road	Brgy Road	7.81/7.81	0.033	0.03	100.00%			0.00%			0.00%					L							
12CCO258	Purok Solaiman Road	Brgy Road	6.21/3.84	0.21		0.00%			0.00%		0.21	100.00%					L							
12CCO259	Purok Kalimudan Road	Brgy Road	6.52/4.96	0.156		0.00%			0.00%		0.156	100.00%					L							
12CCO260	Sesame Street	City Road	7.80/5.21	0.507	0.36	70.13%			0.00%		0.151	29.87%					L							
SUBTOTAL				4.813	3.68	76.46%	-	-	0.00%	-	1.133	23.54%	-	-	-	-								
Rosary Heights 4																								
12CCO261	Sinsuat Avenue	National Road	15.70/6.88	0.6		0.00%		0.60041	100.00%			0.00%					L							
12CCO262	Martinez Street	Brgy Road	5.90/5.10	0.205	0.205	100.00%			0.00%			0.00%					L							
12CCO263	Maria Clara Street	Brgy Road	6.50/4.10	0.071	0.071	100.00%			0.00%			0.00%					L							
12CCO264	Dondoy Juliano Street	Brgy Road	8.34/4.14	0.084	0.084	100.00%			0.00%			0.00%					L							
12CCO265	Don E Sero Street	Brgy Road	11.03/6.34	0.062	0.062	100.00%			0.00%			0.00%					L							
12CCO266	Delfin Reynaldo Street	Brgy Road	10.59/5.08	0.234	0.234	100.00%			0.00%			0.00%					L							
12CCO267	General Luna Street	Brgy Road	14.75/6.15	0.36	0.36	100.00%			0.00%			0.00%					L							
12CCO268	De Mazenod Avenue (Front of Iglesia)	Brgy Road	7.53/5.01	0.036	0.036	100.00%			0.00%			0.00%					L							
12CCO269	De Mazenod Avenue (Front of Iglesia)	Brgy Road	7.00/4.43	0.084	0.084	100.00%			0.00%			0.00%					L							
12CCO270	Arong Village Road	Brgy Road	5.62/4.01	0.122	0.122	100.00%			0.00%			0.00%					L							
12CCO271	Sesame Street	City Road	9.36/4.96	0.31	0.091	29.46%			0.00%		0.219	70.54%					L							
12CCO272	Purok Acacia Road	Brgy Road	6.57/4.16	0.136	0.076	55.34%			0.00%		0.061	44.66%					L							
12CCO273	Ante Compound Road	Brgy Road	5.16/3.21	0.181		0.00%			0.00%		0.181	100.00%					L							
12CCO274	Enilo Compound Road	Brgy Road	5.16/3.21	0.061		0.00%			0.00%		0.061	100.00%					L							
12CCO275	No Name	Brgy Road	5.37/6.94	0.228	0.228	100.00%			0.00%			0.00%					L							

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					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
12CCO276	Road to NDU Back Gate	Brgy Road	8.76/4.13	0.16		0.00%			0.00%		0.16	100.00%					L							
12CCO277	Sto Niño Chapel Road	Brgy Road	5.39/4.00	0.041		0.00%			0.00%		0.041	100.00%					L							
12CCO278	Road 1	Brgy Road	6.57/3.86	0.039		0.00%			0.00%		0.039	100.00%					L							
12CCO279	Road 2	Brgy Road	6.45/3.24	0.084		0.00%			0.00%		0.084	100.00%					L							
12CCO280	Road 3	Brgy Road	5.40/3.32	0.037		0.00%			0.00%		0.037	100.00%					L							
12CCO281	Road 4	Brgy Road	10.12/5.78	0.071		0.00%			0.00%		0.071	100.00%					L							
12CCO282	Road 5	Brgy Road	4.60/3.22	0.02		0.00%			0.00%		0.02	100.00%					L							
12CCO283	Road 6	Brgy Road	4.00/3.64	0.058		0.00%			0.00%		0.058	100.00%					L							
SUBTOTAL				3.284	1.652	50.29%	-	0.6	18.28%	-	1.032	31.43%	-	-	-	-								
Rosary Heights 5																								
12CCO284	1st Street Don E Sero	Brgy Road	10.34/6.71	0.364	0.315	86.64%			0.00%		0.05	13.36%					L							
12CCO285	2nd Street Don E Sero	Brgy Road	10.27/6.09	0.238	0.19	80.61%			0.00%		0.05	19.39%					L							
12CCO286	3rd street Don E Sero	Brgy Road	11.13/5.93	0.45	0.38	84.61%			0.00%		0.07	15.39%					L							
12CCO287	4th street Don E Sero Don E Sero	Brgy Road	9.53/6.15	0.27	0.27	100.00%			0.00%			0.00%					L							
12CCO288	5th street Don E Sero	Brgy Road	9.99/6.08	0.305	0.3	100.00%			0.00%			0.00%					L							
12CCO289	5th street Don E Sero	Brgy Road	10.00/4.21	0.3915	0.28	70.62%			0.00%		0.12	29.38%					L							
12CCO290	Road 5	Brgy Road	8.60/3.21	0.059		0.00%			0.00%		0.06	100.00%					L							
12CCO291	7th street Don E Sero	Brgy Road		0.3	0.3	100.00%			0.00%			0.00%					L							
12CCO292	8th street Don E Sero	Brgy Road	10.00/5.17	0.17	0.17	100.00%			0.00%			0.00%					L							
12CCO293	9th Street Don E Sero	Brgy Road	7.58/4.81	0.288		0.00%			0.00%		0.29	100.00%					L							
12CCO294	10th Street Don E Sero	Brgy Road	8.61/5.49	0.224		0.00%			0.00%		0.22	100.00%					L							
12CCO295	11th Street Don E Sero	Brgy Road	10.56/8.04	0.322		0.00%			0.00%		0.32	100.00%					M							
12CCO296	Pinhoy Street (End)	Brgy Road	10.59/6.37	0.3926	0.39	100.00%			0.00%			0.00%					M							
12CCO297	Don E Sero Street	City Road	7.69/	0.4517	0.45	100.00%			0.00%			0.00%					L							
12CCO298	Demazenod Avenue	National Road	13.05/	0.49	0.49	100.00%			0.00%			0.00%					L							
12CCO299	Ondi	Brgy Road	7.41/4.48	1.191	0.67	56.29%			0.00%		0.52	43.71%					L							
SUBTOTAL				5.907	4.215	71.35%	-	-	0.00%	-	1.692	28.65%												
Rosary Heights 6																								
12CC0300	Santos Street	City Road	11.94/	1.035	1.035	100.00%			0.00%			0.00%					M							
12CC0301	Rosales Street	City Road	10.25/	5.38	2.88	53.53%			0.00%		2.5	46.47%					M							
12CC0302	Krislamville Road	Brgy Road	7.41/	0.6646	0.14	21.66%			0.00%		0.52064	78.34%					L							

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Unique ID for road	Road Name	Classification	Road Surface Type														Hazard Susceptibility (H/M/L)							
			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
12CC0303	Unnamed road	Brgy Road	8.69/	0.0664	0.04	52.89%			0.00%		0.03128	47.11%					L							
12CC0304	Road 5	Brgy Road	6.83/	0.7985	0.8	100.00%			0.00%			0.00%					L							
12CC0305	Road 1	Brgy Road	9.43/	0.558	0.56	100.00%			0.00%			0.00%					L							
12CC0306	Purok Pinen Road	Brgy Road	7.02/	0.002	0.002	100.00%			0.00%			0.00%					L							
12CC0307	No Name	Brgy Road	7.77/	0.0614	0.06	100.00%			0.00%			0.00%					L							
12CC0308	Sulayla Street	Brgy Road	6.711/	0.1827	0.18	100.00%			0.00%			0.00%					L							
12CC0309	No Name	Brgy Road	9.21/	0.075		0.00%			0.00%		0.07504	100.00%					L							
12CC0310	No Name	Brgy Road	6.65/	0.1763		0.00%			0.00%					0.17626	100.00%		L							
12CC0311	No Name	Brgy Road	6.75/	0.074		0.00%			0.00%		0.07404	100.00%					L							
12CC0312	No Name	Brgy Road	7.57/	0.0608		0.00%			0.00%		0.06084	100.00%					L							
12CC0313	Road 8	Brgy Road	10.00/	0.1492		0.00%			0.00%		0.14915	100.00%					L							
12CC0314	Road 7	Brgy Road	8.90/	0.193	0.05	23.52%			0.00%		0.14759	76.48%					L							
12CC0315	Road 14	Brgy Road	4.40/	0.1156	0.12	100.00%			0.00%			0.00%					L							
12CC0316	Road 4	Brgy Road	5.35/	0.245		0.00%			0.00%		0.245	100.00%					L							
12CC0317	Road 6	Brgy Road	8.35/	0.1257	0.05	39.48%			0.00%		0.076	60.52%					L							
12CC0318	Rosal Street	City Road	9.12/	0.4871	0.49	100.00%			0.00%			0.00%					L							
12CC0319	Ortouste Street	Brgy Road	10.41/	0.2141	0.21	100.00%			0.00%			0.00%					L							
12CC0320	Ilang-ilang Street	City Road	10.09/	0.5214	0.52	100.00%			0.00%			0.00%					L							
12CC0321	Jasmin Street	City Road	9.45/	0.5016	0.5	100.00%			0.00%			0.00%					L							
12CC0322	Oblate Drive	City Road	8.40/	0.4604	0.46	100.00%			0.00%			0.00%					L							
SUBTOTAL				12.148	8.092	66.61%	-	-	0.00%	-	3.88	31.94%	-	0.176	1	-								
Rosary Heights 7																								
12CC0323	Sinsuat Avenue	National Road	15.70/6.88	0.6946		0.00%		0.69461	100.00%			0.00%					L							
12CC0324	Road 1 (Ortouste Extension)	Brgy Road	9.00/5.23	0.637	0.637	100.00%			0.00%			0.00%					L							
12CC0325	Road 3	Brgy Road	6.29/4.75	0.4033	0.35	86.60%			0.00%		0.05403	13.40%					L							
12CC0326	Road 4	Brgy Road	9.35/6.08	0.5153	0.52	100.00%			0.00%			0.00%					L							
12CC0327	Unnamed Road 1	Brgy Road	10.92/5.30	0.2637	0.26	100.00%			0.00%			0.00%					L							
12CC0328	Gonzalo Javier Street	City Road	9.90/4.88	0.9042	0.9	100.00%			0.00%			0.00%					M							
12CC0329	Ortouste Street	Brgy Road	10.41/	0.2141	0.21	100.00%			0.00%			0.00%					L							
12CC0330	Rosal Street	City Road	10.05/5.07	0.3025	0.3	100.00%			0.00%			0.00%					L							
12CC0331	Jasmin Street	City Road	8.00/5.16	0.3148	0.31	100.00%			0.00%			0.00%					L							
12CC0332	Santan Street	Brgy Road	8.56/4.03	0.163	0.16	100.00%			0.00%			0.00%					L							
12CC0333	Bouganvilla Street	Brgy Road	9.08/4.08	0.1709	0.17	100.00%			0.00%			0.00%					L							
12CC0334	Ilang-ilang Street	City Road	10.7/5.21	0.3106	0.31	100.00%			0.00%			0.00%					L							
12CC0335	Albert Einstein Road 1	Brgy Road	9.10/6.06	0.3451	0.35	100.00%			0.00%			0.00%					L							

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			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
12CC0336	Oblate Drive	City Road	9.32/4.76	0.534	0.53	100.00%			0.00%			0.00%					L							
12CC0337	Albert Einstein Road 2	Brgy Road	8.48/3.76	0.1496	0.15	100.00%			0.00%			0.00%					L							
12CC0338	Albert Einstein Road 3	Brgy Road	9.71/5.07	0.1552	0.16	100.00%			0.00%			0.00%					L							
12CC0339	R. Garcia St	Brgy Road	10.45/4.78	0.4871	0.31	64.23%			0.00%		0.17423	35.77%					L							
12CC0340	Unnamed Road 2	Brgy Road	9.71/5.15	0.1441	0.14	100.00%			0.00%			0.00%					L							
12CC0341	Ugalingan Street	Brgy Road	6.75/4.00	0.1784	0.18	100.00%			0.00%			0.00%					L							
12CC0342	Dona Avelina Street	City Road		0.3518	0.35	100.00%			0.00%			0.00%					L							
12CC0343	Talitay Street 1	Brgy Road	8.15/5.11	0.6435	0.64	100.00%			0.00%			0.00%					M							
12CC0344	Talitay Street 2	Brgy Road	9.26/5.15	0.2551	0.2	80.00%			0.00%		0.05102	20.00%					M							
12CC0345	R. Garcia Street	Brgy Road	8.02/5.91	0.1711		0.00%			0.00%		0.17113	100.00%					L							
12CC0346	Mercury Street	Brgy Road	7.51/3.84	0.2225	0.11	47.56%			0.00%		0.11667	52.44%					L							
SUBTOTAL				8.531	7.27	85.21%	-	0.695	8.14%	-	0.567	6.65%	-	-	-	-								
Rosary Heights 8																								
12CC0347	Fr Edward Gordon Street	Brgy Road	6.77/5.00	0.391	0.22852	58.51%			0.00%		0.16204	41.49%					L					M		
12CC0348	San Roque Street	Brgy Road	7.27/3.65	0.128		0.00%			0.00%		0.12836	100.00%					L							
12CC0349	Sta Felomina Street	Brgy Road	7.69/3.01	0.123		0.00%			0.00%		0.12346	100.00%					L					M		
12CC0350	St Micahel Street	Brgy Road	8.00/5.00	0.1		0.00%			0.00%		0.09992	100.00%					L					M		
12CC0351	Sta Theresa Street	Brgy Road	8.00/5.01	0.137		0.00%			0.00%		0.13652	100.00%					L					M		
12CC0352	Santa Veronica Street	Brgy Road	7.86/4.47	0.138		0.00%			0.00%		0.13827	100.00%					M					M		
12CC0353	St Isoodre Street	Brgy Road	7.57/3.76	0.154		0.00%			0.00%		0.15376	100.00%					M					M		
12CC0354	San Germinigildo Street	Brgy Road	10.31/5.88	0.165		0.00%			0.00%		0.16531	100.00%					H					M		
12CC0355	Sto Niño Street	Brgy Road	6.33/4.48	0.164		0.00%			0.00%		0.16443	100.00%					L					M		
12CC0356	Block	Brgy Road	10.52/5.22	0.229	0.18	79.50%			0.00%		0.04689	20.50%												
12CC0357	Bliss Road 1	Brgy Road	8.17/4.04	0.263	0.11	43.04%			0.00%		0.14954	56.96%					L					M		
12CC0358	Bliss Road 2	Brgy Road	5.65/7.79	0.117	0.1	84.19%			0.00%		0.0185	15.81%					L					M		
12CC0359	Bliss Road 3	Brgy Road	9.56/5.20	0.188		0.00%			0.00%		0.18829	100.00%					L					M		
12CC0360	Bliss Road 4	Brgy Road		0.113		0.00%			0.00%		0.11329	100.00%					L					M		
12CC0361	Bliss Road 5	Brgy Road	9.00/5.30	0.11		0.00%			0.00%		0.10973	100.00%					L					M		
12CC0362	Bliss Road 6	Brgy Road	7.25/5.28	0.102		0.00%			0.00%		0.10214	100.00%					L					M		
12CC0363	Archbishop Gerald Mongeau Street	City Road	8.04/4.00	0.493	0.49	100.00%			0.00%			0.00%					L					M		
12CC0364	Guadalupe Street	Brgy Road	11.72/6.14	0.606	0.41	66.87%			0.00%		0.20075	33.13%					H					M		
12CC0365	Fr. Egilde Beugon Street	Brgy Road	7.83/3.35	0.247		0.00%			0.00%		0.24676	100.00%					L					M		
12CC0366	Bishop McSorly Street	Brgy Road	10.18/5.00	0.328	0.2	62.44%			0.00%		0.12332	37.56%					L					M		
12CC0367	Fr. J. Boyd Street	Brgy Road		0.39	0.33	83.95%			0.00%		0.06251	16.05%					M					M		
12CC0368	Fr. C. Billman Street	Brgy Road		0.365		0.00%			0.00%		0.36468	100.00%					H							

Unique ID for road	Road Name	Classification	Road Surface Type														Hazard Susceptibility (H/M/L)							
			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth										
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
12CC0369	St. Peter Street	Brgy Road	7.32/3.02	0.099		0.00%			0.00%		0.09947	100.00%					L					M		
12CC0370	St. James Street	Brgy Road	6.33/4.03	0.23		0.00%			0.00%		0.23034	100.00%					L					M		
12CC0371	Sta Isabel Street	Brgy Road	8.06/4.60	0.101		0.00%			0.00%		0.10063	100.00%					L					M		
12CC0372	St. John Street	Brgy Road	6.23/3.15	0.187		0.00%			0.00%		0.1865	100.00%					L					M		
12CC0373	Road 17	Brgy Road	7.13/3.5	0.098		0.00%			0.00%		0.09845	100.00%												
12CC0374	Road 2	Brgy Road	6.73/3.33	0.098		0.00%			0.00%		0.09833	100.00%												
12CC0375	Road 1	Brgy Road	8.17/5.50	0.19	0.07	34.87%			0.00%		0.12389	65.13%												
12CC0376	Fr. Emil Buldoc Street	Brgy Road	8.2/5.08	0.124	0.12	100.00%			0.00%			0.00%					M					M		
12CC0377	Road 16	Brgy Road	5.35/3.21	0.13		0.00%			0.00%		0.1298	100.00%												
12CC0378	Road 26	Brgy Road		0.204		0.00%			0.00%		0.20425	100.00%												
12CC0379	Road 19	Brgy Road	10.83/5.61	0.524		0.00%			0.00%		0.5243	100.00%												
12CC0380	Mercury Street	Brgy Road	7.51/3.84	0.222	0.11	47.56%			0.00%		0.11667	52.44%					L							
12CC0381	Saturn Street	Brgy Road	8.40/3.75	0.543	0.29	52.64%			0.00%		0.257	47.36%					L							
12CC0382	Venus Street	Brgy Road	9.56/6.00	0.27	0.12	45.27%			0.00%		0.14767	54.73%					L							
12CC0383	Moon Street	Brgy Road	11.17/5.20	0.476	0.48	100.00%			0.00%			0.00%					L							
SUBTOTAL				8.546	3.231	37.80%	-	-	0.00%	-	5.316	62.20%	-	-	-	-								
Rosary Heights 9																								
12CC0384	Sinsuat Avenue	National Road	15.70/6.88	1.47		0.00%		1.47	100.00%			0.00%					L							
12CC0385	Gov Guttierez Avenue	City Road		0.675	0.67463	100.00%			0.00%			0.00%					L							
12CC0386	Road 1	Brgy Road	9.01/6.59	0.116		0.00%			0.00%		0.11613	100.00%					L							
12CC0387	Road 2	Brgy Road	9.18/7	0.197	0.13973	70.87%			0.00%		0.05743	29.13%					L							
12CC0388	Road 3	Brgy Road	8.58/7	0.123	0.12309	100.00%			0.00%			0.00%					L							
12CC0389	Road to San Vicente	Brgy Road	9.56/5.40	0.271	0.06216	22.91%			0.00%		0.20916	77.09%					L							
12CC0390	Road 5	Brgy Road	7.09/4.08	0.12		0.00%			0.00%		0.12032	100.00%					L							
12CC0391	Road 6	Brgy Road	6.98/4.01	0.121		0.00%			0.00%		0.12062	100.00%					L							
12CC0392	Road 7	Brgy Road	11.65/6.34	0.053	0.03029	56.67%			0.00%		0.02316	43.33%					L							
12CC0393	1st Street Gov Guttierez	Brgy Road	5.54/3.00	0.186		0.00%			0.00%		0.18626	100.00%					L							
12CC0394	2nd Street Gov Guttierez	Brgy Road	6.39/4.46	0.18		0.00%			0.00%		0.17992	100.00%					L							
12CC0395	Mercury Street	Brgy Road	7.75/4.09	0.209	0.05	24.22%			0.00%		0.15815	75.78%					L							
12CC0396	Road beside St Benedict	Brgy Road	10.04/5.11	0.102	0.1	100.00%			0.00%			0.00%					L							
12CC0397	Road to PSA	Brgy Road	6.97/4.72	0.148		0.00%			0.00%		0.14795	100.00%					L							
12CC0398	Road at the Back of NDH	Brgy Road	8.65/	0.141		0.00%			0.00%		0.14102	100.00%					L					M		

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			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
12CC0399	Road at the Side of NDH	Brgy Road	5.02/	0.203		0.00%			0.00%		0.20287	100.00%					L					M		
12CC0400	1st Road Urban Poor	Brgy Road	9.92/	0.445	0.44	100.00%			0.00%			0.00%					H					M		
12CC0401	2nd Road Urban Poor	Brgy Road	10.51/7.51	0.989	0.74	74.94%			0.00%		0.24792	25.06%					H							
12CC0402	Road 26	Brgy Road	3.71/	0.048		0.00%			0.00%					0.04836	100.00%		L							
12CC0403	Road 25	Brgy Road	3.92/	0.049		0.00%			0.00%					0.04917	100.00%		L							
12CC0404	Road 24	Brgy Road	3.27/	0.051		0.00%			0.00%					0.05116	100.00%		L							
12CC0405	Road 23	Brgy Road	3.66/	0.053		0.00%			0.00%					0.05289	100.00%		L							
12CC0406	Road 22	Brgy Road	3.25/	0.055		0.00%			0.00%		0.05522	100.00%					L							
12CC0407	Road 21	Brgy Road	3.21/	0.059		0.00%			0.00%		0.05926	100.00%					L							
12CC0408	Road 20	Brgy Road	2.67/	0.061		0.00%			0.00%		0.061	100.00%					L							
12CC0409	Road 19	Brgy Road	3.56/	0.063		0.00%			0.00%		0.06305	100.00%					L							
12CC0410	Road 18	Brgy Road	3.19/	0.066		0.00%			0.00%		0.06586	100.00%					L							
12CC0411	Road 17	Brgy Road	4.44/	0.068		0.00%			0.00%		0.06752	100.00%					L							
12CC0412	Road 16	Brgy Road	3.76/	0.07		0.00%			0.00%		0.06967	100.00%					L							
12CC0413	Archbishop Gerald Mongue Street	City Road	7.93/4.48	0.261	0.1	37.15%			0.00%		0.16388	62.85%					L					M		
12CC0414	Road B	Brgy Road	10.15/6.01	0.076		0.00%			0.00%		0.07629	100.00%					L							
12CC0415	Road C	Brgy Road	7.51/4.47	0.068		0.00%			0.00%		0.06838	100.00%					L							
12CC0416	Road 8	Brgy Road	3.58/	0.085		0.00%			0.00%		0.08461	100.00%					L							
12CC0417	Road 7	Brgy Road	3.46/	0.087		0.00%			0.00%		0.08678	100.00%					L							
12CC0418	Circumferencial Road	City Road	9.12/7.00	0.763	0.76	100.00%			0.00%			0.00%					L							
12CC0419	Road A	Brgy Road	4.95/	0.23		0.00%			0.00%		0.22979	100.00%					L							
12CC0420	Road B	Brgy Road	5.73/	0.31		0.00%			0.00%		0.31022	100.00%					L							
12CC0421	Road C	Brgy Road	7.92/	0.073		0.00%			0.00%		0.07326	100.00%					L							
12CC0422	Dona Avelina Street	City Road	4.71/	0.094		0.00%			0.00%		0.09417	100.00%					L							
12CC0423	Road E	Brgy Road	4.12/	0.065		0.00%			0.00%		0.06522	100.00%					L							
12CC0424	Road F	Brgy Road	3.16/	0.087		0.00%			0.00%		0.08669	100.00%					L							
12CC0425	Private	Brgy Road	6.03/	0.06		0.00%			0.00%		0.05993	100.00%					L							
12CC0426	Road H	Brgy Road	4.25/	0.08		0.00%			0.00%		0.08041	100.00%					L							
12CC0427	Road I	Brgy Road		0.181		0.00%			0.00%		0.18103	100.00%					L							
SUBTOTAL				8.913	3.228	36.22%	-	1.47	16.49%	-	4.013	45.03%	-	0.202	4	-								
Rosary Heights 10																								
12CC0428	Road at the Side of City Hall	Brgy Road	20.03/6.68	0.384	0.154	40.24%			0.00%		0.229	59.76%					L					M		
12CC0429	No name 1	Brgy Road	6.99/3.83	0.15		0.00%			0.00%		0.15	100.00%					L					M		
12CC0430	No name 2	Brgy Road	6.95/4.6	0.174		0.00%			0.00%		0.174	100.00%					L					M		

Unique ID for road	Road Name	Classification	Road Surface Type														Hazard Susceptibility (H/M/L)							
			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
12CC0431	No name 3	Brgy Road	4.56/3.11	0.04		0.00%			0.00%		0.04	100.00%					L					M		
12CC0432	No name 4	Brgy Road	5.88/5.01	0.073		0.00%			0.00%		0.073	100.00%					L					M		
12CC0433	No name 5	Brgy Road	7.39/6.02	0.136		0.00%			0.00%		0.136	100.00%					L					M		
12CC0434	No name 6	Brgy Road	7.98/5.11	0.141		0.00%			0.00%		0.141	100.00%					L					M		
12CC0435	No name 7	Brgy Road	6.21/4.52	0.15		0.00%			0.00%		0.15	100.00%					L					M		
12CC0436	No name 8	Brgy Road	6.23/5.12	0.196		0.00%			0.00%		0.196	100.00%					L					M		
12CC0437	No name 9	Brgy Road	8.69/5.04	0.132		0.00%			0.00%		0.132	100.00%					L					M		
12CC0438	No name 10	Brgy Road	9.56/5.77	0.179		0.00%			0.00%		0.179	100.00%					L					M		
12CC0439	No name 11	Brgy Road	6.73/4.24	0.149		0.00%			0.00%		0.149	100.00%					L					M		
12CC0440	No name 12	Brgy Road	7.20/4.11	0.15		0.00%			0.00%		0.15	100.00%					L					M		
12CC0441	No name 13	Brgy Road	6.42/4.00	0.154		0.00%			0.00%		0.154	100.00%					L					M		
12CC0442	No name 14	Brgy Road	6.70/3.81	0.161		0.00%			0.00%		0.161	100.00%					L					M		
12CC0443	No name 15	Brgy Road	10.46/5.03	0.398	0.108	27.24%			0.00%		0.29	72.76%					L					M		
12CC0444	Road to Canizares School	Brgy Road	7.95/4.49	0.118	0.118	100.00%			0.00%			0.00%					L					M		
12CC0445	Road at the Back of Fiesta Mall (Purok Masagana)	Brgy Road	9.52/6.45	0.34	0.24	70.61%			0.00%		0.1	29.39%					L					M		
12CC0446	Purok Mamarinta Road	Brgy Road	9.23/3.14	0.27		0.00%			0.00%		0.27	100.00%					L					M		
12CC0447	No name 16	Brgy Road	7.46/4.01	0.192		0.00%			0.00%		0.192	100.00%					L					M		
12CC0448	No name 17	Brgy Road	5.83/3.20	0.204		0.00%			0.00%		0.204	100.00%					L					M		
12CC0449	Rufo Manara Street	City Road	6.44/4.02	0.672	0.672	100.00%			0.00%			0.00%					L					M		
12CC0450	Amado Papa Street	Brgy Road	9.45/5.06	0.671	0.474	70.70%			0.00%		0.197	29.30%					L					M		
12CC0451	Gavina Gonzales Street	Brgy Road	7.37/4.58	0.308	0.105	34.03%			0.00%		0.203	65.97%					L					M		
12CC0452	No name 18	Brgy Road	12.83/7.58	0.09	0.046	50.83%			0.00%		0.044	49.17%					L					M		
12CC0453	Catalina Austria Street	Brgy Road	9.99/	0.749	0.126	16.83%			0.00%		0.623	83.17%					L					M		
12CC0454	LR Sebastian Road	City Road	11.42/6.07	0.639	0.639	100.00%			0.00%			0.00%					L					M		
12CC0455	No name 19	Brgy Road	9.89/5.08	0.086	0.086	100.00%			0.00%			0.00%					L					M		
12CC0456	No name 20	Brgy Road	9.25/4.04	0.08	0.08	100.00%			0.00%			0.00%					L					M		
12CC0457	No name 21	Brgy Road	10.35/4.04	0.082		0.00%			0.00%		0.082	100.00%					L					M		
12CC0458	No name 22	Brgy Road	10.80/4.99	0.078		0.00%			0.00%		0.078	100.00%					L					M		
12CC0459	No name 23	Brgy Road	9.66/3.16	0.08		0.00%			0.00%		0.08	100.00%					L					M		
12CC0460	No name 24	Brgy Road	7.67/3.08	0.08		0.00%			0.00%		0.08	100.00%					L					M		
12CC0461	No name 25	Brgy Road	8.68/3.83	0.118		0.00%			0.00%		0.118	100.00%					L					M		
12CC0462	Soledad Street	Brgy Road	11.90/4.18	0.085		0.00%			0.00%		0.085	100.00%					L					M		
12CC0463	Delcano Street	Brgy Road	11.67/4.08	0.257	0.223	86.78%			0.00%		0.034	13.22%					L					M		
12CC0464	Concepcion Street	Brgy Road	10.66/3.69	0.276		0.00%			0.00%		0.276	100.00%					L					M		

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			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
12CC0465	No name 26	Brgy Road	8.28/5.07	0.08	0.067	84.23%			0.00%		0.013	15.77%					L					M		
12CC0466	Datu Udtog Matalam Street	City Road	12.41/6.84	0.893	0.893	100.00%			0.00%			0.00%					L					M		
12CC0467	San Isidro Ave	City Road	9.99/5.42	0.699	0.699	100.00%			0.00%			0.00%					L					M		
12CC0468	Pansacala Street	City Road	9.40/6.27	0.66	0.66	100.00%			0.00%			0.00%					L					M		
12CC0469	No name 27	Brgy Road	4.75/2.70	0.122		0.00%			0.00%		0.122	100.00%					L					M		
12CC0470	M. Jarabelo Street	City Road	9.03/4.99	0.758	0.62	81.78%			0.00%		0.138	18.22%					L					M		
12CC0471	No name 28	Brgy Road	10.38/4.11	0.116		0.00%			0.00%		0.116	100.00%					L					M		
12CC0472	No name 29	Brgy Road	9.06/4.01	0.146		0.00%			0.00%		0.146	100.00%					L					M		
12CC0473	No name 30	Brgy Road	9.29/4.94	0.23	0.124	54.15%			0.00%		0.105	45.85%					L					M		
12CC0474	TV Juliano Avenue	City Road	14.03/6.93	0.669	0.669	100.00%			0.00%			0.00%					L					M		
SUBTOTAL				12.613	6.805	53.95%	-	-	0.00%	-	5.808	46.05%	-	-	-	-								
Rosary Heights 11																								
12CC0475	Pelican Street	Brgy Road	6.24/4.1	0.385	0.047	12.10%			0.00%		0.339	87.90%					L					M		
12CC0476	Maya Street	Brgy Road	8.72/3.20	0.365		0.00%			0.00%		0.365	100.00%					L					M		
12CC0477	Loro Street	Brgy Road	3.15/3.75	0.353		0.00%			0.00%		0.353	100.00%					L					M		
12CC0478	Kalaw Street	Brgy Road	6.00/3.40	0.188		0.00%			0.00%		0.188	100.00%					L					M		
12CC0479	Falcon Street	Brgy Road	6.50/3.95	0.245		0.00%			0.00%		0.245	100.00%					L					M		
12CC0480	Lawin Street	Brgy Road	6.15/3.02	0.416		0.00%			0.00%		0.416	100.00%					L					M		
12CC0481	Agila Street	Brgy Road	0.05/3.20	0.402		0.00%			0.00%		0.402	100.00%					L					M		
12CC0482	St Uriel Street / 5AT	City Road	6.02/5.16	0.141		0.00%			0.00%		0.141	100.00%										M		
12CC0483	Road 7	Brgy Road	6.10/3.15	0.111		0.00%			0.00%		0.111	100.00%										M		
12CC0484	Penafrancia 2nd Road	Brgy Road	10.15/4.09	0.371		0.00%			0.00%		0.371	100.00%					L					M		
12CC0485	Penafrancia 1st Road	Brgy Road	10.76/5.59	0.334	0.213	63.77%			0.00%		0.121	36.23%					L					M		
12CC0486	St Gabriel Street	Brgy Road	6.60/3.60	0.296	0.296	100.00%			0.00%			0.00%					L					M		
12CC0487	Federville Village Main Road	City Road	9.89/5.00	0.664	0.664	100.00%			0.00%			0.00%					L					M		
12CC0488	Rufo Manara Street	City Road	10.41/5.10	0.183	0.078	42.78%			0.00%		0.105	57.22%					L					M		
12CC0489	Purveyors 1st Road	Brgy Road	10.53/4.18	0.191	0.191	100.00%			0.00%			0.00%					L					M		
12CC0490	Purveyors 2nd Road	Brgy Road	9.15/4.20	0.192	0.192	100.00%			0.00%			0.00%					M					M		
12CC0491	Purveyors 3rd Road	Brgy Road	10.10/4.30	0.194	0.194	100.00%			0.00%			0.00%					M					M		
12CC0492	Purveyors 4th Road	Brgy Road	9.27/4.14	0.197	0.197	100.00%			0.00%			0.00%					M					M		
12CC0493	Road 9	Brgy Road	9.55/4.22	0.178	0.178	100.00%			0.00%			0.00%										M		
12CC0494	Road 10	Brgy Road	9.25/4.12	0.303	0.181	59.88%			0.00%		0.121	40.12%										M		
12CC0495	Road 11	Brgy Road	7.35/3.22	0.049	0.049	100.00%			0.00%			0.00%										M		
12CC0496	Road 12	Brgy Road	7.38/3.22	0.049	0.049	100.00%			0.00%			0.00%										M		
12CC0497	Road 7	Brgy Road	5.70/3.62	0.247		0.00%			0.00%		0.247	100.00%										M		

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			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
12CC0498	Andres Alonzo Street Extension	City Road	7.84/3.12	1.144	0.9	78.67%			0.00%		0.244	21.33%					M					M		
12CC0499	Mentors 1st Road	Brgy Road	6.84/3.85	0.165		0.00%			0.00%		0.165	100.00%					L					M		
12CC0500	Mentors 2nd Road	Brgy Road	8.13/4.20	0.234		0.00%			0.00%		0.234	100.00%					M					M		
12CC0501	Mentors 3rd Road	Brgy Road	5.33/3.84	0.21		0.00%			0.00%		0.21	100.00%					L					M		
12CC0502	Mentors 4th Road	Brgy Road	4.95/3.36	0.184		0.00%			0.00%		0.184	100.00%					L					M		
12CC0503	Mentors 5th Road	Brgy Road	5.82/4.15	0.172		0.00%			0.00%		0.172	100.00%					M					M		
12CC0504	Road 4	Brgy Road	7.21/3.20	0.128		0.00%			0.00%		0.128	100.00%										M		
12CC0505	6th Road	Brgy Road	6.62/3.50	0.13		0.00%			0.00%		0.13	100.00%										M		
12CC0506	5th Road	Brgy Road	6.40/3.35	0.127		0.00%			0.00%		0.127	100.00%										M		
12CC0507	4th Road	Brgy Road	10.04/5.00	0.125		0.00%			0.00%		0.125	100.00%										M		
12CC0508	3rd Road	Brgy Road	9.79/4.03	0.128		0.00%			0.00%		0.128	100.00%										M		
12CC0509	2nd Road	Brgy Road	6.59/3.52	0.128		0.00%			0.00%		0.128	100.00%										M		
12CC0510	1st Road	Brgy Road	7.96/4.29	0.16		0.00%			0.00%		0.16	100.00%										M		
12CC0511	PH-1 3rd Road	Brgy Road	6.12/3.71	0.124		0.00%			0.00%		0.124	100.00%										M		
12CC0512	PH-1 2nd Road	Brgy Road	6.97/3.17	0.1		0.00%			0.00%		0.1	100.00%										M		
12CC0513	PH-1 1strd	Brgy Road	7.17/4.06	0.084		0.00%			0.00%		0.084	100.00%										M		
12CC0514	Unnamed Road 1	Brgy Road	6.02/3.88	0.052		0.00%			0.00%		0.052	100.00%										M		
12CC0515	Unnamed Road 2	Brgy Road	6.65/3.11	0.061		0.00%			0.00%		0.061	100.00%										M		
12CC0516	San Antonio 1st Road	Brgy Road	8.60/4.32	0.139		0.00%			0.00%		0.139	100.00%					M					M		
12CC0517	San Antonio 2nd Road	Brgy Road	8.76/4.98	0.209		0.00%			0.00%		0.209	100.00%					M					M		
12CC0518	Unnamed Road 3	Brgy Road		0.123		0.00%			0.00%		0.123	100.00%										M		
12CC0519	LR Sebastian Road	City Road	10.87/5.03	0.7	0.20085	28.68%			0.00%		0.499	71.32%					M					M		
12CC0520	Mahogany Street	Brgy Road	8.26/4.95	0.256		0.00%			0.00%		0.256	100.00%					H					M		
SUBTOTAL				10.938	3.63	33.19%	-		0.00%	-	7.308	66.81%	-	-	=	-								
Rosary Heights 12																								
12CC0521	Unnamed Road 1	Brgy Road	9.00/3..60	0.157		0.00%			0.00%		0.157	100.00%										M		
12CC0522	Don Agusto Street	Brgy Road	9.20/5.10	0.157	0.108	68.37%			0.00%		0.05	31.63%										M		
12CC0523	Unnamed Road 2	Brgy Road	8.20/4.30	0.327		0.00%			0.00%		0.327	100.00%										M		
12CC0524	Unnamed Road 3	Brgy Road	8.00/5.00	0.159	0.114	72.01%			0.00%		0.044	27.99%										M		
12CC0525	Pastor Kimpo Street	City Road	9.80/5.00	0.251	0.251	100.00%			0.00%			0.00%					M					M		
12CC0526	Gregorio Street	Brgy Road	8.57/4.90	0.211	0.143	67.90%			0.00%		0.068	32.10%										M		
12CC0527	Quiambao Street	Brgy Road	7.80/4.00	0.267	0.179	66.99%			0.00%		0.088	33.01%					L					M		
12CC0528	Felisiano Street	Brgy Road	4.71/3.00	0.18		0.00%			0.00%		0.18	100.00%										M		
12CC0529	Sousa Avenue	City Road	10.07/4.53	0.175	0.175	100.00%			0.00%			0.00%					M					M		
12CC0530	Rosario Rojas Street	Brgy Road	9.80/5.37	0.229	0.197	86.24%			0.00%		0.031	13.76%					L					M		
12CC0531	Siao Street	Brgy Road	7.53/4.15	0.155	0.066	42.56%			0.00%		0.089	57.44%										M		
12CC0532	Tulingan Street	City Road	9..11/5.53	0.129	0.129	100.00%			0.00%			0.00%					H					M		

Unique ID for road	Road Name	Classification	Road Surface Type														Hazard Susceptibility (H/M/L)							
			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
12CC0533	Cris	Brgy Road	8.00/4.59	0.069		0.00%			0.00%		0.069	100.00%										M		
12CC0534	Tardo	Brgy Road	8.31/5.20	0.087		0.00%			0.00%		0.087	100.00%										M		
12CC0535	Ramon Rabago Street	City Road	10.82/6.25	0.273	0.273	100.00%			0.00%			0.00%										M		
12CC0536	TV Juliano Avenue	City Road	11.00/6.50	0.703	0.703	100.00%			0.00%			0.00%					L					M		
SUBTOTAL				3.529	2.338	66.24%	-	-	0.00%	-	1.191	33.76%	-	-	-	-								
Rosary Heights 13																								
12CC0537	San Juan Street	Brgy Road	7.22/4.00	0.494	0.494	100.00%			0.00%			0.00%					L					M		
12CC0538	San Jose Street	Brgy Road	9.57/5.00	0.205	0.177	86.33%			0.00%		0.028	13.67%					L					M		
12CC0539	San Gregorio Street	Brgy Road	11.00/5.00	0.34	0.206	60.40%			0.00%		0.135	39.60%					L					M		
12CC0540	San Isidro Street	Brgy Road	10.00/5.00	0.365	0.331	90.59%			0.00%		0.034	9.41%					L					M		
12CC0541	San Roque Street	Brgy Road	9.00/5.00	0.157		0.00%			0.00%		0.157	100.00%					L					M		
12CC0542	San Miguel Street	Brgy Road	9.50/5.00	0.241	0.144	59.75%			0.00%		0.097	40.25%					L					M		
12CC0543	Pastor Kimpo Sr Street	Brgy Road	9.30/6.00	0.506	0.506	100.00%			0.00%			0.00%					L					M		
12CC0544	Fecilitas Milan Street	Brgy Road	9.56/5.00	0.551	0.257	46.59%			0.00%		0.294	53.41%					L					M		
12CC0545	San Lorenzo Street	Brgy Road	7.63/4.00	0.179		0.00%			0.00%		0.179	100.00%					L					M		
12CC0546	Unnamed Road	Brgy Road	9.00/4.00	0.233		0.00%			0.00%		0.233	100.00%					L					M		
12CC0547	San Pedro Street	Brgy Road	11.06/6.50	0.203	0.203	100.00%			0.00%			0.00%					L					M		
12CC0548	Soledad Sousa Circuit Road	Brgy Road	11.81/5.00	0.707	0.707	100.00%			0.00%			0.00%					L					M		
12CC0549	Roales Street	Brgy Road	8.70/6.00	0.13	0.13	100.00%			0.00%			0.00%					L					M		
12CC0550	Sta Teresa Street	Brgy Road	4.73/3.45	0.078	0.078	100.00%			0.00%			0.00%					L					M		
12CC0551	Sta Ana Street	Brgy Road	6.65/4.36	0.081	0.081	100.00%			0.00%			0.00%					L					M		
12CC0552	Afes Lai	Brgy Road	7.76/4.42	0.14	0.14	100.00%			0.00%			0.00%					L					M		
12CC0553	Ramon Rabago Street	City Road	10.80/6.25	0.357	0.357	100.00%			0.00%			0.00%					L					M		
12CC0554	TV Juliano Avenue	City Road	12.84/6.52	0.463	0.463	100.00%			0.00%			0.00%					H					M		
12CC0555	Sousa Avenue	City Road	10.00/6.25	0.506	0.506	100.00%			0.00%			0.00%					L					M		
SUBTOTAL				5.936	4.778	80.49%	-	-	0.00%	-	1.158	19.51%	-	-	-	-								
Kalanganan Mother Barangay																								
12CC0556	Cotabato City Circumferencial Road (Western Sect)	City Road	7.60/6.88	8.147	7.12	87.34%		0.88	10.79%		0.15	1.87%					H					H	H	
12CC0557	Road 2	Brgy Road	6.35/4.03	0.347	0.35	100.00%			0.00%			0.00%					H					H	H	
12CC0558	Road 1	Brgy Road	4.55/	0.038		0.00%			0.00%		0.038	100.00%					H					H	H	
12CC0559	Road 2	Brgy Road	4.41/	0.075		0.00%			0.00%		0.075	100.00%					H					H	H	
12CC0560	Road 3	Brgy Road	5.88/	0.056	0.06	100.00%			0.00%			0.00%					H					H	H	
12CC0561	Road 4	Brgy Road	3.61/	0.038		0.00%			0.00%		0.038	100.00%					H					H	H	
12CC0562	Road 5	Brgy Road	3.58/	0.053		0.00%			0.00%		0.053	100.00%					H					H	H	
12CC0563	Road 6	Brgy Road	5.00/	0.07		0.00%			0.00%		0.07	100.00%					H					H	H	
SUBTOTAL				8.824	7.52	85.21%	-	-	9.96%	-	0.426	4.83%	-	-	-	-								

Unique ID for road	Road Name	Classification	Road Surface Type														Hazard Susceptibility (H/M/L)							
			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Kalanganan I Barangay																								
12CC0564	Kalanganan 1 Main Road	City Road	5.30/4.85	1.776	0.8	45.26%			0.00%		0.97	54.74%					H					H	H	
12CC0565	Road 1	Brgy Road	5.15/4.85	0.613	0.29	46.59%			0.00%		0.33	53.41%					H					H	H	
SUBTOTAL				2.388	1.089	45.60%	-	-	0.00%	-	1.299	54.40%	-	-	-	-								
Kalanganan II Barangay																								
12CC0566	Cotabato City Circumferencial Road (Western Sect)	City Road	13.91/7.23	7.323	7.32	100.00%			0.00%			0.00%					H					H	H	
12CC0567	Timako Road	Brgy Road	12.95/6.86	0.795	0.8	100.00%			0.00%			0.00%					H				M	H	H	
12CC0568	Timako Road (Towards Bridge)	Brgy Road	18.31/13.64	1.367	1.37	100.00%			0.00%			0.00%					H				M	H	H	
12CC0569	Timako Road (Towards Left)	Brgy Road	16.98/9.24	0.695	0.7	100.00%			0.00%			0.00%					H				M	H	H	
12CC0570	Bwaya-Bwaya Road	Brgy Road	11.38/5.97	0.244	0.24	100.00%			0.00%			0.00%					H					H	H	
12CC0571	Bai Walk Road 1	Brgy Road	8.61/4.74	0.059	0.06	100.00%			0.00%			0.00%					H					H	H	
12CC0572	Bai Walk Road 2	Brgy Road	5.71/3.55	0.473	0.47	100.00%			0.00%			0.00%					H					H	H	
12CC0573	Adtaban Road (Ice Plant)	Brgy Road	8.62/5.19	0.273	0.27	100.00%			0.00%			0.00%					H					H	H	
12CC0574	No Name	Brgy Road	7.35/3.90	0.298	0.3	100.00%			0.00%			0.00%					H					H	H	
SUBTOTAL				11.528	11.528	100.00%	-	-	0.00%	-	-	0.00%	-	-	-	-								
Tamontaka Mother Barangay																								
12CC0575	Sinsuat Avenue	National Road	15.70/6.88	1.7		0.00%		1.7	100.00%			0.00%					H					M		
12CC0576	Tamontaka Old Road	City Road	4.85/13.65	0.774	0.77	100.00%			0.00%			0.00%					H					M		
12CC0577	San Juan Street	City Road	11.21/5.12	0.474	0.47	100.00%			0.00%			0.00%					H					M		
12CC0578	Concepcion Street	City Road	11.53/5.05	0.633	0.54	86.03%			0.00%		0.09	13.97%					H					M		
12CC0579	Bai Sultana (Kulong-Kulong) San Francisco Road	City Road	10.68/5.15	0.488	0.49	100.00%			0.00%			0.00%					H					M		
12CC0580	Road 4	Brgy Road	8.49/5.18	0.324	0.32	100.00%			0.00%			0.00%					H					M		
12CC0581	Road 5	Brgy Road	7.19/5.09	0.116	0.12	100.00%			0.00%			0.00%					H					M		
12CC0582	Road 6	Brgy Road	7.28/5.12	0.096	0.1	100.00%			0.00%			0.00%					H					M		
12CC0583	Road 7	Brgy Road	8.54/5.31	0.159	0.16	100.00%			0.00%			0.00%					H					M		
12CC0584	Road 8	Brgy Road		0.324	0.32	100.00%			0.00%			0.00%					H					M		
12CC0585	Road A	Brgy Road	6.49/3.92	0.082	0.08	100.00%			0.00%			0.00%					H					M		

Unique ID for road	Road Name	Classification	Road Surface Type														Hazard Susceptibility (H/M/L)							
			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
12CC0586	Road B	Brgy Road	4.33/3.29	0.082		0.00%			0.00%		0.08	100.00%					H					M		
12CC0587	Road C	Brgy Road	5.75/4.01	0.721	0.72	100.00%			0.00%			0.00%					H					M		
12CC0588	Bonzain Road	Brgy Road	9.23/4.86	0.439	0.38	85.40%			0.00%		0.06	14.60%					H					M		
12CC0589	SF/Project	Brgy Road	7.22/4.05	0.318	0.32	100.00%			0.00%			0.00%					H					M		
SUBTOTAL				6.731	4.796	71.26%	-	1.7	25.26%	-	0.235	3.49%	-	-	-	-								
Tamontaka 1																								
12CC0590	Road 1	Brgy Road		1.275	1.275	100.00%			0.00%			0.00%					H					M		
12CC0591	San Juan Street	City Road		0.391		0.00%			0.00%		0.391	100.00%					H					M		
12CC0592	Tamontaka- Bubong Road	City Road	8.17/6.59	2.567	1.566	61.00%			0.00%		1.001	39.00%					H					M		
12CC0593	Road 4	Brgy Road	6.55/4.56	0.607	0.607	100.00%			0.00%			0.00%					H					M		
12CC0594	Road 5	Brgy Road	8.70/4.84	0.322	0.076	23.57%			0.00%		0.246	76.43%					H					M		
12CC0595	Road 6	Brgy Road	7.28/	0.124	0.005	3.80%			0.00%		0.119	96.20%					H					M		
12CC0596	Road 7	Brgy Road		0.251	0.251	100.00%			0.00%			0.00%					H					M		
12CC0597	Road 8	Brgy Road	10.29/4.16	0.056		0.00%			0.00%		0.056	100.00%					H					M		
12CC0598	Road 9	Brgy Road	6.68/3.99	0.095		0.00%			0.00%		0.095	100.00%					H					M		
12CC0599	Road 10	Brgy Road	8.00/4.25	0.038		0.00%			0.00%		0.038	100.00%					H					M		
12CC0600	Road 11	Brgy Road	11.54/4.03	0.247		0.00%			0.00%		0.247	100.00%					H					M		
12CC0601	Road 12	Brgy Road		0.259		0.00%			0.00%		0.259	100.00%					H					M		
12CC0602	Road 13	Brgy Road		0.12		0.00%			0.00%		0.12	100.00%					H					M		
12CC0603	Road 14	Brgy Road	10.83/5.83	0.269		0.00%			0.00%		0.269	100.00%					H					M		
12CC0604	Road 15	Brgy Road	6.79/3.33	0.118		0.00%			0.00%		0.118	100.00%					H					M		
12CC0605	Road 16	Brgy Road		0.213		0.00%			0.00%		0.213	100.00%					H					M		
12CC0606	Concepcion Street	City Road		0.381		0.00%			0.00%		0.381	100.00%					H					M		
12CC0607	Road 18	Brgy Road	7.32/4.76	0.217		0.00%			0.00%		0.217	100.00%					H					M		
12CC0608	Road 19	Brgy Road	6.47/4.90	0.163		0.00%			0.00%		0.163	100.00%					H					M		
12CC0609	Road 20	Brgy Road	7.25/5.00	0.099		0.00%			0.00%		0.099	100.00%					H					M		
12CC0610	Road 21	Brgy Road		0.064		0.00%			0.00%		0.064	100.00%					H					M		
12CC0611	Road 22	Brgy Road	10.67/5.99	0.663		0.00%			0.00%		0.663	100.00%					H					M		
SUBTOTAL				8.539	3.779	44.25%	-	-	0.00%	-	4.76	55.75%	-	-	-	-		-		-	-	-	-	-
Tamontaka 2																								
12CC0612	Unnamed Road	Brgy Road	8.08/5.50	1.407	1.41	100.00%			0.00%			0.00%					H							
12CC0613	Cotabato City East Diversion Road	City Road	10.64/7.00	1.697	1.7	100.00%			0.00%			0.00%					H							
12CC0614	Cyn Village Road 1	Brgy Road	8.50/4.98	0.119		0.00%			0.00%		0.12	100.00%					H							
12CC0615	Cyn Village Road 2	Brgy Road	7.45/4.78	0.058		0.00%			0.00%		0.06	100.00%					H							

Unique ID for road	Road Name	Classification	Road Surface Type														Hazard Susceptibility (H/M/L)							
			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	FI	Tc	Eq	Vo	Ln	Ts	Su	Others
12CC0616	Cyn Village Road 3	Brgy Road	7.01/4.40	0.185		0.00%			0.00%		0.18	100.00%					H							
12CC0617	Cyn Village Road 4	Brgy Road	6.46/4.48	0.22		0.00%			0.00%		0.22	100.00%					H							
12CC0618	Cyn Village Road 5	Brgy Road	6.50/4.02	0.145		0.00%			0.00%		0.14	100.00%					H							
12CC0619	Cyn Village Road 6	Brgy Road	6.92/3.74	0.144		0.00%			0.00%		0.14	100.00%					H							
12CC0620	Cyn Village Road 7	Brgy Road	6.50/3.38	0.144		0.00%			0.00%		0.14	100.00%					H							
12CC0621	Cyn Village Road 8	Brgy Road	6.19/4.31	0.158		0.00%			0.00%		0.16	100.00%					H							
12CC0622	Cyn Village Road 9	Brgy Road	7.02/4.34	0.103		0.00%			0.00%		0.1	100.00%					H							
12CC0623	Cyn Village Road 10	Brgy Road	6.15/5.01	0.109		0.00%			0.00%		0.11	100.00%					H							
12CC0624	Cyn Village Road 11	Brgy Road	6.19/3.29	0.101		0.00%			0.00%		0.1	100.00%					H							
12CC0625	Cyn Village Road 12	Brgy Road	7.05/3.15	0.092		0.00%			0.00%		0.09	100.00%					H							
12CC0626	Cyn Village Road 13	Brgy Road	7.13/3.83	0.073		0.00%			0.00%		0.07	100.00%					H							
12CC0627	Cyn Village Road 14	Brgy Road	6.52/3.52	0.098		0.00%			0.00%		0.1	100.00%					H							
SUBTOTAL				4.853	3.104	63.96%	-	-	0.00%	-	1.749	36.04%	-	-	-	-								
Tamontaka 3																								
12CC0628	Road 1	Brgy Road	10.67/7.57	1.466	1.47	100.00%			0.00%			0.00%					H							
12CC0629	Road 2	Brgy Road	7.75/5.04	1.676	1.65	98.58%			0.00%		0.024	1.42%					H							
SUBTOTAL				3.141	3.12	99.24%	-	-	0.00%	-	0.02	0.76%	-	-	-	-								
Tamontaka 4																								
12CC0630	Road 1	Brgy Road	8.07/6.58	2.404	2.23	92.68%			0.00%		0.18	7.32%					H							
SUBTOTAL				2.404	2.228	92.68%	-	-	0.00%	-	0.176	7.32%	-	-	-	-								
Tamontaka 5																								
12CC0631	Road 1	Brgy Road	8.07/6.58	14.904	0.3	2.04%			0.00%		14.6	97.96%					H							
SUBTOTAL				14.904	0.304	2.04%	-	-	0.00%	-	14.6	97.96%	-	-	-	-								

1.5.1.2 BRIDGES

The Cotabato City is a delta and disconnected further by different bodies of water that make up the city. The city which is also known as “the city of rivers and creeks” is composed of 35 islands in the 37 barangays within its territorial jurisdiction. In order for the city to efficiently deliver basic services and provide ease and comfort for the residents in accessing and delivering goods and services, exercise religious freedom, and better access to work and education, multiple number of bridges were constructed. Table IF-3 below shows the different bridges of Cotabato City with their corresponding location, type, length and width, capacity, and current physical condition.

There are 19 reinforced concrete bridges strewn all over the city, one pre-stressed concrete girder bridge and nine steel bridges. Nowadays, it is noticeable that two of these bridges, the Quirino Bridge and the Matampay Bridge are currently in critical condition. There is an on-going proposal to retrofit the Quirino Bridge

by the Department of Public Works and Highways (DPWH). Notwithstanding the two critical bridges, the rest of the bridges are in fair physical condition and safe to cross. These bridges have propelled the economy of the city due to accessibility from settlement to production area and workplace. The two bridges of Kalanganan II, the Tarbong Bridge and the Miwaroy Bridge were still under construction. But despite of being unfinished, the Tarbong Bridge is already accessible to the public with proper safety measures to provide access to Cotabato City's tourist spots including the Timako Hill, the Baiwalk, and the Grand Mosque.

Majority of these bridges are at highly susceptible to flood and tropical cyclone. Thus, they should always be well-maintained and managed especially the Delta Bridge 1 and 2 which were assessed to be at very high susceptibility. The water level of Rio Grande de Mindanao River is always at a brink of rising lending to its susceptability. The different bridges of Kalanganan 2, namely the Kinagatan Bridge, Lagundungan Bridge, Tarbong Bridge and the Manakulil Bridge were assessed to be highly susceptible to tsunami attributed to its location facing Illana Bay.

Table IF-3 Inventory of Bridges by Location, Type, Capacity and Conditio, Year 2020

Bridge Name	Barangay	Year Constructed	Type	Length (m)	Width (m)	Load Capacity (Tons)	Physical Condition	Hazard Susceptibility (H/M/L)							
								Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Quirino Bridge	Poblacion 1		Steel	162.2	9.6	10	Critical	H	H	-	-	M	-	-	-
Matampay Bridge	Poblacion 1		Concrete	65	16.7	10	Critical	H	H	-	-	M	-	-	-
Matampay Bridge II	Poblacion Mother		Pre-stressed Concrete Girder	75	7.4	10	Fair	H	H	-	-	-	-	-	-
Quirino Bridge II	Poblacion 9		Steel	210	8.56	10	Fair	H	H	-	-	-	-	-	-
Manday Bridge	Poblacion 6		Concrete	30	9.4	25	Fair	H	H	-	-	-	-	-	-
Lugay-Lugay Bridge	Bagua 3		Concrete	75	9.5	15	Fair	H	H	-	-	-	-	M	-
Kalanganan Bridge	Kalnganan Mother		Concrete	30.35	9.35	25	Fair	H	H	-	-	-	-	M	-
Tanghal Bridge	Bagua 3		Concrete	30	9	5	Poor	H	H	-	-	-	M	-	-
Kibatang Bridge	Bagua 2		Steel	55	3.4	5	Fair	H	H	-	-	-	-	-	-
Mahad Bridge	Bagua 2		Concrete	36	8.85	10	Fair	H	H	-	-	-	-	-	-
Usman Bridge	Bagua 2		Concrete	20.2	9.5	10	Fair	H	H	-	-	-	M	-	-
Bagua Bridge	Bagua 2		Concrete	20.22	9.5	10	Fair	M	H	-	-	-	-	-	-
Biniruan Bridge/ Tulay ng Pangulo	R.H. 5		Steel	31	7	5	Fair	M	H	-	-	-	-	-	-
Kalantungan Bridge	R.H. 6		Steel	40	8	5	Fair	M	H	-	-	-	-	-	-
Esteros Bridge	R.H. 9		Concrete	50	9	10	Fair	L	H	-	-	-	-	-	-

Bridge Name	Barangay	Year Constructed	Type	Length (m)	Width (m)	Load Capacity (Tons)	Physical Condition	Hazard Susceptibility (H/M/L)							
								Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Tamontaka Bridge	Tamontaka Mother		Concrete	208	7.35	15	Fair	H	H	-	-	-	M	-	-
Bubong Bridge	Kalanganan II		Concrete	60	9.3	10	Fair	H	H	-	-	-	-	-	-
Neogen Bridge	Kalanganan II		Concrete	20	10	10	Fair	H	H	-	-	-	M	-	-
Kinagatan Bridge	Kalanganan II		Concrete	14.63	9.4	10	Fair	H	H	-	-	-	-	H	-
Lagundungan Bridge	Kalanganan II		Concrete	20	8.5	8	Fair	H	H	-	-	-	-	H	-
Camasi Bridge	Poblacion 9		Steel	23	6.5	5	Poor	L	H	-	-	-	-	-	-
Pagalamatan Bridge	Tamontaka 3		Steel	42	3.4	4	Fair	H	H	-	-	-	-	-	-
Pastor Kimpo Bridge	R.H. 12		Steel	21.25	3.3	4	fair	M	H	-	-	-	-	-	-
Matampay Bridge II	Poblacion 9		Concrete	75	10.47	10	Fair	H	H	-	-	-	-	-	-
Tamontaka 2	Tamontaka 2		Concrete	210	10.57	10	Fair	H	H	-	-	-	-	-	-
Tarbong Bridge	Kalanganan II		Concrete			10	not yet completed	H	H	-	-	-	-	M	M
Delta Bridge 1	Poblacion 1		Steel					VH		-	-	-	-	-	-
Delta Bridge 2	Poblacion 1		Steel					VH		-	-	-	-	-	-
Espino Bridge	Bagua 2		Concrete					H		-	-	-	-	-	-
Kimpo Bridge								H		-	-	-	-	-	-
Miwaroy Bridge								H		-	-	-	-	-	-
Manakulil Bridge	Kalanganan II		Concrete	62	10.5	10	Fair	VH	H	-	-	-	-	H	M

Source: DPWH/PEO/LGU/(CEO)

Type: concrete, steel, wood, others

Physical Condition

Fair – acceptable/serviceable

Poor – needs improvement

Critical – for priority action

Indicate level of susceptibility for all hazards: High (H), Moderate (M), Low (L)

***Types of hazards** – Flood (Fl), Tropical cyclone (Tc), Earthquake (Eq), Volcano (Vo), Landslide (Ln), Tsunami (Ts), Storm Surge (Su), Others (e.g.coastal erosion, sea level rise, land subsidence, liquefaction, strong wind, change in temperature, change in rainfall, etc.)*

1.5.1.3 Ancillary Road Facilities

Road ancillary facilities are the different facilities that provide necessary support to the operation of the primary activities and operations of the road network systems. It refers to the equipments and small structures associated with the road networks to help provide ease, comfort, and safety in traversing the roads of the

city as well as control, avoid or minimize accidents, traffic congestion, and other road-related problems. It includes the street lights, traffic lights, road signs, pedestrian crossing, overpass, waiting sheds, jeepney stops, and other facilities.

As of the present data shown by the table IF-4 below, there are about 2,423 street lights, 992 road signage, 34 pedestrian crossing, and 5 waiting sheds scattered all over Cotabato City. Majority of these ancillary road facilities are of good to fair condition except for some road humps. Despite its being a tourist attraction, the road leading to Timako Hill have no street lights. With the growing number of visitors, local and foreign, there is a need to install stall streetlights and signagescoupled with beautification development.

Table IF-4. Inventory of Ancillary Road Facilities, Year 2020

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
POBLACION MOTHER BARANGAY			
National Road			
Jose Lim Extension	Street Lights	1	FAIR
	Road Signage	1	FAIR
AnacletoBadoy St	Street Lights	6	FAIR
	Road Signage	7	FAIR
Provincial Road			
City Road			
Don Rufino Alonzo St Extension	Street Lights	1	FAIR
SK Pendatun Ext	Street Lights	7	FAIR
	Road Signage	2	FAIR
Dona Blanco St	Street Lights	8	FAIR
	Road Humps	1	FAIR
Buliao 1	Street Lights	7	FAIR
	Road Humps	3	FAIR
Buliao 2	Street Lights	2	FAIR
	Road Humps	3	FAIR
Buliao 3	Street Lights	1	FAIR
	Road Humps	4	FAIR
Purok Kabuntalan	Street Lights	3	FAIR
	Road Humps	2	FAIR
Lumayon 1	Road Humps	2	FAIR
Lumayon 4	Street Lights	1	FAIR
	Road Signage	1	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Road Humps	2	FAIR
Purok Mantok	Street Lights	1	FAIR
	Road Signage	2	FAIR
	Road Humps	1	FAIR
Road beside J. Marquez	Street Lights	3	FAIR
	Road Signage	1	FAIR
	Road Humps	1	FAIR
Consolacion Martinez St	Street Lights	6	FAIR
	Road Signage	7	FAIR
Road 1	Street Lights	1	FAIR
	Road Signage	2	FAIR
POBLACION 1			
National Road			
Sinsuat Avenue	Street Lights	9	FAIR
	Road Signage	25	FAIR
	Pedestrian Cross	2	FAIR
AnacletoBadoy St	Street Lights	5	FAIR
	Road Signage	8	FAIR
	Road Humps	3	POOR
	Pedestrian Cross	3	FAIR
Provincial Road			
City Road			
Brgy Road			
RS Buan	Street Lights	9	FAIR
	Road Signage	3	FAIR
	Road Humps	8	POOR
Purok Lushin Khan St	Street Lights	3	FAIR
	Road Signage	7	POOR
	Road Humps	5	POOR
Turion 1	Street Lights	5	FAIR
	Road Signage	4	FAIR
	Road Humps	1	POOR
Datu Kaka St	Street Lights	7	FAIR
	Road Humps	2	POOR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
POBLACION 2			
National Road			
AnacletoBadoy St	Street Lights	3	FAIR
	Road Signage	2	POOR
Provincial Road			
City Road			
SK Pendatun Ave Extension	Street Lights	7	FAIR
	Road Signage	2	FAIR
Dona Pilar St	Street Lights	5	FAIR
	Road Signage	2	FAIR
Dona Teresa St	Street Lights	8	FAIR
	Road Signage	2	POOR
Brgy Road			
Tiburcio Chavez St	Street Lights	4	FAIR
	Road Signage	2	FAIR
Aurora Soriano St	Street Lights	3	FAIR
	Road Signage	2	FAIR
	Road Humps	2	POOR
Diocesan St	Street Lights	6	FAIR
	Road Signage	2	POOR
Atienza St	Street Lights	7	FAIR
	Road Humps	3	POOR
Charles Quintana St	Street Lights	4	FAIR
MacacuaWatamama St	-	-	-
HamsaRampak St	-	-	-
SuraikMacmod St	Street Lights	5	FAIR
Gunsang St	Street Lights	1	FAIR
POBLACION 3			
National Road			
AnacletoBadoy St	Street Lights	4	FAIR
	Road Signage	1	POOR
Provincial Road			
City Road			
Don Abelardo St	Street Lights	6	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Road Signage	1	FAIR
	Road Humps	2	POOR
Don Cesar St	Street Lights	6	FAIR
	Road Signage	5	FAIR
	Road Humps	2	POOR
Dona Teresa St	Street Lights	8	FAIR
Brgy Road			
Estrella St	Street Lights	10	FAIR
	Road Signage	2	FAIR
POBLACION 4			
National Road			
Notre Dame Avenue Extension	Street Lights	10	FAIR
	Road Signage	8	FAIR
Provincial Road			
City Road			
Faustino Tamse Road	Street Lights	8	FAIR
	Road Signage	8	FAIR
	Road Humps	1	FAIR
SK Pendatun Ave Extension	Street Lights	8	FAIR
	Road Signage	4	FAIR
Dona Blanco St	Street Lights	2	FAIR
	Road Signage	4	FAIR
	Road Humps	1	FAIR
Don Abelardo St	Street Lights	9	FAIR
	Road Signage	7	FAIR
	Road Humps	1	POOR
Don Cesar St	Street Lights	7	FAIR
	Road Signage	4	FAIR
Dona Teresa St	Street Lights	5	FAIR
	Road Signage	4	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Dona Pilar St	Street Lights	3	FAIR
	Road Signage	2	POOR
Brgy Road			
Don Jesus Vilo St	Street Lights	3	FAIR
	Road Signage	1	POOR
Road beside VES	Street Lights	1	FAIR
	Road Signage	1	FAIR
Consolacion Martinez St	-	-	-
Fatima St	Street Lights	8	FAIR
	Road Signage	4	FAIR
	Road Humps	2	FAIR
San Isidro St	Street Lights	2	FAIR
	Road Signage	1	FAIR
Don Antonio Marquez St	Street Lights	3	FAIR
	Road Signage	2	FAIR
Don Tomas Martinez St	Street Lights	4	FAIR
	Road Signage	2	FAIR
POBLACION 5			
National Road			
Sinsuat Avenue	Street Lights	21	FAIR
	Road Signage	19	FAIR
	Pedestrian Cross	5	FAIR
Quezon Avenue	Street Lights	30	FAIR
	Road Signage	27	FAIR
	Pedestrian Cross	10	FAIR
Jose Lim Sr Avenue	Street Lights	22	FAIR
	Road Signage	7	FAIR
Provincial Road			
City Road			
Rajah Tabunaway Boulevard	Street Lights	6	FAIR
	Road Signage	1	FAIR
	Road Humps	2	FAIR
SK Pendatun Ave	Street Lights	17	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Road Signage	23	FAIR
Don Rufino Alonzo St	Street Lights	13	FAIR
	Road Signage	15	FAIR
JapalGuiani Sr St	Street Lights	15	FAIR
	Road Signage	22	FAIR
Brgy Road			
Maguindanao Creek	Street Lights	4	FAIR
	Road Humps	1	FAIR
POBLACION 6			
National Road			
Jose Lim Sr Avenue	Street Lights	12	FAIR
	Road Signage	10	FAIR
Provincial Road			
City Road			
TV Juliano Avenue	Street Lights	8	FAIR
	Road Signage	9	FAIR
Mabini St	Street Lights	16	FAIR
	Road Signage	6	FAIR
Don Rufino Alonzo St	Street Lights	8	FAIR
	Road Signage	12	FAIR
Rajah Tabunaway Boulevard	Street Lights	3	FAIR
	Road Signage	8	POOR
	Road Humps	5	POOR
SK Pendatun Avenue	Street Lights	8	FAIR
	Road Signage	11	FAIR
Brgy Road			
DoroteoTabunaway Road	Street Lights	11	FAIR
	Road Signage	13	FAIR
Don Roman Vilo St	Street Lights	8	FAIR
	Road Signage	8	FAIR
Abdullah Piang St	Street Lights	1	FAIR
	Road Humps	1	FAIR
Abdullah Siang St	Street Lights	2	FAIR
	Road Signage	1	FAIR
Bonifacio St	Street Lights	13	FAIR
	Road Signage	11	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Road Humps	1	POOR
Aguinaldo St	Street Lights	2	FAIR
Palma St	Street Lights	6	FAIR
Salem Bages St	Street Lights	6	FAIR
POBLACION 7			
National Road			
Provincial Road			
City Road			
Brgy Road			
Main Road Pob 7	Street Lights	17	
	Road Signage	2	
	Road Humps	12	
Road to Datu Siang Elem	Street Lights	2	
	Road Signage	1	
	Road Humps	1	
POBLACION 8			
National Road			
Provincial Road			
City Road			
Diversion Road	-	-	-
Brgy Road			
Saturn Street Extension	-	-	-
Road 1	-	-	-
Road 2	-	-	-
POBLACION 9			
National Road			
Provincial Road			
City Road			
Diversion Road	-	-	-
Rosales Street Extension	-	-	-
Brgy Road			
Biniruan Road	-	-	-
Biniruan Road Extension	-	-	-

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
BAGUA MOTHER BARANGAY			
National Road			
Jose Lim Extension	Street Lights	13	FAIR
	Road Signage	11	FAIR
Provincial Road			
City Road			
SK Pendatun Ave Extension	Street Lights	3	FAIR
Brgy Road			
Datumanong St	Street Lights	20	FAIR
	Road Signage	8	FAIR
Del Pilar St	Street Lights	12	FAIR
	Road Signage	2	FAIR
Palmera St	Street Lights	1	FAIR
	Road Humps	5	FAIR
Kima Road	Street Lights	7	FAIR
	Road Signage	2	FAIR
	Road Humps	8	FAIR
Zailon Road	Street Lights	3	FAIR
	Road Signage	1	FAIR
	Road Humps	1	FAIR
Road 1	Street Lights	4	FAIR
BAGUA 1			
National Road			
Jose Lim Extension	Street Lights	7	FAIR
	Road Signage	5	FAIR
Provincial Road			
City Road			
Datu Usman Mampen Road	Street Lights	2	FAIR
Brgy Road			
LugayLugay Street	Street Lights	3	FAIR
	Road Signage	11	FAIR
Purok Matilak	Street Lights	9	FAIR
	Road Signage	3	FAIR
	Road Humps	6	FAIR
Sitio Pagalungan	Street Lights	9	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Road Signage	2	FAIR
Purok Tabanga	Street Lights	7	FAIR
	Road Signage	1	FAIR
Purok Dangkalangan	Street Lights	7	FAIR
	Road Humps	1	FAIR
BAGUA 2			
National Road			
Provincial Road			
City Road			
Ramon Rabago St	Street Lights	7	FAIR
	Road Signage	2	FAIR
Pastor Kimpo St	Street Lights	6	FAIR
Datu Usman Mampen Road	Street Lights	12	FAIR
Brgy Road			
Fatima St	Street Lights	4	FAIR
Abubakar St	Street Lights	9	FAIR
1st St Tanghal Subdivision	Street Lights	4	FAIR
2nd St Tanghal Subdivision	Street Lights	3	FAIR
3rd St Tanghal Subdivision	Street Lights	4	FAIR
4th St Tanghal Subdivision	Street Lights	4	FAIR
Purok Masikap St	Street Lights	3	FAIR
Mangungan St	Street Lights	22	FAIR
	Road Signage	7	FAIR
	Road Humps	8	FAIR
	Waiting Sheds	1	FAIR
Housing 2nd Road	Street Lights	7	FAIR
Housing 3rd Road	Street Lights	5	FAIR
Shariff Maraguia St	Street Lights	5	FAIR
Sultan Kawasa St	Street Lights	5	FAIR
Amay Sanso St	Street Lights	6	FAIR
Shariff Awliya St	Street Lights	4	FAIR
Putri Tunina St	Street Lights	7	FAIR
Tabunaway Road	Street Lights	4	FAIR
Mamalo Road	Street Lights	5	FAIR
Purok Kambal St	Street Lights	4	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Itihad	Street Lights	6	FAIR
Edmark Street	Street Lights	4	FAIR
BAGUA 3			
National Road			
Provincial Road			
City Road			
TV Juliano Avenue	Street Lights	11	FAIR
	Road Signage	3	FAIR
Tulingan St	Street Lights	5	FAIR
	Road Signage	3	FAIR
Mabini St	Street Lights	16	FAIR
	Road Signage	6	FAIR
Brgy Road			
Interior Mabini Street	Street Lights	14	FAIR
Bajunaid St	Street Lights	6	FAIR
ROSARY HEIGHTS MOTHER			
National Road			
Provincial Road			
City Road			
TV Juliano Avenue			
Soledad Sousa Circuit Road	Street Lights	18	FAIR
	Road Signage	6	FAIR
	Road Humps	5	FAIR
Pascual Street	Street Lights	10	FAIR
	Road Signage	3	FAIR
Macapagal Street	Street Lights	17	FAIR
	Road Signage	7	FAIR
	Road Humps	2	FAIR
Brgy Road			
Roales Subdivision Road	Street Lights	2	FAIR
Purok Mahigugmaon Road	-	-	-
Rosales Street	Street Lights	14	FAIR
	Road Signage	3	FAIR
Jose Banas Street	Street Lights	6	FAIR
	Road Signage	2	FAIR
Purok Balikatan Road	Street Lights	7	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Road Signage	2	FAIR
Rosales Extension	Street Lights	2	FAIR
Santa Barbara Street	Street Lights	10	FAIR
	Road Signage	4	FAIR
	Road Humps	1	FAIR
Tandang Sora Street	Street Lights	4	FAIR
	Road Signage	1	FAIR
Maunawain Street	Street Lights	3	FAIR
	Road Signage	1	FAIR
	Road Humps	1	FAIR
Kalye Uno	Street Lights	8	FAIR
	Road Signage	1	FAIR
	Road Humps	1	POOR
Kalye Dos	Street Lights	3	FAIR
	Road Signage	2	FAIR
Kalye Tres	Street Lights	4	FAIR
	Road Signage	2	FAIR
KalyeKwatro	Street Lights	8	FAIR
	Road Signage	1	FAIR
KalyeSingko	Street Lights	5	FAIR
Kalye Sais	Street Lights	4	FAIR
Sibuyan B	Street Lights	11	FAIR
	Road Signage	1	FAIR
Sta Maria Street	Street Lights	12	FAIR
	Road Signage	1	FAIR
Road 3	Street Lights	6	FAIR
Road 4	Street Lights	3	FAIR
Road 5	Street Lights	4	FAIR
Road 6	Street Lights	9	FAIR
	Road Signage	1	FAIR
Road 7	Street Lights	3	FAIR
Road 8	-	-	-
Road 11	Street Lights	3	FAIR
Road 12	-	-	-
Road 13	-	-	-

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
ROSARY HEIGHTS 1			
National Road			
Provincial Road			
City Road			
Veterans Avenue	Street Lights	7	FAIR
	Road Signage	11	POOR
	Road Humps	3	FAIR
Brgy Road			
Road to CCPO	Road Humps	1	FAIR
Road to Coord. Com. Office	Street Lights	3	FAIR
	Road Signage	1	FAIR
Hero's Road	Street Lights	15	FAIR
	Road Signage	16	POOR
Lumibao St	Street Lights	4	FAIR
	Road Signage	5	FAIR
San Juan Extension	Street Lights	4	FAIR
Road to CMO	Street Lights	3	FAIR
ROSARY HEIGHTS 2			
National Road			
Notre Dame Avenue Extension	Street Lights	8	FAIR
	Road Signage	9	FAIR
Notre Dame Avenue	Street Lights	7	FAIR
	Road Signage	5	FAIR
Provincial Road			
City Road			
Brgy Road			
Clemente Alino St	Street Lights	8	FAIR
	Road Signage	8	FAIR
	Road Humps	1	FAIR
Angel Bacani St	Street Lights	12	FAIR
	Road Signage	6	FAIR
	Road Humps	1	FAIR
Moreno Subdivision Road	Street Lights	4	FAIR
	Road Humps	1	FAIR
Dapdap Road	Street Lights	9	FAIR
	Road Humps	2	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Road to NDU Backgate	Street Lights	11	FAIR
	Road Signage	1	FAIR
Road 1	Street Lights	1	FAIR
	Road Signage	1	FAIR
	Road Humps	1	FAIR
Road 2	-	-	-
ROSARY HEIGHTS 3			
National Road			
Notre Dame Avenue	Street Lights	9	FAIR
	Road Signage	28	FAIR
	Pedestrian Cross	1	FAIR
De Mazenod Avenue	Street Lights	14	FAIR
	Road Signage	6	FAIR
	Pedestrian Cross	1	FAIR
Provincial Road			
City Road			
Sesame Street	Street Lights	11	FAIR
	Road Signage	2	FAIR
	Road Humps	2	POOR
Brgy Road			
DatuAlamansa Street	Street Lights	5	FAIR
	Road Signage	3	FAIR
	Road Humps	2	POOR
Datu Liwa Candao Street	Street Lights	9	FAIR
	Road Signage	3	FAIR
	Road Humps	2	POOR
Purok Kalimudan Street	Street Lights	4	FAIR
	Road Humps	1	FAIR
Purok LapuLapu Street	Street Lights	3	FAIR
Sultan Maetem Avenue	Street Lights	10	FAIR
	Road Signage	4	FAIR
	Road Humps	1	POOR
Purok Talipapa Street	Street Lights	3	FAIR
	Road Humps	3	FAIR
Purok Ilangllang Street	Street Lights	3	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Road Signage	1	FAIR
Lauban Street	Street Lights	3	FAIR
Purok Solaiman Street	Street Lights	2	FAIR
	Road Humps	1	FAIR
1st Street Urban	Street Lights	2	FAIR
	Road Humps	3	FAIR
2nd Street Urban	Street Lights	1	FAIR
	Road Humps	2	FAIR
3rd Street Urban	Street Lights	2	FAIR
4th Street Urban	Street Lights	2	FAIR
	Road Signage	1	FAIR
	Road Humps	3	FAIR
5th Street Urban	-	-	-
Road 1	Street Lights	2	FAIR
	Road Humps	1	FAIR
Road 2	Street Lights	2	FAIR
	Road Humps	4	FAIR
ROSARY HEIGHTS 4			
National Road			
De Mazenod Avenue	Street Lights	22	FAIR
	Road Signage	17	FAIR
	Pedestrian Cross	4	FAIR
Provincial Road			
City Road			
Brgy Road			
General Luna Street	Street Lights	13	FAIR
	Road Signage	3	FAIR
Delfin Reynaldo Street	Street Lights	3	FAIR
DodoyJuliano Street	Street Lights	3	FAIR
Maria Clara Street	Street Lights	6	FAIR
	Road Humps	1	FAIR
Martinez Street	Street Lights	9	FAIR
Purok Acacia 1	Street Lights	2	FAIR
	Road Signage	1	FAIR
Purok Acacia 2	Street Lights	5	FAIR
	Road Signage	1	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Ante Compound	Street Lights	4	FAIR
Arong Road	Street Lights	4	FAIR
Sesame Street	Street Lights	11	FAIR
	Road Signage	3	FAIR
Enilo Compound	Street Lights	1	FAIR
ROSARY HEIGHTS 5			
National Road			
Provincial Road			
City Road			
Don E Sero Street	Street Lights	12	FAIR
	Road Signage	12	FAIR
Brgy Road			
PinsinSero Street	Street Lights	6	FAIR
	Road Signage	3	FAIR
1st Street Don E Sero	Street Lights	10	FAIR
	Road Signage	1	FAIR
	Road Humps	2	POOR
2nd Street Don E Sero	Street Lights	8	FAIR
	Road Signage	3	FAIR
3rd Street Don E Sero	Street Lights	12	FAIR
	Road Signage	2	FAIR
4th Street Don E Sero	Street Lights	7	FAIR
	Road Signage	1	FAIR
	Road Humps	1	POOR
5th Street Don E Sero	Street Lights	8	FAIR
	Road Signage	1	FAIR
6th Street Don E Sero	Street Lights	9	FAIR
	Road Signage	3	FAIR
7th Street Don E Sero	Street Lights	4	FAIR
	Road Signage	3	FAIR
	Road Humps	1	FAIR
8th Street Don E Sero	Street Lights	4	FAIR
	Road Signage	3	FAIR
9th Street Don E Sero	Street Lights	6	FAIR
	Road Signage	1	FAIR
	Road Humps	1	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
10th Street Don E Sero	Street Lights	4	FAIR
	Road Signage	1	FAIR
11th Street Don E Sero	Street Lights	5	FAIR
Pinhoy Street	Street Lights	9	FAIR
	Road Signage	8	FAIR
Road 3	Street Lights	1	FAIR
Road 4	Street Lights	3	FAIR
Road 5	Street Lights	3	FAIR
ROSARY HEIGHTS 6			
National Road			
Provincial Road			
City Road			
Rosales Street	Street Lights	19	FAIR
	Road Signage	2	FAIR
Santos Street	Street Lights	22	FAIR
	Road Signage	5	FAIR
	Pedestrian Crossing	1	FAIR
Oblate Drive	Street Lights	18	FAIR
Ilang-ilang Street	Street Lights	21	FAIR
	Road Signage	2	FAIR
Jasmin Street	Street Lights	16	FAIR
	Road Signage	1	FAIR
Rosal Street	Street Lights	22	FAIR
	Road Signage	2	FAIR
Brgy Road			
Ortouste Street	Street Lights	6	FAIR
	Road Signage	1	FAIR
Sulayla Street	Street Lights	5	FAIR
Upper Purok Pinen	Street Lights	3	FAIR
Lower Purok Pinen	Street Lights	3	FAIR
Krislamville	Street Lights	5	FAIR
	Road Signage	1	FAIR
	Road Humps	1	FAIR
Road 1	Street Lights	4	FAIR
Road 2	-	-	-
Road 3	-	-	-

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Road 4	Street Lights	10	FAIR
Road 5	-	-	-
Road 6	-	-	-
Road 7	-	-	-
Road 8	-	-	-
Road 9	-	-	-
Road 10	-	-	-
Road 11	-	-	-
Road 12	-	-	-
Road 13	Street Lights	4	FAIR
Road 14	-	-	-
ROSARY HEIGHTS 7			
National Road			
Provincial Road			
City Road			
Gonzalo Javier Street	Street Lights	23	FAIR
	Road Signage	22	FAIR
	Road Humps	1	POOR
Dona Avelina Gutierrez Street	Street Lights	5	FAIR
	Road Signage	5	FAIR
Brgy Road			
Albert Einstein Road	Street Lights	6	FAIR
	Road Signage	4	FAIR
R. Garcia Street	Street Lights	12	FAIR
Talitay Street	Street Lights	6	FAIR
	Road Humps	1	POOR
Santan Street	Street Lights	4	FAIR
	Road Signage	2	FAIR
Bouganvilla Street	Street Lights	3	FAIR
	Road Signage	11	FAIR
Ugalingan Street	Street Lights	1	FAIR
	Road Signage	1	FAIR
	Road Humps	1	FAIR
Mercury Street	Street Lights	5	FAIR
Road 1	Street Lights	11	FAIR
	Road Signage	1	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Road Humps	1	POOR
Road 2	Street Lights	3	FAIR
Road 3	Street Lights	1	FAIR
	Road Humps	1	FAIR
Road 4	Street Lights	4	FAIR
Road 5	Street Lights	5	FAIR
Road 6	Street Lights	2	FAIR
Road 7	Street Lights	5	FAIR
	Road Signage	2	FAIR
	Pedestrian Cross	1	FAIR
Road 8	Street Lights	4	FAIR
Road 9	Street Lights	2	FAIR
ROSARY HEIGHTS 9			
National Road			
Provincial Road			
City Road			
Governor Gutierez Avenue	Street Lights	25	FAIR
	Road Signage	13	FAIR
	Pedestrian Cross	1	FAIR
Bishop Gerard Mongeau Avenue	Street Lights	11	FAIR
	Road Signage	7	FAIR
Circumferencial Road	Street Lights	13	FAIR
	Road Signage	9	FAIR
	Road Humps	1	POOR
	Road Blocks	2	FAIR
Brgy Road			
1st Road Urban Poor	Street Lights	17	FAIR
	Road Humps	2	FAIR
2nd Road Urban Poor	Street Lights	12	FAIR
St. Benedict Road	Street Lights	2	FAIR
	Road Signage	6	FAIR
	Road Humps	1	FAIR
Jupiter Street	Street Lights	5	FAIR
	Road Signage	2	FAIR
Road 1	-	-	-
Road 2	Street Lights	1	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Road 3	Street Lights	1	FAIR
Road 4	-	-	-
Road 5	Road Humps	1	FAIR
Road 6	-	-	-
Road 7	-	-	-
Road 8	-	-	-
Road 9	Street Lights	9	FAIR
Road 10	Street Lights	3	FAIR
Road 11	Street Lights	2	FAIR
Road 12	Road Signage	2	FAIR
Road 13	Street Lights	4	FAIR
	Road Signage	1	FAIR
Road 14	Street Lights	6	FAIR
	Road Signage	3	FAIR
	Road Humps	1	FAIR
Road 15	Street Lights	7	FAIR
	Road Signage	3	FAIR
Road 16	-	-	-
Road 17	Road Signage	2	FAIR
Road 18	Street Lights	1	FAIR
ROSARY HEIGHTS 10			
National Road			
Provicial Road			
City Road			
M. Jarabelo Street	Street Lights	10	FAIR
	Road Signage	1	FAIR
LR Sebastian Road	Street Lights	11	FAIR
	Road Signage	3	FAIR
San Isidro Avenue	Street Lights	16	FAIR
	Road Signage	4	FAIR
Brgy Road			
Amado Papa Street	Street Lights	13	FAIR
	Road Signage	1	FAIR
	Road Humps	4	FAIR
Concepcion Street	Street Lights	3	FAIR
	Road Signage	1	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Catalina Austria Street	Street Lights	14	FAIR
	Road Signage	3	FAIR
	Road Humps	3	FAIR
Gavina Gonzales Street	Street Lights	3	FAIR
Pansacala Street	Street Lights	12	FAIR
	Road Signage	2	FAIR
Purok Bitara	Street Lights	3	FAIR
	Road Humps	3	FAIR
Soledad Street	Street Lights	2	FAIR
	Road Signage	1	FAIR
Delcano Street	Street Lights	7	FAIR
	Road Signage	5	FAIR
Road 1	Street Lights	7	FAIR
	Road Signage	1	FAIR
Road 2	Street Lights	9	FAIR
Road 3	Street Lights	5	FAIR
Road 4	Street Lights	1	FAIR
Road 5	Street Lights	4	FAIR
Road 6	Street Lights	4	FAIR
	Road Humps	1	FAIR
Road 7	Street Lights	3	FAIR
Road 8	Street Lights	4	FAIR
Road 9	Street Lights	3	FAIR
Road 10	Street Lights	7	FAIR
Road 11	Street Lights	4	FAIR
Road 12	Street Lights	3	FAIR
Road 13	Street Lights	2	FAIR
Road 14	Street Lights	1	FAIR
Road 15	Street Lights	2	FAIR
Road 16	-	-	-
Road 17	Street Lights	2	FAIR
ROSARY HEIGHTS 11			
National Road			
Provincial Road			
City Road			
DatuUdtogMatalam Road	Street Lights	19	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Road Signage	1	FAIR
LR Sebastian Road	Street Lights	30	FAIR
	Road Signage	6	FAIR
	Road Humps	1	FAIR
Andres Alonzo Street	Street Lights	10	FAIR
	Road Signage	5	FAIR
San Isidro Avenue	Street Lights	1	FAIR
	Road Signage	1	FAIR
RufoManara Street	Street Lights	17	FAIR
	Road Signage	3	FAIR
Federville Subdivision Main Road	Street Lights	18	FAIR
	Road Signage	7	FAIR
	Road Humps	2	FAIR
Brgy Road			
San Antonio 1st Road	Street Lights	4	FAIR
San Antonio 2nd Road	Street Lights	3	FAIR
San Antonio 3rd Road	Street Lights	3	FAIR
San Antonio 4th Road	-	-	-
San Pablo Village Main Road	Street Lights	4	FAIR
San Pablo Phase 3 Road 1	-	-	-
San Pablo Phase 3 Road 2	-	-	-
San Pablo Phase 3 Road 3	-	-	-
San Pablo Phase 2 Road 1	-	-	-
San Pablo Phase 2 Road 2	Street Lights	2	FAIR
San Pablo Phase 2 Road 3	-	-	-
San Pablo Phase 2 Road 4	Street Lights	1	FAIR
San Pablo Phase 2 Road 5	Street Lights	2	FAIR
San Pablo Phase 2 Road 6	Street Lights	2	FAIR
Acacia Street	Street Lights	9	FAIR
	Road Signage	1	FAIR
Urban Poor 1st Street	Street Lights	4	FAIR
Urban Poor 2nd Street	Street Lights	3	FAIR
Urban Poor 3rd Street	-	-	
Urban Poor 4th Street	Street Lights	1	FAIR
Apitong Street	Street Lights	5	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Road Signage	1	FAIR
Narra Street	Street Lights	6	FAIR
Sunga Street	Street Lights	2	FAIR
Molave Street	Street Lights	2	FAIR
	Road Signage	1	FAIR
Mentors Subdivision 1st Street	Street Lights	3	FAIR
Mentors Subdivision 2nd Street	Street Lights	5	FAIR
Mentors Subdivision 3rd Street	-	-	-
Mentors Subdivision 4th Street	-	-	-
Mentors Subdivision 5th Street	-	-	-
Mahogany Street	Street Lights	10	FAIR
	Road Signage	2	FAIR
Aguila Street	Street Lights	5	FAIR
Lawin Street	Street Lights	5	FAIR
Falcon Street	Street Lights	4	FAIR
Kalaw Street	Street Lights	5	FAIR
Loro Street	Street Lights	3	FAIR
Maya Street	Street Lights	3	FAIR
Pelican Street	Street Lights	5	FAIR
Penafrancia 1st Road	Street Lights	10	FAIR
	Road Humps	3	FAIR
Penafrancia 2nd Road	Street Lights	3	FAIR
Penafrancia 3rd Road	Street Lights	7	FAIR
	Road Signage	3	FAIR
Penafrancia 4th Road	Street Lights	4	FAIR
	Road Signage	1	FAIR
St. Gabriel Street	Street Lights	9	FAIR
	Road Signage	1	FAIR
Purveyors 1st Road	Street Lights	2	FAIR
	Road Humps	2	FAIR
Purveyors 2nd Road	Street Lights	2	FAIR
	Road Humps	1	FAIR
Purveyors 3rd Road	Street Lights	2	FAIR
	Road Humps	1	FAIR
Purveyors 4th Road	Street Lights	3	FAIR
	Road Humps	3	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Purok Mamarinta Street	Street Lights	4	FAIR
	Road Signage	1	FAIR
Road 1	Street Lights	1	FAIR
Road 2	-	-	-
Road 3	-	-	-
Road 4	Street Lights	4	FAIR
Road 5	-	-	-
Road 6	Street Lights	5	FAIR
	Road Signage	1	FAIR
Road 7	Street Lights	6	FAIR
Road 8	Street Lights	5	FAIR
Road 9	Street Lights	2	FAIR
	Road Humps	1	FAIR
Road 10	-	-	-
Road 11	-	-	-
Road 12	-	-	-
Road 13	-	-	-
Road 14	-	-	-
Road 15	-	-	-
Road 16	-	-	-
Road 17	Street Lights	2	FAIR
ROSARY HEIGHTS 12			
National Road			
Provincial Road			
City Road			
Brgy Road			
Fernandez Subdivision Road	Street Lights	3	FAIR
Quiambao Subdivision Road	Street Lights	7	FAIR
	Road Humps	1	POOR
1st Street AR Pacheco	Street Lights	6	FAIR
	Road Humps	1	POOR
2nd Street AR Pacheco	Street Lights	3	FAIR
3rd Street AR Pacheco	Street Lights	3	FAIR
	Road Signage	2	FAIR
4th Street AR Pacheco	Street Lights	3	FAIR
5th Street AR Pacheco	Street Lights	6	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Teofilo Rojas Street	Street Lights	6	FAIR
	Road Signage	2	FAIR
	Road Humps	1	FAIR
Rosario Rojas Street	Street Lights	4	FAIR
Road 1	Street Lights	4	FAIR
Road 2	Street Lights	2	FAIR
ROSARY HEIGHTS 13			
National Road			
Provincial Road			
City Road			
TV Juliano Avenue	Street Lights	11	FAIR
	Road Signage	4	FAIR
Sousa Avenue	Street Lights	17	FAIR
	Road Signage	9	FAIR
Ramon Rabago Street	Street Lights	24	FAIR
	Road Signage	10	FAIR
Brgy Road			
Soledad Sousa Street	Street Lights	15	FAIR
	Road Signage	9	FAIR
San Juan Street	Street Lights	10	FAIR
	Road Signage	9	FAIR
	Waiting Shed	1	FAIR
San Jose Street	Street Lights	5	FAIR
	Road Signage	2	FAIR
San Gregorio Street	Street Lights	20	FAIR
	Road Signage	2	FAIR
San Isidro Street	Street Lights	3	FAIR
	Road Signage	1	FAIR
San Roque Street	Street Lights	3	FAIR
	Road Signage	1	FAIR
Pastor Kimpo Street	Street Lights	14	FAIR
	Road Signage	8	FAIR
	Road Humps	1	FAIR
San Pedro Street	Street Lights	6	FAIR
	Road Signage	1	FAIR
Felicitas Millan Street	Street Lights	7	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Road Signage	1	FAIR
San Lorenzo Ruiz Street	Street Lights	1	FAIR
	Road Signage	1	FAIR
JP Garcia Street	Street Lights	3	FAIR
	Road Signage	1	FAIR
Rosales Street	Street Lights	2	FAIR
	Road Signage	6	FAIR
Sta Ana Street	Street Lights	3	FAIR
	Road Signage	2	FAIR
San Miguel Street	Street Lights	4	FAIR
	Road Signage	1	FAIR
	Road Humps	2	FAIR
Road 1	Street Lights	5	FAIR
Road 2	Street Lights	2	FAIR
	Road Signage	2	FAIR
Road 3	Street Lights	3	FAIR
TAMONTAKA MOTHER BARANGAY			
National Road			
Provincial Road			
City Road			
Tamontaka-Bubong Road	Street Lights	4	FAIR
	Road Signage	9	FAIR
	Road Blocks	4	FAIR
Tamontaka Old Road	Street Lights	8	FAIR
	Road Signage	1	FAIR
	Road Humps	4	FAIR
Concepcion Street	Street Lights	11	FAIR
	Road Signage	2	FAIR
	Road Humps	2	FAIR
San Juan Street	Street Lights	13	FAIR
	Road Signage	4	FAIR
	Road Humps	3	FAIR
Brgy Road			
Road 1	Street Lights	4	FAIR
Road 2	Street Lights	2	FAIR
	Road Signage	1	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Road 3	-	-	-
Road 4	-	-	-
KALANGANAN 2			
National Road			
Provincial Road			
City Road			
Bubong Road	Street Lights	25	FAIR
	Road Signage	50	FAIR
	Road Humps	3	FAIR
	Road Blocks	2	FAIR
	Pedestrian Cross	5	FAIR
	Waiting Shed	3	FAIR
Brgy Road.			
Road to Seaport	-	-	-
Road to Timako Hill	Road Signage	43	FAIR
	Road Blocks	1	FAIR
Upper Bubong	Road Signage	8	FAIR
	Road Humps	8	FAIR
Road 1	Road Signage	5	FAIR
Road 2	Road Signage	2	FAIR
	Road Humps	4	FAIR
Road 3	-	-	-

Source: LGU/Engineering Office, DPWH

1.5.1.4 Public Land Transport Vehicles

To cater the needs of the citizen on movement of people, goods, and services to areas outside its jurisdiction, the city of Cotabato has provided its citizen with different terminals on land transportation. The city has tallied eight transportation terminals intended for bus, van, and public utility vehicles which were all functional up to date. The city has two major bus terminals at present. These are the Mindanao Star bus terminal bound to north (up to Davao City) and the Husky terminal bound to south (up to General Santos City). Both of these terminals contain enough facilities for passenger use including waiting areas, ticketing booth, and separate comfort rooms for male and female travelers. However, these terminals are at poor condition and needs improvement and maintenance. There are also five existing terminals intended for van bound for north and south cities and provinces all of which are containing facilities like comfort rooms and waiting areas to support operation.

The table IF-7 shows the different transportation terminals and their corresponding description. Owing to its location, these transportation terminals are assessed to be at medium susceptibility in terms of tsunami. The Husky terminal is assessed to be at medium risk to flood while the other terminals with low susceptibility to the same.

Table IF-7: Transportation Terminals by Location and Condition, Year 2020

Name of Terminal	Area Occupied (ha)	Barangay	Year Constructed	Physical Condition	Owner/ Operator	Type of Terminal	Terminal Facilities	Hazard Susceptibility (H/M/L)							
								Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
	2	Poblacion 5	1980	poor		bus	passengers waiting area, ticketing booth and toilet	L					M		
Mindanao Star Bus	2	Poblacion 5	1980	poor		bus	passengers waiting area, ticketing booth and toilet	L					M		
Husky Terminal	0.0974	R.H. 10	1995	poor		bus	passengers waiting area, ticketing booth, Public Toilet: 1- Male; 1-Female; 1-PWD, 2- Storey Office Bldg, Driver's quarter, canteen, 8 units camera	M					M		
A2Z Van Terminal	0.12	Poblacion 5		poor		van	Passenger waiting area (benches) and separate comfort room for men and women	L					M		
Kutoco Terminal		Poblacion 5		poor		van	passenger waiting area (benches with backrests) and separate restrooms for male and female	L					M		
KGS SouthWest Terminal		Rosary Heights 9		poor		van		L					M		

AVA Terminal South Bound		Rosary Heights 9		Poor		van		L					M		
Bangsamoro Terminal and Transport Services		Rosary Heights 9		poor		van	benches with backrests for waiting passengers and separate restrooms for male and female	L					M		
Colido Transport Terminal		Poblacion 5				van and puv	separate restrooms for men and women	L					M		
Unregistered Van Terminal		Rosary Heights 10		poor		van	Alongside the road outside Husky Terminal	M					M		
Water Transport															
Kalanganan Port		Kalanganan MB		poor		Motorized Boats		H							
Poblacion 6 Port		Poblacion 6		poor		Motorized Boats		H							
Poblacion 5 Port		Poblacion 5		poor		Motorized Boats		H							
Poblacion MB Port		Poblacion MB		poor		Motorized Boats		H							

Source OCM TMU

Public transport is a system of transport intended for individual or group transport for use of the general public. These public transports are of designated scheduling and route. Cotabato City's public land transport is composed of tricycles for the downtown areas, PUJs for traversing the national roads, taxis, motorcycles, cars and trucks. Table IF-8 shows the data on the city's inventory on public transport.

As for the record of the Land Transportation Franchising Regulatory Board, there are 152 buses from Cotabato City to Davao (and vice versa), 22 buses from Cotabato City to General Santos City via Surallah (and vice versa), 55 buses from Cotabato City to Makilala via Midsayap-Kabacan (and vice versa), and 18 from General Santos City to Cotabato City via Polloc, Tupi, Koronadal City, Tacurong City, and Isulan City (and vice versa).

For the UVAs, there are 33 vehicles going from Cotabato City to Tacurong via DatuPiang, Shariff Aguak, and Isulan, 6 vehicles from Cotabato City to Arakan Valley, 34 vehicles from Cotabato City to General Santos City via Tacurong City, 45 vehicles from Cotabato City to Kidapawan, 55 vehicles from Cotabato City to Koronadal, 44 vehicles from Cotabato City to Lebak, 131 vehicles from Cotabato City to Makilala, 33 vehicles from Cotabato City to Kalamansig, 98 vehicles from Cotabato City to Davao City, 35 vehicles from Cotabato City to Malabang, 12 vehicles from Cotabato City to Marawi, 62 vehicles from Cotabato City to Midsayap, and 32 vehicles from Cotabato City to Parang.

For the public utility jeepneys, there are a total of 5 PUJs from Cotabato City to Kabuntalan, 35 PUJs from Cotabato City to Kidapawan, 4 PUJs from Cotabato City to Pikit, 12 PUJs from Cotabato City to Sultan Gumander, 30 PUJs from Cotabato City to Tacurong City via DatuPiang, 22 PUJs from Cotabato City to Tapian, 8 PUJs from Cotabato City to Wao, 18 PUJs from Cotabato City to North Upi, 12 PUJs from Cotabato City to South Upi, 46 PUJs from Cotabato City to Tacurong City via Datu Odin Sinsuat, 151 PUJs from Cotabato City to Makilala via Midsayap and Kabacan, and 46 PUJs from Cotabato City to General Santos City via Kidapawan City and Tacurong City. There are also 551 registered trucks and trailers, 3,585 registered tricycles and motorcycles, and 1,348 cars with a total of 6,798 total registered public vehicles.

Based on the JICA's study on Urban Infrastructure Development in Greater Cotabato City, the city's water transport, influenced by its geography with Rio Grande de Mindanao and Tamontaka River, plays a vital role in local mobility and cargo. Divided into intra-city (within the city) and inter-city (between cities) routes, intra-city services riverbank communities lacking road access. There are at least 4 landing boats as indicated in Table IF-7. Close to 200 boats are serving these terminals of which terminal Poblacion 5 (Yusingk-Tukananes) has the highest boat count (120 units). Inter-city transport links Cotabato City to neighboring towns through rivers and Illana Bay. Only two active routes remain via Illana Bay due to road network expansion: Cotabato City-Bongo Island and Cotabato City-Datu Blah Sinsuat only ranging from three (3) to five (5) operating boats. Cotabato City-Libungan Torreta has the most registered boats (250), but less than 100 operate daily, serving around 500 passengers.

1.5.1.4.1 Road Accidents

As shown below, majority of the national and city roads inside the City have narrow width and are difficult to expand due to some issues such as Road Right of Ways (RROW). In effect, traffic (people and vehicle) congestion arises on the busiest of roads especially during peak hours. This lends also to road accidents. For the past four (4) years, 100% of the road accidents were due to human error specifically careless and reckless driving. Majority of these accidents take place on the national roads. 46.296% happened on Sinsuat Avenue, 18.209% on Jose Lim Street, 9.722% on Don Rufino Alonzo Street, 9.413% on Gonzalo Javier Street and the remaining 16.310% road accidents are from different roads of the City. See Table IF-4 for the data on different road accidents of Cotabato City.

Table IF-4. Road Accidents by Location, Nature and Frequency for the Past 5 Years

Name of Road	Barangay	Nature	No. of Accidents					Total
			Year 1 (2015)	Year 2 (2016)	Year 3 (2017)	Year 4 (2018)	Year 5 (2019)	
Campo Muslim	Bagua MB	Human Error	1	1	3			5
	Kalanganan MB		1					1
Jose Lim Street	Poblacion MB	Human Error	2	4	3			9
Sinsuat Avenue	Rosary Heights MB	Human Error	17	25	15	4	1	62
Sinsuat Avenue	Tamontaka MB	Human Error	2	14	15	2	2	35
Lugay-Lugay Road	Bagua I	Human Error		1		1		2
TanghalSubd.	Bagua II	Human Error	1		2			3
Mabini Street	Bagua III	Human Error	2	4			1	7
	Kalanganan I							
Bubong Road	Kalanganan II	Human Error	1		1		1	3
Matampay Bridge	Poblacion I	Human Error	5	8	1			14
Quezon Avenue	Poblacion II	Human Error	3		4			7
De Mazenod Avenue	Poblacion III	Human Error	1	1				2
Don Ceacar	Poblacion IV	Human Error	3	9	4			16
Jose Lim Street	Poblacion V	Human Error	23	58	21	4	3	109
Don Rufino Alonzo St.	Poblacion VI	Human Error	17	38	7	1		63
Sinsuat Avenue	Poblacion VII	Human Error	1	1	1			3
	Poblacion VIII							
	Poblacion IX							
Sinsuat Avenue	Rosary Heights I	Human Error	8	11	12	2	1	34
Sinsuat Avenue	Rosary Heights II	Human Error	7	15	8		1	31
De Mazenod Avenue	Rosary Heights III	Human Error	2	6	4			12
Sinsuat Avenue	Rosary Heights IV	Human Error	2	9	8	2	1	22
De Mazenod Avenue	Rosary Heights V	Human Error		1	5			6
Sinsuat Avenue	Rosary Heights VI	Human Error	8	10	5	2		25
Gonzalo Javier Street	Rosary Heights VII	Human Error	15	33	6	6	1	61

Name of Road	Barangay	Nature	No. of Accidents					Total
			Year 1 (2015)	Year 2 (2016)	Year 3 (2017)	Year 4 (2018)	Year 5 (2019)	
Bishop Mongue Street	Rosary Heights VIII	Human Error		1	4			5
Sinsuat Avenue	Rosary Heights IX	Human Error	5	7	7	1		20
Sinsuat Avenue	Rosary Heights X	Human Error	17	27	18	1	5	68
TV Juliano Avenue	Rosary Heights XI	Human Error		3	2	2		7
Don Ramon Rabago St.	Rosary Heights XII	Human Error		1				1
Pastor Kimpo Street	Rosary Heights XIII	Human Error	1	6	6			13
Bubong Road	Tamontaka I	Human Error		1				1
Cynthia Guiani Village	Tamontaka II	Human Error					1	1
	Tamontaka III							
	Tamontaka IV							
	Tamontaka V							
All Location			**145**	**295**	**162**	**28**	**18**	**648**

Source of Data: TMU

1.5.1.5 Transport Related Projects

Table IF-11. Transport Related Projects, Approved/ Funded for Implementation, Year 2020

Name/ Location of Project	Barangay	Type	Proponent (Government, Private, Other)	Estimated Start Date	Estimated Date of Completion
I. Bicycle Lane Eastern & Western Diversion Road	Pob. 8,9 &Kal 2				
II. Road Widening/ Rehabilitation:					
1. Oblate Drive	RH. 6 & RH. 7	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
2. Road Street	RH. 6 & RH. 7	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
3. Ilang-Ilang	RH. 6 & RH. 7	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
4. Fatima Street	Pob. 4	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
5. Doña Theresa Street	Pob. 4	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
6. Lutganda Blanco Street	Pob. 4	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
7. Doña Pilar Street	Pob. 2 &Pob. 4	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
8. Rosales Street Leading to Krislamville Subdivision	Rosary Heights 6	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
9. Road Leading Triple A Apartment	Rosary Heights 2	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022

Name/ Location of Project	Barangay	Type	Proponent (Government, Private, Other)	Estimated Start Date	Estimated Date of Completion
10. Fatima Street	Pob. 4	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
11. SK Pendatun Extn. Front of Mega Market Leading to Delta Bridge Junction	Pob. Mother	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
12. Don. Abelardo Street	Pob. 2 &Pob. 4	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
				January 2022	December 2022
13. Pansacala Street	RH. 10 & RH. Mother	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
14. Sesame Street	RH. 3 & (Rehab)	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
15. Datu Liwa Candao Leading to Telecom	RH. 3	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
16. Macapagal Street	RH. 10 & RH. Mother	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
17. Junction ORG and Bishop Mongeau Street Leading to By Pass Road	RH. 8 & RH. 9	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
18. Del Pilar Street	Bag. Mother-L W	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
III. Concreting of Road					
1. Road Leading to Triple A Apartment Junction San Isidro	RH. 10	Concreting of Road	GOVERNMENT (CEO)	January 2021	December 2021
2. San Isidro Street	Pob. 4	Concreting of Road	GOVERNMENT (CEO)	January 2021	December 2021
3. Antonion Marquez Street	Pob. 4	Concreting of Road	GOVERNMENT (CEO)	January 2021	December 2021
4. Catalina Austria Street	Pob. 4	Concreting of Road	GOVERNMENT (CEO)	January 2021	December 2021
5. Amado Papa Extension	RH. 10	Concreting of Road	GOVERNMENT (CEO)	January 2021	December 2021
6. Al-Itihad	Bag. 2	Concreting of Road	GOVERNMENT (CEO)	January 2021	December 2021
7. Construction of Concrete Road - Cotabato City East Diversion Road, Cotabato City	Poblacion 8 and 9, Cotabato City	Construction of Concrete Road	GOVERNMENT (DPWH)	January 2021	December 2021
8. Access Road leading to Old City Hall-Cotabato City Information Center, Cotabato City	Poblacion 6, Cotabato City	Construction of Concrete Road	GOVERNMENT (DPWH)	January 2021	December 2021
9. Road from Datu BalabaranBonsain Footbridge, Tamontaka Mother near the Special Economic Zone Passing to the Proposed Septage Treatment Plant Facility to Left Side of City Hall (People's Palace) and Children's Park, Barangay Rosary Heights 10 leading to Junction of Cotabato-Ala Valley-Marbel Road (Sinsuat Avenue), Cotabato City	Tamontaka Mother, Cotabato City	Construction of Concrete Road	GOVERNMENT (DPWH)	January 2021	December 2021
10. Road from the Junction of Kalanganan Mother Main Road Passing thru the City Government Resettlement Project and Shared Service Facilities (SSF) leading to the West Circumferential Road at Barangay Kalanganan 2, Cotabato City, Maguindanao	Kalanganan Mother and Kalanganan 2, Cotabato City	Construction of Concrete Road	GOVERNMENT (DPWH)	January 2021	December 2021

Name/ Location of Project	Barangay	Type	Proponent (Government, Private, Other)	Estimated Start Date	Estimated Date of Completion
11. Concreting of Road with line canal and concrete box culvert, Macapagal Street, Brgy. Rosary Heights, Cotabato City,	Rosary Heights Mother, Cotabato City	Construction of Concrete Road	GOVERNMENT (DPWH)	January 2021	December 2021
12. Concreting of Road with line canal and concrete box culvert, Brgy. Rosary Heights II, Cotabato City,	Rosary Heights 2, Cotabato City	Construction of Concrete Road	GOVERNMENT (DPWH)	January 2021	December 2021
13. Construction of Concrete Road - Concreting of Access Road from Junction of Kalanganan Mother to the West Circumferential, Cotabato City	Kalanganan Mother, Cotabato City	Construction of Concrete Road	GOVERNMENT (DPWH)	January 2021	December 2021
14. Construction of Concrete Road - DatuUdtogMatalam Bypass Rd, Cotabato City	Rosary Heights 10, Cotabato City	Construction of Concrete Road and ROW Acquisition	GOVERNMENT (DPWH)	January 2020	December 2020
15. Construction of Concrete Road - Concreting of Road, Brgy. RH VII, Cotabato City	Rosary Heights 7, Cotabato City	Construction of Concrete Road	GOVERNMENT (DPWH)	January 2020	December 2020
16. Construction of Concrete Road - Road Construction/Concreting of Barangay Kalanganan 1, Cotabato City	Kalanganan 1, Cotabato City	Construction of Concrete Road	GOVERNMENT (DPWH)	January 2020	December 2020
17. Construction of Concrete Road - Road Construction/Concreting of Barangay Poblacion 2, Cotabato City	Poblacion 2, Cotabato City	Construction of Concrete Road	GOVERNMENT (DPWH)	January 2020	December 2020
18. Construction of Concrete Road - Road Construction/Concreting of Barangay Poblacion 4, (Doña Lutgarda Blanco Street leading to SK Pendatun), Cotabato City	Poblacion 4, Cotabato City	Construction of Concrete Road	GOVERNMENT (DPWH)	January 2020	December 2020
19. Construction of Concrete Road - Cotabato City East Diversion Road, Cotabato City	Poblacion 8 and 9, Cotabato City	Construction of Concrete Road	GOVERNMENT (DPWH)	January 2022	December 2022
20. Construction of Concrete Road - Concreting of Road, Barangay Rosary Heights 6 (Krislamville), Cotabato City	Rosary Heights 6, Cotabato City	Construction of Concrete Road	GOVERNMENT (DPWH)	January 2022	December 2022
21. Construction of Concrete Road - Concreting of Road, Barangay Rosary Heights 13, Cotabato City	Rosary Heights 13, Cotabato City	Construction of Concrete Road	GOVERNMENT (DPWH)	January 2022	December 2022
22. Construction of Concrete Road - Concreting of Road, Barangay Poblacion 2 (Purok Mabuhay), Cotabato City	Poblacion 2, Cotabato City	Construction of Concrete Road	GOVERNMENT (DPWH)	January 2022	December 2022
23. Construction of Concrete Road - Concreting of Road with line canal and concrete box culvert, Macapagal Street, Brgy. Rosary Heights, Cotabato City	Rosary Heights Mother, Cotabato City	Construction of Concrete Road	GOVERNMENT (DPWH)	January 2022	December 2022
24 Construction of Concrete Road - Concreting of Road with line canal and concrete box culvert, Brgy. Rosary Heights II, Cotabato City,	Rosary Heights 2, Cotabato City	Construction of Concrete Road	GOVERNMENT (DPWH)	January 2022	December 2022

Name/ Location of Project	Barangay	Type	Proponent (Government, Private, Other)	Estimated Start Date	Estimated Date of Completion
IV. Repair of Intersection/ Junctio/ Chaflan					
1. Tamse Road Street Junction ND Avenue	Poblacion 4	Repair of Intersection/ Junctio/ Chaflan	GOVERNMENT (CEO)	January 2022	December 2022
2. Junction SK Pendatun&Tamse Road	Poblacion Mother Barangay	Repair of Intersection/ Junctio/ Chaflan	GOVERNMENT (CEO)	January 2022	December 2022
3. Junction San Isidro & TV Juliano Avenue	Rosary Heights 10	Repair of Intersection/ Junctio/ Chaflan	GOVERNMENT (CEO)	January 2022	December 2022
4. Junction TV Juliano& Catalina Austria	Rosary Heights 10	Repair of Intersection/ Junctio/ Chaflan	GOVERNMENT (CEO)	January 2022	December 2022
5. Junction San Isidro &Delcano Street	Rosary Heights 10	Repair of Intersection/ Junctio/ Chaflan	GOVERNMENT (CEO)	January 2022	December 2022
V. Flood Control and Drainage System					
1. Villo Creek Protection & Widening	Pob. 2, Pob. 3, Pob. 4	Flood Control and Drainage System	GOVERNMENT (CEO)	January 2022	December 2022
2. Lutganda Blanco Street	Pob. 4	Flood Control and Drainage System	GOVERNMENT (CEO)	January 2022	December 2022
3. Doña Theresa Street	Pob. 4	Flood Control and Drainage System	GOVERNMENT (CEO)	January 2022	December 2022
4. Cesar Villo Street	Pob. 4	Flood Control and Drainage System	GOVERNMENT (CEO)	January 2022	December 2022
5. Don Abilardo Street	Pob. 2, Pob. 3, Pob. 4	Flood Control and Drainage System	GOVERNMENT (CEO)	January 2022	December 2022
6. Sesame Street	RH. 3	Flood Control and Drainage System	GOVERNMENT (CEO)	January 2022	December 2022
7. Al-Itihad Street	Bag. 2	Flood Control and Drainage System	GOVERNMENT (CEO)	January 2022	December 2022
8. Del Pilar Street (From San Roque Church)	Bag. Mother	Flood Control and Drainage System	GOVERNMENT (CEO)	January 2022	December 2022
VI. Others:					
1. Construction of Sidewalk Beside People's Palace Leading To Children's Playground	RH. 10, Cotabato City	Other Infrastructure Projects	GOVERNMENT (CEO)	January 2022	December 2022

Source: Dept. of Public Works and Highway, City / City Engineering Office, Concerned National Government AgencyEngineering office

1.5.2. Social Services Facilities/Utilities/Amenities

1.5.2.1 Education

Currently, there are 16 private elementary schools, 31 public elementary schools, 15 private high schools, 13 public high schools, and 14 Private Colleges, and 1 Public College, and 39 Madrasahs, and 11 Technical Schools, and 2 Specialty Schools. The table above shows the inventory of schools and their current conditions. Many of the facilities are in good condition while only few facilities are in poor condition. None are reported to be in critical condition.

Datu Ayunan Elementary School, located in Kalanganan Mother, has the largest area in the Elementary Level at 50,000 sq. meters. For the secondary level schools, CCNHS-MAIN CAMPUS has the largest area at 80,098 Sq. m. located at Rosary Heights 4. For the tertiary level, Notre Dame University has the largest land area at 99,701 sq. m. Most of the tertiary schools are from the private sector.

Elementary schools that have laboratories were from private schools namely: ND Cathedral Cotabato City Elementary School, NDU Elementary Training Department, Albert Einstein Elementary School, and ND RVM College of Cotabato. ND ETD and Cotabato City Institute has a shop. Less than half of the elementary schools listed have at least one library in good condition. Only Agape School, has a library with poor condition. All of the elementary schools, with the exception of Timako Elementary School, have one functional clinic. All elementary schools have functional comfort rooms with Cotabato City Central Pilot School having the most number available at 148. Most of the schools that have playground were functional. As a practice all public schools may be used as evacuation centers in the case when the two (2) city evacuation centers and barangay identified evacuation facility may be fully occupied.

Several schools are highly susceptible to earthquake as shown in the table SO-2. Flooding is the primary natural calamity experienced in Cotabato City due to its geophysical situation that is below sea level and basin from the upstream rivers and lakes. Schools that are frequently affected are the following: Cot City Central Pilot School, LR Sebastian ES, Tamontaka CS, Timako ES, Vilo ES, and Krislamville ES have medium hazard susceptibility. Mandanas ES, Datu Usman ES, Lugay-Lugay CS, Datu Ayunan ES, Darping ES, Amirol ES, Pagalamatan ES, Buaya-Buaya ES, Bubong ES, Usman Baunga ES, Diocolano ES, Mokamadali ES, Datu Siang CS, J. Marquez ES, and Muamad ES have high susceptibility for flood. For tropical cyclone, 24 elementary schools listed are highly susceptible to hazard. Also, three elementary schools are medium susceptible. During the 1976 Earthquake the city experienced a tsunami affecting the kalanganan barangays, hence six (6) elementary schools were identified with medium hazard susceptibility to tsunami. One school, Tamontaka CS, is medium hazard susceptible to tsunami, due to its location just a few meters from the Tamontaka River, Seven elementary schools are highly susceptible to storm surge. Only one, Tamontaka CS, is medium susceptible to storm surge.

For secondary schools, all listed do not have laboratories. For stores, CANIZARES NHS, Pilot Provincial Science & Technology HS, and DIOCOLANO ANNEX, all have 3 stores each in good condition. DATU SEMA KALANTUNGAN has 2 stores in good condition. DON E. SERO ANNEX, J. Marquez NHS, BUAYA-BUAYA ANNEX, BUBONG ANNEX, and ND VILLAGE NHS, all have one store each in good condition.

Secondary schools, CCNHS-MAIN CAMPUS, CCNHS-ROJAS SITE, ND VILLAGE NHS, CANIZARES NHS, PPSTHS (Pilot Provincial Science & Technology HS, DATU AYUNAN NHS, Datu Siang NHS, DATU SEMA KALANTUNGAN, and LR SEBASTIAN, have one library in good condition each.

All of the secondary schools listed, except PC Annex, has one clinic each in good condition. All secondary schools listed have available comfort rooms in good condition. ND Village NHS has the largest number at 56 comfort rooms. All, except PC Hill Annex, have one playground in good condition.

There are two specialty schools here in Cotabato. One is Notre Dame Center for Catechesis (School for Cathechesis). Another is Notre Dame Hospital and School of Midwifery (School for Midwifery). Meanwhile, there are 8 technical schools present in Cotabato City.

In summary, Diocolano Annex and Bubong Annex High Schools are highly susceptible to five hazards, namely, flood, tropical cyclone, earthquake, tsunami, and storm surge. There are 35 schools that are highly susceptible to flood. There are 46 schools that are lowly susceptible to flood. There are 9 schools that are moderately susceptible to flood. There are 5 schools that are very highly susceptible.

There are 35 schools with moderate susceptibility to tsunamis. There are 6 schools with high susceptibility to tsunamis. There are 13 schools with high susceptibility to storm surge.

a. Schools by Level, Type, Facilities and Condition, SY 2018

There are 40 schools highly susceptible to flood, 15 moderately susceptible to flood, 66 schools lowly susceptible to flood, and 9 schools that are very highly susceptible. There are 37 schools highly susceptible to tropical cyclone, and 4 schools moderately susceptible to tropical cyclone. There are 40 schools highly susceptible to earthquake. Also, there's a school moderately susceptible to earthquake, namely, CCNHS- Main Campus. There are 53 schools with moderate susceptibility to tsunamis, and 11 schools with high susceptibility to tsunamis. There are 13 schools with high susceptibility to storm surge

Table SO-2. Schools by Level, Type, Facilities and Condition, SY 2018

School	Barangay	Area Occupied (ha)	Ownership	Facilities And Condition							Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)							
				Lab.	Shop	Library	Clinic	Comfort Room	Play ground	Others (Specify)		Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Nahda Central Academy	Bagua Mother	675.28	Private	N	N	G	G	G	G		N	H					M		
Rasheeda High School	Bagua Mother	1226.36	Private	N	N	G	G	G	G		N	H					M		
Kutawato Darussalam College Inc. (Mahad)	Bagua Mother	10000 sq.m.	Private	N	N	G	G	G	G		N	H					M		
ND Learning Center	Bagua Mother	833 sq.m.	Private								N								
Lugay-Lugay CS	Bagua 1	2,722 sq.m.	Public	N	N	G	G	G	G	with covered court	Y	H	H	H			M	H	
IQRA Academy Of Mindanao	Bagua 1	1547.86	Private	P	N	G	P	G	G		N	H					M		
Shariff Kabunsuan College	Bagua 1	19,928 sq.m.	Private	N	N	G	G	G	G		N	H					M		
Datu Usman ES	Bagua 2	4,312 Sq. m.	Public	N	N	N	G	G	G		Y	H	H	H			M		
Madrasah Nurol Iman	Bagua 2	453.17	Private								N	H					M		
Madrasah Rahmaniya	Bagua 2	846.3	Private								N	H					M		
Madrasah Ibadur Rahman	Bagua 2	235.02	Private								N	H					M		
Madrasah Hadji Abubakar Kambal Al Islamiya	Bagua 2	290	Private								N	H					M		
Aviation Technology School of Cotabato	Bagua 3	391 sq.m.	Private								N	H					M		
Madrasa Amina	Bagua 3	140.21	Private								N	H					M		
Madrasah	Bagua 3	544.48	Private								N	H					M		

School	Barangay	Area Occupied (ha)	Ownership	Facilities And Condition							Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)							
				Lab.	Shop	Library	Clinic	Comfort Room	Playground	Others (Specify)		Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Sero Central Elementary School	Rosary Heights Mother	10,018 sq. m.	Public	N	N	G	G	G	G	with covered court	Y	L	H	H					
Mangiging Education Center Inc.	RH Mother	2,164 sq.m.	Private	N	N	G	G	G	G		N								
Cotabato Sacred Heart Learning Center Inc.	RH Mother	872.41	Private	N	N	G	G	G	G		N								
PC Hill ES	Rosary Heights 1	2,225 sq. m.	Public	N	N	N	G	G	G		Y					M			
CCNHS-ROJAS SITE	Rosary Heights 1	4,300 Sq. m.	Public	N	N	G	G	G	G		Y	L	M	H			M		
PC HILL Elem. School ANNEX	Rosary Heights 1	2,225 sq. m.	Public	N	N	N	G	G	G		Y					M			
PC Hill Site Annex/JR/SENIOR HIGH	RH 1	2,225 sq. m.	Public	N	N	N	N	G	N	with covered court	Y					M			
Coland System Technology	RH 1	924 sq.m.	Private	N	N	G	G	G	N		N	L							
Notre Dame Cathedral Cotabato City Elementary School Inc.	RH 2	10,179 sq.m.	Private	G	N	G	N	G	G	with Gymnasium	N	L							
NDU Elementary Training Dept.	RH 3	4564.87	Private	G	G	G	G	G	G	with covered court	N	L							
NDU JR High School	RH 3	5.4	Private	G	G	G	G	G	G		N	L							
NDU-Senior High School	RH 3	3727.24	Private	G	G	G	G	G	G		N	L							
Notre Dame University	RH 3	99,701 sq.m.	Private	G	G	G	G	G	G	with Gymnasium: Science Bldg, chapel, soccer field	N	L							

School	Barangay	Area Occupied (ha)	Ownership	Facilities And Condition							Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)							
				Lab.	Shop	Library	Clinic	Comfort Room	Playground	Others (Specify)		Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Madrasah Mahad Saleh	RH 3	35.26	Private	G	G	G	G	G	G			L							
Notre Dame Center for Catechesis	RH 3	196.219	Private					G			N	L							
CCNHS-MAIN CAMPUS	Rosary Heights 4	80,098 Sq. m	Public	N	N	G	G	G	G		Y	L	H	M					
Menang Institute of Technology	RH 4	746.22	Private	N	N	G	G	G	N		N	L							
SKIA Elementary Annex	RH 4	3887.03	Private	N	N	G	G	G	G		N	L							
CCSPC Laboratory High School/JUNIOR & SENIOR HIGH	RH 4	1239.66	Public	N	N	G	G	G	G		N	L							
CCSPC College	RH 4	8860.31	Public	G	G	G	G	G	G	with gymnasium	N	L							
Coland Senior High	RH 4	741 sq.m.	Private	N	N	G	G	G	N		N	L							
Notre Dame of Cotabato (ND Boys Dept.)	RH 4	20,114 sq.m.	Private	G	G	G	G	G	G	with gymnasium	N	L							
DR.P OCAMPO HIGH SCHOOL	RH 4	1,081 sq.m.	Private	G	N	G	G	G	G		N	L							
Don E. Sero ES	Rosary Heights 5	10,000 Sq. m.	Public	N	N	G	G	G	G	with covered court	Y	L	H	H					
DON E. SERO ANNEX	Rosary Heights 5		Public	N	N	G	G	G	G		Y	L	H	H					
Dr.P Ocampo College	RH 5	2,437 sq.m.	Private	G	G	G	G	G	G		N	L							
Madrasa Al Madina Islamiya	RH 5		Private								N								
Krislamville ES	Rosary Heights 6	877 Sq. m.	Public	N	N	N	G	G	G	with covered court	y	L	H	H					

School	Barangay	Area Occupied (ha)	Ownership	Facilities And Condition							Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)							
				Lab.	Shop	Library	Clinic	Comfort Room	Playground	Others (Specify)		Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
SKE College Inc. Madrasah	RH 6	624.93	Private	N	N	G	G	G	G		N	L							
Lord Peace Learning Center	RH 7	1,051 Sq. m.	Private	N	N	G	G	G	N		N								
Albert Einstain elem./high school	RH 7	4,503 sq.m.	Private	G	N	G	G	G	G	with covered court	N	L							
Madrasah Abdul Rahman	RH 7	136.39	Private								N	L							
Madrasatu Ta Leefil Qu Loob Al Islamiya	RH 7	304.16	Private								N	L							
Notre Dame Village Central Elem. School	RH 8	26,986 sq.m.	Public	N	N	G	G	G	G	with covered court	Y	L	H	H			M		
ND VILLAGE NHS	Rosary Heights 8	4,791 Sq. m.	Public	N	G	G	G	G	G	with covered court	Y	H	H	H			M		
Saint Joseph The Worker Parish	RH 8		Private								N								
Madrasah Inon	RH 8	620.49	Private								N	H							
ST. Benedict College(JHS/SHS)	RH 9	2627.43	Private	G	N	G	G	G	G	with covered court	N	L							
St. Benedict Elementary	RH 9	504.88	Private	N	N	G	G	G	G		N	L							
New Life Institute Elementary	RH 9	364.315	Private	N	N	G	G	G	G		N	L							
Fernanda Borbon Elem. School	RH 9	1000 sq. m.	Public	N	N	N	G	G	G		Y								
Notre Dame Hospital and School of Midwifery	RH 9	19,999 sq.m.	Private	G	N	G	G	G	G	with covered court	N	L							

School	Barangay	Area Occupied (ha)	Ownership	Facilities And Condition							Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)							
				Lab.	Shop	Library	Clinic	Comfort Room	Playground	Others (Specify)		Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
San Vicente Academy	RH 9	825.56	Private	N	G	G	G	G	G		N	L							
Mandanas ES	Rosary Heights 10	1,762 sq.m.	Public	N	N	N	G	G	G	with covered court	Y	L	H	H			M		
CANIZARES NHS	Rosary Heights 10	15,000 Sq. m.	Public	G	G	G	G	G	G	with covered court	N	L	H	H			M		
AMA Computer College-Cotabato Campus	RH 10	464 sq.m.	Private	G	N	G	G	G	N		N	L							
Madrasah Baraka Orphange	RH 10	19.7	Private								N	L					M		
A4 College of Peace & Wise	RH 10		Private								N								
STI Pansacala	RH 10	1443.22	Private	N	N	N	G	G	G		N	L					M		
Madrasah Tarbiyyato Wa Thaqfatol Islamia	RH 10	31.74	Private								N	L							
Madrasah Hadji Ding Naki Al-Islamie	RH 10	35.05	Private								N	L					M		
Madrasah Embluwa Islamiyah	RH 10	39.97	Private								N	M					M		
Madrasah Mohammad Subaihe Al Islamie	RH 10	89.25	Private								N	M					M		
LR Sebastian ES	Rosary Heights 11	8,873 sq.m.	Public	N	N	G	G	G	G	with covered court	Y	L	M	H			M		
LR SEBASTIAN Site CCNHS ANNEX	Rosary Heights 11		Public	N	N	G	G	G	G		Y	L	H	H			M		
Idar Technical School	RH 11		Private								N	L					M		
Madrasah Morshid	RH 11	58.29	Private								N	L					M		
Rojas ES	Rosary Heights 12	3,750 Sq. m	Public	N	N	N	G	G	G	with covered court	Y	L	M	H			M		

School	Barangay	Area Occupied (ha)	Ownership	Facilities And Condition							Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)							
				Lab.	Shop	Library	Clinic	Comfort Room	Playground	Others (Specify)		Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
AR Pacheco Elem. (Main)	RH 12	181.17	Private	N	N	G	G	G	N		N	L					M		
AR Pacheco high sch. Bld2	RH 12	64.32	Private	N	N	G	G	G	N		N	L					M		
AR Pacheco College, Inc.	RH 12	472.86	Private	N	N	G	G	G	N		N	M					M		
AR Pacheco Senior High	RH 12	682.07	Private	N	N	G	G	G	N		N	M					M		
Notre Dame RVM Collegeof Cotabato	RH 13	22,781 sq.m.	Private	G	G	G	G	G	G	with gymnasium	N	L					M		
Kimpo Elementary School	RH 13	1,340 Sq. m.	Public	N	N	G	G	G	G	with covered court	Y	L	M	H			M		
J.Marquez Elementary School	Poblacion Mother	4,151 Sq. m	Public	N	N	G	G	G	G	with covered court	Y	M	H	H					
Madrasah Mahad Ali Amir	Pob. Mother	1,600 sq.m.	Private								N	M							
Madrasah Ali-Macarban Al Islamiyah	Pob. Mother	95.2	Private								N	M							
Madrasah	Pob. Mother	926.01	Private								N	L							
J. Marquez NHS (JHS/SHS)	Poblacion Mother	4,151 Sq. m.	Public	N	G	G	G	G	G	with covered court	Y	M	H	H					
Cotabato City Institute	Pob. 1	22,427 Sq. m.	Private	N	G	G	G	G	G	with gymnasium	Y	VH							
Madrasah Al Mutaire Al Islamiya	Pob. 2	164.1	Private	G	N	G	G	G	G		N	L							
CAS Memorial Inc.	Pob. 2	645.67	Private								N	L							
TESDA	Pob. 3	123.82	Public								N	M							
Madrasah Hadja Subia Quran Reading Institute	Pob. 3		Private								N	M							
Innovative System Institute	Pob. 3	400.95	Private								N	L							

School	Barangay	Area Occupied (ha)	Ownership	Facilities And Condition							Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)							
				Lab.	Shop	Library	Clinic	Comfort Room	Playground	Others (Specify)		Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Notre Dame Learning Center	Pob. 3	392.65	Private								N	L							
Madrasah Hadja Subia Educational Center	Pob. 3	955.47	Private								N	M							
Vilo ES	Poblacion 4	2,200 sq. m.	Public	N	N	G	G	G	G	with covered court	Y	L	H	H					
Dela Vida College	Pob. 4	476 sq.m.	Private	N	N	G	G	G	N		N	L							
Academia de Mindanao	Pob. 5	234.42									N	L					M		
Headstart College	Pob. 5	736 sq.m.	Private	N	N	G	G	G	G	with covered court	N	L					M		
Agape School	Pob. 5	1,100 Sq.m.	Private	N	N	P	P	G	G	with Computer Lab	N	L					M		
CAD I.T	Pob. 5	1,503 sq.m.	Private	N	N	G	G	G	N		N	L							
Cot City Central Pilot School	Poblacion 6	40,200 sq. m.	Public	N	N	G	G	G	G	with covered court	Y	L	H	H			M		
TESDA XII	Pob. 6	715.09	Public								N	L					M		
STI College	Pob. 6	994.04	Private								N	M					M		
STI ANNEX	Pob. 6	236.75	Private								N	M					M		
Academia Technology In Mindanao	Pob. 6	328.27	Private	G	N	G	G	G	N		N	M					M		
Datu Siang Central Elementary School	Poblacion 7	1,559 Sq. m	Public	N	N	G	G	G	G	with covered court	Y	VH	H	H			M		
Muamad ES	Poblacion 7	10,000 Sq. m.	Public	N	N	G	G	G	G	with covered court	Y	H	H	H			M		
Datu Siang NHS	Poblacion 7	3,000 Sq. m.	Public	N	N	G	G	G	G	with covered court	Y	VH	H	H			M		
Madrasah Datu Sema Kalamtungan	Pob. 8		Private							with gymnasium	N	L							

School	Barangay	Area Occupied (ha)	Ownership	Facilities And Condition							Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)							
				Lab.	Shop	Library	Clinic	Comfort Room	Playground	Others (Specify)		Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Madrasah Moro Islamiyah	Pob. 8		Private								N	L							
Kutawato Institute of Technology Foundation Inc. (KITFI)	Pob. 8		Private	N	N	G	G	G	G	with covered court	N	L							
Madrasah Najiyat	Pob. 8		Private								N	L							
Madrasah Adzis	Pob 9		Private								N	VH							
Maunad Elementary School	Pob 9	10,000 sq.m.	Private								N	VH							
Madrasah Shuhada Al Islam	Pob 9		Private								N	VH							
Madrasah Kalid Bin Waled	Kal. Mo.	170.04	Private								N	VH					H	H	
Madrasah Nuro Daawah Islamie	Kal. Mo.	181.34	Private								N	H					M		
DATU AYUNAN NHS (JHS/SHS)	MB Kalanganan	50,000 Sq. m.	Public	N	N	G	G	G	G	with covered court	Y	VH	H	H			H	H	
Datu Ayunan Elementary School	Kal. Mo.	50,000 Sq. m.	Public	N	N	G	G	G	G	with covered court	Y	VH	H	H			H	H	
Amirol Elementary School	Kal. Mo.	1,238 Sq. m.	Public	N	N	N	G	G	G	with covered court	Y	H	H	H			M	H	
Darping ES	Kalanganan 1	5,000 Sq. m.	Public	N	N	N	G	G	G		Y	H	H	H			M	H	
Madrasah (Madrasah Nurol-Iman Al-Islamiyah)	Kalanganan 1	801.19	Private								N	H					M	L	
Buaya-Buaya ES	Kalanganan 2	5000 Sq. m	Public	N	N	N	G	G	G		Y	H	H	H			H	H	
CCNHS (Buaya-Buaya Site) ANNEX (HS)	Kalanganan 2	2,000 Sq. m.	Public	N	G	N	G	G	G	with covered court	Y	H	H	H			H	H	
Bubong ES	Kalanganan 2	5000 Sq. m	Public	N	N	N	N	G	G	with covered court	Y	H	H	H			H	H	
Timako ES	Kalanganan 2	2,000 Sq. m.	Public	N	N	N	N	G	G		Y	H	H	H		M	H	H	

School	Barangay	Area Occupied (ha)	Ownership Facilities And Condition								Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)							
			Ownership	Lab.	Shop	Library	Clinic	Comfort Room	Playground	Others (Specify)		Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Buaya Buaya High School	Kal. 2	5000 Sq. m	Public	N	N	N	G	G	G		Y	H	H	H			H	H	
CCNHS-(BUBONG Site) ANNEX	Kalanganan 2	5,000 Sq. m.	Public	N	G	N	G	G	G	with covered court	Y	H	H	H			H	H	
Madrasah Ashafieyah Al Islamiya	Kal. 2	216.65	Private								N	H					H	H	
Tamontaka Central Elementary School	Tamontaka MB	9,272 Sq. m.	Public	N	N	G	G	G	G	with covered court	Y	H	H	H			M	M	
PPSTHS (Pilot Provincial Science & Technology HS	Tamontaka 1	26,262 Sq. m.	Public	N	G	G	G	G	G	with covered court	Y	H	H	H			M		
Madrasah Darol Marhama	Tam. 1		Private								N	H					H		
Madrasah Al Uloom Wal Hikma	Tam. 1	2086.63	Private								N	H					M		
Usman Baunga ES	Tamontaka 2	5100 Sq. m	Public	N	N	N	G	G	G	with covered court	Y	M	H	H					
Masjid Ibrahim Nanding	Tam. 2		Private								N	M							
Pagalamatan ES	Tamontaka 3	1,500 Sq. m	Public	N	N	N	G	G	G	with covered court	Y	H	H	H					
Madrasah Pagalamatan	Tam. 3	639.78	Private								N	H							
Mokamadali ES	Tamontaka 4	5,000 Sq. m.	Public	N	N	N	G	G	G	with covered court	Y	H							
CCNHS Datu Sema Kalantungan Site	Tam. 4	22615 Sq.m.	Public	N	G	G	G	G	G		Y	H	H	H					
Mokamadali Elementary School	Tam. 4	5,000 Sq. m.	Public	N	N	N	G	G	G	with covered court	Y	H	H	H					
Madrasah Najma Akaire	Tam. 4	382.89	Private							with gymnasium	N	H							
Diocolano ES	Tamontaka 5	5,078 Sq. m	Public	N	N	N	G	G	G		N	H	H	H					

School	Barangay	Area Occupied (ha)	Ownership Facilities And Condition								Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)							
			Ownership	Lab.	Shop	Library	Clinic	Comfort Room	Playground	Others (Specify)		Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Madrasah Hadji Esmail Nongka Al Islamie	Tam. 5	115.08	Private								N	H							
CCNHS ANNEX Diocolano Site) JHS/SHS	Tam. 5	1431.15	Public	N	G	N	G	G	G		Y	H	H	H					
Jamiat Cotabato and Institute of Technolgy, Inc.			Private	G	N	G	G	G	G	G- Multi-purpose	N	L							

Source: DepEd District Office, Primary Survey

Notes:

Indicate condition (if facility is present) as follows:
G – Good(Well Maintained)
P – Poor (Needs Improvement)
C – Critical (Requiring Priority Action)
N - None / No Such Facility
Other facilities: Computer room/laboratory, multi-purpose halls/auditorium, etc
Used as evacuation center - Yes (Y), No (N)
Types of hazards – Flood (Fl), Tropical Cyclone (Tc), Earthquake (Eq), Volcano (Vo), Landslide (Ln), Tsunami (Ts), Storm Surge (Su),
Others (e.g. coastal erosion, sea level rise, land subsidence, liquefaction, strong wind, change in temperature, change in rainfall, etc.)

b. Student-Teacher and Student-Classroom Ratio by Level, SY 2018

Based on school year 2019-2020 enrollment data, there are 71,573 leaners enrolled in public and private schools and including in the State Universiry College/Local University College (SUC/LUC). Overall, there are more females (51%) than male enrolles.

More than seven out of ten or 73% (51,985) learners are enrolled in DepEd schools. The public school system caters to 4,316 (8%) kinder learners, 27,920 (53%) elementary learners, 15,848 (30%) Junior High School learners, and 4,634 (9%) Senior High School learners.

Private schools meanwhile have a total population of 18,857 or 27% learners. However, for the current year, there has been a decrease of 84 kindergarten entrants compared to school year 2018-2019. School year 2019-2020 data likewise shows that senior high school population in private school is sifnificantly higher that in public schools since school year 2016-2017. Most of the growth of the enrollment is attributed to increasing retention among junior high school completers moving to senior high school and to the government highly subsidized SHS education in private institutions.

The total number of teachers on all sectors and level of education for school year 2019-2020 are 2,429. Public school have a total population of 1,1861 teachers. There are more female (1,505) than male (356) teachers. However, private school population is 568 teachers. The mobility of teaching profession from private to public schools can be attributed to adequate renumeration and other rmeans of job satisfaction and fulfillment.

The total number of classrooms on all sectors and level of education are 1,435 wherein 29% belongs in private schools and 71% in public schools. The student and classroom ratio for the private and public schools does meet the standard of 1:40. However, for highly dense public schools particularly in the secondary level, they practice two (2) shifting classes. The morning session starts at 5:00 in the morning to 12:00 noon time and the next shifts starts at 12:00 noon to 7:00 in the evening.

Table SO-3. Student-Teacher and Student-Classroom Ratio by Level, SY 2018

Type/Level	Enrollment			No. of Teachers			No. of Classrooms	Student/ Teacher Ratio	Student/ Classroom Ratio
	Male	Female	Total	Male	Female	Total			
Private									
Preparatory	483	409	892	7	59	66	36	25	25
Elementary	2464	2272	4736	35	190	225	215	40	22
Secondary									
Junior High School (Grade 7 – 10)	3816	4239	8055	56	143	199	121	40	67
Senior High School (Grade 11 - 12)	2397	2777	5174	18	60	78	50	40	103
Sub-Total	9160	9697	18857	116	452	568	422	33	45
Public									
Preparatory	2165	2151	4316	5	97	102	46	25	94
Elementary	14167	13753	27920	136	829	965	669	29	42
Secondary									
Junior High School (Grade 7 – 10)	7131	8116	15247	143	459	602	249	40	40
Senior High School (Grade 11 - 12)	2030	2472	4502	72	120	192	49	40	40
Sub-Total	25493	26492	51985	356	1505	1861	1013	28	51

Source: DepEd District Office, Individual Private School

Notes:

Classification: public or private Student-Teacher Ratio = Total Enrollment / Total No. of Teachers

Student-Classroom Ratio = Total Enrollment / No. of Classrooms

c. Tertiary and Vocational/ Technical Schools by Type and Total Enrollment, SY 2019

Cotabato City has a total of 18 Tertiary Schools with only one (1) Public School and the only State University in the City. The rest are privately operated universities and colleges. Out of the 18 there are three (3) specialy schools namely: the Notre Dame Center for Catechesis, Notre Dame Hospital abd school of Midwifery and the Aviation Technology School of Cotabato.

Among the 18 tertiary schools 13 were located in low susceptibility to flooding, 2 schools were identified with moderate susceptibility to flooding and 2 are located in highly susceptibility to flooding; 1 school is identified with low susceptibility to earthquake, while 6 are identified with moderately susceptible to tsunami.

The city has a total of 8 Technical/Vocational Schools. Two (2) TESDA Schools and six (6) privately operated Tech/Voc schools. Only the Academia de Technologia in Mindanao, Inc. is located in moderate susceptibility for flooding and tsunami.

Table SO-4. Tertiary and Vocational/ Technical Schools by Type and Total Enrollment, SY 2019

Name of School	Location (Brgy)	Area (sq.m)	Ownership	Total Enrollment		Hazard Susceptibility (H/M/L)							
				M	F	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Tertiary													
AMA Computer College	RH 10	464	Private	31	40	L							
Antonio R. Pacheco College, Inc.	RH 12	472.86	Private	207	344	M					M		
Coland Systems Technology, Inc.	RH 1	924	Private	684	826	L							
Cotabato City State Polytechnic College	Barangay RH 4	8860.31	Public	2,562	3,033	L							
Dela Vida College, Inc.	Pob. 4	476	Private	21	75	L							
Dr. P Ocampo Colleges, Inc.	RH 5	2439	Private	127	521	L							
Headstart College of Cotabato	Pob. 5	736	Private	933	299	L					M		
Jamiat Cotabato and Institute of Technology, Inc.	Tam. Mo.		Private	48	51			L					
Kutawato Darussalam College, Inc.	Bag. Mo.	10000	Private	15	28	H					M		
Mindanao Capitol College, Inc.	Pob. 6		Private	82	108	L							
Notre Dame Center for Catechesis	RH 3	196.219	Private	5	21	L							
Notre Dame Hospital and School of Midwifery	RH 9	19.999	Private	15	206	L							
Notre Dame University	RH 3	99,701	Private	868	1263	L							
ND-RVM College of Cotabato	RH 13	22,781	Private	135	242	L					M		
Shariff Kabunsuan College	Bag. 1	19,928	Private	30	87	H					M		
St. Benedict College of Cotabato	RH 9	2,627.93	Private	143	200	L							
STI College of Cotabato	Pob. 5	994.04	Private	553	538	M					M		
SKE College Inc. Madrasah	RH 6	624.93	Private			L							

Name of School	Location (Brgy)	Area (sq.m)	Ownership	Total Enrollment		Hazard Susceptibility (H/M/L)							
				M	F	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Voc./Tech.													
Idar Technical School	RH 11		Private			L							
Central Mindanao Computer School			Private										
Academia de Technologia in Mindanao, Inc.	Pob. 5	234.42	Private	35	16	M					M		
Menang Institue of Technology		746.22	Private										
Kutawato Institute of Technology Foundation Inc. (KITFI)	Pob. 8		Private										
Aviation Technology School of Cotabato	Bag. 3	391	Private										
TESDA	Pob. 3	123.82	Public										
TESDA XII	Pob. 6	715.09	Public									L	
Total	-		-	6,494	7,898								

Source: CHED ROXII

Notes:

Ownership –Public/Private
Indicate level of susceptibility for all hazards: High (H), Moderate (M), Low (L)
Types of hazards – Flood (Fl), Tropical Cyclone (Tc), Earthquake (Eq), Volcano (Vo), Landslide (Ln), Tsunami (Ts), Storm Surge (Su), Others (e.g. coastal erosion, sea level rise, land subsidence, liquefaction, strong wind, change in temperature, change in rainfall, etc.)

d. Historical Enrollment by Level for the Past Five School Years

Over the past five years, seven four percent (74%) learners in the formal system are enrolled in Public School, twenty five percent (25%) in Private School and one percent (1%) in State University College (SUC) / Local State University College (LUC). The public school system caters to seven-point three percent (7.3%) kinder learners, fourty six percent (46%) elementary learners, thirty three percent (33%) Junior High School learners, and thirteen point seven percent (13.7%) Senior High School Learners. Overall, there are slightly more females (51%) than male enrollees (49%).

Kindergarten enrollment is expected to stabilize from 5,208 for school year 2019-2020 to 5,313 entrants for school year 2020-2021 based on the data from the Early Registration conducted last February 2020. School year 2017-2018 up to school year 2019-2020, Kindergarten population has grown for the last three (3) years, where it reached its peak in school year 2018-2019 with a growth in population by a total of 68 learners or 1%.

Elementary enrollment (Grades 1 to 6) displays a decreasing trend for the past five (5) years, a decrease of 1,637 learners from SY2015-2016 to 2016-2017. Followed by a -0.8% in SY 2016-2017 to SY 2016-2017, a slight decline of -0.7% in SY 2017-2018 to SY 2018-2019 and the biggest gap was recorded between SY 2018-2019-SY 2019-2020 by -15.7%.

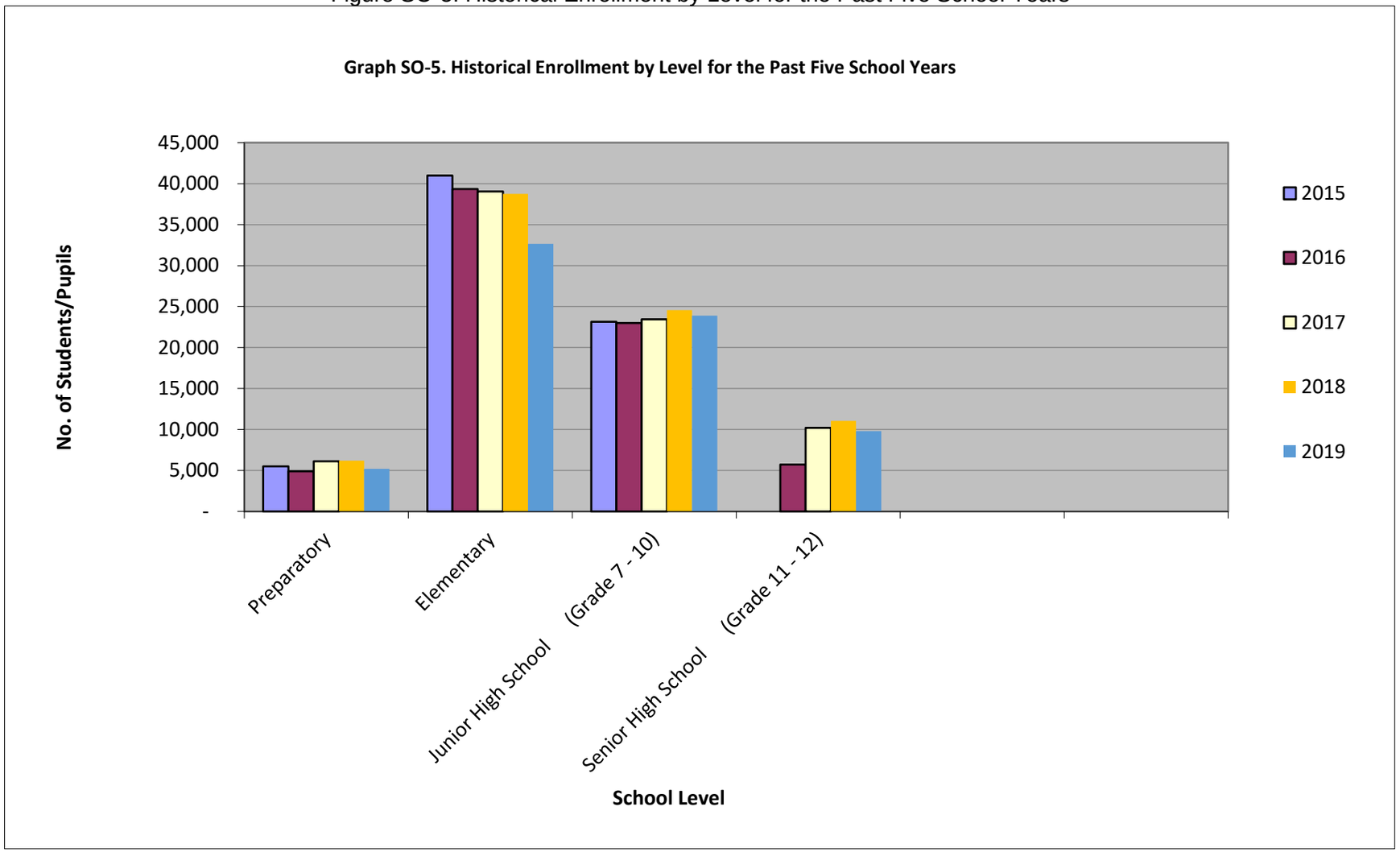
Junior High School population has grown from school year 2017-2018 to the present, where it reached its peak in school year 2018-2019 with an increase of 1,243 learners or five percent (5%) compared to the previous school year. Overall, the data show a fluctuating Junior High School enrollment trend for five school years.

Senior High School population displays an increasing trend in enrollment starting from school year 2016-2017 to the SY 2017-2018. However, a decrease of -11.3% is recorded in SY 2019-2020.

Table SO-5. Historical Enrollment by Level for the Past Five School Years

Level	2015			2016				2017				2018				2019			
	M	F	Total	M	F	Total	Increase/ Decrease (%)	M	F	Total	Increase/ Decrease (%)	M	F	Total	Increase/ Decrease (%)	M	F	Total	Increase/ Decrease (%)
Preparatory	2,854	2,639	5,493	2,541	2,377	4,918	10.4678682	3,167	2,959	6,126	24.6	3,129	3,065	6,194	1.1	2,648	2,560	5,208	-15.9
Elementary	20,782	20,194	40,976	20,020	19,319	39,339	-4.0	19,813	19,227	39,040	-0.8	19,679	19,073	38,752	-0.7	16,631	16,025	32,656	-15.7
Secondary																			
Junior High School (Grade 7 - 10)	10,944	12,195	23,139	10,683	12,316	22,999	-0.6	11,026	12,415	23,441	1.9	11,520	13,045	24,565	4.8	11,167	12,736	23,903	-2.7
Senior High School (Grade 11 - 12)	-	-	-	2,550	3,187	5,737	-	4,540	5,671	10,211	78.0	4,855	6,203	11,058	8.3	4,486	5,320	9,806	-11.3
TOTAL	34,580	35,028	69,608	35,794	37,199	72,993		38,546	40,272	78,818		39,183	41,386	80,569		34,932	36,641	71,573	

Figure SO-5. Historical Enrollment by Level for the Past Five School Years



e. Projected Classroom, Teacher Requirements in Public Schools by Level

Table SO-6 shows the projected classroom and teacher requirement in Public Schools from Year 2020 to 2030. For 2020, the city has a projected school going population in public school from Kindergarten to Grade 12 level of 123,639 learners. This is expected to increase to 148,659 by 2030. The standard ratio for students to classrooms used in the computation is 1:35. This is according to the recommendations of the "Class Size and Conditions Act" introduced by Senator Grace Poe which seeks to help alleviate the problem of oversized classes in the country. For 2020, the overall classroom requirement is 3,533. This is expected to increase to 4,247 in 2030.

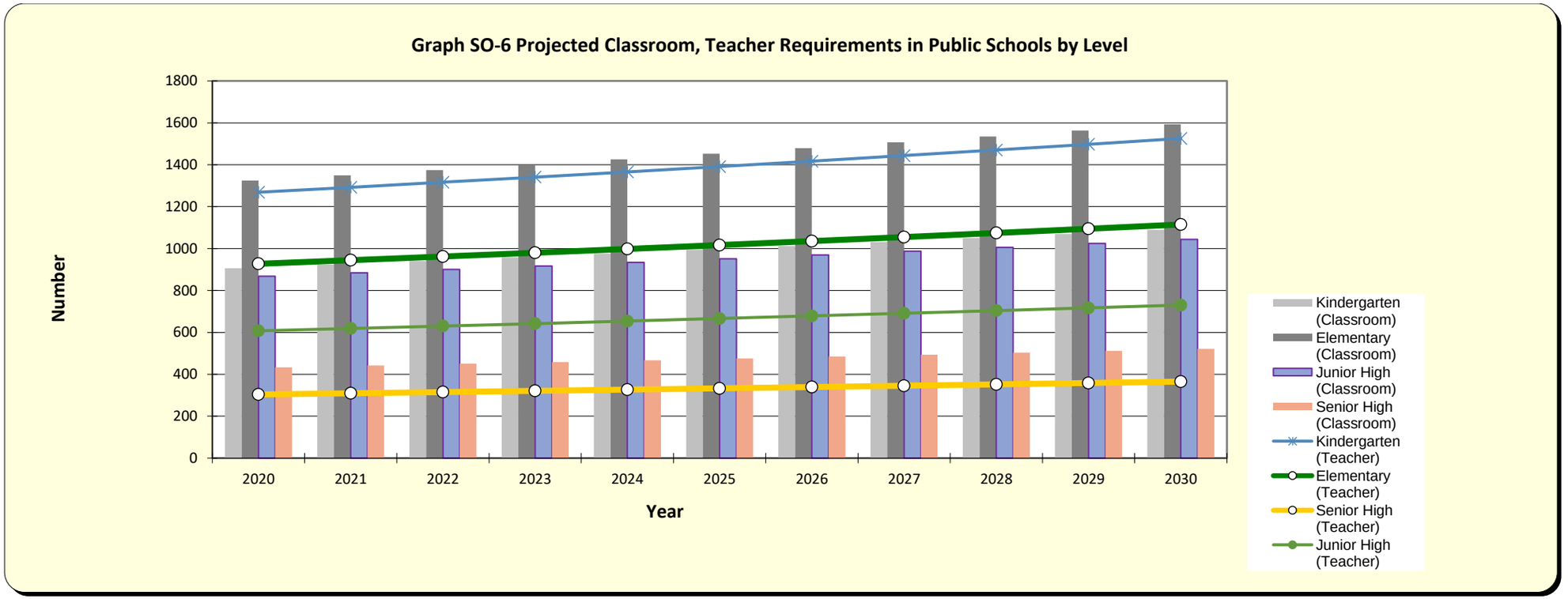
The standard teacher to pupil ratio for preschool children is 1 teacher to 25 pupils. For 2020, the required number of teachers for kindergarten is 1,269. This is expected to increase to 1,526 teachers by 2030. For the rest of the grade levels, the minimum requirement is 15 students per teacher and the maximum is 65 students per teacher. The ideal ratio is 50 students per teacher. For elementary grade level, the required number of teachers is 927 in 2020. This is expected to increase to 1,115 teachers by 2030. For Junior High, the required number of teachers in 2020 is 607. This is expected to increase to 730 teachers in 2030. For Senior High, the required number of teachers is 304. This is expected to increase to 365 teachers in 2030.

Table SO-6. Projected Classroom, Teacher Requirements in Public Schools by Level

Level	Planning Period										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Projected Enrollment	**123,639**	**125,938**	**128,281**	**130,667**	**133,097**	**135,573**	**138,094**	**140,663**	**143,279**	**145,944**	**148,659**
Kindergarten	31,720	32,310	32,911	33,523	34,147	34,782	35,429	36,088	36,759	37,443	38,139
Elementary	46,361	47,223	48,102	48,996	49,908	50,836	51,782	52,745	53,726	54,725	55,743
Junior High School	30,372	30,936	31,512	32,098	32,695	33,303	33,923	34,554	35,196	35,851	36,518
Senior High School	15,186	15,468	15,756	16,049	16,348	16,652	16,961	17,277	17,598	17,925	18,259
Classroom	**3,533**	**3,598**	**3,665**	**3,733**	**3,803**	**3,874**	**3,946**	**4,019**	**4,094**	**4,170**	**4,247**
Kindergarten	906	923	940	958	976	994	1,012	1,031	1,050	1,070	1,090
Elementary	1,325	1,349	1,374	1,400	1,426	1,452	1,479	1,507	1,535	1,564	1,593
Junior High School	868	884	900	917	934	952	969	987	1,006	1,024	1,043
Senior High School	434	442	450	459	467	476	485	494	503	512	522
Teacher	**3,107**	**3,165**	**3,224**	**3,284**	**3,345**	**3,407**	**3,470**	**3,535**	**3,601**	**3,668**	**3,736**
Kindergarten	1,269	1,292	1,316	1,341	1,366	1,391	1,417	1,444	1,470	1,498	1,526
Elementary	927	944	962	980	998	1,017	1,036	1,055	1,075	1,095	1,115
Junior High School	607	619	630	642	654	666	678	691	704	717	730
Senior High School	304	309	315	321	327	333	339	346	352	359	365

Note:

Refer to Demographic Study for the Projected School-Going Age Population (Table DE-17 of Demographic Study)



f. Historical Enrollment, Participation Rate for the Past Five Years

Table SO-7 shows the Historical Enrollment Participation Rate (EPR) or Net Enrollment Rate for the past five years. The enrollment participation rate is based on the total number of actual students who registered for enrollment in relation to the total expected school going population (5-18 years old) for a certain period.

The above table shows a fluctuating trend for the kindergarten level from 2014-2018. It implies that although the official school age starts at 5 years, there is still significant percentage of families sending their children to primary school at a later year, thus contributing to the decline of the EPR/NER. This is probably because some parents do not really feel comfortable sending their children to school at such age. Registering at 53.68% enrollment in 2014 and increasing in 2015 at 59.22% anda sudden drop in 2016 at only 43.53%. In 2017 registered the highest enrollment of 60.18% and slide down to 52.26% in 2018.

The Elementary level registered a participation rate of 67.68% in 2014 and decreased at 63.22% in 2015 and down by 61.51% in 2017 but gained enrollment in 2017 at 69.89% and a quite steady figure in 2018 at 69.16%.

The Junior High School shows a more stable trend of participation rate, recoding at 55.13% in 2014 to 55.72 in 2015, a gradual decrease in 2016 at 53.76 and regained the enrollment in 2017 at 64.66% to 69.49% in 2018. The first batch of senior high school is recorded only in 2017 registering an enrollment rate of 35.51%, and shows a n increasing trend of 45.01% in 2018 and 49.22% in 2018.

Table SO-7. Historical Enrollment Participation Rate for the Past Five Years

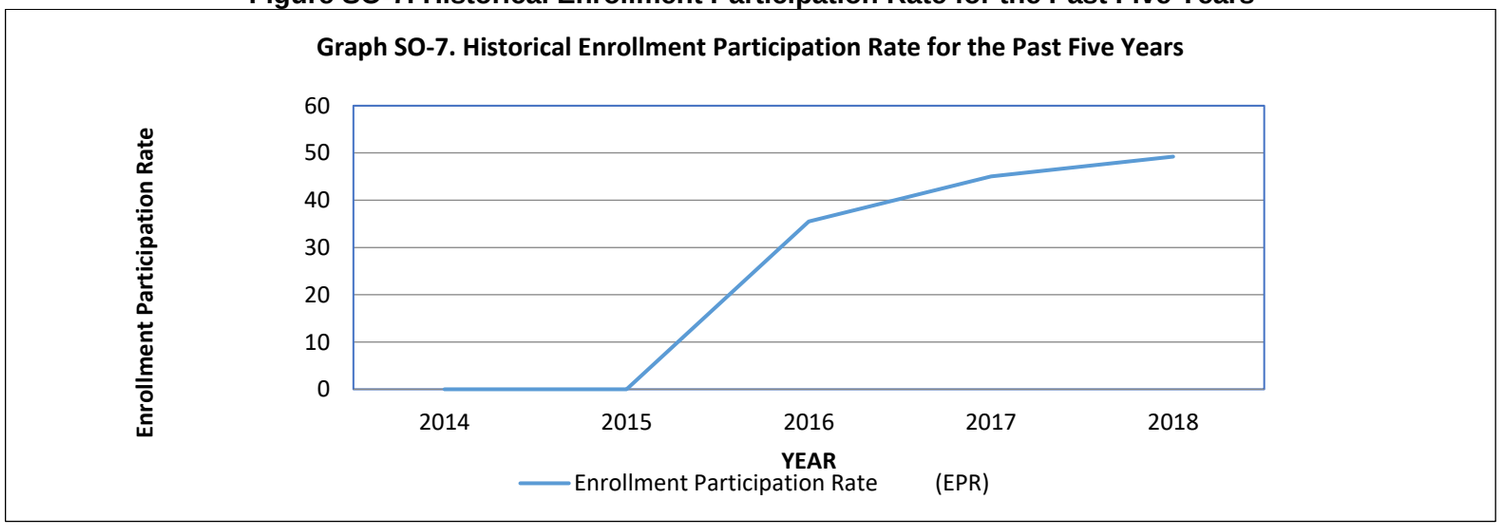
Year	Kindergarten	Elementary	Junior HS	Senior HS
2014	53.68	67.68	55.13	0
2015	59.22	63.22	55.72	0
2016	43.53	61.51	53.76	35.51
2017	60.18	69.89	64.66	45.01
2018	52.26	69.16	69.49	49.22

Source: District Office, DepEd

Note:

EPR = (No. of enrollees by level/school-going age population of relevant age level) x 100

Figure SO-7. Historical Enrollment Participation Rate for the Past Five Years



1.5.2.2 Health

a. General Heath Situation

Vital statistics on the health status of Cotabato City can be divided into the following: (1) Morbidity; (2) Mortality, and (3) Natality. Analysis on the upward or downward trend of these statistics is a significant detail for health program planning and interventions. Common causes of illness and death among all ages are identified to shed light to the proper health care systems improvement.

Morbidity

From 2015 to 2020 more or less half of these morbidities for all ages are lifestyle induced. Pneumonia reveals to be a great health issue since it remained the top 1 highest cause of morbidity in the city in the 5-year period. COVID 19 which is an emerging infectious disease had already climbed to top 3 and is still climbing higher in the present situation. Meanwhile, four of the most common deadly lifestyles diseases also make it to the top 10 causes of illness of the people namely hypertension, diabetes mellitus, heart disease and kidney diseases.

Crude Birth rate is derived by dividing live births (LB) to the baseline projected total population (TP) per 1,000 population. The table below shows the trend of CBR is increasing despite the decrease in population due to the adjustment brought about by the 2015 Census. Thus, by analogy it can be inferred that the decrease of the baseline total population in 2018 has shown little or no significant impact as the upward trend of birth rates per year has not been disturbed.

The 2015 Regional Social and Economic Trends (RSET) registered the Projected Total Fertility Rate of the city from 2000-2020 at 2.34% while the province is a little higher at 3.27%.

The Crude Death Rate of Cotabato City for 2019 is 3.65 which means that around 4 deaths occurred in the city every 1,000 population . This has increased from the previous figure of 3.18. Despite the rise, the Crude Death Rate (CDR) of Cotabato City is still lower than the national CDR of 5.6 or deaths per 1,000 population.

Tabel SO-10 shows the CDR computed by dividing the number of deaths to the baseline total population. The data show an increasing trend by 2015 to 2019. However, in 2018 there is a drop in the CDR because of the total adjustment made in the total Population which was based in the 2015 Census. It is also noteworthy to mention that despite the significant drop of population from 2017 to 2018, the difference between the two years is very minimal. Moreover, there is an observable slight increase in CDR from 2018 to 2019.

The number of deaths, for the past five (5) years, is generally higher among men compared to women. It is inferred that men’s illness are commonly attribute to lifestyle diseases. As generally observed, the male population tends to engage in external vices like smoking, drinking liquors and substance abuse. They are also more exposed to hard labour, like construction, chemical and machinery operation.

Data on the death of an infant (below one (1) year old) and children below 5 years old pose a significant aspect on the part of health program interventions. The national target is zero (0) death.

In 2019, the Infant Mortality Rate is 4.87 which means that there are around 5 deaths in the city for every 1,000 livebirths.

The table below shows that infant mortality and under five mortality rate is on an upward trend except for a significant decrease in 2018. This is attributed to the fact that the figures in 2018 only reflect those who are residents of the city. However, despite the decrease it is still the highest in Region XII. However, the infant mortality rate of Cotabato City reached the target set in the National Objectives for Health 2022 which is ≤15 deaths per 1,000 live births.

The 2018 RSET register only 1 maternal case for Cotabato City in 2015 and 3 cases in 2016, while no available data yet for 2017 to 2019. The region recorded 79 Maternal Mortality cases in 205 and 61 in 2016.

Table SO-10. General Health Situation for the Past Five Years

Health Indicator	City/Municipal										Provincial	
	2015		2016		2017		2018		2019		2015-2020	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Fertility												
Crude Birth Rates (CBR)	3,852	10.95	4,403	11.90	6,700	20.93	7,261	22.98	7,383	22.94		
Total Fertility Rate (TFR)		2.34		2.34		2.34		2.34		2.34		3.27
Morbidity												
General Medical												
Consultative Rate												
Hospitalization Rate												
Mortality												
Crude Death Rate (CDR)	861	2.45	1,028	2.77	1,186	3.70	1,045	3.31	1,176	3.65		
Proportioned Mortality Rate(PMR)												
Infant Mortality Rate(IMR)	25	6.49	30	6.81	139	20.75	35	4.82	30	4.87		
Young Child Mortality Rate(YCMR)	38	9.87	43	9.77	143	21.34	42	5.78	39	6.33		
Maternal Mortality Rate (MMR)	1		3								140	

Source: 2015 RSET

b. Medical Facilities in Cotabato Ctiy

The city is the center of Medical care and Services in Region XII and BARMM. We have the presence of medical field specialists. There are total of 5 hospitals in Cotabato City. Five (4) of them are privately owned and all primary level Hospitals. Only the Cotabato Regional Medical Center is a government run hospital. It is a Tertiary level and a Regional Center Health facility catering to Region XII and BARMM area. It has the most capacity to cater in-house

patients having 375 beds. The hospital with the least number of beds is Unified Doctors Hospital at 24 beds. Out of 5 hospitals, only CRMC disclosed its number of personnel. It has 143 doctors, 294 nurses, 144 midwives, and 397 other personnel.

The publicly owned medical health facilities include the Office on Health Services (OHS) Main Health Center and all the 37 barangays has their respective Barangay Health Stations except for Barangays RH 10, RH MB and Tam MB has extension Health Stations, hence having a total of 40 Barangays Health Centers.

The Office on Health Services has 3 doctors, 27 nurses, and 4 midwives. Each barangay health stations have one midwife each.

All of the facilities are operational. Four hospitals including the office on health services have low susceptibility to flood. Cotabato Peuriculture Center is moderately susceptible to flood. For the barangay health stations, 3 are very highly susceptible to flood, 9 are highly susceptible to flood. While 20 are lowly susceptible to flood.

There are 8 medical facilities said to be moderately susceptible to tsunami.

Note: Not included in the list:

- *EROS Medical Center*
- *Birthing Clinics (4)*
- *Check susceptibility of the OHS Main Center – Moderate to tsunami – verify to Ma'am Dada*

Table SO-11. Medical Health Facilities and Personnel, Year 2018

Name of Health Facility	Brgy.	Ownership	Capacity (No. of Beds)	No. of Personnel						Physical Condition	Hazard Susceptibility (H/M/L)							
				Doctors	Nurses	Midwives	Sanitary Inspectors	Others	Total		Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Hospital																		
Cotabato Regional and Medical Center	Rosary Heights 10	Public	375	143	294	144	0	397	978	Operational	L							
Notre Dame Hospital (Private)	Rosary Heights 9	Private	100							Operational	L							
Cotabato Medical Specialist	Rosary Heights 2	Private	45							Operational	L							
United Doctors Hospital	Rosary Heights 2	Private	24							Operational	L							
Cotabato Puericulture Center	Poblacion 6	Private	30							Operational	M							
Office on Health Services	Rosary Heights Mother	Public	N/A	3	27	4				Operational	L							
Barangay Health Stations:																		
1.) BHS 1	Bagua Mother	Public	N/A			1				Operational	H					M		
2) BHS 2	Bagua I	Public	N/A			1				Operational	H					M		
3) BHS 3	Bagua II	Public	N/A			1				Operational	H							
4) BHS 4	Bagua III	Public	N/A			1				Operational	L							
5) BHS 5	Kalanganan Mother	Public	N/A			1				Operational	H					M		
6.) BHS 6	Kalanganan I	Public	N/A			1				Operational	VH							
7) BHS 7	Kalanganan II	Public	N/A			1				Operational	H					M		
8) BHS 8	Poblacion Mother	Public	N/A			1				Operational	L							
9) BHS 9	Poblacion I	Public	N/A			1				Operational	VH							
10) BHS 10	Poblacion II	Public	N/A			1				Operational	L							
11.) BHS 11	Poblacion III	Public	N/A			1				Operational	L							
12) BHS 12	Poblacion IV	Public	N/A			1				Operational	L							
13) BHS 13	Poblacion V	Public	N/A			1				Operational	L					M		
14) BHS 14	Poblacion VI	Public	N/A			1				Operational	L					M		
15) BHS 15	Poblacion VII	Public	N/A			1				Operational	VH					M		
16.) BHS 16	Poblacion VIII	Public	N/A			1				Operational								
17) BHS 17	Poblacion IX	Public	N/A			1				Operational								

Name of Health Facility	Brgy.	Ownership	Capacity (No. of Beds)	Doctors	Nurses	Midwives	Sanitary Inspectors	Others	Total	Physical Condition	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
18) BHS 18	Rosary Heights Mother	Public	N/A			1				Operational	L							
19) BHS 19	Rosary Heights I	Public	N/A			1				Operational	L							
20) BHS 20	Rosary Heights II	Public	N/A			1				Operational	L							
21.) BHS 21	Rosary Heights III	Public	N/A			1				Operational	L							
22) BHS 22	Rosary Hneights IV	Public	N/A			1				Operational	L							
23) BHS 23	Rosary Heights V	Public	N/A			1				Operational	L							
24) BHS 24	Rosary Heights VI	Public	N/A			1				Operational	L							
25) BHS 25	Rosary Hneights VII	Public	N/A			1				Operational								
26.) BHS 26	Rosary Heights VIII	Public	N/A			1				Operational	L							
27) BHS 27	Rosary Heights IX	Public	N/A			1				Operational	L							
28) BHS 28	Rosary Heights X	Public	N/A			1				Operational	L							
29) BHS 29	Rosary Heights XI	Public	N/A			1				Operational	L							
30) BHS 30	Rosary Heights XII	Public	N/A			1				Operational								
31.) BHS 31	Rosary Heights XIII	Public	N/A			1				Operational	L							
32) BHS 32	Tamontaka Mother	Public	N/A			1				Operational	H					M		
33) BHS 33	Tamontaka I	Public	N/A			1				Operational								
34) BHS 34	Tamontaka II	Public	N/A			1				Operational	H							
35) BHS 35	Tamontaka III	Public	N/A			1				Operational								
36.) BHS 36	Tamontaka IV	Public	N/A			1				Operational	H							
37) BHS 37	Tamontaka V	Public	N/A			1				Operational								
38) BHS 38 RH10-B	Rosary Heights 10	Public	N/A			1				Operational	L							
39) BHS 39 RHMB - Ext	Rosary Heights Mother	Public	N/A			1				Operational	L							
40) BHS 40 TamMB EXT	Tamontaka Mother	Public	N/A			1				Operational	H							

Source: Office on Health Services

Notes:
Ownership – Public/Private
Physical Condition – Operational (O), Needs Repair (NR), Not Operational (NO)
Indicate level of susceptibility for all hazards: High (H), Moderate (M), Low (L)
Types of hazards – Flood (Fl), Tropical Cyclone (Tc), Earthquake (Eq), Volcano (Vo), Landslide (Ln), Tsunami (Ts), Storm Surge (Su), Others (e.g. coastal erosion, sea level rise, land subsidence, liquefaction, strong wind, change in temperature, change in rainfall, etc.)

c. Ten Leading Causes of Morbidity and Mortality for the Past Five Years

In the past 5 years, the top-ranking causes to morbidity is Pneumonia, followed by gastroenteritis, followed by hypertension, followed by pulmonary TB and UTI in a constant same order. While from Rank 6 to 10 namely Heart Disease, Diabetes Mellitus, Bronchial Asthma, Malnutrition and measles with only a minor change in terms of order.

Table SO-12. Ten Leading Causes of Morbidity for the Past Five Years

Causes	MORBIDITY				
	2014	2015	2016	2017	2018
1.PNEUMONIA	3051	2982	3267	2619	3377
2. GASTROENTERITIS	2483	1980	1625	1391	1568
3. HYPERTENSION	2123	1870	1625	1391	1568
4. PTB	706	1217	704	979	1149
5. UTI	559	521	525	469	765
6. HEART DISEASE	506	307	205	193	197
7. DIABETIS MELLITUS	322	300	358	286	466
8. BRONCHIAL ASTHMA	259	193	181	143	159
9. MALNUTRITION	193	337	161	61	33
10. MEASLES	193	21	2	5	245
TOTAL	10,395	9,728	8,653	7,537	9,527

Source:Office on Health Services

Table SO-13. Ten Leading Causes of Mortality for the Past Five Years

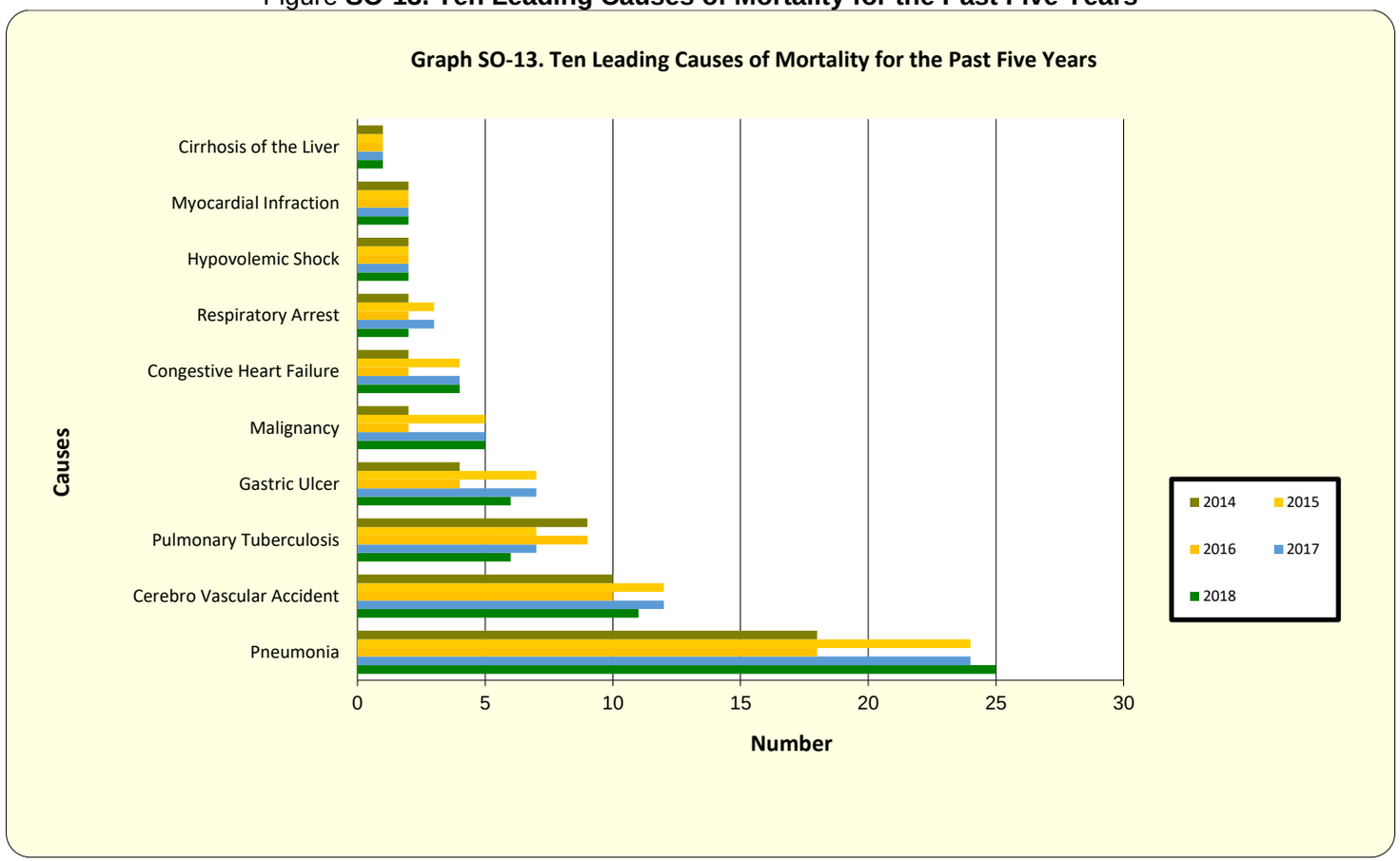
Causes	City																			
	2014				2015				2016				2017				2018			
	M	F	Total	%	M	F	Total	%	M	F	Total	%	M	F	Total	%	M	F	Total	%
Pneumonia	10	8	18	34.6	10	14	24	35.8	10	8	18	34.6	10	14	24	35.8	15	10	25	39.1
Cerebro Vascular Accident	6	4	10	19.2	8	4	12	17.9	6	4	10	19.2	8	4	12	17.9	6	5	11	17.2
Pulmonary Tuberculosis	8	1	9	17.3	3	4	7	10.4	8	1	9	17.3	3	4	7	10.4	2	4	6	9.4
Gastric Ulcer	1	3	4	7.7	4	3	7	10.4	1	3	4	7.7	4	3	7	10.4	3	3	6	9.4
Malignancy	0	2	2	3.8	1	4	5	7.5	0	2	2	3.8	1	4	5	7.5	2	3	5	7.8
Congestive Heart Failure	2	0	2	3.8	2	2	4	6.0	2	0	2	3.8	2	2	4	6.0	3	1	4	6.3
Respiratory Arrest	2	0	2	3.8	1	2	3	4.5	2	0	2	3.8	1	2	3	4.5	2	0	2	3.1
Hypovolemic Shock	0	2	2	3.8	1	1	2	3.0	0	2	2	3.8	1	1	2	3.0	2	0	2	3.1
Myocardial Infraction	1	1	2	3.8	2	0	2	3.0	1	1	2	3.8	2	0	2	3.0	2	0	2	3.1
Cirrhosis of the Liver	1	0	1	1.9	1	0	1	1.5	1	0	1	1.9	1	0	1	1.5	0	1	1	1.6
TOTAL			52				67				52				67				64	

Source: Office of Health Services

Note:

% = (Total per cause/Overall total) x 100
Tabulate data for at least 3 consecutive years if data for the last 5 years is not available

Figure **SO-13. Ten Leading Causes of Mortality for the Past Five Years**



d. Malnutrition Situation

The Table SO-14 shows the Malnutrition situation of Cotabato City for the past 5 years from the period 2014-2018 where the City registered as the highest prevalence rate in the region in 2018 at 11. 50% while the region at only 3.41%. The Normal, Underweight and severely underweight children display a down trend from 2014 to 2016 but start to go up in 2017 to 2018, while the over-weight shows a fluctuation trend.

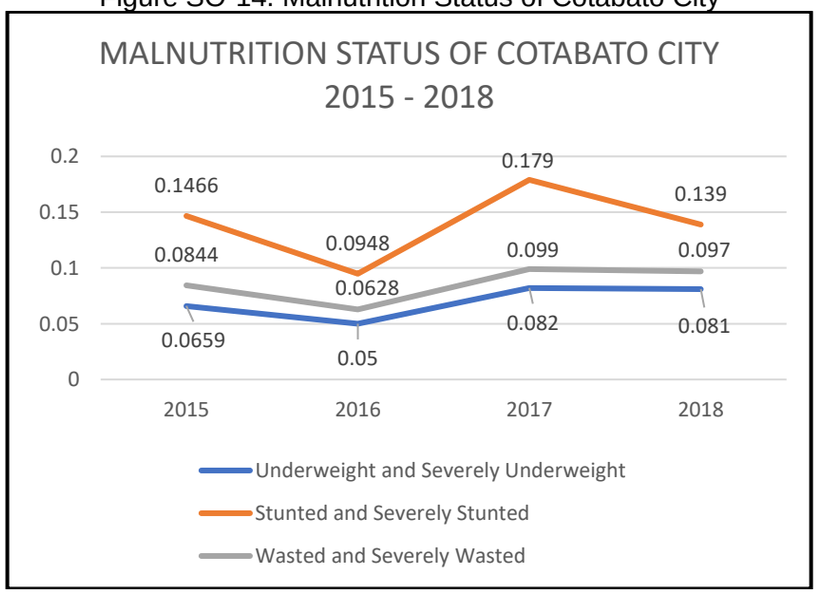
Table SO-14. Malnourished Children for the Past Five Years

Degree of Malnutrition	COTABATO CITY					2018 Prevalence Rate	
	2014	2015	2016	2017	2018	City	Region XII
	#	#	#	#	#		
Normal	19,322	16,871	14,438	11,098	9,214	11.50	3.41
Underweight	1,223	889	885	762	899		
Severely Underweight	569	332	217	249	445		
Over-weight	533	425	592	503	690		

Source: 2019 RSET, PSA

Notes: % = (No. per degree of malnutrition/Total no. of children) x 100

Figure SO-14. Malnutrition Status of Cotabato City



e. Cemeteries / Memorial Parks

Presently Cotabato City has only one available public cemetery which is the Malagapas Cemetery with an area of 1.5 hectare, partitioned in the following - 1 ha. for Christian and .5ha. for Muslim. The old public cemetery located along Ramon Rabago Street, Barangay Rosary Heights Mother is already at its full capacity and cannot anymore accomodate burials.

The Malagapas Cemetery should cater to all who like their dead/decease family buried there. However, it has been observed that most of those who bury their dead/deceased are those who cannot afford the cost of a private memorial park. This maybe because of the implication that it was a former dumpsite and the location is water logged during the rainy season.

The Local Government is on its way to establish apartment type niches at the Malagapas Cemetery to address the above-mentioned water-logged problem and provide a more comfortable feel of the living relatives. It intends to strategically enclose the area to maximize the use of available space of the cemetery. At least 300 units of apartment type cemetery niches is viable and targeting to complete 150 units by 2021 and the other 150 units by 2022.

For future requirement, the city is identifying another site for public cemetery for both Muslim and Christian at Barangay Poblacion 8.

Table SO-15. Cemeteries and Memorial Parks, Year 2018

Name of Cemetery/ Memorial Park	Brgy.	Ownership	Area (ha)	Capacity (No. of Plots)	Remarks
Malagapas Cemetery	RH 10	City Government	1.5 has	101 plots	Public
Muslim Cemetery, Malagapas, RH 10	RH 10	City Government			Public
Public Cemetery	RH Mother Barangay	City Government	1 has.	3855 plots	Public
Catholic Cemetery	RH 1	Private	1.44 has	4,322 plots	Catholic
Chinese Cemetery	RH IV	Private	1.53 has	3,920 plots	Chinese

Source: CENRO 2019

Notes:

Ownership – Public/Private

Remarks may include other characteristics of the cemetery: for example, if the cemetery is only for Catholics, Muslim, etc.

f. Occupied Housing Units by Type of Toilet Facilities

Table SO-16 is derived from the CBMS survey conducted in 2017-20218 for the household type of toilet facilities. The team currently covers about 80-90% of the entire household population. Out of the total 51,435 household surveyed 49,438 household have sanitary toilet facility or 96%, while a total of 2,000 household have unsanitary toilet facilities or 3.8% of the total household surveyed.

Table SO-16. Number of Households in Occupied Housing Units by Type of Toilet Facilities, Year 2018

Barangay	Type of Toilet Facility (No.)							
	Sanitary				Unsanitary			
	Own Flush	Shared Flush	Closed Pit Latrine	TOTAL	Open Pit Latrine	Drop/ Overhang	No Facility/ Field	TOTAL
Bagua MB	1,779	564.00	175	2,518	50	-	21	71
Kalanganan MB	1,680	602	319	2,601	115	-	144	259
Poblacion MB	2,014	547	311	2,872	38		20	58
Rosary Heights MB	1,515	400	171	2,086	8		2	10
Tamontaka MB	1,459	594	247	2,300	79		29	108
Bagua 1	926	284	144	1,354	13		97	110
Bagua 2	2,043	557	306	2,906	56		9	65
Bagua 3	1,041	418	87	1,546	6		13	19
Kal. 1	369	141	138	648	81		17	98
Kal. 2	508	199	230	937	147		41	188
Poblacion 1	572	194	86	852	89		11	100
Poblacion 2	717	247	106	1,070	28		3	31
Poblacion 3	408	155	48	611	9		4	13
Poblacion 4	623	248	62	933	1		1	2
Poblacion 5	386	215	9	610	2		-	2
Poblacion 6	312	169	45	526	9		2	11
Poblacion 7	1,730	591	323	2,644	119		84	203
Poblacion 8	834	348	156	1,338	25		19	44
Poblacion 9	488	154	80	722	13		1	14
RH 1	782	200	46	1,028	11		-	11
RH 2	772	224	60	1,056	1		1	2
RH 3	1,465	468	367	2,300	29		21	50
RH 4	658	166	58	882	10		-	10
RH 5	909	259	117	1,285	3		1	4
RH 6	741	167	190	1,098	1		-	1
RH 7	1,124	369	118	1,611	33		3	36

Barangay	Type of Toilet Facility (No.)							
	Sanitary				Unsanitary			
	Own Flush	Shared Flush	Closed Pit Latrine	TOTAL	Open Pit Latrine	Drop/ Overhang	No Facility/ Field	TOTAL
RH 8	1,064	284	74	1,422	6		2	8
RH 9	1,040	344	110	1,494	11		11	22
RH 10	1,751	770	340	2,861	30		43	73
RH 11	927	148	115	1,190	4		4	8
RH 12	537	97	49	683	2		-	2
RH 13	530	232	59	821	1		-	1
Tam. 1	486	84	51	621	7		2	9
Tam. 2	265	180	35	480	62		35	97
Tam. 3	187	124	447	758	25		22	47
Tam. 4	407	72	41	520	188		1	189
Tam. 5	133	51	67	251	24	-	-	24
TOTAL	33,182	10,866.00	5,387	49,435	1,336	-	664	2,000

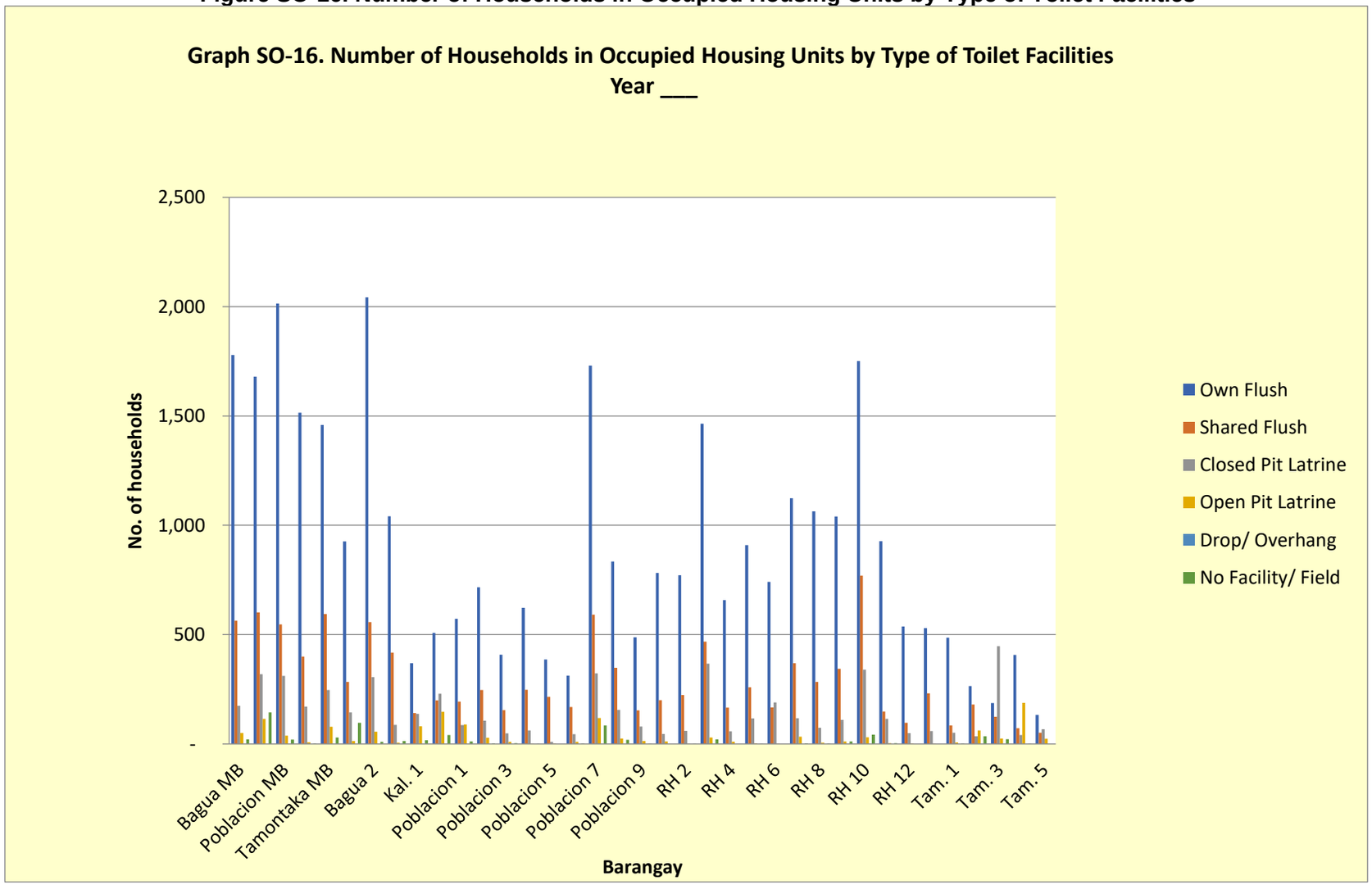
Source: CPDO-CBMS 2017

Notes:

Type of Toilet Facility

1. *Own flush – refers to water-sealed type of toilet facility leading to a depository, and is used exclusively by a household*
2. *Shared flush – same as own flush but shared with other households*
3. *Closed Pit Latrine – toilet facility without water-sealed bowl and box for sitting/squatting. The depository is usually made of tubes with concrete/clay covered top with a small opening.*
4. *Open Pit Latrine – same as closed pit but without covering*
5. *Drop/Overhang – can be a pail system wherein fecal matter is contained in a pail and is picked up for disposal, or any other type of toilet facility not belonging to the earlier types*
6. *No facility/field – refers to households without toilet facility*

Figure SO-16. Number of Households in Occupied Housing Units by Type of Toilet Facilities



g. Projected Requirements for Barangay Health Facilities, Year 2020-2030

Presently the city has a total of 40 Barangay Health Stations and 1 Main Health Center.The standard requirement is to have 1 barangay health station per 5,000 population. Basing on the projected population at an average annual growth rate of 1.86% the city will have a population of 338,345 by 2020 and the needed health facility shall be 68 BHS. On 2021 the population will be 334,452 and the needed requirement shall be 69 BHS, an additional 1 unit of Barangay Health Station from 2020 to year 2023. There shall be a total of 73 public health facility by year 2024 and additional of 1 unit per year from 2025 to 2030 with an estimated population of 394,791. The population also require an additional Main Health Centers to distribute quality universal health services to the populace..

Table SO- 17. Projected Requirements for Barangay Health Facilities, Year 2020-2030

Barangay	No. of Barangay Health Station*																			
	2020		2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need
Bag MB	19,888	4	20,258	4	20,635	4	21,019	4	21,409	4	21,808	4	22,213	4	22,626	5	23,047	5	23,476	5	23,913	5
Bag. I	10,095	2	10,283	2	10,474	2	10,669	2	10,867	2	11,069	2	11,275	2	11,485	2	11,699	2	11,916	2	12,138	2
Bag 2	21,624	4	22,026	4	22,436	4	22,853	5	23,278	5	23,711	5	24,152	5	24,602	5	25,059	5	25,525	5	26,000	5
Bag. 3	7,508	2	7,648	2	7,790	2	7,935	2	8,082	2	8,233	2	8,386	2	8,542	2	8,701	2	8,863	2	9,027	2
Kal MB	16,469	3	16,775	3	17,087	3	17,405	3	17,729	4	18,059	4	18,395	4	18,737	4	19,085	4	19,440	4	19,802	4
Kal I	6,369	1	6,487	1	6,608	1	6,731	1	6,856	1	6,984	1	7,114	1	7,246	1	7,381	1	7,518	2	7,658	2
Kal 2	6,578	1	6,700	1	6,825	1	6,952	1	7,081	1	7,213	1	7,347	1	7,484	1	7,623	2	7,765	2	7,909	2
Pob MB	22,735	5	23,158	5	23,589	5	24,027	5	24,474	5	24,929	5	25,393	5	25,865	5	26,347	5	26,837	5	27,336	5
Pob 1	6,225	1	6,341	1	6,459	1	6,579	1	6,701	1	6,826	1	6,953	1	7,082	1	7,214	1	7,348	1	7,485	1
Pob 2	6,910	1	7,039	1	7,169	1	7,303	1	7,439	1	7,577	2	7,718	2	7,861	2	8,008	2	8,157	2	8,308	2
Pob 3	3,273	1	3,334	1	3,396	1	3,459	1	3,523	1	3,589	1	3,656	1	3,724	1	3,793	1	3,863	1	3,935	1
Pob 4	7,079	1	7,211	1	7,345	1	7,481	1	7,621	2	7,762	2	7,907	2	8,054	2	8,204	2	8,356	2	8,512	2
Pob 5	3,366	1	3,429	1	3,492	1	3,557	1	3,624	1	3,691	1	3,760	1	3,829	1	3,901	1	3,973	1	4,047	1
Pob 6	5,648	1	5,753	1	5,860	1	5,969	1	6,080	1	6,193	1	6,308	1	6,426	1	6,545	1	6,667	1	6,791	1
Pob 7	17,229	3	17,549	4	17,876	4	18,208	4	18,547	4	18,892	4	19,243	4	19,601	4	19,966	4	20,337	4	20,716	4
Pob 8	9,634	2	9,813	2	9,996	2	10,182	2	10,371	2	10,564	2	10,760	2	10,961	2	11,164	2	11,372	2	11,584	2
Pob 9	6,577	1	6,699	1	6,824	1	6,951	1	7,080	1	7,212	1	7,346	1	7,483	1	7,622	2	7,764	2	7,908	2
RH MB	15,289	3	15,573	3	15,863	3	16,158	3	16,459	3	16,765	3	17,077	3	17,394	3	17,718	4	18,047	4	18,383	4
RH 1	4,310	1	4,390	1	4,472	1	4,555	1	4,640	1	4,726	1	4,814	1	4,903	1	4,995	1	5,088	1	5,182	1
RH 2	5,489	1	5,591	1	5,695	1	5,801	1	5,909	1	6,019	1	6,131	1	6,245	1	6,361	1	6,479	1	6,600	1
RH 3	11,827	2	12,047	2	12,271	2	12,499	2	12,732	3	12,969	3	13,210	3	13,456	3	13,706	3	13,961	3	14,220	3
RH 4	4,800	1	4,889	1	4,980	1	5,073	1	5,167	1	5,263	1	5,361	1	5,461	1	5,563	1	5,666	1	5,771	1
RH 5	6,437	1	6,557	1	6,679	1	6,803	1	6,929	1	7,058	1	7,190	1	7,323	1	7,460	1	7,598	2	7,740	2

Barangay	No. of Barangay Health Station*																			
	2020		2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need	BHS Need	Proj. Pop.	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need	Proj. Pop.	BHS Need
RH 6	7,507	2	7,647	2	7,789	2	7,934	2	8,081	2	8,232	2	8,385	2	8,541	2	8,700	2	8,861	2	9,026	2
RH 7	10,151	2	10,340	2	10,532	2	10,728	2	10,928	2	11,131	2	11,338	2	11,549	2	11,764	2	11,982	2	12,205	2
RH 8	9,347	2	9,521	2	9,698	2	9,878	2	10,062	2	10,249	2	10,440	2	10,634	2	10,832	2	11,033	2	11,239	2
RH 9	8,555	2	8,714	2	8,876	2	9,041	2	9,209	2	9,381	2	9,555	2	9,733	2	9,914	2	10,098	2	10,286	2
RH 10	17,251	3	17,572	4	17,899	4	18,232	4	18,571	4	18,916	4	19,268	4	19,626	4	19,991	4	20,363	4	20,742	4
RH 11	8,623	2	8,783	2	8,947	2	9,113	2	9,283	2	9,455	2	9,631	2	9,810	2	9,993	2	10,179	2	10,368	2
RH 12	5,114	1	5,209	1	5,306	1	5,405	1	5,505	1	5,608	1	5,712	1	5,818	1	5,926	1	6,037	1	6,149	1
RH 13	5,425	1	5,526	1	5,629	1	5,733	1	5,840	1	5,949	1	6,059	1	6,172	1	6,287	1	6,404	1	6,523	1
Tam MB	13,188	3	13,433	3	13,683	3	13,938	3	14,197	3	14,461	3	14,730	3	15,004	3	15,283	3	15,567	3	15,857	3
Tam 1	4,850	1	4,940	1	5,032	1	5,126	1	5,221	1	5,318	1	5,417	1	5,518	1	5,620	1	5,725	1	5,831	1
Tam 2	4,588	1	4,673	1	4,760	1	4,849	1	4,939	1	5,031	1	5,124	1	5,220	1	5,317	1	5,416	1	5,516	1
Tam 3	2,994	1	3,050	1	3,106	1	3,164	1	3,223	1	3,283	1	3,344	1	3,406	1	3,470	1	3,534	1	3,600	1
Tam 4	4,102	1	4,178	1	4,256	1	4,335	1	4,416	1	4,498	1	4,582	1	4,667	1	4,754	1	4,842	1	4,932	1
Tam 5	1,291	1	1,315	1	1,339	1	1,364	1	1,390	1	1,416	1	1,442	1	1,469	1	1,496	1	1,524	1	1,552	1
Total	328,345	68	334,452	69	340,673	70	347,010	71	353,464	73	360,038	74	366,735	75	373,556	76	380,504	78	387,582	79	394,791	80

Note:

**Computed based on ratio of 1 Barangay Health Station per 5,000 population and using the projected population in demographic study.*

1.5.2.3 HOUSING

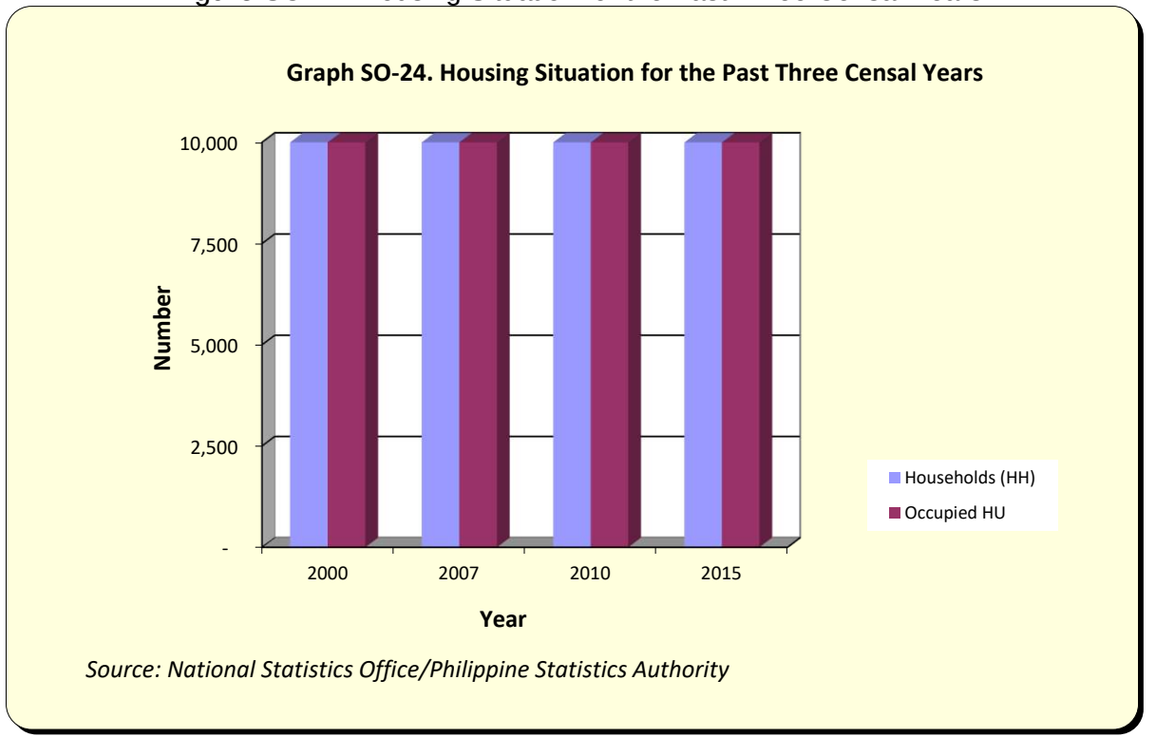
a. Housing Situation for the Past Three Censal Years

The table below shows the housing situation for the past three censal years. From 2000 to 2015, there has been an increase in number of households. However, the percentile rate at which households have been increasing for the past 15 years has mellowed down to 6.70%. For the household population, housing units, and occupied housing units, there have been fluctuations in the rate of increase for the past three censal years. Ratio of HH to Occupied HU in 2000 is 0.18 which decreased in 2007 to 0.17. Then it increased in 2010 to 0.19 and increased again in 2015 to 0.41. Ratio of HH Population to Occupied HU in 2000 is 5.42 which increased in 2007 to 5.81. Then, in 2010, it decreased to 5.36 which further decreased in 2015 to 2.42.

Table SO-24. Housing Situation for the Past Three Censal Years

	2000 No.	2007 No.	2010 No.	2015 No.
Households (HH)	31,227	45,403	55,171	58866
Household Population	161,517	257,821	271,609	298,223
Housing Units (HU)	29,794	44,411	50,645	123,260
Occupied HU	29,794	44,411	50,645	123,260
Vacant HU	-	0	0	0
Ratio of HH to Occupied HU	0.18	0.17	0.19	0.41
Ratio of HH Population to Occupied HU	5.42	5.81	5.36	2.42

Figure SO-24. Housing Situation for the Past Three Censal Years



Source: National Statistics Office/Philippine Statistics Authority

b. Housing Backlog

The table below shows the backlog trend from 2000 to 2015. The Doubled – Up Households have fluctuating rate from 0.6 to 0.89. Unacceptable Housing Units have a rising rate from 0.01 to 0.10. Makeshift / Salvage/ Improvised HU have a decreasing rate from 0.007 to 0. Others have a decreasing rate from 0.37 to 0.

Table SO-25. Housing Backlog, Year 2018

Backlog	2000		2007		2010		2015	
	No.	%	No.	%	No.	%	No.	%
Doubled – Up Households	1433	0.6046414	992	0.54	4526	0.97	2879	0.89
Unacceptable Housing Units	39	0.0164557	15	0.01	53	0.01	335	0.10
Makeshift / Salvage/ Improvised HU	18	0.0075949	2	0.001	63	0.0135	2	0.00
Others	880	0.37	821	0.45	8	0.00	11	0.00
Total Backlog	2370		1830		4650		3227	

Source: RSET 2015 and 2018, PSA

Notes:

Backlog:

1. *Doubled – Up (DUHH) = No. of Households (HH) – No. of Housing Units (HU)*
2. *Unacceptable Housing Units = 5% of HU made of mixed materials*
3. *Mixed Materials = HU with walls and roof made of wood, cogon/Nipa/ Anahaw, asbestos and others (NSO data on Occupied HU by construction materials*
4. *Makeshift / Salvage / Improvised HU (per NSO data)*

c. Informal Settlement Areas, 2018

The preceding table shows the list of informal settlers from the year 2018. There are four: Cynthia Village Phase 1, Sulog Urban Poor, Cynthia Village Phase 2 and Malagapas Resettlement Project. Cynthia Village Phase 1 in Tamontaka 1, has the largest area at 3.80 hectares. All are in the residential zoning classification. Sulog Urban Poor has the greatest number of households at 500. Cynthia Village Phase 1, located in Tamontaka 1, and Malapas Resettlement, located in RH 11, are both complete in utilities.

Table SO-26. Informal Settlement Areas, Year 2018

Brgy.	Name of Settlement (if applicable)	Area (ha)	Land Ownership	Zoning Classification	Pro-gram/s	Age ncy	No. of House-holds	Population			Settlers Origin	Year Occupied	Utilities Present (Y/N)						Hazard Susceptibility (H/M/L)							
								M	F	Total			W	P	S	T	C	others	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Tamontaka 2	Cynthia Village Phase 1	3.80	private	Residential	Housing	LGU	259			-	City	2018	Y	Y	Y	Y	Y									
Tamontaka 2	Cynthia Village Phase 2	1.6	private	Residential	Housing	LGU	187						Y	Y	Y	Y	Y									
Kalanganan 2	Sulog Urban Poor	5	private	Residential	Housing	LGU	500				City				Y	Y			H				L		M	
Kalanganan 2	Mamalo Urban Poor	0.30	private	Residential	Housing	LGU	21								Y	Y			H				L		M	
RH 11	Malagapas Resettlement Project	3.1	public	Residential	Housing	LGU	312				City	2002	Y	Y	Y	Y	Y		L							

Source: City Planning and Development Office, Shelter Planning and Development Division

Table 9 Households Who Are Informal Settlers By Barangay

Barangay	Population	NUMBER OF HOUSEHOLDS	HOUSEHOLDS WHO ARE SQUATTERS	
Bagua	18,137	3,627	436	2.4%
Kalanganan	15,019	3,004	393	2.6%
Poblacion	20,734	4,147	300	1.4%
Rosary Heights	13,943	2,789	265	1.9%
Tamontaka	12,027	2,405	352	2.9%
Bagua I	9,206	1,841	194	2.1%
Bagua II	19,720	3,944	218	1.1%
Bagua III	6,847	1,369	104	1.5%
Kalanganan I	5,808	1,162	79	1.4%
Kalanganan II	5,999	1,200	146	2.4%
Poblacion I	5,677	1,135	146	2.6%
Poblacion II	6,302	1,260	171	2.7%
Poblacion III	2,985	597	50	1.7%
Poblacion IV	6,456	1,291	94	1.5%
Poblacion V	3,070	614	73	2.4%
Poblacion VI	5,151	1,030	72	1.4%
Poblacion VII	15,712	3,142	628	4.0%
Poblacion VIII	8,786	1,757	180	2.0%
Poblacion IX	5,998	1,200	99	1.7%
Rosary Heights I	3,931	786	86	2.2%
Rosary Heights II	5,006	1,001	152	3.0%
Rosary Heights III	10,786	2,157	402	3.7%
Rosary Heights IV	4,377	875	61	1.4%
Rosary Heights V	5,870	1,174	105	1.8%
Rosary Heights VI	6,846	1,369	59	0.9%
Rosary Heights VII	9,257	1,851	200	2.2%
Rosary Heights VIII	8,524	1,705	122	1.4%
Rosary Heights IX	7,802	1,560	154	2.0%
Rosary Heights X	15,732	3,146	509	3.2%
Rosary Heights XI	7,864	1,573	74	0.9%
Rosary Heights XII	4,664	933	57	1.2%
Rosary Heights XIII	4,947	989	67	1.4%
Tamontaka I	4,423	885	69	1.6%
Tamontaka II	4,184	837	105	2.5%
Tamontaka III	2,730	546	58	2.1%
Tamontaka IV	3,741	748	212	5.7%
Tamontaka V	1,177	235	11	0.9%
TOTAL	299,438	59,888	6,503	10.9%

Source: CBMS Census 2017

*Households living in public places; with rented/owned house or lot, or rent-free house or lot without consent of the owner over total number of households

**Number of households living in public places; with rented/owned house or lot, or rent-free house or lot without consent of the owner over total number of households

d. Inventory of Residential Subdivisions

The table below shows the 31 subdivisions categorized to social housing. The remaining two subdivisions are categorized to economic housing. Among them, Notre Dame Village has the largest area at 20.79 hectares with 421 housing units/lots. However, Ville de Reve has more housing units at 530 while only having an area of 11.23 hectares. Many of the subdivisions are classified as flood prone areas.

Table SO-27. Inventory of Residential Subdivisions, Year 2018

Name of Subdivision/ Condominium	Type	Barangay	Area (ha)	No. of Lots/ Units	Hazard Susceptibility (H/M/L)							
					Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
1. AL-HUDA	Socialized Housing	RH-3	0.25	50								
2. Bliss Housing	Socialized Housing	RH 8	4.19	54	H							
3. Brgy. Pag-asa HOA	Socialized Housing	RH6	1.22	80								
4. CYNTHIA Village Phase 1 (Jaskat)	Socialized Housing	Tam 2	3.80	358	H							
5. CYNTHIA Village Phase 2	Socialized Housing	Tam 2	1.60	187								
6. Concerned Riverside	Socialized Housing	RH 10	2.02	99	L							
7. Dapdap Urban Poor	Socialized Housing	RH 2	0.96	65	L							
8. Fed. Of Women in Coop.	Socialized Housing	Tam. MB	3.40	85	H							
9. Federville	Socialized Housing	RH 11	8.60	495	L							
10. Happy Homes	Economic Housing	RH 10	0.67	55	L							
11. Immaculada Concepcion	Socialized Housing	RH 2	0.31	65	L							
12. Libra HOA	Socialized Housing	RH2	0.61	72								
13. Mamalo HOA	Socialized Housing	Kal. 2	0.30	30	H				L		M	
14. Manuel Tan Subdivison	Socialized Housing	RH 7	3.34	143	L							
15. Mentor's Village	Socialized Housing	RH 11	3.99	406	L							
16. NAKABASIL HOA	Socialized Housing	RH3	0.32	40								
17. ND Village	Socialized Housing	RH 8	20.79	421	L							
18. Pagbabago HOA	Socialized Housing	MBRH	0.46	73								
19. Peñafrancia Village	Socialized Housing	RH 11	6.49	571	L							
20. Purok Maunawain	Socialized Housing	RH MB	1.00	75	L							
21. Purok Sibuyan HOA	Socialized Housing	MBRH	0.55	87								
22. Purveyors	Socialized Housing	RH 11	7.48	322	L							
23. SAMAKA HOA	Socialized Housing	MB Poblacion	0.64	138								
24. San Pablo Village	Socialized Housing	RH 11	6.27	381	L							
25. Sigla HOA	Socialized Housing	Tam-1	6.80	356								
26. Sto. Niño Urban Poor	Socialized Housing	RH 2	0.58	25	L							
27. Sulog Housing Project	Socialized Housing	Kal. 2	5.00	257	H				L		M	

Name of Subdivision/ Condominium	Type	Barangay	Area (ha)	No. of Lots/ Units	**Hazard Susceptibility (H/M/L)**							
					Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
28. Tanghal Subdivision	Socialized Housing	Bagua 2	10.76	453	H	for validation						
29. Umpungan sa Al-Hidaya Urban Poor	Socialized Housing	Pob 2	0.30	54	M							
30. United Muslim Christian HOA	Socialized Housing	RH12	0.65	66								
31. Virgo Urban Poor	Socialized Housing	RH 9	6.89	414	L							
32. United Urban Poor	Socialized Housing	RH 11	1.98	113	L							
33. Ville de Reve	Economic Housing	Tamontaka 1	11.23	530	H							
			20.10	1,057.00								

Source: Local Shelter Plan 2012-2020

e. Resettlement Areas

The table below shows the inventory of resettlement areas. There are ten areas available. Cynthia Village Phase 1 (Jaskat) has the greatest number of households at 358 more housing units at 359. United HOA has the least number of housing units and households at 66. All of the listed resettlement areas have access to water, electricity, toilet, communication, and access road. Both United HOA and Malagapas Resettlement Project Phase 1 have access to sewerage systems. Both Cynthia Villages Phase 1 and 2 are highly susceptible to flooding. While Malagapas Resettlement Project Phase 1 is lowly susceptible to flooding.

Table SO-28. Resettlement Areas, Year 2018

Name of Resettlement Area	Barangay	Land Ownership	No. of Households	No. of Housing Units	Utilities/ Facilities/ Amenities	Administration	Hazard Susceptibility (H/M/L)							
							Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
CNTHIA Village Phase 1 (Jaskat)	Barangay Tam. 2	Private	358	359	Water, Electricity, Toilet, Communication, Access Road	LGU	H							
CYNTHIA Village Phase 2 Tam. 2	Barangay Tam. 2	Private	161	161	Water, Electricity, Toilet, Communication, Access Road	LGU	H				L		M	
Pagbabago HOA	MBRH	Gov't.	73	73	Water, Electricity, Toilet, Communication, Access Road	SHFC								
Purok Sibuyan HOA	MBRH	Gov't.	87	87	Water, Electricity, Toilet, Communication, Road	SHFC								
Libra HOA	RH2	Private	72	72	Water, Electricity, Toilet, Communication, Access Road	Private								
NAKABASIL HOA	RH3	Private	130	80	Water, Electricity, Toilet, Communication, Access Road	Private								
Brgy. Pag-asa HOA	RH6	Private	99	99	Water, Electricity, Toilet, Communication, Access Road	Private								
UNITED HOA	RH12	Private	66	66	Water, Electricity, Sewerage, Toilet, Communication, Access Road	Private								
SAMAKA HOA	MBPoblacion	Gov't.	136	136	Water, Electricity, Toilet, Communication, Access Road	SHFC								
Malagapas Resettlement Project Phase 1	Barangay RH 10	Gov't.	312	312	Water, Electricity, Sewerage, Toilet, Communication, Road	LGU	L							
Total					1,494.00	1,445.00								

Source: City Planning and Development Office, Shelter Planning and Development Division

Notes:
Land Ownership - Government/Private
Administration – NHA, GK, Habitat, LGU, Others
Indicate level of susceptibility for all hazards. High (H), Moderate (M), Low (L)

f. Housing Facilities and Utilities Situation for the Past Three Censal Years

Housing lots owned/amortized have been increasing and decreasing for the last three censal years. The same can be observed with housing lots rented, housing lots being occupied for free with consent of the owner, and housing units being occupied for free without consent of owner. All categories has seen an increase in 2010 and decrease in 2015.

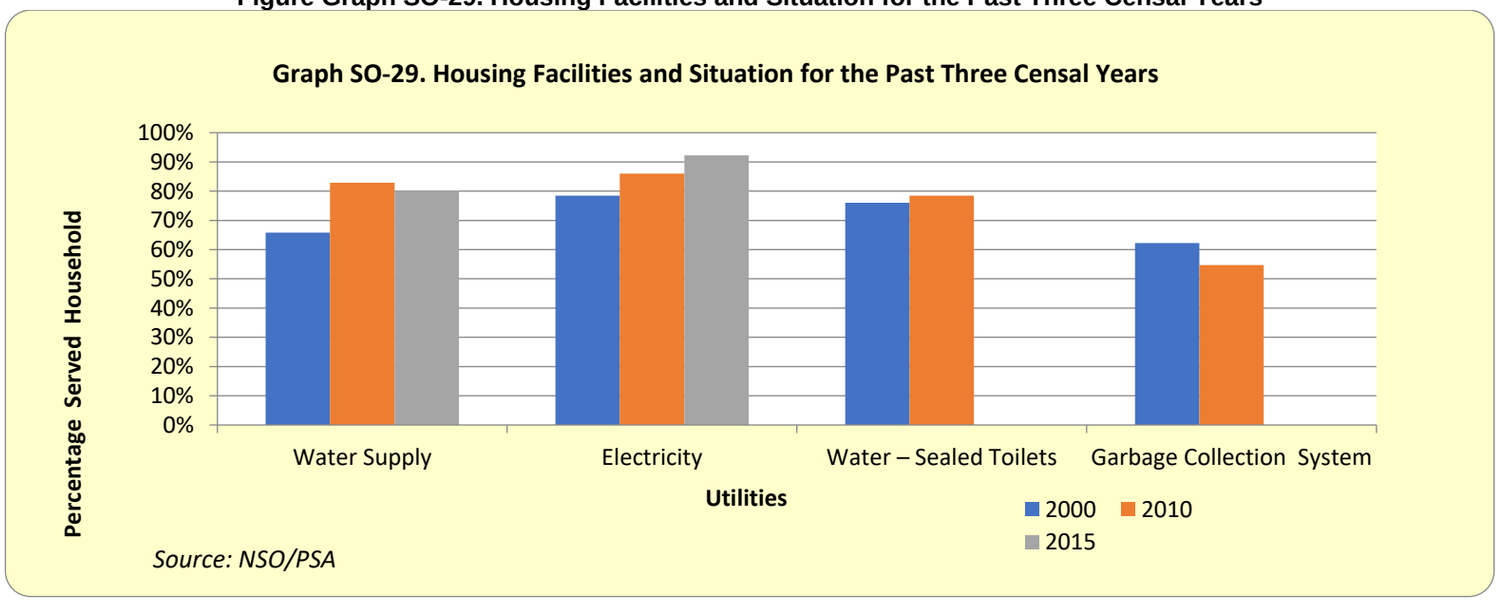
Table SO-29. Housing Facilities and Utilities Situation for the Past Three Censal Years

Utilities	2000			2010			2015		
	Housing Units	No. Served	% Served	No. of Housing Units	No. Served	% Served	No. of Housing Units	No. Served	% Served
Water Supply	31,227	20,563	1	55,171	45,707	1	58,866	47,195	
Electricity	31,227	24,501	1	55,171	47,426	1	58,866	54,320	1
Water – Sealed Toilets	31,227	23,751	1	55,171	43,299	1	58,866		-
Garbage Collection System	31,227	19,432	1	55,171	30,183	1	58,866	-	-
Total		166,615			166,615			01,515	

Source: RSET 2018

Note: % Served = (No. Served/Housing Units) x 100

Figure Graph SO-29. Housing Facilities and Situation for the Past Three Censal Years



g. Occupied Housing Units and Lots by Tenure Status for the Past Three Censal Years

Table SO-30. Occupied Housing Units and Lots by Tenure Status for the Past Three Censal Years

Tenure Status	2007				2010				2015			
	Housing Unit		Lot		Housing Unit		Lot		Housing Unit		Lot	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Owned/being amortized	6,618	27%	24,187	63%	6,618	27%	29,155	58%	6,618	27%	23,632	79%
Being Amortized	4,412	18%		0%	4,412	18%		0%	4,412	18%	-	0%
Rented	6,617	27%	9,874	26%	6,617	27%	8,389	17%	6,617	27%	3,715	12%
Being Occupied for Free With Consent of Owner	4,963	20%	3,315	9%	4,963	20%	9,344	19%	4,963	20%	2,420	8%
Being Occupied for Free Without Consent of Owner	2,206	9%	886	2%	2,206	9%	2,990	6%	2,206	9%	291	1%
Total	24,816	100%	38,262	100%	24,816	100%	49,878	100%	24,816	100%	30,058	100%

Source: RSET 2015 and 2018, PSA

Note:

% = (No. of housing units per tenure status/Total no. of housing units) x 100

Figure SO- 30. Housing Units by Tenure Status for the Past Three Censal

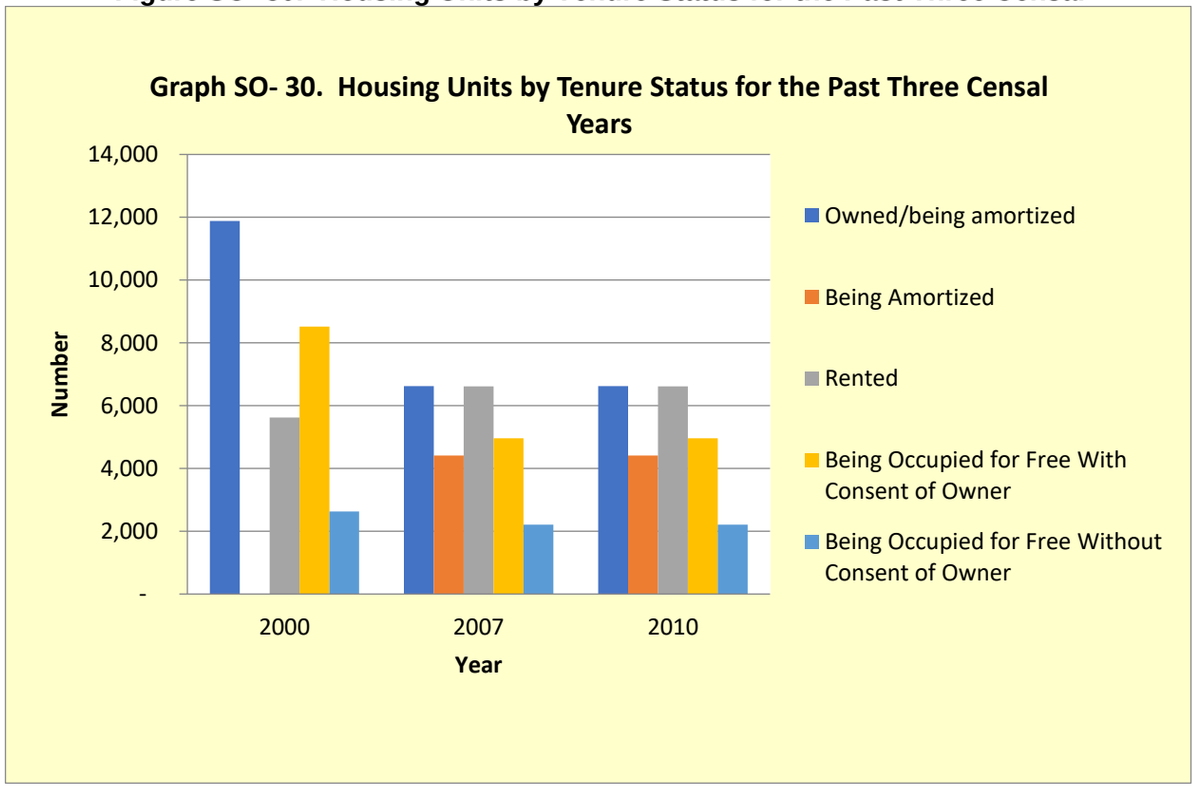
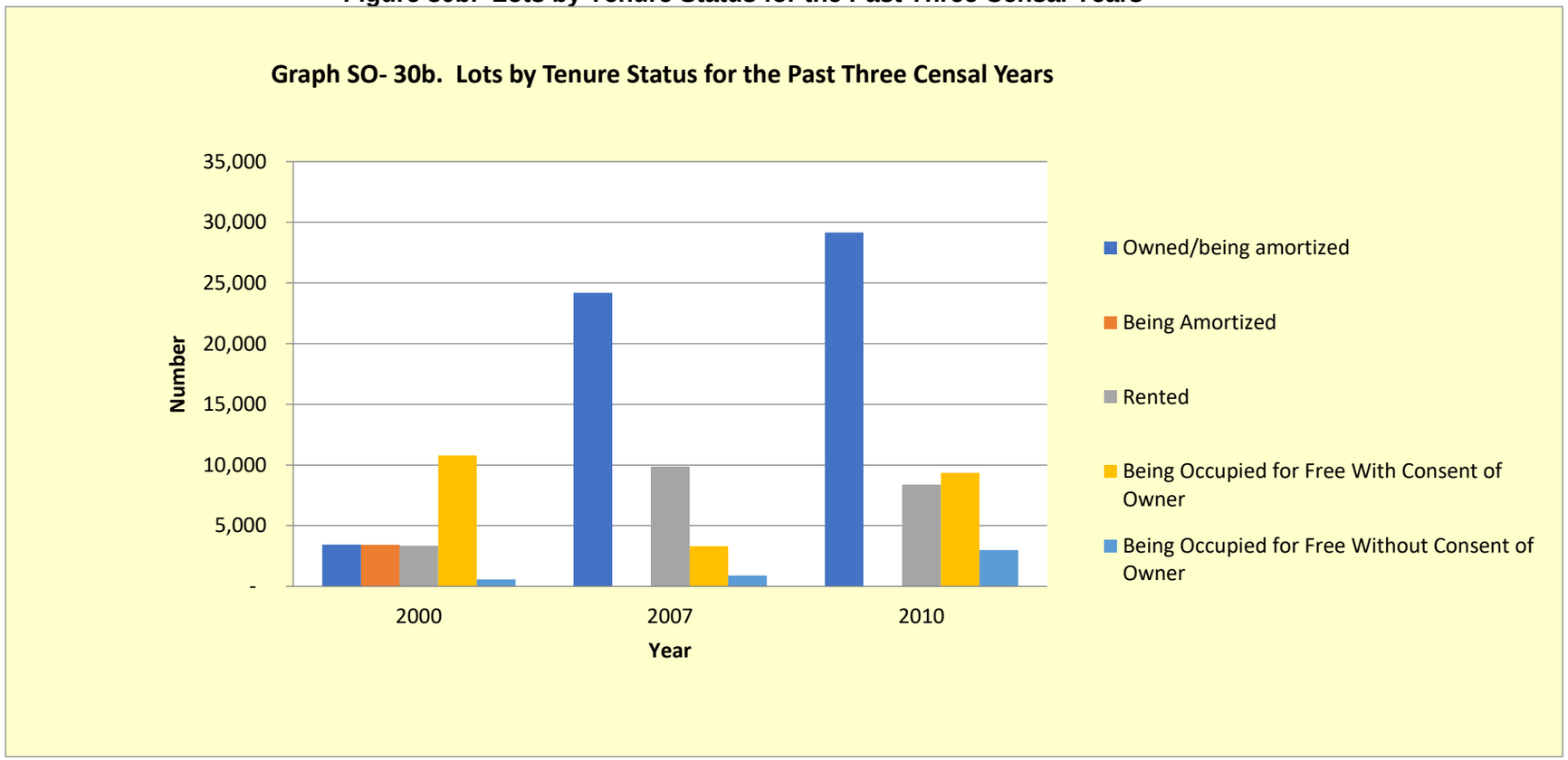


Figure 30b. Lots by Tenure Status for the Past Three Censal Years



h. Occupied Housing Units by Condition (State of Repair) of the Building and Year Built, Year 2007

According to the table above, year 2001-2007 have the largest number of total housing units occupied. Out of those occupied, 9,018 need no repair/minor repair, 1,755 need major repair, 45 are dilapidated/condemned, 241 are under renovation/being repaired, 89 are unfinished construction, 134 are under construction, and 507 are not reported. Data shows an increasing trend in all categories as the population of the city increases.

Table SO-31. Occupied Housing Units by Condition (State of Repair) of the Building and Year Built, Year 2007

Year Built	Total Occupied Housing Unit	CONDITION (State of Repair) OF THE BUILDING						
		Needs No. Repair/Minor Repair	Needs Major Reapir	Dilapidated/ Condemned	Under Renovation/Being Repaired	Unfinished Construction	Under Construction	Not Reported
2001-2007	11,791	9,018	1,755	45	241	89	134	507
1996-2000	10,075	7,706	1,500	39	206	76	115	435
1991-1995	8,656	6,620	1,288	33	177	66	99	373
1981-1990	7,159	5,475	1,066	27	146	54	81	310
1971-1980	4,540	3,473	676	17	93	34	52	195
1961-1970	2,450	1,874	365	9	50	19	28	105
1960 or earlier	1,161	888	173	4	24	9	13	50
Not Applicable	7	6	1	0	0	0	0	0
Don't Know/ Not reported	2,035	1,556	303	8	42	15	23	88
TOTAL	47,874	36,616	7,127	182	979	362	545	2,063

Source: RSET 2015 AND 2018, PSA

i. Inventory of Potential Lands for Housing, Year 2009

There are 71 potential lands listed. Four of these potential housing areas are already owned by the City Government of Cotabato. Twenty-two of these are classified as residential lands. Forty-eight of these are classified as agricultural lands. Juan B. Gutierrez owns the land with the current highest market value at 11,462,590 pesos while only having an area of 5.47 hectares. This is likely due to its classification as residential land. Whereas, Eusebio Tanghal owns the land with the largest area at 18.46 hectares which is classified as agricultural land.

Table SO-32. Inventory of Potential Lands for Housing, Year 2009

Owner	TCT No.	Barangay	Area (ha)	Classi-fication	Fair Market Value	Actual Land Use	Zoning Classi fication	Utilities Present (Y/N)						Hazard Susceptibility (H/M/L)							
								W	P	S	R	T	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
1. City of Cotabato		RH 10	5.98	Gov't. Owed	598,000.00		Residential	Y	Y	N	Y	Y	Y	L							
2. City of Cotabato		RH 10	4.86	Gov't. Owed	243,170.00		Residential	Y	Y	N	Y	Y	Y	L							
3. Mama Mangelen		Tam 1	3.00		2,400,000.00		Residential							H							
4. City of Cotabato (formerly owned by Esteban Doruelo)		Kal MB	7.58		3,847,000.00		Residential							H						M	
5. City of Cotabato (formerly owned by Melania Doruelo)		Kal MB	6.4589		3,277,890.00		Residential							H						M	
6. Narriman Ibra		Kal 2	11.38		5,690,000.00		Agricultural							H				L		M	
7. Mustapha Usop		Kal 2	11.3062		327,160.00		Agricultural							H						M	
8. Kamad Raganding		Kal 2	10.22		295,710.00		Agricultural							H						M	
9. Heirs of Mamarinta		Kal 2	5.63		162,880.00		Agricultural							H						M	
10. P & A Realty Dev't. Corp.		Kal 2	5.88		164,360.00		Agricultural							H						M	
11. Evelyn S. Wee		Kal 2	10.53		304,810.00		Agricultural							H						M	
12. Tulunganen Flauta		Kal 2	8.0875		234,020.00		Agricultural							H						M	
13. Yu Kian Guan Hardware	T-40636	Pob 8	2.86		84,500.00		Agricultural														
14. Benjamin Tan	T-19875	Pob 8	2.74		1,027,630.00		Agricultural														
15. Nasser Kabalo	T-37069	Pob 8	2.82		1,220.00		Agricultural														
16. Sibugao Madalanda		Pob 8	7.27		206,310.00		Agricultural														
17. Butu Kamad	T-384	Pob 8	5.85		174,140.00		Agricultural														
18. Madu Maneku ET ALS	T-392	Pob 8	6.40		184,170.00		Agricultural														
19. Sabino Liakin		Pob 8	5.51		163,870.00		Agricultural														
20. H. Salahuddin Muhammad	T-629	Pob 9	3.62		131,890.00		Agricultural							L							
21. Laman Salik	T-17729	Pob 9	3.67		24,810.00									L							
22. Laman Salik	T-20651	Pob 9	3.63		98,410.00		Agricultural							L							
23. Dodong and Samuel Alamada	T-23273	Pob 9	4.00		89,330.00		Agricultural							L							
24. Nalambai S. Ibad	T-1782	Pob 9	8.90		178,900.00		Agricultural							L							
25. Eugenio Camello	T-28475	Tam M.	3.41		782,880.00		Residential							H							
26. Eugenio Camello	T-28476	Tam M.	3.15		103,320.00		Residential							H							
27. Eusebio Tanghal	T-1454	Kal M	18.46		534,200.00		Agricultural							M							
28. Evelyn S. Wee	T-22243	Kal 2	10.53		327,160.00		Agricultural							M							
29. H. Mustapha Usop		Kal 2	5.63		162,880.00		Agricultural							M							
30. P & A Realty Dev't. Corp.	T-41188	Kal 2	5.68		164,360.00		Agricultural							M							

Owner	TCT No.	Barangay	Area (ha)	Classi-fication	Fair Market Value	Actual Land Use	Zoning Classi fication	Utilities Present (Y/N)						Hazard Susceptibility (H/M/L)							
								W	P	S	R	T	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
31. Cesar Datuwata	19635	Kal 2	2.68		77,490.00		Agricultural							M							
32. Mohammad H. Adil	T-7413	Tam 1	8.83		267,260.00		Agricultural							H							
33. Enlay Tukan	T-640	Tam 1	3.67		106,050.00		Agricultural							H							
34. PNB		Tam 1	6.74		195,120.00		Agricultural							H							
35. Limput Baguilan	R.O. 64(411)	Tam 1	3.00		90,800.00		Agricultural							H							
36. Musa Umpad		Tam 1	3.05		92,370.00		Agricultural							H							
37. Milagros Lobinco	T-3374	Tam 1	3.21		760,690.00		Residential							H							
38. Antonio Santos		RH 11	4.66		4,226,380.00		Residential							L							
39. Atty. Sergio Tocao		RH 11	6.64		134,860.00		Agricultural							L							
40. Fernando L. Go		RH 11	2.50		50,760.00		Agricultural							L							
41. PNB		RH 6	1.05		2,014,590.00		Residential							L							
42. Pin Nen Sero		RH 6	0.82		1,350,120.00		Residential							L							
43. Pin Nen Sero		RH 6	1.00		1,595,180.00		Residential							L							
44. Hrs. of Fernanda Vda. De Gutierrez		RH 9	3.05		90,420.00		Agricultural							L							
45. Hrs. of Fernanda Vda. De Gutierrez		RH 9	5.56		164,590.00		Agricultural							L							
46. Dionisio Gutierrez, Jr.		RH 9	6.57		7,917,930.00		Agricultural							L							
47. Hrs. of Fernanda Vda. De Gutierrez		RH 9	2.09		61,870.00		Agricultural							L							
48. Hrs. of Alfredo S. Ortuoste		RH 10	2.69		78,620.00		Agricultural							L							
49. Eugenio Camello		Tam MB	4.4097		3,138,450.00		Residential							H							
50. Bai Farida S. Kadatuan		Pob 8	0.801		294,100.00		Residential														
51. Benjamin Tan		Pob 8	2.7435		1,027,630.00		Residential														
52. Dania Sangkupan		Pob 8	2.8173		86,210.00		Agricultural														
53. Kalasuwan Kusain		Pob 9	1.34		36,260.00		Agricultural							M							
54. Basilio P. Wee		Bag 1	5.30		169,190.00		Agricultural							L						L	
55. Tuasi Adam (Dec.)		Bag 2	1.96		59,620.00		Agricultural							H							
56. Manebek Laguiem		Bag 2	2.06		62,210.00		Agricultural							H							
57. Rosita Sero		RH 5	3.89		94,530.00		Agri/Res.							L							
58. Sulayla Sero		RH 5	14.71		489,420.00		Agricultural							L							
59. Pinky Sero		RH 5	3.20		100,030.00		Agricultural							L							
60. Consolacion P. Vda de Sero		RH 5	4.99		156,100.00		Agricultural							L							
61. Sps. Elisa & Chi Cheng Tan		RH 9	1.84		3,895,610.00		Comm/Res.							L							
62. Juan B. Gutierrez		RH 9	5.4717		11,462,590.00		Residential							L							
63. Hrs. of Fernanda Vda. De Gutierrez		RH 9	3.00		6,275,540.00		Residential							L							
64. Ret. Maj. Gen Delfin		RH 9	4.14		8,566,220.00		Residential							L							

Owner	TCT No.	Barangay	Area (ha)	Classi-fication	Fair Market Value	Actual Land Use	Zoning Classi fication	Utilities Present (Y/N)						Hazard Susceptibility (H/M/L)							
								W	P	S	R	T	C	Fl	T c	E q	V o	L n	T s	S u	Oth ers
65. Aurora Riego Carag Et Als		RH 10	1.84		54,400.00		Agricultural							L							
66. Bai Debra Ibad Hundegger		RH 10	1.27		38,470.00		Agricultural							L							
67. Vicente Tiu		Tam MB	1.59		800,780.00		Residential							H							
68. Vito Rojas		Tam MB	1.56		67,400.00		Residential							H							
69. Dra. Lourdes A. De Luna		Tam MB	1.62		48,020.00		Agricultural							H							
70. Manuel C. Tan		Tam MB	1.51		1,376,830		Residential							H							
71. Elizabeth Tan		Tam MB	1.60		1,461,050		Agricultural							H							

j. Current and Projected Housing Needs

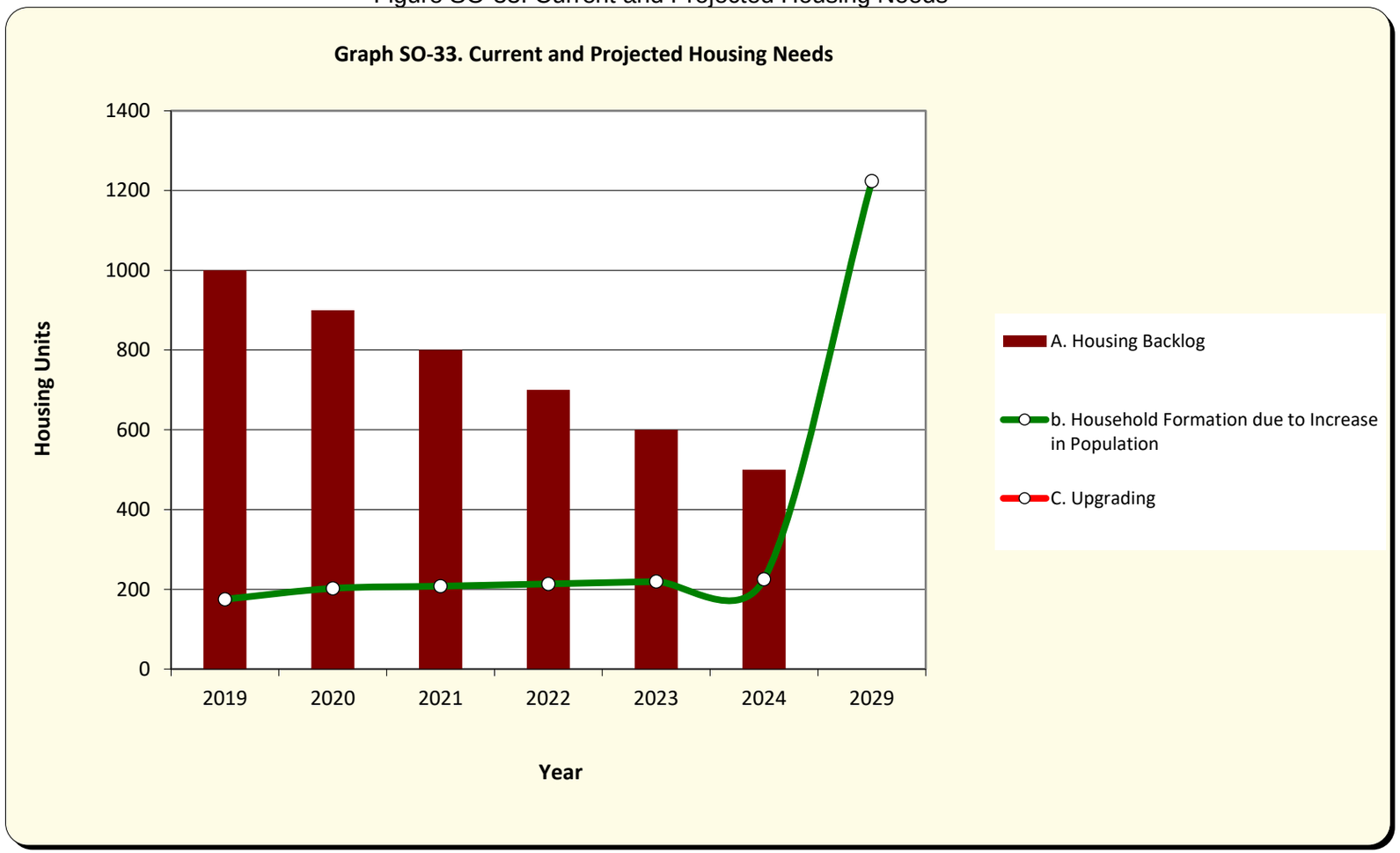
The table below shows the housing backlog in 2019 was 1000. The future backlogs for succeeding years are seen to shrink by a 100 every year according to the current trend. There is no data available regarding the upgrading housing units. By year 2029, the housing backlog is expected to be fully addressed.

Table SO- 33. Current and Projected Housing Needs

Housing Needs	2019	Future Housing Needs					
		2020	2021	2022	2023	2024	2029
A. Housing Backlog	1000	900	800	700	600	500	0
b. Household Formation due to Increase in Population	175	202	208	214	219	225	1224
C. Upgrading							
TOTAL	1,175	1,102	1,008	914	819	725	1,224

Source: Shelter Plan 2012-2020
A. Current housing backlog may be assumed to be equally addressed within the planning period.
Example: Planning period = 10 years
Backlog = 1,000 units
Addressed yearly at = 100 units
Hence housing need to backlog is: Y1 = 1000 – 100 = 900
Y2 = 900 - 100 = 800
Y3 = 800 - 100 = 700
Y4 = 700 - 100 = 600
Y5 = 600 - 100 = 500
Y10 = 500 - 500 = 0

Figure SO-33. Current and Projected Housing Needs



1.5.2.3 **Social Welfare Services**

The Social Welfare Services has the largest scope of services, it is popularly tag as the services from “womb to tomb”, catering to several sub-sector such as children, women, senior citizens, PWD, Solo Parents, Urban Poor, Family and other individuals in difficult circumstances.

The OSWDS extends assistance to the Office for Senior Citizens Affairs (OSCA). However, with the LGU limited resources the following are the observable gaps:

There was an abrupt increase among the Senior Citizens client, that may be due to the Socialize Pension Program of the National Government and other propose benefits that are lining up for legislation purposes; Though there is a Model Center for Senior Citizen but was not conveniently located for the Older person to frequently visit the center, hence they are aspiring for some more comfortable space/venue to establish their Senior Citizen Center.

The limited home care facility for Senior Citizen is Bahay Maria, the only existing home care facility for the aged, run by a religious organization, presently can no longer accommodate the demand. Hence, the sector appeals for the establishment of a Government Home Care Facility and/or for those senior citizen who can afford can establish a home for retirees.

The services for children is the highest client demand. It comprises several sub-sector namely: children ages 3-6 or known as Day Care Children, Youth, CICL, CAR, etc. The most urgent need for now is the establishment of Bahay Pag-asa. This is one of the demands of the DILG to address the need of the unprecedented number of drug surenderees and to house Children in Conflict with the Law (CICL). The next concern is the deteriorating condition of our Social Development Center (SDC) and Women Crisis Center (WCC). Other concerns are the absence of a Child Minding Center to address the concern of working mothers or parents; the absence of a protectory facility for the youth and women offender. Only 1 barangay do not have a Day Care Center due to no more buildable public space, and several Day Care Centers are needing rehabilitation. There are also Day Care Centers with common CR, or without kitchen or handwashing facility, while some are located in danger zones and needs relocation, and several barangays needs additional Day Care Centers due to increasing population.

The women protection services are pretty good. Currently the Child-Minding space is on-going at the City Hall lobby to cater to the toddlers of LGU employees and walk-in client with toddlers. The presence of a Women Crisis Center provides security and temporary shelter to VAW cases; however, the center needs some rehabilitation, same as the Productivity Skills Center (PSCB) – a training center that provides sewing skills to women. In compliant to DILG mandate, all barangays have established their respective VAWC Desk. However, one weakness is observable - the low implementation of the private and public institution for the establishment of a breast-feeding room and absence of Child-Minding Facility at the barangay level.

Our PWD are in high hopes for the establishment of a PWD Center, and for the strict implementation of the accessibility law and aspiring for the establishment of an appropriate learning facility for students with special needs. PDAO is working to make the city a PWD Friendly City.

The youth sector also lobbying for the establishment of a Youth Hub facility, while for the other services, the OSWDS is in dire need for the construction of a stockroom for their stockpile. The city has existing 2 evacuation centers but recommending for a policy that all barangays should establish their respective evacuation

center considering that the city is 75% below sea level. Other concerns are the absence of a halfway house for the mentally deranged individuals and provide a policy supporting for the establishment of a mental facility at the CRMC.

The current facilities listed herein are the facilities that are necessary to be established in order to effectively serve the public and efficiently deliver the social welfare and development programs for Cotabato City.

1.5.2.3.1.1 Children:

The OSWDS highly recommends the completion of the Bahay Pag-asa in accordance to the full implementation of the CLJIP or the Comprehensive Local Juvenile Intervention Program, rehabilitation of Day Care centers, SDC, WCC; completion of the Senior Citizen Building; Completion of the Child Minding space at the City Hall, Establishment and completion of the Multi-purpose building/ Relief Good stock room; Construction of additional Day Care Centers; Completion of the PWD center and establishment of evacuation centers to calamity prone barangays in the city; and establishment of breastfeeding facility in public places.

Structures such as the child-minding facility room located at the ground floor of the City Hall is now ongoing and is expected to operate on the 3rd quarter year 2021. In addition, the senior citizen physical building is already completed, April of 2021, based on the latest progress, the permits for the power connection are already approved and is now undergoing process for review and inspection by the Cotabato light and power company for the electricity connection - - in line with this, the elevator is the only facility to be installed in the said building after the power will be installed. The said building is expected to be turned over and will be fully operational by the last quarter of 2021.

Along with services for children development and welfare, the Bahay Pag-asa is in dire need to be finished and completed since this is the most important facility the LGU has to have during the full implementation of the CLJIP where children in conflict with the law that has ongoing court cases ages 15-18 must be housed in the said facility. This building has a total budget of Php 13,000,000.00 - - but because it is solely funded by the City LGU, construction of the said facility building is still ongoing, thus, dividing the total budget per implementing years based on the funds availability.

Two existing centers (SDC and WCC) is also in dire need for rehabilitation and repair re: water leaks, rusted roofs, dilapidated windows, wall leaks, etc.,

a. Social Welfare Facilities, Services and Clientele, Year 2019

Other facilities listed herein is also recommended to be established within 6 to 9 years to reach out and provide the unmet needs of Cotabato city constituents.

Table SO-35. Social Welfare Facilities, Services and Clientele, Year 2019

Facility	Barangay	Services Offered	Type of Clientele	No. of Clientele	Staff	Ownership	Physical Condition	Hazard Susceptibility (H/M/L)							
								Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Senior Citizen Center	RH 5	Used for meetings, socialization activities, socio-cultural activivties	60 years old and above	2,409	2	Go'vt.	Fair								
Senior Citizen Building	RH 10	Activity Center, Multi-purpose Haall	60 years old and above	On-going Costruction	0	Go'vt.	Fair	L							
Evacuation center-City Gov't.	RH 10	Temporary Shelter for evacues	Victims of Calamities	0	0	Go'vt.	Fair	L					M		
Evacuation Center-Regional	RH 10	Temporary Shelter for evacues	Victims of Calamities	0	0	Go'vt.	Fair	L					M		
Bahay Maria	Pob 2	Home Care for abandoned Senior Citizens	abandoned 60 years old and above	30	2 Social Workers/ 8 House Parents/2 Sisters	NGO	Fair	L							
Women Crisis Center	Pansacala, RH 10	Temporary Shelter for disadvantage and abused women	18-59 years old Disadvantages, abused and VAW	4	6	Go'vt.	Fair	L					M		
Social Development Center (SDC)	Pansacala, RH 10	Drop-in Center/Temporary Shelter for Street Children and CICL	Children and Youth	36	5	Go'vt.	Fair	L					M		
PSCB	Pansacala, RH 10	Skills Training/ Capability Building	Disadvantage Women	38	4	Go'vt.	Fair	L					M		
Center for the Handicapped	San Isidro, RH 10	Skills Training/ Capability Building for PWDs	PWDS			Go'vt./DSWD XII	Fair	L					M		
Day Care Centers:															
1	RH MB	Day Care Services	3-4 years old	70	1	Gov't.	Fair	L							
2	Purok Pascual, RH MB	Day Care Services	3-4 years old	40	1	Gov't.	Poor	L							
3	Purok Maunawain, RH MB	Day Care Services	3-4 years old	48	1	Gov't.	Critical	L							

Facility	Barangay	Services Offered	Type of Clientele	No. of Clientele	Staff	Ownership	Physical Condition	Hazard Susceptibility (H/M/L)							
								Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
4	RH 1	Day Care Services	3-4 years old	50	1	Gov't.	Poor	L				L			
5	Purok Jasmin, RH 2	Day Care Services	3-4 years old	30	1	Gov't.	Critical	L							
6	Purok Katahimikan, RH2	Day Care Services	3-4 years old	32	1	Gov't.	Critical	L							
7	Purok Sampaloc, RH 2	Day Care Services	3-4 years old	32	1	Gov't.	Fair	L							
8	Purok Shariff Kabunsuan, RH 3	Day Care Services	3-4 years old	45	1	Gov't.	Poor	M							
9	RH 4	Day Care Services	3-4 years old	40	1	Gov't.	Fair	L							
10	RH 5	Day Care Services	3-4 years old	32	1	Gov't.	Fair	M							
11	Purok Pinnen, RH 6	Day Care Services	3-4 years old	60	1	Gov't.	Fair	L							
12	Purok Krislamville, RH 6	Day Care Services	3-4 years old	34	1	Gov't.	Fair	L							
13	RH 7 Extension	Day Care Services	3-4 years old	60	1	Gov't.	Fair	L							
14	Purok Imba, RH 7	Day Care Services	3-4 years old	30	1	Gov't.	Critical	L							
15	Purok Maharlika, RH 7	Day Care Services	3-4 years old	40	1	Gov't.	Critical	H							
16	Bliss, RH 8	Day Care Services	3-4 years old	45	1	Gov't.	Critical	H					M		
17	Borbon, RH 9	Day Care Services	3-4 years old	60	1	Gov't.	Fair	L							
18	Virgo, RH 9	Day Care Services	3-4 years old	33	1	Gov't.	Critical	H					M		
19	Purok Esteros, RH 9	Day Care Services	3-4 years old	47	1	Gov't.	Critical	L							
20	San Isidro, RH 10	Day Care Services	3-4 years old	52	1	Gov't.	Fair	L					M		
21	Purok Bitara, RH 10	Day Care Services	3-4 years old	45	1	Gov't.	Fair	L					M		
22	Purok Pag-asa, RH 10	Day Care Services	3-4 years old	35	1	Gov't.	Poor	L					M		
23	Purok Balabaran, RH 10	Day Care Services	3-4 years old	32	1	Gov't.	Poor	L					M		
24	Purok Mamalangkay, RH 10	Day Care Services	3-4 years old	35	1	Gov't.	Fair	L					M		
25	RH XI	Day Care Services	3-4 years old	45	1	Gov't.	Poor	L							

Facility	Barangay	Services Offered	Type of Clientele	No. of Clientele	Staff	Ownership	Physical Condition	Hazard Susceptibility (H/M/L)							
								Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
26	San Pablo, RH 11	Day Care Services	3-4 years old	40	1	Gov't.	Poor	L							
27	RH XII	Day Care Services	3-4 years old	45	1	Gov't.	Fair	L							
28	RH XIII	Day Care Services	3-4 years old	35	1	Gov't.	Fair	L							
29	Pob MB	Day Care Services	3-4 years old	60	1	Gov't.	Poor	L							
30	Purok Datukaka, Pob 1	Day Care Services	3-4 years old	40	1	Gov't.	Poor	L							
31	Purok Lu Shin Khan, Pob 1	Day Care Services	3-4 years old	30	1	Gov't.	Critical	H							
32	Purok Honeybee, Pob 2	Day Care Services	3-4 years old	45	1	Gov't.	Poor	L							
33	Annex, Pob 2	Day Care Services	3-4 years old	48	1	Gov't.	Critical	H							
34	Pob 3	Day Care Services	3-4 years old	36	1	Gov't.	Poor	H							
35	Purok Malipayon, Pob 4	Day Care Services	3-4 years old	45	1	Gov't.	Fair	L							
36	Pob 5	Day Care Services	3-4 years old	45	1	Gov't.	Poor	L							
37	Purok Mapayag, Pob 7	Day Care Services	3-4 years old	40	1	Gov't.	Poor	L					M		
38	Purok Sultan, Pob 7	Day Care Services	3-4 years old	20	1	Gov't.	Critical	VH					M		
39	Purok Bailaga, Pob 8	Day Care Services	3-4 years old	55	1	Gov't.	Poor	H							
40	Purok Katamlangan, Pob 8	Day Care Services	3-4 years old	40	1	Gov't.	Critical	VH							
41	Purok Kalantungan, Pob 8	Day Care Services	3-4 years old	32	1	Gov't.	Fair	L							
42	Purok Dimalanes, Pob 8	Day Care Services	3-4 years old	45	1	Gov't.	Poor	H							
43	Biniruan, Pob 9	Day Care Services	3-4 years old	35	1	Gov't.	Poor	H							
44	Purok Datu Ali, Tam MB	Day Care Services	3-4 years old	58	1	Gov't.	Fair	L							
45	Tam 1	Day Care Services	3-4 years old	50	1	Gov't.	Fair	L							
46	Purok Datu Pio, Tam 2	Day Care Services	3-4 years old	21	1	Gov't.	Critical	H							

Facility	Barangay	Services Offered	Type of Clientele	No. of Clientele	Staff	Ownership	Physical Condition	Hazard Susceptibility (H/M/L)							
								Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
47	Tam 3	Day Care Services	3-4 years old	29	1	Gov't.	Critical	H							
48	Tam 4	Day Care Services	3-4 years old	45	1	Gov't.	Critical	H							
49	Tam 5	Day Care Services	3-4 years old	30	1	Gov't.	Critical	H							
50	Campo Muslim, Bag MB	Day Care Services	3-4 years old	32	1	Gov't.	Poor	M					M		
51	Purok Sampalok, Bag MB	Day Care Services	3-4 years old	60	1	Gov't.	Critical	H					M		
52	Lugay-Lugay, Bag 1	Day Care Services	3-4 years old	60	1	Gov't.	Critical	H					M		
53	Bag 2	Day Care Services	3-4 years old	60	1	Gov't.	Fair	L					M		
54	Bag 3	Day Care Services	3-4 years old	40	1	Gov't.	Poor	H							
55	Purok Balas, Kal MB	Day Care Services	3-4 years old	33	1	Gov't.	Critical	H					H	M	
56	Purok Kalimudan, Kal MB	Day Care Services	3-4 years old	30	1	Gov't.	Poor	L					H	M	
57	Purok Kidupo, Kal 1	Day Care Services	3-4 years old	31	1	Gov't.	Critical	VH					M		
58	Purok Darping, Kalanganan 1	Day Care Services	3-4 years old	35	1	Gov't.	Critical	VH					M		
59	Purok Linao, Kal 1	Day Care Services	3-4 years old	30	1	Gov't.	Critical	VH					M		
60	Purok Limbayanagi, Kal 2	Day Care Services	3-4 years old	30	1	Gov't.	Fair	L					M		
61	Bubong, Kal 2	Day Care Services	3-4 years old	65	1	Gov't.	Poor	M					M		
62	Purok Bedtasan, Kal 2	Day Care Services	3-4 years old	44	1	Gov't.	Critical	H					M		
63	Purok Buwaya-buwaya, Kal. 2	Day Care Services	3-4 years old	44	1	Gov't.	Poor	L							
64	Purok Pimbaglan, Kal 2	Day Care Services	3-4 years old	37	1	Gov't.	Poor	L					M		

Source: Office on Social Welfare Services

Notes: Services offered:
1. Family Life Education and Counseling
2. Family Planning Assistance

Type of Clientele:
1. Disadvantaged families
2. Depressed Area

Ownership - Public /Private

Physical Condition: Fair - well maintained/serviceable
Poor - needs improvement

3. Day Care Services, Supplemental Feeding
4. Medical Care
5. Relief/Rehabilitation

3. Disadvantaged women (18-59 years old)
4. Pre-school Children/Children (0-12 years old)
5. Youth (13-24 years old)

Critical - needs priority action
Indicate level of susceptibility for all hazards: High (H), Moderate (M), Low (L)

The said ratings on the physical conditions and hazard susceptibility of our facilities are validated, evaluated and checked by our social worker together with the CDRR, barangay, and Engineering where the said facilities was thoroughly inspected based on the report submitted to OSWDS.

Senior Citizens have three dedicated facilities. One is the Model Center, located in Rosary Heights 5 which is serving more than 2,000 clients. Another is the Senior Citizen Building, located in Rosary Heights 10. Both are government-owned. The third facility, Bahay Maria, houses 30 abandoned senior citizens from the city. It is managed by 2 social workers, 8 house parents, and 2 nuns. it is NGO-owned. The two latter facility are both low susceptible to flooding.

Serving as temporary shelters during times of calamity, two government-owned evacuation centers are situated in Rosary Heights 10. One is constructed by the local city government. The other is constructed by the regional government, both are susceptible to low flooding. The Women Crisis Center which temporary houses 4 disadvantaged and abused women at a time is managed by 6 staffs; the Social Development Center (SDC) presently provide temporary shelter to 36 street children and CICL is manned by 5 staffs; together in the same site, the PSCB, a productivity training center for women are all located in a government own property located in Pansacala, RH 10 and are susceptible to low flooding. The Center for the Handicapped is situated at San Isidro, RH 10. It is where livelihood trainings center for PWD-related services are offered has a low susceptibility to flooding.

There are a total of 64 daycare centers in the city. All are government-owned where each is manned by one daycare staff. The average children caterred in a Day Care Center range from 30 to 60. The highest recorded is from Mother Barangay Rosary Heights with 70 Day Care Children. Out of the 64 DC Centers, 5 are susceptible to very high flooding, 18 with high susceptibility, 4 Moderately susceptible and 37 with low susceptibility, while 1 is vulnerable to low landslide, and 21 with moderate susceptibility to tsunami and 2 centers are vulnerable to high tsunami. Two DC centers are with moderate susceptibility to Storm surge. Barangay Poblacion 6 do not have a Day Care Center due to no more buildable public space and as an alternate established a Supervised Neighborhood Play (SNP) Activity.

Pertaining to the structural condition of the 64 Day Care Centers, twenty needs repair, 10 are susceptible to fire, while 6 are no longer functioning or demolished, 15 needs relocation and 4 needs construction and 1 needs a temporary structure.

b. Historical Number of Population Served by Type of Clientele System

OSWDS is serving at least 9 common clientele. The table shows the trend on the historical number of clientIle by type of client. The Women in Difficult Circumstance shows a better performance. A reduction of .57% from the previous year and maintain a down trend from 2017 recording at 39 cases to only 12 in 2019. The children in need of special protection display a gradual increase from 2017 to 2019 and landed a 1.07% increase in 2019. The PWD and Senior Citizens display an increasing trend that may be attributed to the strengthened support of the national government in providing their social pension and other propose bills. Solo parents show a fluctuating trend, recording at 191 clients in 2016 and abruptly increased to 1,713 clients in 2017 and dive to a record of 31 in 2018 and 32 in 2019.

The Day Care Children is one of the biggest participations of client in social welfare services, though it shows a fluctuating trend, it recorded a .945% decrease in 2019. The decrease may be attributed to the introduction of Supervised Neighborhood Play (SNP) Program of the OSWDS wherein it accommodates the same age bracket client. Hence, the SNP Children client show an increasing trend from 2016 to 2018 but slightly drops in 2019 by .938%.

Children in Conflict with the Law (CICL) show a very satisfying record from the increasing number in 2016 at 14 cases, then 15 in 2017 and 18 in 2018 then landing to only 5 cases in 2019, registering a decrease of .277%. The Children at Risk (CAR) also shows a remarkable improvement from 20 cases in 2016, also a fluctuating trend but graduating to only 8 cases in 2019.

Other facilities listed herein is also recommended to be established within 6 to 9 years to reach out and provide the unmet needs of Cotabato city constituents. The current data herein are the total number of clients served within the said years and was able to receive all the programs and services applicable to the said clients based on the recommendation of the social worker handling the case re: women in especially difficult circumstances, children in need of special protection, CICL and CAR.

In line with the Persons with disabilities, senior citizens, and solo parents, these are the total number registered, evaluated, and validated on the said implementing years.

Day care children and SNP children total number stated herein are the number of children enrolled 62-day care centers of the city and SNP within the 37 barangays of Cotabato city thus, other day care children that are not listed herein are children that are enrolled to private schools.

Table SO- 36. Historical Number of Population Served by Type of Clientele System

Type of Clientele	Previous Years			Current/Latest Year	
	2016	2017	2018	2019	Percentage
Women in especially difficult circumstances	12	39	21	12	
Children in need of special protection	20	13	14	15	
Persons with Disabilities	1,020	1,364	1,722	1,940	
Senior Citizens	1,009	1,709	2,409	2,875	
Solo Parents	191	1,713	31	32	
Day Care Children	3,000	3,113	3,011	2,846	
Youth					
SNP Children	277	477	555	521	
CICL/CAR	14/20	15/13	18/16	5/8	
TOTAL	5,529	8,428	7,763	8,241	

Source: OSWDS, 2019

1.5.2.3.2 **Protective Services**

Cotabato City Police Office currently have 4 stations and 1 City Mobile Force Company situated at Poblacion 6, RH Mother, Datu Balabaran, Bagua Mother and RH 1, PC Hill respectively. Police officers are significant to the growth of economic and social development because they have a key function and authority with regards to keeping the peace, maintaining public security and safety, and preserving common property for citizens in the community and society. Chief of Police of the said stations were doing all their efforts and responsibilities to give the services as to what is being mandated which is "TO SERVE AND PROTECT". However, with the growing security demands of a rapidly changing society, the tasks of Law Enforcers in the city becomes even more difficult. This is a great challenge that our police force has no face and admittedly, in the performance of these tasks, our police personnel are sometimes placed in bad light because of some operational lapses.

Concerns include but are not limited to: community-police relations, mass shootings, gang related crimes, rapid changes in technology, current pandemic situation, and challenges in keeping up with capital investment to include police equipment and facilities. These stations and mobile company are currently experiecing shortages of facilities which caused to the provision of poor and delayed services. Here are the factors affecting the effectiveness of police performance.

In summary thereof, stations have poor station buildings, living quarters and even section offices which cause to slow processing and delivery of services resulting to negative feedbacks and impressions of the citizens. Hence, it is suggested to submit report and outsource support from the LGU and other stakeholders in order to provide adequate space for the personnel in the stations. Police stations should be designed in such a way that it conveys a message of community integration.

Insufficient number of patrol cars which slows and delays the crime response and response time. With this, stations should nsubmit report for declaration of BER vehicles for replacement and strengthen liaising with the LGU and other stakeholders in order to have additional patrol cars as needed. With the limited area perimeteer of the stations, there is no available garage for mobile patrol vehicles which results to the rapid deterioration of the said vehicles. There should be a proper garage for the patrol cars to avoid the delay of responding time to any incident.

Increase in the number of shooting incidents in 2019 as compared to 2018 has a big impact in public safety, economic development and peace and order in the city. It makes the citizens feel unsafe and unsecured even walking in the streets especially at night. It has been recommended that the police personnel to conduct periodec review and evaluation of operational and tactical plan. (EMPO and increase Police Visibility.

The police stations will no longer be suitable for thier occupants which could result in lack of storage space and poor working conditrions. With this, shortage of Police forces to population ratio is a problem. It results to not to be able to meet the response time. It is suggested to have and additional Police Stations that can maximize public accessibility and police visibility, as well as permit an effective, timely response to citizen needs and concerns.

With the limited perimeter of the Police Stations, there is limited space detention cell while other stations have no available detentions cells it can cause the detention cell to be crowded. There is also no available detention cell for womenand youth offenders which causes them in joining the hardcore

criminals and they are being used as protectory by common offenders. There should be detention cell for every Police station and there should be a separate detention cell and facilities for women and youth offenders.

A successful police station design should embrace safety and security maintaining the satisfaction of citizens and address crimes in thier respective area of responsibilities that positively impact the quality of community life.

A Police Station is a building which serves to accomodate police officers, other members of staff and clientele. These buildings often contain offices and accommodation for personnel and vehicles, along with locker rooms, temporary holding cells and interview/interrogation rooms. The provision of key resources and equipment to police is essential to increase their capacity to respond rapidly and effectively to incidents of violence.

However, Police Stations and City Mobile Company is Cotabato City Police Office mostly have poor facilities and equipment. As to Police Personnel to population ratio, it says that there is an inadequate number of police personnel compare to the population in the area. For the record, Police Station 1 has 51 personnel with 1:2040 ratio; Police Station 2 has 52 personnel with 1:2069 ratio; Police Station 3 has 48 personnel with 1:769 ratio; Police Station 4 has 48 personnel with 1:1523 ratio; and City Mobile Company has 173 personnel with 1:1859 ratio. With regards to the lot area of the police stations and mobile company, it is relatively small to accomodate the number of police personnel alone, not including function rooms for women's desk, investigation room, detention cell, locker area, ammunition stock room, conference room and other essential spaces needed for the service of protection. Some stations are not strategicaly locatied, they were either, nearby to an infrastructure of a school, in squatter area, which client find it hard to recognize immediately. All stations are functional as well as the mobile patrol cars.

With regards to the level of hazard susceptability, only Police Station 1 has the possibility for flooding. CMFC have the low level on landslide because of its uphill location. Police Station 1 and 4 have the low level for storm surge due to its proximity to Rio Grande River.

a. Protective Services by Facilities and Equipment, Year 2018

The provision of equipment is an important means to build institutional response capacity and can also be used as a mechanism to encourage progress. All police facilities, stations or units should be adequately equipped to respond to their immediate needs. Infrastructure and equipment needs to be in place and adequate for operating capabilities.

Table SO-39. Protective Services by Facilities and Equipment, Year 2018

Type of Services	Barangay	Area (sq m)	Physical Condition of Facility	No. of Personnel
Police				
Headquarters	RH 1	1400	Fair	56
Sub-Station				
Police Station 1	Poblacion 6	200	Poor	51
Police Station 2	RH Mo.	220	Poor	52
Police Station 3	Datu Balabaran	260	Poor	48
Police Station 4	Mother Brgy Bagua	160	Poor	48
CMFC	RH 1	600	Fair	173
Traffic	Poblacion 6	90	Poor	18
Total				446
Fire Protection				
Headquarters	Pob. 5	600	Poor	20
Sub-Station	RHMB	150	Fair	5
Jail Management				
Provincial Jail	(Maguindanao)	1200	Fair	
District Jail				
City/Mun. Jail	Pob. 5	322	Poor	45
Others				
Total				

Source: Philippine National Police, Bureau of Jail Management and Penology, Bureau of Fire Protection
Physical condition of facility – fair, poor, critical
Vehicle type – Patrol car; prisoner van; motorcycle; bicycle; patrol boats

b. Barangay Security Force and Volunteers by Type of Service, Year 2019

Table SO-40. Barangay Security Force and Volunteers by Type of Service, Year 2019

Type of Services	Number of Security Force/Volunteer	Facilities / Equipment	Condition of facilities/ equipment
Brgy Bagua Mother Security Forces and Volunteers	20 Tanods, 40 Volunteers	1 Multicab (for SWM but the Barangay is using it for security purposes as the need arises); 5 units Icom Radios, 1 unit sound system, 1 unit speed boat	All functional
Brgy Bagua 1 Security Forces and Volunteers	20 Tanods, 10 Volunteers	Brgy Multicab	Non-functional
		Icom Radio	Functional
Brgy Bagua 2 Security Forces and Volunteers	20 Tanods, 24 Volunteers	Fire Arms, Brgy Vehicle, Icom Radio	All functional
Brgy Bagua 3 Security Forces and Volunteers	20 Tanods, 11 Volunteers	Brgy Vehicle	Non-functional
		Icom Radio	Functional
Brgy RH 2 Security Forces and Volunteers	4 Tanods, 20 Volunteers	Batuta, Brgy Vehicle, Icom Radio	All functional
Brgy RH 3 Security Forces and Volunteers	20 Tanods, 15 Volunteers	2 units Icom Radio, 1 set Computer	Functional
		1 unit Multicab	Non-functional
Brgy RH 4 Security Forces and Volunteers	10 Tanods, 10 Volunteers	Brgy Vehicle, Icom Radios, Sound System	All functional
Brgy RH 5 Security Forces and Volunteers	10 Tanods, 10 Volunteers	Fire Arms, Brgy Vehicle, Icom Radio	All functional
Brgy RH 6 Security Forces and Volunteers	20 Tanods, 10 Volunteers	Brgy Vehicle, Icom Radios, Sound System	All functional
Brgy RH 7 Security Forces and Volunteers	20 Tanods, 3 Volunteers	Icom Radio	Functional
		Brgy Multicab	Non-functional
Brgy RH 9 Security Forces and Volunteers	20 Tanods, 7 Volunteers	Brgy Vehicle, Icom Radio	All functional
Brgy RH 11 Security Forces and Volunteers	20 Tanods, 10 Volunteers	Brgy Multicab,	Non-functional
		Garbage Truck, Icom Radio	All functional
Brgy RH 12 Security Forces and Volunteers	8 Tanods, 5 Volunteers	Fire Arms, Brgy Vehicle, Icom Radio	All functional
Brgy Pob. 1 Security Forces and Volunteers	20 Tanods, 10 Volunteers	Brgy Vehicle, Icom Radio	All functional
Type of Services	Number of Security Force/Volunteer	Facilities / Equipment	Condition of facilities/ equipment
Brgy Pob. 2 Security Forces and Volunteers	20 Tanods, 31 Volunteers	Batuta, Brgy Vehicle, Icom Radio	All functional
Brgy Pob. 3 Security Forces and Volunteers	20 Tanods, 20 Volunteers	Brgy Vehicle, Icom Radios, Sound System	All functional
Brgy Pob. 4 Security Forces and Volunteers	20 Tanods, 11 Volunteers	Icom Radio	Functional
Brgy Pob. 8 Security Forces and Volunteers	20 Tanods, 5 Volunteers	Icom Radios, sound system, computer	All functional
Brgy Pob. 9 Security Forces and Volunteers	20 Tanods, 16 Volunteers	Brgy Vehicle, Icom redios, Sound System	All functional
	20 Tanods, 20 Volunteers	1 unit vehicle	Non-functional

Brgy Kalanganan Mother Security Forces and Volunteers		Icom Radios, Mega Phone	Functional
Brgy Kal. 2 Security Forces and Volunteers	40 Tanods, 40 Volunteers	1 unit computer set, Icon Radios	Functional
		1 unit Multicab	Non-functional
Brgy Tam. MB Security Forces and Volunteers	20 Tanods, 32 Volunteers	Brgy Multicab, Rescue Boat, Icom Radios, Sound System, computer	All functional
Brgy Tam. 2 Security Forces and Volunteers	20 Tanods, 5 Volunteers	Brgy Vehicle, Icom Radios, 1 unit computer	All functional
Brgy Tam. 3 Security Forces and Volunteers	20 Tanods, 10 Volunteers	Brgy Vehicle, Icom Radios	All functional
Brgy Tam. 5 Security Forces and Volunteers	10 Tanods, 15 volunteers	1 unit brgy vehicle	Functional
		2 units Icom Radio	Non-functional

Source: Barangay Office

All the 37 Barangays are required to install their DRRM Unit in compliance to DILG Resiliency Program. The Barangay DRRM is allocating 5% annually of their total income or known as DRRM Fund, it is distributed to allocate 30% for the response operation in the case of calamity and 70% for preparedness either, mitigation of adaptation measures.

On the other hand, they also allocate for their Peace and Order drawn from their General Fund which supports their peace and order effort or for the maintenance of their auxilliary forces/BPAT or Tanods, maintenance of outpost and Ronda Patrol. Generally, each barangay has a minimum of at least 20 tanods and some volunteers, but some with peace and order issues like Brgy. Kal 2 has 40 Tanods and volunteers. All barangays invested to have communication gadgets and sound system. They were issued Multicab vehicle for their security and rescue operations. For the barangays along the big rivers such as Brgy. Bagua Mother and Tamontaka Mother they acquired rescue boats. Tanods are issued with their respective uniforms and for some includes batuta. Some Barangay Officials were issued firearms. (see above table)

c. Fire Incidence for the Past Five Years

Table SO-41 shows the Fire Incidence for the past five (5) years. In 2015 only 13 fire incidences were recorded and then increased to 22 in 2016 then slightly increasing by 1 case from 2017 to 2018 and drops to only 15 cases in 2019.

The most common causes of fire were electrical, especially of what happened in 2015, were mostly the causes was electrical disturbance. This was the time the country experienced shortage in electricity and need to ration the supply. The second common causes was accidental such as unattended lighted cadle or mosquito coil of cooking stove, followed by gas leakage from LPG tanks. There are other causes like grass fire, automotive fire and there are some that are still undetermined.

Table SO- 41. Fire Incidence for the Past Five Years

Barangay	Origin / cause	Frequency of Occurrence				
		2019	2018	2017	2016	2015
Gov. Gutierez, RH 7	Overheated Extension wire	✓				
Purok Pinnen, RH 6	Overheated Electric Fan	✓				
Purok Sibuyan, RH MB	Unattended lighted candle	✓				
Pob. 9	Grass Fire	✓				
Purok Gumamela, Sousa Ext. St. RH 13	Overheated of defective electric fan	✓				
Purok Maunawain, RHMB	Leakage current	✓				
Pansacala St, RHMB	Short circuit electrical wires	✓				
Don Rufino Alonzo St., Pob 5	Electrical short circuit	✓				
Nayon Shariff, RH 3	LPG stove gas leakage	✓				
Pansacala ST., RH 10	Faulty wiring	✓				
Pob. 5	Overheated food warmer	✓				
Malagapas, RH 10	Overheated TV set	✓				
Mega Market, Pob MB	Overheated Ceiling Fan	✓				
Sero ES, RH MB	Electrical short circuit	✓				
Pob. 5	Vehicular Fire-motorcycle	✓				
RH 3	Electrical short circuit		✓			
Campo Muslim, Bag. MB	Electrical overload		✓			
Purok Dimales, Tukananes, Pob. 7	Electrical overload		✓			
Tamse Road, Pob. 4	Undetermined		✓			
Mercury St., RH 8	Electrical arcing caused by frayed conductors		✓			
Pastor Kimpo, RH 13	Defective airconditioning unit		✓			
Malagapas, RH 10	Open flame		✓			
Camasi, Pob 9	Overheated Ceiling Fan		✓			

Barangay	Origin / cause	Frequency of Occurrence				
		2019	2018	2017	2016	2015
Mega Market, Pob MB	Undetermined		✓			
Tam MB	Undetermined		✓			
RLA, ARMM, RH 7	Defective airconditioning unit		✓			
Ruffo Manara, RH 10	Overheated Electric Fan		✓			
Ramon Rabago St., RH 10	Electrical overload-freezer		✓			
RH 10	Electrical Post short circuit		✓			
Jasmin St., RH 6	Unattended cooking stove		✓			
COMELEC XII, RH 13	undetermined		✓			
Purok Sampalok, Bagua MB	Unattended lighted mosquito coil		✓			
Ante Comp., RH 4	Unattended lighted candle		✓			
Zone 2, RH 1	Undetermined		✓			
Urban Poor, RH 3	Undetermined		✓			
Zone 7, RH 1	Open flame from lighter igniting combustible materials		✓			
Tabunaway Blvd, Pob. 5	Arcing electrical short circuit of flourescent lamp		✓			
Mangongan Road, Bag 2	Undetermined		✓			
RHMB	lighted cigarette butt		✓			
Cotabato Regional and Medical Center	Button of Control Panel at the Electrical Equipment Room/Accidental			✓		
Manday, Bagua MB	Bedroom of Pesquira Residence/Accidental			✓		
MJ Photocopy Center, Pob. 6	Overheating of Device Video Recorder of CCTV/Accidental			✓		
Esteros, RH 9	Uyak Kusain's Residence/Undertermined			✓		
Purok Sampalok, Bagua MB	Electrical Disturbance			✓		
Purok Datu Wali, Tam MB	Worn out Electrical Wire Insulator/Accidental			✓		
De Mazenod Ave., RH 4	Electrical Disturbance			✓		
Beestop, Corner Don Rufino Alonzo St. & Sinsuat Ave.	Northwest Portion of the Restaurant/Accidental			✓		
Red Ribbon, Pob. 5	Cashier Area of Red Ribbon at Ground Floor/ Overheated Electrical Appliances			✓		

Barangay	Origin / cause	Frequency of Occurrence				
		2019	2018	2017	2016	2015
Mantigue Res., Brgy Pob. 4	Ceiling of Comfort Room/Accidental			✓		
Marlon Alejano Res., Pob 1	Electrical Disturbance			✓		
Purok Kabuntalan, Pob MB	2nd Floor of Diocolano Residence/Accidental			✓		
Barangay Hall, Pob. 8	Electrical Wire of Aircondition Unit/Accidental			✓		
Ampatuan Res., Bag 2	Electrical Disturbance			✓		
Lugay-lugay, Bag MB	Electrical Disturbance			✓		
Ecop Res., Pob 7	Ameen Escop's Residdence/ Undermined			✓		
IMT Site, Jasmin St., RH MB	Gas Stove in the Kitchen of Security Escorts/Accidental			✓		
Mike Guiamad Res., Bag 2	Electrical Disturbance			✓		
Purok 3, RH 9	Electric Fan Placed on a small table near the bed and curtain/Accidental				✓	
Vehicular Fire, Pob 6	Frayed Wire Connecting Battery/ Accidental				✓	
Reyes Fam Res., Bag 3	Electrical Disturbance				✓	
Tandang Sora St., RH MB	Ceiling of Cobita's Residence/ Accidental				✓	
Moon St., Zenaida Subd., RH 5	Gas Lamp/Accidental				✓	
Purok Lu Shin Kham, Pob. 1	Cooking Area of Montes Residence/ Accidental				✓	
Bonifacio St., Pob. 6	4th Floor of Violtan Laundry Place/ Accidental				✓	
Purok Pinagsamahan, RH 2	Area where dried grasses and rotten woods were piled/Accidental				✓	
Sinsuat Ave., Pob. 5	Kitchen Hood/ Accidental				✓	
CCSPC Agriculture Structure, RH 4	Convenience Outlet (left Portion of the Building/Accidental)				✓	
#8 Don Abelardo St., Pob 4	2nd Floor Door 4, Bueno Apartment/Electrical Accident				✓	
Manara St., RH 10	Dining Area of Conselo's Residence/ Accidental				✓	
Purok Gumbila, Tam MB	Master Bedroom Datu Tungko/ Accidental				✓	
Gutierrez Ave., RH 9	At the Cashier of Abigail Enterprises/Accidental				✓	
Purok 5, RH 9	Extension House of Peñas Establisment/ Accidental				✓	

Barangay	Origin / cause	Frequency of Occurrence				
		2019	2018	2017	2016	2015
Pansacala St., Slaughter Hse, RH 10	Living Room of Lumapinit's Residence. Owner transferring diesel fuel to smaller container/ Accidental				✓	
Kakar, Pob 8	Overheating of Electrical Appliance/ Accidental				✓	
Jupiter, RH 9	2nd Floor of Teosoro's Boarding House/ Accidental				✓	
Purok Kalilintad, RH 7	Ceiling of Kitchen Area/ Accidental				✓	
Calda Pizza, Al Nor, RH 9	Overheating of Gas Oven Located at the Kitchen Area/ Accidental				✓	
Usman Subd., Bag 2	Mrs. Bai Maitum Birurar's Room/ Accidental				✓	
Datu Udtog Matalam Ave., RH 10	Kitchen of Jerry Abas Residence/ Accidental				✓	
Purok Mabagal, Lugay-lugay, Bagua 1	Gas Leakage at the valave of LPG tank/ Accidental				✓	
#003 Lapu-lapu St., Nayon Shariff, RH 3	Ceiling Particularly at the Living room/ Accidental				✓	
Purok 1, Gov. Gutirrrez Ave., RH 9	Connie's Bakeshop/ Undermined				✓	
Tukananes, Brgy. Pob. 7	Badria Dagdaban Ali Residence/ Undermined				✓	
Jose Lim Sr. St., Bagua MB	Overheated Ballast Burst open in Flames/ Accidental					✓
Japal guiani Sr., St. Pob 5	Sparked Exposed Electrical Wiring/ Accidental					✓
Purok 3, RH 1	Unattended lighted mosquito coil/ Accidental					✓
Dona Estrella St., Pob 3	Kitchen Area/ Accidental					✓
City Assessor's Office, People's Palace, RH 10	Defective Airconditioning Unit/ Accidental					✓
Phase 1, 1st Road, Malagapas, RH 10	In the main strairway of the residential structure where the convenient outlet/ Accidental					✓
Sinsuat Ave., RH 10	Unattended Light Candle/ Accidental					✓
Datu Liwa Candao St., RH 3	Electrical Disturbance					✓
Kutawato Darussalam College, Bag MB	Electrical Disturbance					✓
Nayon Shariff, RH 3	Electrical Disturbance					✓
Kimpo Subdivision, RH 5	Electrical Disturbance					✓
Zone 1, RH 1	Electrical Disturbance					✓
Total		15	24	24	22	13

Source: Bureau of Fire Protection Local Fire Protection Office

d. Crime Incidence by Barangay for Adults for the Past Five Years

For the past five years, here is the data on Crime incidence by barangay for adults. There are two (2) types of crime in the data - The Index and Non-index Crimes. The Index Crimes are sufficiently significant and which occur with sufficient regularity to be meaningful. Included in this category are murder, physical injury, robbery, theft and rape. On the other hand, Non-Index crimes are all types of crimes not considered as index crimes.

The table shows the comparison on Index and Non-Index Crimes from 2015-2019. In summary thereof, there was a decrease in crime cases in Cotabato City Police Office.

In year 2015, Index Crimes on Murder has a total of 106 cases. Twenty-two (22) cases were solved and has 129 male offenders. Homicide with 1 case that was unsolved and offender was male. For the Physical injury, recorded a total of 282 cases with 292 male and 26 female offenders and 102 cases were solved. Rape cases had 19 cases with 18 male and 1 female offender and 12 cases were solved. On Criminal against property, robbery recorded a total of 227 cases with 246 male and 1 female offenders, thirty-one (31) cases were solved. On Theft, out of 366 cases,122 were solved involving 370 male and 36 female offenders.

In 2016, cases decreased on Murder by 21,7% or a total of 83 cases, 14 of which were solved involving 91 male offenders. Still 1 homicide case was recorded with male offender. A decrease of 33.7% on Physical Injury with 20 cases solved from the total of 187, involving 181 male and 25 female offenders. Rape decreased with 26.3% with 10 out of 14 cases were solved having all male offenders. On crime against Property, out of 227 cases, 12 were solved with 227 male and 5 female offenders. Theft increased with 372 cases and 71 were solved. Offenders with 335 male and 69 females.

In 2017, a declining trend for Index Crime on Murder recording a total of 62 (25%) cases with 30 solved, involving 68 male and 1 female offenders. There was an increase in Homicide, recording a total of 28 cases with 12 solved involving 32 male offenders. Physical Injury decreased to 102 cases (45.5%) with 12 solved and involving 102 males and 18 female offenders. Rape cases gradually decrease recording a total of 13(7.1%), wherein 9 cases were solved. Crime against Property on Robbery recording a 52% decreased compared to last year, registering only a total of 109 cases and 7 case of which are solved, involving 112 males and 1 female offenders. Theft recorded a 53% decrease with a total of175 cases, 36 cases were solved involving 157 male and 29 female offenders.

In 2018, a continuing decline of 54% for the Murder crime compared to 2017 was recorded, registering only a total of 28 cases with 15 cases solved, involving 38 male offenders. Homicide also shows a downward trend recording only 28 cases with 25 cases solved involving 14 males and 44 female offenders. Physical injury recorded 36 cases (64.7%) where 25 were solved, involving 44 males and1 female offenders. Rape cases also decrease recording 12 (7.7%) cases and 11 cases solve involving 16 male offenders. On Crime against Property, Robbery decreased with 42.2%. Out of 63 cases, 27 were solved with 95 males and 2 female offenders. Theft also decreased by 63.4% with 34 cases solved out of 64 total cases., involving 59 males and 20 female offenders.

In 2019 a slight increase in the Murder cases was recorder registering a total of 32 cases and 9 of which were solved, involving 43 male offenders. Homicide continues to decline registering a total of 10 cases (70.6%) and 4 of which were solve, involving 13 male offenders. A decrease of 47.2 % on Physical Injury, recording 19 cases, 7 of which were solve, involving 31 male offenders. Rape case decreased by 66.7% all 4 cases were solved involving 4 male offenders. On Crime against Property, Robbery recorded the lowest record within 5 years with 12 cases solved out of the 38 total cases, involving 49 male and 1 female offenders. Lastly, theft recorded a total of 27(57.8%) cases and 15 cases were solved, involving 33 males and 5 female offenders.

Generally, for the past five years, the percentile for Crime against Person were the following: Murders 69.8%., Homicide increased, Physical Injury 67.4% and Rape 78.9%. For Crime against Person, Robbery 83.3% and Theft 92.6%.

Table SO-42. Crime Incidence by Barangay for Adults for the Past Five Years

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
BAGUA 1	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1		1		1		1		1	1	1									
	b. Homicide																	1		1	
	c. Physical Injury	5	3	5						2		1	1								
	d. Rape					1	1	1													
	Crimes Against Property																				
	b. Theft	6	2	5	1					2		2		1	1	3					
	Non-index Crimes																				
BAGUA 2	Index Crimes																				
	Crimes Against Person																				
	a. Murder	9	2	9						4	2	4		2	1	1					
	b. Homicide									1	1	2						1	1	1	
	c. Physical Injury	3	2	4						4		4						1		1	
	d. Rape													1	1	1		1	1	1	
	Crimes Against Property																				
	a. Robbery	5	2	5		3		3		3		3		2	2	3					
	b. Theft	9	6	8	1	2	2	3		1		1						1	1		1
	Non-index Crimes																				

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
BAGUA 3	Index Crimes																				
	Crimes Against Person																				
	a. Murder	3	1	3		2		2		2	1	2						1	1	1	
	b. Homicide																				
	c. Physical Injury	7	1	7	1	7	2	7		1		1		1		1					
	d. Rape					1		1													
	Crimes Against Property																				
	a. Robbery	1		1		6	2	6		1		1						1		2	
	b. Theft	7	3	7		5		6													
	Non-index Crimes																				
KALANGANAN 1	Index Crimes																				
	Crimes Against Person																				
	a. Murder									1	1	4									
	c. Physical Injury																	1		1	
	d. Rape																				
	Crimes Against Property																				
	a. Robbery													1	1	11					
	b. Theft					1	1	1						1	1	2					
	Non-index Crimes																				
KALNAGNAN 2	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1		1														2	1	2	
	b. Homicide	1		1																	
	c. Physical Injury	3	1	3		2		2												1	
	d. Rape													1	1	1					
	Crimes Against Property																				
	a. Robbery					1		1													
	b. Theft									2	1	2									
	Non-index Crimes																				

MB BAGUA	Index Crimes																			
	Crimes Against Person																			
	a. Murder	4	1	7		3	2	3						2	2	7				
	b. Homicide													2	1	3		1		1
	c. Physical Injury	20	13	20	1	7	3	7		4	3	3	1	3	2	3				
	d. Rape																			
	Crimes Against Property																			
	a. Robbery	7	2	9		1		1		1	1	1		2	2	3				
	b. Theft	16	7	15	1	8	2	8		1	1	1								
	Non-index Crimes																			
MB KALANGANAN	Index Crimes																			
	Crimes Against Person																			
	a. Murder	4	2	4		3	2	3						1	1	1				
	b. Homicide									1	1	2								
	c. Physical Injury	5	3	6	1	3	1	4		2	1	2		1	1	1		1	1	1
	d. Rape																			
	Crimes Against Property																			
	a. Robbery					1		1						1	1	2				
	b. Theft	4	2	4		1	1	2		3	2	4								
	Non-index Crimes																			
MB POBLACION	Index Crimes																			
	Crimes Against Person																			
	a. Murder	17	5	24		9	1	9		4	4	4		3	3	4		1		1
	b. Homicide					1	1	1		2	1	2								
	c. Physical Injury	10	5	12	1	9	5	9		3		3		1	1	1				1
	d. Rape	1		1		1	1	1						1	1	1				
	Crimes Against Property																			
	a. Robbery	9	2	9		4		4		5		6		2	1	2		2	1	2
	b. Theft	24	12	21	4	20	9	17	4	7	2	6	1	3	1	3				
	Non-index Crimes																			

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
MB ROSARY HIEGHTS	Index Crimes																				
	Crimes Against Person																				
	a. Murder	3		3		2	1	3		3		3		1		1					
	b. Homicide									1	1	1		6	2	5		1	1	1	
	c. Physical Injury	26	7	27		18	1	20	1	7		8		1		1					
	d. Rape													1	1	1					
	Crimes Against Property																				
	a. Robbery	27	1	28		24	1	24		5		4	1	2	1	3		4	2	5	
	b. Theft	20	4	19	1	24	1	22	2	12	1	12		2		2		1	1	1	
	Non-index Crimes																				
MB TAMONTAKA	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1		1		3	1	3		2	2	2						2		2	
	b. Homicide									1	1	1		2	2	2					
	c. Physical Injury	6	1	6	2	2		5	2	1		1		1	1	1		1		1	
	d. Rape	1	1	1																	
	Crimes Against Property																				
	a. Robbery	3		3		2		2													
	b. Theft	12		18		4	1	4	1	4	2	4		1		1		1		1	
	Non-index Crimes																				
POBLACION 1	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1		1						1	1	1									
	b. Homicide																				
	c. Physical Injury	2	1	1		3		3													
	d. Rape	1	1	1		1	1	1													
	Crimes Against Property																				
	a. Robbery																				
	b. Theft																				
	Non-index Crimes																				

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
POBLACION 2	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1		1		2		2		1		1									
	b. Homicide																				
	c. Physical Injury					2		3		1		1				1					
	d. Rape																				
	Crimes Against Property																				
	a. Robbery									3		3									
	b. Theft	2		2		1		1										1	1	3	
	Non-index Crimes																				
POBLACION 3	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1	1	1		2		2										2		3	
	b. Homicide																				
	c. Physical Injury	1		1		6		6		1		1									
	d. Rape					1		1		1	1	1									
	Crimes Against Property																				
	a. Robbery	1		1		3		3		1		1									
	b. Theft	1	1	1		2	1	1	1					1		1					
	Non-index Crimes																				
POBLACION IV	Index Crimes																				
	Crimes Against Person																				
	a. Murder					4		4						2	1	2		5		6	
	b. Homicide																				
	c. Physical Injury	6	3	5	1	1		1		2	1	3	2					2	1	4	
	d. Rape	1		1						1		1									
	Crimes Against Property																				
	a. Robbery	6	2	8		9		9		8		8		2		3					
	b. Theft	12	6	12	2	12	2	12		16	3	12	5	3	2	2	1	3	3	4	
	Non-index Crimes																				

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
POBLACION V	Index Crimes																				
	Crimes Against Person																				
	a. Murder	8	3	15		9	2	12		6	4	7		5	1	6		2		4	
	b. Homicide									3		3		1		1					
	c. Physical Injury	28	8	27	3	16	2	12	7	14	1	13	1	4	3	5		1	1	1	
	d. Rape					2	2	2		3	3	3									
	Crimes Against Property																				
	a. Robbery	25	3	26		29		27	4	11		11		8	3	10	2	3	1	9	
	b. Theft	75	30	83	9	146	31	130	28	51	12	40	15	19	10	15	10	4	3	2	2
	Non-index Crimes																				
POBLACION VI	Index Crimes																				
	Crimes Against Person																				
	a. Murder	10	1	14		9		9		4		4		3	1	3		4		5	
	b. Homicide									2		2		2	1	2					
	c. Physical Injury	25	5	28		27		21	5	9	1	11		1	1	3		3	1	3	
	d. Rape	2	1	1	1					1		1									
	Crimes Against Property																				
	a. Robbery	10	2	9	1	18	3	19		5	1	6									
	b. Theft	43	13	43	3	42	9	36	14	16	3	15	1	5	3	6	4	1	1	2	
	Non-index Crimes																				
POBLACION VII	Index Crimes																				
	Crimes Against Person																				
	a. Murder					1		1						1		1		1	1	2	
	b. Homicide									1		1									
	c. Physical Injury	4	1	4		2		3						1	1	1					
	d. Rape									1		1									
	Crimes Against Property																				
	a. Robbery	1	1	1		1	1	1													
	b. Theft	4	2	3	1	1		1		2		2		1		1					
	Non-index Crimes																				

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
POBLACION VIII	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1		1						1		1									
	Crimes Against Property																				
	a. Robbery	1		1																	
	b. Theft					1			1	2		2									
	Non-index Crimes																				
POBLACION IX	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1		1																	
	b. Homicide																				
	c. Physical Injury	1		1																	
	d. Rape																				
	Crimes Against Property																				
	a. Robbery					1		1													
	b. Theft	2		2																	
	Non-index Crimes																				
ROSARY HIEGHTS 1	Index Crimes																				
	Crimes Against Person																				
	a. Murder	4	1	5						1	1	1		2		2					
	b. Homicide									1	1	1						1	1	2	
	c. Physical Injury	8	1	10		12		13		3		3	1					1		2	
	d. Rape	3	2	3		1	1	1		2	1	2		1	1	1					
	Crimes Against Property																				
	a. Robbery	22	4	24		7		8		2	1	2		7	3	13					
	b. Theft	10	4	9	1	7	1	7		5		4	1	1			1				
	Non-index Crimes																				

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
ROSARY HIEGHTS II	Index Crimes																				
	Crimes Against Person																				
	a. Murder	3	1	3		2		2		1		1						2	1	3	
	b. Homicide									2	1	2									
	c. Physical Injury	9	3	10		3	1	2	1	3	1	5		1		1		1	1	1	
	d. Rape					2	1	2						1	1	1					
	Crimes Against Property																				
	a. Robbery	10	4	10		20	3	21		13		13						4	1	4	
	b. Theft	17	2	19	2	12		9	4	8		8		2	2	2		1	1		1
	Non-index Crimes																				
ROSARY HIEGHTS III	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1		1		2	1	2						1		1		1		1	
	b. Homicide																				
	c. Physical Injury	4		4		4	2	4		2	1	5		1	1	1		1	1	3	
	d. Rape													2	2	2					
	Crimes Against Property																				
ROSARY HIEGHTS III	a. Robbery	11	1	16		4		4		3		3		2	1	2		1		1	
	b. Theft	7		5	2	4	1	4		3	1	3		1		1					
	Non-index Crimes																				
ROSARY HEIGHTS IV	Index Crimes																				
	Crimes Against Person																				
	a. Murder	2		2						3	2	3						2	2	2	
	b. Homicide									1		1		3	1	3					
	c. Physical Injury	15	9	16	2	7		5	2	2		4		1	1		1	1		1	
	d. Rape					1		1													
	Crimes Against Property																				
	a. Robbery	5		6		3		3		4		4		5	1	6		3	1	3	1
	b. Theft	6	3	6		11	1	11		2		1	1								
	Non-index Crimes																				

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
ROSARY HEIGHTS V	Index Crimes																				
	Crimes Against Person																				
	a. Murder																				
	b. Homicide									3	2	3		1		1					
	c. Physical Injury	5	4	5		5		5		2		3		2	2	2					
	d. Rape	1	1	1														1	1	1	
	Crimes Against Property																				
	a. Robbery	2		2		4	1	4		5		5		1		1					
	b. Theft	1		1		3	1	2	2	2		2									
	Non-index Crimes																				
ROSARY HEIGHTS VI	Index Crimes																				
	Crimes Against Person																				
	a. Murder	2		3		1		1		1	1	3									
	b. Homicide									1		1		2	1	2					
	c. Physical Injury	5	2	4	1	4		3	1	7	1	4	2	2	1	3					
	d. Rape	1		1										1	1	1					
	Crimes Against Property																				
ROSARY HEIGHTS VI	a. Robbery	3		4		5		5		6		6		2		2		3		5	
	b. Theft	7	2	7		4		2	2	3	2	2	1								
	Non-index Crimes																				
ROSARY HEIGHTS VII	Index Crimes																				
	Crimes Against Person																				
	a. Murder	5		5		6	1	7		4	2	3	1					2	1	3	
	b. Homicide									1		1		1		1		2		2	
	c. Physical Injury	10	3	9	2	5		5	1	9		6	6	2	1	3					
	d. Rape	1	1	1		1	1	1		1	1	1									
	Crimes Against Property																				
	a. Robbery	7	1	7		18		18		7		9		4	1	5		4	2	4	
	b. Theft	13	4	14		10	1	9	1	7		9		10	6	8	2	6	2	13	
	Non-index Crimes																				

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
ROSARY HEIGHTS VIII	Index Crimes																				
	Crimes Against Person																				
	a. Murder	5		5		4		4		2		2		1	1	2					
	b. Homicide									2	2	4		1	1	1					
	c. Physical Injury	11	4	12	2	5		7		1		1		3	3	3					
	d. Rape	2	2	2						1	1	1		1	1	1					
	Crimes Against Property																				
	a. Robbery	8		10		11		11		4	1	4									
	b. Theft	5	1	2	4	2		1	1	1			1	2	1	2					
	Non-index Crimes																				
ROSARY HEIGHTS IX	Index Crimes																				
	Crimes Against Person																				
	a. Murder	2		2		2		2		5	1	6		3	3	6		1	1	1	
	b. Homicide																				
	c. Physical Injury	13	2	13	1	6		4	2	3	1	4		2	1	2		3		5	
	d. Rape																				
	Crimes Against Property																				
	a. Robbery	23	3	23		12		12		5	1	6		3	2	4		4	1	4	
	b. Theft	17	4	15	3	8	2	11	1	5	1	7	1	3	1	3		3		3	
	Non-index Crimes																				
ROSARY HEIGHTS X	Index Crimes																				
	Crimes Against Person																				
	a. Murder	10	2	10		10		10		9	4	9						2	1	4	
	b. Homicide									2	1	2		9	4	9		2	1	4	
	c. Physical Injury	29	12	28	4	21	1	20	2	12	1	9	3	4	2	5		2	1	3	
	d. Rape	2	2	2						1	1	1						1	1	1	
	Crimes Against Property																				
	a. Robbery	17	1	18		18	1	18		7		7		5	1	5		6	2	7	
	b. Theft	24	10	26	1	20	2	18	2	11	2	9	2	6	5	6	1	5	2	4	1
	Non-index Crimes																				

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
ROSARY HEIGHTS XI	Index Crimes																				
	Crimes Against Person																				
	a. Murder	2	1	2		2		2		2		2									
	b. Homicide													1	1	1					
	c. Physical Injury	4	2	4		3		3		3		3									
	d. Rape																	1	1	1	
	Crimes Against Property																				
	a. Robbery	5		5		9		8	1	4	1	4		2		2					
	b. Theft	4	1	5		6		5	1	3	1	3		1	1		1				
	Non-index Crimes																				
ROSARY HEIGHTS XII	Index Crimes																				
	Crimes Against Person																				
	a. Murder																	1		2	
	b. Homicide									1		1		1		1					
	c. Physical Injury	2	1	2		3	1	3		2		2									
ROSARY HEIGHTS XII	d. Rape																				
	Crimes Against Property																				
	a. Robbery	4	1	4		1		1						3	3	4					
	b. Theft	5		5		3	1	2	1	2		2									
	Non-index Crimes																				
ROSARY HEIGHTS XIII	Index Crimes																				
	Crimes Against Person																				
	a. Murder	3	1	3		1		1		3	2	3									
	b. Homicide									2		2		2		2		1		1	
	c. Physical Injury	14	5	18	2	3	1	2	1	1		1		2	2	2					
	d. Rape	2		2		1	1	1						1		5					
	Crimes Against Property																				
	a. Robbery	13	1	15		11		11		5		5		9	4	14		3	1	3	
	b. Theft	12	3	12		12	1	10	3	4	2	4									
	Non-index Crimes																				

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
TAMONTAKA I	Index Crimes																				
	Crimes Against Person																				
	a. Murder					2	2	5						1	1	1		1		1	
	b. Homicide																				
	c. Physical Injury	1			2	1		2		1			1	1	1	3				2	
	d. Rape	1	1	1						1	1	1									
	Crimes Against Property																				
	a. Robbery	1		1		1		1		1	1										
	b. Theft	1		1										1		1					
	Non-index Crimes																				
TAMONTAKA II	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1		1		1	1	1													
	b. Homicide																				
	c. Physical Injury													1		1					
	d. Rape					1	1	1						1	1	1					
TAMONTAKA IV	Index Crimes																				
	Crimes Against Person																				
	a. Murder									1	1	1									

Notes:
Types of Crime:

1. *Index Crimes - crimes which are sufficiently significant and which occur with sufficient regularity to be meaningful. Included in this category are the following crimes: murder, physical injury, robbery, theft and rape*
2. *Non-Index Crimes – all types of crimes not considered as index crimes*

e. Crime Incidence by Barangay for Children (below 18 years old) in Conflict with the Law for the past five years.

Children in conflict with the law refers to anyone under 18 who comes into contact with the justice system as a result of being suspected or accused of committing an offence. Currently, children under the age of 15 in the Philippines are exempt from criminal liability, but subject to intervention by the government under the provision of the Juvenile Justice and Welfare Act of 2006.

In 2015, 1 case of Homicide - male was solved im MB Tamontaka. On Physical Injury, a total of 10 cases was solved. All were males and came from Barangay MB Poblacion (1), MB Tamontaka (1), Pob. 4 (1), Pob. 5 (1), Pob. 7 (2), and RH 4 (4). There were 2 cases of Rape was solved in Barangay Pob. 7 and RH 9. While on Crime against Property, a total of 21 cases on theft were solved. (2) Bagua 2 - male, (3) MB Poblacion - 2 male and 1 female, (2) MB Rosary Heights - male, (1) Poblacion 2 - male, (5) Poblacion 5 - male, (3) Poblacion 6 - 2 males and 1 female, (2) RH 9 - male, and (3) RH 13 - male. On Non-index Crime, two (2) crime incidence committed by CICL was solved in MB Rosary Heights.

In 2016 on Crimes against Persons, three (3) cases on Physical Injury were solved - all males at Barangay Bagua 2, RH 7 and RH 10. On crime against Property, there was one (1) robbery case solved at RH 6 - male offender. A total of 20 cases solved on Theft. Barangays were MB Poblacion (1) - male, Pob. 4 (1) - male, Pob. 5 (10) - 5 males and 5 females, Pob. 6 (1) - male, RH 1 (1) - male, RH 2 (1) - male, RH 6 (1) - male, RHH 7 (2) - 1 male and 1 female, RH 10 (2) - 1 male and 1 female. For Non-index Crimes on crime incidence committed by CICL, there were 2 cases solved in Barangay MB Tamontaka - male and RH 10 - male.

Table SO-43 shows Crime Incidence by Barangay for Children (below 18 years old) in Conflict with the Law for the past five years.

Barangay	Type of Crime	2015				2016				2017				2018				2019			
		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender	
				Male	Female			Male	Female			Male	Female			Male	Female			Male	Female
Bagua 2	Index Crimes																				
	Crimes Against Person																				
	a. Murder																				
	b. Homicide																				
	c. Physical Injury					1	1	1													
	d. Rape																				
Bagua 2	Crimes Against Property																				
	a. Robbery																				
	b. Theft	2	2	2																	
	Crimes Against Property																				
	a. Robbery																				
	b. Theft													1	1	1					
	Non-index Crimes																				
	a. Crime Incidence Commited by CICL													3	3	3					

Barangay	Type of Crime	2015				2016				2017				2018				2019			
		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender	
				Male	Female			Male	Female			Male	Female			Male	Female			Male	Female
MB Poblacion	Index Crimes																				
	Crimes Against Person																				
	c. Physical Injury	1	1	1																	
	Crimes Against Property																				
	a. Robbery																				
	b. Theft	3	3	2	1	1	1	1						1	1		1				
MB Rosary Heights	Index Crimes																				
	Crimes Against Person																				
	a. Physical Injury									1	1	1									
	Crimes Against Property																				
	a. Theft	2	2	2																	
	Non-index Crimes																				
	a. Crime Incidence Commited by CICL	2	2	2																	
MB Tamontaka	Index Crimes																				
	Crimes Against Person																				
	b. Homicide	1	1	1																	
	c. Physical Injury	1	1	1																	
	Crimes Against Property																				
	b. Theft									1	1	1									
	Non-index Crimes																				
	a. Crime Incidence Commited by CICL					1	1	1						1	1	1					
	Crimes Against Property																				
	b. Theft	1	1	1										2	2	2					
Pob 3	Non-index Crimes																				
	a. Crime Incidence Commited by CICL									1	1	1									
Pob 4	Index Crimes																				
	Crimes Against Person																				
	c. Physical Injury	1	1	1																	
	Crimes Against Property																				
	b. Theft					1	1	1										1	1		1

Barangay	Type of Crime	2015				2016				2017				2018				2019			
		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender	
				Male	Female			Male	Female			Male	Female			Male	Female			Male	Female
Pob 5	Index Crimes																				
	Crimes Against Person																				
	c. Physical Injury	1	1	1																	
	Crimes Against Property																				
	a. Robbery																				
	b. Theft	5	5	5		10	10	5	5	2	2	1	1	3	3	3		5	5	2	3
	Non-index Crimes																				
	a. Crime Incidence Commited by CICL																	1	1	1	
Pob 6	Crimes Against Property																				
	a. Robbery																				
	b. Theft	3	3	2	1	1	1	1		1	1	1									
Pob 7	Index Crimes																				
	Crimes Against Person																				
	c. Physical Injury	2	2	2														1	1	1	
	d. Rape	1	1	1																	
RH 1	Crimes Against Property																				
	a. Robbery																				
	b. Theft					1	1	1													
	Non-index Crimes																				
	a. Crime Incidence Commited by CICL					1	1	1										2	2	2	
RH 2	Crimes Against Property																				
	b. Theft					1	1	1										1	1	1	
RH 4	Index Crimes																				
	Crimes Against Person																				
	c. Physical Injury	4	4	4						2	2	1	1					1	1	1	
RH 6	Crimes Against Property																				
	a. Robbery					1	1	1													
	b. Theft	1	1	1																	
	Non-index Crimes																				

Barangay	Type of Crime	2015				2016				2017				2018				2019			
		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender	
				Male	Female			Male	Female			Male	Female			Male	Female			Male	Female
RH 7	Index Crimes																				
	Crimes Against Person																				
	c. Physical Injury					1	1	1													
	Crimes Against Property																				
	b. Theft					2	2	1	1												
RH 8	Index Crimes																				
	Crimes Against Person																				
	c. Physical Injury									1	1	1						1	1	1	
RH 9	Index Crimes																				
	Crimes Against Person																				
	d. Rape	1	1	1																	
	Crimes Against Property																				
	b. Theft	2	2	2																	
RH 10	Index Crimes																				
	Crimes Against Person																				
	c. Physical Injury					1	1	1													
	Crimes Against Property																				
	b. Theft					2	2	1	1												
	Non-index Crimes																				
	a. Crime Incidence Commited by CICL					1	1	1		1	1	1									
RH 13	Index Crimes																				
	Crimes Against Person																				
	d. Rape													1	1	1					
	Crimes Against Property																				
	b. Theft	3	3	3						1	1		1	1	1	1					
	Non-index Crimes																				
	a. Crime Incidence Commited by CICL									1	1	1									
TAM 5	Crimes Against Property																				
	b. Theft									1	1	1									

Source: Local PNP

Notes:

Types of Crime:

Index Crimes - crimes which are sufficiently significant and which occur with sufficient regularity to be meaningful. Included in this category are the following crimes: murder, physical injury, robbery, theft and rape

Non-Index Crimes – all types of crimes not considered as index crimes

In 2017, the cases were decreasing. For Index Crimes on Physical Injury, 4 cases were solved in barangay MB Rosary Heights (1) - male, RH 4 (2) - 1 male and 1 female, and RH 8 (1) - male. While on Crime against Property, 6 cases on theft were solved. Baragays are MB Tamontaka (1) - male, Pob. 5 (2) - 1 male and 1 female, Pob. 6 (1) - male, RH 13 (1) - female and Tam. 5 (1) - male. Crime incidence committed by CICL has 3 cases solved at Barangay Pob. 3, RH 10, and RH 13 - all males.

In 2018, 1 rape case was solved in Rh 13 - male. For Crime against Properties, 1 robbery was solved in RH 10 - male and 8 on theft cases solved in Barangay MB Bagua (1) - male and RH 13 (1) - male. Crime incidence committed by CICL has 4 cases solved in Barangay MB Bagua (3) and MB Tamontaka (1) - all males.

In the year 2019, 3 cases on Physical Injury was solved in Barangays Pob. 7, RH 4 and RH 8 - all males while crime against property on robberry has 1 solved case in Barangay RH 9 - male and on theft were 7 cases solved in barangays Pob. 4 (1) - female, Pob. 5 (5) - 2 male and 3 females and RH 2 (1) - male. On crime incidence committed by CICL, 4 cases solved in barangays Pob. 5 (1) - male, RH 1 (2) - male and RH 11 (1) - male.

The data shows that there was a decrease in both Index and Non-Index Crimes from 2015 - 2019 on Crime Incidence by Barangay for Children below 18 years old.

f. Current and projected manpower requirement for the protective services from 2021 to 2029.

Table SO-44 shows the Current and projected manpower requirement for the protective services from 2021 to 2029.

As of 2019 the projected population is about 322,346 with an existing Police force of 50. As our population grow by 1.86% annually the Police forces shall correspond to the growth of the population requiring 51 police officer by 2020, 52 by 2021, 54 by 2022, 55 by 2023, 56 by 2024 and 71 by 2029 at estimated population of 387,577 population.

Currently the Bureau of Fire has a strong 25 Fire Fighters, by 2020 to 2021 the need requirement is 26 an additional of only 1 fire officer, and by 2022 to 2023 at least 27 fire fighters is needed, and by 2024 28 fire fighters is required and by 2029 the Bureau of Fire is recommended to have 36 fire fighters.

Presently the BJMP has 44 Jail guards, and an additional 1 Jail personnel is required annual from 2020 to 2022, by 2023 shall maintained the forces at 47, by 2024 another 1 additional manpower totalling to 48 and by 2029 the need requirement shall be 58 Jail officers.

Table SO-44. Current and Projected Requirement for Police, Fire and Jail Personnel

TYPE	Existing No. (2019)	Projected Population and Required No. of Personnel					
		Year 2020	Year 2021	Year 2022	Year 2023	Year 2024	Year 2029
Population*	322,346	328,342	334,449	340,670	347,006	353,460	387,577
Police Force**	50	51	52	54	55	56	71
Fire Force	25	26	26	27	27	28	36
Jail Personnel	44	45	46	47	47	48	58

Notes:
**based on population increase rate = 2.4% per annum*
*** computed based on population projection and standard ratios*

1.5.2.3.1 **Sports and Recreation**

a. Existing Sports and Recreational Facilities

The table SO 46 shows the city existing sports facilities. A total of 75 Sports and recreation facilities having fair physical conditions, except for the Central Pilot Elementary School Oval track and field that is poorly maintained. Forty three of the facilities are publicly owned and 31 were from private sector.

Facilities having high susceptability to flooding while 11 with medium and 47 with low susceptability. There are 38 facilities were identified having medium susceptability to tsunami, they were the barangays belonging to the coastal areas and 1 or Kalanganan mother with high susceptability for tsunami and surge. Two of the facilities with medium susceptability to landslide, these are located at the PC Hill.

Thirteen of the public facilities were allowed to be use as evacuation center.

Table SO-46. Existing Sports and Recreational Facilities by Barangay, Year 2018

Barangay	Type of Facility	Lot Area (ha/sq m)	Ownership	Physical Condition of Facility	Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)							
						Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Bagua Mother	San Roque Gym	436.24	Public	Fair		H					M		
	Mahad Covered Court	436.24	Private	Fair		H					M		
	Rasheeda Basketball Court	436.24	Private	Fair		H					M		
Bagua 2	Day Care Playground		Public	Fair	N	H					M		
Poblacion MB	Playground	1300 sqm	Public	Fair	Y	M							
Pob. 1	CCI Gymnasium		Private	Fair	N	M							
	CCI Open Field		Private	Fair	N	M							
Pob. 2	Mini Park	436.24	Public	Fair	N	L							
	Half basketball Court	40 sq.m.	Public	Fair	N	L							
Pob. 3	Covered Court	436.24	Public	Fair	N	M							
Pob. 4	Re-creation Hall	60	Public	Fair	Y								
Poblacion 4	Half basketball Court	50 sq.m.	Public	Fair	N								
Poblacion 5	Playground		Public										
	Basketball Court		Private										
Poblacion 6	Bodybuilding Gym 1	160 sq.m.	Private	Fair	N	L					M		
	Bodybuilding Gym 2	300 sq.m.	Private	Fair	N	L					M		
Poblacion 6	Billiard Hall 1	32 sq.m.	Private	Fair	N	M					M		
	Billiard Hall 2	32 sq.m.	Private	Fair	N	M					M		
	Billiard Hall 3	32 sq.m.	Private	Fair	N	M					M		
	City Plaza, Play Ground/ Open Space	600 M²	Public	Fair	N	L					M		
	Half basketball Court		Private	Fair	N	L					M		
	PP1 Basketball Court		Private	Fair	N	L					M		
	PCG Basketball Court		Private	Fair	N	L					M		
	Half basketball Court		Private	Fair	N	L					M		
	Central Pilot Oval/Track and field		Public	Poor	Y	L					M		
	Central Pilot Covered Court		Public	Fair	Y	L					M		
Poblacion 7	School Ground		School Property	Fair	N	H					M		
	Brgy. Gymnasium	1,000	Public	Fair	H	H					M		
Pob. 8	Madrasa Multi-Purpose Hall	60	Private	Fair	N								
Rosary Heights Mother	LGU Tennis Court		Public	Fair	N	L					M		

Barangay	Type of Facility	Lot Area (ha/sq m)	Ownership	Physical Condition of Facility	Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)							
						Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
	Golden Lace Swimming Pool		Private	Fair	N								
Rosary Heights 1	Basketball Court	1000sqm	Public	Fair	N	L				M	M		
	PNP Tennis Court	1000sqm	Public	Fair	N	L				M	M		
RH 2	NDSAC Gym		Private	Fair	N	L							
RH 3	NDU Gymnasium		Private	Fair	N								
	NDU Soccer Field		Private	Fair	N								
	NDU Open Tennis Court		Private	Fair	N								
RH 4	Brgy. Gymnasium	1,000	Public	Fair	Y	L							
	NDBoys Gymnasium		Public	Fair	N	L							
	NDBoys Open Tennis Court		Public	Fair	N	L							
	CCSPC Track and Field		Public	Fair	N	L							
	CCSPC Gymnasium		Public	Fair	N	L							
	CCSPC Open Tennis Court		Public	Fair	N	L							
	CNHS Main Covered Court		Public	Fair	N	L							
RH 5	Don E. Sero Elem. School Covered Court	436.24	Public	Fair	N	L							
RH 6	Krislammville Elem. School Covered Court	436.24	Public	Fair	Y	L							
RH 7	Sideout Badminton Court		Private	Fair	N	L							
	BARMM Open Field		Public	Fair	N	L							
	A Fitness Gymnasium		Private	Fair	N	L							
	Citi Mall Cinema Theater		Private	Fair		L							
RH 8	DepEd Covered Court		Public	Fair	N	M					M		
	St. Joseph Parish Covered Court		Private	Fair	N	M					M		
	NDVillage H/S Covered Court		Public	Fair	N	M					M		
	NDVillage E/S Covered Space		Public	Fair	N	M					M		
Rosary Heights 9	Basketball Open Court	portion of 1,921 sqm	Public	Poor	Y	L					M		
	AL Nor Cinema Theater		Private	Fair	N	L							

Barangay	Type of Facility	Lot Area (ha/sq m)	Ownership	Physical Condition of Facility	Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)							
						Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Rosary Heights 9	St Benedict Covered Basketball Covered Court		Private	Fair	N	L					M		
	Al Nor Swimming Pool		Private	Fair	N	L							
Rosary Heigts 10	RH 10 Open Basketball Court		Public	Fair	N	L					M		
	Canizarez High School Covered Court		Public	Fair	N	L					M		
	Children's Park		Public		N	L					M		
	People's Palace Open Space		Public	Fair	N	L					M		
Rosary Heights 11	Basketball Court		Public	Fair	Y	L					M		
	Tennis Court		Private	Fair	Y	L					M		
	Covered Court	500	Public	Fair	Y	L					M		
Rosary Heights 12	USAID Community Center		USAID Donated	Fair	Y	L					M		
	Basketball Court	436.24	Public	Fair	Y	L					M		
	Sports Court	1000sqm.	Private	Fair	Y	L					M		
RH 13	RVM Gymnasium		Private	Fair	N	L					M		
	Pizzaro Swimming Pool		Private	Fair	N	L							
Kal. Mother	Basketball Court	436.24	Public	Fair	N	H					H	H	
Kal. 2	Covered Court	436.24	Public	Fair	N	L							
	Bay walk		Public	Fair	N	L							
	Bike Lane		Public	Fair	N	L							
Tam. 2	Multi-Purpose Hall	70	Public	Fair	N	H							

Source: City Planning and Development Office, Engineering Office, Office of the Sagguniang Kabataan (SK).
Notes:
Type of Facility – Sports or Recreational
Ownership - public/private
Physical Condition of Facility – Fair, Poor, Critical
Indicate level of susceptibility for all hazards: High (H), Moderate (M), Low (L)

b. Proposed Recreation Facilities

The city is looking for a national sponsor to fund the Sports Complex, the Office of the City Assessors is on its process of the inventory of public lands that is potential location for the Construction of a Sports Complex.

Out of the 37 barangays only 14 barangays signify proposals to put up a sports facility, others may already have existing sports facilities. The most commmon is construction of either a covered or open basketball court, which can also use into other sports activities. Some opted for a construction of multi purpose building, that can also be use for recreational space and some sports events. Barangay Kalanganan 2 signify to propose for a Construction of a Gymnasium. However, we have to consider the susceptability of their propose location. Bagua 2 and 3 are with high flood and medium Tsunami susceptability. The Rosary Heights Barangays has low to flood susceptability. Poblacion 8 at low flood susceptability while Pob. 9 and Kalanagan Mother has very high flood suscetability and Kal. 2, Tamontaka mother and Tamontaka 5 with high flood susceptability.

Table SO-47. Proposed Recreation Facility, Year 2019

Proposed Recreation Facility	Barangay	Type of Facility	Ownership	Area (ha/sq m)	Hazard Susceptibility (H/M/L)							
					Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Sports Complex												
	Bagua Mother											
	Bagua 1											
Construction of Brgy Basketball Court	Bagua 2	Basketball Court	Public		H					M		
Construction of Brgy Covered Court	Bagua 3	Covered Court	Public		H					M		
	RH Mother											
	RH 1											
Concreting of Basketball Court	RH 2	Basketball Court	Public		L							
Lot acquisition and construction of Multi-purpose Hall	RH 3	Multi-purpose Hall	Public	50,000 sq.m.								
	RH 4				L							
Construction of Brgy Basketball Court	RH 5	Basketball Court	Public		L							
	RH 6											
	RH 7											
	RH 8											
	RH9											
	RH 10											

Proposed Recreation Facility	Barangay	Type of Facility	Ownership	Area (ha/sq m)	Hazard Susceptibility (H/M/L)							
					Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Construction of a Covered Court	RH 11	Covered Court	Public		L							
Construction of a Recreation Center/Multi-purpose Building	RH 12	Recreation Center	Public	50 sq.m.	L							
	RH 13											
	Pob. Mother											
	Pob. 1											
	Pob. 2											
	Pob. 3											
	Pob. 4											
	Pob. 5											
	Pob. 6											
	Pob. 7											
Construction of Multi-purpose Building	Pob. 8	Multi-purpose Building	Public		L							
Construction of Covered Court		Covered Court	Public	50 sq.m.	L							
Construction of Covered Court	Pob. 9	Covered Court	Public	50 sq.m.	VH					H	H	
Lot acquisition and construction of Multi-purpose Hall	Kal. Mother	Multi-purpose Hall	Public		VH	H	H			H	H	
Construction of Covered Court		Covered Court	Public		VH	H	H			H	H	
	Kal. 1											
Construction of a Multi-purpose Hall	Kal. 2	Multi-purpose Hall	Public		H					H	H	
Construction of Gymnasium		Gymnasium	Public		H	H	H			H	H	
Construction of Multi-purpose Hall	Tamontaka Mother	Multi-purpose Hall	Public		H	H	H			M	M	
	Tam. 1											
	Tam. 2											
	Tam. 3											
	Tam. 4											
Construction of a Multi-purpose Hall	Tam. 5	Multi-purpose Hall	Public		H	H	H					

Note:

Type of Facility – Sports or Recreational

Indicate level of susceptibility for all hazards: High (H), Moderate (M), Low (L)

c. Needs Analysis: Presence, Absence and Condition of Socio Services by Barangay

Table SO-49. Needs Analysis: Presence, Absence and Condition of Socio Services by Barangay

Barangay	Administration		Housing (Y/N)			Health (Y/N)				Education (Y/N)				Social Welfare (Y/N)			Protection (Y/N)			Recreation (Y/N)	
	BH		IS	SH	RS	H		PC	PrC	E		S	T	D	Sc	MH	P		F	MF	
	Y/N	C*				Y/N	C*			Y/N	C*						Y/N	C*		Y/N	C*
Bagua Mother	Y	F	Y			Y	F			Y	F	Y	Y	Y	N		Y	F			
Bagua 1	Y	F	Y	N	N	Y	F	N	Y	Y	F	Y	Y	Y	N	N	N	NA	N	N	N
Bagua 2	Y	F	Y	Y	N	Y	F		Y	Y	F	N	N	Y	N	N	N	NA	N	N	
Bagua 3	Y	F	Y	N	N	Y	F	N	N	Y	F	N	N	Y	N	N	N	NA	N	N	N
RH Mother	Y	F	Y	N	N	Y	F	Y	Y	Y	F			Y	N	Y	Y	F	Y	Y	F
RH 1	Y	F	Y			Y	F		Y	Y	F	Y	Y	Y			Y	F		Y	F
RH 2	Y	F	Y	Y	N	Y	F	N	N	Y	F	N	N	Y	N	N	N	NA		N	NA
RH 3	Y	F	Y	N	N	Y	F	N	N	Y	F	Y	Y	Y	Y	N	N	NA	N	N	N
RH 4	Y	F	Y	Y	N	Y	F	N	Y	Y	F	Y	Y	Y	N	N	N	NA	N	N	N
RH 5	Y	F	Y	N	N	Y	F	N	N	Y	F	Y	Y	Y	Y	N	N	NA		Y	Y
RH 6	Y	F	Y	Y	Y	Y	F	N	N	Y	F	Y	N	Y	N	Y	N	NA	N	N	N
RH 7	Y	F	Y	Y	Y	Y	F	N	N	Y	F	Y	N	Y	N	Y	N	NA	N	Y	F
RH 8	Y	F	Y	Y	N	Y	F	N	N	Y	F	Y	N	Y	N	Y	N	NA	N	Y	F
RH9	Y	F	Y	N	N	Y	F	Y	Y	Y	F	Y	Y	Y	N	N	N	NA		N	N
RH 10	Y	F	Y	N	Y	Y	F	Y	N	Y	F	Y	Y	Y	Y	Y	N	NA	N	Y	F
RH 11	Y	F	Y	Y	N	Y	F	N	N	Y	F	Y	N	Y	N	Y	N	NA	N	Y	F
RH 12	Y	F	Y	N	N	Y	F	N	N	Y	F	Y	Y	Y	N	Y	N	NA	N	Y	F
RH 13	Y	F	Y			Y	F			Y	F	N	Y	Y	N	N				Y	F
Pob. Mother	Y		Y											Y							
Pob. 1	Y	F	Y	N	N	Y	F	N	N	Y	F	Y	N	Y	N	N	Y	F	N	Y	F
Pob. 2	Y	F	Y	N	N	Y	F	N	N	Y	F	N	N	Y	N	N	N	NA		N	N
Pob. 3	Y	F	Y	N	Y	Y	F	N	N	Y	F	N	N	Y	N	N	N	NA		N	
Pob. 4	Y	F	Y	N	N	Y	F	N	N	Y	F	Y	Y	Y	N	Y	N	NA	N	Y	
Pob. 5	Y	F	Y			Y	F							Y					Y		
Pob. 6			Y			Y	F							N			Y	F			
Pob. 7			Y			Y	F							Y				NA			
Pob. 8	Y	F	Y	N	Y	Y	F	N	Y	Y	F	Y	N	Y	N	Y	N	NA	Y	Y	Y
Pob. 9	Y	F	Y	N	N	Y	F	Y	Y	Y	F	N	N	Y	N	N	N	NA	N	N	N
Kal. Mother	Y	F	Y	Y	Y	Y	Y	N	Y	Y	F	Y	Y	Y	N	N	Y	C	N	N	N
Kal. 1			Y															NA			

Barangay	Administration		Housing (Y/N)			Health (Y/N)				Education (Y/N)				Social Welfare (Y/N)			Protection (Y/N)			Recreation (Y/N)	
	BH		IS	SH	RS	H		PC	PrC	E		S	T	D	Sc	MH	P		F	MF	
Kal. 2	Y	F	N	N	N	Y	C	Y	N	Y	F	Y	N	Y	N	Y	N	NA	N	N	N
Tamontaka Mother	Y	F	Y	N	N	Y	Y	N	Y	Y	F	N	Y	Y	N	Y	Y	F	N	Y	Y
Tam. 1			N															NA			
Tam. 2	Y	F	Y	Y	Y	Y	C	N	Y	Y	F	N	N		N	Y	Y	NA	N	N	N
Tam. 3	Y	F	Y	N	N	Y	C	Y	N	Y	F	N	N		N	N	N	NA	N	N	N
Tam. 4			Y															NA			
Tam. 5	Y	F	Y	N	N	Y	C	N	Y	Y	F	Y	Y		N	N	N	NA	N	N	N

Notes:
Check presence of the following per barangay – Yes (Y), No(N)

(BH) Barangay Hall
(IS) Informal Settlers
(SH) Socialized Housing
(RS) Relocation Site
(H) Health Station/Center
(PC) Public Cemetery
(PrC) Private Cemetery (eg. memorial parks, crematorium, etc.)
(E) Elementary School
(S) Secondary School

C* – Condition
Indicate if the following facilities are functioning – Functioning (F), Not Functioning (NF), Not applicable (NA)
(BH) Barangay Hall
(H) Health Station/Center
(E) Elementary School
(P) Police Outpost
(MF) Multipurpose Recreational Facilities
(T) Tertiary
(D) Day Care Center

(Sc) Senior Citizen Center
(MH) Multipurpose Hall
(P) Police Outpost
(F) Fire Station
(MF) Multipurpose Recreational Facilities

1.5.3 AGRICULTURE AND AGRI- INDUSTRY FACILITIES

Existing Situation

Cotabato City has a total of sixteen (16) agricultural barangays out of thirty-seven (37) barangays in the City. It has a vast agricultural area based on the actual figure from the City Agriculture Division of the Office of the City Mayor of more or less 8,620.62 hectares representing 48.98% of the total land area of the city of 17,599 hectares. Only 2,075.00 hectares were maximized for agricultural crops for the year 2018. While 1,266.24 hectares were maximized for agricultural crops for the year 2019.

a. Existing Major Agricultural Crops by Area, Production and Market, 2018 & 2019

As shown in the table below major crops are rice, corn, banana and coconut. Rice is planted in the sixteen (16) agricultural barangays of the city. Corn is cultivated in the Tamontaka areas, Banana and Coconut are found in Kalanganan, Tamontaka and Poblacion rural barangays. Farminers used the traditional way of farming.

The sixteen (16) classified agricultural barangays in Cotabato City provide 8,620.62 has. of total agricultural land in 2020 which is lesser than that of year 2018 at 9,495.27 hectares. Based on 2018 data, primary crops planted in Cotabato City were rice, coconut, corn and banana which accounts land utilization of 15.17%, 5.03%, 3.82% and 0.16% respectively. Specifically, total land utilization for rice was 1,310 ha, for coconut was 478 has., corn with 280 has., and banana had the least with 7 hectares land utilization. As a whole, 2,075 hectares of agricultural land was utilized for rice, coconut, corn and banana for 2018. This was 24.70% of total agricultural land This reduced to 1,266.24 hectares in 2019 which is 15.18% of agricultural land.

Furthermore, among the 16 agricultural barangays, Brgy. Tamontaka 5 possessed the largest agricultural land area which had 2580 hectares or 47% of its total land area. However, Poblacion 9 had the highest agricultural land utilization which had 216 hectares or 22.36% of its total agricultural land *compared* to 66 hectares (2.56%) agricultural land utilization of Brgy. Tamontaka 5. This is however, attributed to the geographical condition of Tamontaka 5 where other farming practices are more appropriate. Meanwhile, Brgy. RH 5 had the least agricultural land having 12.52 hectares in which 12 hectares was used for rice in 2018.

TABLE EC-2 Existing Major Agricultural Crops by Area, Production and Market, 2018 & 2019

Major Crop	Location (Barangay)	Total Land Area	Total Agri Land	Area 2018		Area 2019		Annual Production 2018		Annual Production 2019		Product Market	No. of Farmers	No. of Tenants	Type of Farming Technology	Existing Agricultural Support Facilities		Hazard Susceptability (H/M/L)							
				ha	% Utilization	ha	% Utilization	Volume (50kls/bag)	Value (Php)	Volume (50kls/bag)	Value (Php)					Pre-Harvest	Post Harvest	Fl	Tc	Dr	Eq	Ln	Ts	Su	Others
RICE	BAGUA 1	185.59	94.96	8	8.42	6.25	6.58	509.6	433,160.00	398.13	338,406.25	Local	5	1	Traditional			L							
	BAGUA 2	176.24	93.046	32	34.39	27.15	29.18	2,038.40	1,732,640.00	1,729.46	1,470,036.75	Local	21	4	Traditional			L							
	KALANGANAN MB	2,206.50	955.51	46	4.81		0	2,930.20	2,490,670.00	-	-	Local	31	6	Traditional					L			H		Sea Level Rise
	KALANGANAN 1	1,158.50	628.94	34	5.41		0	2,165.80	1,840,930.00	-	-	Local	23	5	Traditional					L			H		
	KALANGANAN 2	2,107.40	1202.8	140	11.64		0	8,918.00	7,580,300.00	-	-	Local	93	19	Traditional					L			H		
	POBLACION 1	68.119	36.947	20	54.13		0	1,274.00	1,082,900.00	-	-	Local	13	3	Traditional			H							
	POBLACION 8	166.8	128.16	135.5	105.73	79.46	62	8,631.35	7,336,647.50	5,061.55	4,302,318.38	Local	90	18	Traditional			H		H					
	POBLACION 9	1,594.10	968.15	216.5	22.36		0	13,791.05	11,722,392.50	-	-	Local	144	29	Traditional			H		H					

	RH 5	59.84	12.517	12	95.87	10.12	80.85	764.4	649,740.00	644.64	547,947.40	Local	8	2	Traditional										
	RH 9	85.02	18.246	15	82.21	42.51	232.98	955.5	812,175.00	2,707.89	2,301,703.95	Local	10	2	Traditional										
	TAMONTAKA MB	315.04	207.17	110	53.1	110	53.1	7,007.00	5,955,950.00	7,007.00	5,955,950.00	Local	73	15	Traditional			H		L					
	TAMONTAKA 1	280.92	180.78	123	68.04		0	7,835.10	6,659,835.00	-	-	Local	82	16	Traditional			H		L					
	TAMONTAKA 2	461.88	326.01	102	31.29	90	27.61	6,497.40	5,522,790.00	5,733.00	4,873,050.00	Local	68	14	Traditional			H		L					
	TAMONTAKA 3	525.51	262.85	139	52.88	123	46.79	8,854.30	7,526,155.00	7,835.10	6,659,835.00	Local	93	19	Traditional			H		L					
Major Crop	Location (Barangay)	Total Land Area	Total Agri Land	Area 2018		Area 2019		Annual Production 2018		Annual Production 2019		Product Market	No. of Farmers	No. of Tenants	Type of Farming Technology	Existing Agricultural Support Facilities		Hazard Susceptability (H/M/L)							
				ha	% Utilization	ha	% Utilization	Volume (50kls/bag)	Value (Php)	Volume (50kls/bag)	Value (Php)					Pre-Harvest	Post Harvest	Fl	Tc	Dr	Eq	Ln	Ts	Su	Others
	TAMONTAKA 4	1,880.40	941.71	111	11.79	111	11.79	7,070.70	6,010,095.00	7,070.70	6,010,095.00	Local	74	15	Traditional			H		L					
	TAMONTAKA 5	5,494.80	2580	66	2.56	66	2.56	4,204.20	3,573,570.00	4,204.20	3,573,570.00	Local	44	9	Traditional			H		L					
Total			8,637.80	1,310.00	15.17	665.49	7.7	83,447.00	70,929,950.00	42,391.66	36,032,912.73														
CORN	KALANGANAN MB	2,206.50	955.51	5	0.52	5	0.52	533.33	453,333.33	533.33	453,333.33	Local	3	1	Traditional					L			H		
	KALANGANAN 1	1,158.50	628.94	86	13.67	73	11.61	9,173.33	7,797,333.33	7,786.67	6,618,666.67	Local	57	11	Traditional					L			H		
	KALANGANAN 2	2,107.40	1202.8	15	1.25	15	1.25	1,600.00	1,360,000.00	1,600.00	1,360,000.00	Local	10	2	Traditional					L			H		
	POBLACION 1	68.119	36.947	6	16.24	6	16.24	640	544,000.00	640	544,000.00	Local	4	1	Traditional			H		L					
	TAMONTAKA MB	315.04	207.17	2	0.97	2	0.97	213.33	181,333.33	213.33	181,333.33	Local	1	0	Traditional			H		L					
	TAMONTAKA 1	280.92	180.78	5	2.77	5	2.77	533.33	453,333.33	533.33	453,333.33	Local	3	1	Traditional			H		L					
	TAMONTAKA 2	461.88	326.01	5	1.53	5	1.53	533.33	453,333.33	533.33	453,333.33	Local	3	1	Traditional			H		L					
	TAMONTAKA 3	525.51	262.85	50	19.02	40	15.22	5,333.33	4,533,333.33	4,266.67	3,626,666.67	Local	33	7	Traditional			H		L					
	TAMONTAKA 4	1,880.40	941.71	40	4.25	22	2.34	4,266.67	3,626,666.67	2,346.67	1,994,666.67	Local	27	5	Traditional			H		L					
	TAMONTAKA 5	5,494.80	2580	66	2.56	31	1.2	7,040.00	5,984,000.00	3,306.67	2,810,666.67	Local	44	9	Traditional			H		L					
Total			7,322.72	280	3.82	204	2.79	29,866.67	25,386,666.67	21,760.00	18,496,000.00														
Banana	KALANGANAN MB	2,206.50	955.51	2	0.21	2	0.21	22,317.72	18,970,057.87	22,317.72	18,970,057.87	Local	1	0	Traditional					L			H		
	KALANGANAN 1	1,158.50	628.94	3	0.48	3	0.48	50,858.91	43,230,069.64	50,858.91	43,230,069.64	Local	1	0	Traditional					L			H		
	TAMONTAKA 1	280.92	180.78	1	0.55	1	0.55	58,979.98	50,132,979.31	58,979.98	50,132,979.31	Local	1	0	Traditional			H		L					
	TAMONTAKA 5	5,494.80	2580	1	0.04	1	0.04	4,132.71	3,512,806.20	4,132.71	3,512,806.20	Local	1	0	Traditional			H		L					
Total			4345.23	7	0.16	7	0.16	136,289.31	115,845,913.03	136,289.31	115,845,913.03														
Coconut	BAGUA 1	185.59	94.96	5	5.27	3.75	3.95	9,000	117,000.00	6,750	87,750.00	Local	3	1	Traditional			L							
	BAGUA 2	176.24	93.046	3	3.22	3	3.22	5,400	70,200.00	5,400	70,200.00	Local	2	0	Traditional			L							
	KALANGANAN MB	2,206.50	955.51	3	0.31		0	5,400	70,200.00	-	-	Local	2	0	Traditional					L					

	KALANGANAN 1	1,158.50	628.94	60	9.54		0	108,000	1,404,000.00	-	-	Local	40	8	Traditional					L					
	KALANGANAN 2	2,107.40	1202.8	15	1.25		0	27,000	351,000.00	-	-	Local	10	2	Traditional					L					
	POBLACION 1	68.119	36.947	2	5.41		0	3,600	46,800.00	-	-	Local	1	0	Traditional			H							
	POBLACION 8	166.8	128.16	70	54.62	74	57.74	126,000	1,638,000.00	133,200	1,731,600.00	Local	47	9	Traditional			H		L					
	POBLACION 9	1,594.10	968.15	90	9.3	86	8.88	162,000	2,106,000.00	154,800	2,012,400.00	Local	60	12	Traditional			H		L					
	TAMONTAKA MB	315.04	207.17	10	4.83	10	4.83	18,000	234,000.00	18,000	234,000.00	Local	7	1	Traditional			H		L					
	TAMONTAKA 1	280.92	180.78	50	27.66	50	27.66	90,000	1,170,000.00	90,000	1,170,000.00	Local	33	7	Traditional			H		L					
	TAMONTAKA 2	461.88	326.01	70	21.47	63	19.32	126,000	1,638,000.00	113,400	1,474,200.00	Local	47	9	Traditional			H		L					
	TAMONTAKA 3	525.51	262.85	50	19.02	50	19.02	90,000	1,170,000.00	90,000	1,170,000.00	Local	33	7	Traditional			H		L					
	TAMONTAKA 4	1,880.40	941.71	30	3.19	30	3.19	54,000	702,000.00	54,000	702,000.00	Local	20	4	Traditional			H		L					
	TAMONTAKA 5	5,494.80	2580	20	0.78	20	0.78	36,000	468,000.00	36,000	468,000.00	Local	13	3	Traditional			H		L					
Total			8607.033	478	5.55	389.75	4.53	860,400.00	11,185,200.00	701,550.00	9,120,150.00															

Source: CMO-Agriculture Division
Notes:
Product Market – Local/Export Type of Farming Technology – Traditional, Modern, Ecological Indicate level of susceptibility for all hazards: High (H), Moderate (M), Low (L)

b. Comparative Agricultural Crop Areas and Production, 2018-2019

Agricultural land use areas continue to decline. In effect, one can observe the fall in the volume of production in various crops. This is to be expected as the city continues to increase in population due to the number of people from neigboring municipalities finding job opportunities in the city. Many agricultural areas are converted to residences. Rice production took the most toll as it decreased by 49% from 83,477 metric tons to 42,391.66 metric tons.

Table EC-3 Table EC-3. Comparative Agricultural Crop Areas and Production, 2018-2019

Major Crops	Area(ha)			Volume of Production MT		
	2018	2019	%Increase/ Decrease	2018	2019	%Increase/ Decrease
Rice	1,310.00	665.49	-49%	83,447.00	42,391.66	-49%
Corn	280.00	204.00	-27%	29,866.67	21,760.00	-27%
Coconut	478.00	389.75	-18%	860,400.00	701,550.00	-18%
Banana	7.00	7.00	0%	136,289.31	136,289.31	0%
Total	2,075.00	1,266.24	-39%	1,110,002.98	901,990.97	-19%

Source: Office of City Agriculturist

c. Existing Livestock and Poultry Farms, 2018

Livestock and poultry raising in Cotabato City are generally practiced in backyard with only limited number of heads and sold for local markets in the city. Brgy. Kalanganan 2 had the highest number of heads of carabaoes (16) and cattles (32). While they shared the same spot with Brgy. Tamontaka 5 for number of heads of goat (60). For poultry, Barangay Kalanganan 2 had the most chicken raised in the backyard (350) and Brgy. Tamontaka 5 for ducks (350).

Table EC-4. Existing Livestock and Poultry Farms, 2018

Type	Barangay	Total Land Area	Total Agri Land	Area(ha)	No. of Heads	Production Classification	Production		Product Market	No. of Tenants	Hazard Susceptibility(H/M/L)							
							Volume (kg)	Value (kg)			Fl	Tc	Dr	Eq	Ln	Ts	Su	Others
Livestock																		
Carabao																		
	Poblacion 1	68.12	36.947	42.0583	6	Backyard	1,800	171,000.00	Local	1	**H**							
	Kalanganan 2	2,107.40	1202.8	1534.5189	16	Backyard	4,800	456,000.00	Local	3			**L**			**H**		Sea Level Rise
	Tamontaka 2	461.88	326.01	369.142	6	Backyard	1,800	171,000.00	Local	1	**H**		**L**					
	Tamontaka 3	525.51	262.85	291.063	6	Backyard	1,800	171,000.00	Local	1	**H**		**L**					
	Tamontaka 4	1,880.40	941.71	716.353	12	Backyard	3,600	342,000.00	Local	2	**H**		**L**					
	Tamontaka 5	5,494.80	2580	2414.298	6	Backyard	1,800	171,000.00	Local	1	**H**		**L**					
	Bagua 1	185.59	94.96	129.0804	6	Backyard	1,800	171,000.00	Local	1	**L**							
				5,496.51	**58**		**17,400**	**1,653,000.00**										
Cattle																		
	Rosary Heights 5	59.84	12.517	25.546	7	Backyard	2450	269,500.00	Local	1								
	Kalanganan 2	2,107.40	1202.8	1534.5189	32	Backyard	11200	1,232,000.00	Local	5			**L**			**H**		Sea Level Rise
	Kalanganan 1	1,158.50	628.94	592.3672	30	Backyard	10500	1,155,000.00	Local				**L**			**H**		Sea Level Rise
	Tamontaka 2	461.88	326.01	369.142	7	Backyard	2450	269,500.00	Local	1	**H**		**L**					
	Tamontaka MB	315.04	207.17	215.8045	14	Backyard	4900	539,000.00	Local	2	**H**		**L**					
				2,737.38	**90**		**31,500**	**3,465,000.00**										
Goat																		
	Kalanganan MB	2,206.50	955.51	2214.3771	200	Backyard	6,000	828,000.00	Local	40			**L**			**H**		
	Kalanganan 1	1,158.50	628.94	592.3672	30	Backyard	900	124,200.00	Local	6			**L**			**H**		Sea Level Rise
	Kalanganan 2	2,107.40	1202.8	1534.5189	60	Backyard	1,800	248,400.00	Local	12			**L**			**H**		Sea Level Rise
	Tamontaka 3	525.51	262.85	291.063	30	Backyard	900	124,200.00	Local	6	**H**		**L**					
	Tamontaka 4	1,880.40	941.71	716.353	30	Backyard	900	124,200.00	Local	6	**H**		**L**					
	Tamontaka 5	5,494.80	2580	2414.298	60	Backyard	1,800	248,400.00	Local	12	**H**		**L**					
				7,762.98	**410**		**12,300**	**1,697,400.00**										
Poultry																		
Chicken	Kalanganan MB	2,206.50	955.51	2214.3771	300	Backyard	270	32,400.00	Local	13			**L**			**H**		
	Kalanganan 1	1,158.50	628.94	592.3672	150	Backyard	135	16,200.00	Local	6			**L**			**H**		Sea Level Rise

	Kalanganan 2	2,107.40	1202.8	1534.5189	170	Backyard	153	18,360.00	Local	7			L			H		Sea Level Rise
	Tamontaka 3	525.51	262.85	291.063	350	Backyard	315	37,800.00	Local	15	H		L					
	Tamontaka 4	1,880.40	941.71	716.353	100	Backyard	90	10,800.00	Local	45	H		L					
	Tamontaka 5	5,494.80	2580	2414.298	300	Backyard	270	32,400.00	Local	13	H		L					
				7,762.98	**1,370**		**1,233**	**147,960.00**										

Type	Barangay	Total Land Area	Total Agri Land	Area(ha)	No. of Heads	Production Classification	Production		Product Market	No. of Tenants	Hazard Susceptibility(H/M/L)							
							Volume (kg)	Volume (kg)			Fl	Tc	Dr	Eq	Ln	Ts	Su	Others
Duck	Kalanganan MB	2,206.50	955.51	2214.3771	100	Backyard	90	11,430.00	Local	4			L			H		
	Kalanganan 1	1,158.50	628.94	592.3672	160	Backyard	144	18,288.00	Local	7			L			H		Sea Level Rise
	Kalanganan 2	2,107.40	1202.8	1534.5189	100	Backyard	90	11,430.00	Local	4			L			H		Sea Level Rise
	Tamontaka 3	525.51	262.85	291.063	150	Backyard	135	17,145.00	Local	6	H		L					
	Tamontaka 4	1,880.40	941.71	716.353	150	Backyard	135	17,145.00	Local	6	H		L					
	Tamontaka 5	5,494.80	2580	2414.298	200	Backyard	180	22,860.00	Local	9	H		L					
				7,762.98	**860**		**774**	**98,298.00**										
				31,523	**2,788**		**63,207**	**7,061,658**										

d. Existing fishing grounds and Aquaculture Production

Fisherfolks based in the 3 Kalanganan Barangays (Kalanganan Mother, Kalanganan 1 and Kalanganan 2) are engaged in fishing off the coast of Illana Bay while fishpond owners operate their own brackish water fishponds. Even the members of fishpond cooperatives tend to their own fishponds. Workers are hired on a piece-rate basis as the eed arises during harvest, casting of fingerlings at the start of the production cycle, and maintenance activities. It is more simplified in the case of freshwater fishpond owners as they are all engaged in backyard-raising and do not demand labor support.

Table EC-5. Existing Fishing Grounds and Aquaculture Production, Year 2018

Fishing Grounds	Barangay	Production		Post-Harvest Facilities				Product Market	Hazard Susceptibility (H/M/L)							
		Volume (mt)	Value	Type	Number	Capacity	Status		Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Marine																
Illana bay	Kalanganan 1	10	1,125,000.00	Fish Landing	2	1 MT /day	NR/N.O	Local	L					H		
Moro Gulf	Kalanganan 2	16	1,150,000.00	Ice Plant	2	120 blocks/day	N.O	Local	L					H		
	Kalanganan MB	26	2,250,000.00						L					H		
Inland																
Fishponds	Kalanganan 1	90	8,550,000.00	Processing Facilities	2	0.2 MT/day	O	Local	L					H		
	Kalanganan 2	35	3,325,000.00						L					H		
	Kalanganan MB	150	14,250,000.00						L					H		

Source: BFAR, CMO-AD

Notes: If this table plays a significant role in the economy, a comparative data should be prepared similar to Table EC-3 Status – Operational (O), Needs Repair (NR), Not Operational (NO)

Product Market: Local/Export

e. Existing Agricultural Support Facilities and Services

Table below shows the agricultural equipment present in the agricultural barangays of the city. Most of this equipment are provided by NGA's through the regional offices such DA XII, DAR and BFAR.

Table EC-7. Existing Agricultural Support Facilities and Services, 2018

Post Harvest Facilities and Support	Barangay	No.	% Utilization	Type /Capacity	Remarks
Rice Mill	Tamontaka 3	1	100	Mobile	Operational
	Bagua 2	2	67	Mobile	Operational
		1	33	Mobile	Non-Operational
Multi Purpose Drying Pavement/ Solar Dryer	Bagua 2	2	100	Mobile	Operational
	Bagua 1	1	100	Mobile	Operational
	Rosary Height 5	1	100	Mobile	Operational
	Poblacion 1	1	100	Mobile	Operational
	Kalanganan MB	1	100	Mobile	Operational
	Kalanganan 2	1	100	Mobile	Operational
	Tamontaka MB	3	100	Mobile	Operational
Private Tresher/ Association	Poblacion 9	1	100	Mobile	Operational
	Bagua 1	1	100	Mobile	Operational
	Poblacion8	1	100	Mobile	Operational
Hand Tractor	Tamontaka 4	1	100	Mobile	Operational
	Tamontaka 5	1	100	Mobile	Operational
	Poblacion8	6	75	Mobile	Operational
		2	25	Mobile	Non-Operational
	Bagua 2	3	75	Mobile	Operational
		1	25	Mobile	Operational
Source: MAO, C/MPDO					

Source: MAO, C/MPDO
Notes:
Remarks – (O) Operational, (NR) Needs Repair, (NO) Not Operational

f. Agricultural Occupations/Groups in Urban and Rural Areas

The are four Agricultural occupations/groups found in the agri-barangays as shown in the table below. Crop farmers have the largest number at 880 persons members registered. Inland and coastal water fisherfolks are second having 476 persons members registered.

Table EC-8. Agricultural Occupations/Groups in Urban and Rural Areas, 2018

Major and Minor Occupation Groups	Barangay	Urban			Rural			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
FARMERS										
Crop Farmers	BAGUA 1			15						15
	BAGUA 2			21						21
	KALANGANAN MB			31						31
	KALANGANAN 1			23						23
	KALANGANAN 2			93						93
	POBLACION 1			13						13
	POBLACION 8	72	16	88				72	16	88
	POBLACION 9			144						144
	RH 5			8						8
	RH 9			10						10
	TAMONTAKA MB			73						73
	TAMONTAKA 1			82						82
	TAMONTAKA 2			68						68
	TAMONTAKA 3						93			93
	TAMONTAKA 4						74			74
	TAMONTAKA 5						44			44
Livestock and Dairy Farmers	POBLACION 1			1						1
	KALANGANAN 2			3						3
	TAMONTAKA 2			1						1
	TAMONTAKA 3						1			1
	TAMONTAKA 4						2			2
	TAMONTAKA 5						1			1
	BAGUA 1			1						1
	ROSARY HEIGHTS 5			1						1
FISHERFOLKS										
Aqua- Farm cultivators	KALANGANAN 1			52						52
	KALANGANAN 2									
	KALANGANAN MB									
Inland and Coastal Waters Fisherfolks	KALANGANAN 1			476						476
	KALANGANAN 2									
	KALANGANAN MB									
Deep Sea Fisherfolks	KALANGANAN 1			98						98
	KALANGANAN 2									
	KALANGANAN MB									
TOTAL		**72**	**16**	**1302**			**215**	**72**	**16**	**1517**

Source: NSO/PSA

g. Strategic Agriculture and Fisheries Development Zones (SAFDZ)

Table EC-9 Strategic Agriculture and Fisheries Development Zones (SAFDZ)

Name of SAFDZ area (if applicable)	Barangay	Area (ha)	Type of SAFDZ	Hazard Susceptibility (H/M/L)						
				Fl	Tc	Eq	Vo	Ln	Ts	Others
	Tamontaka MB	207.171	Strategic Crop Sub- Devt.Zone	H		L				
	Tamontaka 1	180.7772	Strategic Crop Sub- Devt.Zone	H		L				
	Tamontaka 2	326.01	Strategic Crop Sub- Devt.Zone	H		L				
	Tamontaka 3	262.852	Strategic Crop Sub- Devt.Zone	H		L				
	Tamontaka 4	941.71	Strategic Crop Sub- Devt.Zone	H		L				
	Tamontaka 5	2531.043	Strategic Crop Sub- Devt.Zone	H		L				
		50.00	Strategic Livestock Sub- Devt. Zone	H		L				
	Kalanganan Mother	945.511	Strategic Crop Sub- Devt.Zone			L			H	
		10.00	Strategic Livestock Sub- Devt. Zone			L			H	
		873.275	Strategic Fishery Sub Devt. Zone			L			H	
	Kalanganan 1	628.9405	Strategic Crop Sub- Devt.Zone			L			H	
		275.358289	Strategic Fishery Sub Devt. Zone			L			H	
	Kalanganan 2	902.835	Strategic Crop Sub- Devt.Zone			L			H	
		300.00	Strategic Livestock Sub- Devt. Zone			L			H	
		380.356489	Strategic Fishery Sub Devt. Zone			L			H	
	Poblacion 1	36.947	Strategic Crop Sub- Devt.Zone	H						
	Poblacion8	128.158	Strategic Crop Sub- Devt.Zone	H		H				
	Poblacion 9	968.147	Strategic Crop Sub- Devt.Zone	H						
	Rosary Heights 5	12.517	Strategic Crop Sub- Devt.Zone							
	Bagua 1	94.96	Strategic Crop Sub- Devt.Zone	L						
	Bagua 2	125.81	Strategic Crop Sub- Devt.Zone	L						

Notes:

Type of SAFDZ
Strategic Crop Sub-development Zone
Strategic Livestock Sub-development Zone
Strategic Integrated Crop/Livestock Sub-development ZoneSub-development Zone
Strategic Integrated Crop/Fishery Sub-development Zone
Strategic Integrated Crop/Livestock/Fishery
Strategic Integrated Fishery and Livestock Sub-development Zone
Remaining NPAAADReservation; SD – Sand dunes/beach area;
NIPAS; Proposed Tourism; Agro-Forestry Zone
Watershed/Forestry Zone

h. Agrarian Related Concerns, 2018

Table below shows that 4,880.87 hectares are covered with Certificate of Landownership Award or Emancipation Patent (CLOA/EP) under the Comprehensive Agrarian Reform Program (CARP) of the Department of Agrarian Reform (DAR). The said CLOAs/EPs have been issued to some 445 farmer beneficiaries.

EC-10. Agrarian Related Concerns, 2018

Concerns	Location	Total Brgy Area	Area (ha)	No. of Farmer - Beneficiaries
A. CARPable Lands				
1. Covered				
2. To be covered				
B. Agrarian Reform Communities (ARCs)	Tam3	525.51	262.85	93
	Tam4	1,880.40	941.71	74
	Tam5	5,494.80	2580	44
	Pob8	166.80	128.16	90
	Pob9	1,594.10	968.15	144
Total		**9,661.61**	**4,880.87**	**445**

Source: MARO, PARO

1.5.4.1 Utilities : Power, Communication Network, Water, Irrigation / Dam

1.5.4.1 Power Sector

The city's main power source comes from the Cotabato Light and Power Company (CLPC), wholly owned electric distribution by the Aboitiz Company. CLPC's source of power comes from the National Power Corporation (NPC) delivered through the transmission operator, the National Grid Corporation of the Philippines (NGCP). By 2018, all of the 37 barangays already have access to electricity. However, in some occasions, there are still power shortages especially in rural areas. CLPC also has a backup diesel facility that provides power during interruptions and power outages. As of December 2018, Cotabato Light is serving 27,339 household.

a. Household Served and Unserved with Electricity for the Past Three Years

CLPC has covered almost all parts of the city. However, in the urban areas of Barangay Poblacion 1, almost 23% were still not served, in Poblacion 8, 13.78% were unserved, in Poblacion 9, 28.82% were unserved and in Kalanganan Mother, 7.88% were unserved (see Table 1F-13). In the rural areas, only Tamontaka 2 and Tamontaka 3 are the barangays that have 100% access to electricity.

Table 1F-13 Household Served and Unserved with Electricity for the Past Three Years

Barangay	2016					2017					2018				
	Total No. of HH	Served		Unserved		Total No. of HH	Served		Unserved		Total No. of HH	Served		Unserved	
		No.	%	No.	%		No.	%	No.	%		No.	%	No.	%
URBAN															
Pob. MB	1195	1195	100.00		0.00	1195	1195	100.00		0.00	1195	1195	100.00		0.00
Pob. 1	402	372	92.54	30	7.46	402	402	100.00		0.00	522	402	77.01	120	22.99
Pob. 2	581	581	100.00		0.00	581	581	100.00		0.00	581	581	100.00		0.00
Pob. 3	324	324	100.00		0.00	324	324	100.00		0.00	324	324	100.00		0.00
Pob. 4	573	573	100.00		0.00	573	573	100.00		0.00	573	573	100.00		0.00
Pob. 5	721	721	100.00		0.00	721	721	100.00		0.00	721	721	100.00		0.00
Pob. 6	780	780	100.00		0.00	780	780	100.00		0.00	780	780	100.00		0.00
Pob. 7	901	901	100.00		0.00	901	901	100.00		0.00	901	901	100.00		0.00
Pob. 8	219		0.00		0.00	219	219	100.00		0.00	254	219	86.22	35	13.78
Pob. 9	331	306	92.45	25	7.55	331	331	100.00		0.00	465	331	71.18	134	28.82
Bag MB	1126	1126	100.00		0.00	1125	1125	100.00		0.00	1125	1125	100.00		0.00
Bag 1	648	648	100.00		0.00	596	596	100.00		0.00	596	596	100.00		0.00
Bag 2	1005	980	97.51	25	2.49	1340	1339	99.93	1	0.07	1340	1340	100.00		0.00
Bag 3	543	543	100.00		0.00	519	519	100.00		0.00	519	519	100.00		0.00
Kal MB	1005	1005	100.00		0.00	1005	1000	99.50	5	0.50	1091	1005	92.12	86	7.88
RH MB	842	842	100.00		0.00	1520	1520	100.00		0.00	1520	1520	100.00		0.00
RH 1	816	816	100.00		0.00	816	816	100.00		0.00	816	816	100.00		0.00
RH 2	766	766	100.00		0.00	766	766	100.00		0.00	766	766	100.00		0.00
RH 3	1158	1158	100.00		0.00	1158	1158	100.00		0.00	1158	1158	100.00		0.00
RH 4	779	779	100.00		100.00	779	779	100.00		0.00	779	779	100.00		0.00
RH 5	764	764	100.00		100.00	764	764	100.00		0.00	764	764	100.00		0.00
RH 6	1003	1003	100.00		100.00	1003	1003	100.00		0.00	1003	1003	100.00		0.00
RH 7	1168	1168	100.00		100.00	1168	1168	100.00		0.00	1168	1168	100.00		0.00
RH 8	1152	1152	100.00		0.00	1152	1152	100.00		0.00	1152	1152	100.00		0.00
RH 9	1048	1048	100.00		0.00	1048	1048	100.00		0.00	1048	1048	100.00		0.00
RH 10	1766	1766	100.00		0.00	1766	1766	100.00		0.00	1766	1766	100.00		0.00
RH 11	1431	1431	100.00		0.00	1431	1431	100.00		0.00	1431	1431	100.00		0.00
RH 12	498	498	100.00		0.00	498	498	100.00		0.00	498	498	100.00		0.00
RH 13	640	640	100.00		0.00	640	640	100.00		0.00	640	640	100.00		0.00
Tam MB	847	817	96.46	30	3.54	847	824	97.28	23	2.72	847	847	100.00		0.00

Barangay	2016					2017					2018				
	Total No. of HH	Served		Unserved		Total No. of HH	Served		Unserved		Total No. of HH	Served		Unserved	
		No.	%	No.	%		No.	%	No.	%		No.	%	No.	%
RURAL															
Kal 1	111	80	72.07	31	27.93	111	83	74.77	28	25.23	111	94	84.68	17	15.32
Kal 2	379	344	90.77	35	9.23	379	305	80.47	74	19.53	379	321	84.70	58	15.30
Tam 1	234	234	100.00		0.00	234	234	100.00		0.00	234	225	96.15	9	3.85
Tam 2	59	59	100.00		0.00	59	56	94.92	3	5.08	59	59	100.00		0.00
Tam 3	42	42	100.00		0.00	42	34	80.95	8	19.05	42	42	100.00		0.00
Tam 4	83	71	85.54	12	14.46	83	83	100.00		0.00	83	22	26.51	61	73.49
Tam 5	23	23	100.00		0.00	23	23	100.00		0.00	88	23	26.14	65	73.86
TOTAL	25,963	25,556		188		26,899	26,757		0		27,339	26,754		585	

Source: Cotabato Light and Power Company

b. Number of Connections by Type of Users and Average Consumption (KWH/Mo.) for the Past Three Years

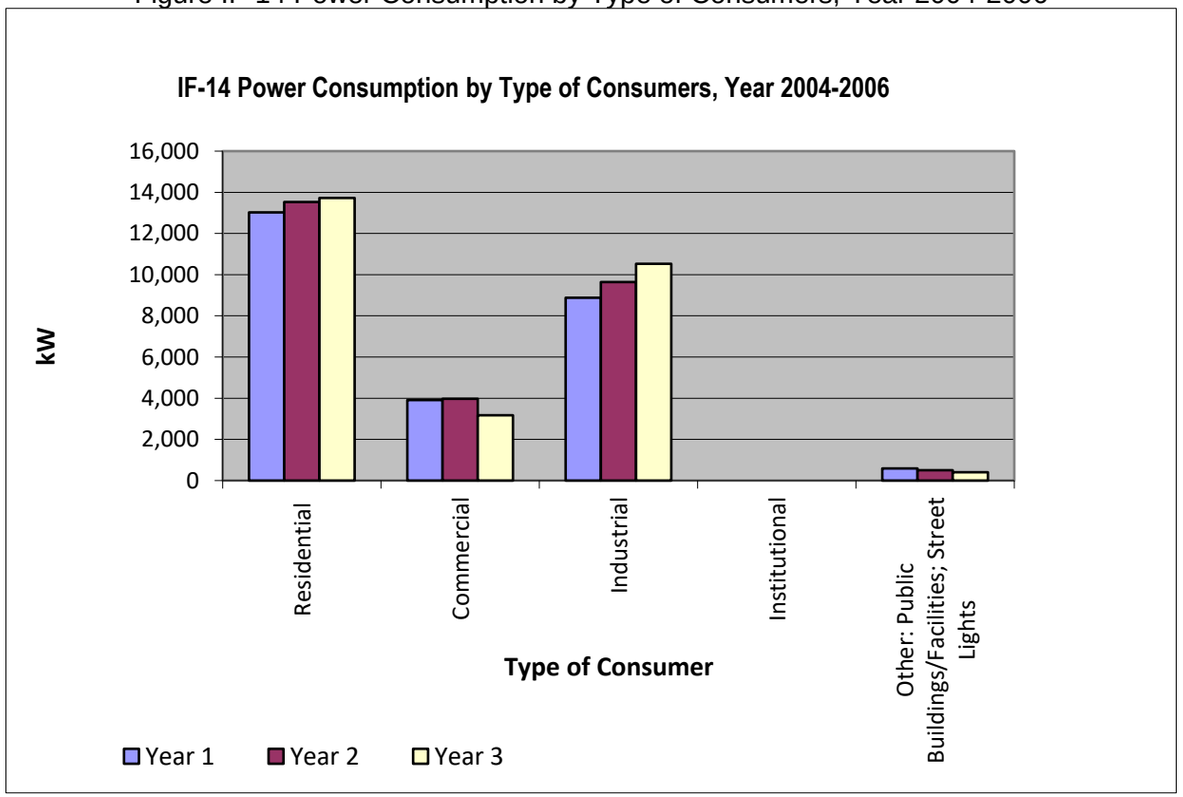
Residential areas are the biggest consumers of electricity in the city with 40,143 connections consuming 13,723 kilowatt-hours per month or 49.3% of the total electric supply (see Table 1F-14 and Figure IF-14b). On the other hand, among the least consumers of electricity are some public buildings and facilities, and street lights with just 1.5% of the total consumption of the city. The probability of an increase in the number of households served by the CLCP is high because of the continuing expansion of the coverage area to the different puroks in every barangay and most especially in rural areas. To date, there are 562 power posts with 19,596 KW.

Table IF-14 Number of Connections by Type of Users and Average Consumption (KWH/Mo.) for the Past Three Years

TYPE OF CONSUMERS	2016			2017			2018		
	No. of connections	KW	%	No. of connections	KW	%	No. of connections	KW	%
Residential	35,473	13,029	49.3	37,420	13,532	48.9	40,143	13,723	49.3
Commercial	3,037	3,915	14.8	3,261	3,975	14.4	3,237	3,174	11.4
Industrial	393	8,882	33.6	401	9,642	34.9	420	10,533	37.8
Institutional		0	0.0			0.0			0.0
Other: Public Buildings/Facilities; Street Lights	21	593	2.2	20	498	1.8	16	406	1.5
TOTAL		26,419	100.0		27,647	100.0		27,836	100.0

Source: Cotabato Light and Power Company

Figure IF-14 Power Consumption by Type of Consumers, Year 2004-2006



c. <u>Projected Number of Connections by Type of Users and Average Consumption (KWH/Month)</u>

In the coming years energy consumption will continue to increase due to economic activities as shown below in table IF-15. It is expected to increase from 30,488 kilowatt-hour per month in the year 2020 to 40,629 kilowatt-hour per month in the year 2028. To address future power deficiency, CLPC have proposed another power sub-station in order to provide 100% power supply in all 37 barangays. An additional new type of energy generation technology is also proposed in cooperation with the city government agencies and private sectors.

Table 1F-15 Projected Number of Connections by Type of Users and Average Consumption (KWH/Month)

TYPE OF CONSUMERS	2020		2021		2022		2023		2024		2025		2026		2027		2028	
	KW	%	KW	%	KW	%	KW	%	KW	%	KW	%	KW	%	KW	%	KW	%
Residential	14,482	48	15,005	47	15,528	47	16,081	47%	16,574	47%	17,097	46%	17,620	46%	18,143	46%	18,666	46%
Commercial	3,328	11	3,411	11	3,493	11	3,576	10%	3,658	10%	3,741	10%	3,823	10%	3,906	10%	3,988	10%
Industrial	12,260	40	12,909	41	13,560	41	14,214	41%	14,869	42%	15,525	42%	16,181	42%	16,838	43%	17,497	43%
Institutional	0	0	0	0	0		0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Other: Public Buildings/Facilities; Street Lights	418	1	425	1	433	1	440	1	448	1	455	1	463	1	471	1	478	1
TOTAL	30488	100	31750	100	33014	100	34311	100	35549	100	36818	100	38087	100	39358	100	40629	100

Source: Cotabato Light and Power Company

d. Power Transmission/Distribution Line

Table IF-16 shows the city's power transmission line with its corresponding description. It also shows the projected susceptibility to the different hazards. As shown in table 1F-16, the transmission line of the Cotabato Light and Power Company is assessed at low risk to flood attributed to its location, medium susceptibility to earthquake, and medium susceptibility to landslide.

Table IF-16: Power Transmission/Distribution Line

Name of Line Owner	Year Constructed/ Developed	Area Occupied (ha)	Length (m)	Width (m)	Voltage (kV)	Hazard Susceptibility (H/M/L)							
						Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Cotabato Light & Power Company	1939	19120	30000	6373	69kV/13.8kV	L		M		M			

Power substations are part of electric system (generation, distribution and transmission) that transforms high voltage to lower voltage or vice versa and perform other important functions. Before traveling to the consumers, electricity from the source or generating stations travel to the different substations each with different voltage levels and provide constituents with just enough energy. The Cotabato Light and Power Company have three substations namely the Sinsuat Substation, Malagapas Substation, and the Salimbao Substation (see table IF-17). The Salimbao Substation is located at Salimbao, Sultan Kudarat just outside the city of Cotabato. The Sinsuat Substation at Rosary Heights 1 which is assessed to be at low in susceptablity in terms of to and has medium susceptibility to earthquake and landslide. The Malagapas Substation at Rosary Heights 10 is also at low risk to flood and medium risk to tsunami.

Table IF-17: Power Substations

Name of Substation	Barangay	Area Occupied (ha)	Year Constructed	Voltage	Hazard Susceptibility (H/M/L)							
				(kV)	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Sinsuat Substation	RH-1	0.029	1984	69kV/13.8kV	L		M		M			
Malagapas Substation	RH-10	0.068	2011	69kV/13.8kV	L					M		
Salimbao Substation	Salimbao, Sultan Kudarat	0.088	1999	69kV/13.8kV								

Source: Cotabato Light and Power Company

There is one power plant within the city located at Rosary Heights 1 and is owned by the Cotabato Light and Power Company. It is an oil-based type of power plant with over 9 Megawatts capacity. As shown in the table IF- 18, the power plant is seen to be at low risk to flood and at medium risk to earthquake and land slide. See table below for the description and hazard susceptibility of the power plant.

Table IF-18: Power Plant by Location and Condition

Name of Power Plant	Barangay	Ownership	Area Occupied (ha)	Year Constructed	Capacity (MW)	Type of Plant	Date of Commission/ Operation	Hazard Susceptibility (H/M/L)							
								Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
CLPC Diesel Power Plant	RH-1	Cotabato Light and Power Company	0.15	1963-1971	9.927	Oil-Based	1963-1971	L		M		M			

Source: Cotabato Light and Power Company

1.5.4.2 Water

A substantial amount of water supply of Cotabato City is collected and treated at Dimapatoy River, Datu Odin Sinsuat Maguindanao by the Metro Cotabato Water District (MCWD). MCWD was created by the city government of Cotabato in 1976. The ownership and the management of the water utility was all transferred to what then was called Cotabato City Water District (CCWD) by virtue of Sangguniang Panlungsod Resolution No. 35, dated March 9, 1976. The later was renamed as Metro Cotabato Water District (MCWD) pursuant to CCWD Board Resolution No. 030B-03, dated August 8, 2003, and in accordance with LWUA Board of Trustees Resolution No. 186, series of 1997.

a. Local Waterworks System by Type and Number of Consumers and Average Water Consumption, Year 2018

MCWD served a total of 27,840 concessionaires in the city with a Level III supply facility. Among the 37 barangays, only Kalanganan 1 (Darping) does not have access to the services provided by the MCWD. Table IF-23 below shows the number of concessionaires per barangay and land use. Domestic or residential concessionaires are the biggest consumers with Barangay Rosary Heights 10 having the most number of connections and Barangay Tamontaka 5 having the lowest. Among the commercial users, Barangay Poblacion 5 has the most connections while Barangays Tamontaka 5 and Kalanganan Mother have no connection for commercial use.

There is also an existing possible source of water in the form of an undeveloped spring located at the Barangay Bagua 3, Cotabato City. However, this body of water is not guaranteed to be a potable water source.

Table IF-24: Level III – Local Waterworks System by Type and Number of Consumers and Average Water Consumption, Year 2018

Name of Barangays Served	Type of Consumer							
	Domestic/ Residential		Commercial		Industrial		Others	
	No. of Connections	Ave. Water Consumption	No. of Connections	Ave. Water Consumption	No. of Connections	Ave. Water Consumption	No. of Connections	Ave. Water Consumption
Pob MB	859		154		-		6	
Pob 1	434		14		-		4	
Pob 2	493		11		-		-	
Pob 3	204		13		-		2	
Pob 4	721		110		-		5	
Pob 5	214		343		-		14	
Pob 6	201		276		-		28	
Pob 7	917		10		-		5	
Pob 8	221		3		-		4	
Pob 9	296		1		-		4	
Tam MB	920		54		-		9	
Tam 1	334		4		-		1	
Tam 2	167		1		-		2	
Tam 3	92		-		-		2	
Tam 4	67		1		-		2	
Tam 5	10		-		-		-	
RH MB	1,672		99		-		13	

Name of Barangays Served	Type of Consumer							
	Domestic/ Residential		Commercial		Industrial		Others	
	No. of Connections	Ave. Water Consumption	No. of Connections	Ave. Water Consumption	No. of Connections	Ave. Water Consumption	No. of Connections	Ave. Water Consumption
RH 1	816		34		2		33	
RH 2	455		79		-		3	
RH 3	1,208		37		-		1	
RH 4	643		100		-		8	
RH 5	697		41		-		6	
RH 6	932		52		-		9	
RH 7	738		109		-		69	
RH 8	1,347		48		-		11	
RH 9	1,120		123		-		7	
RH 10	1,912		180		-		14	
RH 11	1,446		47		-		6	
RH 12	484		39		-		2	
RH 13	522		101		-		9	
Bag MB	1,137		22		-		3	
Bag 1	698		4		-		3	
Bag 2	1,489		15		-		2	
Bag 3	582		54		-		2	
Kal MB	896		-		-		12	
Kal 2	401		5		-		8	
TOTAL	25,345	0	2,184	0	2	0	309	0

Source: Metro Cotabato Water District

b. Communal Faucet

While most households are served by individual faucets, Table IF-24 shows that in some areas of Barangays Tamontaka 2, Tamontaka 3, Poblacion 8, Poblacion 9, Kalanganan Mother, Rosary Heights 7 and Rosary Heights 5 water supply is distributed through a communal faucet. These barangays have smaller number of households compared to those served with a Level III facility. The barangays not mentioned below are also served or have full access to the services provided by the MCWD.

Table IF-24 Communal Faucet

Name of Barangays Served	Type of Consumer	Name of Barangays Served
036-12-1000	Tamontaka II	3
036-12-2700	Tamontaka II	4
036-12-2750	Tamontaka II	3
036-12-4000	Tamontaka II	5
036-12-4200	Tamontaka II	6
036-12-5000	Tamontaka II	8
036-12-5300	Tamontaka II	10
036-12-6100	Tamontaka II	10
036-12-6500	Tamontaka II	3
036-12-6900	Tamontaka II	2
036-12-7200	Tamontaka II	3
037-12-0200	Tamontaka III	7
037 12-0400	Tamontaka III	2
061-22-0072	Rosary Heights VII	10
061-22-0408	Rosary Heights VII	10
068-22-0880	Pobblacion VIII	6
069-22-2003	Poblacion IX	4
069-22-2015	Poblacion IX	3
069-22-2300	Poblacion IX	Disconnected
071-22-5105	Rosary Heights V	4
071-22-6230	Rosary Heigths V	Disconnected
183-22-4540	Kalanganan MB	4
183-22-4820	Kalanganan MB	Disconnected
183-22-5740	Kalanganan MB	3
183-22-6450	Kalanganan MB	(DatuAyunan HS)
183-22-7480	Kalanganan MB	4
183-22-7980	Kalanganan MB	2
183-12-8160	Kalanganan MB	Disconnected
183-22-8940	Kalanganan MB	Disconnected
183-22-9530	Kalanganan MB	2
183-22-0585	Kalanganan MB	Disconnected

Name of Barangays Served	Type of Consumer	Name of Barangays Served
183-22-8844	Kalanganan MB	Disconnected
183-22-9053	Kalanganan MB	2
183-12-0950	Kalanganan MB	Disconnected
183-12-1360	Kalanganan MB	10
183-12-2600	Kalanganan MB	8
183-12-3420	Kalanganan MB	6
183-12-4140	Kalanganan MB	10
183-12-5500	Kalanganan MB	8
183-12-7670	Kalanganan MB	10
183-12-9065	Kalanganan MB	2
183-12-9250	Kalanganan MB	Disconnected
183-12-9590	Kalanganan MB	Disconnected

Source: Metro Cotabato Water District

c. Water Requirement by Barangay Population, Year 2018.

MCWD has set a minimum requirement of 150L/person. Different volume of water is distributed to different barangays founded upon their respective population. From the table below, MCWD has enough supply of water to cover the barangays. Water interruptions are most often caused by low water level at headwater or low pressure brought about by less precipitation or dry season. Other causes are maintenance of water facility/pumping station or high geographical elevation of barangay affected especially during dry spell.

Table IF-25: Water Requirement by Barangay Population, Year 2018.

Barangay	Current Year				PROJECTED (Year 9)	
	Population	Water Supply (L/month)	Water Requirement	Deficit/Surplus	Population/ Number of Establishments in Year 10*	Projected Water Requirement*
Bagua	5,785	1,157	150 L/ person			
Kalanganan	4,290	858	150L/ person			
Poblacion	5,060	1,012	150L/ person			
Rosary Heights	8,855	1,771	150L/ person			
Tamontaka	4,725	945	150 L/ person			
Bagua I	5,390	678	150L/ person			
Bagua II	7,315	1,463	150L/ person			
Bagua III	3,115	623	150L/ person			
Kalanganan II	1,915	383	150 L/ person			

Barangay	Current Year				PROJECTED (Year 9)	
	Population	Water Supply (L/month)	Water Requirement	Deficit/Surplus	Population/ Number of Establishments in Year 10*	Projected Water Requirement*
Poblacion I	2,180	436	150L/ person			
Poblacion II	2,505	501	150L/ person			
Poblacion III	1,055	211	150L/ person			
Poblacion IV	4,130	826	150L/ person			
Poblacion V	2,895	579	150L/ person			
Poblacion VI	2,510	502	150L/ person			
Poblacion VII	4,615	923	150 L/ person			
Poblacion VIII	1,045	209	150L/ person			
Poblacion IX	1,440	288	150L/ person			
Rosary Heightsl	4,365	873	150L/ person			
Rosary Heights II	2,650	530	150 L/ person			
Rosary Heights III	6,060	1,212	150L/ person			
Rosary Heights IV	3,765	753	150L/ person			
Rosary Heights V	3,580	716	150L/ person			
Rosary Heights VI	4950	990	150L/ person			
Rosary Heights VII	4,425	885	150L/ person			
Rosary Heights VIII	6,825	1,365	150L/ person			
Rosary Heights IX	6,055	1,211	150 L/ person			
Rosary Heights X	10,220	2,044	150L/ person			
Rosary Heights XI	7,380	1,476	150L/ person			
Rosary Heights XII	2,495	499	150L/ person			
Rosary Heights XIII	3,125		150 L/ person			
Tamontaka I	1,610	322	150L/ person			
Tamontaka II	775	155	150L/ person			
Tamontaka III	455	91	150L/ person			
Tamontaka IV	305	61	150L/ person			
Tamontaka V	30	6	150L/ person			

Source: Metro Cotabato Water District

MCWD continues to expand and improve their services through proper maintenance and repair of leaks and damaged pipes. They regularly coordinate with the Local Government Unit of Cotabato City in terms of plans of expansion within the city and in preservation of pipes especially during proposed road clearings or improvements which may damage pipes and lead to water contamination. Currently, the MCWD is in search of other potable water sources within and outside the city.

1.5.4.3 Communication Sector

Telecommunication sector consist of outfits responsible for transmitting or exchanging data and information through different platforms. In the city, there is only one (1) Local Postal Service, the Philippine Postal Service that accepts or process postal (snail) mails.

There are five (5) telephone service provider namely; Globe Telecom Inc., Smart Communications/Broadband, Maguindanao Skycable Inc., Cotabato Cable TV Network Corporation and Philippine Long Distance Telephone (PLDT). Not only do these companies provide telecommunication services to the city but also some portions of nearby municipalities. These companies also provides cell sites/ towers, of which ten (10) cell towers were set up by Globe Telecom, Inc and ten (10) cell towers were mounted by Smart Communications purposely to enhanced connectivity. Although there is limitation in terms of signal coverage they continue expand and upgrade their system.
Cotabato City have nine (9) Broadcast and Television Network (Radio, Television, Cable) namely; ABS-CBN Broadcasting System Corp., Consolidated Broadcasting System, Inc. Manila Broadcasting Company, Notre Dame Broadcasting Corporation, Radio Mindanao Network, Inc., Philippine Broadcasting Corporation, Baycomms Broadcasting Corporation, Bandera News Philippines and Nation Broadcasting Corporation.
The city has seven (7) radio stations, three (3) Amplitude Modulation (AM) Stations and four (4) Frequency Modulation (FM) Stations to provide real time information to listeners.

a. Communication Service Facilities

Due to location of these facilities, a few are at risk to different calamities. Among the facilities at risk are Globe Telecom at Bagua 1, Rosary Heights 1, 10, as well as Tamontaka Mother Barangay which are highly susceptible to flood and are medium category in terms of susceptibility to tsunami. The Smart Communications at Rosary Heights Mother and 13 were assessed to be low in terms of susceptibility to flood and medium in terms of susceptibility to tsunami. Due to location at the coast, the Parola Signal Site of Kalanganan Mother Barangay was assessed to be at highly susceptibility to tsunami and storm surge.

Table IF-30: Communication Service Facilities, 2018

Type	Year Constructed	Area Occupied (ha)	Barangay	Ownership			Hazard Susceptibility (H/M/L)						
				Public	Private	FI	Tc	Eq	Vo	Ln	Ts	Su	Others
Postal Services													
Post Office			Poblacion 6	✓									
Telephone Service Provider													
Globe Broadband			Cotabato City		✓								
Smart Bro			Cotabato City		✓								
Maguindanao Skycable Inc.			Cotabato City		✓								
Cotabato Cable TV Network Corporation			Cotabato City		✓								

Type	Year Constructed	Area Occupied (ha)	Barangay	Ownership			Hazard Susceptibility (H/M/L)						
				Public	Private	FI	Tc	Eq	Vo	Ln	Ts	Su	Others
PLDT			Cotabato City		✓								
Cell Sites Network					✓								
GLOBE TELECOM		0.011163	Bagua I		✓	H					M		
GLOBE TELECOM			Bagua II		✓								
GLOBE TELECOM		0.00154	Rosary heights 1		✓					M			
GLOBE TELECOM			Rufino Alonzo st.		✓								
GLOBE TELECOM			RabagoSt.		✓								
GLOBE TELECOM		0.002089	DelcanoSt.		✓	L							
GLOBE TELECOM		0.012506	Conception St.		✓	H					M		
GLOBE TELECOM			Moon St., RH 8		✓								
GLOBE TELECOM			South seas complex		✓								
GLOBE TELECOM, INC.			32 doñaTeresita St.		✓								
SMART BROADBAND,			Don E Sero cor. 4th St.		✓								
SMART BROADBAND, INC		.035381	Rosales Subd., RH 6		✓	L					M		
SMART COMMUNICATIONS, INC.			Don ESero cor. 4th St. RH 5		✓								
SMART			San Sebastian road RH 11		✓								
SMART			Bagua		✓								
SMART COMMUNICATIONS		.027616	F. Milan st. RH 13		✓	L					M		
SMART		.034819	#11 Don E. SeroSt. RH 5		✓	L							
SMART			San Sebastian road RH 11		✓								
SMART			PinhoySeroSt.RH 5		✓								
SMART			SkPendatunAve.		✓								
DICT TOWER			Rosary heights 5										
Parola Signal Site		0.018407	KalanganMother barangay		✓						H	H	
Broadcast and Television Network (radio, television, cable)													
ABS-CBN Broadcasting System,Corp.			Don Sero Cor. Kabunsuan St., Cotabato City		✓								
Consolidated Broadcasting System, Inc.			5th St., Don Sero, R.H. 5,, Cotabato City		✓								
Manila Broadcasting Company			PC Hill, Rosary Heights I, Cotabato City		✓								
Notre Dame Broadcasting Corporation			Corner Sinsuat& Quezon Ave, Cotabato City		✓								
Radio Mindanao Network, Inc.			Sinsuat Ave., Rosary Heights 10, Cotabato City		✓								

Type	Year Constructed	Area Occupied (ha)	Barangay	Ownership			Hazard Susceptibility (H/M/L)						
				Public	Private	FI	Tc	Eq	Vo	Ln	Ts	Su	Others
Philippine Broad casting Corpration			Dep. Ed ARMM ORG Compound, Cotabato City		✓								
Baycomms Broadcasting Corporation			Sinsuat Ave., Cotabato City		✓								
Bandera News Philippines			Rosary Heights 5, Cotabato City		✓								
Nation Broadcasting Corporation			Almonte St., Cotabato City		✓								
TV Station													
ABS-CBN Broadcasting Corp.			Don Sero Cor. Kabunsuan St.		✓								
GMA Network, Inc.			ARMM Compound, Cotabato City		✓								
Republic Broadcasting System			Cotabato City		✓								
Amcara Broadcasting Network, Inc. (Studio 23)			Don Sero Cor. Kabunsuan St.		✓								
People's TV Network			Cotabato City		✓								
AM Station					✓								
Notre Dame Broadcasting Corporation			Corner Sinsuat& Quezon Avenue, Cotabato City		✓								
Pacific Broadcasting System, Inc.			Krislamville, Santos Extn., R.H. Cotabato City		✓								
Radio Mindanao Network, Inc.			Sinsuat Ave. Rosary Heights 10, Cotabato City		✓								

Source: DICT Region XII

b. Type of print media available

Cotabatenos nowadays are convenient on using social media thru the aid of Internet Services Providers, but printed newspaper cannot be disregarded altogether. There are two existing print media in the city. It continues to operate and prints weekly local newspaper. Table IF-31 shows the print media operating in the city. These local new spapersis being circulated in the entire area of city and its neighboring towns and provinces.

Table IF-31: Type of print media available, 2018

Type of Print Media	Location	Area Coverage	Circulation		
			Number	Type	Frequency
The Mindanao Cross	ND. Avenue	City wide and nearby towns		Printing Establishment	once a week
Mindanao News Star	Don Rufino Alonzo St.	City wide and nearby towns		Printing Establishment	once a week

Source: DICT Region XII

1.5.4.4 Solid Waste Management

The city is collecting an average solid waste of 58,345.43 tons per day from domestic or households, and 20,418.72 tons per day from commercial establishment, an average of 4,474.74 tons per day from Industrial, and only .37 tons per day from hospital and 25,002.08 tons per day from other source, all are disposed in the controlled dumpsite at Biniruan dumpsite in Barangay Pob. 9.

a. Solid Waste Generation by Source, Year 2018

During the start of the then Mayor Jojo Guiani administration, he strictly imposed the implementation of City Ordinance 2360 or the practice of waste segregation at source. An intensified information and education dissemination on the practice of 4 Rs was impose for all sectors. The barangays are mandated to not collect garbage that are not segragated at source. But the problem was household and other establishments slowly adopt and practice the waste segregation, however, there was no proper scheduling of pick-up for waste that are separated accordingly to their respective classification. The segregated waste were collected and dump into the same pick-up point and during collection time, all are mixed and hauled into the same dumptruck. This must be the implication of the limited available resources, equipment and manpower that shall accomplish a 2-shift collection daily with only 5 serviceable dumptrucks and 5 serviceable compactors for the entire city.

Table SO-18. Solid Waste Generation by Source, Year 2018

Source	Types of waste	Volume of solid waste generated (Tons/day)	Volume of solid waste collected (kg/day)	Disposal methods/ treatment facilities	Disposal site
Domestic/HH	mixed	58,345.43	58,345.43	Controlled Dumpsite	Pob. 9, Biniruan Dumpsite
Commercial	mixed	20,418.72	20,418.72	Controlled Dumpsite	
Industrial	mixed	4,474.74	4,474.74	Controlled Dumpsite	
Hospital/Institutional	mixed	0.37	0.37	Controlled Dumpsite	
Others	mixed	25,002.08	25,002.08	Controlled Dumpsite	

b. Methods of Solid Waste Disposal/Treatment

Out of the 37 barangays only 31 barangays are being serve of the city Solid waste collection and disposal. Twenty-five (25) of which have already established their house-to-house collection system and bringing them to the designated pick-up points. The pick-up point designated by CENRO is the point where the barangays shall accumulate their collected solid waste for disposal at a given schedule. The CENRO do not have at present the data on the number of household practicing composting, recycling, burning and maintaining individual open pit.

The city is collecting an average of 108.61 tons of solid waste per day, all are being dispose at Biniruan dumpsite. As of Rep. Act 9003, otherwise known as Solid Waste Management Act of 2000, stating order that operation of controlled dumpsite shall be allowed only until February 16, 2006 and all LGUs shall shift into sanitary land fill.

At the dumpsite, an Effective Microorganism (EM) solution is being used to treat garbage at the disposal facility, it is a disinfentant, deodorizer and decomposer solution as treatment to garbage.

Table SO- 19. Methods of Solid Waste Disposal/Treatment, Year 2018

Methods	Quantity (Total municipal solid waste generated) (Tons/day)	No. of household served	Agency Responsible
1. Collected and disposed to:			
- Open Dump			
- Controlled Dump	108.61	31 barangay served	CENRO
- Sanitary Landfill			
2. Composting	31,548.47		BLGU
3. Recycling	7,037.94		BLGU
4. Not collected:	9,078.82		BLGU
- Burned			
- Dumped in individual open pit (not burned)			
5. Others			
Animal Feed	14,560.83		

Source: CENRO, 2019

Table SO- 19.1 LIST OF EXISTING MATERIAL RECOVERY FACILITIES (MRF) IN BARANGAYS

NAME OF BARANGAY/LGU	FACILITIES	COMPOSTING
1. DATU BALABARAN (TAMONTAKA MOTHER)	MRF	None
2. TAMONTAKA 1	NO MRF	None
3. TAMONTAKA 2	NO MRF	None
4. TAMONTAKA 3	NO MRF	None
5. TAMONTAKA 4	MRF	None
6. TAMONTAKA 5	NO MRF	None

7. ROSARY HEIGHTS MOTHER	MRF	Active
8. ROSARY HEIGHTS 1	MRF	Active
9. ROSARY HEIGHTS 2	MRF	None
10. ROSARY HEIGHTS 3	NO MRF – Due to road clearing	None
11. ROSARY HEIGHTS 4	MRF	Active
12. ROSARY HEIGHTS 5	MRF	None
13. ROSARY HEIGHTS 6	MRF	Active
14. ROSARY HEIGHTS 7	NO MRF	None
15. ROSARY HEIGHTS 8	MRF	None
16. ROSARY HEIGHTS 9	NO MRF	None
17. ROSARY HEIGHTS 10	MRF	Active
18. ROSARY HEIGHTS 11	NO MRF	None
19. ROSARY HEIGHTS 12	MRF	None
20. ROSARY HEIGHTS 13	MRF	None
21. POBLACION MOTHER	MRF	None
22. POBLACION 1	MRF	None
23. POBLACION 2	NO MRF	None
24. POBLACION 3	NO MRF – Due to road clearing	None
25. POBLACION 4	MRF	Active
26. POBLACION 5	MRF	None
27. POBLACION 6	MRF	None
28. POBLACION 7	MRF	None
29. POBLACION 8	MRF	None
30. POBLACION 9	NO MRF	None
31. BAGUA MOTHER	NO MRF	None
32. BAGUA 1	MRF	None
33. BAGUA 2	NO MRF – Due to road clearing	None

34. BAGUA 3	MRF	None
35. KALANGANAN MOTHER	NO MRF	None
36. KALANGANAN 1	MRF	None
37. KALANGANAN 2	NO MRF	None

Source: CENRO, 2023

Several measures have already been introduced to improve the solid waste management situation in the city. The intensive information, education, and communication (IEC) campaign has been running for years. These efforts have been coupled with programs, projects, and activities intended to comply with the requirements of Republic 9003, particularly segregation at source, the practice of 3Rs with composting, the putting up of Material Recovery Facilities (MRF) in all barangays, the establishment of barangay waste collection systems, the designation of sanitary officers at the barangay level to enhance the enforcement capacity, organizing the barangay Solid Waste Management Committees, and many more at the barangay level.

At the city government level, efforts include passing enabling laws that would support the solid waste management programs of the city, the creation of the City Environment and Natural Resources Office (CENRO) to focus on environmental issues and concerns, the acquisition of equipment to improve the capacity of the city government, through the CENRO, to collect, transport, and dispose of solid waste, assistance to barangays and schools to put up their MRFs, and many more.

Parallel to these efforts is the formulation of the school-based solid waste management program, which paved the way for the integration of solid waste management lectures into appropriate subjects in elementary and high school. The school-based SWM program has improved SWM in schools and reduced waste generation, as almost all schools have functional MRFs. These MRFs are now being used to collect recyclable waste from homes through the pupils, thereby extending their services to the community.

The foreseen solution to the waste problem in Cotabato City is to establish a Central Materials Recovery Facility, which will be located on a lot owned by the City Government of Cotabato in Barangay Poblacion 8. Cotabato City will process the waste and aim to reduce the volume of waste for disposal. The proposed facility includes manual segregation of biodegradable, recyclable, residual, and special wastes. Biodegradables will be composted through rapid composting technology, recyclables will be baled and sold, residuals will be brought to a sanitary landfill, and special wastes will be brought to a special storage facility. Glass wastes will be pulverized and used as fine aggregates in road and drainage construction. Plastic wastes will be shredded, melted, and molded into useful materials. The facility would also include the treatment of hospital waste.

The preparation of plans and cost estimates for the construction and/or installation of a bio-medical waste and solid waste management facility will be done by the City Engineering Office but will be turned over to the City Environment and Natural Resources Office after the completion of the project for its full operation and periodic maintenance. This initiative is an intermediate solution for the city government in the absence of a sanitary landfill. Proposals for a sanitation landfill have been made but would still need further study to determine the appropriateness of the proposed sites. Pending this, the Safe Closure and Rehabilitation Plan of the Biniruan Dumpsite cannot materialize as of this writing.

1.6 ECONOMIC STRUCTURE (revenue sources)

Cotabato City is the commercial, industrial, finance, Halal and trading center of Central Mindanao as well as Bangsamoro Region. The LGU has been classified as a first-class city in terms of income and financial performance. Its annual income had been growing at an average of 10.51 percent yearly. In 2019, Cotabato City was recognized as the Top 2 Most Competitive Component City in Mindanao and the Most Competitive City in Region 12 for 3 consecutive years based on the Cities/Municipalities Competitiveness Index (CMCI) annual ranking, with special citation in 2018 and 2019 Search for the Most Business Friendly City.

By at large, the local economy of Cotabato City is being guided by the different activities clustered in each of the three (3) sectors, namely:

1. Primary Sector	- Agriculture
	- Livestock and Poultry
	- Fishery - Forestry
	- Agricultural Support - Services and Facilities
2. Secondary Sector	- Manufacturing
	- Construction
	- Electricity
	- Gas
	- Water
3. Tertiary Sector	- Wholesale and Retail Trade
	- Financial and Lending Institutions
	- Economic Enterprise
	- Tourism Services
	- Transportation and Communication
	- Cooperative Services
	- Public Employment Services

In the hierarchy of its contribution to the local economy, the order is spearheaded by Tertiary Sector followed by the Secondary Sector and Primary Sector. The development orientation of the city revolves around its being a service provider of goods, services, and facilities in this part of South-Central Mindanao (Region XII – SOCSKSARGEN), including the Province of Maguindanao and the Bangsamoro Region (BARMM) based in the city. Even local traders from the nearby municipalities of Cotabato Province come and go here for business transactions. Cotabato City's development direction is bannered by the ever-growing wholesaling and retailing of goods and services under the Commerce and Trade Sub-Sector.

By now, Cotabato City is well heading towards becoming a highly urbanized city with the city's economy continuing to rise due to the increasing number of investments pouring in. Thereby trickle effect on the establishment of micro, small and medium scale businesses as well as the availability of jobs which provides more opportunity for employment and income.

THE PRIMARY SECTOR

The Primary Sector focuses mainly on the production of agricultural crops, aquaculture, livestock and poultry and provision of agricultural support services like.Post-Harvest Facilities and Services like Warehouse, Multi-Purpose Dryer Pavement, Rice Mills (Baby Cono, "Kiskisan", Mini Rice Mill), Ice Plant, fish Landing

a. AGRICULTURE

Cotabato City has a vast agricultural land and it is rather ironic that the city could not even make itself self-sufficient when it comes to crop production. Agriculture croplands are located mostly in the eastern part of the city. There are 16 identified agricultural barangays with a total agricultural area of 9,495.27 hectares, utilizing only a total of 3,771.95 hectares as productive area planted with various crops such as rice, coconut, corn, vegetables, nipa, mango and banana, with still available potential area of 4,772.63 hectares for agricultural uses.

The agricultural sector of Cotabato City posed low agriculture productivity with an average rice production of 41.74 metric ton (MT) per year at only 1 cropping per year, 127 MT for coconut, 1,337 MT of mango, 746.36 MT of Banana, 14.95 MT of corn and 301.95 MT of aquaculture products per year. The vegetable produced were primarily for personal consumption and small Income Generating Project. The reason for the export of almost 80% of food supply were from outside sources and the traditional or conventional technology used in farming aggregates a stumpy turn-out of harvest.

b. LIVESTOCK AND POULTRY

- In the case of livestock, the bulk of supply for both large (cattle, carabao) and small animals (goats) is still sourced out from the adjacent and nearby Municipalities of Maguindanao Province and partly from nearby municipalities of Cotabato Province (*contribution ratio is 90% outside and only 10% produced by city-based farmers*);

- Poultry production in the city 8,200 heads/month barely created a dent as the net consumption of 151,400 tons is still supplied by contract growers of big poultry producers based in Davao City, General Santos City and Cagayan de Oro City

c. **FISHERY -** The city has a total of 1,684.34 hectares for fishery production.

Inland Fishery - There are 10 barangays with inland bodies of water and potential to become economically productive.

Brackishwater Fish Production - There is an estimated total land area 1,449 hectares of brackishwater fishponds.

- Fishpond operators produced the traditional milkfish and to some extent, some are getting into polyculture (mixing the former with mudcrabs and prawns). Residual fries of shrimps, tilapia and other species (commonly called "sari") from the wild enter the fishponds whenever the pond gates are opened during high tide;

- Majority of fishpond operators are not financially stable and rely solely on "credit financing" provided by the middlemen/traders based in the community in order to operate their fishponds;

- At the rate small fishponds are operating, they proved to be uneconomical as they barely contribute to the local economy where most of the time, the operators are on break-even mode;

- There is an impending need to assess the issuance of Fishpond-Lease Agreements (FLA's) to come up with a holistic approach to develop the brackish water fishing into a burgeoning industry complemented with support infrastructure facilities. FLAs covered a total of 509 hectares.

Freshwater Fish Production

- The tilapia and catfish (hito) that are sold in the city's markets come from South Cotabato, Lake Buluan, Maguindanao and Ligwasan Marsh within Pikit, North Cotabato;

- The backyard fishponds that exist sparingly are merely for sustenance of the households engaged in such endeavor;

- The vast marshland area at the eastern part of the city remained untapped for lack of interested investors and strong government support.

Coastal Fishery

- There is a 17-kilometer of City Water off the coast of Illana Bay where coastal fisherfolks in the three (3) Kalanganan Barangays get their subsistence livelihood;

AGRICULTURE SUPPORT FACILITIES

- Capacity Development

The OCM-Agriculture Services Division has the human resource capable of providing skills training and on-farm extension services to farmers and fisher folks. Skills Training could be done upon request and on-farm extension services done periodically and as the need arises.

- Production Inputs

Through the Regular Program of the Department of Agriculture (DA), production inputs such as rice and corn seeds, fertilizers, vegetable seeds, fingerlings, feeds are provided to farmers and fisher folks as a means to enhance their productivity;

Whenever a calamity hits the city, the affected farmers and fisher folks are provided with equitable financial assistance and in kind to help them recover and put them back in business, so to speak.

- Post-Harvest Facilities

Through their initiative, some of the post-harvest facilities were put up by the private sector like warehouses and multi-purpose drier pavements. However, the City Government of Cotabato was able to access with the Department of Agriculture (DA) through their special projects and became recipients of various projects for post-harvest facilities.

Existing Agricultural Support Facilities and Services, 2016 and 2017

TYPE	2016	2017
Hand tractor	2 units	
Mobile Rice Mill	1 unit	
Rice Thresher	2 units	1 unit
Floating Tiller	4 units	7 Units
Smoke House Bangus Production Center	1 Center	
Livelihood Center	1 Center	
Motorized Banca	10 units	7 units
Ice Plant	1 unit	
Halal Feed mill complete with equipment		1 unit
Community Fish Landing Center		2 units
Multi-purpose Dryer Pavement		1 unit

Source: OCM-Agricultural Division

d. FORESTRY

Timako Hill prides itself as the only forested area in the city standing majestically with an elevation of 197 meters but is not a production forest area. The City Government is closely coordinating with the Barangay Government to conserve and protect it for eco-tourism projects.

THE SECONDARY SECTOR

The Secondary Sector covers such activities as: Manufacturing, Construction, Mining and Quarrying and Utilities (Electricity, Gas and Water).

a. MANUFACTURING

- Under manufacturing, there are no factories to speak of but only cottage or home-based entrepreneurs engaged in activities such as: processed meat/fish, fruit delicacies, native delicacies and condiments;
- The lowly water hyacinth is now being used as indigenous raw material for handicrafts like bags, fans and other home décor items produced by an enterprising CSO;
- The traditional hand-weaving is still very much active in the Tamontaka area producing Inaul clothing material that is now widely accepted in the fashion circle for formal and semi-formal dresses and attires, including corporate and government office uniforms;
- Brasswares sold as souvenir items are crafted by a lone family of artisan belonging to the 6th generation.

b. CONSTRUCTION

- City Government spending in construction were used in opening of roads, concreting and/or rehabilitation of damaged roads as well as support facilities such as Day Care Centers, Women Crisis Center, Teen Center, Main Health Center, Barangay Cluster Health Centers, among other things;
- Two (2) major road projects with bridge components of the National Government are still ongoing – the West Circumferential Road and East Diversion Road are still ongoing projects;
- From the private sector, notable commercial establishments that were constructed are: Mall of Al-Nor, EM Manor, City Mall, Puregold Supermarket, Centro Department Store and Superama Hypermart;
- Somehow, these activities have contributed to the city/s economy in terms of providing employment and job opportunities.

c. MINING AND QUARRYING

- There are no mining and/or quarrying activities done in the city;
- Earthfill materials extracted from quarries outside the city are used mainly for the rehabilitation or construction of roads and for compaction and/or adding up the elevation of residential lots in low-lying areas;
- Sand and gravel are likewise sourced outside.

d. ELECTRICITY

- Cotabato City has a stable source of electricity provided by the Cotabato Light and Power Company. They have a stand-by power plant that is activated during power outages or whenever power fluctuation occurs. Energy source is the National Grid Corporation of the Philippines (NGCP)

e. GAS

- This aspect refers to the marketing/distribution of Liquefied Petroleum Gas (LPG) or Propane that used to be dominated by Petron, Shell and Caltex;
- The entry of small players as Petronas Gas and Pryce Gas gave consumers with other choices;

f. WATER

- Except for Barangay Kalanganan 1, all the thirty-six (36) barangays of the city are now provided with potable water by the Metro Cotabato Water District (MCWD) although interior parts of the Tamontaka and Kalanganan Barangays are experiencing low water pressure especially during peak hours;

- Water distribution system at Barangays Tamontaka 4-5 was converted from Level II to Level III under the Sagana at LigtasnaTubigsa Lahat (SALINTUBIG) Project of the Department of the Interior and Local Government (DILG) in cooperation with the City Government of Cotabato and the MCWD.

THE TERTIARY SECTOR

These are the services/activities that comprises the tertiary sector:

1. Wholesale and Retail Trade
2. Financial and Lending Institutions
3. Economic Enterprise
4. Tourism Services
5. Transportation and Communication Services

6. Cooperative Services
7. Public Employment Services

Number of Financial Institutions, 2017

CLASSIFICATION	NAME OF BANK	NO. OF BRANCH
A. Clearing House	1. Central Bank	1
A. Private Commercial Bank	1. BDO	2
	2. BPI	2
	3. Metro Bank	2
	4. East West Bank	1
	5. China Bank	1
	6. UCPB	1
	7. RCBC	1
	8. PNB	2
		12
B. Gov't. Specialized Bank	1. Land Bank	3
	2. DBP	1
		4
C. Special Private Bank	- Amanah Bank	1
D. Rural Bank	- Palm Tree Bank	1

Source: OCM-Tourism, Trade & Industry Division

FINANCIAL AND LENDING INSTITUTIONS

Aside from the banking institutions, there are several pawnshops and remittance centers spread all around the city plus a few private lending companies catering to individual borrowers.

WHOLESALE AND RETAIL TRADE

- Still the dominant service in the area of commerce and trade;
- Engaged mostly in dry goods, consumer products, hardware and general merchandising.

ECONOMIC ENTERPRISE

Market Facilities – Operation of Market, under the Administrative Supervision of the Office of the City Mayor

1. Mega Market
2. City Central Arcade

3. Slaughterhouse Facilities – Operation of Slaughterhouse, under the Regulatory and Administrative Supervision of the Office for Veterinary Services
4. Halal Slaughterhouse
5. Hog Slaughterhouse

TOURISM SERVICES

- Visitor's Information Center is now operational located at the Old City Hall
- Religious and Socio-Cultural Festivals that are regularly celebrated and continuously attracting local and foreign tourists as well as investors
  - Shariff Kabunsuan Festival
  - Araw ng Cotabato
  - Immaculate Conception Patronal Fiesta
  - Chinese New Year
- DOT- Accredited Facility – Mall of AL-NOR
- For City Tours – By special arrangement with owners/operators of Aircon Vans

TRANSPORTATION AND COMMUNICATION

Transportation

- Regular means of public conveyance along major streets of the city
  - Vintage PUJ's (Sarao-type Body)
  - Passenger-type Multicabs, Town Aces and other converted surplus vehicles
- For short-distance travels within the downtown area (CBD) to and from adjacent barangays
  - Motorized Tricycles
- Other means of "Specialized Conveyance"
  - Pedicabs
  - Payong-Payong
  - Habal-Habal
- For Out-of-Town (Long Distance Travels)
  - Mindanao Star (formerly Weena Transport) – North-bound destinations
  - Husky – South-bound destinations
  - Air-conditioned Vans – North-bound and South-bound destinations

Communication

- For Landline Telephone Services – provided by Philippine Long Distance Telephone Company (PLDT)
- For Cellular Phone Facilities – provided by Smart/Sun and Globe Company
- Frequency Modulation (FM) Stations – Six (6) Radio Stations

- Alternate Modulation (AM) Stations – Four (4) Radio Stations
- Television Network – ABS-CBN operating a Regional Network Station and GMA-7 operating via a Relay Station
- Cable Television – Two Service Providers (Maguindanao Cable and Cotabato Cable).

COOPERATIVE SERVICES

- Reckoned from 2009, the number of cooperatives drastically declined from fifty-three (53) to thirty-seven (37) as of March 2017. Major reason is their failure to comply with the submission of documents to the Cooperative Development Authority (CDA);
- Nonetheless, all the cooperatives are duly registered with CDA pursuant to Philippine Cooperative Act of 2008 (R.A. No. 9520);
- The Cooperative Services Section of OCM-CACSD performs the following functions:
  - ✓ Organization
  - ✓ Training/Capacity Development
  - ✓ Supervision and Monitoring
  - ✓ The month of October is celebrated as Cooperative Month

Number and Classification of Cooperatives, 2016

TYPE	NATURE OF BUSINESS	NUMBER
A. Multi-Purpose (Non-Agriculture)	Credit	7
	Transport	6
	Construction	1
	Education	1
	Credit and Consumers	13
	Credit and Services	3
	Consumers	1
	Credit, Consumers and Services	1
B. Multi-Purpose (Agriculture)	Marketing	2
	Credit and Marketing	2
	Total	37

Source: OCM-CACSD

Poverty Incidence

Average Annual Per Capita Poverty Threshold, Poverty Incidence, Magnitude, 2009-2018

INDICATOR	YEAR			
	2009	2012	2015	2018
Annual Per Capita Poverty Threshold (in Pesos)	18,103	20,568	25,581	30,349
Poverty Incidence among Families (%)	23.7	34.5	38.5	35.2
Magnitude of Poor Families (%)			16.4	20.9

The table above is the survey result of the Average Annual Per Capita Poverty Threshold, Poverty Incidence and Magnitude 2009-2018 by the Philippine Statistics Authority (PSA). This means that in 2018 the range of poverty per person per year would incur a total cost of P30,349.00 to satisfy the basic needs, that is a monthly income of Php 2,529.08, hence the city has a poverty incidence of 35.2 among the total number of families and an estimated of about 20,900 affected families.

The poverty incidence among families were recorded at 27.5% in 2006 or a total of 12,206 families and increases to 29.9% in 2009 or a total of 15,754 families, that was a 2.4% increase from previous; still a continuing increase in the poverty incidence in 2012 at 34.5% or affecting 21,555 families, this is a big leap of 4.6% compared to 2009, but there was a change of trend from 2012 to 2015 were a remarkable decrease in the poverty situation of the city at only 24.7%, a decreased of 9.8% compared to 2012 affecting only 10,570 families or 49% reduced magnitude of poor families from 2012.

1.6.1 Revenue Sources

There are two (2) general ways by which a local government unit derives revenues to sustain the delivery of basic social, economic, medical and welfare services to its constituents as well as defraying the cost of personnel services and maintenance and other operating expenses within the local bureaucracy. One is from the National Government in the form of its share from the Internal Revenue Allotment (IRA) which forms the major source of funds for its financial coffers. The other is locally-generated and it has two (2) categories); tax revenue and non-tax revenue.

A. Tax Revenue – these are revenues imposed by the local government unit to individuals or juridical persons for their ownership or use of real property, business operations, and other incidental or related activities accruing income, profits or interests thereon such as but not limited to community taxes, peddling, franchising, fines and penalties, and; motor vehicles users tax. It consists of the following:

B. Non-Tax Revenue – these are revenues in the form of fees and charges for activities or services (direct or indirect) rendered by the local government unit for individuals or juridical persons either for their personal use or otherwise as a manifestation of its legitimacy or expressed authority to engage in such activities or services. It consists of the following:

Both the tax and non-tax revenues comprise the income of the City Government derived from economic activities such as in trade and commerce, banking and finance, agriculture, cottage industry, and tourism support facilities, not to mention the taxes imposed on individuals such as the community tax certificate, clearances and the like. The table below shows how the City Government of Cotabato generated its revenues from 2015-2020, viz:

Distribution of Revenues By Source

Source	2015	2016	2017	2018	2019	2020
A. Tax Revenue						
a.1 Real Property Tax - Basic	7,540,906.04	7,953,596.15	8,229,279.97	10,391,202.01	10,261,924.05	10,070,903.80
a.2 Real Property Tax - SEF	9,796,892.88	12,299,371.92	12,885,765.33	15,043,535.53	15,164,130.88	14,691,065.84
a.3 Tax on Business	76,563,591.54	83,271,994.38	98,222,634.20	101,639,347.20	112,483,729.28	109,704,994.81
a.4 Other Taxes	7,066,123.56	7,596,782.96	7,539,700.28	7,062,898.11	7,574,754.17	6,522,231.48
Sub-total	100,967,514.02	111,121,745.41	126,877,379.78	134,136,982.85	145,484,538.38	140,989,195.93
B. Non-Tax Revenue						
b.1 Regulatory Fees	9,456,319.45	13,159,291.36	11,591,902.65	13,183,147.19	15,806,206.29	13,503,736.37
b.2 Services/User Charges	6,802,407.40	7,265,660.50	12,223,817.98	11,015,723.49	13,091,852.32	11,731,938.11
b.3 Receipts from Economic Enterprises	10,840,454.10	14,979,972.69	22,719,986.90	20,592,952.06	19,353,779.49	16,713,353.12
b.4 Other Receipts	290,770.82	3,437,466.93	4,198,343.98	6,912,119.17	8,837,133.18	43,674,417.38
b.5 Toll Fees	-	-	-	-	-	-
Sub-total	27,389,951.77	38,842,391.48	50,734,051.51	51,703,941.91	57,088,971.28	85,623,444.98

Source	2015	2016	2017	2018	2019	2020
C. Shares from National Tax						
c.1 Internal Revenue Allotment(IRA)	580,134,120.00	634,850,069.68	722,142,924.00	775,815,255.96	861,316,472.00	966,607,245.96
D. Other Income						
d.1 Loans and Borrowings - Land Bank	199,314,050.00	-	38,859,942.40	20,209,822.00	206,511,550.00	198,250,073.00
Sub-total	779,448,170.00	634,850,069.68	761,002,866.40	796,025,077.96	1,067,828,022.00	1,164,857,318.96
GRAND TOTAL	**907,805,635.79**	**784,814,206.57**	**938,614,297.69**	**981,866,002.72**	**1,270,401,531.66**	**1,391,469,959.87**

Source: City Treasury Office

1.6.2 Labor and Employment

The erstwhile administrative role of Cotabato City as the seat of Central Mindanao (Region XII) paved the way for the establishment of regional offices of National Line Agencies (NLAs) thereby providing employment to its constituents. Together with the Office of the Chief Minister of the and its component agencies in the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM), it comprises a big chunk of employed persons within the labor force. These employees in the government sector have contributed largely to the growth of the city's economy in terms of accessing social and economic services through spending on household needs, consumer goods, use of entertainment facilities, engagement in entrepreneurial concerns and payment of local taxes.

Commerce and Trade sub-sector represents the major employment provider covering such endeavors as wholesale and retail activities, banking and finance, service facilities, and others. The agriculture sub-sector, in general, has no visible employment participation since most of the concerned populace are self-employed. Fisherfolks based in the 3 Kalanganan Barangays are engaged in fishing off the coast of Illana Bay while fishpond owners operate their own brackish water fishponds. Even the members of fishpond cooperatives tend to their own fishponds. Workers are hired on a piece-rate basis as the need arises during harvest, casting of fingerlings at the start of the production cycle, and maintenance activities. It is more simplified in the case of freshwater fishpond owners as they are all engaged in backyard-raising and do not demand labor support.

The same is true in the case of farmers who also own the land they are tilling. In effect, they are also self-employed.

Employment Rate

The Regional Social and Economic Trends (RSET) of 2015 by the Philippine Statistics Authority recorded the city Labor Force Participation Rate at 67.5% in 2013 and decrease to 59.3% in 2015. Out of the total Labor Participation Population, the city has an employment rate of 93.9% in 2013 and slide a bit by 0.4% or 93.5% in 2014, and the city's unemployment rate isat 6.1% in2013 and slightly increase at 6.5% in 2014.

Labor Force Participation Rate, Employment Rate, Unemployment Rate, 2013-2014

INDICATOR	YEAR		
	2013	2014	2019
Labor Force Participation Rate	67.5	59.3	64.1
Employment Rate	93.9	93.5	95.6
Unemployment Rate	6.1	6.5	4.4

Source: PSA

The City Licensing Division registered 1,826 old business applications in 2017, and 1,002 new business registrations having a total of 2,828 business operations.

1.6.3 Average Family Income and Expenditures

The average family in Cotabato City earns more than what it spends for its basic family needs and services. Going by the generally accepted norm, the average number of family members of 5, has P27,761.00 to use for meeting their personal requirements.

The average family in Cotabato City is above the poverty threshold as shown in the poverty incidence of families. This is one reason why the city is can be classified as a highly urbanizing city in South-Central Mindanao.

1.7 Existing Land and Water Use

The CLUP of 2010 -2020 goal was to develop the city in a nodal fashion. Five (5) growth nodes and three (3) growth stimuli were identified to develop the city during its planning period. The growth nodes and the growth stimuli including its production areas are all connected through a Circumferential and Diversion Roads. The growth nodes are the major growth center of the city such as the downtown and uptown areas, Barangay Kalanganan Mother, Kalanganan 2 (adjacent the grand mosque Sultan Haji Hassanal Bolkiah) and the City owned property sometimes called Doruelo estate. Growth stimuli were identified as a caralyst of growth of the nodes. These growth stimuli are the Seaport, the agri-industrial ecozone and the integrated terminal at Barangay Poblacion 8.

The plan also directs the development to unfold towards the direction of the south (Barangay Tamontaka Mother) to ease pressure and unburden the infrastructure on the north (Central Business District of Barangays Poblacion 5 and 6). Over the years, following its nodal fashion, the major growth center at the Central Business District (CBD) comprising of Barangay Poblacion 5 and 6 continued to grow in a manner that renewed its urban form. These areas had shed some of its old parts as it continued its economic dynamism. Commercial establishments whose business ventures were not doing well were replaced by newer, vibrant and sometimes larger buildings.

Another identified growth node, the uptown area continued to thrive. Part of the uptown area, the People's Palace at Barangay Rosary Heights 10, once identified as growth catalyst, continues to attract development in this part of the city. Using scalogram method, Barangay Rosary Heights 10 is growing as to diversity of services and facilities. Barangays Rosary Heights 7 and Rosary Heights 9, both in close proximity to Barangay Rosary Heights 10 were also growing in functional complexity and becoming more diverse of activities. These growth nodes have the ability to provide various types of services to residents and even to people from the south visiting the city. Functionality of services gradually extends even further uptown going to the Barangay of Tamontaka Mother in a linear type pattern. Overall, the centrality of settlements and activities is gradually shifting from the downtown CBD to the uptown area.

The secondary growth nodes of Barangays Kalanganan Mother and Kalanganan 2, both at the western part and sitting adjacent the other, had setback as minor growth nodes. This can be attributed to the delayed completion of the stimulus-which is the seaport. The seaport, a project of the Philippine Ports Authority, is divided into phases. Currently, it is still in its first phase –Construction of causeway and trestle. The entire project has four phases and the last three has no guaranteed fund yet. The circumferential road connecting both barangays is also undergoing construction which when completed may support the seaport and facilitate even more the growth of the node.

There were attempts to fund (from national source) the physical access to another secondary node formerly known as Doruelo estate, now owned by the City Government of Cotabato. The area is still inaccessible, except through water transport, due to lack of bridge leading to the same. Further west of the city is another growth stimulus which was proposed to be an Integrated Terminal. Further study resulted in the dropping of the proposed project as it may not be viable anymore owing to its exposure to flood. Setting up a transport terminal may encourage the construction of settlements or businesses in its surrounding and expose more build-ups and putting more population at risk to flood. It may even be more costly or unfeasible for public transport (buses and vans) to continue its trips to and from the terminal during time of inundation.

1.7.1 Trends by Land Use Category

Available Land Supply for Development

Available land supply are lands in the territorial boundary of the city which could be made available for future expansion or development. These includes the following:

1. Developed urban lands in the city – lands within the urban barangays which is developed and largely build upon but there are existing vacant lots within the compact built-up area
2. Underdeveloped urban lands, or lands within the urban limits which at the time is not yet developed and built upon.
3. Lands within the urbanizable limits or lands presently unurbanized but likely to get urbanized within the next five to ten years.
4. Lands beyond urbanizable limits which remain idle and unproductive for years.

To arrive at the Available Land Supply, the above land categories must be subtracted with lands that are exposed to hazard, preserved or protected by law such protection zone, production zone, built up areas, water bodies and others, thus:
Available Land Supply = TLA – (Protection zone + Production zone + Urban Area + Hazard Prone areas + waterbodies)

Given:

- Protection zone including mangroves zone, upon map overlay, is overlapped by tsunami/storm surge and flooding except Timako Hill
- Production zone is overlapped by the extent of tsunami/ storm surge if overlay
- *Protection zone and Production zone is not considered in the computation as they are already included in the hazard-prone area*

TLA = 17,599 has
Urban built up area = 1,465.54 has
Hazard Prone area = 9.643 has
Waterbodies = 2,413 has

Available Land Supply = 17,599 – (1,465.54 +9,643+2413)
= 17,599 – (13,521.54)
= 4,077.46 has

a. Residential Use

Residential uses continued to stay or evolved at general residential zone at Rosary Heights 1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11,12, and 13, Barangays Poblacion Mother, 2, 3, 4, small parts of Poblacion 5 and 6 , the entire of Poblacion 7, portion of Poblacion 8, and 9. Barangay Bagua Mother, 1, 2, and 3. Along the linear strip of Kalanganan Mother, portion of Kalanganan 1 and section of Kalanganan 2. Tamontaka Mother and Tamontaka 1 and portion of Tamontaka 2 and Tamontaka 4.

Noticeable are dwelling units built along the road with the development of Cotabato East Diversion Road and its branch road. From the previous planning period, some expansion can be seen in the eastern part of Rosary Heights 5, along Tarbeng Creek in the eastern of Rosary Heights 8, and in the southern part of Rosary Heights 9 and 10. Similarly, expansion of urbanized area is also observed in the western part of Brgy Tamontaka Mother which was triggered by the construction of new road leading to the Grand Mosque. In general, residential houses developed along new roads following a linear fashion and as provided and projected by the previous land use plan.

b. Commercial Use

Commercial use are those principally for trade, services and business activities to include service industries performing complimentary/ supplementary functions to principally commercial zone. From the last CLUP there are 11 big commercial establishments that have put up or planning to join the commercial trade in Cotabato City. Of the 11 establishments 2 are undergoing construction. The entry of these big establishments is a manifestation of a booming business climate in the area. One example is the City Mall located along Gov. Gutierrez Avenue of Barangay Rosary Heights 7. Its location that being to the BARMM complex triggered the putting up of restaurants and eateries nearby. Table below shows the commercial land use changes from CLUP year 2010

Table 11 Land Use Changes from Existing Land Use 2010

Development	Opening Year	Shopping Center/Mall	Location (Barangay)
Completed	2013	Kutawato Diamond Township	Poblacion 5
	2015	El Manuel Hotel/Citi Hardware	Poblacion 5
	2015	Mall of Alnor	Rosary Heights 9
	2016	City Mall	Rosary Heights 7
	2016	Fiesta Mall/ Puregold	Rosary Heights 10
	2017	Puregold	Poblacion 5
	2017	Superama Hypermarket	Rosary Heights 10
	2019	Superama (Hiway)	Rosary Heights 10
On-going	2021	On-going commercial Center	Rosary Heights 7
	2022/2023	KCC Mall of Cotabato	Rosary Heights 2

Roadside commercial located along Sinsuat did not appear to have expanded much due to lack of space but a few of the old buildings situated linearly along the road underwent urban renewal. One most noticeable establishment was the Mall of Alnor which developed in a commercial zone but was later expanded and extending to a residential zone. It is one of the biggest commercial establishment to date in the city, although, a much bigger establishment will soon rise in Barangay Rosary Heights 2.

In the past few years other commercial activities/establishments, big and small alike, develop in barangays Rosary Heights Mother, 1, 2, 3, 4, 6, 7, 9, 10, 11, 12, 13, Barangay Poblacion Mother, 1, 2, 3, 4, 5, 6, 8 and 9, Barangay Tamontaka Mother, 1, 2, 3, Barangay Bagua Mother1, 2, and 3, Barangay Kalanganan Mother, and 2. Most of the commercial activities that evolve in the rural fringe are along the road side which is also zone as commercial strips. Barangay Rosary 7, 9 and 10 has gradually evolve into a business district at the uptown area

c. Industrial Use

Industrial use in the city are non-pollutive/non-hazardous manufacturing/processing establishments. In the recent years no same type of industrial activities has developed in the city. The CLUP has maintained barangay Poblacion 7 as area for industrial use but over time residential use has evolve and expanded in that barangay. This industrial zone was the same area identified even before this current land use plan. This industrial zone is proposed to be reverted back to residential zone except those areas having industrial activities.

d. General Institutional Use

This land use includes government centers to house national, regional or local offices, private and government offices, colleges, universities, professional business schools, vocational and trade schools, technical schools, primary, secondary and other institutions of higher learning, madrasahs and other religious structures and other similar uses. The city was designated regional center of Region XII or SOCCSKSARGEN Region for many years until 2004 when Executive Order No. 304 issued by former President Gloria Macapagal-Arroyo which transferred the seat of Region XII from Cotabato City to Koronadal City, South Cotabato. Thus, almost all regional government agencies under Region XII have transferred their offices to Koronadal City. There area still some Region XII Offices that remain in City. These include the following:

- Department of Health
- Population Commission
- Philippine Statistics Authority
- Department of Science and Technology (laboratory Facility)
- There are also other institutions of higher education located within the city that are being maintained and strengthened. These are:
    - Cotabato State Polytechnic College (now: Cotabato State University)
    - Notre Dame University
    - Eleven (11) private colleges and institutions (STI Colleges, St. Benedict College, RVM College, AMA Computer College, Coland System Technology College, Antonio Pacheco College, Dr. P. Ocampo College, Dela Vida College, Mindanao Capitol Colleges, Shariff Kabunsuan College, Kutawato Darusallam College.

e. Special Institutional Use

Special Institutional Use are land uses such as orphanages, military/ PNP camps and offices, training grounds, reservations, correctional institutions and similar uses. These types of land uses were not affected so much by the transfer of regional seat as these establishments have different set up from regional offices. It is sited up due to its tactical location, convenience, or rapid deployment in case of camps, among others. Much of these types of land use is located at Pedro Colina hill at Barangay Rosary Heights 1.

f. Parks and Recreation

These are areas designed for diversion/amusements and for the maintenance of the ecological balance of the community. Parks and recreation have not increased significantly in the city although there was rehabilitation/improvement of the old city park which was financed by the Department of Budget and Management that was recently completed. The DBM has also financed an ongoing project known as the Children's Park embracing an area of 1.5 hectare

g. Tourism

Tourism sites in the city remain the same in terms of area. Some notable tourism sites in the city are Kutawato cave, a cave at the heart of the city, alleged to have a network of channels extending to the farthest south of the city particularly Tamontaka Church. It was said to be used by the Japanese force for the storage of guns and ammunition. Takumi Butai shrine. Takumi was the provincial commander of the Japanese force assigned in Cotabato. It was said that he was loved by the people and considers Cotabato his second home. He died during World War II and has requested before he died that his ashes be buried in Cotabato. Church of Immaculate Concepcion of Tamontaka or Tamontaka Church built along the Tamontaka river by the Jesuit priests in 1872. This first Christian church was declared a National Historic Landmark on July 19, 2004. On the far north of the city is Rio Grande de Mindanao where Shariff Kabunsuan, an Arab missionary landed and introduced Islam to the natives.

h. Cemeteries

The two existing cemeteries namely, the public cemetery, and the catholic cemetery of the city are full to capacity. The Chinese cemetery which caters only to the Filipino-Chinese residents of the city has enough space although may reach its limit in a few years. The active area of the cemetery is around 3 hectares more or less. There is a need to develop this city-owned cemetery at Malagapas owing to the full capacity of the public and catholic cemetery. The city may need to revisit the cemetery plan and make necessary improvement as some areas may be vulnerable to flood.

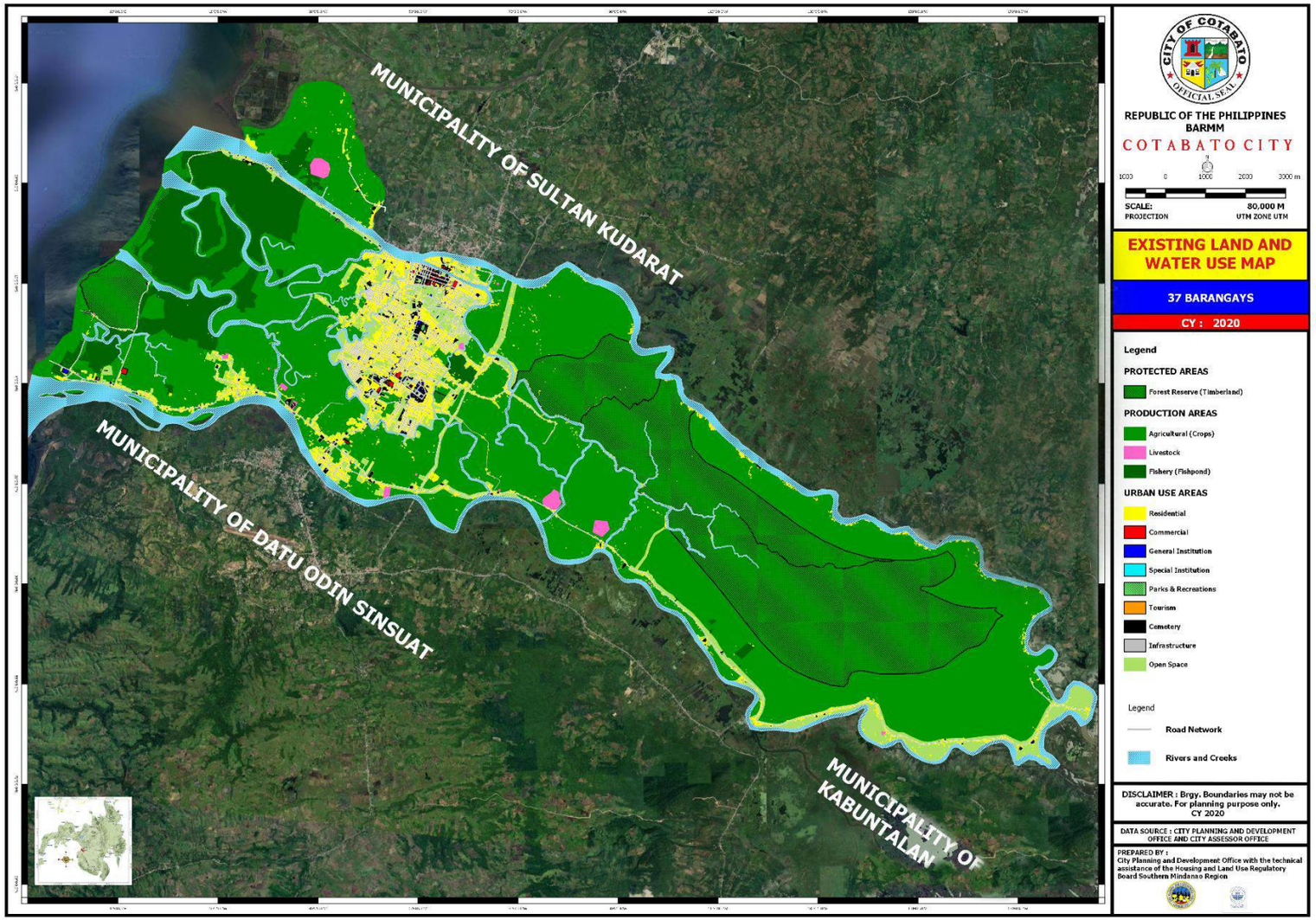
i. Open Space (Areas)

These are forestlands devoid of tree cover, grasslands, brushlands, denuded forests, croplands and grazing lands that have been abandoned. These parts are mostly located at the peripheries of the city particularly at Brgy Tamontaka 4 and 5. These open spaces are vast, inaccessible, llow-lying(sometimes waterloggeddemographic), unproductive lands. The DENR classifies some parts of this area as timberland. Another area classified as timberland, under the criteria of forest and forestland, is the Timako Hill at Brgy Kalanganan 2. But unlike the forestland in Tomontaka 4 and 5, it has a tree cover. Fishpond also under the criteria of forestland is also located adjacent to Timako Hill at Brgy Kalanganan 2 and Kalanganan Mother.

Table 12 Existing Land Use Areas

Land Use Categories	Area (ha)	Percent to Total
Protected Areas	3448.625	20%
Agriculture	8620.624	49%
Urban Use Areas		
Residential	536.648967	3%
Commercial	56.4787461	0%
General Institution	48.87659	0%
Special Institution	1.835885	0%
Parks & Recreations	7.269903	0%
Tourism	0.663876	0%
Cemetery	5.022299	0%
Infrastructure	3.545124	0%
Roads	218.2709	1%
Open Space	708.3492	4%
Water Uses		
Fishery	1528.98978	9%
Rivers and Creeks	2413.8	14%
Total	17599.0003	100%

Map 10 - Existing Land Use and Water Use Map


MUNICIPALITY OF SULTAN KUDARAT
MUNICIPALITY OF DATU ODIN SINSUAT
MUNICIPALITY OF KABUNTALAN
REPUBLIC OF THE PHILIPPINES
BARMM
COTABATO CITY
1000 0 1000 2000 3000 m
SCALE: 80,000 M
PROJECTION UTM ZONE UTM
EXISTING LAND AND WATER USE MAP
37 BARANGAYS
CY : 2020
Legend
PROTECTED AREAS
Forest Reserve (Timberland)
PRODUCTION AREAS
Agricultural (Crops)
Livestock
Fishery (Fishpond)
URBAN USE AREAS
Residential
Commercial
General Institution
Special Institution
Parks & Recreations
Tourism
Cemetery
Infrastructure
Open Space
Legend
Road Network
Rivers and Creeks
DISCLAIMER : Brgy. Boundaries may not be accurate. For planning purpose only. CY 2020
DATA SOURCE : CITY PLANNING AND DEVELOPMENT OFFICE AND CITY ASSESSOR OFFICE
PREPARED BY :
City Planning and Development Office with the technical assistance of the Housing and Land Use Regulatory Board Southern Mindanao Region

1.7.2 Existing Land Use by Barangay

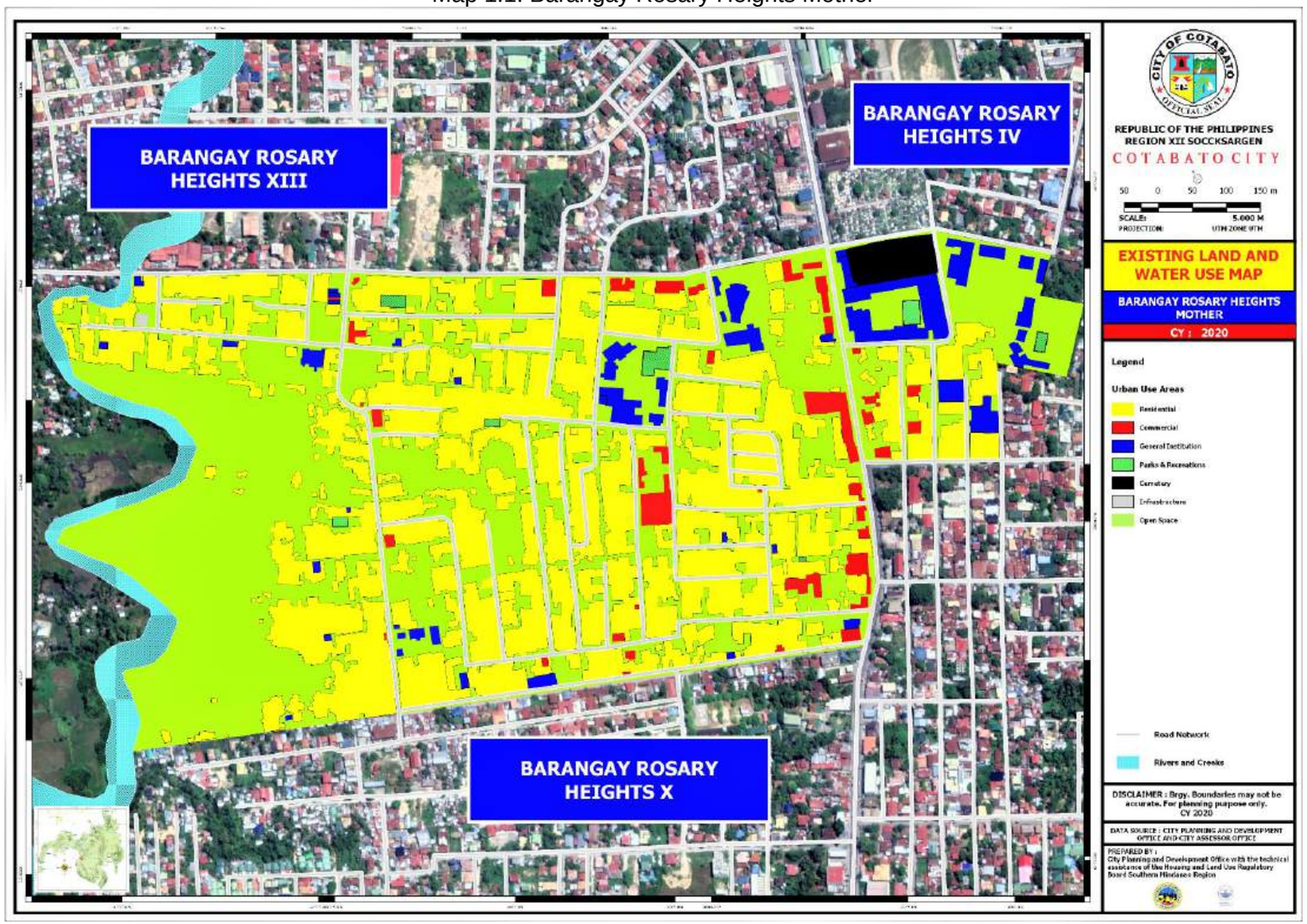
Barangay Rosary Heights MB (RHMB)

Table 1.1: Existing Land Use of Barangay Rosary Heights Mother

Land Use	Existing (ha)	% to Total
Residential	32.5279	42%
Commercial	2.064252	3%
General Institution	3.261232	4%
Parks & Recreation	0.091832124	1%
Infrastructure	0.037014	0%
Cemetery	0.767051	1%
Open Space	29.17546	38%
Rivers and Creeks	0.842	1%
Roads	8.35812	11%
Total	77.43853	100%

Barangay Rosary Heights Mother is an urban settlement of mixed land use of largely low-density residential area which characterized by low rise single detached units. The barangay houses government buildings such as Office on Health Services, Special Development Center that houses Women Crisis Center, Sero Elementary School, DPWH District Engineering office, Public Safety Savings and Loan Asso. Inc., International Monitoring Team Office, Rosary Heights Parish Church, Dept. of Trade and Industry of former ARMM, Bureau of Fire Protection sub-station, PNP Station 2, and others. Recreational facilities in the area include basketball courts and 1 tennis court. The barangay is connected to a national highway that passes through the CBD of the city and connected as well to the uptown area. Commercial buildings lined up the national highway such as restaurants/ food shops, sari-sari stores, groceries/mini marts, hostels, water refilling stations, filling station, car service shops, clinics and other low intensity commercial uses.

Map 1.1: Barangay Rosary Heights Mother



Barangay Rosary Heights 1 (RH 1)

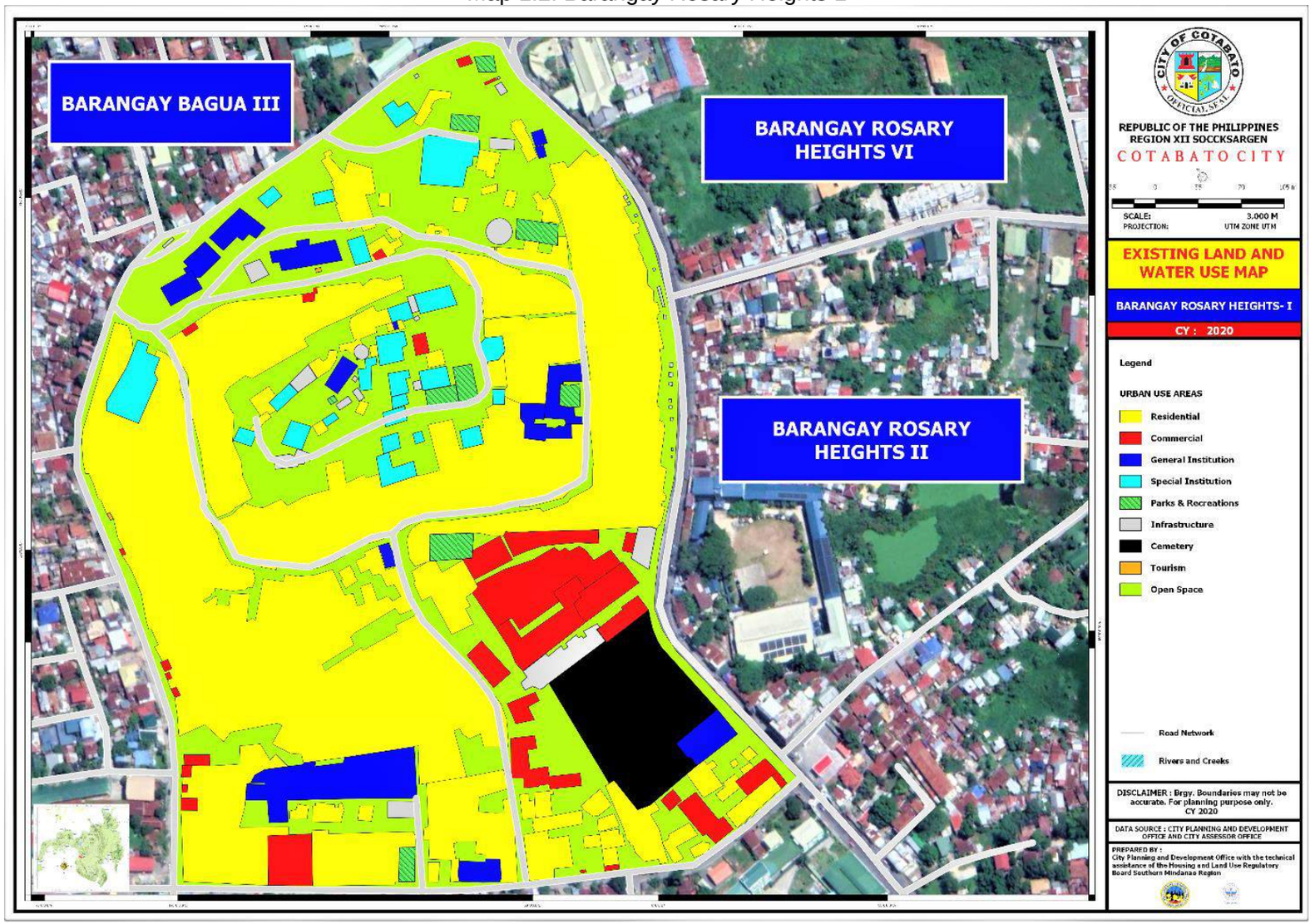
Table 1.2: Existing Land Use of Barangay Rosary Heights 1

Land Use	Existing (ha)	% to Total
Residential	13.49540677	46%
Commercial	1.582058	5%
General Institution	1.153833	4%
Special Institution	0.924939	3%
Parks & Recreation	0.116990234	1%
Tourism	0.003581	0%
Infrastructure	0.416003	1%
Cemetery	1.15648	4%
Open Space	6.448305	22%
Roads	3.68252	13%
Total	28.98012	100%

The barangay is sited on Pedro Colina (PC) Hill. This is one of the elevated areas of the city. PC hill is also known as “tantawan” as it was an ideal place as lookout during Spanish time. Spanish galleons were seen afar giving the defenders more time to prepare and launch offensive actions. It has earned the name “Kutawato” or “Fort of Stone” from where the city has derived its name-Cotabato City. The barangay accommodates important government institutions such as the Philippine National Police headquarters, Highway Patrol Group, 512 Communication Electronic, K9 unit, Task Force Cotabato, Bomb Squad, City Mobile Force Company, RIU, Crime Lab, CIDG, ICTAP< NICA, DIPO Westmin, Mindanao Field Unit Cot Satellite Office, Regional Highway Patrol Unit BARMM, House of Correction & Jail Management Office, Maguindanao Community Defense Center, 1st Marine Brigade, 6th Military Operations Group, National Historical Commission, and others, thus, zoned as Special Institutional Zone. It is also the location of one important historical tourism site, the Kutawato Cave. A large part is residential zone previously providing abode to mostly servicemen.

Settlers, other than servicemen have settled later in this barangay. An elementary school caters to the educational needs of residents of tender age supported with two recreational facilities- a tennis court and tantawan park. One important utility is the Cotabato Light and Power Company (COLIGHT). COLIGHT is an electric utility and a member company of Aboitiz Power Group. Aside from COLIGHT there are some notable establishments such as Philippine Red Cross, Philippine Institute of Volcanology and Seismology. Early inhabitants of the city lay their loved ones at the Catholic Cemetery which is also located at the barangay.

Map 1.2: Barangay Rosary Heights 1



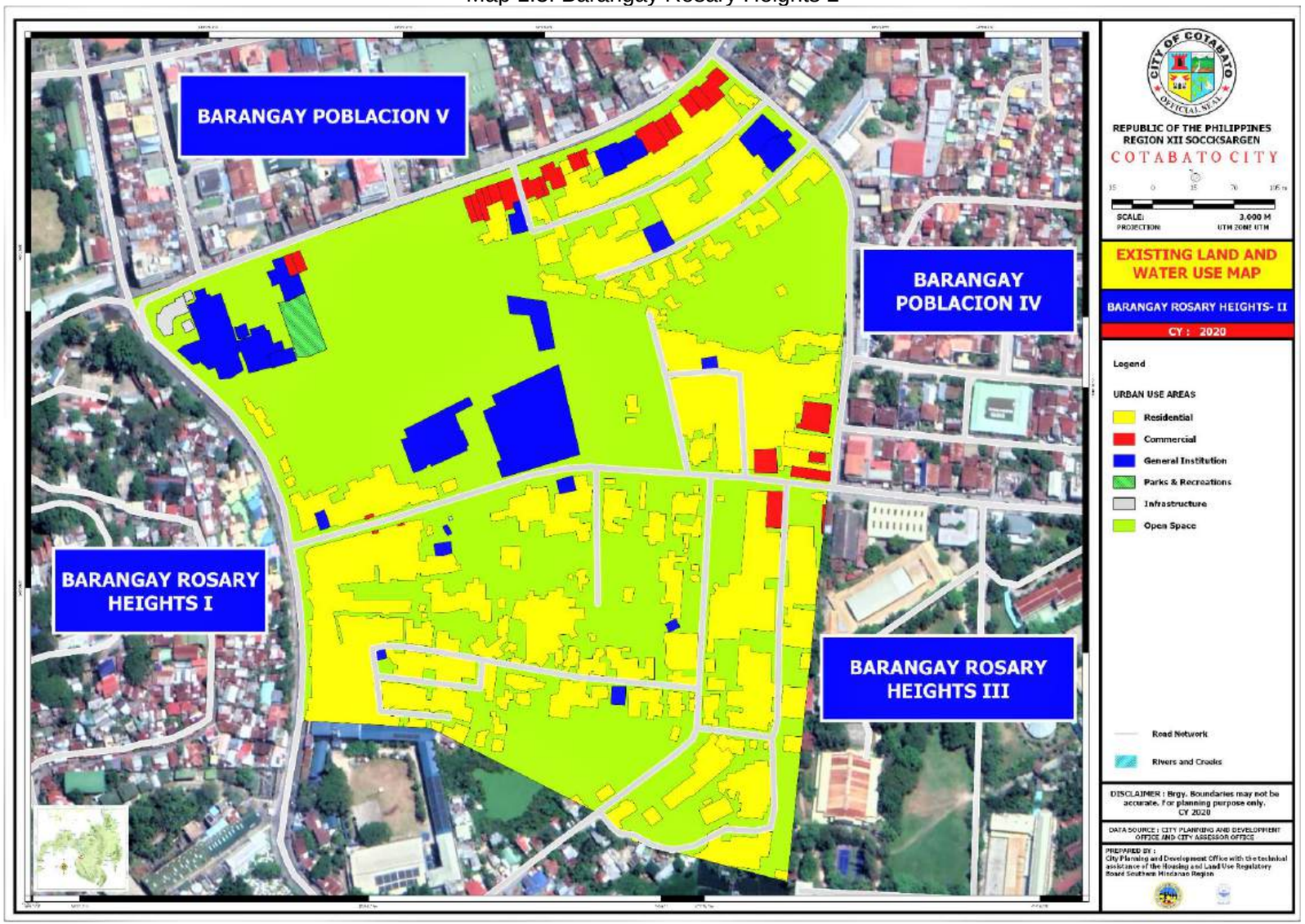
Barangay Rosary Heights 2 (RH 2)

Table 1.3: Existing Land Use of Barangay Rosary Heights 2

Land Use	Existing (ha)	% to Total
Residential	8.334199	30%
Commercial	0.582289	2%
General Institution	1.66161	6%
Parks & Recreation	0.132284	0%
Infrastructure	0.066033	0%
Open Space	13.22363	47%
Roads	3.92199	14%
Total	27.92203	100%

RH 2 is an urban settlement near the urban center or CBD. Its eastern side caters to warehouses while other commercial activities occupy in a linear fashion its major road. While it is dominantly residential it is undergoing urban renewal type of development. What was formerly a residential zone would be replaced by what could be the biggest mall in the city (as of writing). Affected residents were transferred by the City Government of Cotabato to a resettlement site where they could own the lot assigned to them. The barangay is link to a national highway which could lead to the CBD and uptown area. It is also connected to a major road (Notre Dame Avenue) on the east which leads to a premier university in the city. Some notable institutional institutions in the barangay are Cotabato Medical Hospital, Cotabato Medical Clinic, Pag-Ibig Fund Office, United Doctor's Hospital, Overseas Workers Welfare Administration, Happy FM, among others. The Immaculate Conception Cathedral, the largest Catholic Church, is located in this barangay.

Map 1.3: Barangay Rosary Heights 2



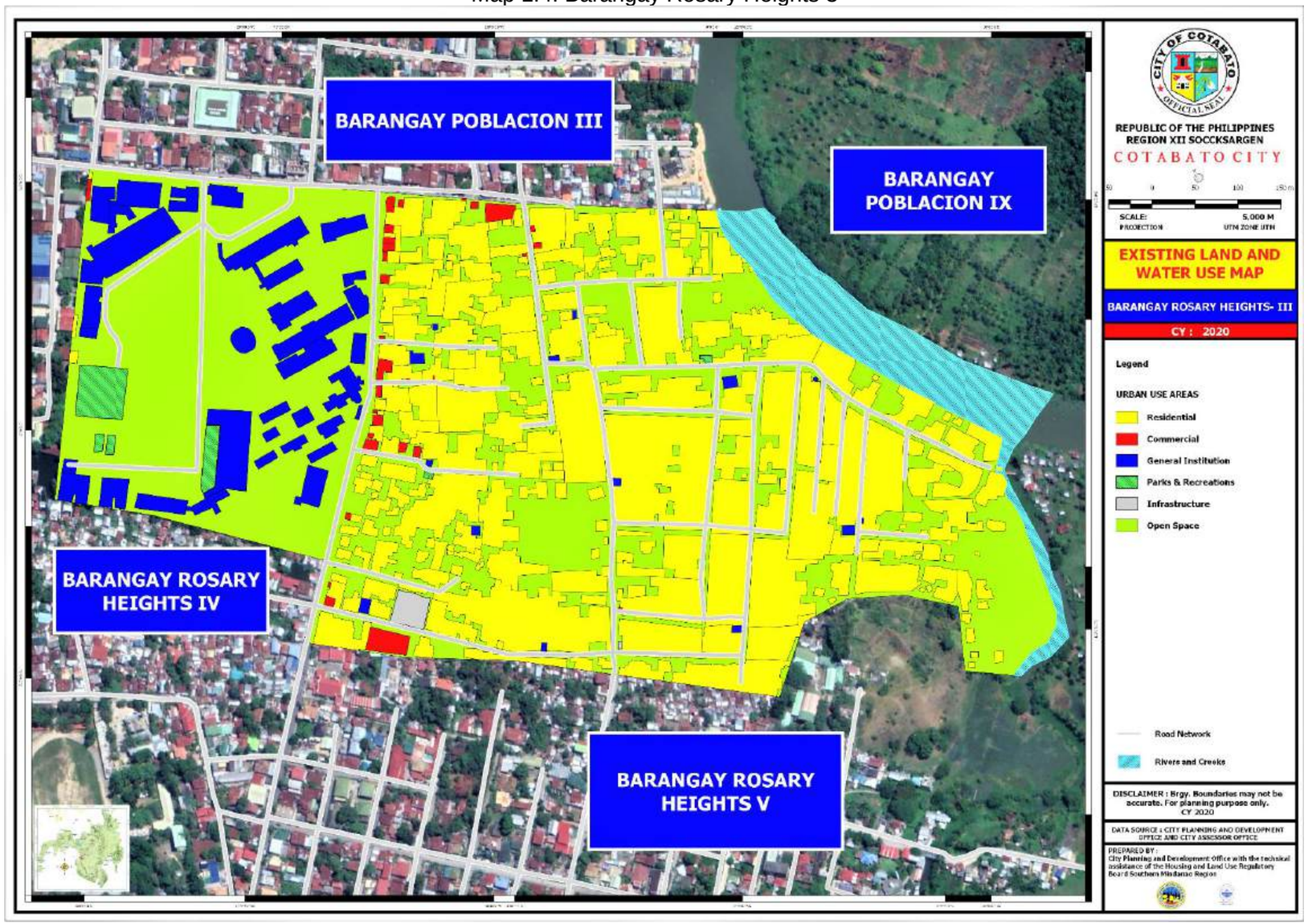
Barangay Rosary Heights 3 (RH 3)

Table 1.4: Existing Land Use of Barangay Rosary Heights 3

Land Use	Existing (ha)	% to Total
Residential	22.00088388	43%
Commercial	0.430228	1%
General Institution	3.592742	7%
Parks & Recreation	0.213389124	1%
Infrastructure	0.15615	0%
Open Space	17.85207	35%
Rivers and Creeks	1.823	4%
Roads	4.81294	9%
Total	50.8814	100%

RH 3 is a mixed land use dominated by residential use occupying residential subdivisions. Sited in the barangay is the premier university in the city – Notre Dame University. Its presence has influence land uses in the area. A ribbon type of commercial establishments including boarding houses, apartments, variety stores (sari-sari stores) could be observed along its major roads (Notre Dame Avenue and De Mazenod St). The interior land use circulation of the barangay is traversed by a semi-irregular grid system of minor roads giving access to residential zones. It has a wide open space that could provide a room for expansion. The barangay is connected to the CBD and uptown through Notre Dame Avenue and De Mazenod Street which then connects to the Sinsuat Avenue (national highway).

Map 1.4: Barangay Rosary Heights 3



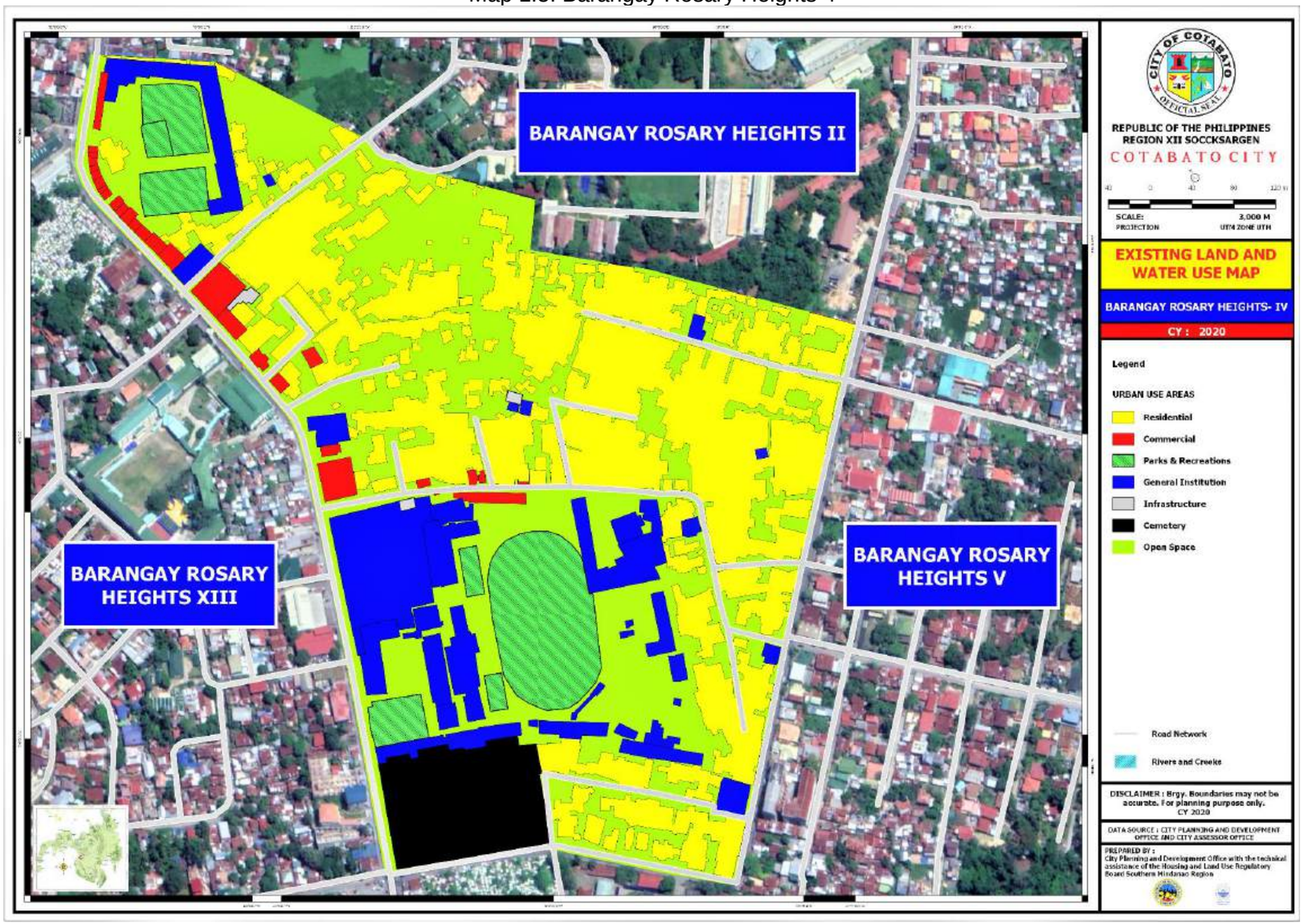
Barangay Rosary Heights 4 (RH 4)

Table 1.5: Existing Land Use of Barangay Rosary Heights 4

Land Use	Existing (ha)	% to Total
Residential	13.68421866	35%
Commercial	0.699278	2%
General Institution	3.792121	12%
Parks & Recreation	0.153061345	8%
Infrastructure	0.058465	0%
Cemetery	1.58177	5%
Open Space	9.281117	29%
Roads	3.28424	10%
Total	32.53427	100%

A large part of RH 4 is devoted to institutional use being the location of biggest public schools and private school in the city. In this part of the city is the site of Cotabato City National High School, Cotabato City State Polytechnic College and Notre Dame of Cotabato which addresses the educational needs of a large part of the population, a notable place of worship, and the Burhan Mosque is also sited in the same barangay. Not far from these institutional uses is the Chinese Cemetery were only Chinese residence area laid to rest. Land use circulation is semi grid and irregular providing access to residential dwelling units. RH 4 is also connected to the CBD as well as uptown area through the national highway (Sinsuat Avenue). Institutional use dominates commercial use in this barangay.

Map 1.5: Barangay Rosary Heights 4



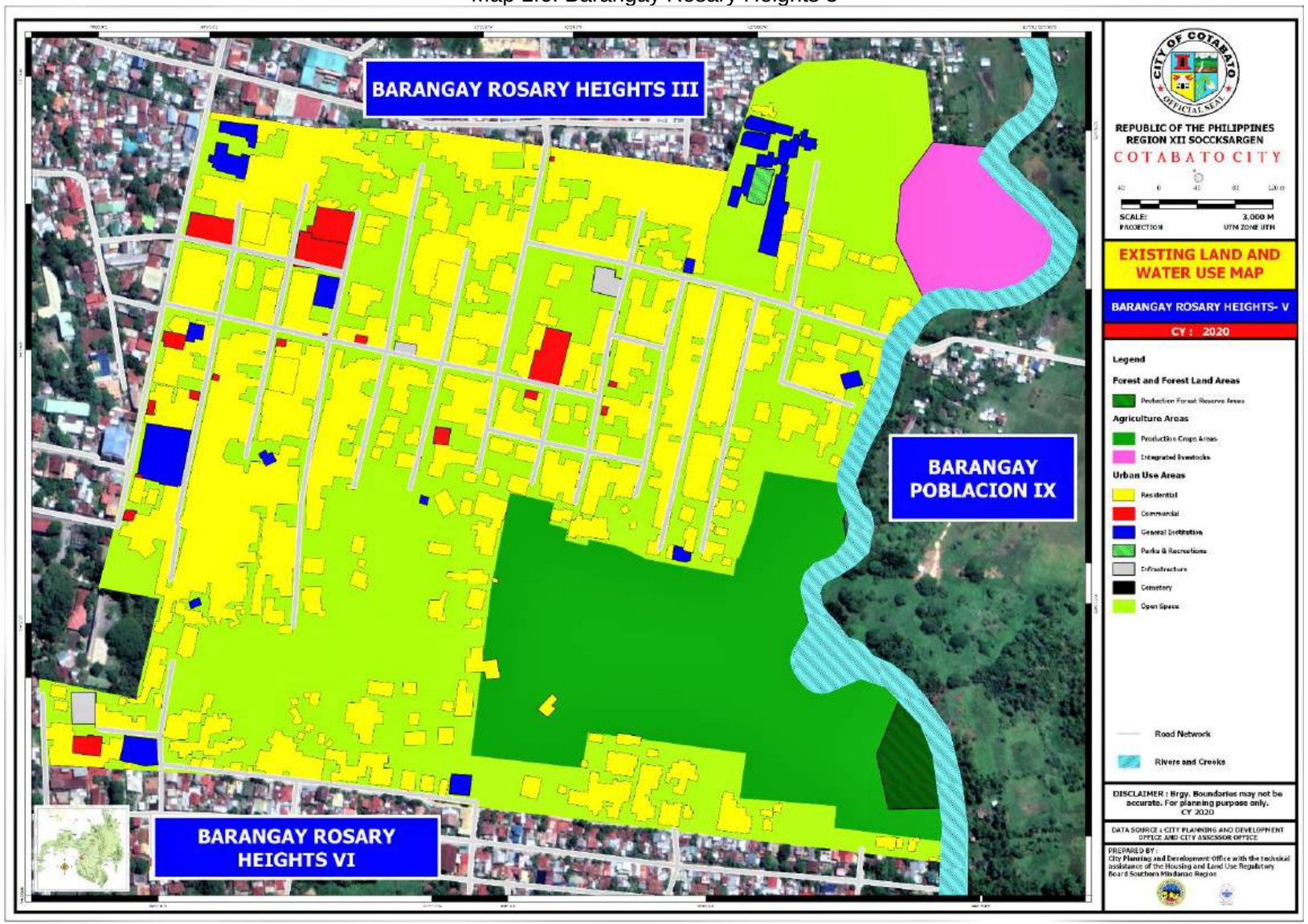
Barangay Rosary Heights 5 (RH 5)

Table 1.6: Existing Land Use of Barangay Rosary Heights 5

Land Use	Existing (ha)	% to Total
Protection	0.624	1%
Agricultural	12.517	21%
Residential	18.83527	31%
Commercial	0.870677	1%
General Institution	1.233216	2%
Parks & Recreation	0.076066	0%
Infrastructure	0.199562	0%
Open Space	18.53969	31%
Rivers and Creeks	1.154	2%
Roads	5.907061	10%
Total	59.95653	100%

The RH 5 is an urban settlement of mixed land use but largely residential in character. Its road circulation is more organized and following a grid type of settlement comprising of subdivisions. The presence of Don E. Sero Elementary School caters to the learning needs of nearby residents of tender age while the Iglesia Ni Kristo-Lokal ng Cotabato City addresses the spiritual needs of its members in the entire city. Some institutional uses are located and co-existing in residential neighbors such as ABS CBN Corp. Station, Bureau of Telecommunication and Dr. Ocampo P. College. Its proximity to Central Business District and the uptown area is quite secluded but accessible nevertheless through their secondary roads that connects to a major road (De Mazenod Street) and eventually to the national highway.

Map 1.6: Barangay Rosary Heights 5



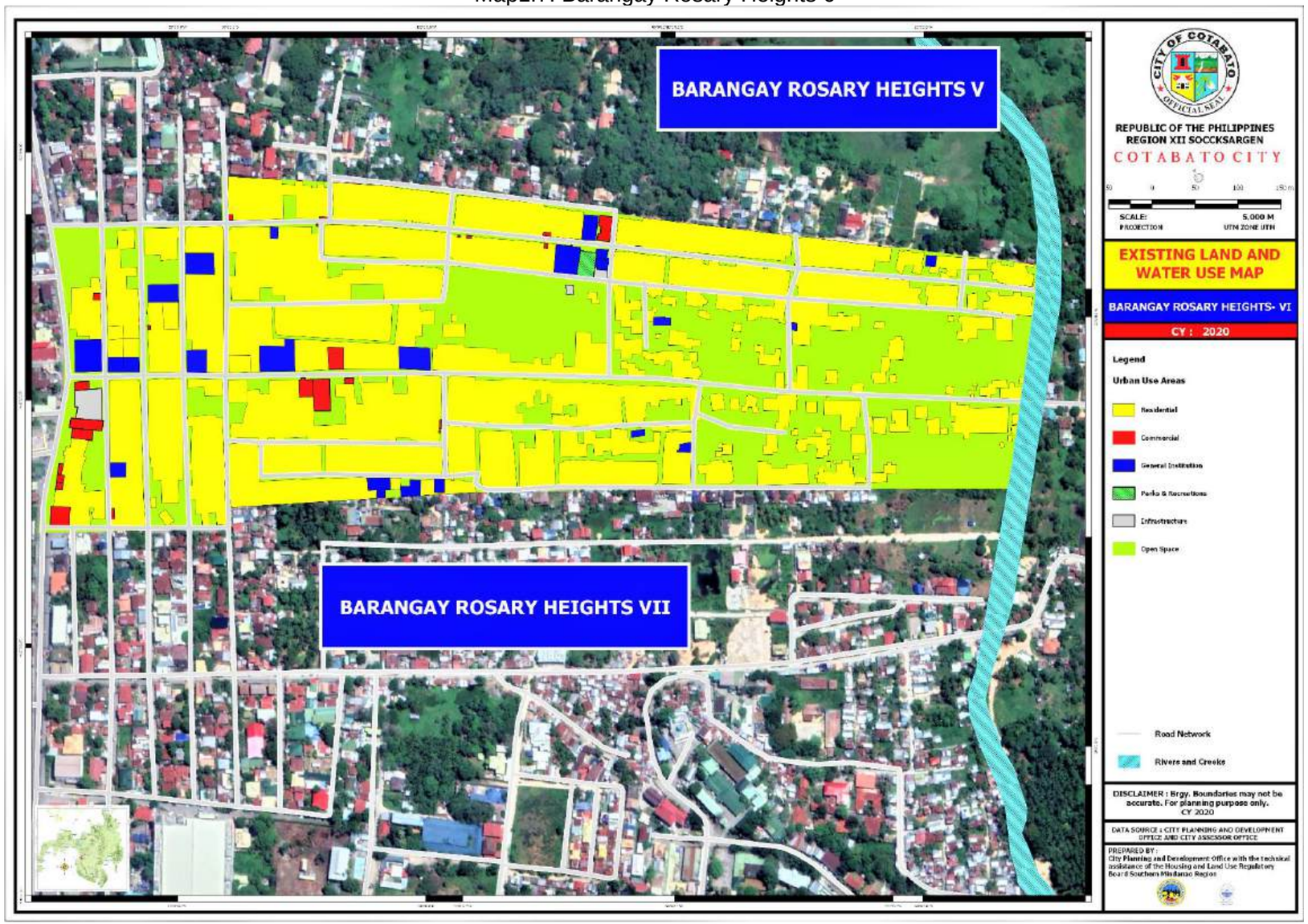
Barangay Rosary Heights 6 (RH 6)

Table 1.7: Existing Land Use of Barangay Rosary Heights 6

Land Use	Existing (ha)	% to Total
Residential	20.11659	52%
Commercial	0.412927	1%
General Institution	1.026879	3%
Parks & Recreation	0.058057	0%
Infrastructure	0.134449	0%
Open Space	4.329553	11%
Rivers and Creeks	0.433	1%
Roads	12.14772	31%
Total	38.65918	100%

This is an urban settlement of mixed land use largely residential followed by low intensity commercial land uses such as motor stuff accessories, barber shop, bakeshop, car aircon shop, food shops/stalls, coffee shops, pharmacy, fitness gym, apartments, catering services, laundry shops and similar uses. It is a home base of Non-Government Organizations such United Nations High Commissioner for Refugees (UNCHR), International Committee of the Red Cross (ICRC), Community and Family Services International (CFSI), Islamic Relief Philippines/ Worldwide and other institutional uses such as the Krislamville Elementary School, Bureau of Jail Management and Penology, National Irrigation Administration (NIA). Its road system is organized forming a grid type of settlements. RH 6 is connected to the national highway leading to the major urban centers of the city.

Map1.7: Barangay Rosary Heights 6



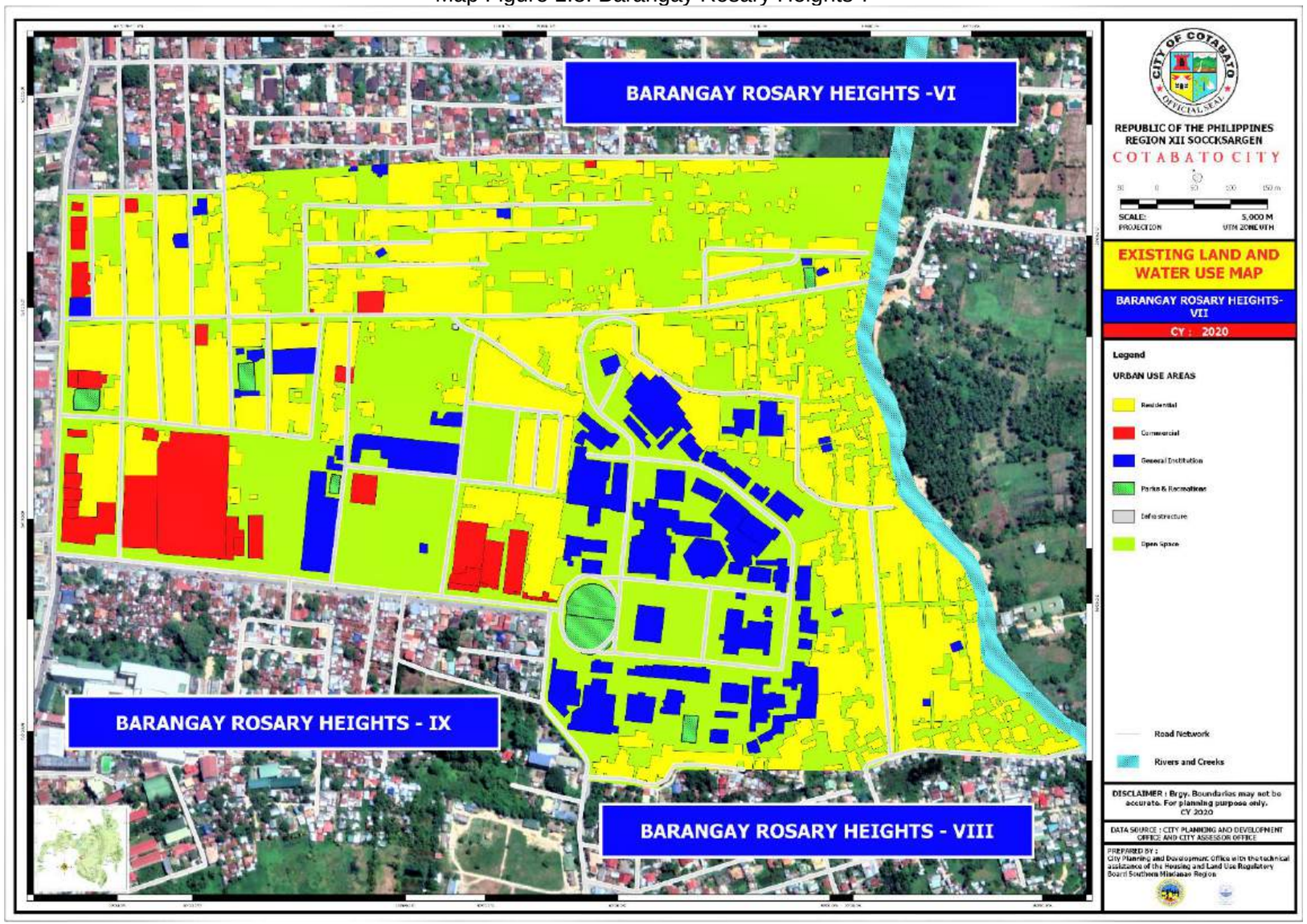
Barangay Rosary Heights 7 (RH 7)

Table 1.8: Existing Land Use of Barangay Rosary Heights 7

Land Use	Existing (ha)	% to Total
Residential	26.61580422	32%
Commercial	4.356247	5%
General Institution	1.858607	2%
Parks & Recreation	0.095617779	0%
Infrastructure	0.00533	0%
Cemetery	0.00533	0%
Open Space	38.06517	47%
Rivers and Creeks	2.026	2%
Roads	8.53127	10%
Total	81.55938	100%

RH 7 is a new growth center uptown where a new mall has set up. It offers more diverse activities and can be access through a major road (Gov. Gutierrez Avenue) that also leads to the Office of the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM). It is also where the office of the Metro Cotabato Water District (MCWD) is sited. MCWD provides water to concessionaires in the city and extends its service to adjacent municipality. The barangay is a mixture of land uses. It is dominated by residential subdivision followed by institutional uses such as government offices such as the BARMM comprising the Ministry of Environment and Natural Resources, Ministry of Labor and Employment, Bangsamoro Women Commission, Ministry of Basic, Higher and Technical Education, Civil Service Commission, Ministry of Science and Technology, DarulIfta, Albert Einstein School, among others. Prominent commercial uses are BDO Cotabato City Mall branch, Barter trade center, Estosan Hotel, Sardonyx Plaza and Pension House, Mercury Drug, Rose Pharmacy, Land Bank of the Philippines, Chowking. The barangay is also dotted with other commercial use such as food shops, sari-sari (variety) stores, fitness center, clinic, laundry shops, filling stations and other similar activities. Its residential areas can be access mostly through a grid pattern type of road.

Map Figure 1.8: Barangay Rosary Heights 7



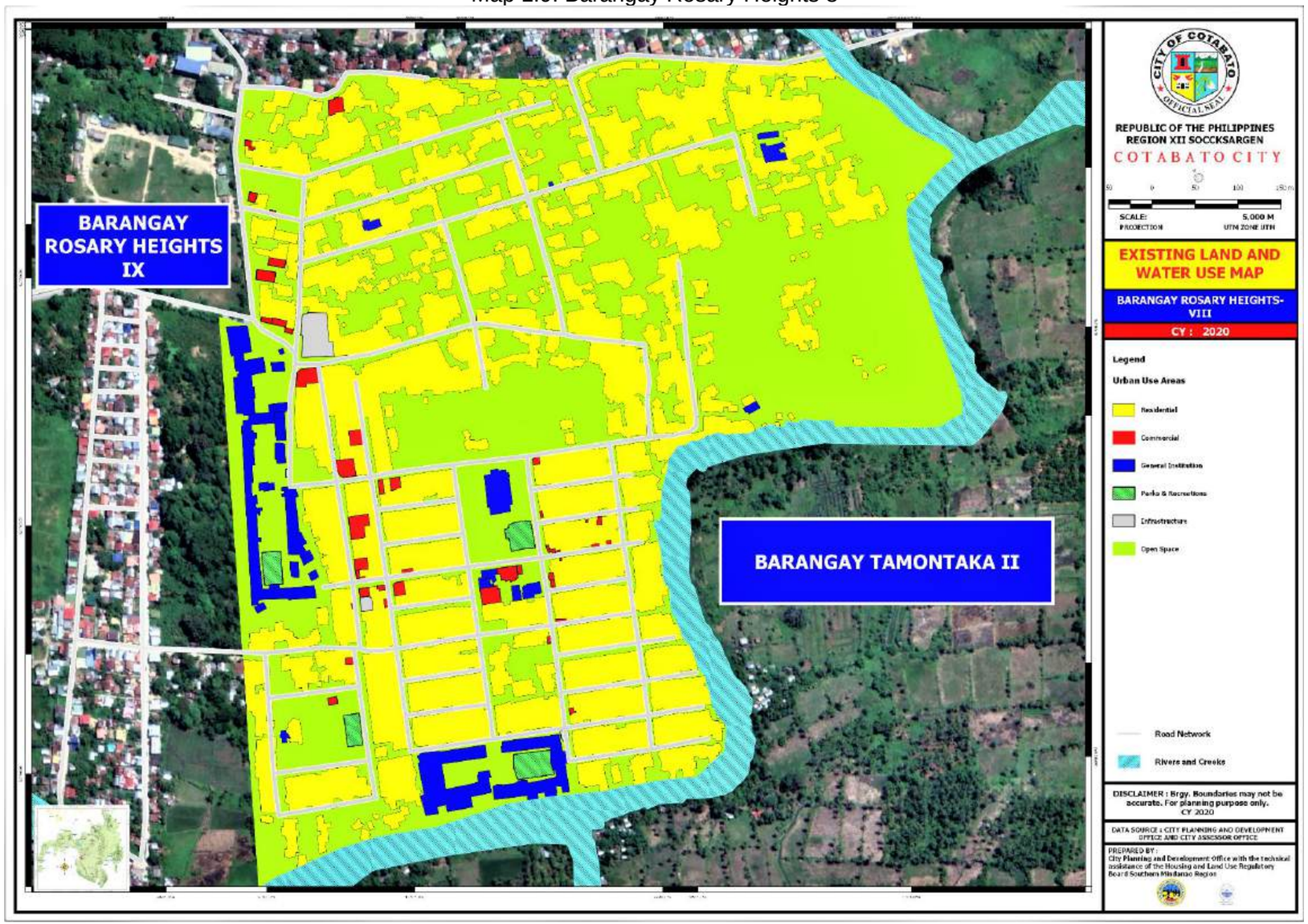
Barangay Rosary Heights 8 (RH 8)

Table 1.9: Existing Land Use of Barangay Rosary Heights 8

Land Use	Existing (ha)	% to Total
Residential	24.51330566	41%
Commercial	0.573681	1%
General Institution	1.996122	3%
Parks & Recreation	0.220967345	1%
Infrastructure	0.203991	0%
Open Space	20.61729	35%
Rivers and Creeks	2.996	5%
Roads	8.54648	14%
Total	59.66783	100%

The barangay of RH 8 is mostly residential use served by two schools in terms of education- the Notre Dame Village Elementary School and the Notre Dame Village National High School. Except for a few small-scale commercial activities such as sari-sari (variety) stores, internet cafe, bakery among others, it is purely residential arranged mostly in grid type. The Saint Joseph Workers Parish Church addresses the needs of the faithful in the area. It is bordered on the south and the east by Tarbeng Creek which serve also as a transport which can be used for trading and transport. RH 8 is also a distant from the CBD but in close proximity to the growing uptown.

Map 1.9: Barangay Rosary Heights 8



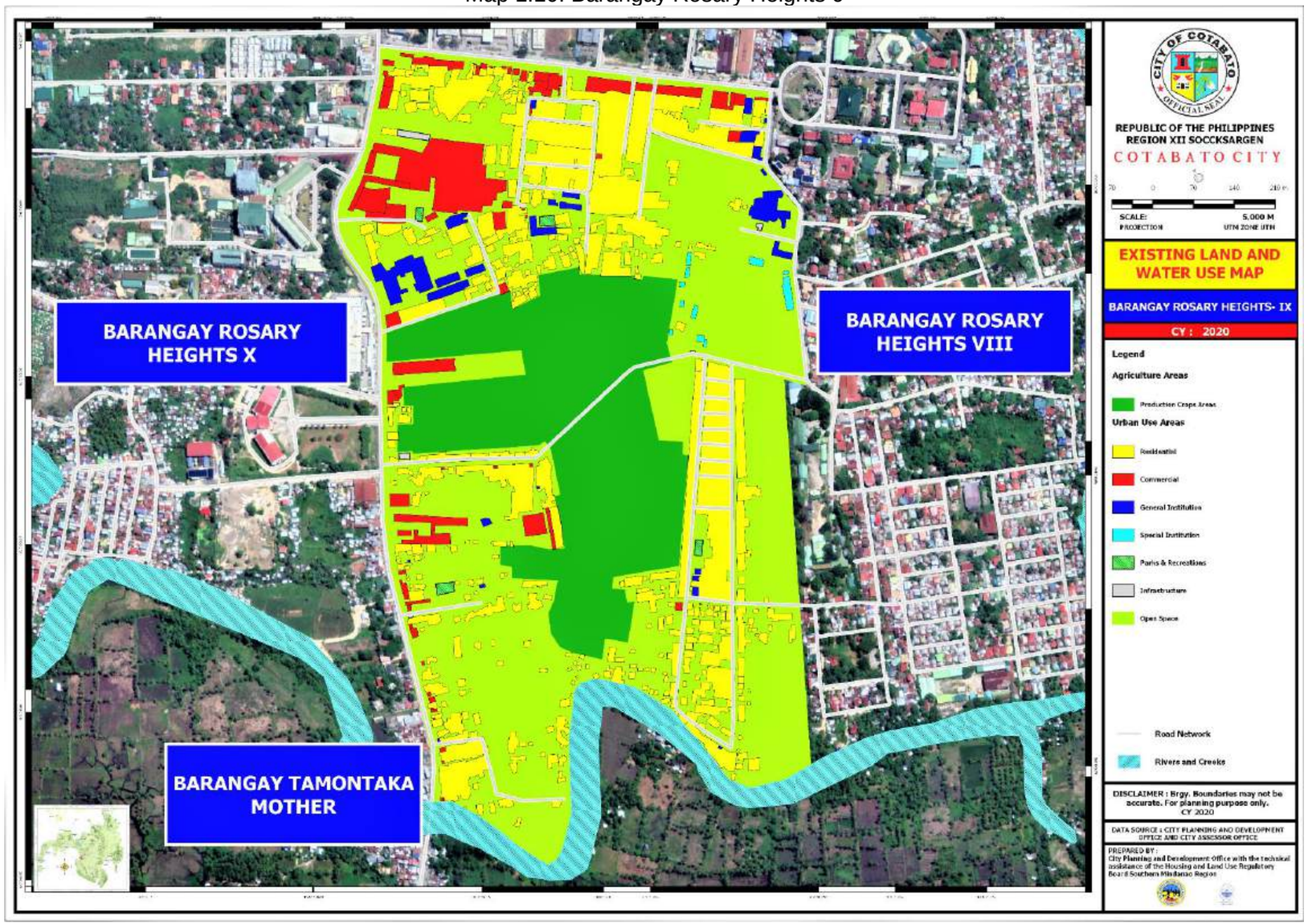
Barangay Rosary Heights 9 (RH 9)

Table 1.10: Existing Land Use of Barangay Rosary Heights 9

Land Use	Existing (ha)	% to Total
Residential	18.65188611	22%
Commercial	4.419685	5%
General Institution	1.408915	2%
Special Institution	0.199649	0%
Parks & Recreation	0.165362	0%
Infrastructure	0.098873	0%
Open Space	49.30026	58%
Rivers and Creeks	2.064	2%
Roads	8.91305	10%
Total	85.13953	100%

This barangay is a growing center which is a home to diverse activities such as prominent commercial establishments like Greenwich, Daily Dose Pharmacy, Palawan Express, Em Manor Hotel and Convention Center, Alnor Hotel and Convention Center, Robinsons Supermarket –Alnor Mall, Air 21 and other car shops, food shops, clinics, boarding/lodging houses, bakery, lumberyards, hardwares, transport terminal and other similar commercial activities. It is also a home to three (3) urban poor associations, the Virgo Urban Poor Association subdivision, Sampaguita Urban Poor Association subdivision, Vic Badoy Urban Poor Association. While it is dominantly residential, a large part of it is an open space which is suitable for expansion. Its share of institutional uses are Churches and chapels, Fernanda Borbon Elementary School, Cotabato City New Life Institute, Roads are linear or straight where transport is less complex and traffic is light.

Map 1.10: Barangay Rosary Heights 9



Barangay Rosary Heights 10 (RH 10)

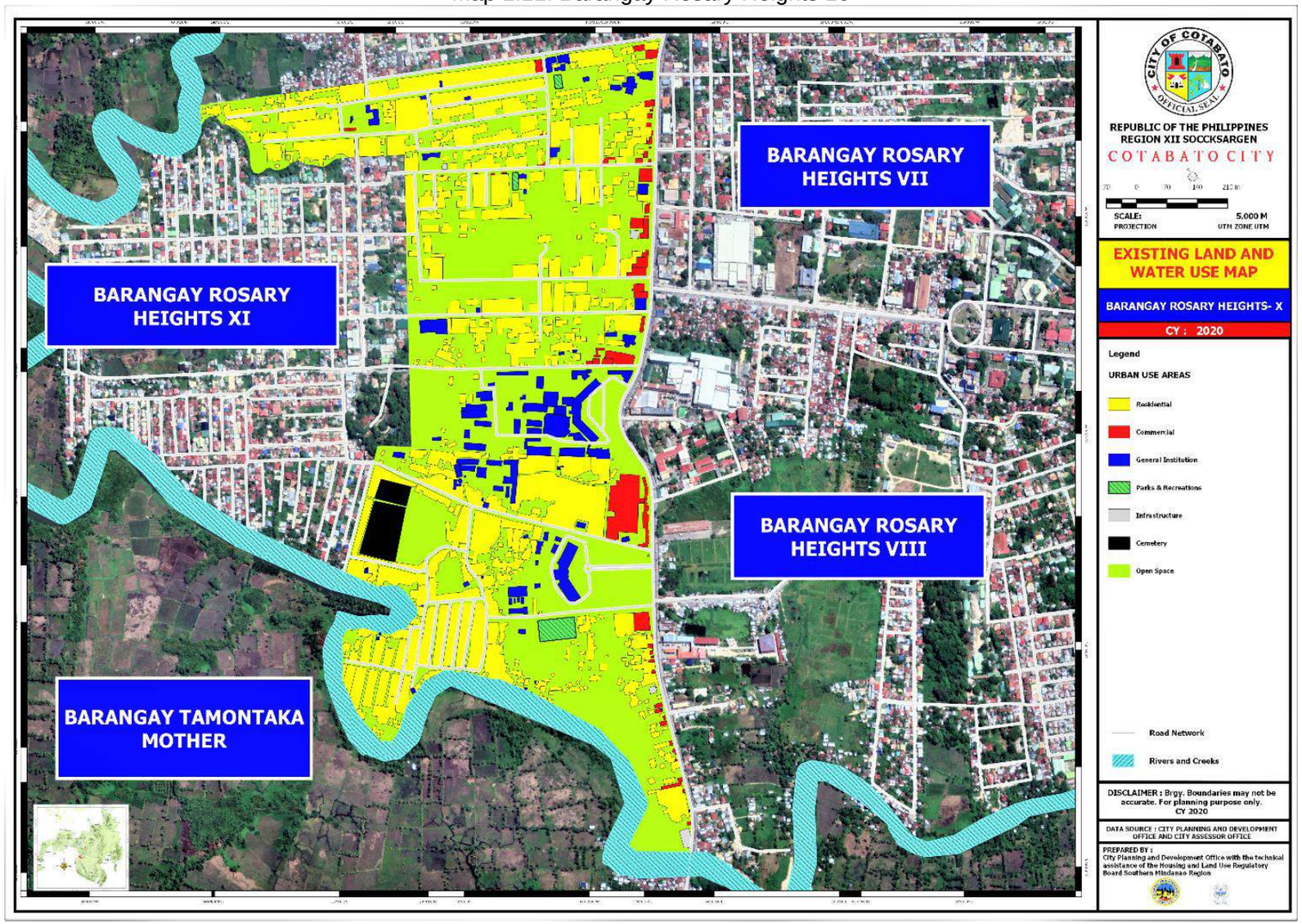
Table 1.11: Existing Land Use of Barangay Rosary Heights 10

Land Use	Existing (ha)	% to Total
Residential	36.29628121	34%
Commercial	2.60623	2%
General Institution	4.782616	5%
Parks & Recreation	0.22485869	1%
Infrastructure	0.166987	0%
Cemetery	1.337523	1%
Open Space	43.66464	42%
Rivers and Creeks	2.87	3%
Roads	12.61254	12%
Total	104.5617	100%

Mixed use mostly of residential and institutional, commercial activities develop along the major road (national highway) forming a ribbon type of bustling commercial activities. RH 10 is a leading growing center in the uptown area. This is where the seat of government for LGU-Cotabato City lies-monickered as the People's Palace or the New City Hall. Beside it is the Puregold Cotabato- Fiesta Mall branch, City and Regional Evacuation Center. The barangay is complemented by a DBM financed Children's Park. Notable establishments located in the barangay are Philippine Airlines, Cotabato Regional Medical Center, Palawan Pawnshop, MangGorio Restaurant, Derek's Ice Kreme Palace, Manong's Restaurant, Jollibee, Western Union, Superama Hyper store, STI College, AMA Computer College. Other establishments in general includes, dress shops, food shops, car shops, hardwares, lumberyards, clinics, cafes, and other similar commercial and institutional uses. This is also the barangay where the City Hog Slaughterhouse is located. This is also where bus terminal is situated that provides transport to southern municipalities up to General Santos City.

The barangay has several places of worships like Masjid Altihadya, Masjid AsSande, Masjid YusofKasuyo, Masjid CRMC, Masjid Al Hidaya, Masjid Midtimbang/Ampatuan, Masjid Al-Sharip, Masjid Bagundang, Masjid RajahBuayan, Masjid Saqafah, Masjid Canizares, Masjid Abduljabbar, Masjid NurAlhuda, Masjid Taubah, Masjid Balabaran, Masjid Al Huda Bagundang, Masjid UmmoFalih, and Masjid Khadigyah among others. It also has places of worship for Christians such as Anchor bay Evangelist Church, Sto. Nino Chapel, New Horizon Baptist Church, Assembly of God Family Fellowship, United Pentecostal Church, San Isidro Labrador, Sr. Sto. Nino –Canizares and others.

Map 1.11: Barangay Rosary Heights 10



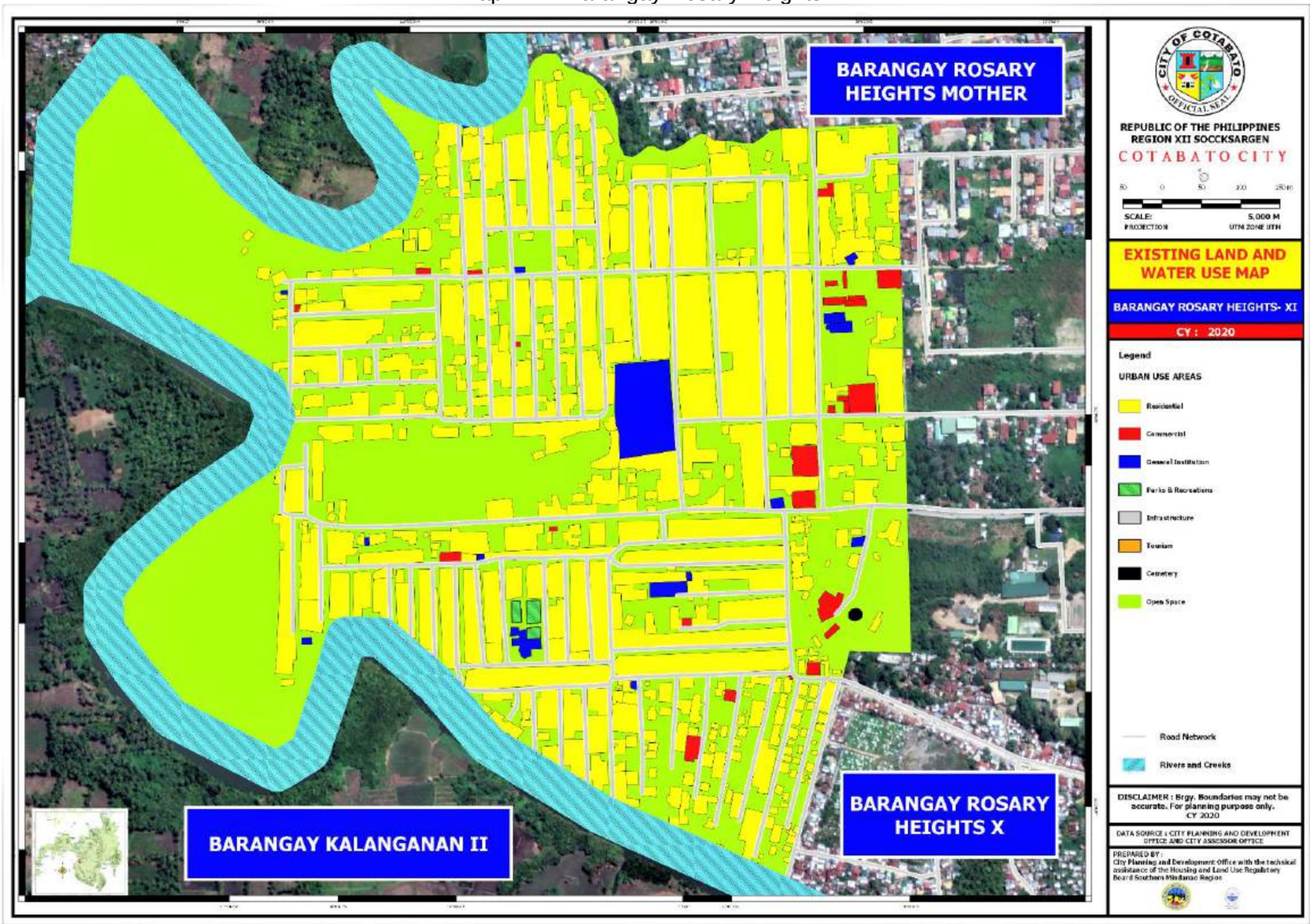
Barangay Rosary Heights 11 (RH 11)

Table 1.12: Existing Land Use of Barangay Rosary Heights 11

Land Use	Existing (ha)	% to Total
Residential	29.95915	35%
Commercial	0.852417	1%
General Institution	1.274467	2%
Parks & Recreation	0.110963	0%
Tourism	0.000092	0%
Infrastructure	0.001092	0%
Cemetery	0.022024	0%
Open Space	29.77576	35%
Rivers and Creeks	11.835	14%
Roads	10.93808	13%
Total	84.76904	100%

The barangay is dominantly residential dotted with schools, places of worship and tourism site. Institutional uses in the barangay include the LR Sebastian Elementary School, San Pablo Sacred Heart School, Idar Technical School. The places of worship are Chapel San Roque, Our Lady of Penafrancia Chapel, United Pentecostal Church Philippines, San Antonio Four Square Gospel, San Antonio De Padua and Masjids which namely Masjid Morsid, Madrasah Morsid, Masjid Fatima, Masjid Al Haqq, Masjid Alison, Masjid Al-Wihdah, Masjid KhalizhahraniyTalapas, Masjid Musineen among others. Notable commercial establishments are Pagana Kutawato Native Restaurant, Petron filling station, Out of Nowhere Restaurant, Philippine Airlines ticketing office, some food shops, laundry shops, water refilling stations, sari-sari (variety) stores, convenience store, pharmacy and other similar commercial uses. Its road type is mostly grid in character and connects to the uptown area.

Map 1.12: Barangay Rosary Heights 11



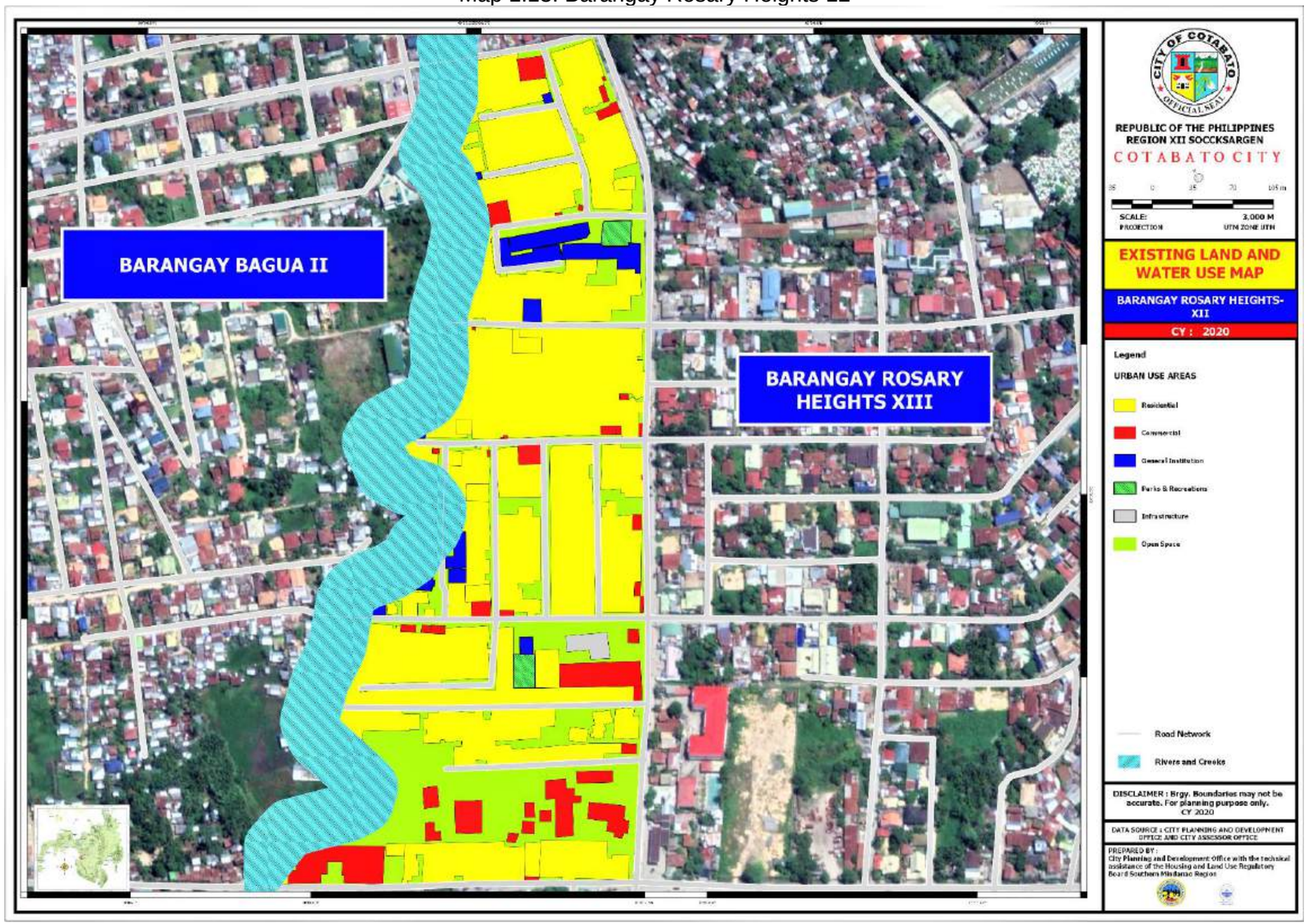
Barangay Rosary Heights 12 (RH 12)

Table 1.13: Existing Land Use of Barangay Rosary Heights 12

Land Use	Existing (ha)	% to Total
Residential	9.445059	58%
Commercial	0.785976	5%
General Institution	0.521894	3%
Parks & Recreation	0.108948	1%
Infrastructure	0.065018	0%
Open Space	0.952845	6%
Rivers and Creeks	0.843	5%
Roads	3.52882	22%
Total	16.25156	100%

RH 12 is a mixture of land uses dominated by residential zone which is supported by a mixture of small commercial activities belonging to the business of auto and motorcycle care shops, restos/carenderias, internet cafes, water refilling station, gas filling station, sari-sari stores, hotel, minimarts and similar activities. Educational needs are provided by a private school – the Pacheco Elementary School, its high school and College. Its places of worship are Masjid Al-Rahman, Masjid Zamzam, San Antonio Padua 1 and 2. It is connected to the CBD and uptown area through a major road (Don TV Juliano St.) from where secondary roads of grid character are connected.

Map 1.13: Barangay Rosary Heights 12



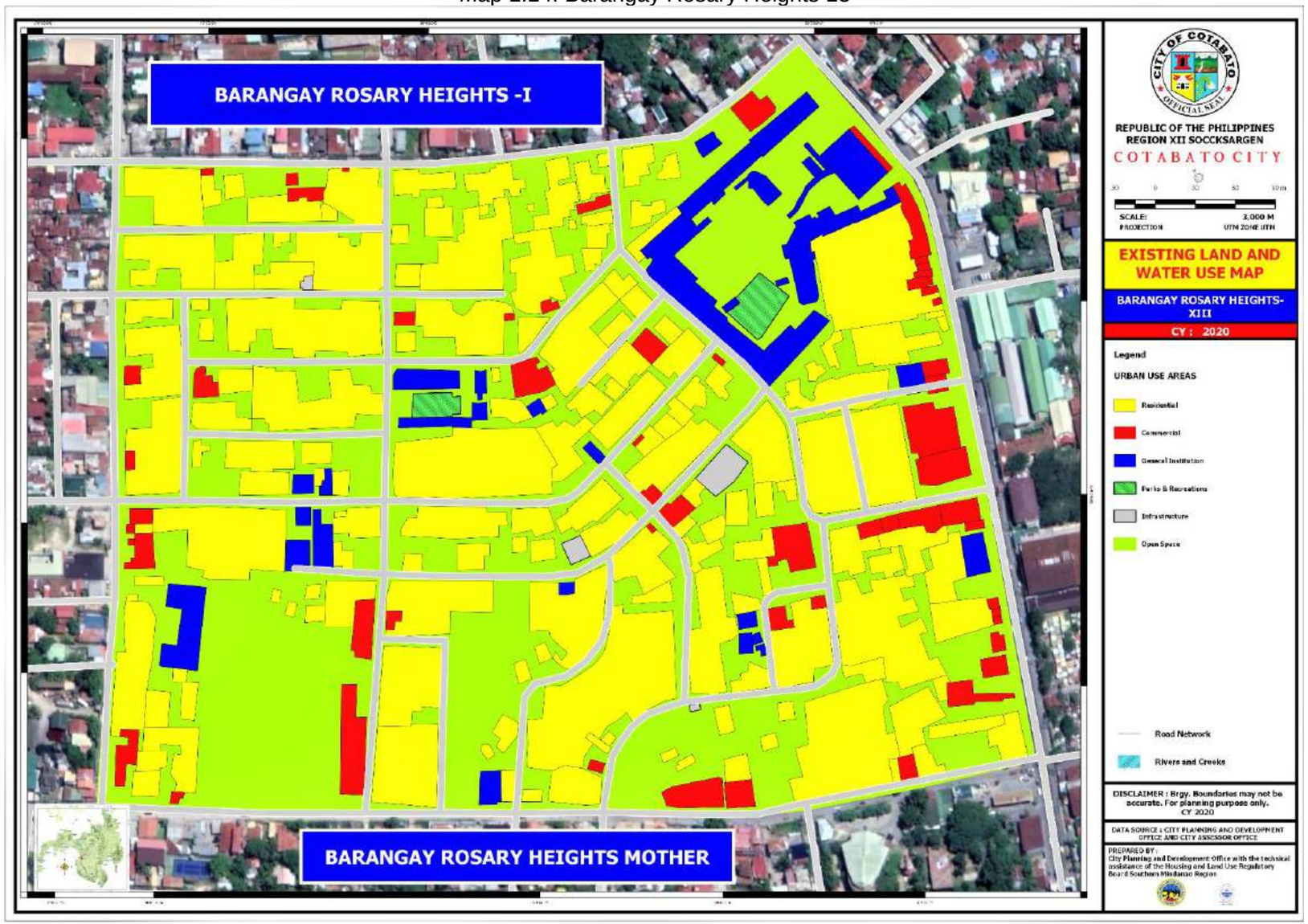
Barangay Rosary Heights 13 (RH 13)

Table 1.14: Existing Land Use of Barangay Rosary Heights 13

Land Use	Existing (ha)	% to Total
Residential	14.22334	45%
Commercial	1.655979	5%
General Institution	1.712135	5%
Parks & Recreation	0.181906	1%
Infrastructure	0.117757	0%
Open Space	7.774989	25%
Roads	5.93607	19%
Total	31.60218	100%

This barangay is a mixed use of residential, commercial and institutional uses. Residential uses are more dominant followed by low intensity commercial uses tailed by institutional uses. The barangay is connected to a major road (national highway) where commercial and institutional uses are lined up. Notable commercial uses strewn in the barangay are Goodyear Servitek, Quad Core Arena, Circuit Resto, Biton Garden Convention Center and Pension House, RD Pawnshop, and other commercial uses such as clinics, water refilling centers, sari sari stores, barbershops, filling stations, car shops/car wash shops, food shops and other similar commercial uses. Institutional uses include Dept. of Agrarian Reform, Notre Dame RVM College, Kimpo Elementary School, Masjid Abubakar Kimpo, Masjid Jaime NurolIslami, and Masjid Jainab among others. Roads in the barangay are mostly grid type.

Map 1.14: Barangay Rosary Heights 13



Barangay Poblacion MB (Pob MB)

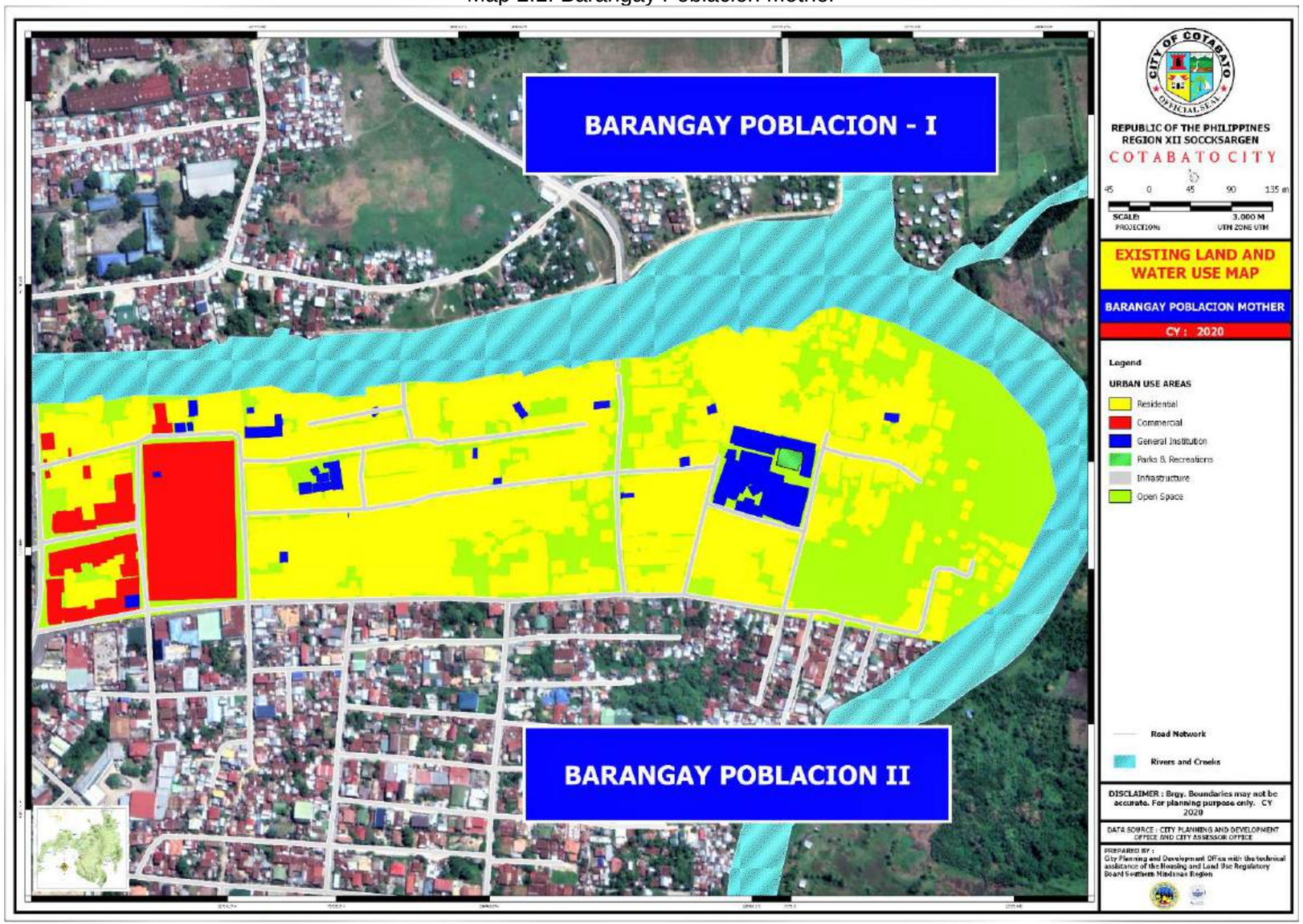
Table 2.1: Existing Land Use of Barangay Poblacion Mother

Land Use	Existing (ha)	% to Total
Residential	15.32431	43%
Commercial	2.605598	7%
General Institution	1.045151	3%
Parks & Recreation	0.054494	0%
Open Space	7.846806	22%
Rivers and Creeks	4.388	12%
Roads	4.32495	12%
Total	35.5893	100%

This is where the public market is located. It is a highly densified commercial area where trading activities is dynamic. It has a high-density residential area in close proximity to the market. During weekends the market and surrounding area is full of activity. Aside from the supermarket, other commercial activities include groceries, pharmacies, pawnshops, bakeries, footwear stores, agricultural supplies, merchandising stores, tailoring, rice retailers, hardwares, carenderias, mini marts, money shipment (perapadala), among others. Beside the market is a “bagsakan” area placed along the Rio Grande River. A small fire station is also situated nearby. Islam faithful are served by numerous masjids, Masjid Al-Tujjar, Masjid A-Lil Amir, Masjid Nurul Islam, Masjid Sogiya, Masjid Solano Buliao 1, Masjid Pindulonan, Masjid Ali Macarban, Masjid Abubakar As Siddiq, Masjid IB’N Omar, Masjid Campio, Masjid Ulandangen, Masjid Haron, Masjid SiddikhLumayon, Masjid Al Motaire, Masjid Bangsamoro, Masjid Mahad Ali Amir. Learning needs of the barangay are also supported with the presence of J. Marquez Elementary and High School, Madrasah Ali-Macarban Al Islamiyah, Madrasah Mahad Ali Amir and Madrasah Al-Mutarie Al Islamiyah.

Aside from the grid road pattern on the market area other roads are irregular. The barangay is connected to a national highway connecting to the Central Business District and Davao-Cotabato Road.

Map 2.1: Barangay Poblacion Mother



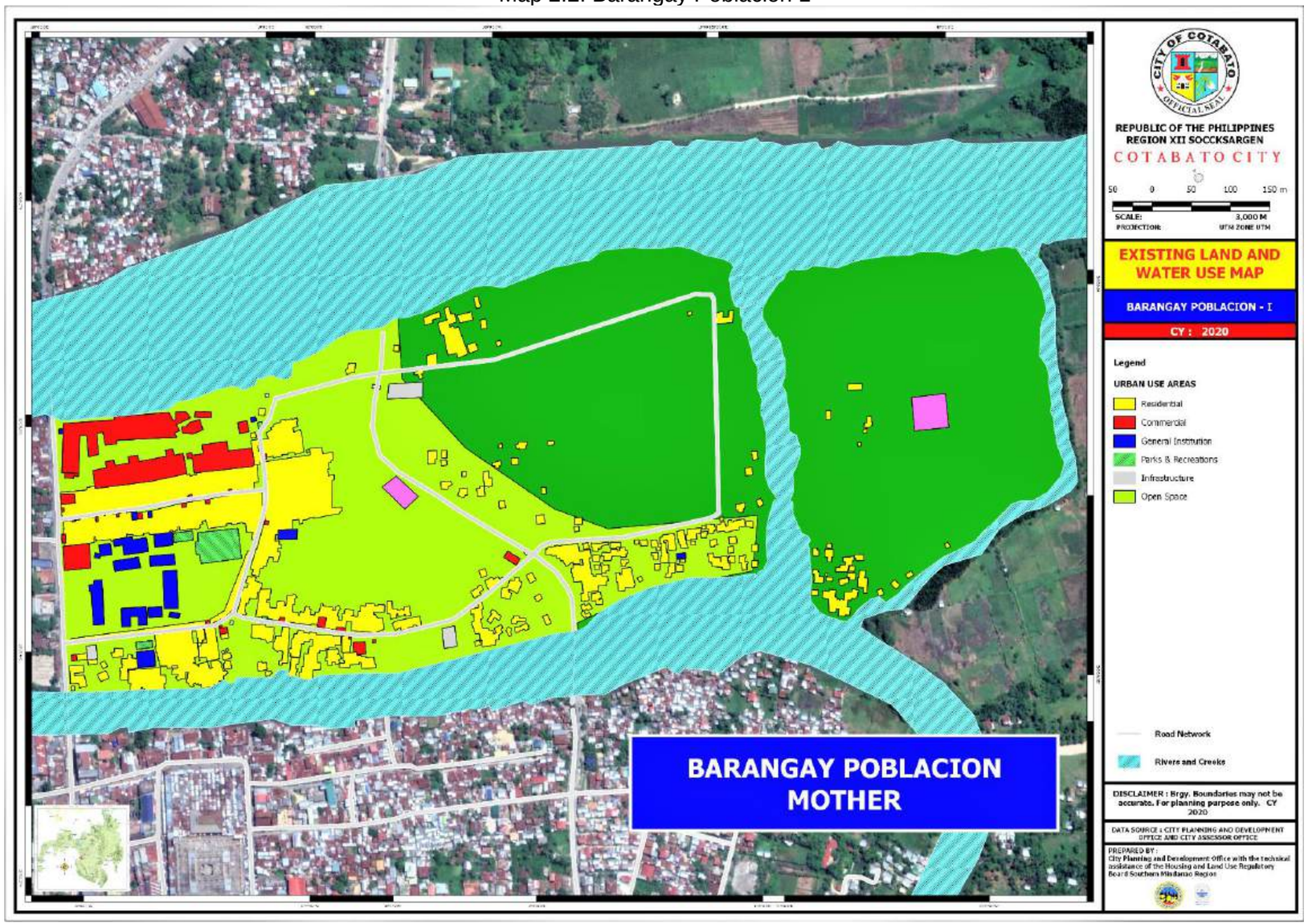
Barangay Poblacion 1 (Pob 1)

Table 2.2: Existing Land Use of Barangay Poblacion 1

Land Use	Existing (ha)	% to Total
Agricultural	37.09636566	54%
Residential	6.266659	9%
Commercial	1.426423	2%
General Institution	0.603714	1%
Parks & Recreation	0.124447345	0%
Infrastructure	0.167837	0%
Open Space	8.552934	13%
Rivers and Creeks	11.089	16%
Roads	2.9118	4%
Total	68.23918	100%

This barangay is mixed used of different land uses although substantial part of it is an ideal buildable open space. It is a home to a prestigious secondary school known as the Cotabato City Institute. It's the entry point of the city, through Quirino Bridge and Delta Bridge, if one comes from the North. It is also a place of high intensity uses such as warehouses, storehouses, auto shops being away from a large population. Other light uses of the area are bakery/bakeshop, motor parts, and internet cafe, water refilling station, sari-sari stores and likes. The barangay is directly close to the CBD although surrounded by rivers, one of which is the longest river in Mindanao and second longest in Mindanao. The rivers are used as means of transport and trade even during the early times. It has a small place of worship namely the San Isidro Labrador Chapel, Masjid Tawbah, Masjid Usmaniya, Masjid DatuLukes among others. Road hierarchy =the barangay is connected to a national road leading to the CBD and to the north (Davao-Cotabato Road). Interior roads are irregular leading to warehouses, schools and houses.

Map 2.2: Barangay Poblacion 1



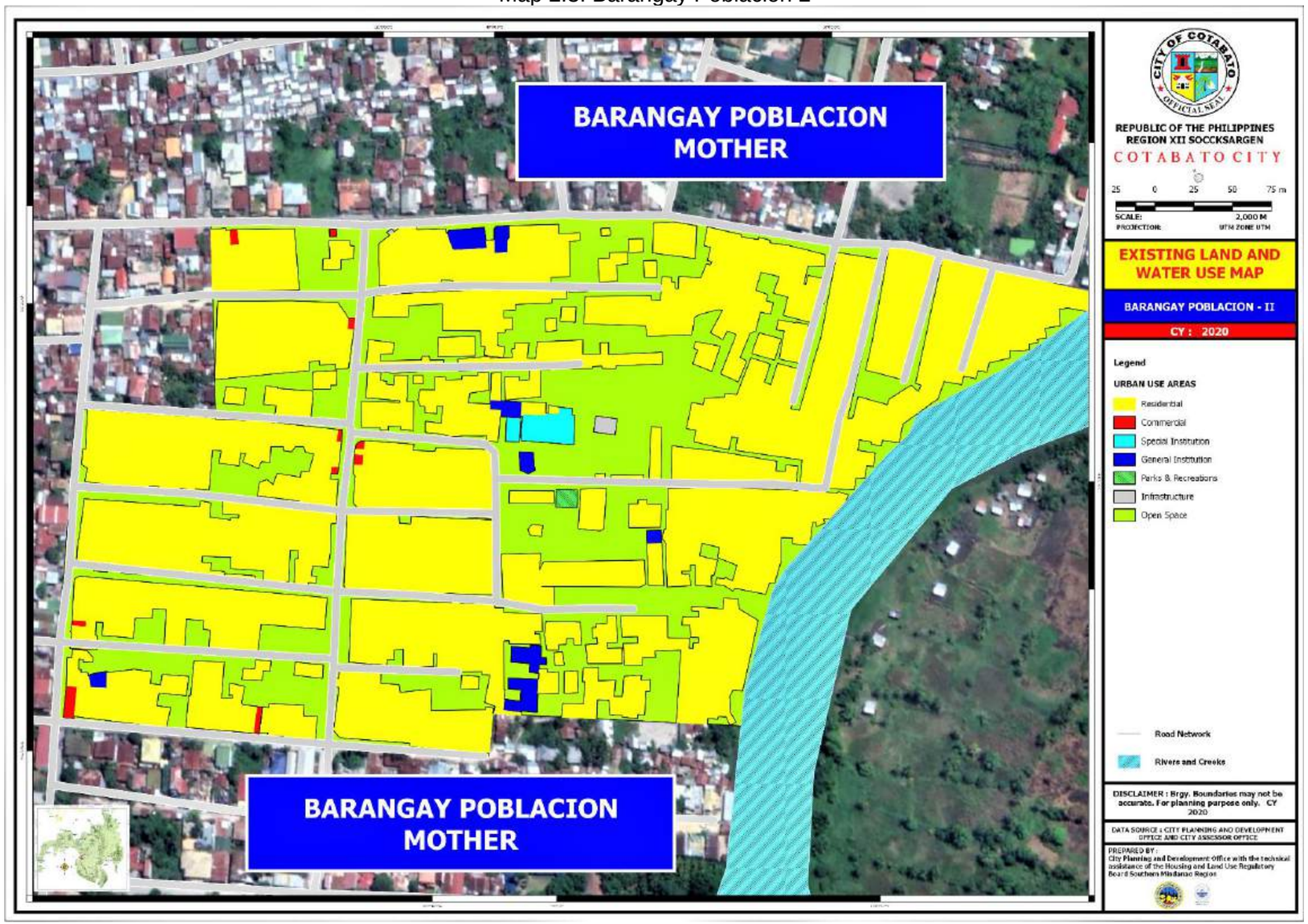
Barangay Poblacion 2 (Pob 2)

Table 2.3: Existing Land Use of Barangay Poblacion 2

Land Use	Existing (ha)	% to Total
Residential	10.02781	58%
Commercial	0.04948	0%
General Institution	0.165712	1%
Special Institution	0.081229	0%
Parks & Recreation	0.016081	0%
Infrastructure	0.015535	0%
Open Space	2.29348	13%
Rivers and Creeks	1.179	7%
Roads	3.36623	20%
Total	17.19455	100%

Pob 2 barangay is largely residential area with a few commercial activities such as “sari-sari” stores, laundry shop, food stores/shops, and a couple of lumberyards among others. A few places of worship for both Christian and Moslem, to name some: Bahay Maria Chapel, Masjid Daud, Masjid BAital, Masjid Motaire as well as Al-Mutaire Al Islamiya. The road circulation system is of grid type especially in residential areas. There is a patch of open space that may be used for expansion. The barangay is located at a distance from the CBD and uptown but nevertheless accessible through Notre Dame Avenue or De Mazenod Street.

Map 2.3: Barangay Poblacion 2



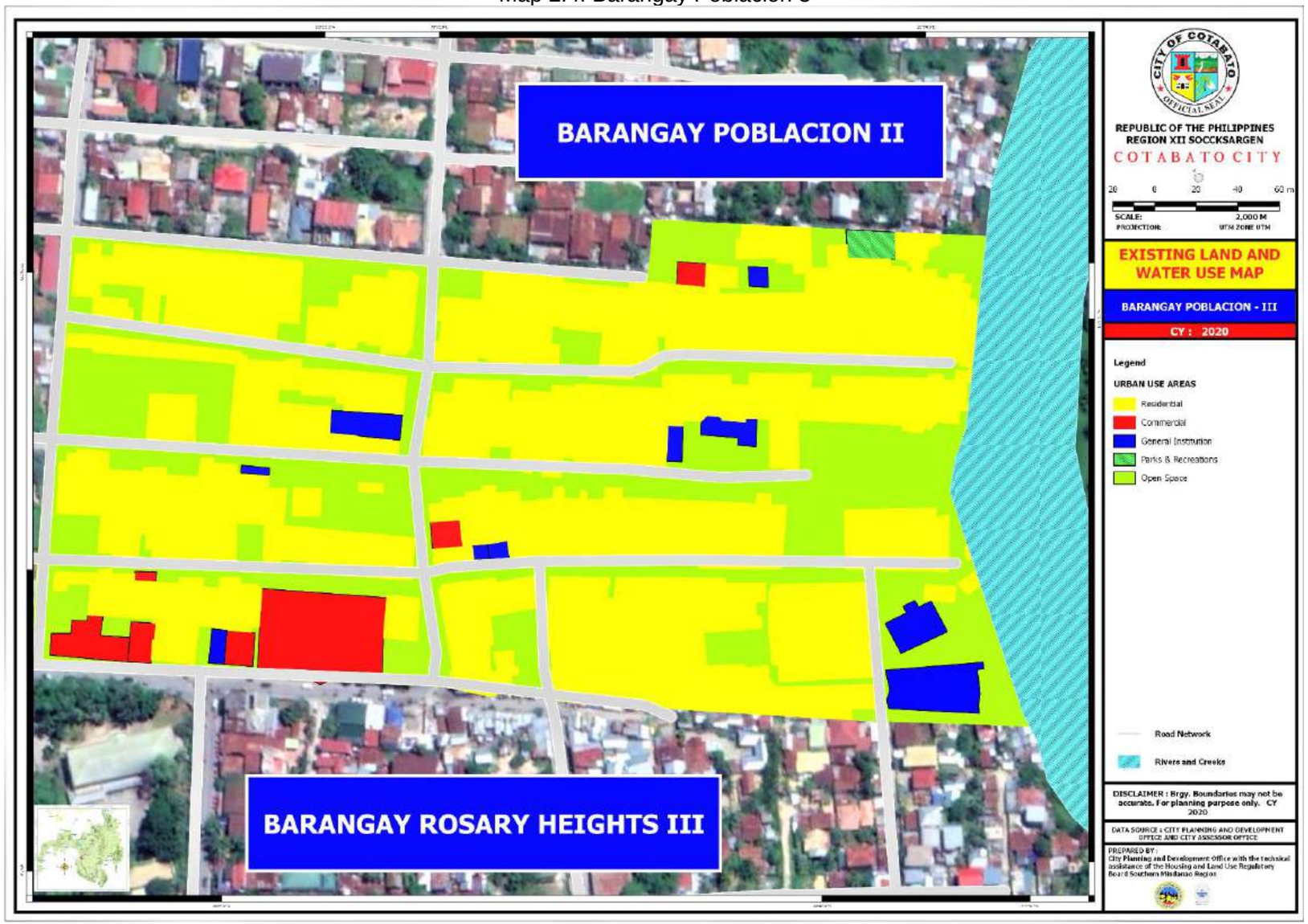
Barangay Poblacion 3 (Pob 3)

Table 2.4: Existing Land Use of Barangay Poblacion 3

Land Use	Existing (ha)	% to Total
Residential	5.470327	51%
Commercial	0.380476	4%
General Institution	0.261839	2%
Parks & Recreation	0.031191	0%
Open Space	1.692205	16%
Rivers and Creeks	0.704	7%
Roads	2.16842	20%
Total	10.70846	100%

The barangay is largely residential with dwelling units, boarding houses and apartments. Boarding houses mostly cater to students of Notre Dame University located just across its main thoroughfare, the Notre Dame Avenue. A warehouse and hardware is also conducting business in this barangay. A few places of worships such as St. Joseph Chapel, Masjid HjaSubia (Doton) and Masjid Sampulna serve the spiritual needs of the faithful. Being mostly a residential subdivision, the barangay has a grid type of road that provides access to dwelling units. It is also accessible to and from the CBD and uptown through Notre Dame Avenue or De Mazenod Street.

Map 2.4: Barangay Poblacion 3



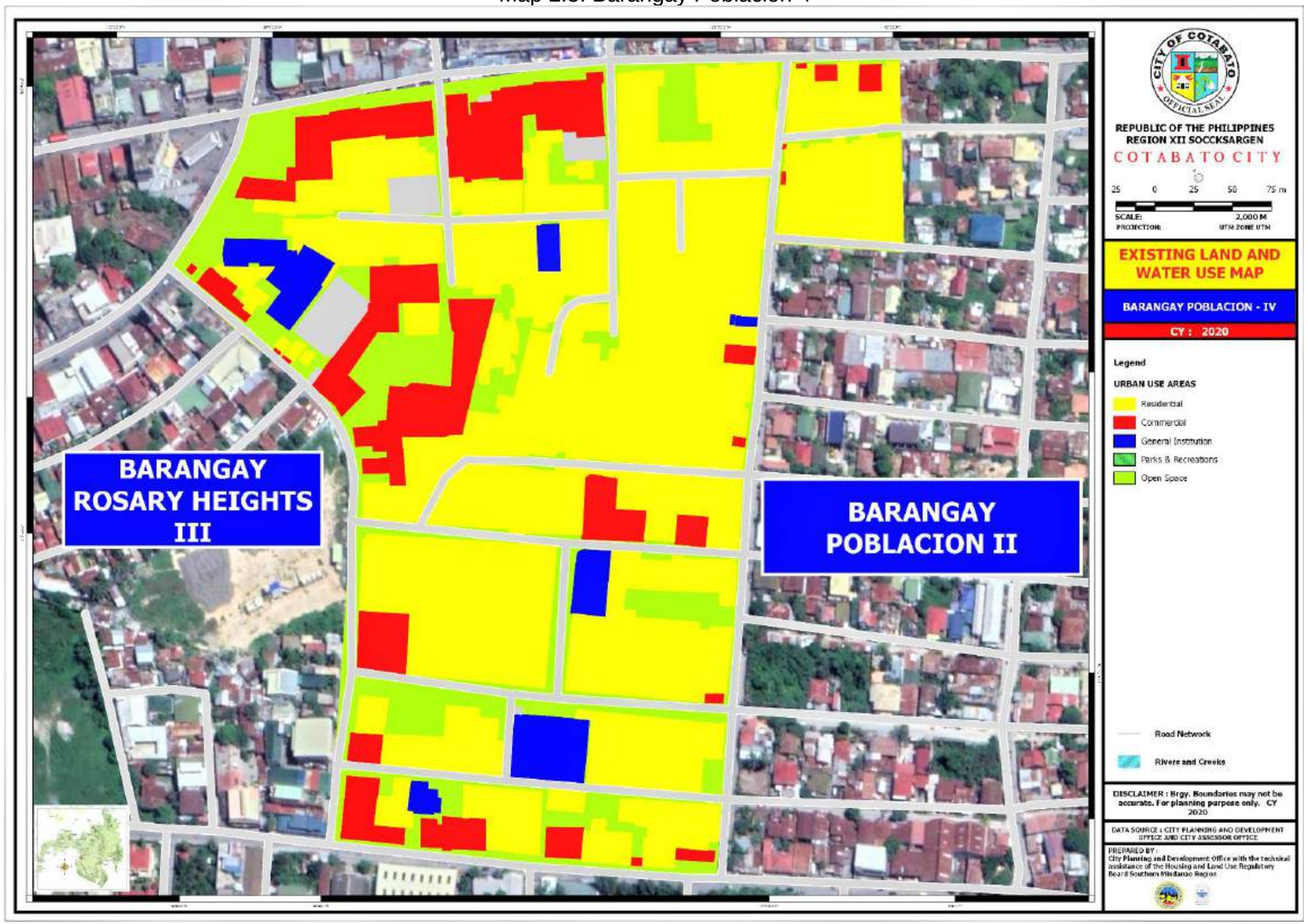
Barangay Poblacion 4 (Pob 4)

Table 2.5: Existing Land Use of Barangay Poblacion 4

Land Use	Existing (ha)	% to Total
Residential	6.821461	43%
Commercial	2.077677	13%
General Institution	0.591602	4%
Infrastructure	0.264596	2%
Open Space	2.060265	13%
Roads	4.13998	26%
Total	15.95558	100%

The barangay is a mixture of residential, commercial and institutional uses. This barangay is influence to a great extent by the presence of high density uses such educational institutions and public market in and around it. Aside from the premier Notre Dame University, educational institutions are Dela Vida College and Vilo Central Elementary School. The presence of the supermarket on the north of the barangay (at adjacent barangay Pob MB) influences most commercial activities adjacent it. Food shops and stalls, bookbinding and photocopying stalls, money shipment centers (eg. “perapadala centers”) and allied activities positioned themselves were they profit most. Places of worship for nearby residents also abound such as Seventh Day Adventist Church, Southern Baptist Church, Our Lady of Fatima Church and Masjid Al Salaama. The road system is a mixture of grid and irregular road which access to the various land uses. Pob 4 is connected to the CBD and uptown through Notre Dame Avenue and De Mazenod Street respectively.

Map 2.5: Barangay Poblacion 4



Barangay Poblacion 5 (Pob 5)

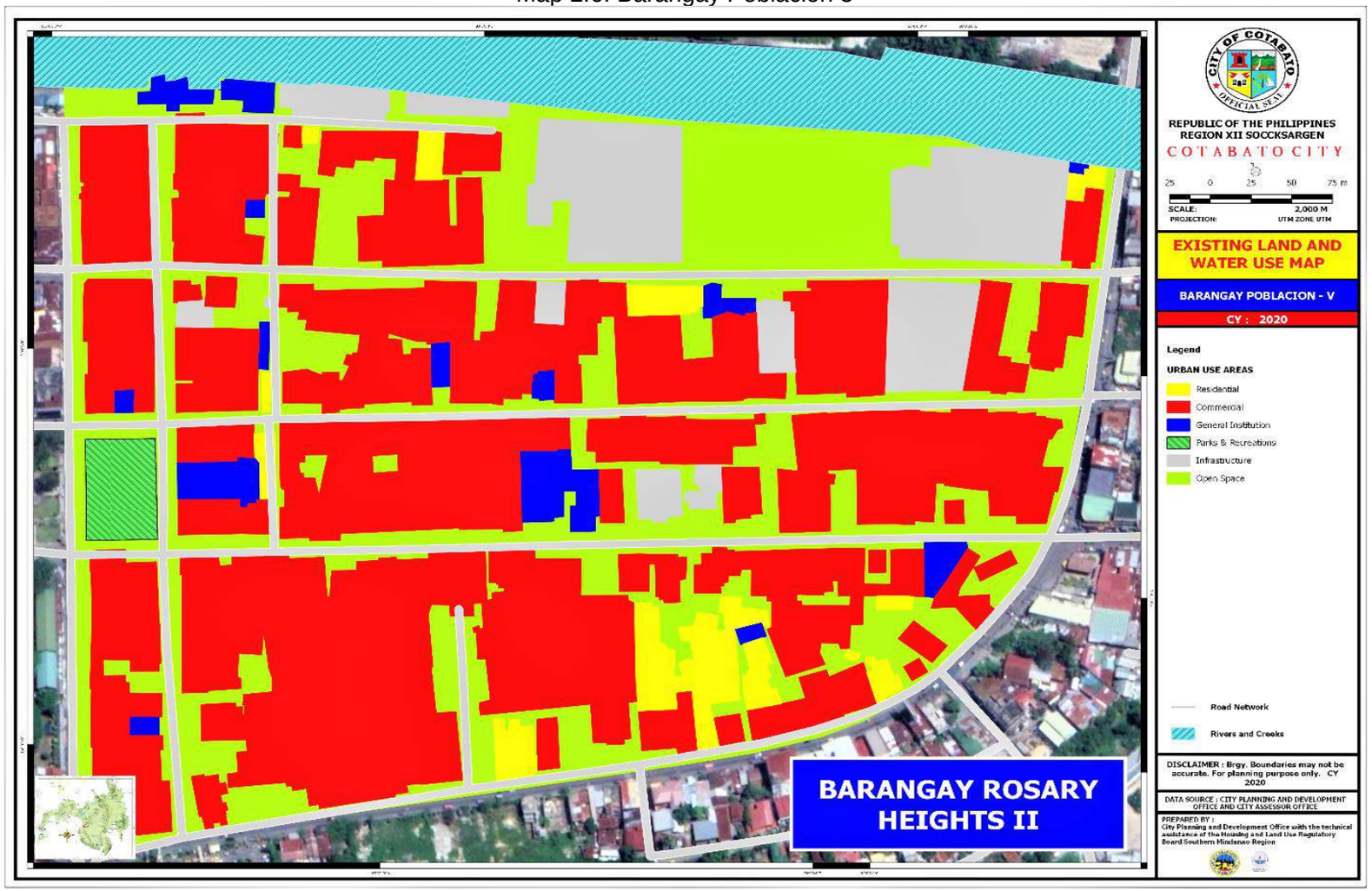
Table 2.6: Existing Land Use of Barangay Poblacion 5

Land Use	Existing (ha)	% to Total
Residential	0.901533	3%
Commercial	16.19581	58%
General Institution	0.765693	3%
Open Space	5.279695	19%
Rivers and Creeks	1.6	6%
Roads	3.38733	12%
Total	28.13006	100%

Pob 5 is one part of the CBD or Major Urban Center of the City and has a high real estate value. Partly, here lies some the center of trade and commerce of the city. As such, commercial activities take place in almost every part of the barangay. There are a few residential areas much less subdivision in this barangay. Commercial uses include banks such as BangkoSentralngPilipinas, Banco De Oro, Bank of Philippine Island, EastWest Bank, Land Bank of the Philippines, Metrobank, Philippine National Bank, Rizal Commercial Banking Corporation, and United Coconut Planters Bank and others. Food chains/Food Shops includes Jollibee, Infinitea, Lugaw Republic, McDonalds, Minute Burger, ChooboChoobi, Red Ribbon, Goldilocks, Mang Gorio, MangInasal, PritongManok, Mother's Bakeline, Box Net Café, Kitok's Lechon Manok, other bakeshops, carenderias, fastfoods and more. Other commercial activities include, Citi Hardware, Henry Uy parts ICT hardware, Yu Kian Guan Hardware, City Hardware. Mercury Drug, Gamot Publiko, Generic Pharmacy. CENTRO, Centerpoint, KP Commercial, Monte Mart, Pure Gold, South Seas Complex, Superama, Today' Commercial, Penshoppe, Perfect Image, Kodak Philippines, First Traders, Ranie's, Sea Oil Refilling Station, Shell Refilling Station, Lee and RJJ Boutique, Octagon Computer Superstore, Electronics and phone centers, Globe and Smart offices, pawnshops, appliance/Furniture stores/centers, water refilling stations, hair salons, health, dental and eye care clinics, agricultural supply stores, auto and motor shops/parts, and van terminals and many more.

Remittance Centers are also operating in this barangay, to name some, LBC Express, JRS Express, M Lhullier, Palawan Express, and Western Union. A few offices and other institutional uses operate and blend in the sea of commercial activities. To name some, they are the SanggunianPanlungsod building, Office of the Local Civil Registrar, Registry of Deeds, City Court, Bureau of Internal Revenue, PhilHealth, Philippine Long Distance Telephone Company, Social Security System, Cotabato City Jail, Cotabato Fire Station, Academia Technologia in Mindanao, AMA Computer College, CAD IT, Agape School. Places of Worship include, Queen of Peace, Sta. Clara Chapel, Nuestra Sr. Del Pilar, Bell Church, Masjid Takwa, Masjid Razzak and others. The barangay continues to develop through a renewal type of development where old/hazardous buildings are demolished or renovated/rehabilitated and replace with another type of business with a much modern. The barangay is connected to a national road that leads to the north (Cotabato- Davao Road) and South (Cotabato- General Santos Road). On the north is the Rio Grande de Mindanao that is also use for transport, trade and commerce for small time businessmen/fishermen/farmers as well as people travelling to and from Cotabato city.

Map 2.6: Barangay Poblacion 5



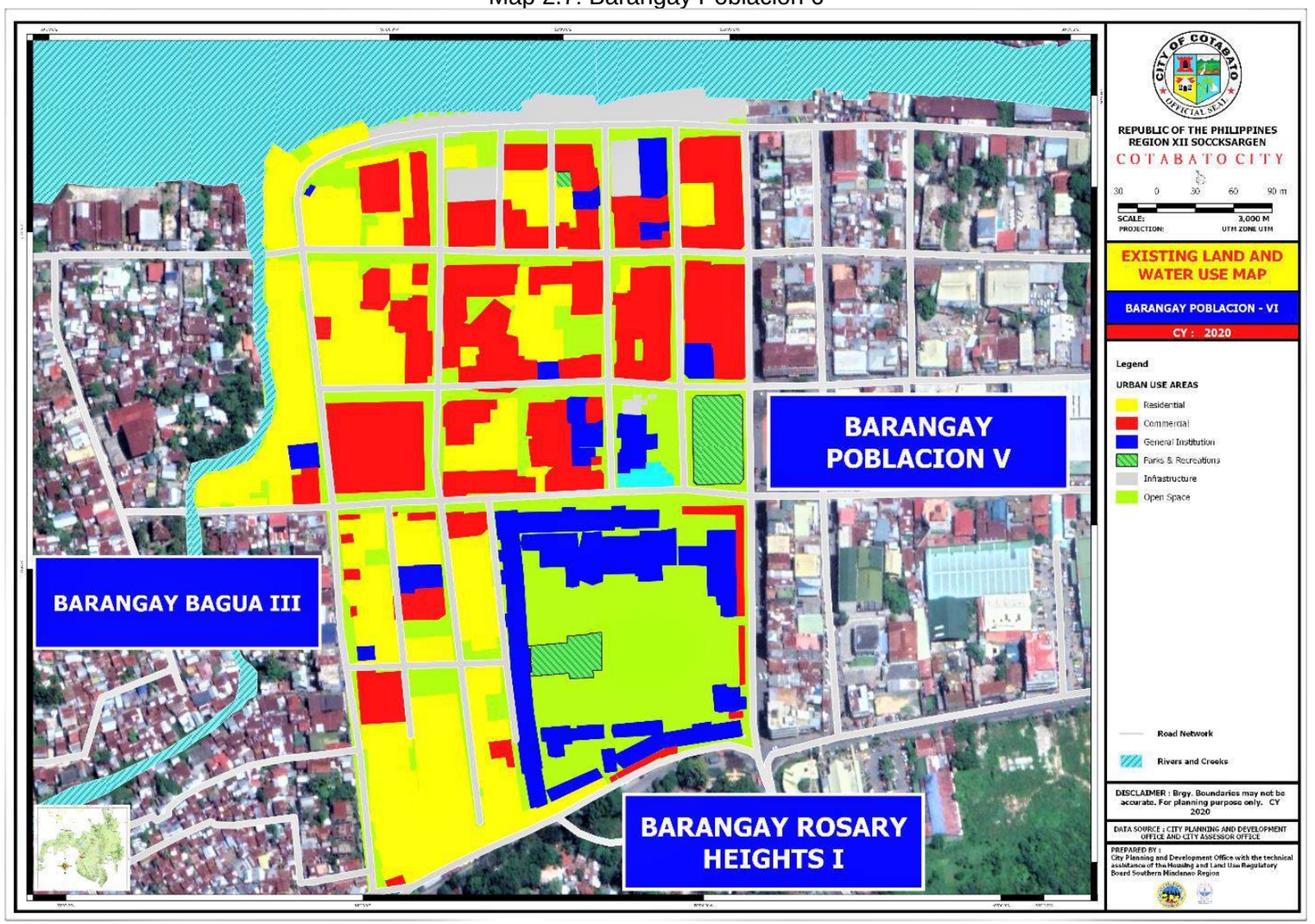
Barangay Poblacion 6 (Pob 6)

Table 2.7: Existing Land Use of Barangay Poblacion 6

Land Use	Existing (ha)	% to Total
Residential	5.186909655	22%
Commercial	1.864322	8%
General Institution	1.755271	8%
Special Institution	0.066003	0%
Parks & Recreation	0.294423345	2%
Tourism	0.260577	
Infrastructure	0.705936	3%
Open Space	4.743665	21%
Rivers and Creeks	4.126	18%
Roads	3.71493	16%
Total	22.71804	99%

Barangay Poblacion 6 is one part of the Central Business District. The other half, Barangay Poblacion 5, which is adjacent to it makes up the entire Central Business District. During Spanish rule, Poblacion is considered or known to be the commercial center where inhabitants flock on market days (which is set by a local ordinance). Today it is known as the Central Business District where trade and commerce transpire. Evidence of Spanish rule is evident in this barangay, a plaza in front of the city hall (Governadorcillo), a place of worship not far away and a school …A bustle of commercial activities ensues in this part of the city. Commercial operations include banks and other commercial outfits such as Development Bank of the Philippines, Philippine National Bank, Palm Tree Bank, Cotabato City Old Market, Sugni Superstore, Superama Store, Mercury Drug, Palawan Express, Great Eastern Trading, Petron Gasoline Station, Mother's Bakeline, GP Fish Trading, Motor Cycle Parts, K Hong Store, Mercantile Lu Eia, Chuan Lam Trading, Aquabest, Maping Hardware, Sigma Marketing, Garlands, A&B Mechandise, Feroce Pawnshop, Keng Chua Trading, Top Mix, Oppo Phonetech, Filidian Bazaar, Diagnostic Laboratory, Cotabato Falcon Marketing, Quick Pharmacy, DS Merchandising, Agencia De Oro, Seng Lee Trading, Monte Mart, Fashionistas, Wilmart Pawnshop, GTL Lending, Ferizze Lending, Bayad Center, Gamot Publiko, Alnor Store, Agencia De Oro, Romeo Hotel, Mardoney's Resto, Mami King, Rough Rider Jeans (RRJ), CK Phonetech, Magallanes Bazar, Yap Ping Chong, Generic Pharmacy, Fely's Dress Shop, and many more. Institutional uses include the Old City Hall (now Museum), Cotabato City Central pilot Elementary School, Philippine Ports Authority, TESDA, Comelec, Maguindanao, ST College, Academia Technology in Mindanao, and Aviation Technical School of Cotabato among others. Places of Worship include Masjid Al Abasi, Masjid Sulaiman and others. The location of the City Plaza is also in this barangay. Not far from this is the Police Precinct Station 1 and old port operated by the Philippine Ports Authority. Road pattern in this barangay is mostly of grid type making the land uses in the barangay very accessible

Map 2.7: Barangay Poblacion 6



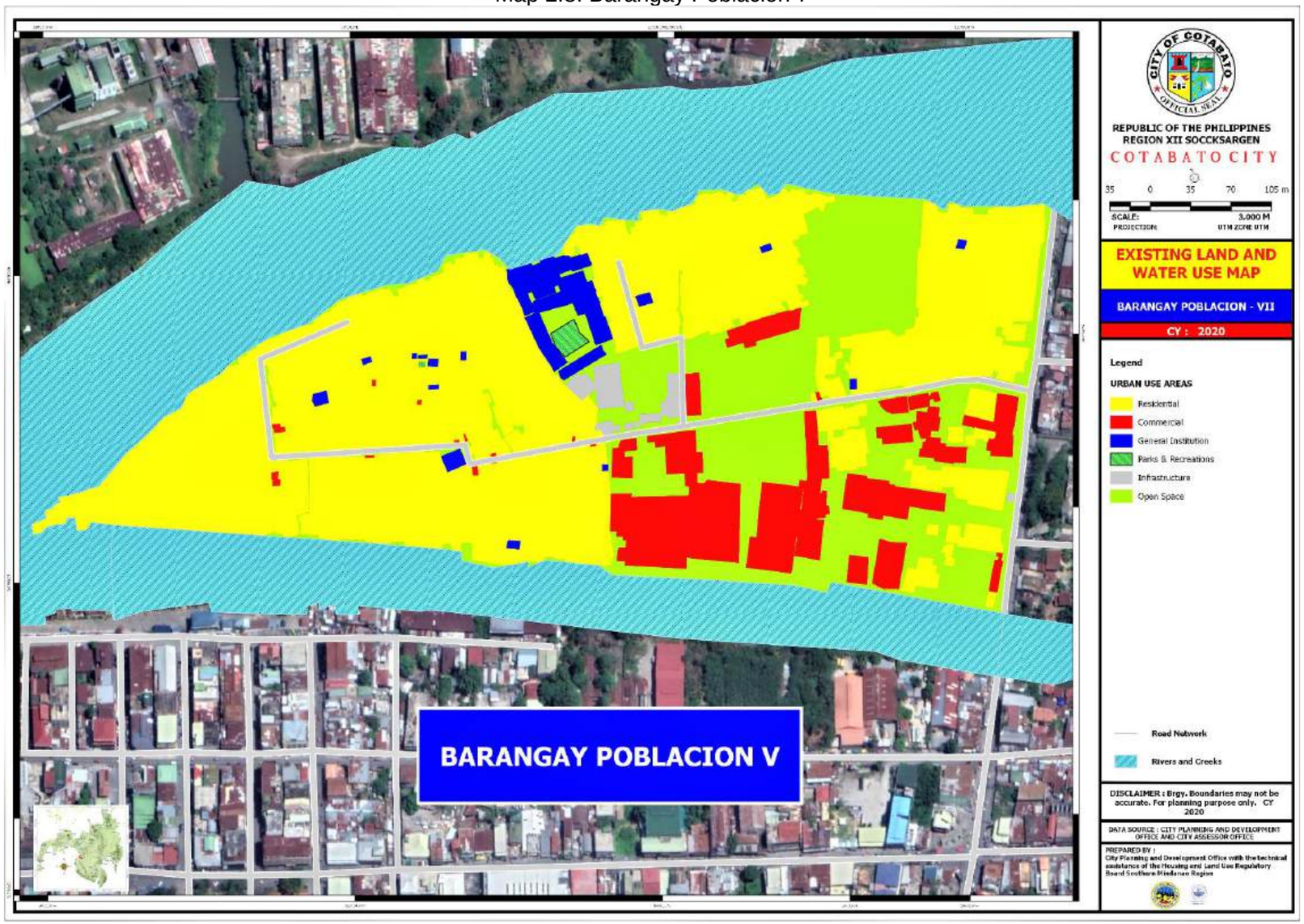
Barangay Poblacion 7 (Pob 7)

Table 2.8: Existing Land Use of Poblacion 7

Land Use	Existing (ha)	% to Total
Residential	11.67115	44%
Commercial	2.455163	9%
General Institution	0.559849	2%
Parks & Recreation	0.060761	0%
Open Space	4.168797	16%
Rivers and Creeks	6.433	24%
Roads	1.31402	5%
Total	26.66274	100%

This barangay has mixed uses. Its interior part is densely populated with informal settlers where proper road circulation and open spaces does not conform to proper standards. Places of worship abound in this places some of which are, Masjid Hanan, Masjid Aisha, Masjid Salih Ali Azhrani, Masjid Yusofi, Masjid Lauban, Masjid Hasanah, Masjid Sultan, Masjid Abubakar, Masjid Al Aman, for the Islam believers and Sr. Vicente Ferrer chapel for the Christians. A public place of learning was set up in the barangay to cater to the educational requirement of the students. The Datu Siang school is both a primary and secondary school that was set years before. Light and medium commercial uses also thrive in this place such as sari-sari stores, bakery, internet cafes, water refilling stations, second hand auto supply, and glass and aluminum supply store, old warehouses and sawmill. The barangay is connected to a national highway leading northbound or the Cotabato-Davao road. It is also the entry point of those coming from the north.

Map 2.8: Barangay Poblacion 7



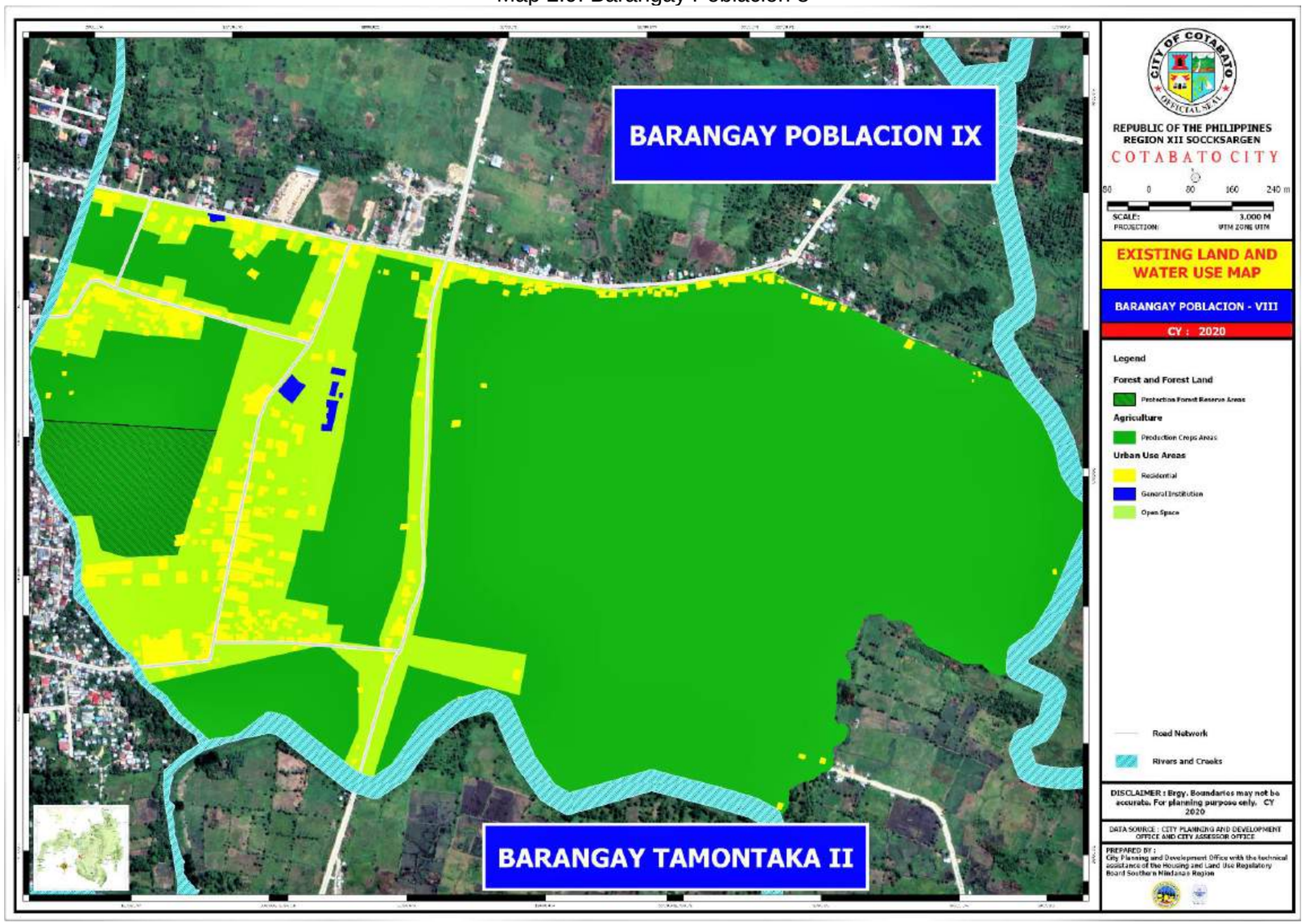
Barangay Poblacion 8 (Pob 8)

Table 2.9: Existing Land Use of Barangay Poblacion 8

Land Use	Existing (ha)	% to Total
Protection	6.647	4%
Agricultural	128.158	77%
Residential	6.624219	4%
General Institution	0.341017	0%
Open Space	4.210079	3%
Rivers and Creeks	12.222	7%
Roads	8.719652	5%
Total	166.922	100%

This barangay is largely agricultural or open undeveloped land. The type of development in this place is dispersed. Most structures are dwelling units and a few commercial uses. Commercial uses include warehouse, rice mill and sari sari stores. Remoteness of this place does not prevent residents from practicing their religious conviction. Places of worships include Masjid Kitfi, Masjid Rahman, Masjid Bai Laga Islamiyah, Masjid Ali Basah, and Masjid DatuSemaKalangtungan. Madrasahs include Madrasah Najiyat, Madrasah DatuSemaKalantungan, Madrasah Moro Islamiyah, and Madrasah Najiyat. A lone educational building stands to support the religious belief of the people in the area- the Kutawato Institute of Technology Foundation, Inc. (KITFI). Pob 8 is a fringe barangay having road pattern of straight and irregular.

Map 2.9: Barangay Poblacion 8



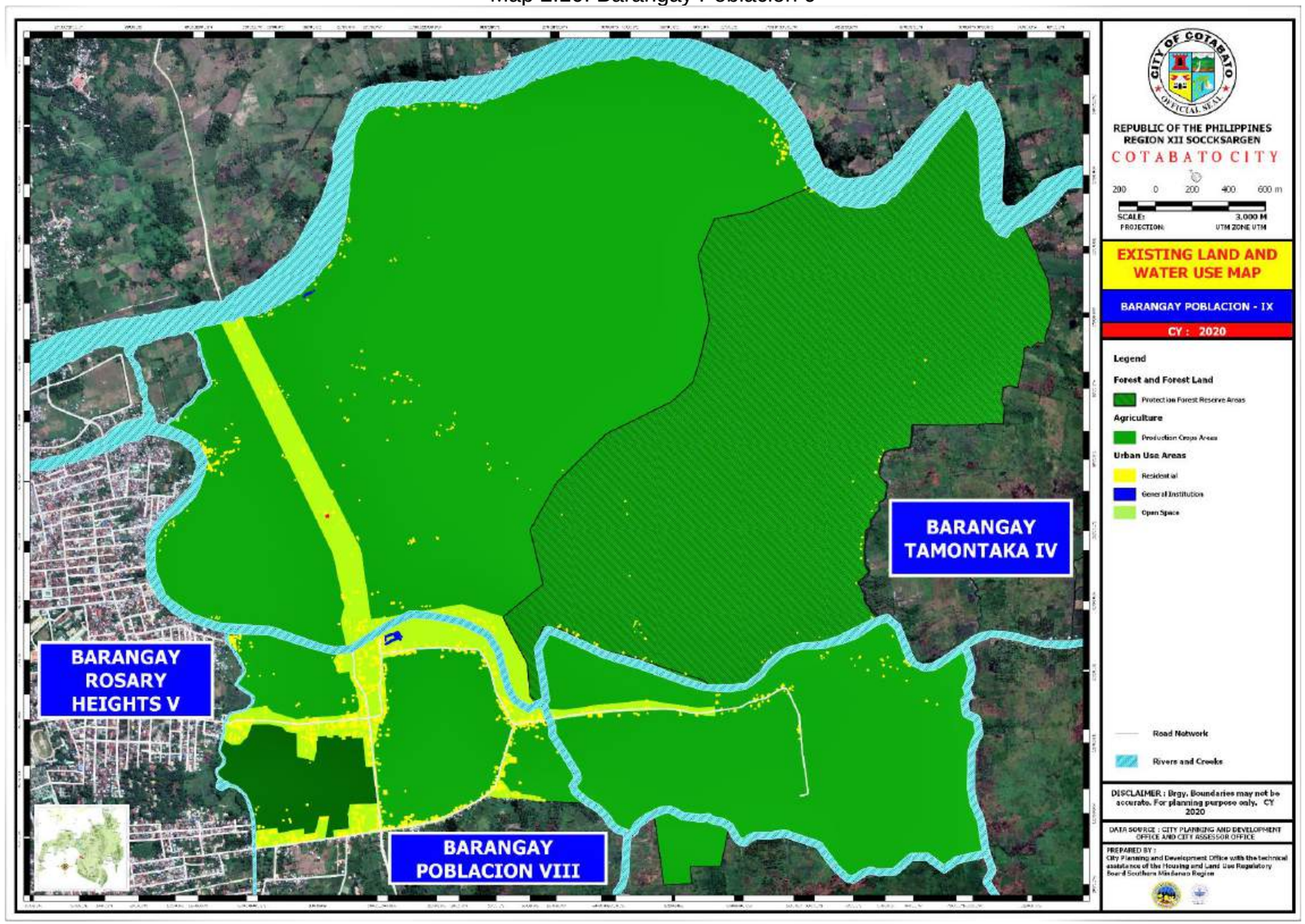
Barangay Poblacion 9 (Pob 9)

Table 2.10: Existing Land Use of Barangay Poblacion 9

Land Use	Existing (ha)	% to Total
Protection	475.993	30%
Agricultural	968.147	61%
Residential	4.084076	0%
Commercial	0.026155	0%
General Institution	0.055221	0%
Open Space	10.89809	1%
Rivers and Creeks	131.266	8%
Roads	3.79797	0%
Total	1594.268	100%

Adjacent Pob 8 but more remote, this barangay is quite similar in land use. It is largely agricultural and open undeveloped land. Most structures are communities of residential structures and disperse in pattern. This is where the city's disposal site is located. Most notable in this area is the presence of several masjids such Masjid Bai Maria Pinadtaya, Masjid Rampak, Masjid Sakargiling, Masjid Shuhada Al Islam, Poblacion 9 Masjid, Masjid Al Rasheed, Masjid Adzis, MasidHIdaya, Masjid Piqaw Dawah Islamiya, Masjid Pinguiaman-Original, Masjid Pinguiaman 1, Masjid Moro Ismiyah and others. Madrasha includes Madrasah Shuhada Al Islam, Madrasah Adzis. A primary school, Maunad Elementary School, is also situated here to address the educational needs of the area around it.

Map 2.10: Barangay Poblacion 9



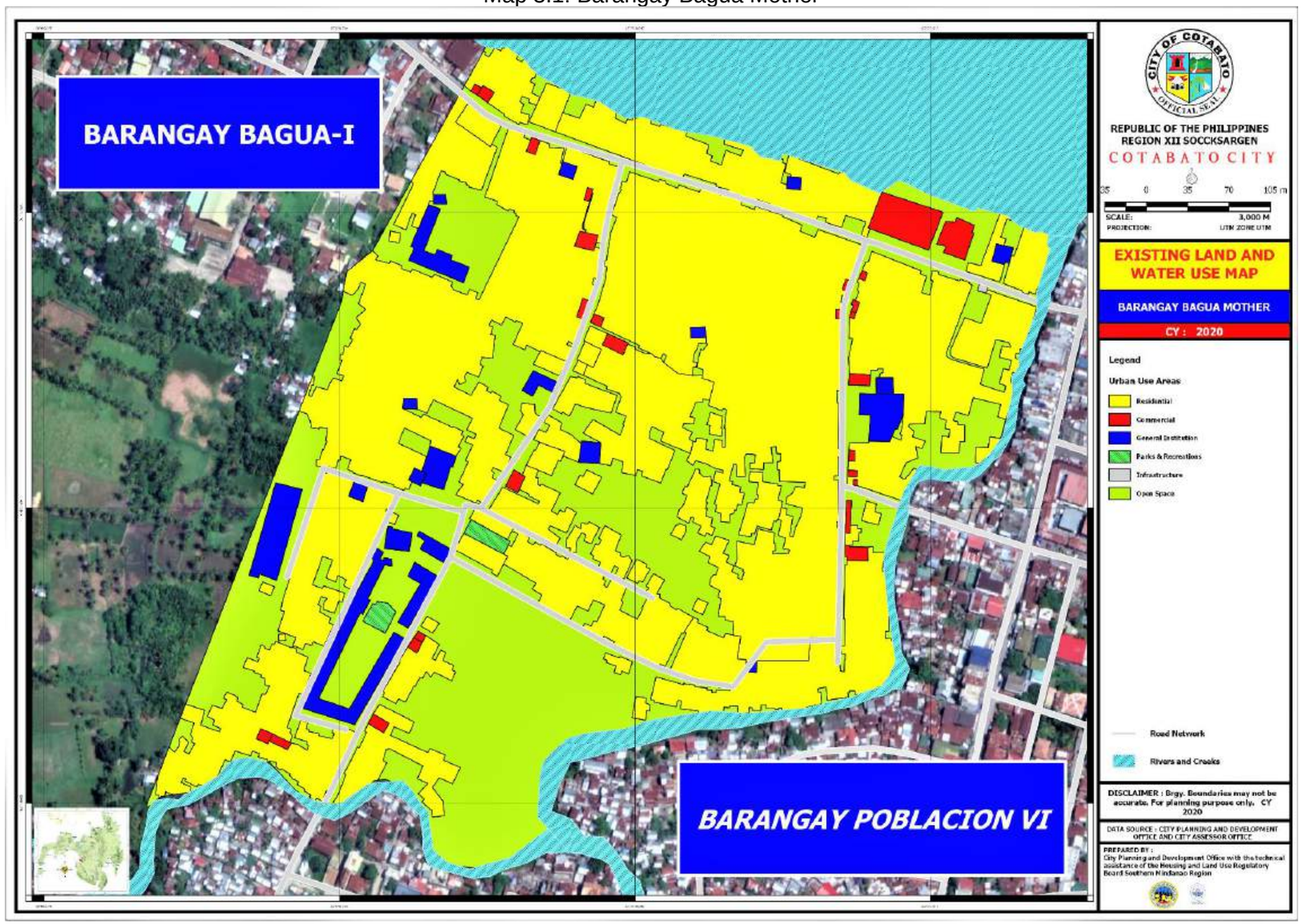
Barangay Bagua Mother (Bag MB)

Table 3.1: Existing Land Use of Barangay Bagua Mother

Land Use	Existing (ha)	% to Total
Residential	14.69525	49%
Commercial	0.498564	2%
General Institution	1.110037	4%
Parks & Recreation	0.092644	0%
Infrastructure	0.004932	0%
Open Space	11.38322	38%
Roads	2.49508	8%
Total	30.27973	100%

This barangay is adjacent to the Central Business District. It is largely for residential use of which most areas are densified dwelling areas. Light commercial activities lined up intermittently along the road. A few small-scale high density commercial uses are present in the barangay such as warehouses, metal shops, repair shops, hardwares and lumberyards. Some lighter commercial use includes Variety (sari-sari) stores, internet cafes, and water refilling stations, vulcanizing shops, barber shops and likes. The barangay‘s educational needs are provided by Nahda Central Academy, Rasheeda High School. It is also the location of Police Precinct outpost 4. It has one (1) covered court that serve as its recreation area. It has a substantial number of places of worship such as Masjid Muttakim, Masjid Dumama, Masjid Nahda, Masjid Al Ansar (Mahad), Masjid Amir BinnKhatab, Masjid Palacala, Masjid Sampalo, among others. The roads are straight and irregular. Although the barangay is populated being close to the CBD, a large area is still inaccessible by roads. Access is through pathways, alleyways or backstreet.

Map 3.1: Barangay Bagua Mother



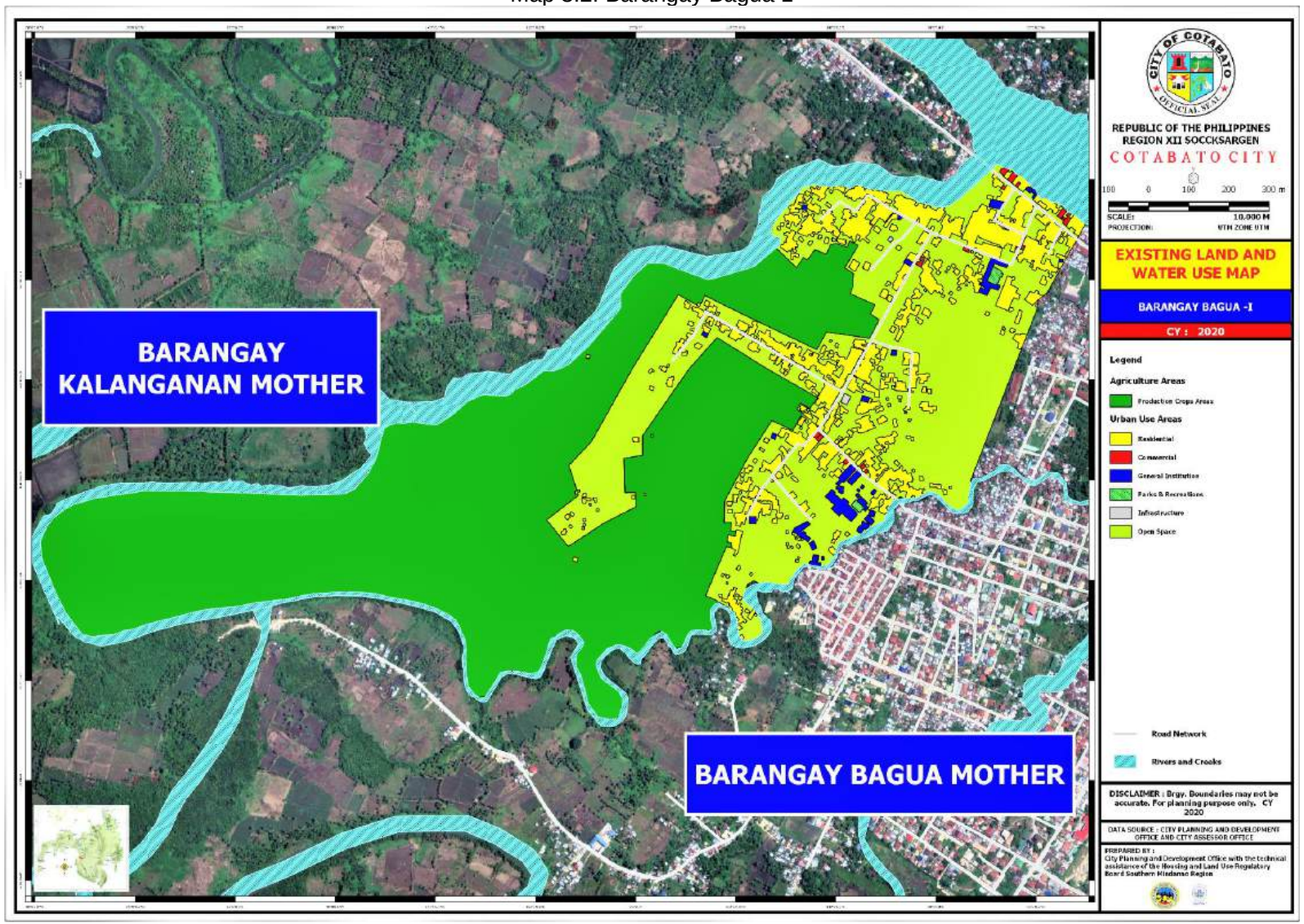
Barangay Bagua 1 (Bag 1)

Table 3.2: Existing Land Use of Barangay Bagua 1

Land Use	Existing (ha)	% to Total
Agricultural	94.96	51%
Residential	14.94801	8%
Commercial	0.271663	0%
General Institution	1.274281	1%
Parks & Recreation	0.155638	0%
Infrastructure	0.05716	0%
Open Space	53.66375	29%
Rivers and Creeks	17.374	9%
Roads	3.00057	2%
Total	185.7051	100%

This barangay is mostly residential use and it has a large tract of cultivated land. The barangay has a few high-density commercial establishments such as lumberyards, furniture shops, auto shops and rice mill. The barangay has also a substantial number of institutional building mostly places of worship that serves the spiritual needs of the residents such as Masjid Al Khairat, Masjid Al Moktar, Masjid Omar, Masjid Al Husain, MsjidBajunaid, Masjid Norodin, Masjid MidtimbangUdasan, Masjid Piang, Masjid Abubakar Sidiqq, Masjid DarulUnsing, Masjid Amir Ahmad Mohammad Al Saadi, masjid Iqra, Masjid Rahmani, Masjid Pagalungan among others. Their education institutions are LugayLugay Elementary School, IQRA Academy of Mindanao and ShariffKabunsuan College. Similar to its neighbour, Bag MB, a large ares is unserved by road leaving some parts serve by pathways. Its location fringe part of the CBD and the uptown area. Roads at the barangay is irregular and straight.

Map 3.2: Barangay Bagua 1



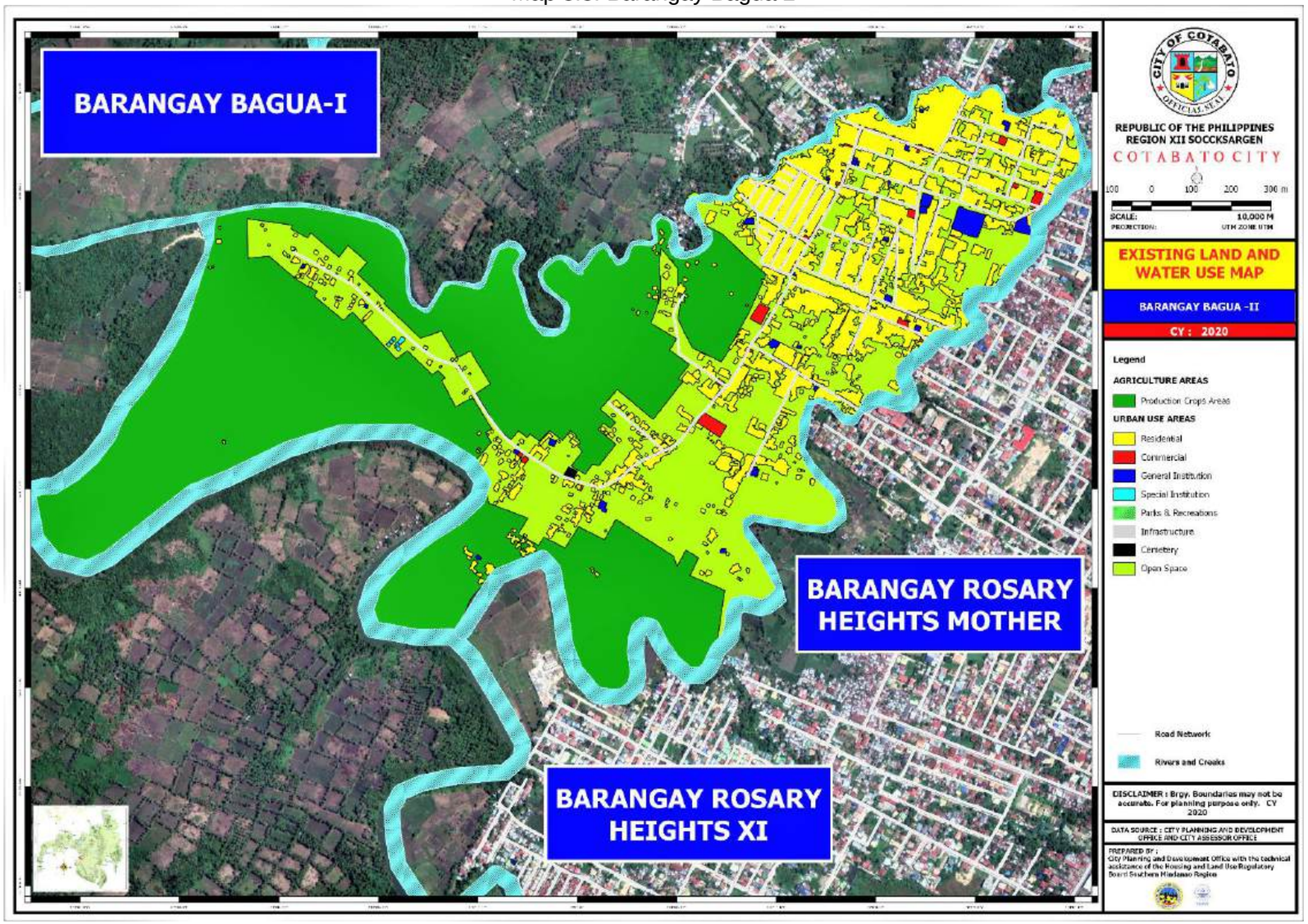
Barangay Bagua 2 (Bag 2)

Table 3.3: Existing Land Use of Barangay Bagua 2

Land Use	Existing (ha)	% to Total
Agricultural	95.04215111	53%
Residential	32.55016	18%
Commercial	0.76904	0%
General Institution	1.15613	1%
Special Institution	0.062289	0%
Parks & Recreation	0.07348689	0%
Infrastructure	0.002698	0%
Cemetery	0.053832	0%
Open Space	26.5441	15%
Rivers and Creeks	12.438	7%
Roads	9.737387	6%
Total	176.3622	100%

This barangay is largely for residential use. Similar to it neighboring barangay Bagua1, almost half of the barangay is devoted to cultivation. The barangay is home to numerous places of worship suggesting most residents are practicing their spiritual obligations, to name some: Masjid RajahmudahBudtong, Masjid Rahman, Masjid Aisha, Masjid Waqaf, Masjid Al Iman Al Bukharie, Masjid Omar BinnQintab, Masjid Sandialen, Masjid EbrahimDemarop, Masjid Fatmah, Masjid Abubakar, Masjid UmmolMuhminin, Masjid Haya Abdul KabisiRAhima Allah, Masjid Omar, Masjid Abdulgani, Masjid Al Ittihad, Masjid Al Ayob, Masjid Rahmiya, MasjidAlbayan, Masjid Khalid BinnWaled, Masjid IbadurRahman, Masjid Usman, Masjid Mlok, Masjid Kutabato Islamic Center, Madrasah Nurol Imam, Madrasah Rahmaniya, Madrasah IbadurRahman. The barangay has a primary school – Usman Elementary School. Most of its residential area is served by a grid type of road and the rest by an irregular and straight. It is also at the fringe part of the CBD and uptown.

Map 3.3: Barangay Bagua 2



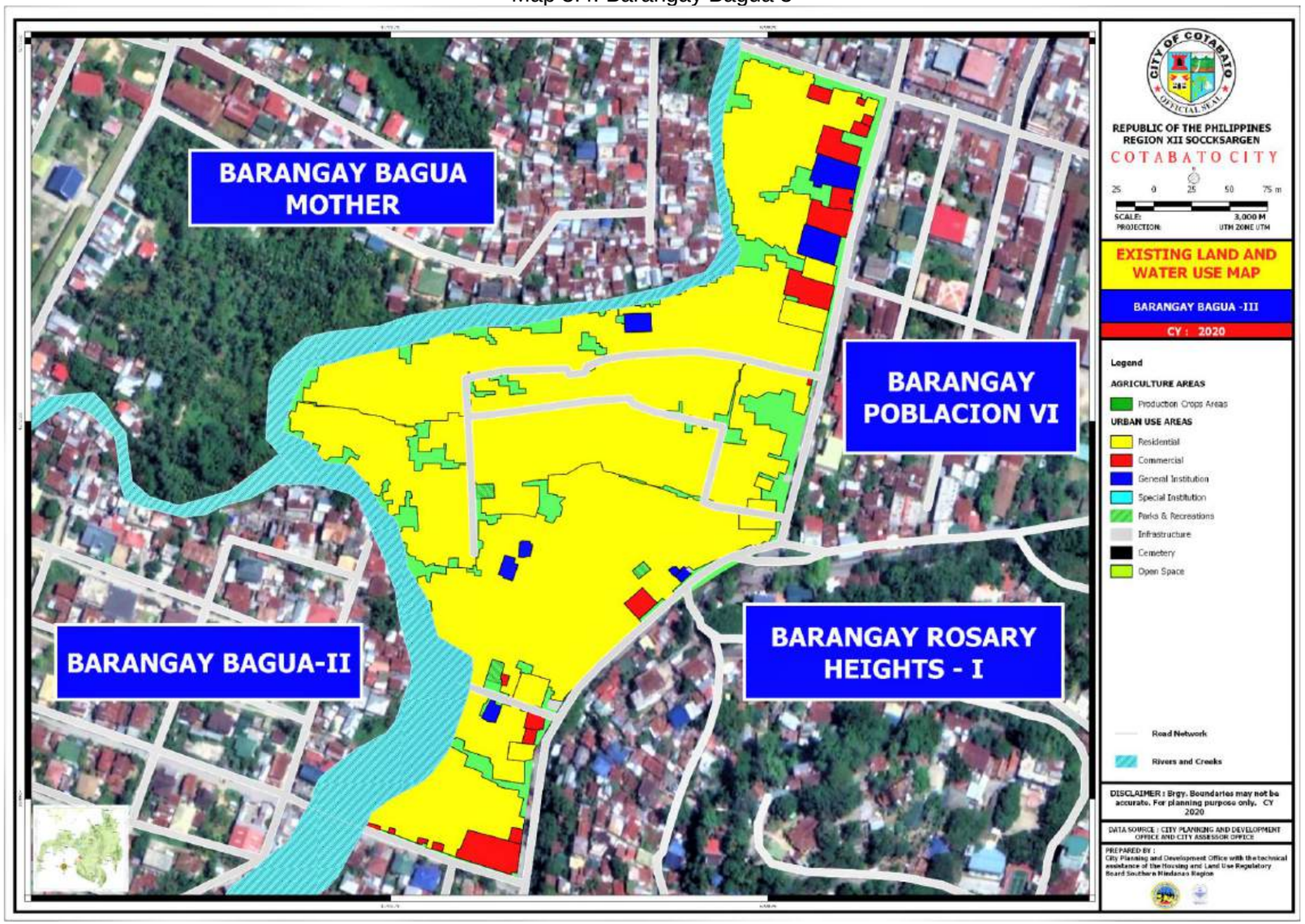
Barangay Bagua 3 (Bag 3)

Table 3.4 Existing Land Use of Barangay Bagua 3

Land Use	Existing (ha)	% to Total
Residential	6.205292	74%
Commercial	0.345926	4%
General Institution	0.176634	2%
Parks & Recreation	0.030667	0%
Infrastructure	0.007595	0%
Open Space	0.229738	3%
Rivers and Creeks	0.587	7%
Roads	0.75971	9%
Total	8.342562	100%

This barangay is largely residential except for a few commercial activities near the market area. The commercial activities mostly cater to the needs of the barangay such as variety stores (sari-sari stores), motor and auto shops, hardwares among others. A few institutional uses such as San Vicente Ferrer, San Pedro Chapel, Masjid Amina and Masjid AbagBalilia to name some. Roads are straight and irregular. Most dwelling units are accessible via pathways, alleyways and backstreet. It is very close to the CBD that may lend to its high-density population.

Map 3.4: Barangay Bagua 3



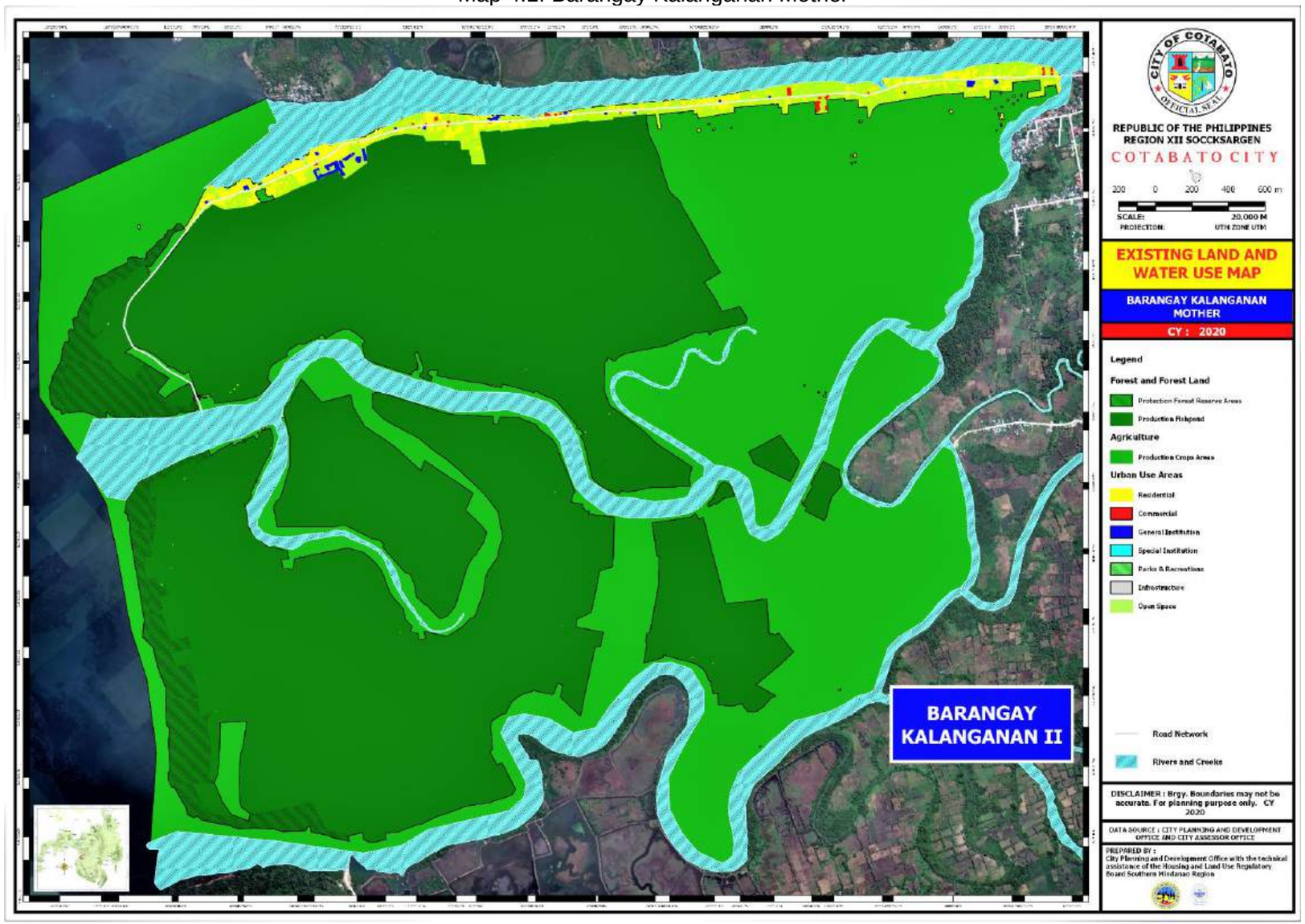
Barangay Kalanganan MB (Kal MB)

Table 4.1 Existing Land Use of Barangay Kalanganan Mother

Land Use	Existing (ha)	% to Total
Protection	61.481	3%
Agricultural	955.511	43%
Fishery	873.275	40%
Residential	24.99557	1%
Commercial	0.483724	0%
General Institution	1.169231	0%
Special Institution	0.063787	0%
Parks & Recreation	0.044226	0%
Open Space	6.295347	0%
Rivers and Creeks	274.489	12%
Roads	8.82442	0%
Total	2206.632	100%

This barangay is largely agriculture with presence of farmlands and fishponds. This is a coastal barangay with a strip of mangroves along its coast. Fishermen and farmers/fishpond owners reside in this barangay, although there are also businessmen, workers in the private and public sector living here. Linear Strip of residential supported by institutional uses such as schools and places of worship, to name some: DatuAyunan Elementary School, DatuAyunan High School and Amirol Elementary School, Masjid SaripaGuiad, Masjid Muslimin, Masjid Khalid BinnWaled, Masjid Datu Ali Ayunan, Masjid Matabalao Maulana, Masjid BacolIslamiyah, Masjid Arap, Masjid Nasser Bansalao, Masjid Basser (Sangingan). Masjid Dante Pasawilan, Masjid Faitol, Madrasah Khalid Bin Waled and Madrasah NuroDaawahIslamie. It is connected to a single road-part of the circumferential road that connects to the CBD. This is one of the fringiest barangays from either CBD or uptown area.

Map 4.1: Barangay Kalanganan Mother



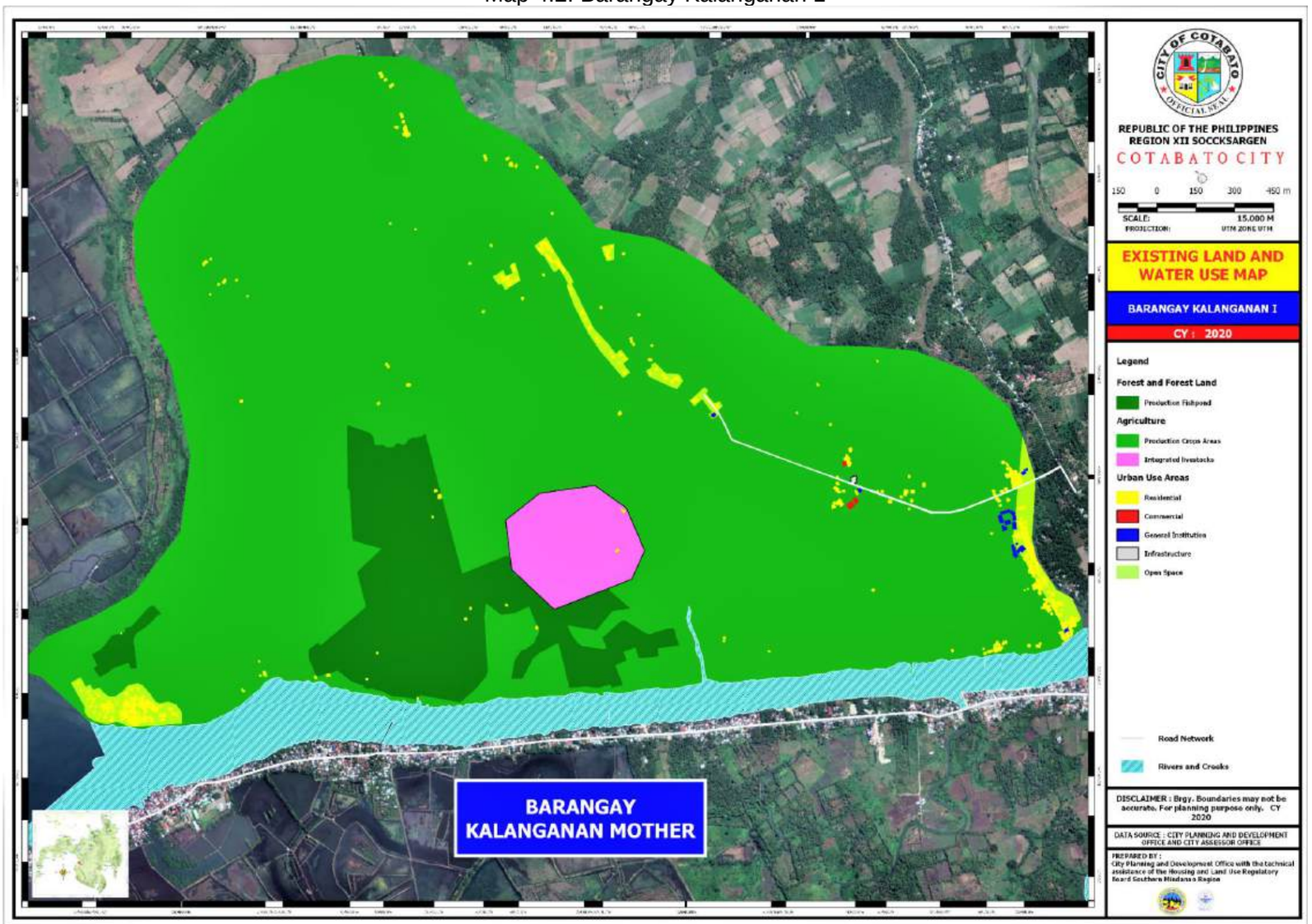
Barangay Kalanganan 1 (Kal 1)

Table 4.2 Existing Land Use of Barangay Kalanganan 1

Land Use	Existing (ha)	% to Total
Agricultural	628.9405	54%
Fishery	275.3583	24%
Residential	4.621362	0%
Commercial	0.100437	0%
General Institution	0.386034	0%
Infrastructure	0.064328	0%
Open Space	42.22633	4%
Rivers and Creeks	204.566	18%
Roads	2.38837	0%
Total	1158.652	100%

This barangay is geographically separate from the rest of the city by Rio Grande de Mindanao. It is also a coastal barangay with mangrove strips facing the Illana Bay. It could be accessed overland through another municipality. Residents also avail of water transport (bancas) to cross the Rio Grande de Mindanao going to the city. It is largely agricultural land and open land with a few residential uses forming a linear strip along a single road. Residential use also occupies a small part facing the Rio Grande de Mindanao. Other land uses include dryer, rice mill, birthing home, madrasah/masjid and other light uses. Educational needs are addressed by the presence of Darping Elementary School.

Map 4.2: Barangay Kalanganan 1



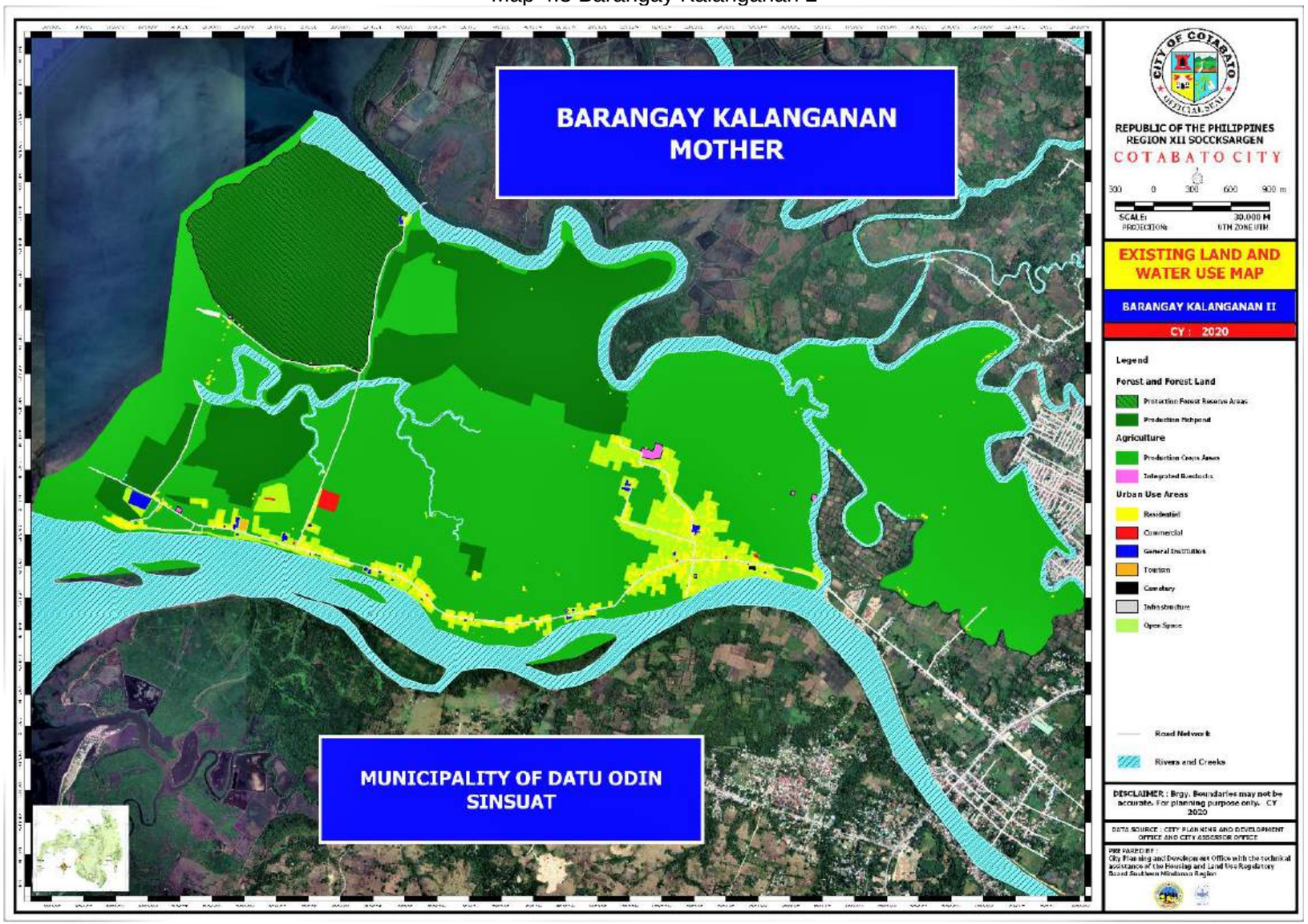
Barangay Kalanganan 2 (Kal 2)

Table 4.3 Existing Land Use of Barangay Kalanganan 2

Land Use	Existing (ha)	% to Total
Protection	201.976	10%
Agricultural	1202.835	57%
Fishery	380.3565	18%
Residential	18.31056	1%
Commercial	1.971904	0%
General Institution	2.701361	0%
Special Institution	0.024864	0%
Tourism	0.399626	0%
Infrastructure	0.480079	0%
Cemetery	0.09142	0%
Open Space	32.87903	2%
Rivers and Creeks	253.964	12%
Roads	11.52781	1%
Total	2107.518	100%

Mostly open agricultural land with large tract still undeveloped. This is also a coastal barangay with a strip of mangroves along its coast. In this barangay lies Timako Hill which is considered to be a protected area. Reports from locals disclose that the hill is rich with biodiversity, flora and fauna. This is similarly the site of grand mosque Sultan Haji Hassanal Bolkiah, a tourism attraction to local and foreign tourist alike. On the farthest north is the location of the on-going construction of the proposed Seaport. Residential and commercial uses form linear along a single major road (part of Circumferential Road). Small communities are served by minor roads. The barangay is at the south fringe of the city. Its only access to the CBD is through the Circumferential Road.

Map 4.3 Barangay Kalanganan 2



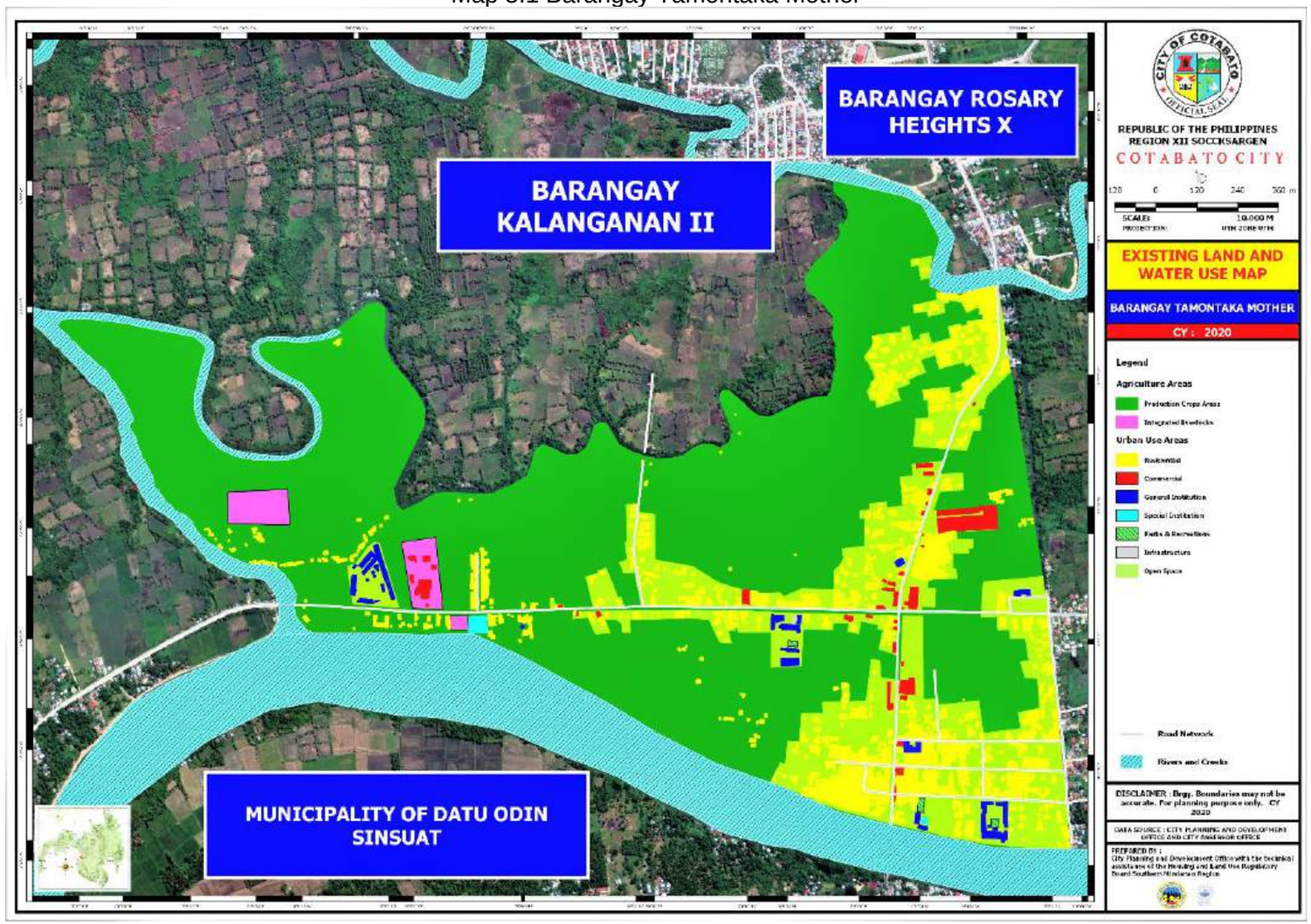
Barangay Tamontaka MB (Tam MB)

Table 5.1 Existing Land Use of Barangay Tamontaka Mother

Land Use	Existing (ha)	% to Total
Agricultural	207.2531511	66%
Residential	22.98554	7%
Commercial	2.572788	1%
General Institution	1.802993	1%
Special Institution	0.307689	0%
Parks & Recreation	0.10268589	0%
Infrastructure	0.028794	0%
Open Space	25.30219	8%
Rivers and Creeks	48.309	15%
Roads	6.73087	2%
Total	315.3957	100%

This barangay is one of the previously identified growth node of the city. It is a growing residential community while maintaining a wide agricultural and buildable open land. While a few parcels are planted with crops yet a substantial part are still buildable. This barangay is the entry point from the south municipalities and cities. Needless to say, it is the closest to Awang airport at Datu Odin Sinsuat Municipality. The siting of the “AA” Halal slaughterhouse in the barangay is strategic as it is near the airport especially if the city increases a notch higher to “AAA slaughterhouse” and exports its halal products. It was constructed through the assistance of the National Meat Inspection Service of the Department of Agriculture. As a growth center it is also near the proposed seaport and airport at BrgyKalanganan 2 and BrgyTamontaka 8-9 respectively. Beside the Halal slaughterhouse is the site the proposed Ecozone. As of writing, there were initiatives to avail the assistance of the Philippine Economic Zone Authority (PEZA) to be set up at the Agro-Industrial Zone of the city. While it has complied with some of the requirements but for some technical reason it was interrupted in its approval. At present a proposed integrated terminal, public market as well as technical school would be set up in the said zone. Despite its remoteness to the urban center yet a number of schools are sited here such as Tamontaka Elementary School, Headstart College of Cotabato, Datu Siang High School, and others. One historical religious site, the Tamontaka Church, is located in this barangay. It is Cotabato’s oldest church with Spanish-inspired architecture built in 1872. The road pattern of the barangay is linear and grid especially at the old settlement area of the barangay. On the south is the Tamontaka River which is use also as a mode of transport for some people living in the area.

Map 5.1 Barangay Tamontaka Mother



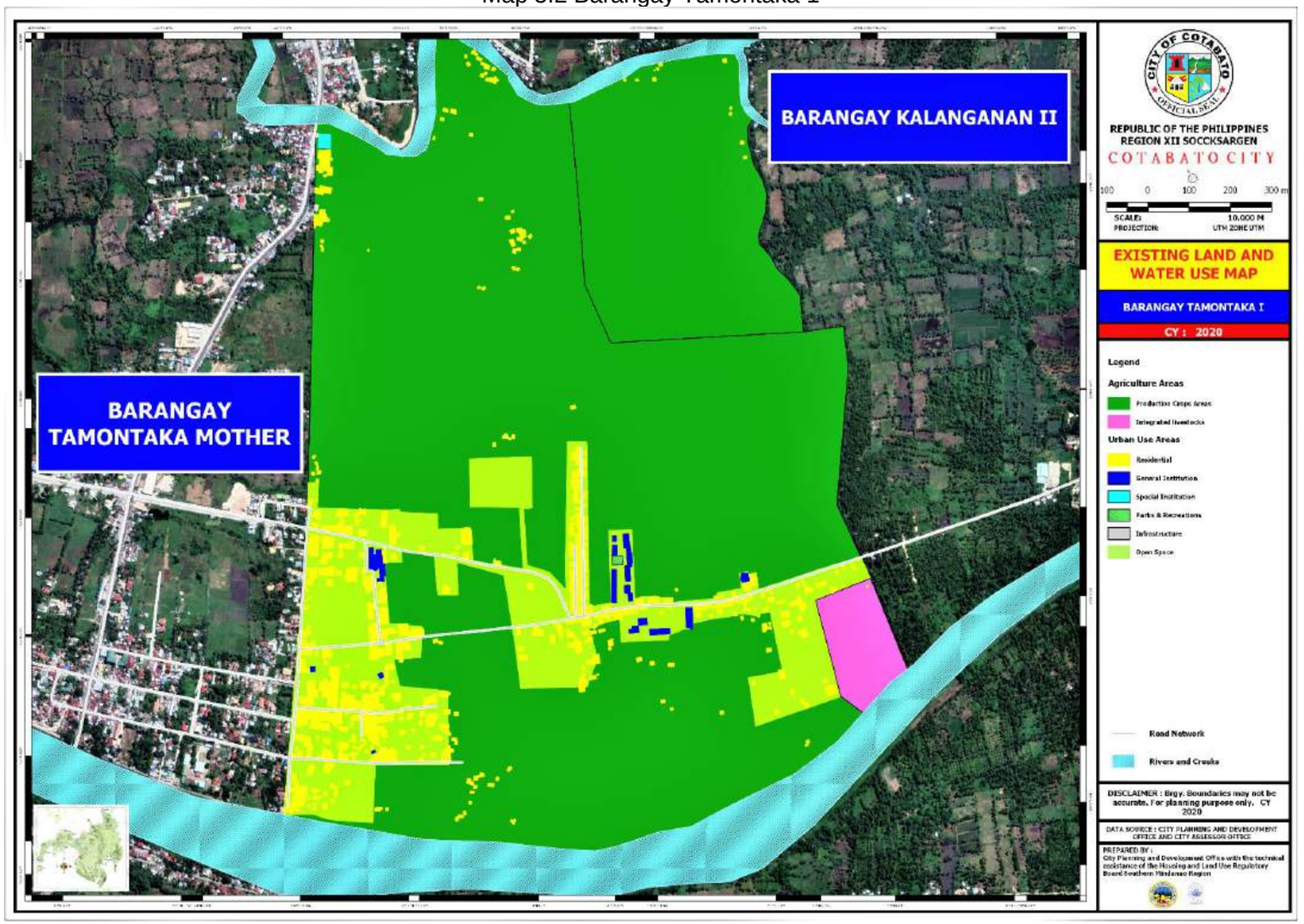
Barangay Tamontaka 1 (Tam 1)

Table 5.2 Existing Land Use of Barangay Tamontaka 1

Land Use	Existing (ha)	% to Total
Agricultural	180.7772	64%
Residential	9.634584	3%
General Institution	0.842018	0%
Special Institution	0.105436	0%
Parks & Recreation	0.0547	0%
Infrastructure	0.01891	0%
Open Space	11.98318	4%
Rivers and Creeks	68.96	25%
Roads	8.53945	3%
Total	280.9155	100%

Tam 1 is largely agricultural although a part of it is a community of residential use being a neighbour of Tam MB. The barangay is a distant from the national highway with residential community adjoining the borders of Tam MB. The barangay has less development in terms of institutional, commercial and other uses. However, an Eros Medical Clinic and Hospital located at the barangay provides health care needs of the barangay. Development in the area is linear to the only road connecting to Tam MB which connects them to the national highway. Like Tamontaka Mother, it is connected to Tamontaka River that is use by fisher folks, farmers and some residents to transport goods.

Map 5.2 Barangay Tamontaka 1



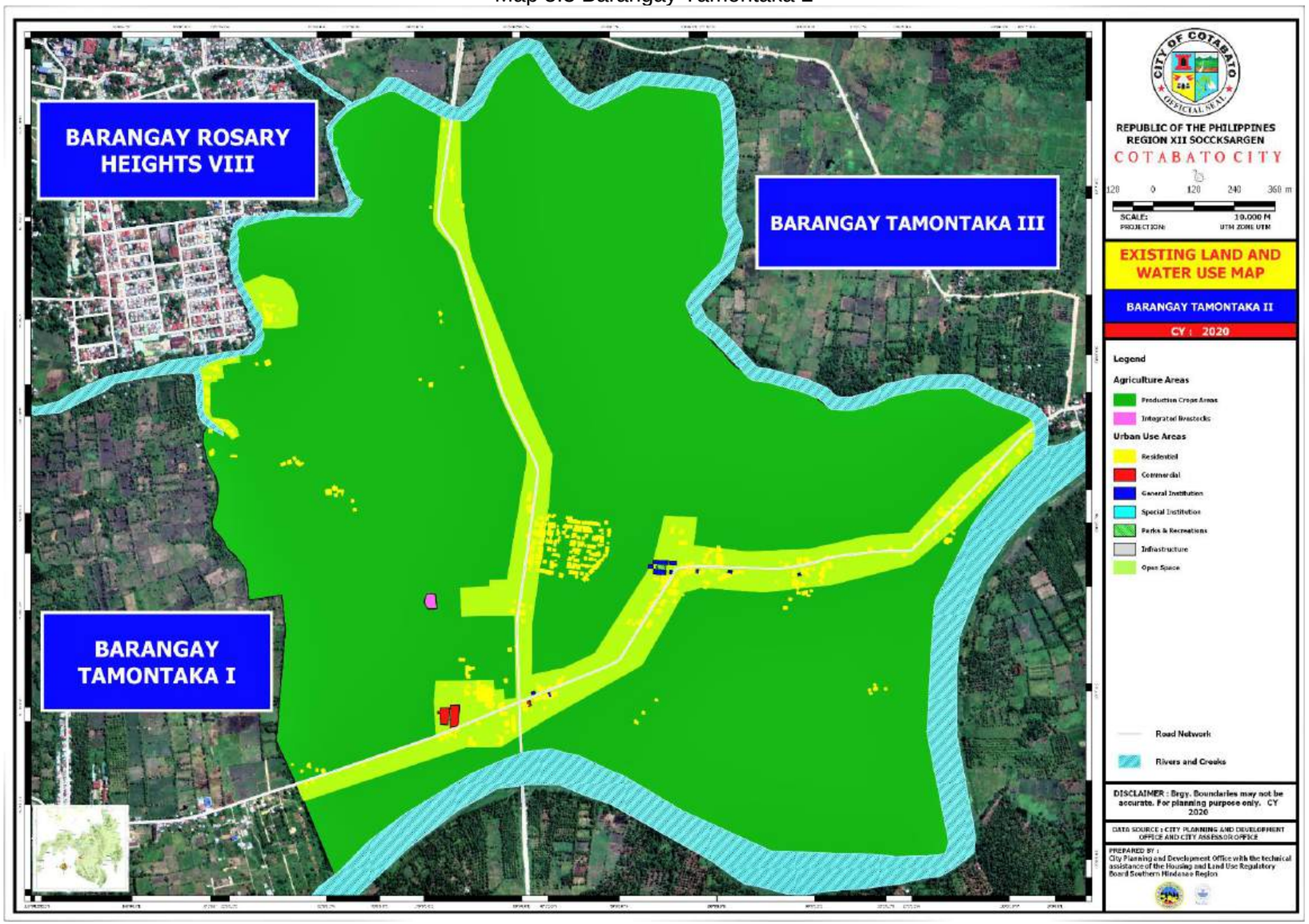
Barangay Tamontaka 2 (Tam 2)

Table 5.3 Existing Land Use of Barangay Tamontaka 2

Land Use	Existing (ha)	% to Total
Agricultural	326.01	71%
Residential	4.81382	1%
Commercial	0.307893	0%
General Institution	0.206195	0%
Parks & Recreation	0.045525	0%
Open Space	33.54559	7%
Rivers and Creeks	92.1	20%
Roads	4.85273	1%
Total	461.8818	100%

Tam 2 is basically an agricultural barangay with a few housing communities mostly linear in growth pattern. It has one singular and main road that connects the barangay to the national highway and to the urban center as well. Institutional uses include masjids, Usman Baunga Elementary School, BubongElementry School. It is also connected to Tamontaka River which is another mode of transport for the residents in the area. Its access to the urban center is through the single road that passes to Tam MB and Tam 1. East Diversion road, an alternate entry and exit point to or from the city is also at this barangay.

Map 5.3 Barangay Tamontaka 2



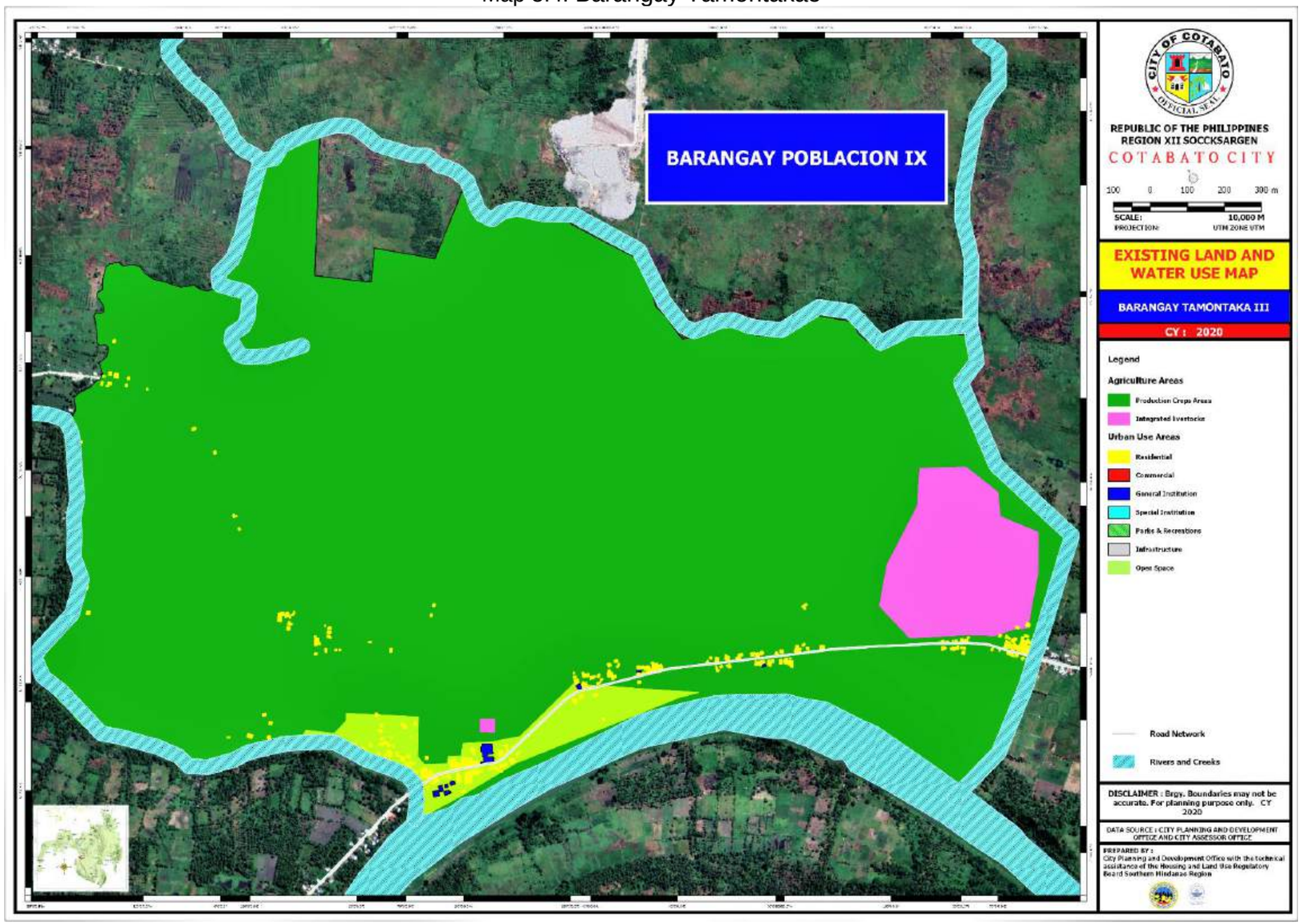
Barangay Tamontaka 3 (Tam 3)

Table 5.4 Existing Land Use of Barangay Tamontaka 3

Land Use	Existing (ha)	% to Total
Agricultural	262.852	50%
Residential	2.347592	0%
General Institution	0.257949	0%
Open Space	30.55817	6%
Rivers and Creeks	226.468	43%
Roads	3.14122	1%
Total	525.6249	100%

Southeast direction of Tam 2 is Tam 3 which is similar in landscape and land use. This is an agricultural barangay with small communities forming a linear pattern of development. The barangay has one major road that leads to Tam MB, Tam 1 and Tam 2 which eventually leads to the national highway. Aside from dwelling units there are institutional uses too such as the Madrasah Pagalamatan and Pagalamatan Elementary School. Masjids area also present in the area. Like its neighbor, it is also connected to Tamontaka River which is connected to the stretch of Tamontaka River.

Map 5.4: Barangay Tamontaka3



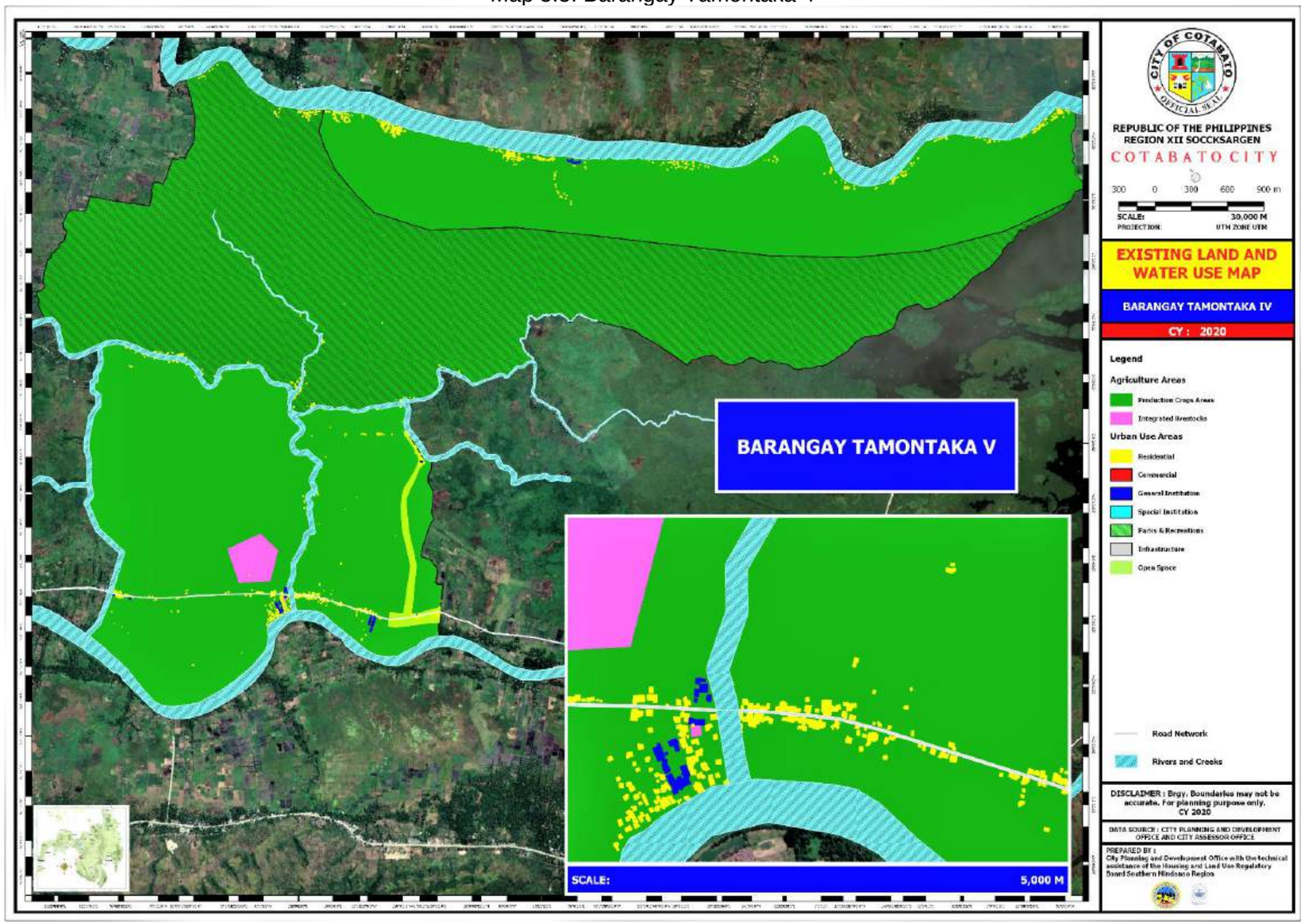
Barangay Tamontaka 4 (Tam 4)

Table 5.5 Existing Land Use of Barangay Tamontaka 4

Land Use	Existing (ha)	% to Total
Protection	637.91	34%
Agricultural	941.71	50%
Residential	7.347702	0%
General Institution	0.807556	0%
Parks & Recreation	0.042287	0%
Open Space	45.48185	2%
Rivers and Creeks	244.774	13%
Roads	2.40356	0%
Total	1880.477	100%

Further southeast is Tam 4. Like its neighbor this is also an agricultural barangay connected to a single road which leads to the national highway. Following the road leading further southeast passing Tam 5 is the entry and exit point to/from Municipality of Kabuntalan. It has patches of residential dwelling arrange in a linear type of development. Aside from the residential areas there are institutional uses such as Mokamadali Elementary School and Madrasah Najma Akire. Like the rest, it is also connected to the stretch of one of the major rivers of the city -Tamontaka River.

Map 5.5: Barangay Tamontaka 4



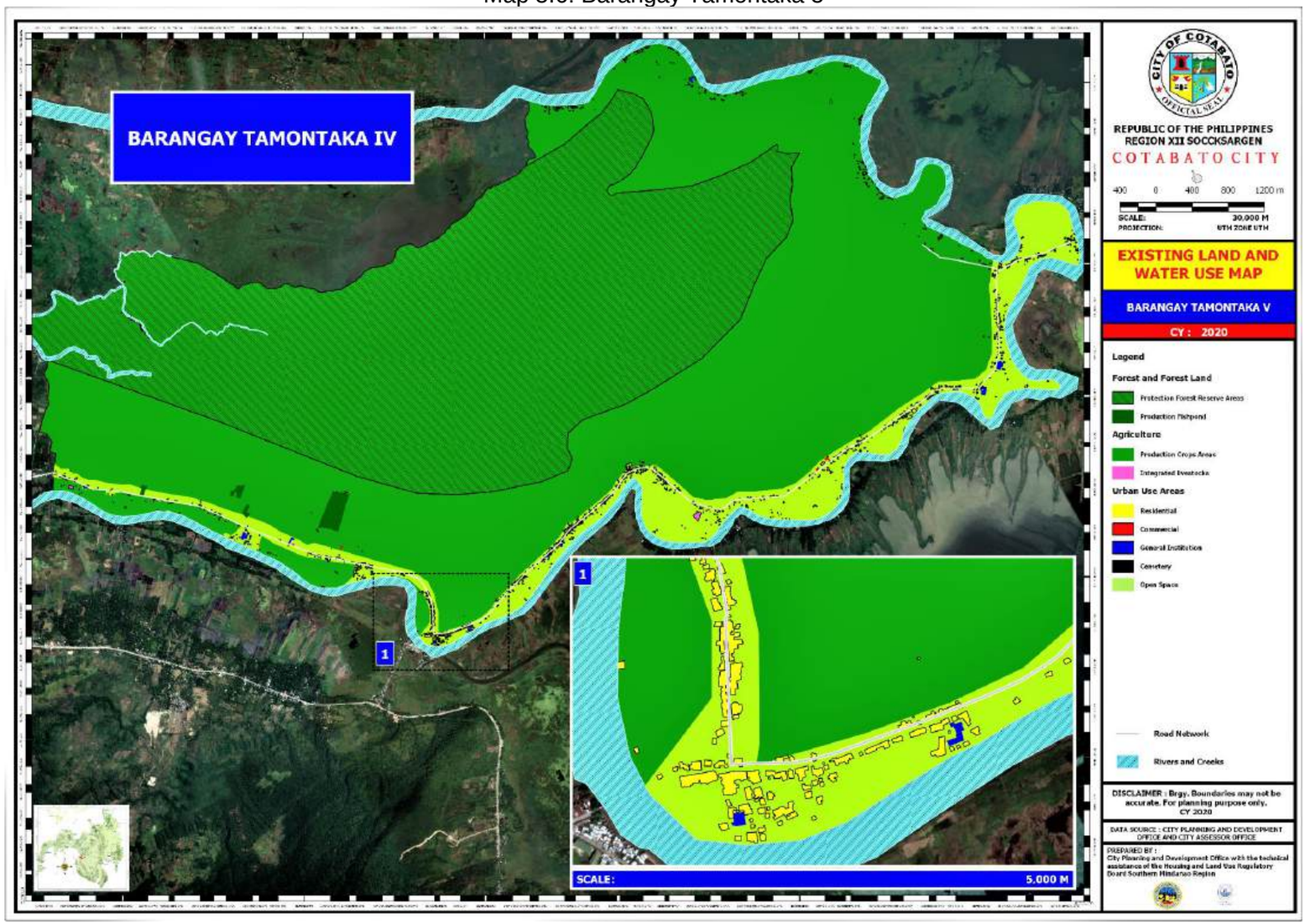
Barangay Tamontaka 5 (Tam 5)

Table 5.6 Existing Land Use of Barangay Tamontaka 5

Land Use	Existing (ha)	% to Total
Protection	2063.994	38%
Agricultural	2581.043	47%
Residential	15.82005	0%
Commercial	0.183778	0%
General Institution	1.564715	0%
Cemetery	0.006869	0%
Open Space	47.50992	1%
Rivers and Creeks	769.878	14%
Roads	14.90356	0%
Total	5494.903	100%

Tam 5, the fringiest barangay in the southeast portion of the city, is also an agricultural barangay. This is the entry and exit point to or from the Municipality of Kabuntalan. Patches of small communities are formed along the single road. Aside from these communities there are masjids and madrasahs in the area. Remote as it is, there are institutional uses that addresses the learning needs of children in the area, such as Cot City National High School (CCNHS) Annex, CCNHS Diocolano Site Senior High School, Diocolano Elementary School, Warehouses/Storage buildings are also present in the area. This barangay is connected as well to Tamontaka River.

Map 5.6: Barangay Tamontaka 5



1.8 Comparative Advantages and Competitive Edge

Cotabato City enfolded by two main rivers, the Rio Grande de Mindanao and Rio Grande de Tamontaka, is located in the northwestern of Mindanao flanked by Illana Bay which is part of the Moro Gulf to the west, the Municipalities of Sultan Kudarat to the north, Datu Odin Sinsuat to the south and Municipality of Kabuntalan to the east. Time and time again, an awardee of "Most Competitive City" in the categories of Economic Dynamism, Government Efficiency, Infrastructure, and Resiliency, in the region or Mindanao as well as nationwide is a manifestation that it is a leading institutional, financial and service center in the region and other urban centers surrounding it. The city is also the center for public health services due to the presence of Cotabato Regional Medical Center (CRMC), which specializes in many areas of health care.

The geo-political uniqueness of the city stands as its strength among others. It is an independent component city of Maguindanao Province. As of this writing, it is not yet part of the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) but is the Urban Center of the same. It makes the ingress and egress of adjacent provinces of Maguindanao and Sultan Kudarat. The city has vital transport links with Davao City and General Santos City having adequate facilities and inter-provincial bus lines and public utility vans as alternate public utility transport.

The Port of Polloc on the other hand, which has a linear distance of 15 kilometers from the city, more or less, possesses a birthing facility for international cargo, and large vessel. Its current international sea routes are Vietnam with Cement as cargoes, Hongkong and Indonesia for corn. Inter-island routes are Manila-Cebu-Zamboanga-Cotabato. Ships from the port, on occasion, has routes to Sulu and Tawi-Tawi carrying construction materials. Its anchorage is well protected. Being located in a cove.

Awang Airport sometimes referred to as "Cotabato Airport" in the Maguindanao Province is located approximately 8 kilometers from the city. It serves Cotabato City and Maguindanao. It is classified by the Civil Aviation Authority of the Philippines as Class 1 principal (major domestic) airport. Philippine Airlines and Cebu Pacific are carriers, among others, operating to and from the airport. They connect Cotabato with Manila, Cebu and Zamboanga.

1.8.1 Functional Role of The City

Development trends evolve around the city due to its strategic position and being a center of finance, trade, commerce, institutions, and industry. It continues to play a significant role in the development of Maguindanao, and the former Autonomous Region in Muslim Mindanao has now evolved into the Bangsamoro Autonomous Region in Muslim Mindanao, commonly known as "BARMM." Municipalities surrounding the city are rice- and corn-producing areas. Banana, coconut, rubber, vegetables, coffee, mongo, root crops, beans, peanuts, cassava, and some fruits come from some nearby municipalities of the region, such as Pigkawayan, Libungan, Midsayap, Kabacan, Aleosan, Pikit, Magpet, and Makilala, among others. Economic activities are further strengthened due to water transportation routes in Cotabato City. Aside from being a commercial, educational, financial, and service center, the city is considered the center of crab production, halal products, exotic weavings, and brasswares.

Owing to all these, the Mindanao Spatial Strategy Development Framework Plan (2011-2045) considers the city as the regional center, the SOCCSKSARGEN Regional Development Plan (2017-2022) as the primary urban center, the SOCCSKSARGEN Regional Physical Framework Plan (2004-2030) as the primary urban

center, the Maguindanao Provincial Development Physical Framework Plan (2014-2023) as the primary urban center, and the Bangsamoro Development Plan as the urban center of the region. The city, under BARMM, is its regional center for commercial, industrial, financial, educational, and government services.

1.8.2 Develpment Constraints

The city, large and wide as it is, is also confronted with constraints that hinder full development in some areas. Being a low-lying area in the region, the city becomes the catch basin and egress point of rainwater passing through Rio Grande de Mindanao and Tamontaka River. Due to heavy siltation deposited on the riverbed caused by deforestation upstream, a large part on the east of the city becomes a flood-prone area. Although engineering measures (e.g. dredging) had been initiated and flooding occurrence had rLaneduced, physical development on these flood-prone areas must provide mitigating measures against flood.

The west part of the city, facing Illana bay, is another constraint area as it is exposed to tsunami or storm surge. Although the city has not been hit by a tsunami or storm surge since 1976 it takes into account the fact that hazard maps from appropriate national government agency show coastal barangays and some inland barangays of the city are vulnerable to disastrous wave actions.

A large part of Poblacion 8 and 9 is also classified by DENR as timberland and not open to physical development. However, the City Assessor's Office disclosed that their records show these are already alienable and disposable land having been titled to private individuals/groups.

The development constraints with an attached map entails and shows the various obstacles to development in the physical sense like the subsidence of flooding risks. Such obstacles are best illustrated when a combination of different thematic maps are being sieved or overplayed. It specifically locates and delineates or identifies critical areas where environment is considered foremost factor of what particular projects to be undertaken.

Considered development constraints will provide planners in setting up options or mitigating measures in order to sustain development in the functional land uses and comply with the land use policies.

Identified land constraints shall be considered in the CLUP of a certain locality so that any development in said areas can be properly regulated. Thus, urban development shall be restricted or focused to strict land use regulations in all areas exposed to flooding and even drainage problems.

However, for areas already with existing development need to count on related mitigating measures that could address hazards brought by floods like cleaning of rivers/channels of debris, dredging, constructing firm dikes and other flood-control structures.

Most identified development constraint areas are those classified for protection and conservation and also that are listed as environmentally critical areas as contained in Proclamation No. 2145 such as areas frequently visited and/or hard hit by natural calamities like floods, areas with critical slopes, mangrove forest and including areas as even local historical sites and large tract of marshland where still many are depending their various means of livelihood there.

Physical Constraints

a. Mangrove Areas

On the western part of the city lies the mangrove stand covering an area of 408.64 has or 2.31% of the total area. Mangrove is known to provide nursery grounds for fish, crustaceans and millusk especially those located along tidal mudflats. Inland mangroves provide protection to communities from storm surges, waves, tidal currents and typhoons. It is also an excellent site as recreational grounds for bird watching and observation of other wildlife such as egrets which is still present in the coastal area.

Mangrove is a good source of wood and timber and nipa shingles for housing materials, firewood and charcoal. This makes mangroves susceptible to human exploits. Already the rapid population growth has exerted too much pressure on mangroves. The agricultural sector's rapid expansion including settlement and conversion to fishponds has reduced the mangrove to a pitiful state. There are eight (8) species of mangrove existing at the coastal barangays of Kalanganan whose local names are the following: kabadak-badak, nipa, pararan, bakao, kulasi, malasaging, api-api and pagatpat. At present, there are still report that mangroves are being cut for commercial purposes. Policies must be passed to prevent further degradation of the remaining mangroves.

b. Forest

The only considered forest in the city is also located on a critical slope which by itself limits development. Timako hill where the said forest is located covers an area of 148 has and located beside the coast like a sentinel watching over the sea of Illana Bay. Behind its back is the mangrove and fishpond areas. Although no significant deforestation has been reported on that area even now, it has to be protected and development has to go around it. The 40% -50% slope rules out development even for agriculture production. As the slope increases the less it can support agricultural production. The steeper the slope the more it becomes costlier to manage any form of development.

c. Marshland

Barangay Tamontaka 4 and Tamontaka 5 located at the southeastern part of the city are among the lowest areas of the city. Except for perennial crops, much of these areas are undeveloped due to various reason such as absence of circulation or access road leading to it. Another cause is that the area is waterlogged especially during long period of precipitation. The reason is that the soil characteristic of Barangay Tamontaka 4 and Tamontala 5 is such that it could retain water for a long period because its soil geology.

The soil classification of these area is Tamontaka clay which has a high water holding capacity, thus, remains waterlogged after precipitation while its surrounding area is free of saturation. However, during dry season the area remains dry and, in some cases vegetated by farmers.

Expansion or development in this area is not easy due to reasons mentioned above, unless prudent planning is taken into account.

The total area of the marshland is 3,300.62 has. or occupying 18.76% of the city.

d. Flood Hazard Areas

About half of the city's total land area is considered to be below sea level and therefore flood prone whether due to tidal intrusion from sea water or heavy precipitation from within or from upstream. The areas of Barangays Poblacion 8 and 9, Barangays Tamontaka 1, 2, 3, 4 and 5 are inundated whenever heavy rainfall occurs persisting for a considerable number of days. This is further aggravated as the city major river the Rio Grande de Mindanao is heavily silted so much so that the capacity of the river to contain the flow is greatly diminished resulting sometimes to overspilling of water to low leveled barangays of the city. The city is at the receiving end of what is considered the biggest river basin in Mindanao the Cotabato-Agusan River Basin.

However, the government has put efforts to improve the situation. Periodic dredging of silt from Rio Grande de Mindanao has greatly improved the situation.

Table 13 Development Constraint Areas

LAND/WATER USE	AREA (HAS)	% TO TOTAL LAND AREA
Mangrove area	408.64	2.31
Forest	148.00	0.8
Marshland	3,300.62	18.76
Flood hazard areas (High Risk only)	9,643.09	54.79

Source: CPDO; CMO-Agri Div.

CHAPTER II - THE COMPREHENSIVE LAND USE PLAN

2.1 SWOT ANALYSIS MATRIX

SWOT (strengths, weaknesses, opportunities, and threats) analysis is a framework used to evaluate an LGU or Company competitive position/ potentials and to develop strategic planning. SWOT analysis assesses internal and external factors, as well as current and future potential. It is designed to facilitate a realistic, fact-based, data-driven look at the strengths and weaknesses of an LGU, initiatives, or within its locality.

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
1. Presence of egrets/migratory birds at Kalanganan 2. Rich Biodiversity of Timako Hill 3. Large area of buildable lands, open spaces, and playgrounds 4. Approval of Septage Treatment Plan facilities 5. Establishment of 67 Materials Recovery Facilities 6. Presence of mangrove species along foreshore area 7. Preserved foreshore area 8. Presence of reliable power service provider (COLIGHT), fuel refilling station, LPG dealers and retailers; and 9. Presence of street lighting system that provide public safety and comfortable movement of road/street users.	1. No Sanitary landfill 2. Limited drainage system capacity 3. High migration rate 4. High land development cost 5. Heavily silted river 6. Narrow roads 7. Poor condition of some roads 8. Traffic congestion/problems 9. Most areas are flood prone	1. Strong political will of the Local Chief Executive/Sanguniang Panglungsod on implementing development plans 2. Reliable power (Colight) and water (MCWD) supply 3. Achieving Zero out-of-school youth last 2018 4. Presence of sizeble number of commercial, government and other financial institutions 5. Committed and qualified public servants serving the public 6. Harmonious relationship between the executive and the legislative branch 7. Improved peace and order condition (adjudged as the 2nd Safest City in the Philippines in 2017 8. Multi-awarded Local Government Unit (recipient of several national awards and citations)	1. Located below sea level; low-lying barangays are flood prone 2. Presence of possible violent extremism/terrorism in neighboring municipalities and other social security related threats (gangsterism, drug related crimes) 3. Catchment area of Mindanao River Basin 4. Venue of Conflicts (Rido) for people from neighbor municipalities 5. Presence of Liquefaction in some areas of the City.

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
		1. Resilient and vigilant community (Active Community Paticipation) 2. High literacy rate 3. Hub of commercial and social services in Central Mindanao 4. Operation of "AA" Mechanized Halal and Hog Slaughterhouses 5. Updated Development Plans 6. Implementation of CBMS 7. Available Area for open spaces and playgrounds 8. Strong linkages w/ NLAs and CSOs 9. Proposed Construction of Airport and Seaport	
SO STRATEGIES	**WO STRATEGIES**	**ST STRATEGIES**	**WT STATEGIES**
1. Implementation of Greening Program 2. Construction of Septage Treatment Facility 3. Preservation of Mangrove species 4. Development and Implementation of FORESHORE Management and Development Plan and FLUP, City Disaster Risk and Management Plan, and Solid Waste Management Plan 5. Updating and Implementation of Tourism Development Plan 6. Updating Community-Based Monitoring System	1. Establishment of Central MRF w/ Pyroclave and conveyor 2. Formulation of Master Drainage Plan (Proposed) 3. More Job Opportunities due to vibrant economy 4. Utilize silt in rivers as filling materials for land development 5. Capitalize on the strong linkages w/ DPWH in dredging activities 6. Opening of barangay roads 7. Update Transport and Traffic Management Plan 8. Repairs and Rehabilitation of dilapidated City Roads Capitalize the support of NLAs (DBM, TRIPSI, DOT, DPWH, DTI) on road improvement	1. Strict implementation of Ronda Patrol and Discipline Hours for Minors 2. Close coordination with PNP, AFP, BADAC, and PDEA 3. Active and responsive PESO Programs 4. Scholarship Programs 5. Anti-Drug Campaign 6. Job Opportunities for Youth especially Out-of-School Youth 7. Creation and Operation of Public Safety Office 8. Establishment of Operation Center for Disaster and Crime Response 9. City-wide Computerization Program	1. Strengthening the Barangay Active Drug Action Council (BADAC), Barangay Auxiliary Force 2. Close coordination with the PNP, AFP, PDEA, etc. 3. Implementation of City Shelter Plan 4. Implementation of Peace and Order Plan 5. Responsive DRRM Office

SO STRATEGIES			
7. Identification of new resettlement and development areas 8. Development of Special Economic Zone 9. Proposed Center of Halal Hub of the Country 10. the Trading Center of Greater Cotabato 11. Establishment of Children's Park			

2.2. COTABATO CITY VISION:

A SMART CITY WITH GOD-FEARING, ENLIGHTENED, DIVERSE PEOPLE LIVING IN A PEACEFUL, SECURE, AND RESILIENT COMMUNITY WITH PROGRESSIVE ECONOMY AND GOOD GOVERNANCE

The city's vision was developed and validated through the Vision Reality Gap Assessment (VRGA) tool, presented to the City Development Council, and approved in October 2020. Analysis where each of the adjective words describes the many salient characteristics and indicators that are aligned with the regional priority development agenda of the Bangsamoro Autonomous Region in Muslim Mindanao:

1. A **BETTER** and improved **SMART CITY** shall be realized once digital infrastructure and e-governance are in place, with the availability and accessibility of digitized government functionalities and stronger data privacy coupled with energy security resulting in proper resource investment and job generation;

2. A **RESPONSIVE** and **RESILIENT COMMUNITY** where investment in transportation, communication, and other strategic infrastructure is prioritized to ensure better connectivity and economic growth; implementing responsive policies and programs with a holistic approach to mitigate the effects of climate change, making the city a disaster resilience and climate-change pro-adaptation;

3. **GOD-FEARING, ENLIGHTENED,** and **DIVERSE PEOPLE** promoting our Bangsamoro region's rich culture, heritage, history, and identity through meaningful engagements where there is unity in diversity;

4. Living in a **PEACEFUL, JUST,** and **SECURE COMMUNITY** where social protection and universal healthcare are enjoyed by its constituents while providing access to quality and holistic education, making it a complementary arm of BARMM that promotes and sustains the dividend of peace in the entire region and the country;

5. **PROGRESSIVE ECONOMY,** where revenue generation and an economic comparative advantage approach are encouraged to materialize our economic potentials in natural resources, halal industry, ecotourism, and others that would generate revenues and spur development in the city and nearby municipalities in the region; and

6. **GOOD GOVERNANCE** is geared towards a stronger BARMM bureaucracy reflecting transparency and accountability based on CSC policies, rules and regulations, with better public financial management adherence to the values and fundamentals of **MORAL GOVERNANCE**.

2.3 MISSION:

TO MOBILIZE A UNITED AND DISCIPLINED COMMUNITY TO PRACTICE UTMOST VIGILANCE IN PROTECTING HUMANITY IN A SAFE ENVIRONMENT, SOUND TECHNOLOGY AND SYSTEMATIC GOVERNMENT TOWARDS PROGRESSIVE DEVELOPMENT AND ECONOMIC ACTIVITIES.

2.4 VISION REALITY GAP (2020-2028)

DESCRIPTOR	SUCCESS INDICATOR	PARAMETERS	PRESENT CONDITIONS	DESIRED CONDITIONS	GAP
SMART CITY	With enhanced quality and performance on services such as energy, transportation, and utilities, and information technology for efficient delivery of basic urban services in order to reduce resource consumption, wastage, and overall costs.	Capacity of the following Energy provider Water provider	 27,846 KW 27,565 cu.m/day	 40,629 KW 48,502cu.m/day (MCWD projection up to 2026 only)	 12,783KW 20,937 cu.m/day or more
		Transportation Interconnectivity Concrete Gravel Asphalt (8.687km) Earth (7.9km)	 187.023km. 27.33km. - -	 200.523km. 13.50km. - -	 13.50km. 13.83km. - -
		Bridges National Local	 20 bridges 11 bridges	 40 bridges -	 9 bridges -
		Telecommunication Call Centers No. of Barangays covered by: Power/Energy Water Services	15 0 37 36	20 min. 1 0 37	5 1 0 1
		No. of public terminals Presence of Taxi Company like Alnor and Wow	6 satellite terminals (pvt.) 3 taxis	1 Integrated Public Terminal 3 taxis	1 IPT

DESCRIPTOR	SUCCESS INDICATOR	PARAMETERS	PRESENT CONDITIONS	DESIRED CONDITIONS	GAP
GOD FEARING/ ENLIGHTENED	Free-thinking, open-minded God loving, reliable honest, dependable respectful	No. of places of worship Mosques Churches Chapels No. of religious institutions and organizations (Madrasah, Religious Organization/Institution)	222 Masjid 35 Religions	Variable Variable	- -
DIVERSE PEOPLE	Multi-cultural	Cultural festivities observed (Fiesta, observation of Religious beliefs)	128 Ethnic Tribes	Variable	-
PEACEFUL	Peace loving, safe Vigilant, child friendly	Ave. monthly Crime rate	15.99%	0	15.99%
		Crime solution efficiency rate	56.922%	100%	43.08%
		Ronda patrol	Every night	Every night	0
		No. of cases of child in conflict with the law (CICL)	17	0	17
		No. of cases of violence against women (VAWC)	4	0	4
		No. of Police Stations	4	8	4
		No. of Fire Stations	2	8	6

DESCRIPTOR	SUCCESS INDICATOR	PARAMETERS	PRESENT CONDITIONS	DESIRED CONDITIONS	GAP
SECURE	Healthy, long life expectancy with quality and affordable primary-care services, adequate housing, quality education and safe and clean environment	HEALTH – Affordable Health Care-Cost	80% coverage of Phihealth	100% coverage of Philhealth	20% gap in coverage
		Morbidity rates	860.85 per 100,000 population based on the top 10 morbidity	430.42 per 100,000 population or reduced by half	430 per 100,000 pop'n.
		Mortality (MMR/IMR) rates fetal deaths (2018) maternal deaths	 4 2	 0 0	 4 2
		HIV Cases in the City Knows their status Undergoing ART Suppressed HIV Presence of HIV facilities: Testing center Social hygiene clinic Counsellors Community based HIV screening HIV Primary Care Treatment Center	 23 (2018) 1 1 1 0	 1 1 1 1	 0 0 0 1
		Malnutrition rates underweight severely underweight wasted severely wasted overweight stunted severely stunted	 6% 1.9% 7.7% 4.0% 4.2% 12.8% 6.2%	All forms of malnutrition should be under 5%	 1% - 2.7% - - 7.8% 1.2%

DESCRIPTOR	SUCCESS INDICATOR	PARAMETERS	PRESENT CONDITIONS	DESIRED CONDITIONS	GAP
SECURE	Healthy, long life expectancy with quality and affordable primary-care services, adequate housing, quality education and safe and clean environment	Immunization rate Fully Immunized Child (FIC) mother	95%	37.6%	57.4%
		Barangay Health Station (BHS) - Ratio to population	40 BHS (1:7,875)	63 BHS (1:5,000)	23 BHS
		Ratio of Barangay Health Station to population	1:8,004	1:5,000	3,004
		Human Resources for Health (HRH) to Population Ratio Doctors Nurses (including DOH deployed nurses) Midwives (including DOH deployed midwives)	 1:78,991 (4) 1:7,021 (45) 1:6,869 (46)	 1:20,000 (16) 1:-10,001 (32) 1:5,000 (63)	 12 - 17
		No. of hospital bed CRMC ND Hospital & School of Midwifery Cotabato Medical Specialist Cotabato Puericulture United Doctor's Hospital	 375 100 40 30 24	 Variable Variable Variable Variable Variable	 - - - - -
		Hospital Bed to Population Ratio	1:559	1:800	No gap
		Policeman to Population Ratio	1:710	1:500	210
		Firearms to Policemen Ratio	1:1	1:1	0

DESCRIPTOR	SUCCESS INDICATOR	PARAMETERS	PRESENT CONDITIONS	DESIRED CONDITIONS	GAP
SECURE	Healthy, long life expectancy with quality and affordable primary-care services, adequate housing, quality education and safe and clean environment	No. of Classrooms at Public Schools Elementary Junior High School Senior High School TOTAL	 139 204 281 624	 1,522	 898
		No. of Classrooms at Private Schools Elementary Junior High School Senior High School TOTAL	 882 373 5 1,260	 1,522	 -
		Elementary Classroom to Student Ratio	1:40	1:35	5
		High School Classroom to Student Ratio	1:40	1:40	No gap
		Drop-out Rate Elementary High School	 0.82% 0.91%	 0 0	 0.82% 0.91%
		Presence of Social Welfare Facilities: Day Care Center Women Crisis Center Social Development Center PSCB Bahay Pag-Asa Child Minding Center	 62 1 1 1 0 0	 1 1	Additional Day Care Centers to highly densed barangays 1 1
		Assisted Urban Poor Associations/other organizations			

DESCRIPTOR	SUCCESS INDICATOR	PARAMETERS	PRESENT CONDITIONS	DESIRED CONDITIONS	GAP
ENVIRONMENT	Sustainable Clean and Green	Sanitary Landfill Greening Activities Riverbank Protection Activities SWM (No. of MRF Facilities) Barangay Schools	0 6 in 2 years 5 67 35 32	Shared landfill with neighboring LGU 4/year 15 69 37 32	 1 10 2 2 No gap
RESILIENT COMMUNITY	Disaster preparedness Capacity to respond	No. of trainings conducted	10	25	15
		Approved DRRM Plan	1	1	0
		Early warning system in place	1	37	36
		Adequate equipment for respond during disaster	30	70	40
	Reliable DRRM Office	Highly trained personnel ALERT CERT	26 11 10	50 25 25	24 14 15
PROGRESSIVE ECONOMY	Local Finance	City's Income (2018) Expenditure (2018)	 1,048,963,072.56 902,122,718.86	 1,153,859,379.81 Maintain or lessen	 At least 10% increase
	Halal Hub	Mechanized Halal Slaughterhouse	1 "AA"	1 "AAA"	1 notch category
		Presence of Halal Certifying Board	1	1	No gap
		Presence of DOST Halal Laboratory	1	1	No gap
		Halal accredited restaurants and establishments	17	50	33

DESCRIPTOR	SUCCESS INDICATOR	PARAMETERS	PRESENT CONDITIONS	DESIRED CONDITIONS	GAP
PROGRESSIVE ECONOMY	Trade & Industry and Commerce	No. of investors applied & approved of business permits (2017)	4,693	6,000	1,307
		No. of banks and financial institutions (as of 2018) Banks Other Financial Institutions	 21 22	 Variable Variable	 - -
		Value of investment	7,425,078,763.44	Variable	
		Employment rate	73.3%	85%	11.7%
		Manpower (labor force)	12,516	13,767 (up by 10%)	1,251
		Number of SME'S, MSME's Micro Small-Medium	 1,603 1,102	 2,100 1,500	 497 398
		Existing Economic Enterprise	4	8	4
		Number of Businesses who registered their Business/Trade names with DTI (2018)	1,448	1,900	452
		Special Economic Zone	0	1	1
		Establishment of: Airport Seaport other allied facilities	 0 0 0	 1 1 2	 1 1 2

DESCRIPTOR	SUCCESS INDICATOR	PARAMETERS	PRESENT CONDITIONS	DESIRED CONDITIONS	GAP
PROGRESSIVE ECONOMY	Tourism	No. of tourists arrival recorded as of 2018	14,824	30,000	15,176
		Hotels/Pension	26	35	9
		Houses/Inns/Lodges- Hotels			
		Travel Agencies	25	30	5
		Restaurants/Convention Centers	40	50	10
	Agriculture	Annual volume of production per/hectare per type of crop/aquaculture/livestock			
		Agriculture			
		Rice	41,723.50 @ 50kls.bag	48,809.67 @ 50kls/bag	5%
		Corn	29,867 @ 50kls/bag	31,360.35 @ 50kls/bag	5%
		Banana	746,368 @ 32kls/bulig	783,686.4 @ 32kls/bulig	5%
		Coconut			
		- nuts	3,440,600 nuts	3,612.630 nuts	5%
		-copra	860,400 copra @ 50kls/bag	903,420 copra @ 50kls/bag	5%
		Fishery			
		Inland			
		Freshwater Aquaculture			
		Tilapia			3%
		Brakishwater Aquaculture			
		Bangus			
		Prawn	130,000 kls. @ 4-5 pcs/kilo	133,900 kls. @ 4-5 pcs/kilo	2%
		Crab	206,250 kls. @ 3-4 pcs/kilo	210,375 kls. @ 3-4 pcs/kilo	2%
		Marine			2%

DESCRIPTOR	SUCCESS INDICATOR	PARAMETERS	PRESENT CONDITIONS	DESIRED CONDITIONS	GAP
PROGRESSIVE ECONOMY	Agriculture	Municipal capture fisheries Commercial capture fisheries	55,000 kls. @ 12-13 pcs/kilo 41,000 kls. @ 3-4 pcs/kilo 50,400 kls. 24,000 kls.	56,100 kls. @ 10-12 pcs/kilo 41,820 kls. @ 3-4 pcs/kilo 52,500 kls. 25,200 kls.	5% 5%
		Number of Agri. Producers Adopting Mechanized Farming Technology	25%	30%	5%
		Number of support facilities for sustainable fishery production	0	2	2
GOOD GOVERNANCE	Outstanding executive and legislative performance	Awards received as LGU 2017-2019 (enumerate if necessary) 2017 National Finalist-Presidential Award for the Most Child Friendly Cities & Municipalities Regional Awardee-Seal of Child Friendly Local Governance SGLG Awardee The Safest City in Region XII Awardee	14 6	(Estimated) 28	50%

DESCRIPTOR	SUCCESS INDICATOR	PARAMETERS	PRESENT CONDITIONS	DESIRED CONDITIONS	GAP
GOOD GOVERNANCE	Outstanding executive and legislative performance	Top 2-Component City Category –Government Efficiency Top 10-Most Business-Friendly City 2018 Special Citation-2018 Search for the Most Business Friendly LGU Gawad Kalasag Award-Second Place 3rd Place-2018 National Competitive Index-Component City Category Mayor Cynthia's brainchild Ronda as Best Practice 2019 Special Citation-2019 Most Business Friendly LGU Award DOH RED Orchid Award Best Performing Peace and Order Council Most Outstanding Sangguniang Panlungsod	4 4		
		Plans formulated in consonance with national guidelines (2015-2019)	14	20	6

2.5 SECTORAL GOALS & OBJECTIVES:

2.5.1 Social Sector

OVER-ALL SECTORAL GOAL/S:

- **TO BE ABLE TO EFFICIENTLY AND EFFECTIVELY DELIVER BASIC SOCIAL SERVICES FOR THE CARE AND PROTECTION OF INDIVIDUALS, GROUPS, FAMILY AND COMMUNITIES**

SUB-SECTOR	GOALS	OBJECTIVES
Education	➢ To improve quality of learning and management ➢ To improve access to quality basic education ➢ To improve accountability, transparency and governance ➢ To increase the percentage of schools with 95% completers by grade level by 2030	➢ To attain 75% of learners will have proficiency level of at least 80% by 2030 ➢ To increase the % of schools with 95% completers by grade level by 2030 ➢ To attain at least 1% increase of Teachers having Distinguished level (Synthesizing) in all domains of Philippine Professional Standards for Teachers by 2030 ➢ To attain at least 10% increase of teachers with Trainor's Methodology/ Assessor's Certificate by 2030 ➢ To attain 30% increase in the number of schools with SBM Level 3 by 2030 ➢ To attain 85% for School Heads with at least 85% level of competencies by 2030 ➢ To attain at least 1% increase of SHS assessment venue having at least 90% readiness by 2030 ➢ To attain at least 1 SHS offering Agri-industrial education to be the site for eco-tourism from 0-9 by 2030 ➢ To increase the number of schools offering inclusive education to IP schools & to ALIVE implementing schools to strengthen socio-cultural education by 2030 ➢ To attain equitable distribution of generated resources from external partners by 2030 ➢ To attain Functional offices receiving a Customer Satisfaction Rating of at least 3.0

Health	➢ Delivery of Quality Health Services	➢ Implement the Universal Health Care ➢ Increase Access of Poor and Indigent Patient to Medical Facilities (Nutrition Center, Aids, Lab., Etc.)as well as Bemonc Services ➢ Provide Adequate Public/Community Health Centers, ➢ Intensified Disease Prevention And Control Of Rabies Victims, Tuberculosis, Sexually Transmitted Diseases, Malaria And Dengue; Rationalize Public Health Care Services Delivery System And Augment Public Health Personnel Base On The Standard Health Personnel To Population Ratio
Housing	➢ To reduce Housing Backlog brought about by population growth, double-ups and inmigration ➢ To provide suitable housing areas for settlement and relocation ➢ To provide affordable housing to deserving and qualified residents	➢ To provide adequate and acceptable dwelling units through low cost formal socialized housing ➢ To optimize residential use in identified residential areas by establishing residential density pattern that will produce desirable concentration of residences ➢ Provide low priced site for land developers and for purposes of land banking ➢ To provide areas for relocation and resettlement
Social Welfare	➢ Efficient and Effective Delivery of Social Welfare Services	*CHILDREN:* ➢ Cotabato City as a Child Friendly City ➢ Provide quality and effective social welfare services and adequate social welfare facilities
		FAMILY AND COMMUNITY: ➢ Adequate support, efficient and immediate assistance To VAWC victims and CAR
Social Welfare	➢ Efficient and Effective Delivery of Social Welfare Services	*SENIOR CITIZENS:* ➢ Empower Senior Citizens and keep them physically and mentally active
		SPECIAL SERVICES: ➢ Protect and empower the vulnerable sector and give efficient assistance to those who are in need

Protective Services	➢ Guarantee Maximum Protection, Safety, and Security of the City's Constituents ➢ Provide immediate and Quick Response During Emergencies and Calamities	➢ To achieve the most desirable level of peace and public safety through: - Effective and efficient delivery of protective services - Improve police capability to respond to crime situations - Sustain the RONDA patrol - Intensify police visibility - Establishment of additional police and fire stations - Intensify Special Civilian Armed Forces Geographical Units Auxiliary (SCAA) Operations, Task Force Kutawato - Sustain the safe and smooth flow of traffic - Establishment of "Eye in the Sky" - Improved social services in disaster and other risk situations as well as police capability in crime prevention and response - Deep-seated community involvement in climate change adaptation and fighting criminality - Increase the fire-fighting capability of the BFP in the city in order to prevent losses of life and property - Ensure the improvement of jail management and penology services towards zero escape and better rehabilitation of inmates and decreased incidence of reoffending inclusive of basic facilities.
Sports & Recreation	➢ Establish a progressive Sports Development Plan with a state of the Art City Sports Facility and all Barangays with Established Recreation Facilities	➢ Formulation of a Comprehensive Sports Development Plan ➢ Acquire a state of the Art City Sports and recreation Facilities ➢ Establish sports and recreation facilities in all barangays ➢ Create a City Sports Division/Office under the City Mayor's Office ➢ Establish at least 5 Children's Parks and playgrounds

INTEGRATED SOCIAL ANALYSIS		
Solid Waste	➢ Provide a Healthy environment, sustained the present and succeeding generations through reduction of waste generation and increase resource recovery	➢ Enforce the Solid Waste Management Program ➢ Establish, maintain, develop, promote cleanliness, and beautification of surroundings
Environment	➢ Conserve biological diversity across all forest and forestland (Biological Diversity) ➢ Maintain and enhance forest ecosystem's health and productivity (Forest Health Productivity) ➢ Sustain Forest Contribution to ecosystem services (Forest Product and Ecosystem Services) ➢ A healthy environment to sustain the present and succeeding generations through reduction of waste generation and increase resource recovery	➢ Retain existing forest covers and allocate new forests to provide ecological and economic benefits to people ➢ Maintain the ecological functions and integrity of forest by conserving biological diversity ➢ Promote sustainable forestry management through actively growing forests and trees ➢ To provide comprehensive conservation education campaign through innovative technology and pro-active policy communication on forest sustainability to stakeholders ➢ Comply with laws and policies of forest and forestland management ➢ Continually develop forestry educational materials, utilize new outreach mechanism, and capitalize on special events to communicate forestry information ➢ To enforce SWM program ➢ To establish, maintain, develop, promote cleanliness and beautification of surroundings ➢ To establish additional MRF and composting facility on schools, barangays and other stakeholders

2.5.2 Economic Sector

OVER-ALL SECTORAL GOAL/S:

- **TO ATTAIN A SUSTAINABLE AND VIGOROUS ECONOMIC CONDITION.**

OVER-ALL SECTORAL OBJECTIVE/S:

- By 2028, to achieve and sustain the resilience of agricultural and fishery communities
- To increase by 50% the employment opportunities for both skilled and unskilled workers with the establishment of a Special Economic Zone and Economic Enterprises;
- By 2028, shall be able to capitalize on the competitive and comparative advantages of the city, promoting public-private partnerships in investment prospects
- By 2028, to have a fully developed tourism industry.

SUB-SECTOR	GOALS	OBJECTIVES
Agriculture	➢ To broaden farmers and fisherfolks' access and participation on value chain development ➢ Increase resilience of agriculture fishery communities	➢ To strengthen research and development on agriculture and fishery ➢ To strengthen agricultural and fishery capacity to mitigate the effect of climate change and adaptation ➢ To update the Food Security Plan ➢ To enhance and sustain aquamarine industry ➢ Promote urban/vertical agriculture and agripreneur.
Forestry	➢ To conserve biological diversity in the City's forests ➢ To maintain and enhance forest ecosystem's health and productivity ➢ To sustain forest contribution to ecosystem services ➢ To encourage people's participation in forest management	➢ To retain or increase existing forest covers to provide ecological and economic benefits to the city ➢ To maintain the ecological functions and integrity of Timako Hill by conserving biological diversity ➢ To promote sustainable forestry management through actively planting trees ➢ To provide comprehensive conservation education campaign through innovative technology and proactive policy communication on forest sustainability to stakeholders ➢ To comply with the laws and policies of forest management ➢ To continually develop forestry educational materials, utilize new outreach mechanisms, and capitalize on special events to communicate forestry information.

Commerce and Trade	➢ To diversify the city's economic base through creation of a Special Economic Zone ➢ To become a major gateway in the BIMP-EAGA ➢ To become the trading center amongst the cities/municipalities in the region	➢ To establish a Special Economic Zone ➢ To establish Seaport and International Airport ➢ To increase air, sea and land linkages for greater interconnectivity and mobility of people and products ➢ For Cotabato City to become the primary urban center in the region ➢ To achieve sustainable growth for MSME's ➢ To enhance and sustain a business environment (BE) that promotes productivity ➢ To develop products and services for the global market ➢ To help in the expansion of e-commerce business as a way of reaching new markets
Industry	➢ To become economically progressive and advance industrial trade ➢ To establish Cotabato City as the country's Halal Hub	➢ To develop halal-certified products that are globally competitive ➢ To expose our MSMEs to the various innovations/advancements – research and development (R&D), science and technology (S&T) – available to them ➢ To be able to partner with Higher Education Institution (HEIs) in advancing the Halal Industry in the city ➢ To become a major player in the Halal Industry Development leading to international trade and investment
Tourism	➢ To put Cotabato City in the map of tourist destinations in the country	➢ To improve tourism facilities and destinations ➢ To establish riverine cruise ➢ To promote and support the preservation of all historical and tourism sites ➢ To be able to establish a tourism package to showcase the city

2.5.3 INFRASTRUCTURE SECTOR

OVER-ALL SECTORAL GOAL/S:

- **TO ESTABLISH AN EFFICIENT NETWORK OF INFRASTRUCTURE THAT PROVIDE BETTER CIRCULATION OF PEOPLE AND GOODS, SUPPORTED BY SERVICE ORIENTED FACILITIES WITH EFFECTIVE COMMUNICATION**

OVER-ALL SECTORAL OBJECTIVE/S:

- To improve circulation and access to production areas and utilities
- To improve the level of service at the business district
- To provide sufficient energy supply to residents and businesses
- To practice energy efficiency and conservation in all levels of public and private facilities
- To provide sufficient and safe potable water supply
- To establish an effective Telecommunication as a management function that closes the gap between individuals, businesses and services

SUB-SECTOR	GOALS	OBJECTIVES
Transportation	➢ Adequate, efficient, effective and well integrated infrastructure support ➢ Improve production, better circulation and movement, enhanced access to services and utilities ➢ To increase urban and rural network to meet the needs of the growing population ➢ Increased environment friendly vehicle plying the streets of Cotabato City	➢ To improve accessibility and linkage of production areas, settlement areas and protected areas ➢ To improve existing roads, and bridges condition ➢ To enhance circulation and movement of people and goods ➢ To improve traffic flow and management ➢ To improve traffic management (traffic flow, traffic density and traffic velocity) ➢ To support LTO and LTFRB on the promotion of electric vehicles and other pertinent laws including Clean Air Act of 1999
Power	➢ To ensure an ample, safe and reliable power supply to Cotabato Light customers	➢ To construct additional substation to prospective lots on Cotabato City ➢ To encourage residents a wise use of energy through efficiency and conservation
Water	➢ To be a highly efficient water utility rendering excellent service community	➢ To provide adequate, safe, and affordable water supply to all our concessionaires. ➢ To deliver efficient service and be responsible in promoting environmental conservation, rehabilitation, and sanitation
Communication	➢ To provide better telecommunication, infrastructure and services to help achieve a holistic development	➢ To upgrade communication services suited to needs of the customers ➢ To install more communication facilities/ towers to accommodate its growing demand

2.6 SCALOGRAM

2.6.1 Economic Sector

	ECONOMIC SECTOR																										
	COMMERCE											FINANCE						AGRICULTURE					ANIMAL HUSBANDRY				
BARANGAY	Sari Sari Stores	Warehouses	Lodging Houses/ Hotel/ Pension House	Hardwares	Groceries	Shopping Centers	Public Markets/ Talipapa	Supermarket	Appliance Stores	Drugstores	Funeral Parlor	Pawnshops	Banks and financial establishemnt	Money Remittance Centers	Lending Institutions	Credit Cooperative or Credit Union	Rural Banks	Food Production Area	Cold Storage	Demo Plots	Shared Service Facility	City Agriculture Office	Slaughterhouses and Cold Storage	Veterinary Clinics	Marketing and Transport Facilities	Vaccination Clinics	Halal Facilities
Bagua MB	0.00	5.00																									
Kalanganan MB	2.70																	6.60	33.33	33.33	50.00						
Poblacion MB	2.70	5.00	7.14	7.69	12.5		12.5	16.7				7.69		14.28													
Rosary Heights M	2.70	5.00	7.14	7.69		12.5				16.7						25.00							25.00				
Tamontaka MB	2.70	5.00	7.14	7.69			12.5					7.69						6.60					25.00		100.00		100.00
Bagua 1	2.70																	6.60									
Bagua 2	2.70	5.00																6.60									
Bagua 3	2.70	5.00		7.69																							
Kalanganan 1	2.70			7.69														6.60									
Kalanganan 2	2.70																	6.60					25.00				
Poblacion 1	2.70	5.00																									
Poblacion 2	2.70	5.00																									
Poblacion 3	2.70			7.69																			0				
Poblacion 4	2.70	5.00		7.69	12.5	12.5						7.69	14.28	14.28	20.00												
Poblacion 5	2.70	5.00	7.14	7.69	12.5	12.5		16.7	16.7	16.7		7.69	14.28	14.28	20.00	25.00											
Poblacion 6	2.70		7.14	7.69	12.5	12.5	12.5	16.7	16.7	16.7		7.69	14.28	14.28	20.00	25.00	100.00										
Poblacion 7	2.70	5.00																									
Poblacion 8	2.70																	6.60									
Poblacion 9	2.70																	6.60									
Rosary Heights 1	2.70	5.00																	33.33								
Rosary Heights 2	2.70	5.00	7.14			12.5						7.69	14.28		20.00												
Rosary Heights 3	2.70	5.00		7.69																							
Rosary Heights 4	2.70	5.00	7.14									7.69															
Rosary Heights 5	2.70	5.00										7.69						6.60		33.33							
Rosary Heights 6	2.70		7.14		12.5							7.69															
Rosary Heights 7	2.70	5.00	7.14	7.69	12.5	12.5	12.5	16.7	16.7	16.7		7.69	14.28	14.28	20.00												
Rosary Heights 8	2.70						12.5					7.69									50.00						
Rosary Heights 9	2.70	5.00	7.14	7.69	12.5	12.5	12.5	16.7	16.7	16.7	100.0	7.69	14.28	14.28				6.60									
Rosary Heights 1	2.70	5.00	7.14	7.69	12.5	12.5	12.5	16.7	16.7	16.7		7.69	14.28	14.28		25.00			33.33	33.33		100.00	25.00	50.00		100.00	
Rosary Heights 1	2.70	5.00	7.14				12.5		16.7																		
Rosary Heights 1	2.70	5.00	7.14																								
Rosary Heights 1	2.70	5.00	7.14																					50.00			
Tamontaka 1	2.70																	6.60									
Tamontaka 2	2.70																	6.60									
Tamontaka 3	2.70																	6.60									
Tamontaka 4	2.70																	6.60									
Tamontaka 5	2.70																	6.60									
	37	20	14	13	8	8	8	6	6	6	1	13	7	7	5	4	1	15	3	3	2	1	4	2	1	1	1
	100.00		100.00	100.00		100.00		100.00	100.00		100.00		100.00				100.00				100.00	100.00		100.00	100.00	100.00	100.00

2.6.2 Social Sector

| | SOCIAL SECTOR | | |

2.6.3 Infrastructure Sector

	INFRASTRUCTURE SECTOR															
	POWER AND WATER SUPPLY				COMMUNICATION SERVICES						TRANSPORTATION					
BARANGAY	Power Supply Connection	Piped Water Supply	Individual Generator	Communal Water Source	Hand Held Radio	Internet Café	Telephone Services	Cell sites	Print & Broadcast Media	Post Office	Roads	Bridges	Gasoline Station	Service Station	Bus Station	Pier
Bagua MB	2.70	2.77			2.7	3.44	3.5				2.70					
Kalanganan MB	2.70	2.77			2.7	0.00	3.5				2.70	8.33				
Poblacion MB	2.70	2.77			2.7	3.44	3.5				2.70	8.33				
Rosary Heights M	2.70	2.77	16.7		2.7	3.44	3.5	6.67			2.70		7.69	25.00		
Tamontaka MB	2.70	2.77			2.7	3.44	3.5	6.67			2.70	8.33	7.69			
Bagua 1	2.70	2.77			2.7	3.44	3.5	6.67			2.70		7.69			
Bagua 2	2.70	2.77			2.7	3.44	3.5				2.70					
Bagua 3	2.70	2.77			2.7	3.44	3.5				2.70	8.33				
Kalanganan 1	2.70			100.00	2.7						2.70					
Kalanganan 2	2.70	2.77			2.7						2.70	8.33				
Poblacion 1	2.70	2.77			2.7	3.44	3.5				2.70	8.33				
Poblacion 2	2.70	2.77			2.7	3.44	3.5				2.70					
Poblacion 3	2.70	2.77			2.7	3.44	3.5	6.67			2.70					
Poblacion 4	2.70	2.77			2.7	3.44	3.5				2.70		7.69			
Poblacion 5	2.70	2.77	16.7		2.7	3.44	3.5	6.67			2.70		7.69	25.00	33.33	
Poblacion 6	2.70	2.77	16.7		2.7	3.44	3.5			100.00	2.70		7.69			100.00
Poblacion 7	2.70	2.77			2.7	3.44	3.5				2.70					
Poblacion 8	2.70	2.77			2.7	3.44					2.70	8.33				
Poblacion 9	2.70	2.77			2.7						2.70	8.33				
Rosary Heights 1	2.70	2.77			2.7	3.44	3.5	6.67			2.70					
Rosary Heights 2	2.70	2.77			2.7	3.44	3.5	6.67	20.00		2.70					
Rosary Heights 3	2.70	2.77			2.7	3.44	3.5				2.70					
Rosary Heights 4	2.70	2.77			2.7	3.44	3.5		20.00		2.70		7.69	25.00		
Rosary Heights 5	2.70	2.77			2.7	3.44	3.5	6.67	20.00		2.70	8.33				
Rosary Heights 6	2.70	2.77			2.7	3.44	3.5				2.70		7.69			
Rosary Heights 7	2.70	2.77	16.7		2.7	3.44	3.5	6.67	20.00		2.70		7.69			
Rosary Heights 8	2.70	2.77			2.7	3.44	3.5	6.67			2.70					
Rosary Heights 9	2.70	2.77	16.7		2.7		3.5	6.67			2.70		7.69		33.33	
Rosary Heights 10	2.70	2.77	16.7		2.7	3.44	3.5	6.67	20.00		2.70	8.33	7.69		33.33	
Rosary Heights 11	2.70	2.77			2.7	3.44	3.5	6.67			2.70					
Rosary Heights 12	2.70	2.77			2.7	3.44	3.5	6.67			2.70	8.33	7.69			
Rosary Heights 13	2.70	2.77			2.7	3.44	3.5	6.67			2.70		7.69	25.00		
Tamontaka 1	2.70	2.77			2.7	3.44	3.5				2.70					
Tamontaka 2	2.70	2.77			2.7						2.70					
Tamontaka 3	2.70	2.77			2.7						2.70	8.33				
Tamontaka 4	2.70	2.77			2.7						2.70					
Tamontaka 5	2.70	2.77			2.7						2.70					
	37	36	6	1	37	29	28	15	5	1	37	12	13	4	3	1
		100.00	100.00	100.00	100.00	29.00				100.00				100.00	100.00	

2.7 SPATIAL STRATEGY

The previous land use plan had the city direct development towards the outer fringe in order to evolve its countryside. In the past years, development has focused on the urban center and has left the city unable to utilize much of its resources on the fringe. The city, extending from the coast of Illana Bay towards the southern part of Kabuntalan, is a potential area for development and expansion. There were five (5) growth nodes and three (3) growth stimuli identified in the preceding land use plan, namely: the coastal barangay of Kalanganan Mother, the coastal barangay of Kalanganan 2 (near the grand mosque), city-owned property at Doruelo Estate, and the uptown and downtown areas as both major growth centers. The growth stimuli are the proposed seaport, integrated terminal, and agri-industrial ecozone. To accomplish this, a central, nodal, and circumferential spatial strategy was adopted.

There are four (4) factors for the next planning period: (i) the area's development potential; (ii) the spatial growth trend; (iii) proposed development undertakings; (iv) and the overarching hazard exposure of the area. Departing from the old strategy, the **SPATIAL STRATEGY** of the city now will be a ***Concentric form*** of urban development that will emanate from downtown and uptown towards the city's inner fringe. The expansion area is safe from the extent of tsunamis and floods; hence, it is a concentric form of urban expansion. Both tsunamis and floods are hazards to the city from the west and east, respectively, leaving the center of the city as the safe area. On the east, the existing east diversion road will be elevated to act as a road (protection) dike that will serve as a barrier to floods coming from the east. On the west, there is a proposal to construct a road dike that would act as a tsunami barrier that may originate from the Moro Gulf. Barangays Kalanganan Mother, Kalanganan 1, and Kalanganan 2 will be the proposed (as of writing) areas to be traversed by the road dike, whose length will be facing the Illana Bay/Moro Gulf. On the east, Tamontaka 2, Poblacion 8, and Poblacion 9 will be the barangays traversed by the east diversion road dike. Proposed residential areas will extend up the inside part of these barriers.

Higher-intensity expansion and development will be redirected to the south towards the uptown area through land use and zoning. Barangays Rosary Heights 7, 9, and 10 will be an additional growth zone; thus, more commercial zones will be allocated in these barangays. The presence of the People's Palace, children's park, hospitals, malls, groceries, BARMM offices, and other government offices, utilities, and restaurants will serve as catalysts for development in that part of the city. Extending further south, the Tamontaka area along the national highway will also be zoned for other uses, such as residential, commercial, institutional, and agro-industrial, taking into account the required buffer for each of the land uses.

An area for proposed big-ticket projects will be allocated in the west and east parts of the city. Absent the development layout for each project, a Planned Unit Development would be the type of zoning in this area/s. Prior to the implementation of these projects, a master plan or layout will be required from the proponent. The plan must prudently take into account sensitive areas (e.g., mangroves, if any) and zone them the same as to their appropriate use.

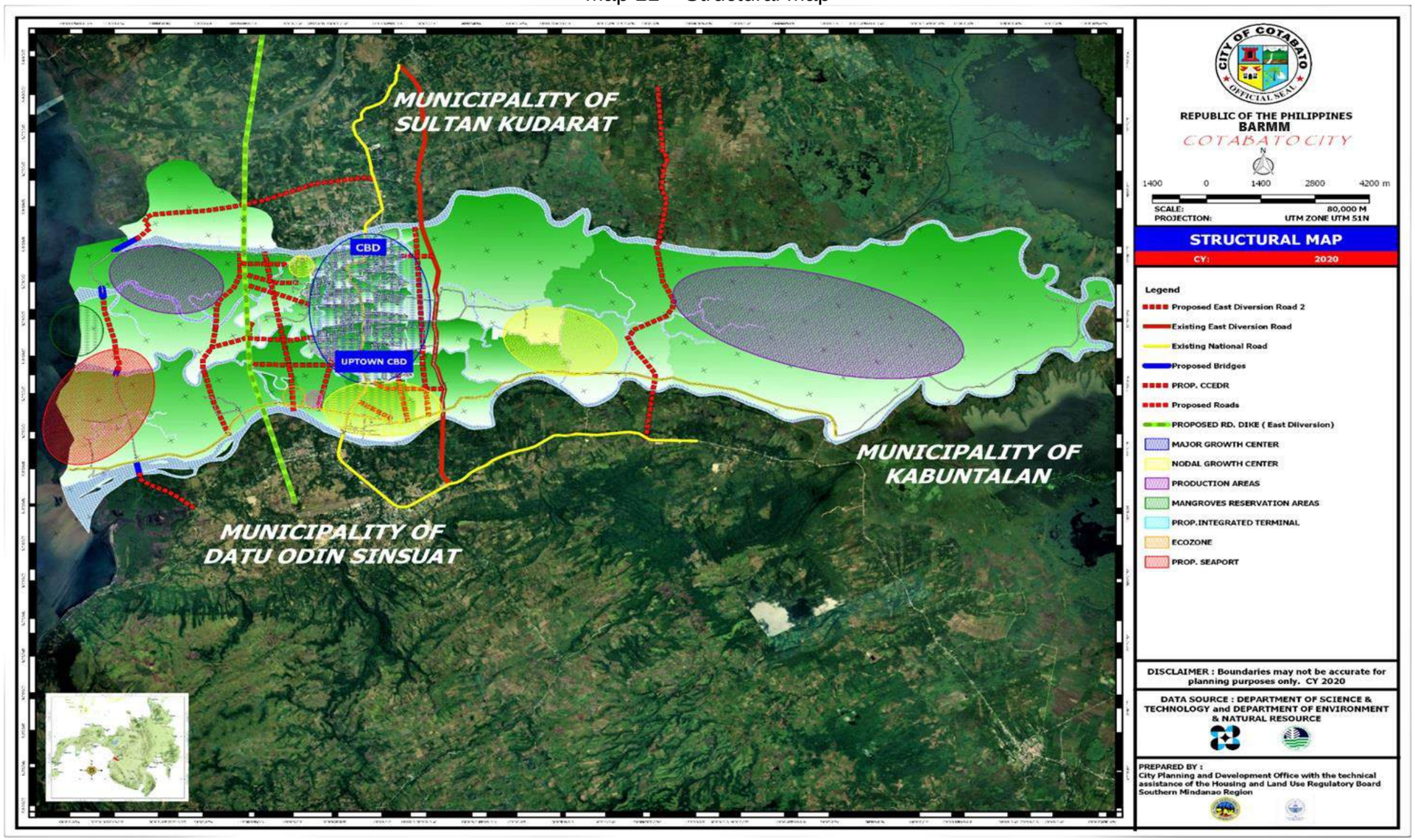
2.8 DEVELOPMENT CONCEPT AND STRUCTURE PLAN

For the next nine years, the city will continue to perform its functional role as the primary urban center of BARMM, as well as in several municipalities and provinces surrounding it. The city's economic performance and multiple awards are a testament to its functionality as a regional market and service center for the region. A review of the land use trend of the last ten (10) years shows that the city has gradually evolved into another major growth center in barangays Rosary Heights 7, 9, and 10, all in the uptown area. Commercial enterprises had developed in these barangays and along major roads, following a linear pattern. Some small-scale commercial businesses have also sprouted in other land uses, such as residential areas, co-existing and providing support services to these zones. To strengthen its functional role, the city purchased 50-hectare land intended for an economic zone where the public market and integrated transport terminal would be set up. The city would also pursue the proposed seaport, which would further complement its key role as the lead for financial, trade development, institutions, education, health, and others in the region. In 2019, for the first time, the city hits the 1 billion peso mark due to its robust economy. The "big ticket" investments as well as small and medium-scale businesses have also promoted the city to new heights.

Above the premise considered, the city would pursue **COMMERCIALIZATION** as its *Development Thrust*, especially for specialized services such as health care, banking and finance, business services, transportation, education, communication, and construction, among others. Prudent measures would be taken so as not to encourage the overmigration of workers from adjacent cities or municipalities, which have overburden the city's infrastructure.

To accomplish this, the city would use the **CONCENTRIC AND CIRCUMFERENTIAL** *Spatial Strategy*. Over time, the city plans to progress within the confines of a protected and safe environment. From the CBD and uptown CBD towards the outer fringe will be the target growth of urban development, where it will be free from identified hazards. Although growth cannot be entirely prevented in rural or peripheral areas due to their inherent character, purpose, or nature of development, such as seaports, airports, or agriculture, disaster prevention, mitigation, and response will be taken into account. These growth centers and the existing communities in the periphery shall be connected to the urban center through a circumferential road where urban services are provided. Growth centers and proposed development in the periphery will include a proposed seaport, an airport, tourism, and coastal protection. To accommodate the growth of urban function, strengthening the road network through "asset preservation" (rehabilitation of existing roads) and "ladder type of road network," which are seen to increase the capacity of city roads, would be pursued.

Map 11 – Structural Map



2.9 THE LAND USE PLAN

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2.10 PROPOSED LAND USE PER LAND USE CATEGORY

2.10.1 Residential Use

The expansion of residential area will be between the safe confines of the road dikes (proposed and existing) at the west and east part of the city. Those identified barangays for residential expansion are the eastern buildable part of Barangay Bagua 2, Barangay Tamontaka 2, just beside the East Diversion Road which will later be elevated to become a road dike and barrier to flood as well. A large part on the northern side of Barangay Tamontaka 1 will also be a site for residential expansion. Barangay Tamontaka Mother, east side of the Halal slaughterhouse of the City Government. Some identified residential zone in the previous CLUP were zoned back to its existing and appropriate use as it may not evolved to another use in the absence of access road and/or catalyst for expansion. A socialized housing site at Barangay Tamontaka 2 was also identified as future settlement of those who would qualify under the program. This is also for those who would be affected by government projects that have available funding and are about to be implemented.

2.10.2 Commercial Use

Commercial zone will be expanded so as to fulfill its role as Regional Center of the Greater Cotabato (JICA study-Urban *Infrastructure Development in Greater Cotabato City*). The City will also play the same role under the Mindanao Spatial Strategy/ Development Framework Plan 2011-2045 and the Primary Urban Center under the Socksargen Regional Physical Framework Plan 2004-2030 and the Maguindanao Provincial Development Physical Framework Plan o2014-2013. The up-town area of the city, Barangays Rosary Heights 7, Rosary Heights 9 and Rosary Heights 10, will be another area of expansion area for commercial use. Some part of the downtown area, Barangay Rosary Heights 2 will also be rezoned to commercial area so as to accommodate more trading services. Urban renewal type of development will also be allowed in already-existing commercial zones. Previously zoned commercial areas will be rezoned to a more flexible and high-density commercial zone such as General Commercial Zone to absorb more commercial uses. Prudent zoning will be taken into account so to protect as well the character and stability of other uses.

2.10.3 Industrial Use

Over the years the industrial zone had not evolved into the same. Most of the land uses that developed in the zone are residential and commercial (mostly warehouses) in character particularly at Barangay Poblacion 7. The presence of informal settlers in the area have negate the proposed expansion of industrial or other high intensity uses. The formerly known Metro Cotabato Regional Agro-Industrial Center located at Brgy Tamontaka Mother will be the proposed site of the Agro-Industrial/Industrial Center. At present it has been identified as an Ecozone area of Cotabato City.

2.10.4 General Institutional Use

Institutional uses are located, among other location, at Barangays Rosary Heights 7 and 10, Poblacion 5 and 6 and some are strewn intermittently at different parts of the city. It is expected to increase in the next planning years albeit the transfer of regional seat. This is if the BARMM offices will remain where

it is now. Other offices such as non-government organizations, people's organization and other civil society organization are anticipated to increase as had been in the previous years.

2.10.5 Special Institutional Use

There will be slight or no increase in the special institutional use. It has been the same for over the years. A large part of the city's special institutional use are military or PNP and its branches offices/camps. Apparently, all the needed offices/camp for the same have already been established. The slight increase, if any, will be on welfare homes, orphanage, home for the aged and training grounds. Any increase on this land uses will be minimal.

2.10.6 Parks and Recreation

Parks and recreation are essential for a balance and healthy community. Over the years the city government has endeavored to provide more parks and recreation aside from the city plaza which was recently remodeled to become a more wholesome space. Earliest renovated was the stage area of the city plaza making it more open and inviting, subsequently the Tantawan park and garden where Sultan Kudarat monument proudly stand, then the Rizal park at the City Plaza making it more wholesome with dancing fountain, children and fitness amenities, and finally the Children's Park conferred with bicycle lane, amphitheater site, zumba space, administration building, parking area, among others. Providing parks and recreation zone would continue over the following years especially on subdivisions where such space are walkable to the homeowners.

2.10.7 Tourism

Tourism sites in the city remain the same in terms of area. Some notable tourism sites in the city are Kutawato cave, a cave at the heart of the city, alleged to have a network of channels extending to the farthest south of the city particularly Tamontaka Church. It was said to be used by the Japanese force for the storage of guns and ammunition. Takumi Butai shrine. Takumi was the provincial commander of the Japanese force assigned in Cotabato. It was said that he was loved by the people and considers Cotabato his second home. He died during World War II and has requested before he died that his ashes be buried in Cotabato. Church of Immaculate Concepcion of Tamontaka or Tamontaka Church built along the Tamontaka river by the Jesuit priests in 1872. This first Christian church was declared a National Historic Landmark on July 19, 2004. On the far north of the city is Rio Grande de Mindanao where Shariff Kabunsuan, an Arab missionary landed and introduced Islam to the natives.

Timako Hill is proposed to be developed as an eco-tourism park supported with infrastructure facilities (admin building) and amenities (including foot trails and viewing decks) with less disturbance to its surrounding environment.

2.10.8 Cemeteries

Cemeteries at the city are Catholic Cemetery, Public Cemetery, Chinese and the Malagapas Cemtery. The first two are full to capacity while the third is exclusive to filipino-chinese in the city. The Malagapas cemetery was conceived and opened to accommodate those recently departed. However, there is a need to improve and beautify the area so as to make it more appealing to visit. In the following years no new cemetery sites would be added to the existing ones but

improvement may be had on Malagapas cemetery. As of writing, additional vacant prefab niches will be set up for those residents whose loved ones will be buried at Malagapas cemetery.

2.10.9 Infrastructure

Infrastructure Utilities in the City are continuing to expand and will be developed for the upcoming years. In the years to come, the road network will be expanded to a “ladderized” type to increase its capacity to cater heavy traffic volume for both in and out of the City. Cotabato City East Diversion Road was already established and serves its purpose which is to lessen the traffic congestion on the major roads. In addition, through JICA, there will be a proposed West Diversion Road “a dike road tsunami barrier that can mitigate the risk of the impact of hazards since the location of the proposed diversion is prone or exposed to various hazards. It also serves as an alternative access road to divert traffic passing or going to the central business district of the City.

In addition, Economic Infrastructure Utilities had been considered and studied. The Sangguniang Panlungsod of Cotabato City had already approved the Feasibility Study in establishing the New Public Market and Integrated Transport Terminal located at the Brgy. Tamontaka Mother’s “Economic Zone”. Envision to be a catalyst in that part of the city, will promote the continuing growth of the city’s economy. It can also boost the city’s business industry since it can attract more investors resulting in more job opportunities. In the next two years, a newly established Public Market will be ready to serve the people of Cotabato in producing/selling various goods. Further, an Integrated Transport Terminal (Public Utility Vehicles, Bus, Vans) will be capable of serving both North and Southbound routes of the City.

Infrastructure utilities for air and sea transport is undergoing investment study. In the next upcoming years, an established gateway airport/ seaport for greater Cotabato City will promote the development of agriculture, fisheries, forestry, trade, tourism, and other investment. It will also be an agent of infrastructure development nearby the airport and seaport. The proposed investment will be open to both domestic and international flag carriers.

The City will promote environmentally friendly infrastructure utilities in accordance with the clean air/water act. The City, through the private sector, has established a Bulk Water Supply due to insufficient water supply and bulk water demand. With this utility, it can now generate more and sufficient clean water, strengthen, and expand its water service capacity. Another environment-friendly infrastructure utility that the city will establish is the Septage Treatment Facility which collects the septage from every household and converts it to clean water and soil enhancer.

2.10.10 Open Space (Areas)

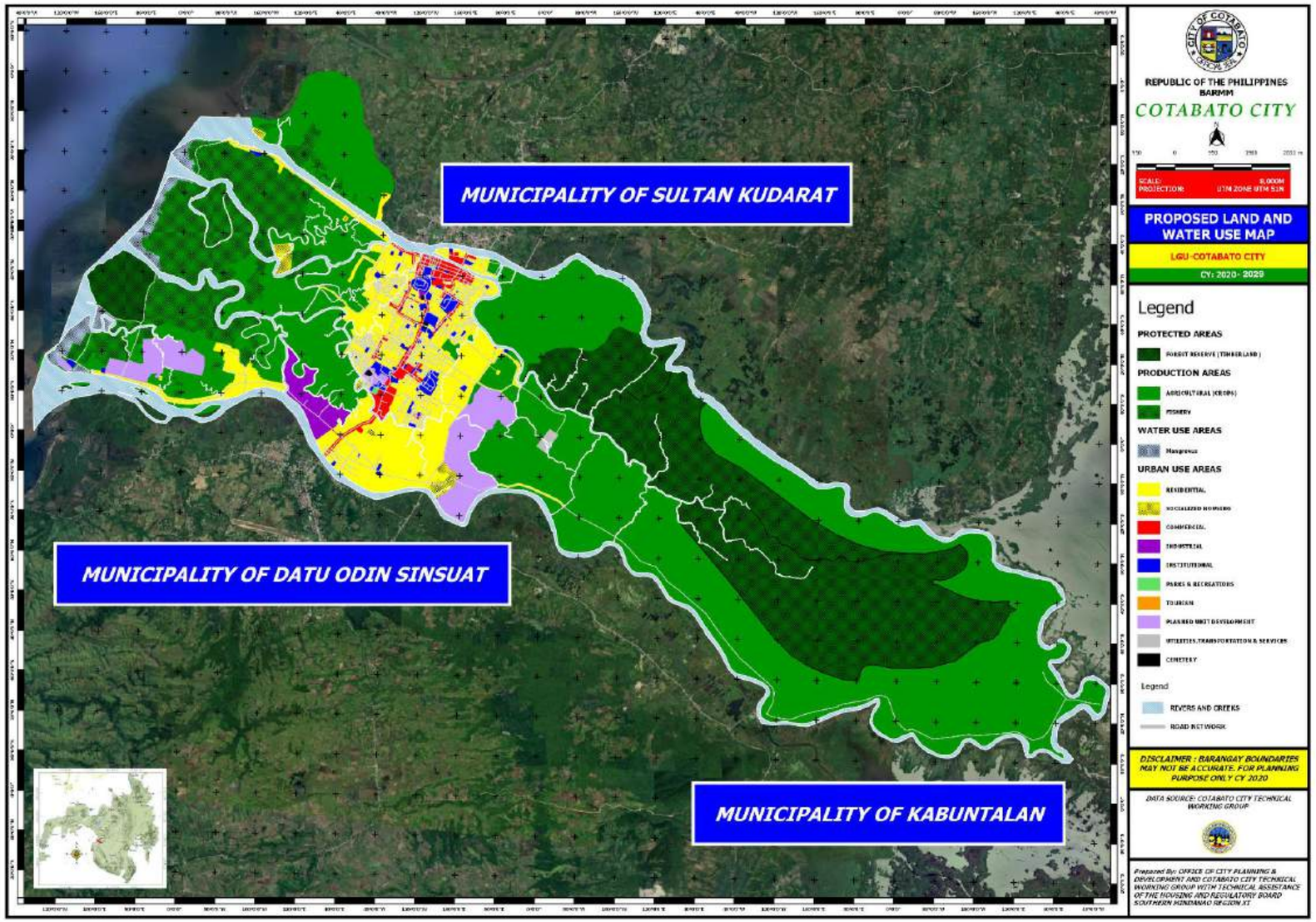
There are more areas in the City that have been identified and will be classified accordingly to its appropriate land use. Open spaces converted to other land use will be sufficient for large Infrastructure and other socio-economic development. Future expansion in these areas will regulate and provide room for economic growth while decongesting the present urban center.

2.11 Proposed and Existing Land Use

Proposed and Existing Land Use

LAND USE CATEGORIES	EXISTING LAND USE AREA (ha)	PROPOSED LAND USE AREA (ha)	INCREASED/(DECREASED)
Forest and Forest Land	3,448.025	3,172.40713	(275.617870)
Agriculture	8,620.938	7,564.55581	(1056.382190)
Fishery	1,528.98978	1,528.98978	0
Urban Use Areas			
Residential	540.0069	1,516.90161	976.89471
Commercial	56.20105	196.983316	140.782266
General Institution	48.67659	132.465671	83.789081
Special Institution	1.835885	1.835885	0
Parks & Recreations	2.938299	2.938299	0
Tourism	0.403299	0.403299	0
Cemetery	5.022299	6.41300918	1.39071018
Infrastructure	6.419523	13.8532075	7.43368446
Industrial	0	155.4064	155.4064
Open Space	578.1318	0	(578.1318)
Planned Unit Development	0	466.018	466.018
Roads	226.578295	260.095796	33.5175008
Water Uses			
Rivers and Creeks	2,413	2,413	0
Mangroves	121.91	166.732521	44.822521
Total	**17,599**	**17,599**	**0**

Proposed Land Use and Water Use Map



2.12 PROPOSED BARANGAY LAND USE

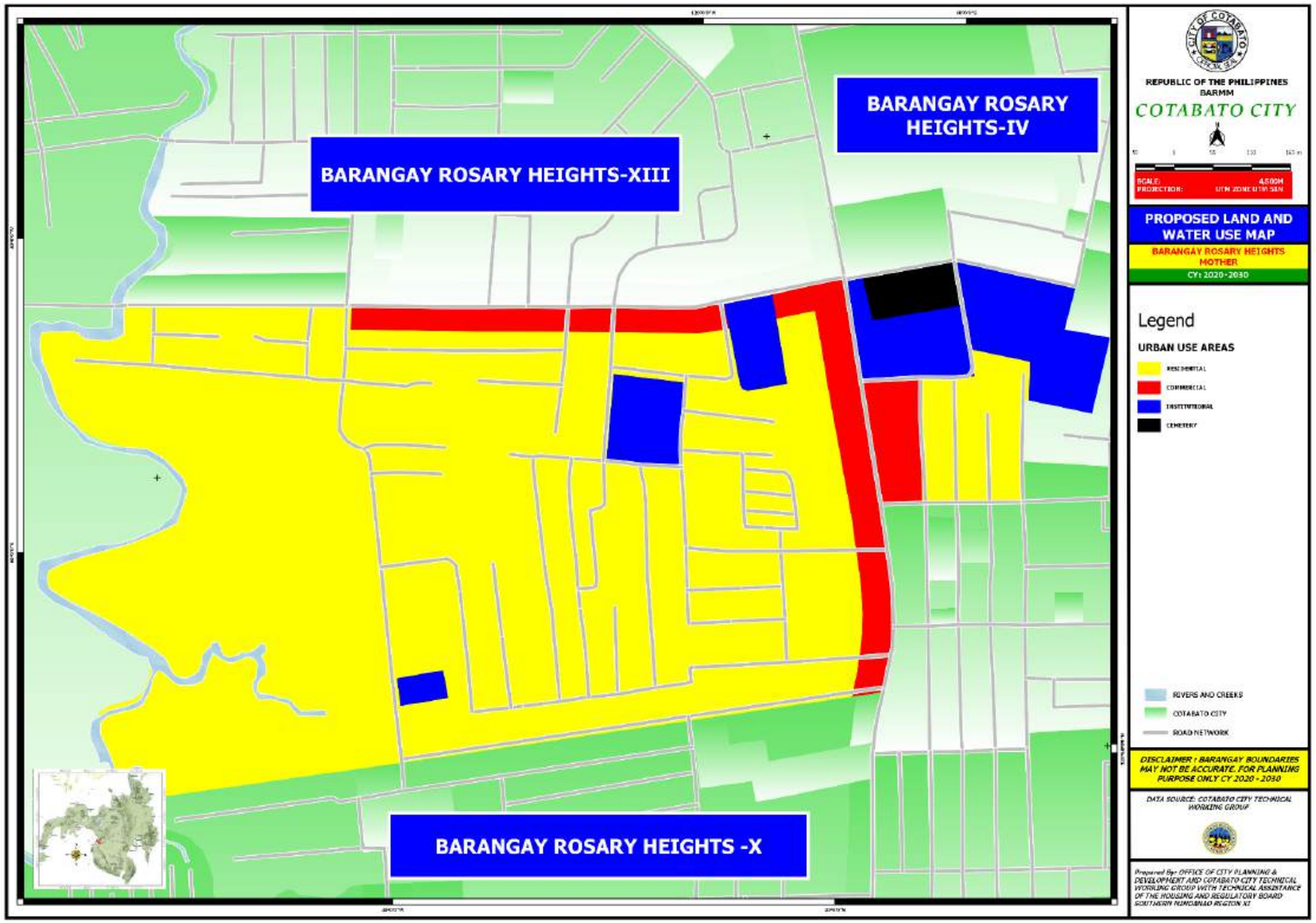
Barangay Rosary Heights MB (RHMB)

Table 1.4: Proposed Land Use of Barangay Rosary Heights Mother

Land Use	Proposed (ha)	% To Total
Cemetery	0.85	1%
Commercial	6.18	8%
Institutional	6.72	9%
Residential	54.49	70%
Rivers & Creeks	0.84	1%
Roads	8.36	11%
Total	**77.44**	**100%**

RHMB will continue to be a mixed land use mostly for residential uses. While it would be dominantly for residential, a linear strip will continue to be allocated along its major road, Sinsuat Avenue and Ramon Rabago Sr. Avenue. The commercial strip along Sinsuat Avenue will be deeper in width to accommodate trade and commerce not only in the barangay but for the city as well. Compatible land uses will be allowed, even filling stations, health care establishments, and other similar uses making it accessible through for residents. The commercial strip along Ramon Rabago Sr. Avenue's which is a collector road will also receive similar commercial and allowable institutional establishments. Institutional zone will still be allocated for the place of Worship-Rosary Heights parish Church to provide service to its parish members which extends to several barangays. Institutional zone will also be maintained for government facilities such as the Department of Public works and Highways and the Sero Central Elementary School both located as the eastern part of the barangay. A new institutional zone will be allocated at the southern part of the barangay for the existing city government facilities specifically for the Social Development Center which houses also the PWD Center, Women Crisis Center and Health Center. An already old-time cemetery will be zoned as such but burials will be discouraged as it is full in capacity. This will only be a place to visit by surviving family members and relatives. This facility will serve not only the barangay but the entire city residents. On the west part of the barangay are buildable lands suitable for expansion, thus, it will be zoned as residential for expansion purposes as long as parcels of farmland will not be affected otherwise government policies on the same will be observed.

Figure 1.1: Barangay Rosary Heights Mother



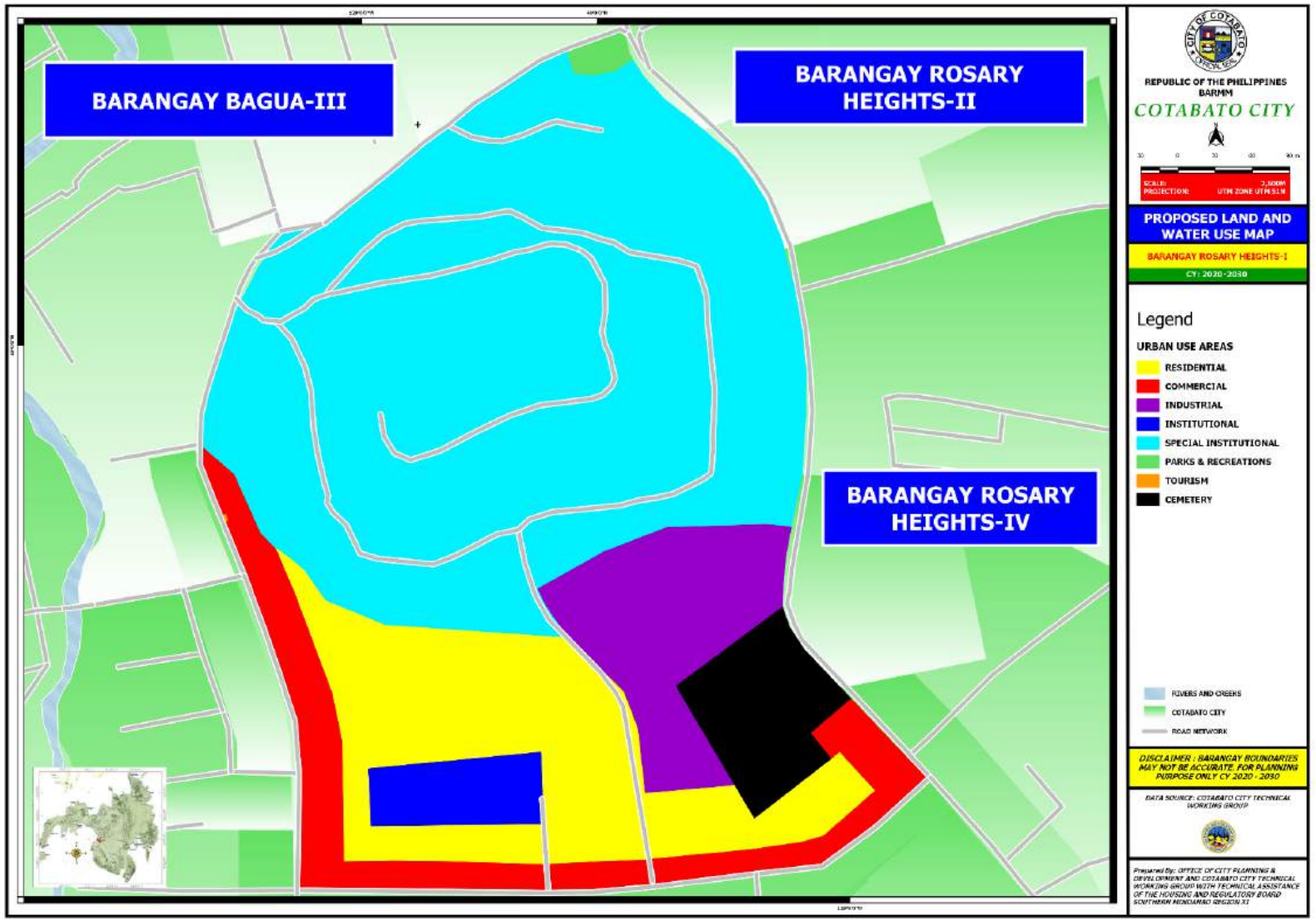
Rosary Heights 1 (Brgy Pedro Colina)

Table 1.2: Proposed Land Use of Barangay Rosary Heights 1

Land Use	Proposed (ha)	% To Total
Cemetery	1.26	4%
Commercial	2.83	10%
Industrial	2.31	8%
Special Institution	0.92	3%
Institutional	13.24	46%
Parks & Recreation	0.13	0%
Residential	4.61	16%
Tourism	0.0029	0%
Roads	3.68	13%
Total	**28.98**	**100%**

Having no much room for expansion, Brgy. Colina Hill will remain as the sites for most Institutional Zone for Government offices/facilities such as the Philippine National Police, Highway Patrol Group, House of Correction and Jail Management Office, Philippine Institute of Volcanology and Seismology, PC Hill Elementary School and other existing and proposed government institution. Residential zones will supplement the already existing land use. Due to its slope, most vacant or other open spaces will remain as open area as the same are not buildable zones. Only those buildable zones, although not substantial, will be zone as residential. The linear strip of Sousa Street from the national highway (Sinsuat Avenue) going west to Don Teodoro V. Juliano Avenue will be zone as Commercial zone. Towards the junction of Sousa Street towards the CBD in the north following the Don Teodoro v. Juliano Avenue will also be zone as a Commercial zone following a linear fashion. A small strip fronting the national highway from the Catholic Cemetery to the junction of Sousa Street will also be a Commercial Zone

Figure 1.2: Barangay Rosary Heights 1



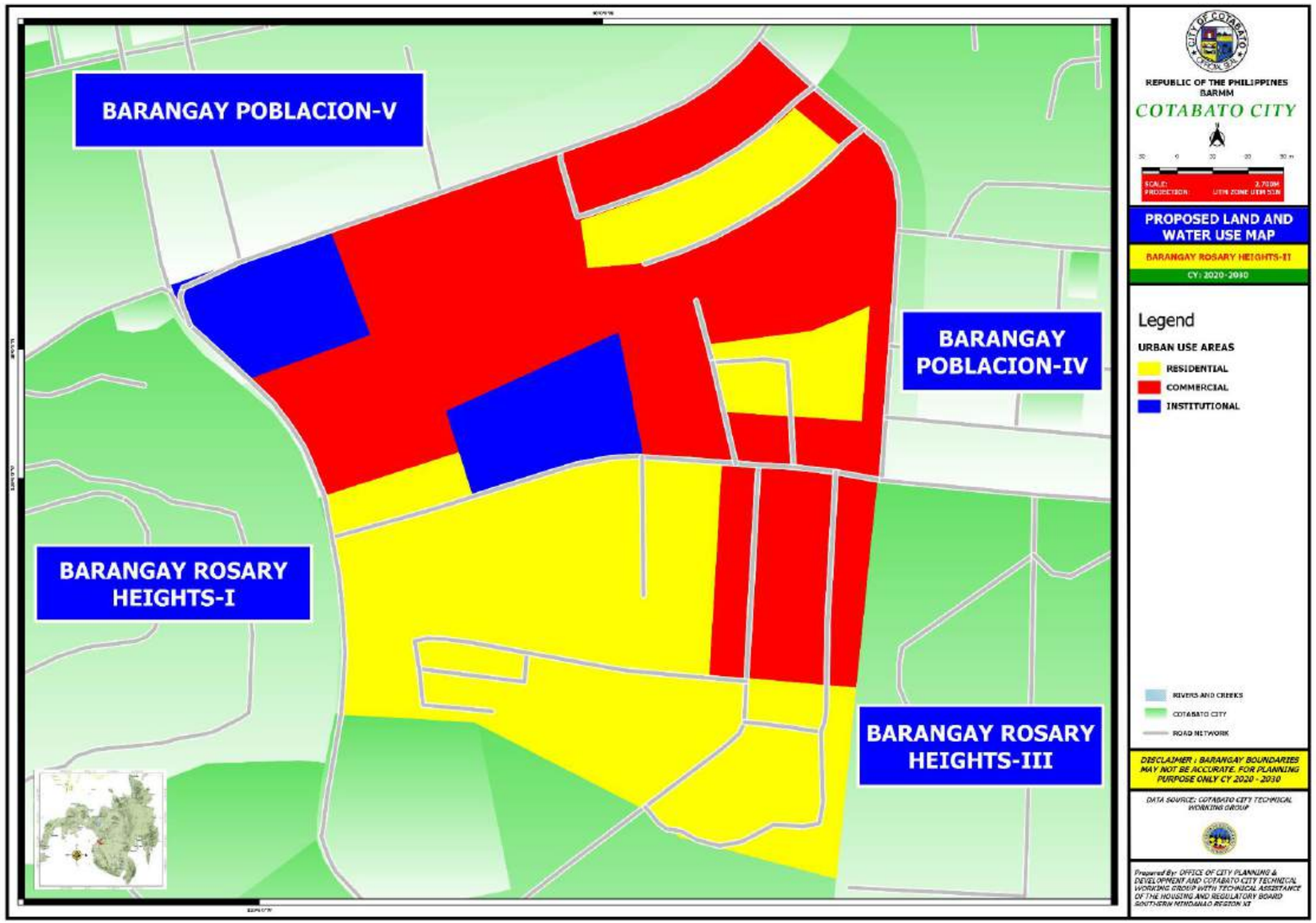
Rosary Heights2 (Brgy Immaculada Concepcion)

Table 1.3: Proposed Land Use of Barangay Rosary Heights 2

Land Use	Proposed (ha)	% To Total
Commercial	10.12	36%
Institutional	2.70	10%
Residential	11.18	40%
Roads	3.92	14%
Total	**27.92**	**100%**

Barangay Immaculada Concepcion is situated right next to the CBD. Although not entirely part of the CBD it has become an extension of the same. The barangay separated only from CBD by Quezon Avenue (national highway) will have a huge transformation in terms of land use. What was once dominantly residential will be have a much larger commercial zone to accommodate the growing and expanding business sector that can no longer be accommodated by the CBD. A huge block of commercial zone will be added to the already existing commercial strips. A wide commercial strip following the stretch of Quezon Avenue will be allocated and from thereon head eastward following Notre Dame Avenue and towards Notre Dame University. A commercial strip along Notre Dame Avenue will not only support the commercial expansion but institutional uses as well. Due to its accessibility, Notre Dame Avenue is also a good place for the transacting public as long as proper parking spaces area provided by establishments. It is also expected to absorb the development/investment brought about the by the presence of the premier university located at a neighboring barangay. In line with the city/s vision as contained in its parameters-a healthy long-life expectancy for the residents, a health care center or a commercial-institutional establishment had been allocated. On the southern part of the barangay, a commercial zone will be maintained where warehouses/storehouses had been set up in the early years of Cotabato and which has co-existed with its neighboring land uses. Since a substantial part of the barangay is still vacant, same will be devoted for residential use to accommodate growing population.

Figure 1.3: Barangay Rosary Heights 2



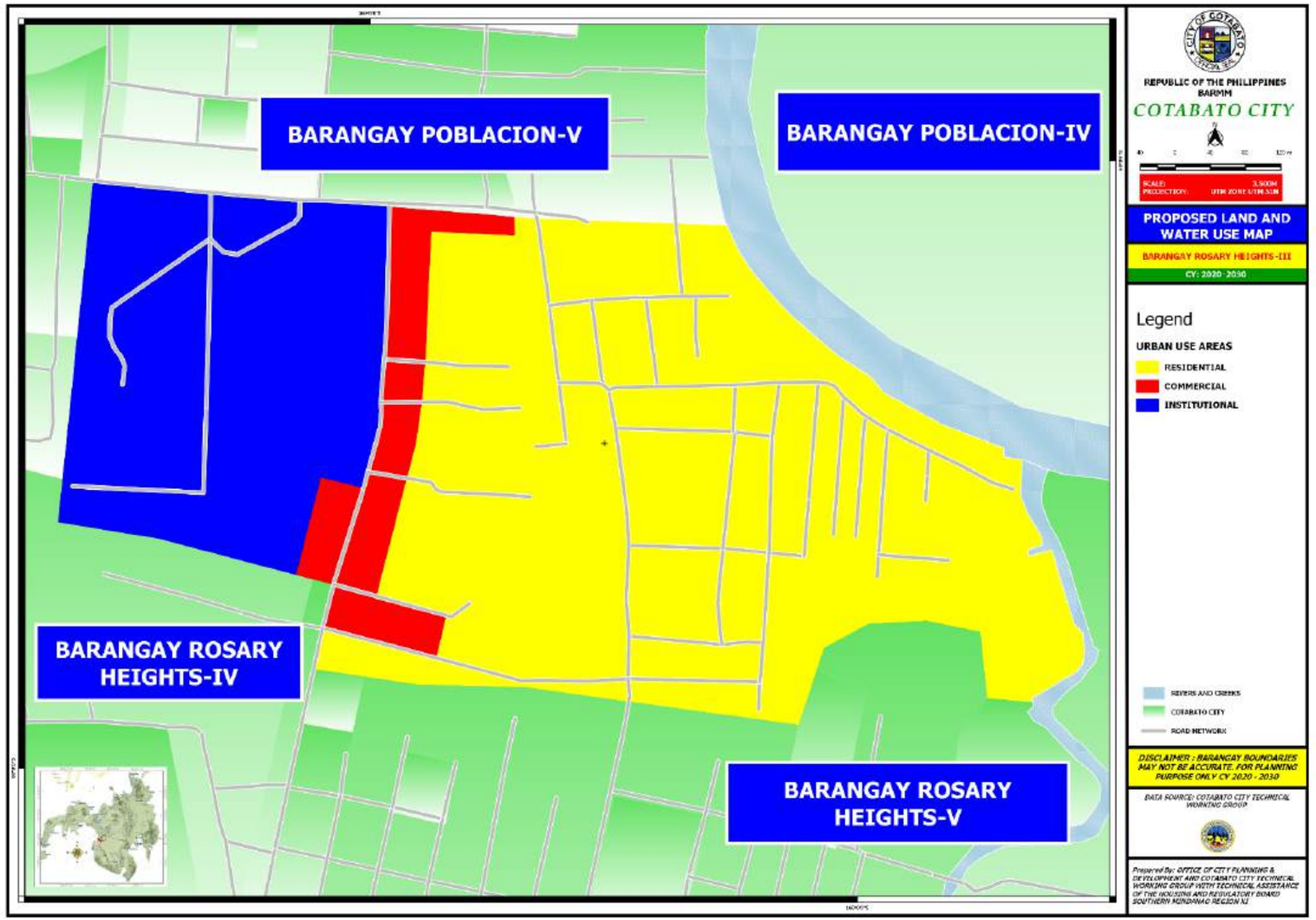
Rosary Heights 3 (Brgy Shariff Kabunsuan)

Table 1.4: Proposed Land Use of Barangay Rosary Heights 3

Land Use	Proposed (ha)	% To Total
Commercial	3.47	7%
Institutional	13.46	26%
Residential	27.31	54%
Rivers & Creeks	1.82	4%
Roads	4.81	9%
Total	**50.88**	**100%**

Barangay Sharif Kabunsuan is an institutional center of the city and it will be for the coming years. It is the location of Notre Dame University which was established in 1948 as Notre Dame College (in a different site). Overtime, the university has attracted a large part of the community residences which gradually evolved into residential subdivisions even in other adjacent barangays as well (e.g., Barangay Poblacion 3). On the eastern part of this barangay a large part of dwellings had set up over the years. Due its distant location from any commercial zone, there is a need to provide a commercial/institutional zone within the barangay. Commercial strip will be allocated following the stretch of De Mazenod Avenue, an area in close proximity to the residential zone and to Notre Dame University as well. Some vacant spaces of the barangay will be zoned as residential as well to accommodate anticipated growth of residential use.

Figure 1.4: Barangay Rosary Heights 3



Barangay Rosary Heights 4 (RH 4)

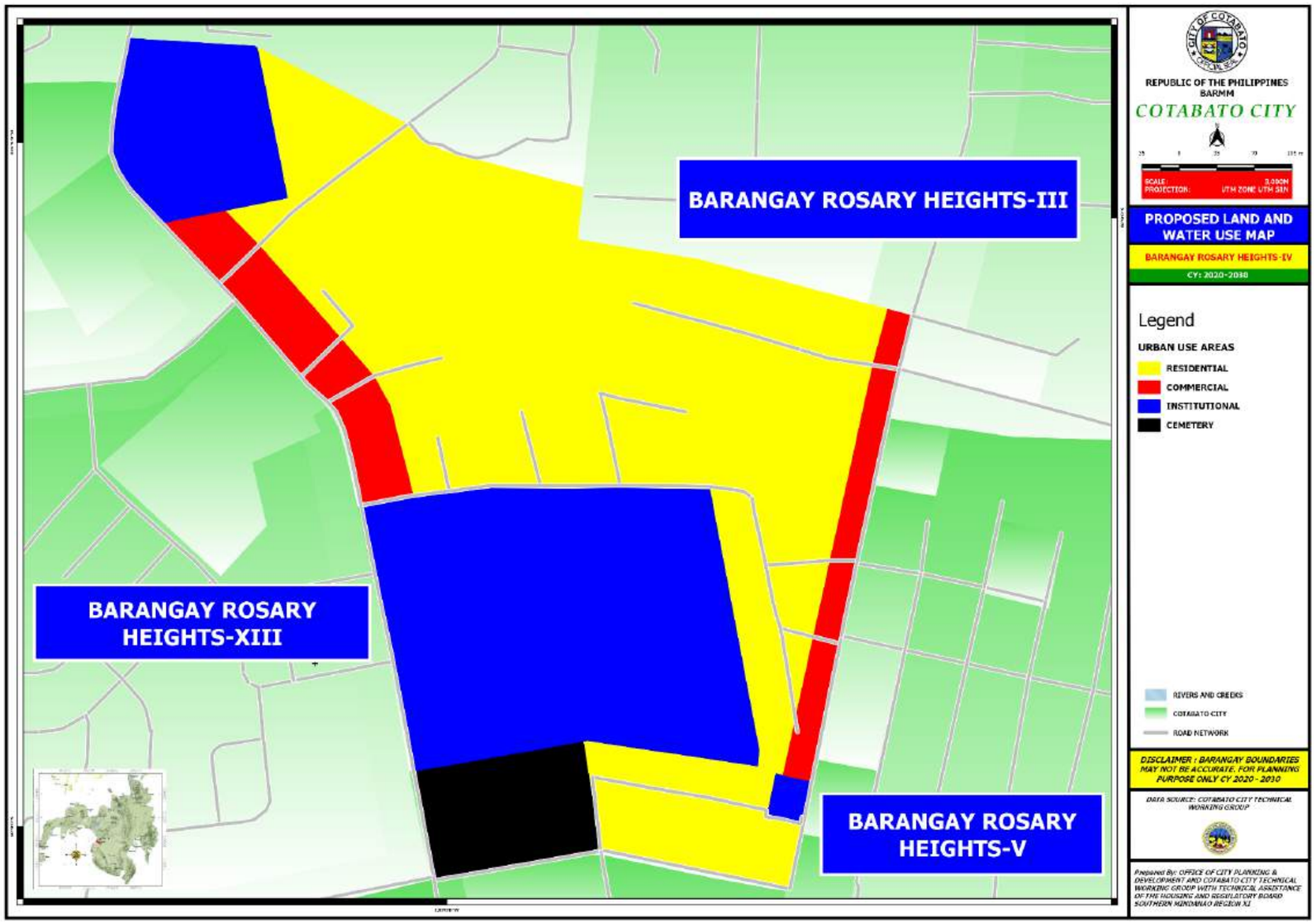
Table 1.5: Proposed Land Use of Barangay Rosary Heights 4

Land Use	Proposed (ha)	% To Total
Cemetery	1.71	5%
Commercial	2.72	8%
Institutional	10.55	32%
Residential	14.26	44%
Roads	3.28	10%
Total	**32.53**	**100%**

Barangay Rosary Heights 4 is another barangay with notable places of learning. Along the stretch of Sinsuat Avenue (national highway) are schools the- Cotabato City State Polytechnic College (High School and College) and the Notre Dame of Cotabato. Just across Sinsuat Avenue is another school the – Notre Dame RVM College of Cotabato although located in another barangay. This barangay will continue to be the area for places of learning but future development in this barangay will be prudently assessed. As it is, Sinsuat Avenue is already congested with vehicles plying the national highway more so during weekdays. Higher intensity uses, especially along the national highway, that generate traffic would be discouraged or at least take into consideration the traffic plan and applicable documents for their establishment. A linear strip of commercial zone will be allocated along Sinsuat Avenue between the two schools above-mentioned to provide support to commerce of lighter intensity generated by the presence of the schools or otherwise. Further east, at the border of the barangay is also a school -Dr Ocampo P. College, Inc. Following the stretch of De Mazenod Avenue will be a newly strip of commercial zone to provide area for commerce to an alternate route- De Mazenod Avenue.

A cemetery zone, which have been in the barangay during the early times of the city, would be maintained but burying of remains shall also be with care not only because the same is full almost full but also the harmful leachate could adversely affect the subsurface and groundwater of the adjacent residential zones. No expansion for the cemetery zone would be introduced. The rest of the barangay shall be devoted for residential zone

Figure 1.5: Barangay Rosary Heights 4



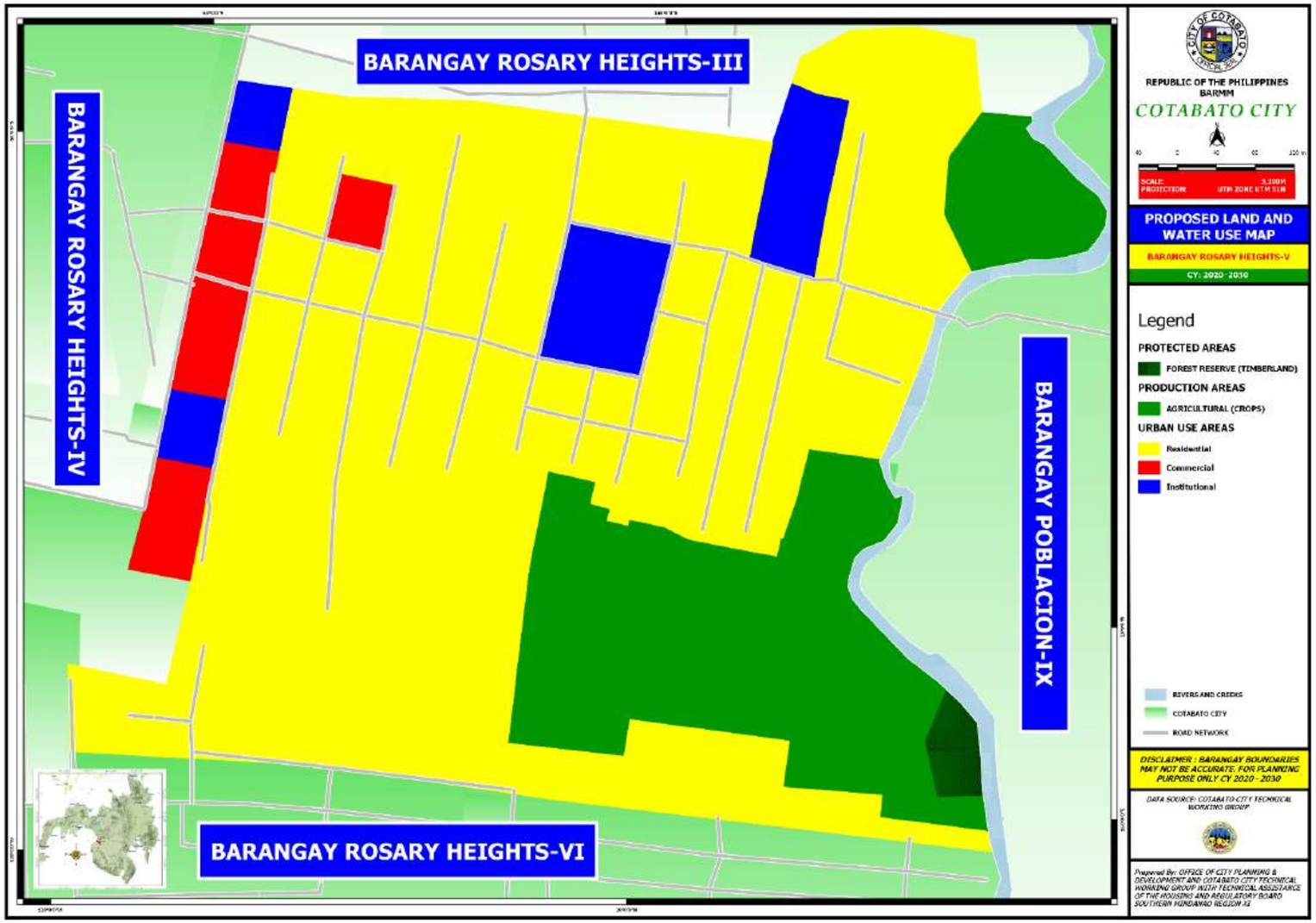
Barangay Rosary Heights 5 (RH 5)

Table 1.6: Proposed Land Use of Barangay Rosary Heights 5

Land Use	Proposed (ha)	% To Total
Commercial	2.77	5%
Crops	12.52	21%
Institutional	3.66	6%
Residential	33.33	56%
Rivers & Creeks	1.15	2%
Timberland	0.62	1%
Roads	5.91	10%
Total	**59.96**	**100%**

Brgy RH 5 is a largely residential-dominated barangay and shall be for the next planning year. It is a settlement area mostly subdivision type in the inner fringe of the city. Unlike in the previous land use plan, the eastern part of the barangay will be rezoned to agricultural production zone and an agricultural-livestock zone which may be included in the pending application for Strategic Agricultural and Fisheries Development Zone (SAFDZ). Aside from the residential zone, the area will still be devoted to Institutional use such as the Bureau of Telecommunication and the Don E. Sero Elementary School which has been there in since the early years of the city. Along the De Mazenod Avenue will also remain as the institutional use for the Dr. P. Ocampo Colleges, Inc. and the Iglesia ni Kristo church. De Mazenod Avenue is a major road that leads to the national highway and the Central Business District; thus, a linear commercial linear strip would be allocated between the Iglesia Ni Kristo up to Dr. P. Ocampo Colleges, Inc. This commercial strip would also serve the requirement of trading/commerce in the barangay as well as adjacent barangays within their area of influence.

Figure 1.6: Barangay Rosary Heights 5



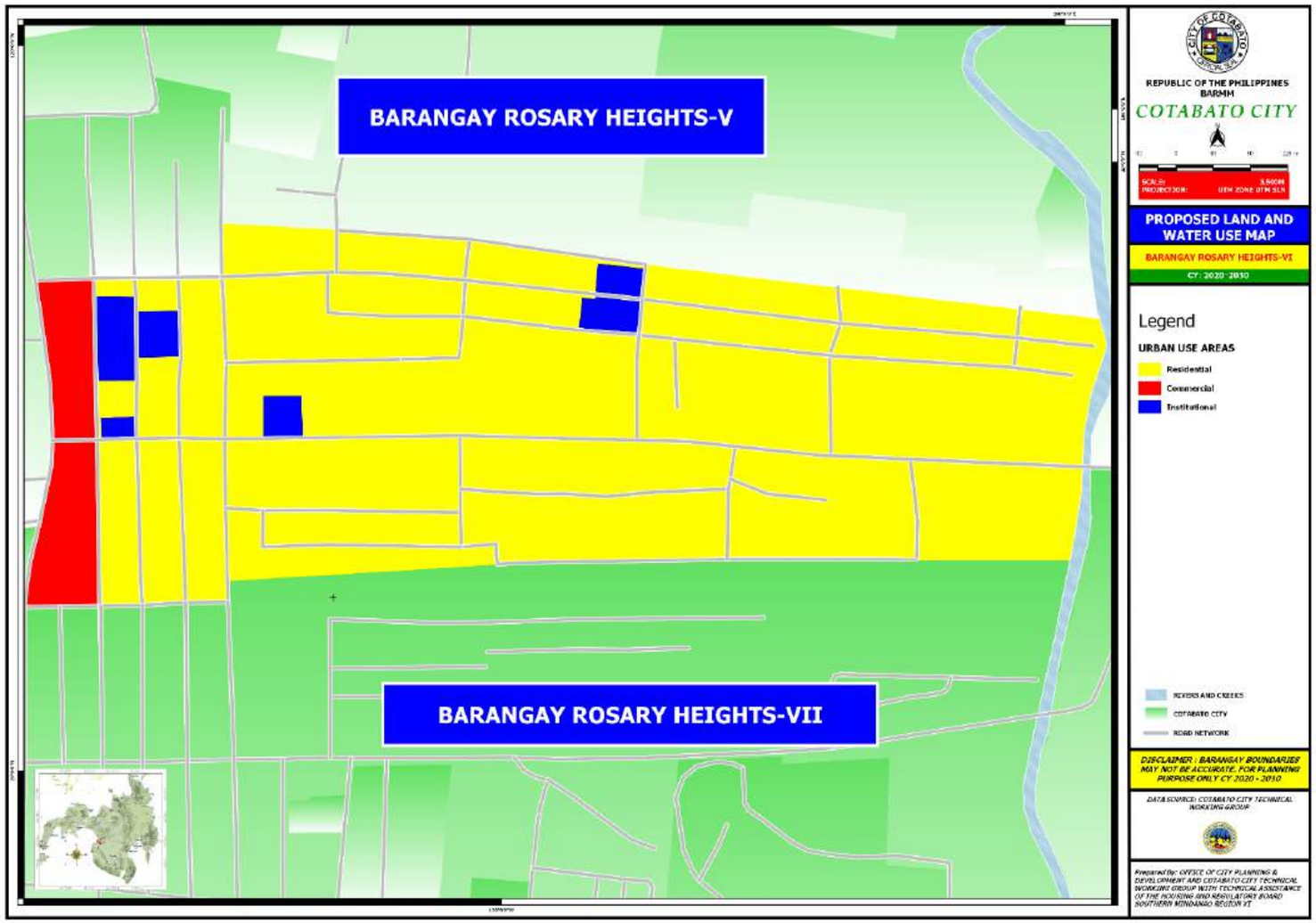
Rosary Heights 6 (Brgy Pag-Asa)

Table 1.7: Proposed Land Use of Barangay Rosary Heights 6

Land Use	Proposed (ha)	% To Total
Commercial	2.11	5%
Institutional	1.33	3%
Residential	22.64	59%
Rivers & Creeks	0.43	1%
Roads	12.15	31%
Total	**38.66**	**100%**

Barangay Pag-Asa will be dominantly for residential use as it extends away from the CBD urban core and towards rural-urban fringe (inner fringe). It is mostly subdivision type of residential settlements and can be access by good roads. Along the west border of the barangay fronting the national highway will still be zoned for commercial use. Since this strip is fronting a main thoroughfare a least a block deep would be allocated for commercial use. To provide nearby public services in the barangay, an institutional use will be maintained for the Krislamville Elementary School, Krislamville church and for those already existing for a long period of time such as the National Irrigation Administration. The previously zoned as institutional use such as the Seventh Day Adventist church will still be maintained as this will provide space to its members not only in the barangay but in the whole city as well.

Figure 1.7: Barangay Rosary Heights 6



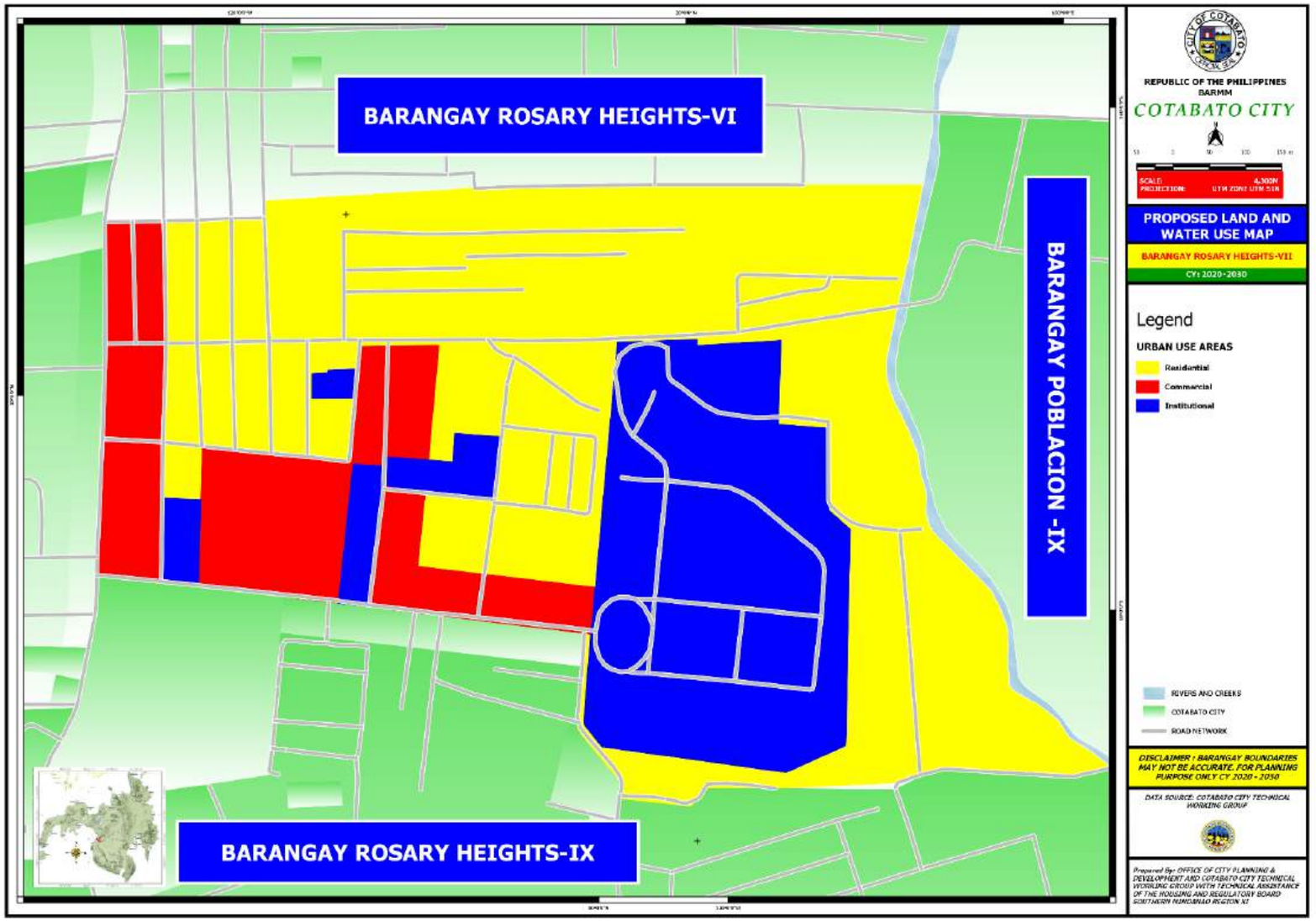
Barangay Rosary Heights 7 (RH 7)

Table 1.8: Proposed Land Use of Barangay Rosary Heights 7

Land Use	Proposed (ha)	% To Total
Commercial	12.52	15%
Institutional	21.15	26%
Residential	37.34	46%
Rivers & Creeks	2.03	2%
Roads	8.53	10%
Total	**81.56**	**100%**

This barangay is one of the three barangays whose functionality of services and facilities is growing where and centrality of services is shifting from the CBD towards the uptown area to include this barangay. The commercial strip along the national highway at least a block deep will be maintained along the stretch of Sinsuat Avenue to accommodate growing commercial activities and transformation in this area which usually in the form of urban renewal. A larger commercial strip to include a block will be allocated along the stretch of the Gov. Gutierrez Avenue towards the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) compound. Along that strip an institutional block will be maintained for the Metro Cotabato Water District and the Government Service Insurance System. Owing to its increasing functionality a commercial strip on both sides of the road (side of GSIS) will be rezoned to commercial area to accommodate growing commercial activities in the barangay. Institutional zones will still be maintained for Albert Einstein School and BARMM compound since these zones accessible to residents and provide services for the entire city. This barangay has large open and buildable lands that will be zoned as residential to absorb residential growth in the future.

Figure 1.8: Barangay Rosary Heights 7



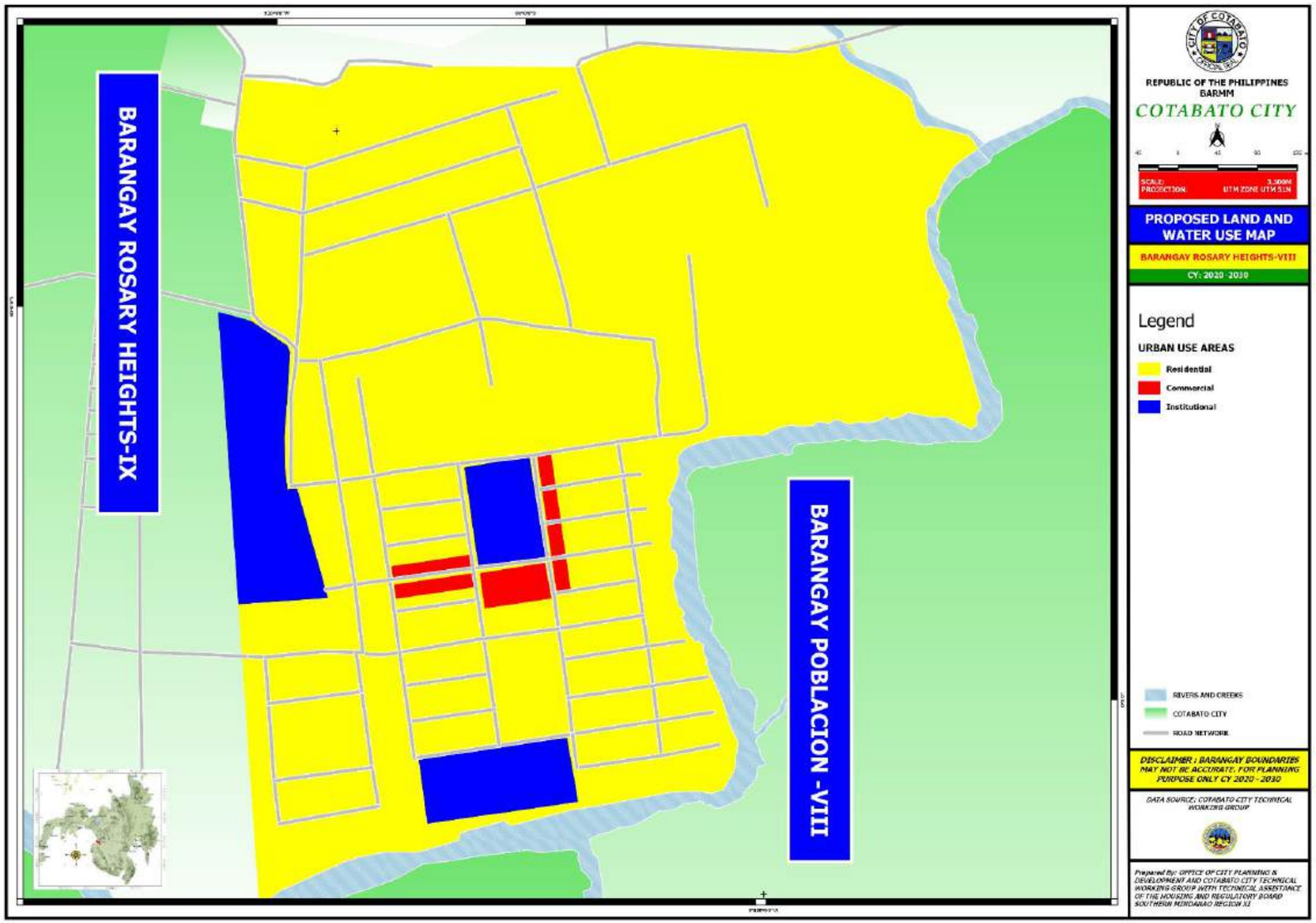
Rosary Heights 8 (Brgy Notre Dame)

Table 1.9: Proposed Land Use of Barangay Rosary Heights 8

Land Use	Proposed (ha)	% To Total
Commercial	0.81	1%
Institutional	4.52	8%
Residential	42.65	71%
Rivers & Creeks	2.996	5%
Roads	8.70	15%
Total	**59.67**	**100%**

Barangay Notre Dame derived its name from Notre Dame Village established in the early years of Cotabato. It is a settlement area located at the outer fringe from the CBD during that time. Today, this barangay will remain devoted to a settlement or residential area supplemented with other land use. To support basic and secondary education of the residents of the barangay and secondary barangay as well, an institutional zone will be maintained at three separate areas. At the western part of the barangay an institutional zone will be allocated for Notre Dame Village Central Elementary School and for Department of Education – Division of Cotabato City. On the southern border will be an institutional zone for Notre Dame Village National High School. An institutional use will also be allocated for a place of worship or the Notre Dame Village Parish Church. Fronting the parish church will be a parks and recreation zone for leisure essential for human biology and psychology. Due to the barangay's distant location from any commercial zone, an additional commercial strip will be added to the barangay in addition to the already existing one- the market area. This commercial area will absorb the growing commercial area requirement/ needs of the community. The rest of the open and buildable lands in the barangay will be devoted to residential to absorb expansion of dwelling units.

Figure 1.9: Barangay Rosary Heights 8



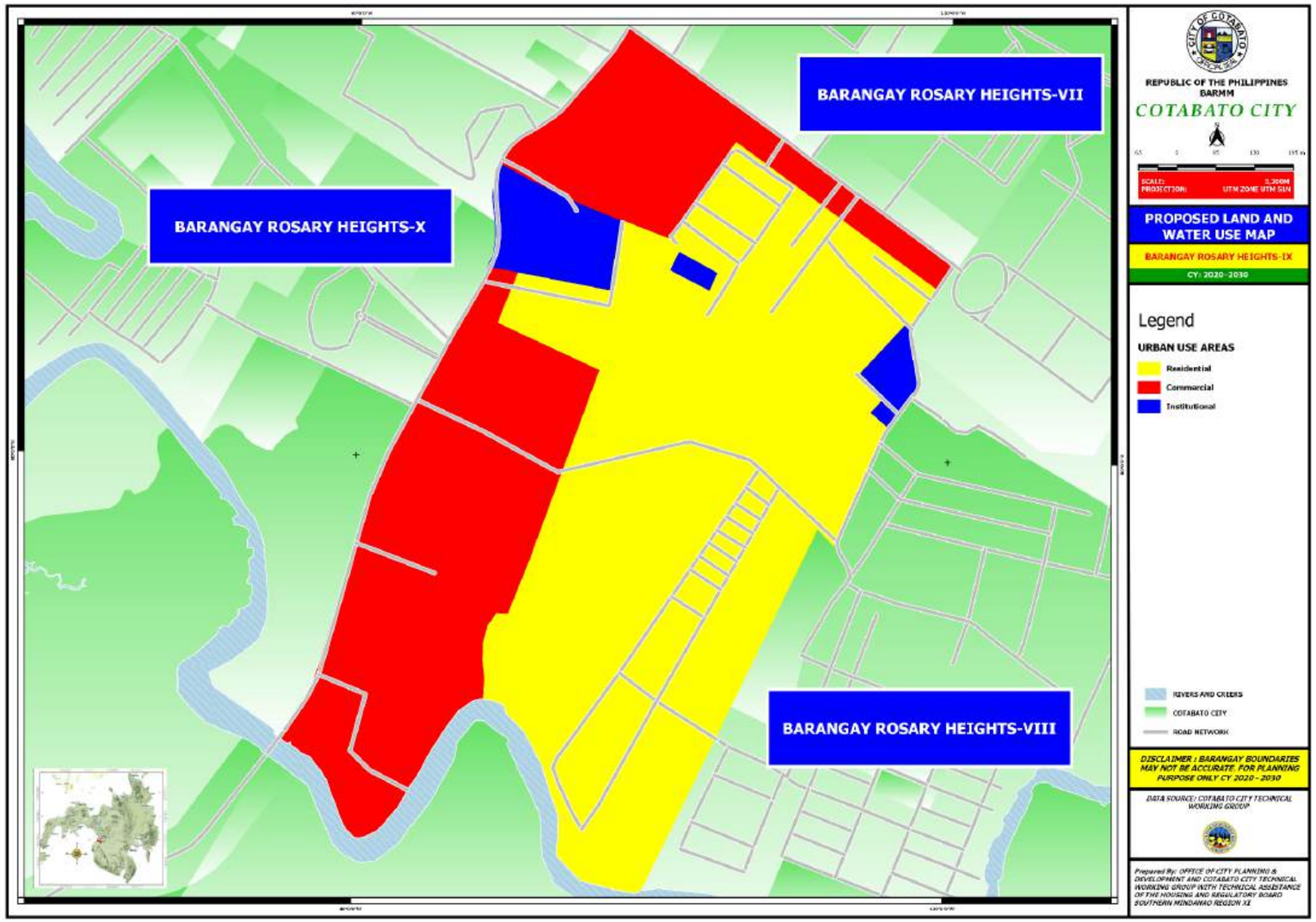
Barangay Rosary Heights 9 (RH 9)

Table 1.10: Proposed Land Use of Barangay Rosary Heights 9

Land Use	Proposed (ha)	% To Total
Commercial	25.196	30%
Institutional	3.98	5%
Residential	41.87	49%
Rivers & Creeks	2.06	2%
Roads	11.83	14%
Total	**84.94**	**100%**

Barangay Rosary Heights 9 is one of the growing barangays in terms of functionality of service. Located in the uptown area, this barangay will be zone for multi-uses. Being bordered by major roads namely, the Sinsuat Avenue (national highway) and Gov. Gutierrez Avenue, the area allotment for commercial will be much larger and of higher intensity to be able to accommodate anticipated commercial growth in this barangay. The area along the stretch of Sinsuat Avenue will be allocated as commercial zone from Notre Dame Hospital towards the direction of Esteros River in the south and towards Gov. Gutierrez in the north. Along Gov. Gutierrez Avenue, commercial zone will be allotted along its stretch up to the gate of BARMM compound. As it is, these 2 commercial zones are conducive and have a surge of diverse commercial activities over the years. Institutional zone would be allocated in the barangay for the Notre Dame Hospital, San Vicente Academy, Fernanda Borbon Elementary School and Saint Benedict College of Cotabato. The rest of the barangay will be zone for residential use including those vacant and buildable lands as the area for expansion.

Figure 1.10: Barangay Rosary Heights 9



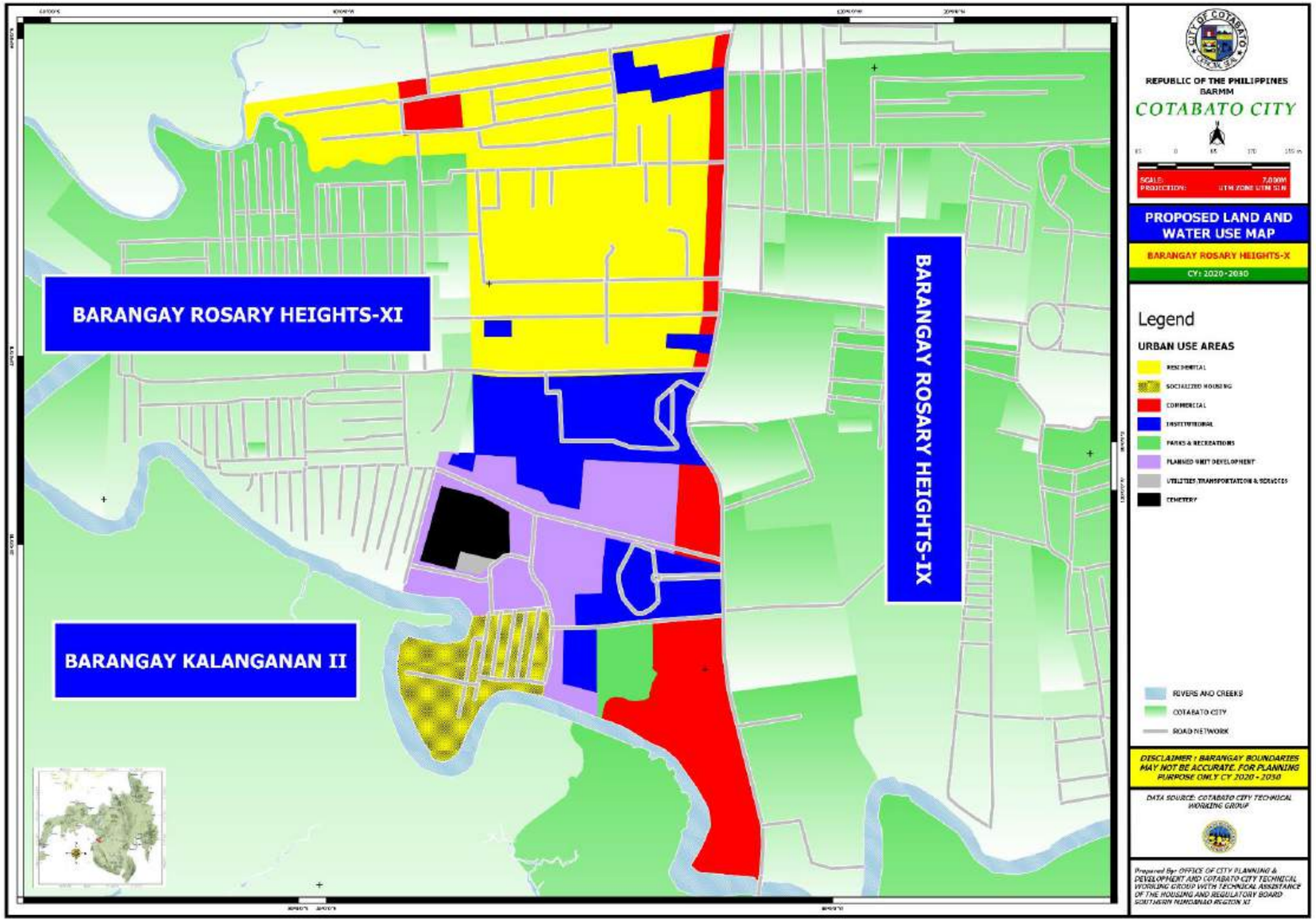
Barangay Rosary Heights 10 (Brgy San Isidro)

Table 1.11: Proposed Land Use of Barangay Rosary Heights 10

Land Use	Proposed (ha)	% To Total
Cemetery	2.59	2%
Commercial	16.40	16%
Infrastructure	0.31	0%
Institutional	19.09	18%
Parks & Recreation	2.16	2%
Planned Unit Development	13.85	13%
Residential	34.63	33%
Rivers & Creeks	2.87	3%
Roads	**12.66**	**12%**

Barangay Rosary Heights 10 is also one growing barangay in terms of diversity of services and facilities. It is one of the 3 barangays where centrality of service is slowly shifting from the CBD. To absorb the increasing diversity of trade, the commercial strip along Sinsuat Avenue from the corner of Pansacala St towards Esteros river will be upgraded to higher intensity to accommodate more specialize services. Existing institutional uses shall be maintained for mostly government facilities such as the People's Palace (new City Hall), Cotabato Regional and Medical Center, Canizares National High School, Mandanas Elementary School, Bureau of Jail Management and Penology, Philfida's working facility/shed, Proposed Covid Isolation facility and some privately owned structures. A zone for parks and playground will be allocated for residents at least within the radius of 15-minute walk to get healthy and fit or enjoy company of family and friends. The rest of the area will be zone as residential including those buildable and vacant lands for expansion

Figure 1.11: Barangay Rosary Heights 10



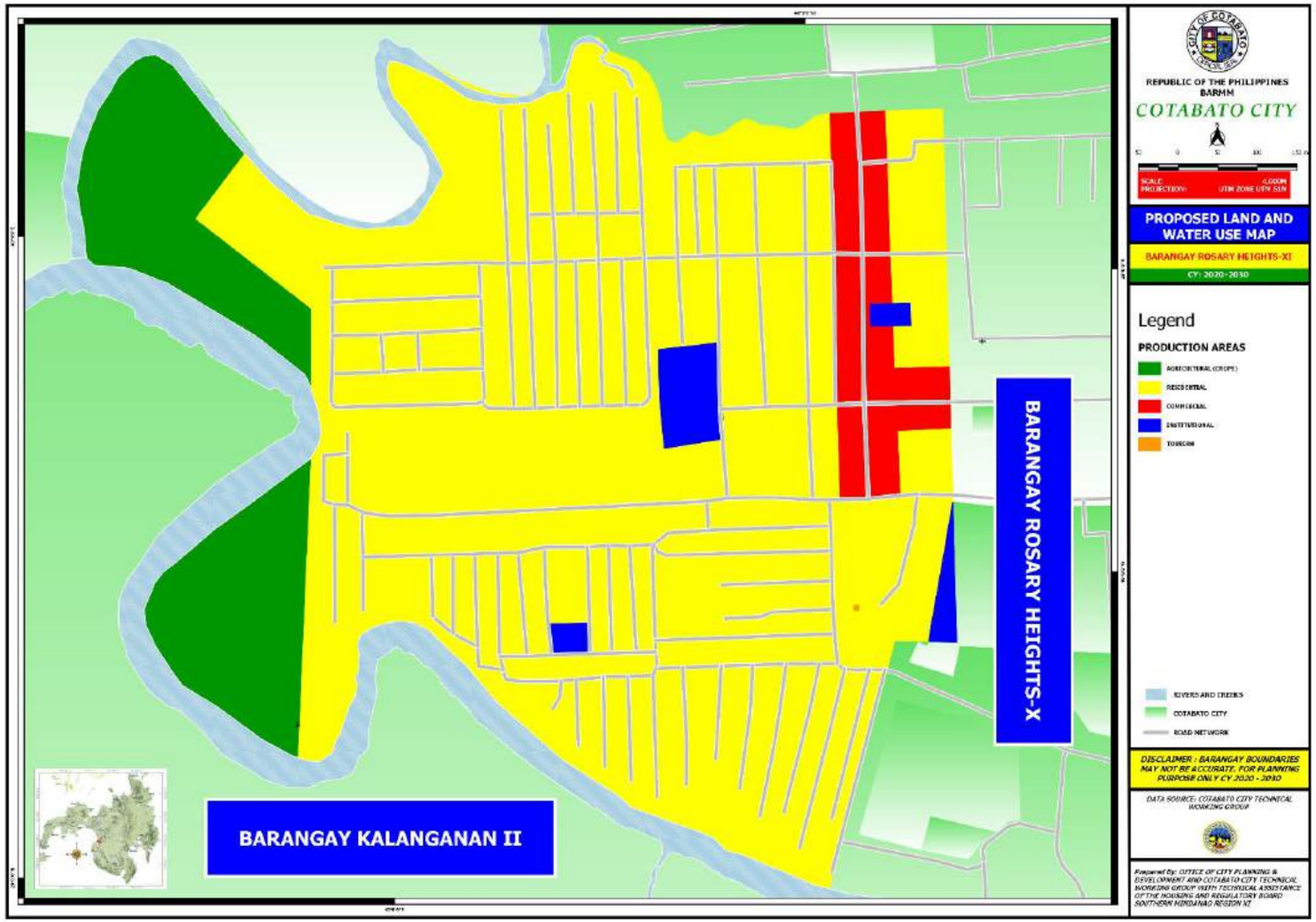
Barangay Rosary Heights 11 (RH 11)

Table 1.12: Proposed Land Use of Barangay Rosary Heights 11

Land Use	Proposed (ha)	% To Total
Commercial	4.025	5%
Crops	12.13	14%
Institutional	1.60	2%
Residential	43.95	52%
Rivers & Creeks	11.835	14%
Roads	11.22	13%
Tourism	0.0065	0%
Total	**84.76**	**100%**

In the past years, Rosary Heights 11 is previously all residential zone supported with essential institutional uses such as church and school. But due to the growing settlement and the increasing social needs (food, water, employment, resources, health, etc.) there is need to provide another land use to accommodate most of these. Taking into account the absence of a commercial zone and the barangay's distant location from any commercial district, there is a need to allocate a space for trading in the barangay. From the city's Hog slaughterhouse following Andres Alonzo Street shall be commercial strip on both sides except that part of Our Lady of Peñafrancia Chapel which shall remain as institutional. The LR Sebastian Elementary School shall likewise remain as institutional as this as a place of learning for residence of tender age. The large part of the barangay shall remain as dwelling area or residential zone including those buildable and vacant lands.

Figure 1.12: Barangay Rosary Heights 11



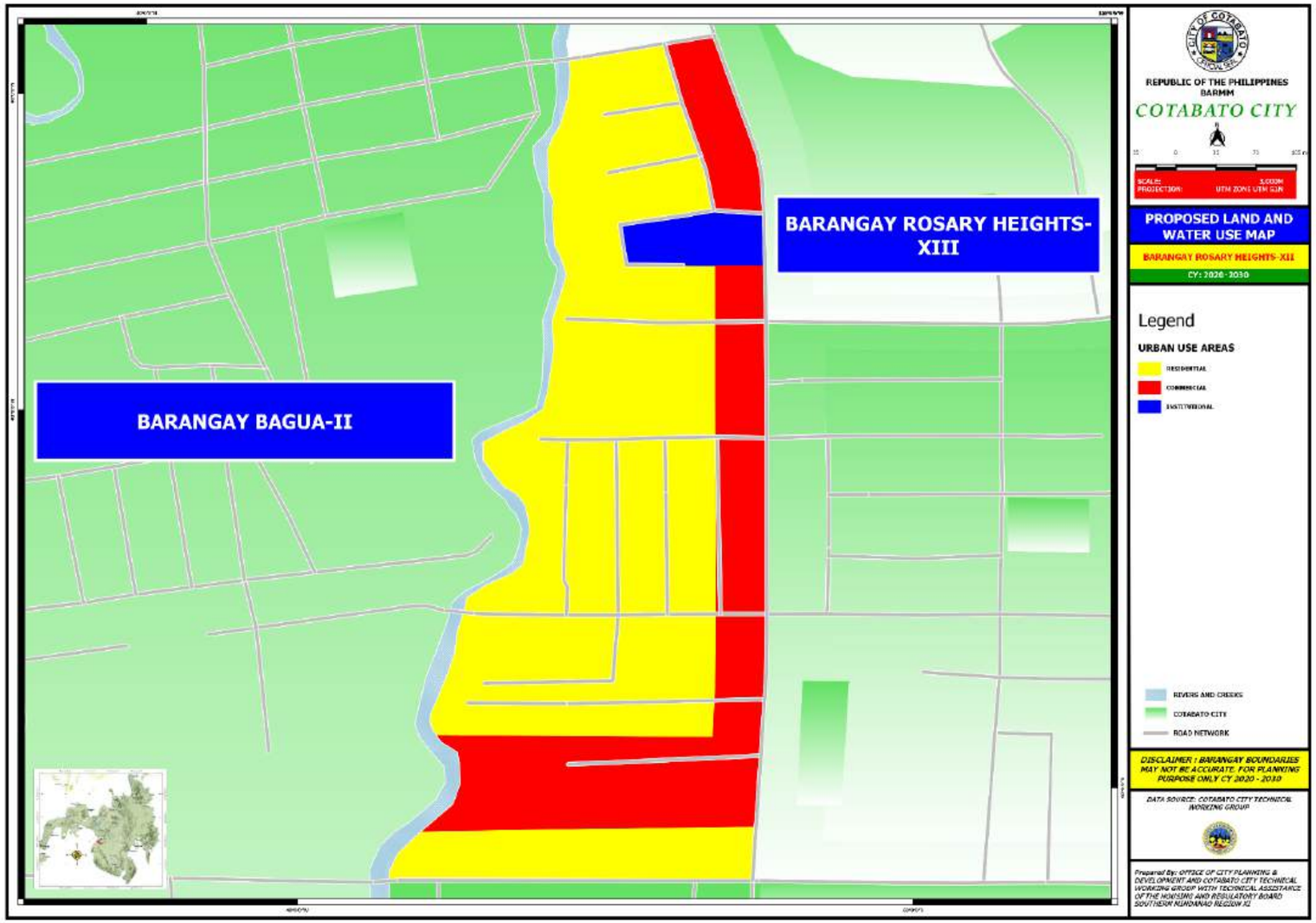
Barangay Rosary Heights 12 (RH 12)

Table 1.13: Proposed Land Use of Barangay Rosary Heights 12

Land Use	Proposed (ha)	% To Total
Commercial	4.64	29%
Institutional	0.54	3%
Residential	6.70	41%
Rivers & Creeks	0.84	5%
Roads	3.53	22%
Total	**16.25**	**100%**

The land use of this barangay will remain as it was during the previous planning period. Most part of this barangay will remain as residential zone and since large part of this barangay is occupied there will no area for expansion. Considering its proximity to the CBD and uptown area the major road is being used as alternate route to and from the CBD. The strip along its major road (Don TV Juliano Avenue) shall remain as commercial area except the Rojas Elementary School which shall remain as an institutional block. The rest of the barangay shall be for dwelling purposes thus will be zoned as residential use. There are not much vacant and buildable lands in this barangay.

Figure 1.13: Barangay Rosary Heights 12



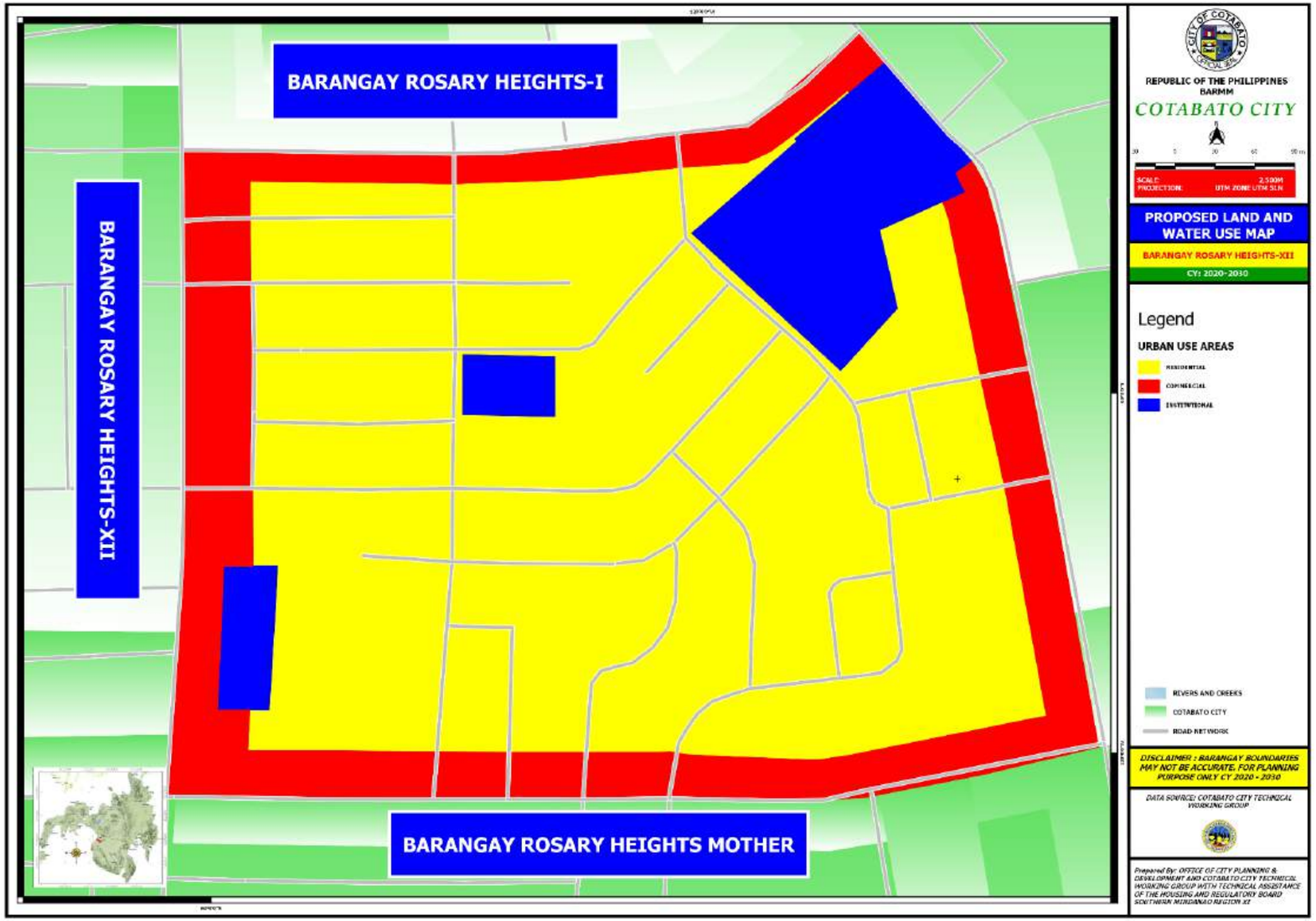
Barangay Rosary Heights 13 (Brgy Don Antonio Sousa)

Table 1.14: Proposed Land Use of Barangay Rosary Heights 13

Land Use	Proposed (ha)	% To Total
Commercial	7.20	23%
Institutional	3.05	10%
Residential	15.42	49%
Roads	5.94	19%
Total	**31.60**	**100%**

Barangay Don Antonio Sousa is dominantly for dwelling purposes and will remain as residential zone for the next planning period. Most of its land area are subdivisions and occupied by medium to large houses. The subdivision is supplemented by other land use such as commercial and institutional uses. The barangay is bordered by major roads such as the national highway (Sinsuat Avenue), Sousa Street, T.V. Juliano Avenue and Ramon Rabago Sr. Street. These streets shall be devoted to a commercial zone to absorb trading in and around the barangay. Since these roads have become alternate routes to and from the CBD and in other parts of the city it has evolve into a more dynamic area for commerce. The area previously devoted area for commercial zone shall be expanded in some parts to absorb the growing demand in the area. Institutional uses will remain for public and private facility such as the Kimpo Elementary School, Commission on Audit and Notre Dame RVM-College of Cotabato will provides services not only in the barangay but for the entire city as well. The rest will be zoned as residential area including those few vacant lands.

Figure 1.14: Barangay Rosary Heights 13



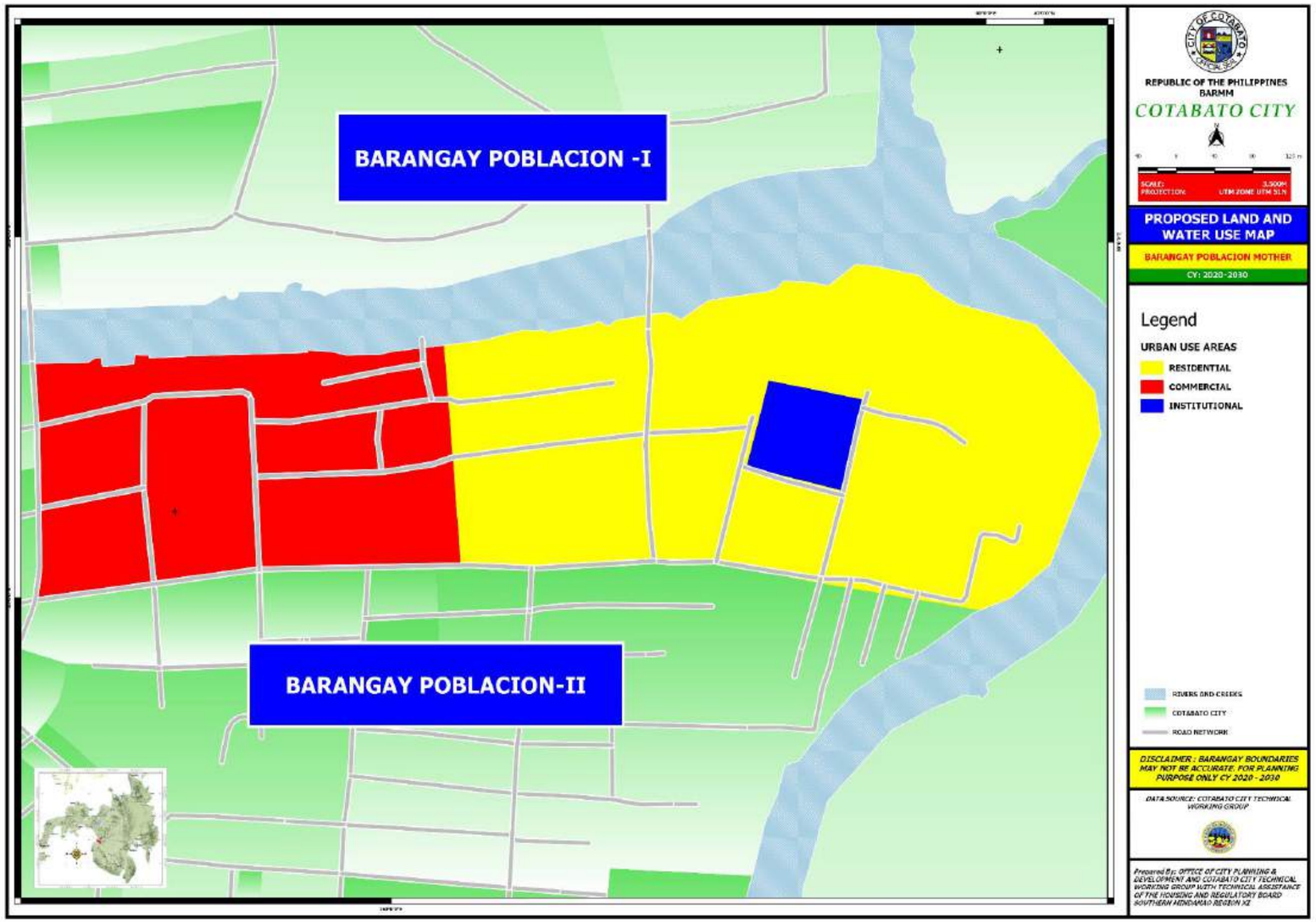
Barangay Poblacion Mother

Table 1.15: Proposed Land Use of Barangay Poblacion Mother

Land Use	Proposed (ha)	% To Total
Commercial	11.66	33%
Institutional	0.98	3%
Residential	14.20	40%
Rivers & Creeks	4.39	12%
Roads	4.36	12%
Total	**35.59**	**100%**

Barangay Poblacion Mother will be devoted to mixed use. Owing to the presence of the Mega market and the highly dynamic business activities transpiring every day in the area bordered by Quezon Avenue, SK Pendatun ext., Rio Grande de Mindanao and 350 meters more or less eastward will be devoted to Commercial block/zone. This is the area where high density commercial activities of various types are taking place. After the commercial block the area will be retained for dwelling or residential zone. This area is intended mainly for those working in and around the commercial zone and the adjacent CBD. To supplement the community with primary and secondary level of education, an institutional use will be maintained for J. Marquez Elementary and National High School. This barangay is one of those having a high population density (person/has) and having a high number of pupils and students as well.

Figure 1.15: Barangay Poblacion Mother



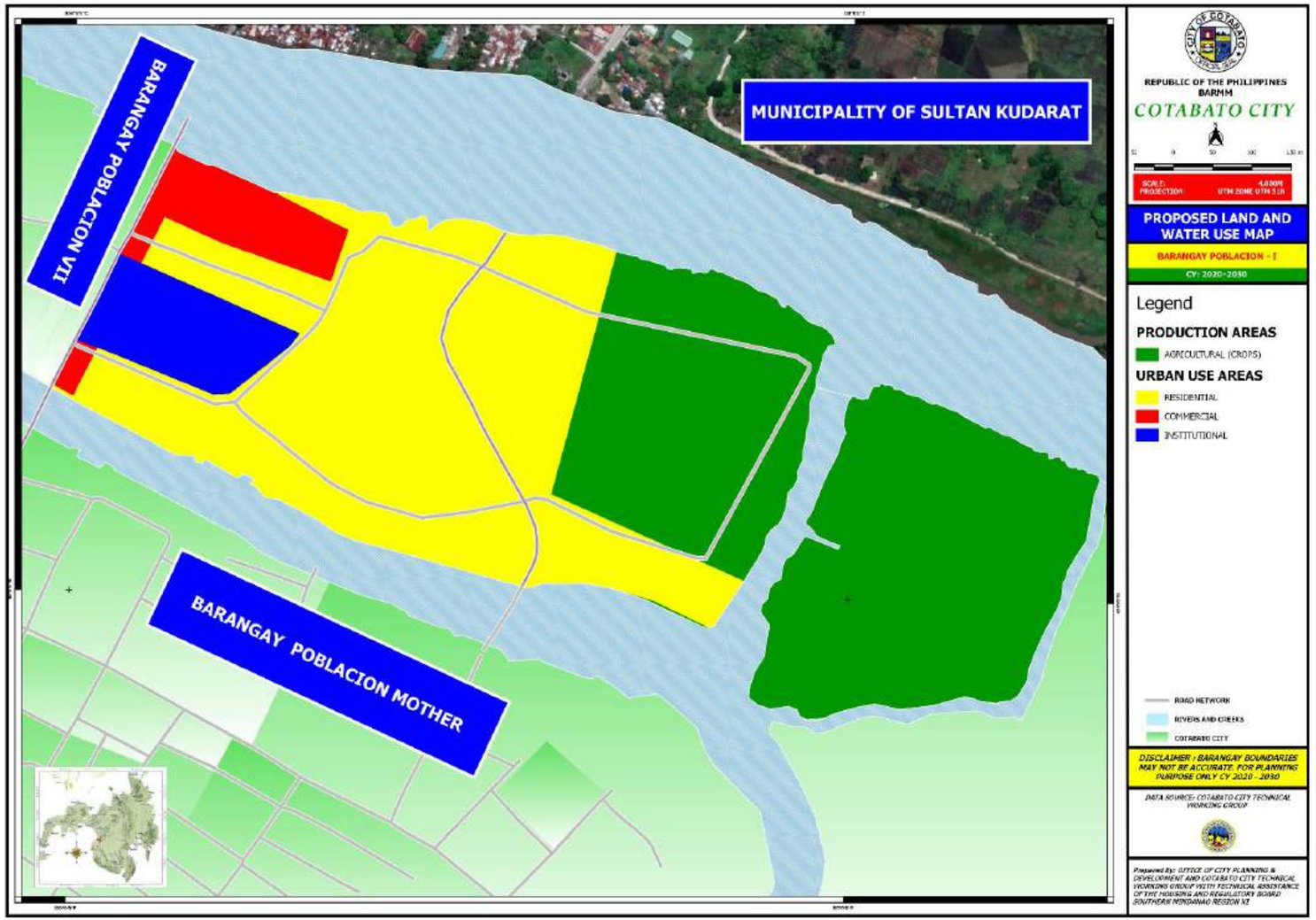
Barangay Poblacion 1 (Brgy Anding S. Lim)

Table 1.16: Proposed Land Use of Barangay Poblacion 1

Land Use	Proposed (ha)	% To Total
Commercial	2.57	4%
Crops	33.72	49%
Institutional	2.77	4%
Residential	15.18	22%
Rivers & Creeks	11.09	16%
Roads	2.91	4%
Total	**68.24**	**100%**

Barangay Anding S. Lim is a combination of land use as well. In the previous CLUP a large part of this barangay was zone as industrial owing to the presence of industrial and commercial warehouses in and adjacent barangay. Taking into consideration the existing facility such as the school and development taking place which is mostly dwelling units, some parts of the barangay will be rezoned to different uses. A strip of commercial zone will be allocated along the national highway, except the Cotabato City Institute, to accommodate small commercial businesses that have gradually evolved over the years. The previously zone industrial will be rezoned to residential use to absorb growing number of populations in the barangay. At the most eastern part will be rezoned to agricultural which could be a potential Strategic Agricultural and Fisheries Development Zone (SAFDZ) site. Some of the vacant and buildable lands close.

Figure 1.16: Barangay Poblacion 1



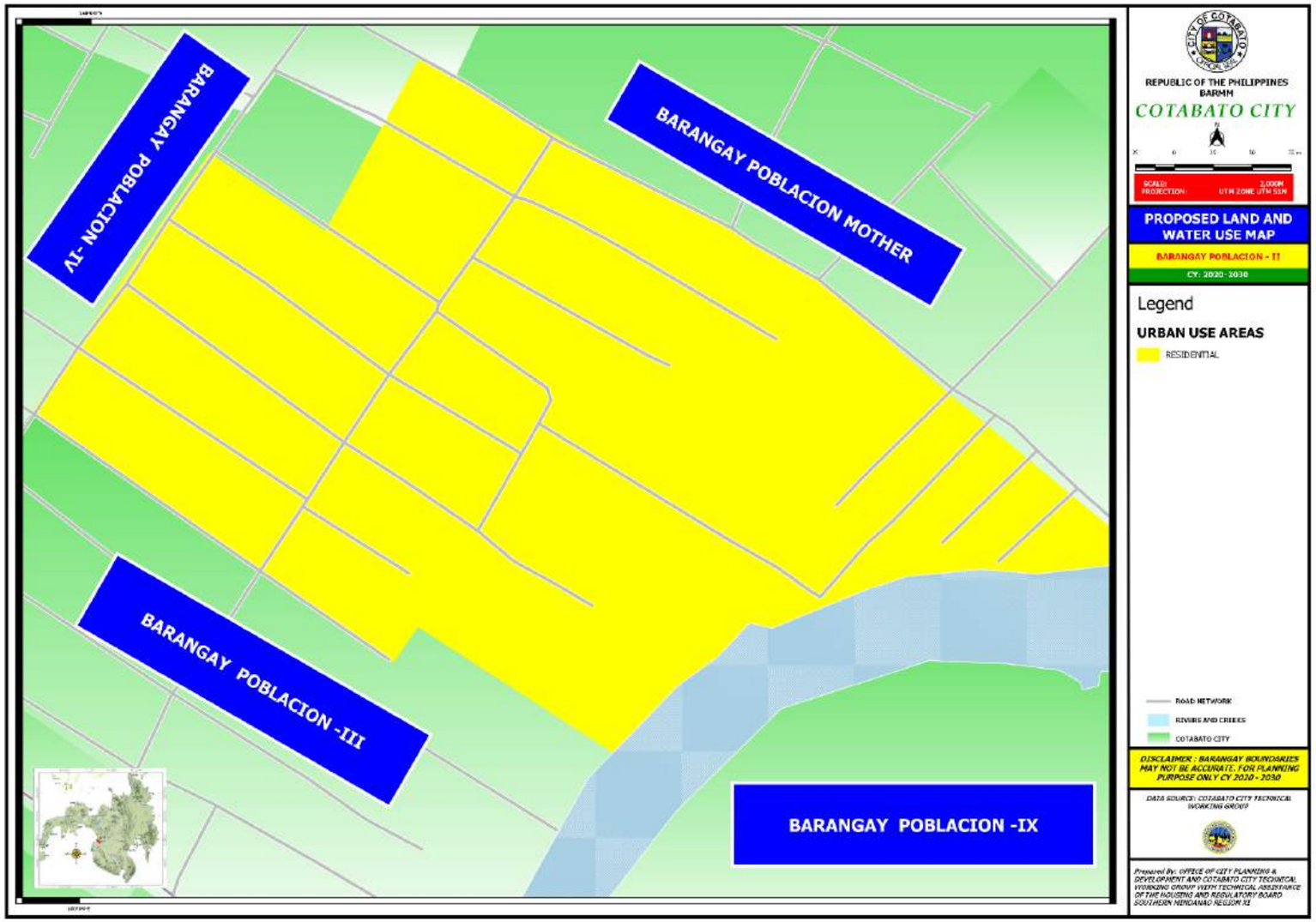
Barangay Poblacion 2 (Brgy Anacleto Badoy Sr.)

Table 1.17: Proposed Land Use of Barangay Poblacion 2

Land Use	Proposed (ha)	% To Total
Special Institution	0.08	0%
Residential	12.57	73%
Rivers & Creeks	1.18	7%
Roads	3.37	20%
Total	**17.19**	**100%**

Barangay Anacleto Badoy Sr. will be devoted to purely residential use. The previously zone commercial strip along Anacleto Badoy St will be rezoned to residential since the strip has not evolve to commercial uses over the years. Instead, residential including apartments which are allowable use on residential zone have set up in the said strip. Although the barangay has a small private elementary school that supports the educational needs of the area it will also be blended in a residential zone. Vacant and buildable lands will also be zoned as residential to absorb future expansion of dwelling areas.

Figure 1.17: Barangay Poblacion 2



Barangay Poblacion 3

Table 1.18: Proposed Land Use of Barangay Poblacion 3

Land Use	Proposed (ha)	% To Total
Commercial	1.14	11%
Residential	6.70	63%
Rivers & Creeks	0.70	7%
Roads	2.17	20%
Total	**10.71**	**100%**

This barangay will be devoted to two (2) land uses, the residential and commercial zone. A large part of this barangay will be devoted for residential zone as it has been in the past several years. Mostly, this barangay consists of dwellings except for a few land-uses which can co-exist with the dominant land use such as the masjids, chapels, kinder learning center, carwash, and a computer workplace. While the northern to eastern part of the barangay reckon from Tamse Road is residential, the south western part fronting the second gate of Notre Dame University up to Anacleto Badoy Street would be devoted to Commercial zone. Vacant lands, although not much, will be zoned as residential.

Figure 1.18: Barangay Poblacion 3



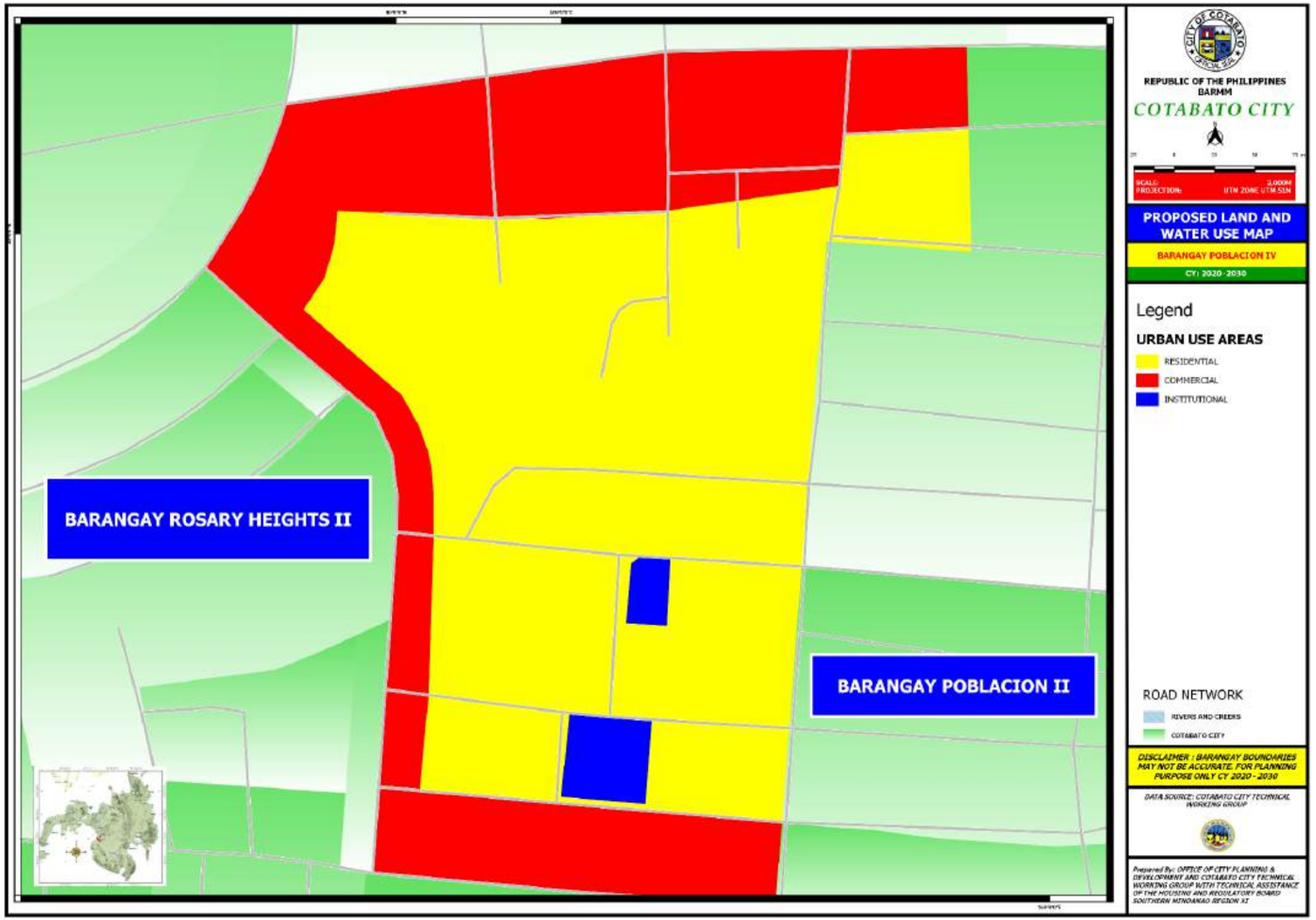
Barangay Poblacion 4 (Brgy Don Tomas T. Martinez)

Table 1.19: Proposed Land Use of Barangay Poblacion 4

Land Use	Proposed (ha)	% To Total
Commercial	4.59	29%
Institutional	0.36	2%
Residential	6.87	43%
Roads	4.14	26%
Total	**15.96**	**100%**

Barangay Don Tomas Martinez is a mixed-use barangay being closer to the CBD and Notre Dame University. The southernmost part of the barangay in front of the premier university, along Notre Dame Avenue, will be zoned as commercial to accommodate business establishments that will complement academic related needs. It can also be a good place to establish business related establishment owing to its location which is very accessible and near the CBD. This will be allocated to light - medium intensity trading so as not to aggravate traffic flow which may easily congest during peak hours especially during classes. On the western part of the barangay along the stretch of Notre Dame Avenue from the Notre Dame Printing Press up to the corner of Quezon Avenue shall similarly be commercial zone of light to medium intensity. The rezoning of a large commercial zone along with the proposed mall at the adjacent barangay (Brgy Rosary Heights 2) may consequently increase traffic on this road, thus, high intensity commercial activity shall be discouraged on this zone. From the corner of Notre Dame Avenue following the stretch of Quezon Avenue (national highway) up to the Supermarket area will be similarly zone as commercial. The commercial zone in this stretch may extend up to a block in width so as to accommodate more commercial activities to support the CBD, Brgy Poblacion 5 and 6, just across the barangay and the mega market as well. The rest of the barangay will be for dwelling except the mosque (Masjid Al Salaamah) and the Vilo Elementary School which shall remain as institutional blocks. There are not much vacant lands for expansion in this barangay.

Figure 1.19: Barangay Poblacion 4



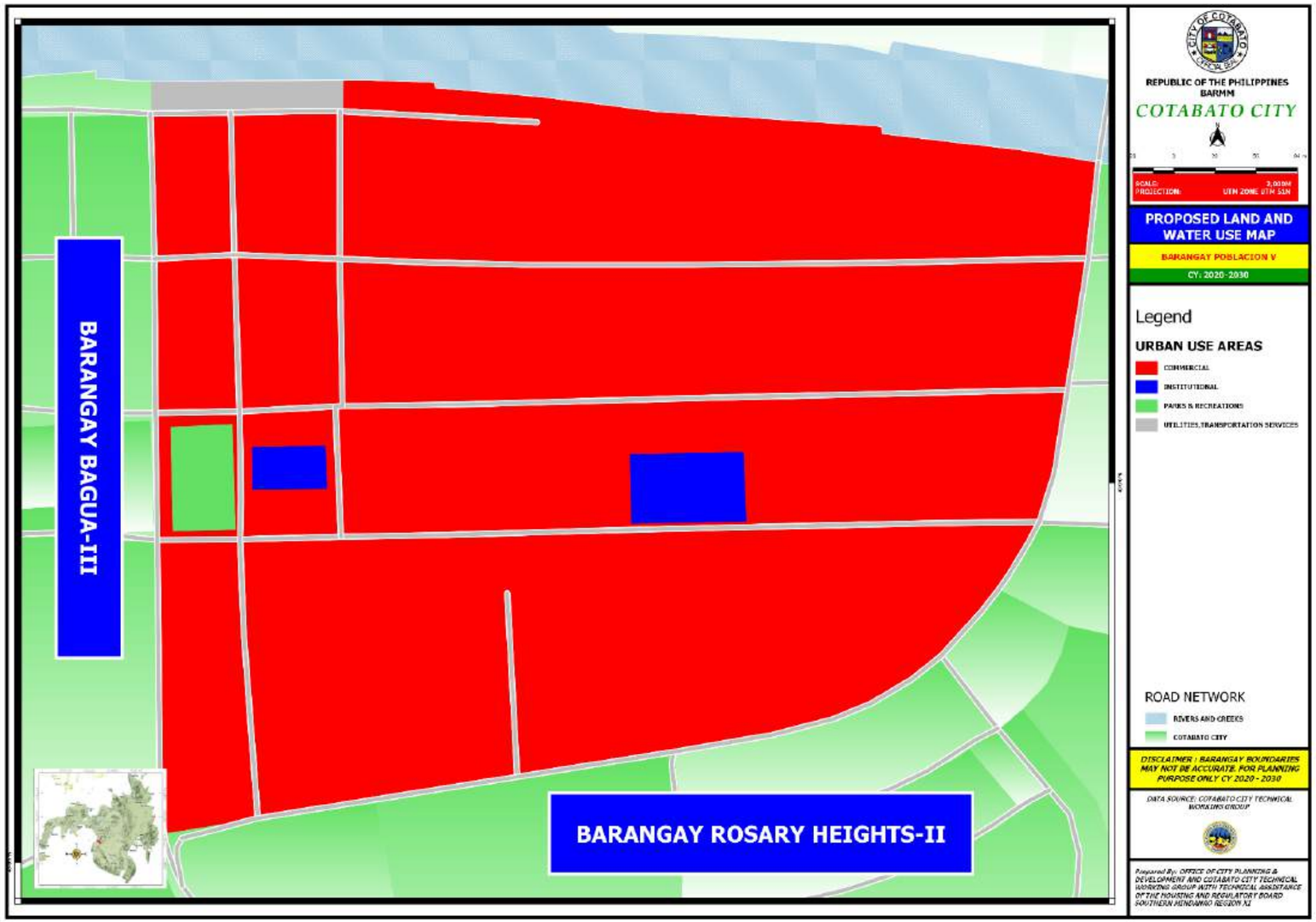
Barangay Poblacion 5

Table 1.20: Proposed Land Use of Barangay Poblacion 5

Land Use	Proposed (ha)	% To Total
Commercial	22.33	79%
Institutional	0.51	2%
Parks & Recreation	0.30	1%
Rivers & Creeks	1.60	6%
Roads	3.39	12%
Total	**28.13**	**100%**

Barangay Poblacion 5 is one of the two barangays that compose the CBD. It has been the center of commerce since the early times. Being the center of commerce and trade up to now, the barangay is most suitable for a commercial zone. The barangay being bordered by the stretch of Quezon Avenue (national highway) on the south to southeast and Japal Guiani Sr. St. on the west and Rio Grande de Mindanao on the north shall be purely for commercial zone. From the previous light to medium commercial zone, it will be rezoned to a more a dynamic and higher intensity commercial district. Except for institutional uses which be maintained and have been in the barangay for a long time such as the Sanggunian Panlungsod, Agape Evangelical School and Philippine Ports Authority. The parks and plaza will be fronting the (Old) City Hall shall be for Parks and Recreation zone. Although a fraction of the barangay is presently dwelling area, they will be zoned as commercial zone as well. Poblacion 5 is presently fully occupied however it is anticipated that it will continually undergo urban renewal. Old commercial buildings are replaced by a newer and more dynamic commercial establishment.

Figure 1.20: Barangay Poblacion 5



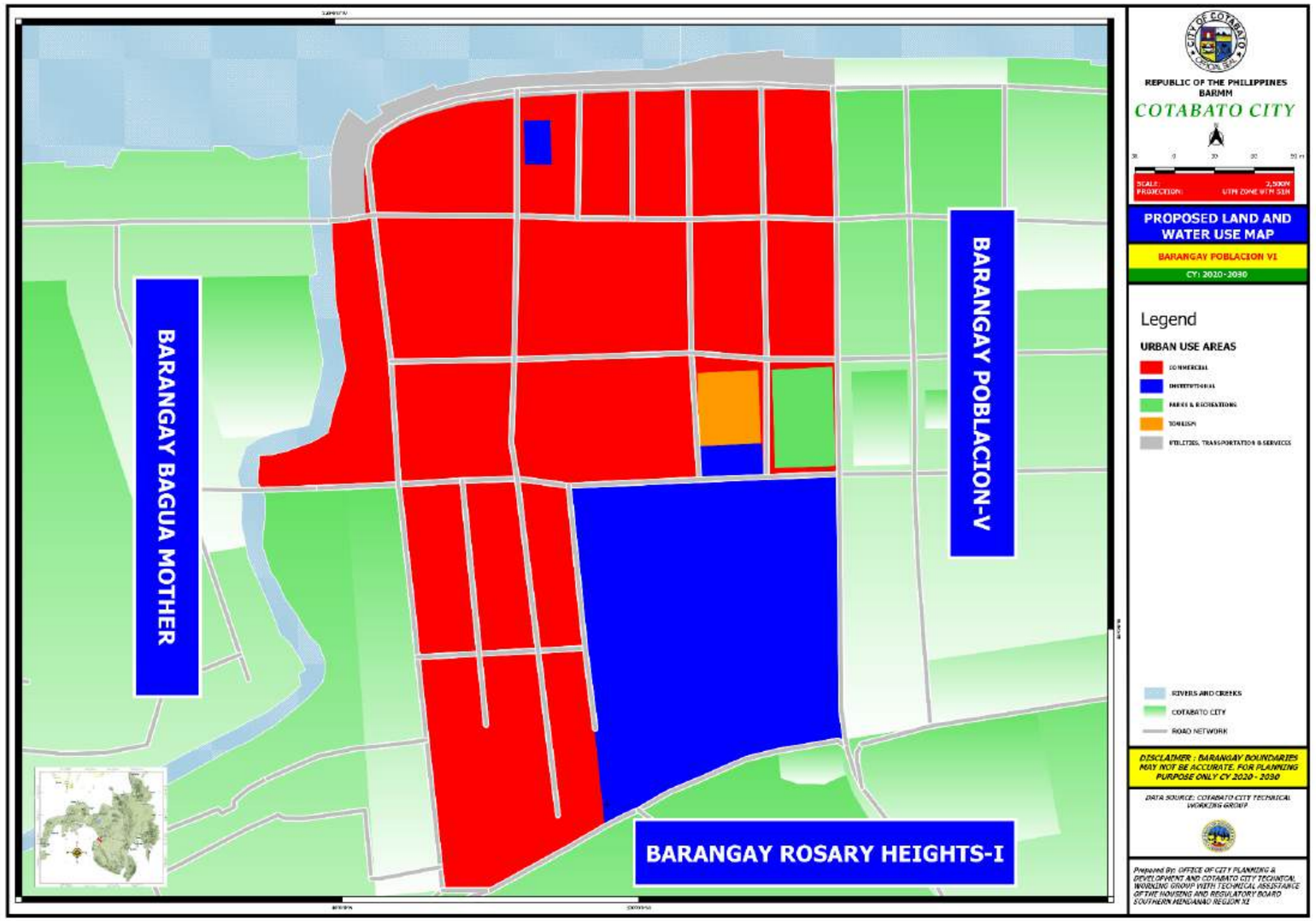
Barangay Poblacion 6 (Brgy Sentral)

Table 1.21: Proposed Land Use of Barangay Poblacion 6

Land Use	Proposed (ha)	% To Total
Commercial	8.68	39%
Institutional	5.59	25%
Parks & Recreation	0.35	2%
Rivers & Creeks	4.13	18%
Roads	3.71	17%
Tourism	0.26	1%
Total	**22.46**	**100%**

Barangay Sentral implies its location geographically vis-à-vis the city. Together with Poblacion 5 it is the central of trade and commerce even during the Spanish time as evidence by the *Poblacion concept* of King Philip of Spain. Up to now it is still the part of the CBD although the same is gradually shifting to Barangays Rosary Heights 7, 9 and 10. The entire grid of the barangay as bordered by Sinsuat Avenue to the east, Tabunaway Boulevard at the north, Mabini Street at the west, and PC Hill Road at the south shall be zoned for commerce and trade or Commercial zone. Unlike the previous planning year, it will be rezoned to a more flexible commercial zone. The previously zoned as institutional blocks will be maintained such as those zoned for Cotabato City Central Pilot School, Old City Hall, Post Office and the Philippine Ports Authority. Similar to Poblacion 5, the other half of the plaza falling within its jurisdiction shall be zoned as Parks and Recreation. The dwelling areas shall be included within the commercial zone as most of it may gradually transformed to commercial establishments. There are not much vacant lands in this barangay.

Figure 1.21: Barangay Poblacion 6



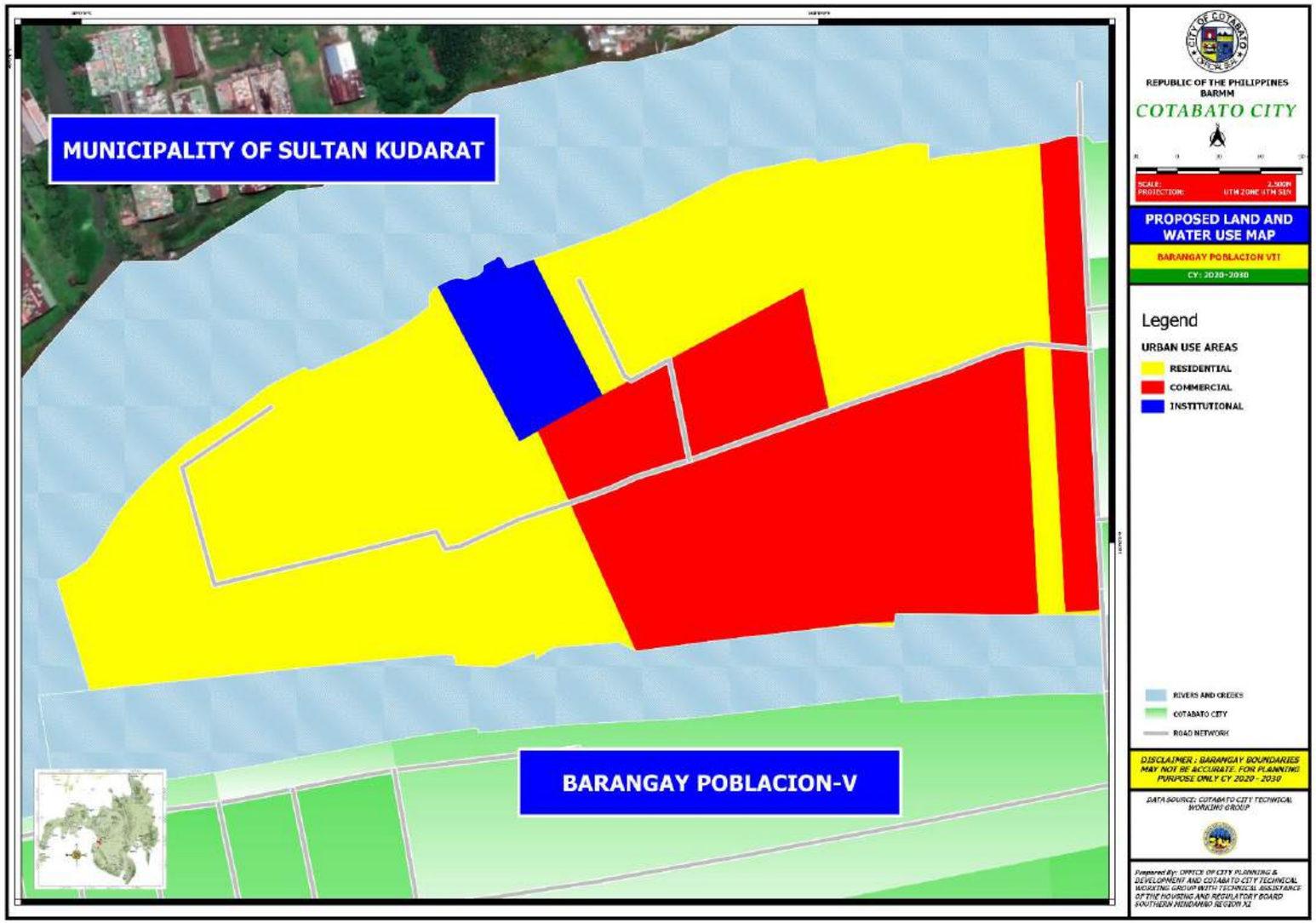
Barangay Poblacion 7

Table 1.22: Proposed Land Use of Barangay Poblacion 7

Land Use	Proposed (ha)	% To Total
Commercial	7.27	27%
Institutional	0.88	3%
Residential	10.76	40%
Rivers & Creeks	6.43	24%
Roads	1.31	5%
Total	**26.66**	**100%**

Poblacion 7 will be a mixed-use barangay composed of residential, commercial and industrial uses. Previously, much of this barangay was zoned as industrial. Apparently, the industrial use has reached its maximum use and leaving a substantial part of the industrial zone occupied by dwellings. The area fronting the national highway shall be zoned as commercial as well as the block occupied by Cotabato Sawmill and the warehouses in that part of the barangay. The Datu Siang Elementary School shall remain as institutional while the rest of the barangay shall be rezoned to residential use. The vacant land shall be included in the residential zone since could be an expansion area.

Figure 1.22: Barangay Poblacion 7



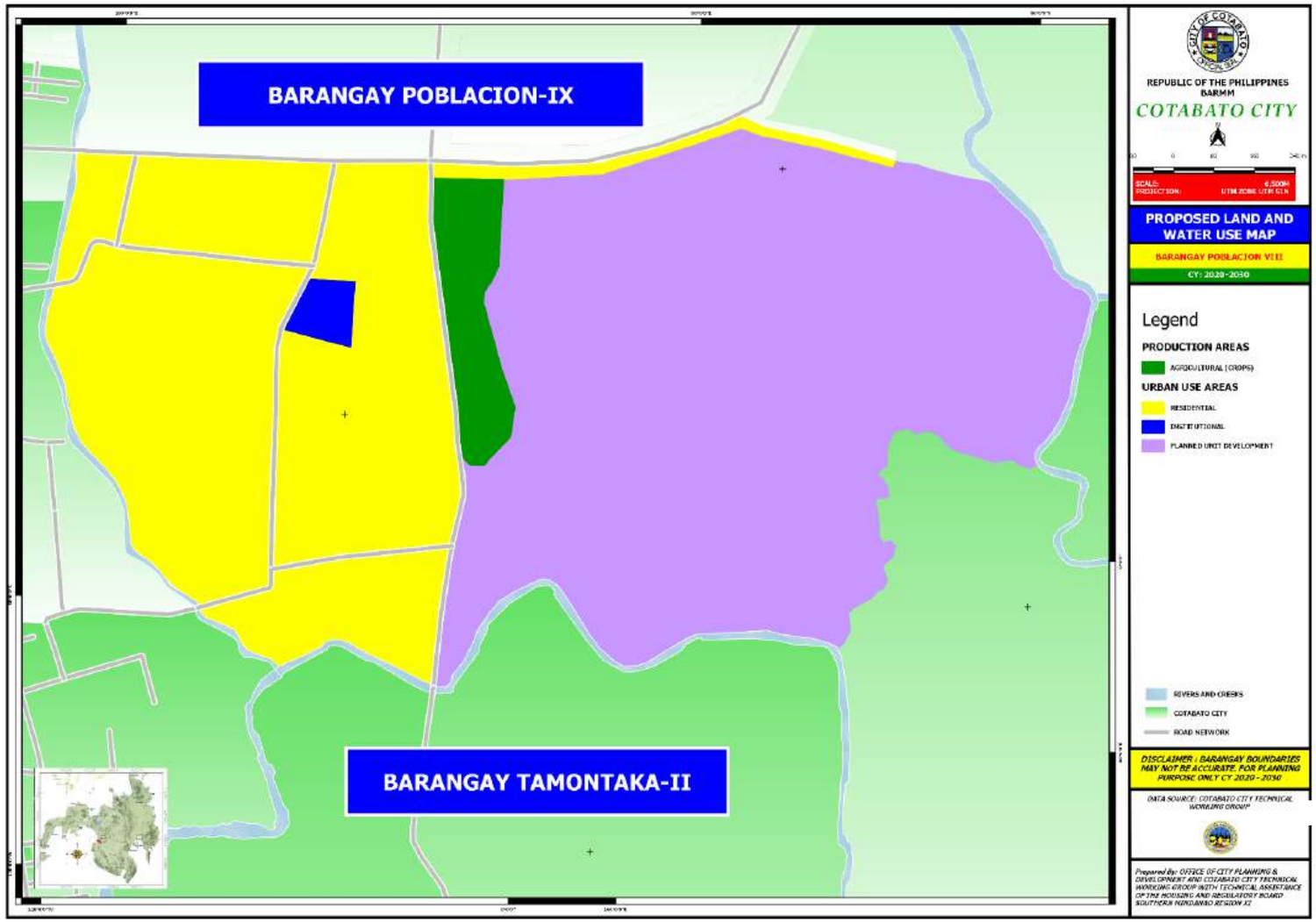
Poblacion 8 (Brgy Datu Sema Balabaran Kalantungan)

Table 1.23: Proposed Land Use of Barangay Poblacion 8

Land Use	Proposed (ha)	% To Total
Crops	6.22	4%
Institutional	1.32	1%
Residential	43.14	26%
Rivers & Creeks	12.22	7%
Planned Unit Development	94.30	56%
Roads	9.72	6%
Total	**166.92**	**100%**

Barangay Datu Sema Balabaran Kalantungan is located at the outer fringe of the city thus most part of this barangay is suitable for agriculture. The barangay is largely planted with crops except a few particularly those along the road since settlements have gradually set in vacant lands. For this purpose, a residential strip following the stretch of the roads shall be zone as residential use. Since the barangay is far from most schools in the city, an institutional zone shall remain for Kutawato Institute of Technology Foundation Incorporated (KITFI) since it provides education to the pupils/students in the barangay. The large part shall remain as agriculture zone. An infrastructure use, with sufficient setback from other uses shall be allocated for the City Government to operate a solid waste Management facility.

Figure 1.23: Barangay Poblacion 8



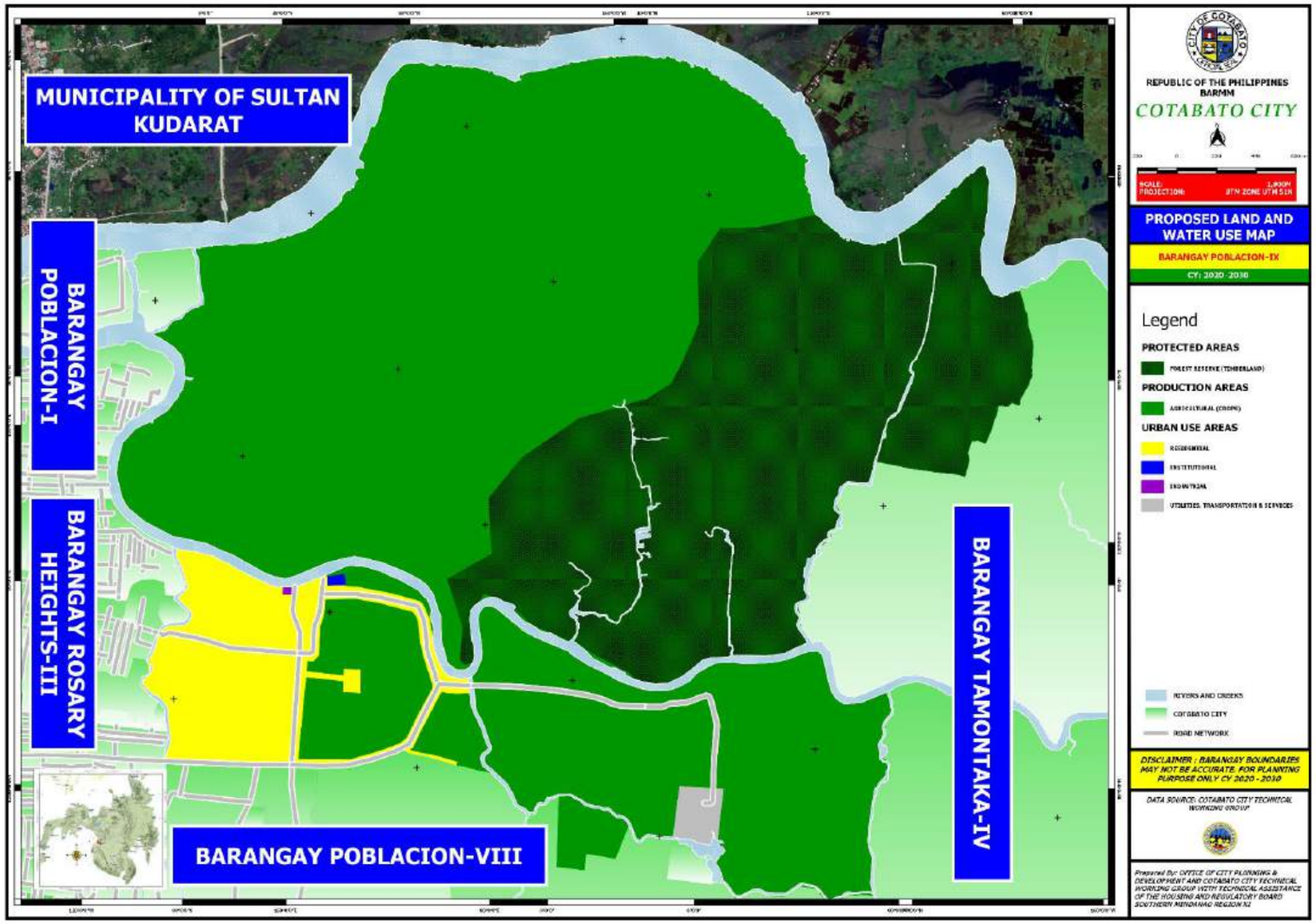
Poblacion 9 (Brgy Biniruan)

Table 1.24: Proposed Land Use of Barangay Poblacion 9

Land Use	Proposed (ha)	% To Total
Crops	1067.33	67%
Infrastructure	8.74	1%
Industrial	0.20	0%
Institutional	0.65	0%
Residential	105.78	7%
Rivers & Creeks	131.27	8%
Timberland	275.99	17%
Roads	4.31	0%
Total	**1594.27**	**100%**

Barangay Biniruan is situated in the outer fringe of the city and is suitable for agriculture. As it is, the barangay is dominantly agriculture with a few areas occupied by settlements. The area along the roads of biniruan following a linear strip will be zoned as residential, the Kakar Road as well will have a strip of residential zone while opposite the same road will be a block or residential zone including the vacant space as a room for expansion. The strip following the diversion road will be zoned as residential except the area of Bulk Water Supply for Greater Cotabato which will be rezoned into industrial. The western part of the barangay will be zoned as Planned Unit Development (PUD) for future various projects of the city government in the form of Public-Private Partnership. The project will include an airport and other support facilities. The rest will be agriculture and timberland per classification of Dept of Environment and Natural Resources.

Figure 1.24: Barangay Poblacion 9



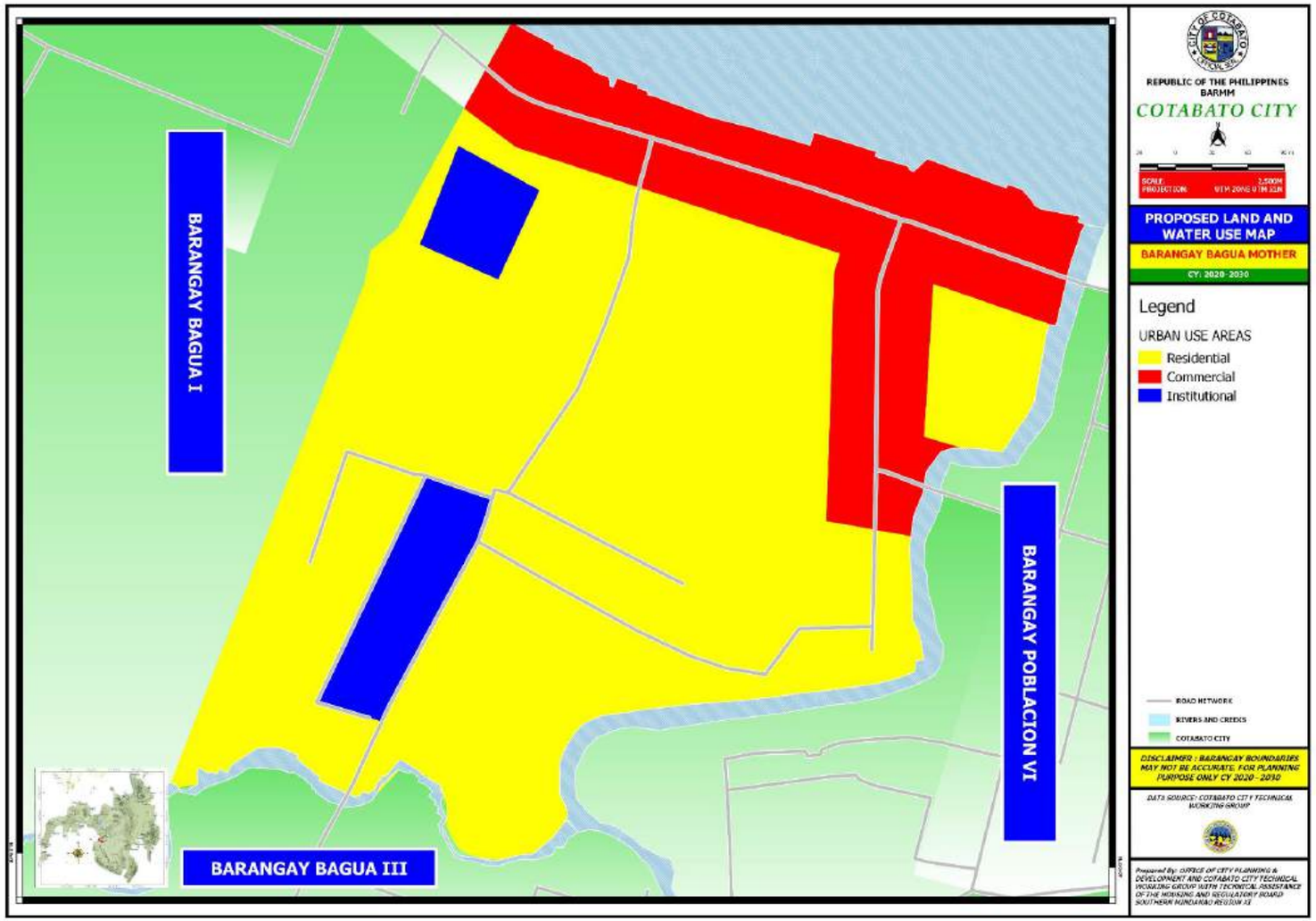
Barangay Bagua Mother

Table 1.25: Proposed Land Use of Barangay Bagua Mother

Land Use	Proposed (ha)	% To Total
Commercial	9.39	31%
Institutional	1.85	6%
Residential	16.54	55%
Roads	2.50	8%
Total	**30.28**	**100%**

Barangay Bagua Mother is situated within the inner fringe of the city separated by Manday River from the CBD. As such, the area is highly densified with residential use being near to work and CBD Most part of the barangay will be zoned as residential to accommodate residents that have settled therein. The stretch of Jose Lim Sr. St (Lugay Lugay part) will be zoned as commercial on both sides for commercial establishments. The stretch of Manday Street will likewise be for commercial use on both sides including the place of worship- San roque Chapel since same is allowable under institutional use. To cater to educational needs of the nearby population the following institutional zone for Kutawato Darussalam College Inc. will be maintained. In addition to that the site of the Rasheeda High School will zone as another institutional use. The vacant lands will be zone as residential for expansion purposes.

Figure 1.25: Barangay Bagua Mother



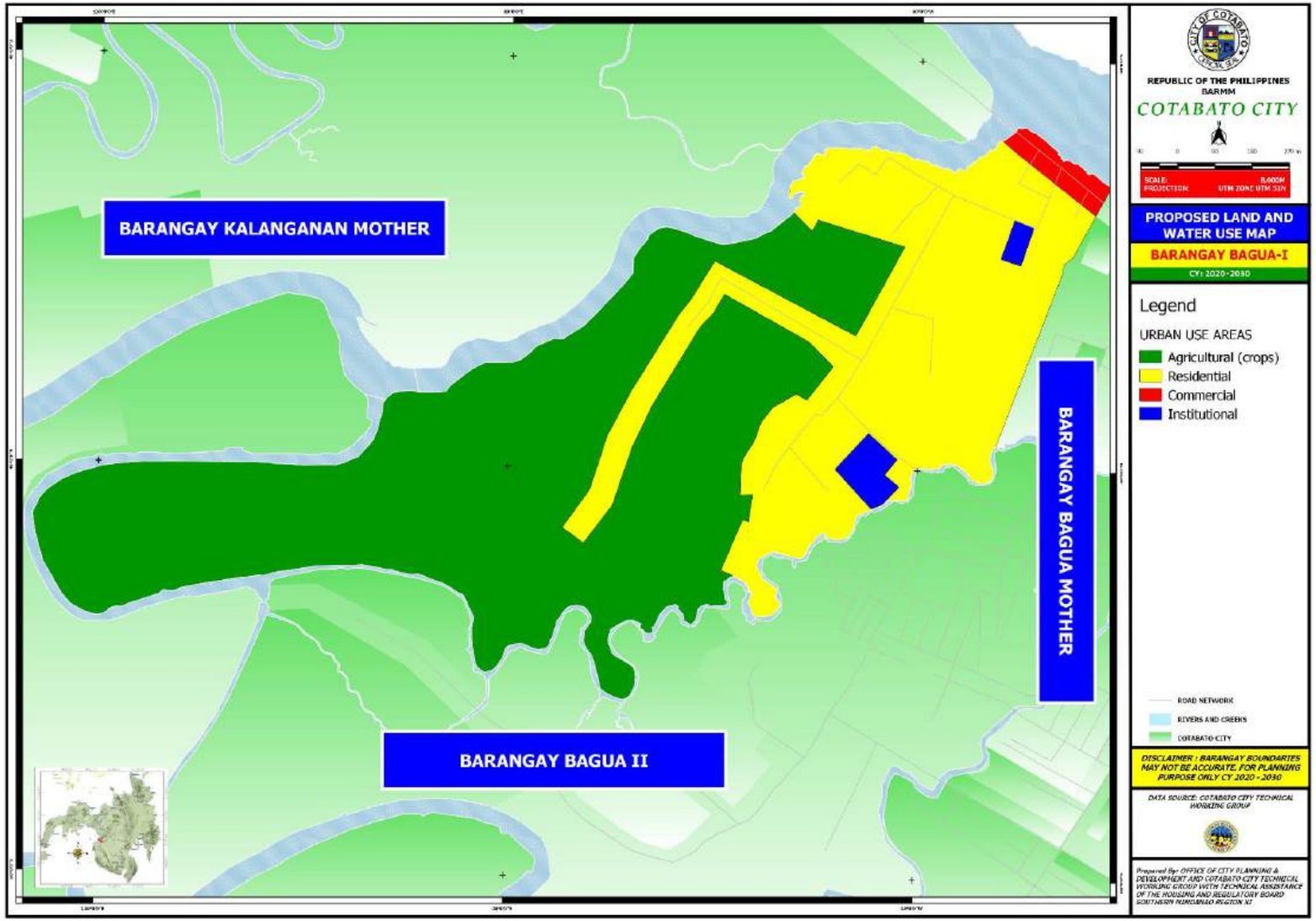
Barangay Bagua 1 (Brgy Lugay-Lugay)

Table 1.26: Proposed Land Use of Barangay Bagua 1

Land Use	Proposed (ha)	% To Total
Commercial	5.32	3%
Crops	101.53	55%
Institutional	2.05	1%
Residential	54.95	30%
Rivers & Creeks	17.37	9%
Roads	4.49	2%
Total	**185.71**	**100%**

Barangay Lugay-Lugay is potential for mixed-use. This barangay being next to Bagua Mother has its share of settlement although not high in population density compared to the latter. The proposed land use for this barangay is almost the same with their neighboring barangay except that a part of this barangay will have an agriculture zone different from the previous land use plan. The commercial strip along Jose Lim Sr. St (Lugay-Lugay part) reckons from Barangay Bagua Mother will extend to Barangay Bagua 1 up to Lugay-Lugay Bridge. Institutional uses will also be allocated to existing schools such as Lugay-Lugay Elementary School and Shariff Kabunsuan College. Majority of students in these schools are residents of this barangay or adjacent barangay thus necessary that they have a place in the land use plan. The southwestern part of the barangay particularly those planted with crops will be rezone to agriculture area. Other vacant spaces outside the agricultural zone, Institutional zone and commercial zone will be zone to residential for future expansion of settlement.

Figure 1.26: Barangay Bagua 1



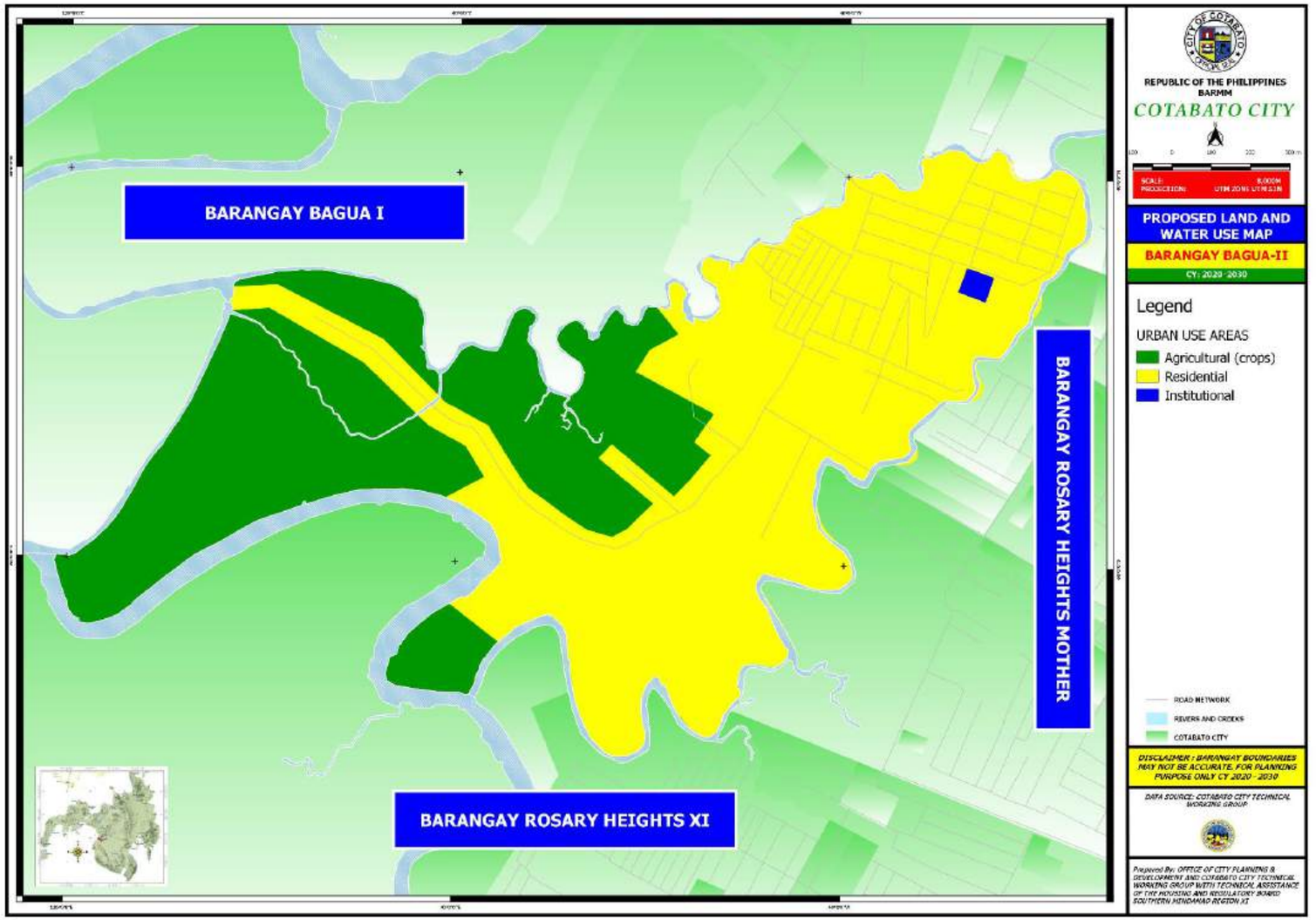
Barangay Bagua 2 (Brgy Datu Usman Mampen)

Table 1.27: Proposed Land Use of Barangay Bagua 2

Land Use	Proposed (ha)	% To Total
Crops	70.79	40%
Special Institution	0.06	0%
General Institution	0.40	0%
Residential	82.11	47%
Rivers & Creeks	12.44	7%
Roads	10.56	6%
Total	**176.36**	**100%**

Barangay Datu Usman Mampen is also a large tract of land but mostly for residential or dwelling use. Since this barangay lies in the outer fringe it would be more ideal for dwelling. Almost the entire barangay will be zone for residential use including those large vacant lands as area for expansion of settlements. Due to the increasing land space occupied by this long-time school, the previously zoned Usman Elementary School shall be rezoned to institutional block. The numerous places of worships in the barangay such as the masjids will be included in the residential zone since they can co-exist and allowable in residential districts.

Figure 1.27: Barangay Bagua 2



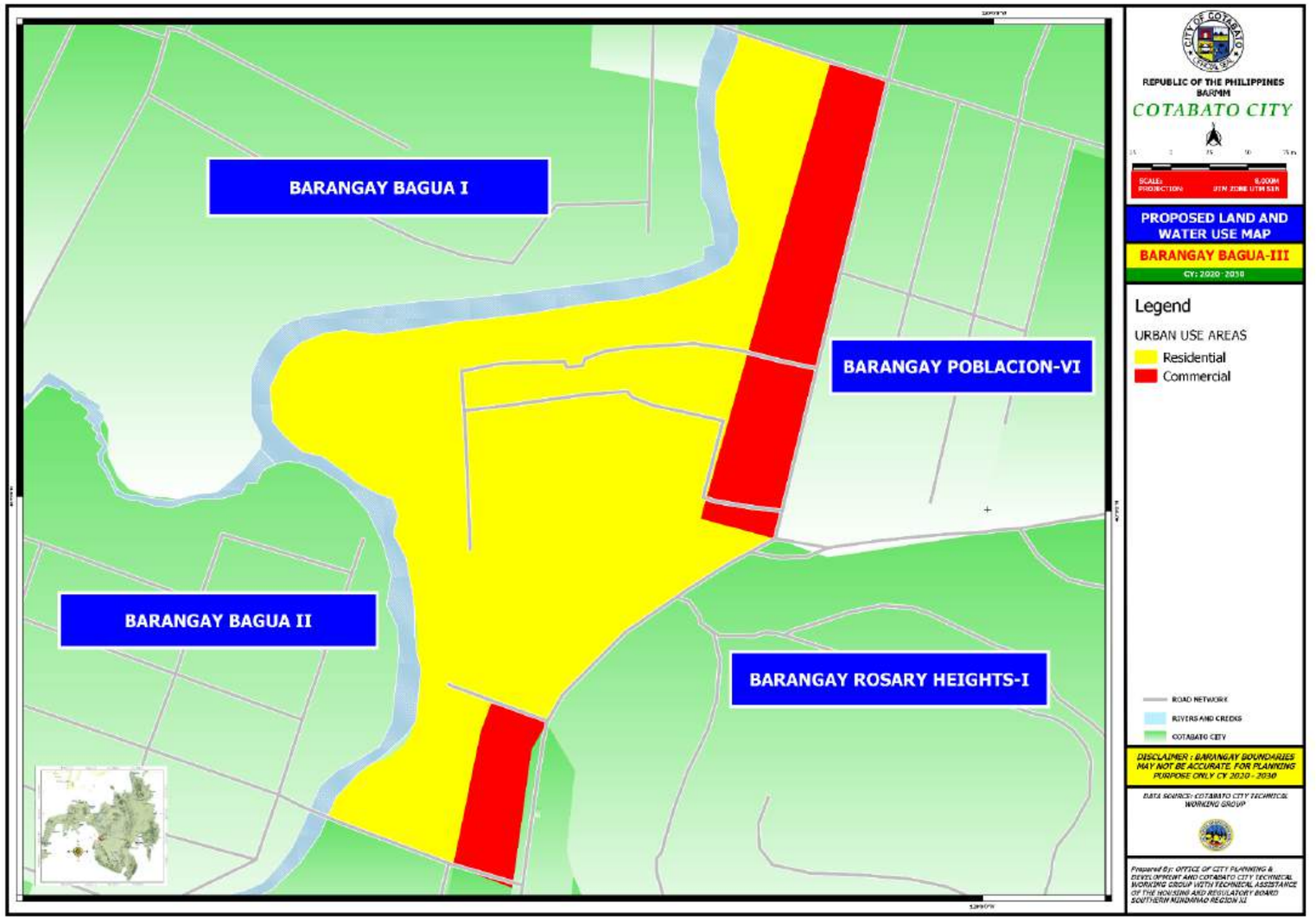
Barangay Bagua 3 (Brgy Piansa H. Ali)

Table 1.28: Proposed Land Use of Barangay Bagua 3

Land Use	Proposed (ha)	% To Total
Commercial	1.79	21%
Residential	5.21	62%
Rivers & Creeks	0.59	7%
Roads	0.76	9%
Total	**8.34**	**100%**

Barangay Piansa Ali is a barangay adjacent to the CBD making it attractive to early settlements. Similar to Barangay Bagua Mother it has a high population density as shown by highly densified dwellings. Being close to the CBD it has its share of commercial activities particularly along Mabini St. This part will be zoned as commercial area to take in business and trade. The part along T.V. Juliano Avenue will be zoned as commercial as well as it gradually evolves into a commercial strip being an alternate route to and from the CBD. The same has also been classified as a national road apart from the Sinsuat Avenue. The rest will remain as residential zone including a small vacant land which may also be an expansion site.

Figure 1.28: Barangay Bagua 3



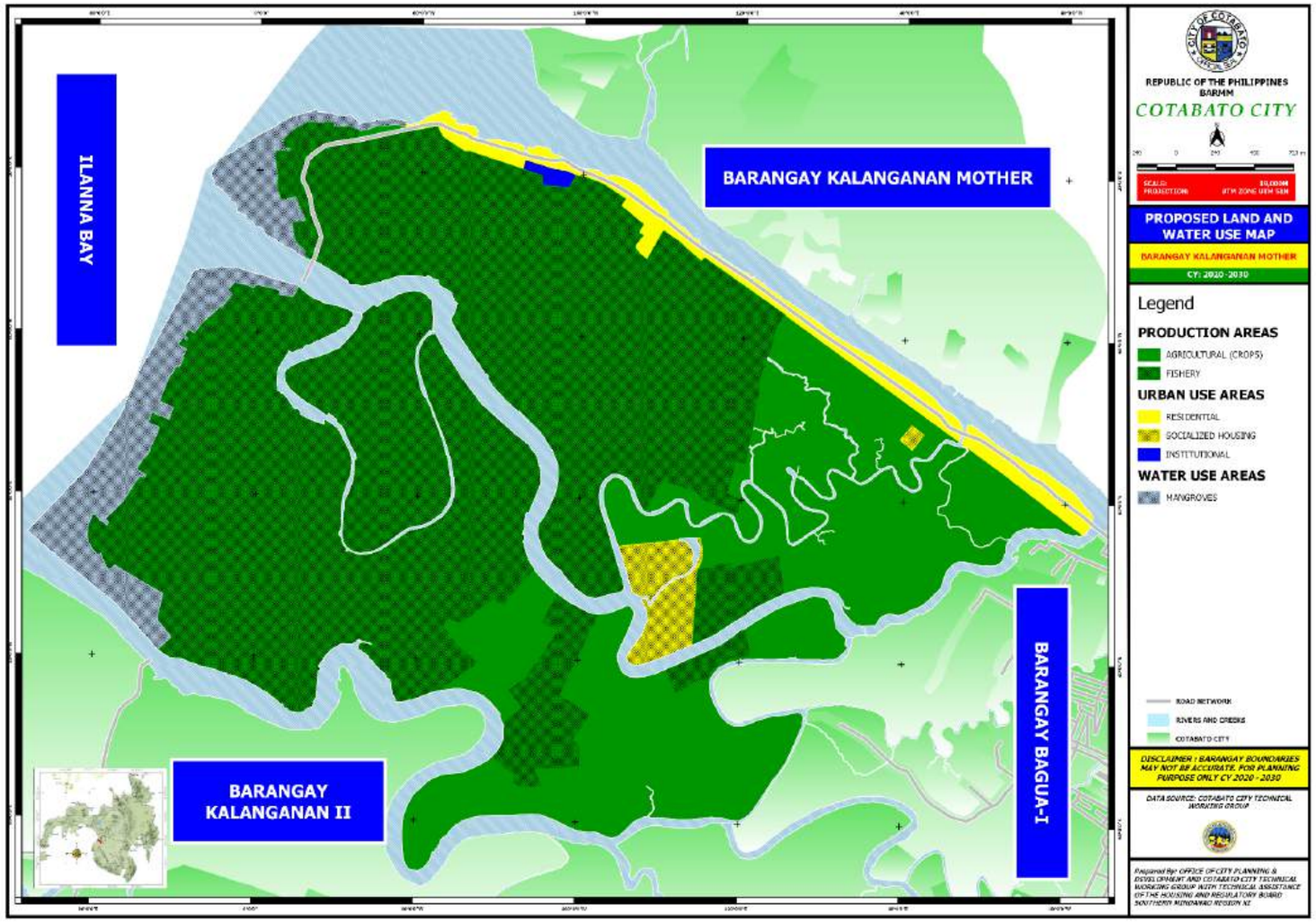
Barangay Kalanganan MB

Table 1.29: Proposed Land Use of Barangay Kalanganan Mother

Land Use	Proposed (ha)	% To Total
Crops	660.93	30%
Fishery	1002.89	45%
Special Institution	0.06	0%
General Institution	2.504	0%
Mangroves	92.34	4%
Residential	154.05	7%
Rivers & Creeks	273.69	12%
Roads	20.17	1%
Total	**2206.63**	**100%**

Barangay Kalanganan Mother is one of the 3 coastal barangays of the city. It is located at the outer fringe, thus, mostly aquaculture and agriculture covered by a fishpond lease agreement which will expire very soon. It has a thin strip of mangrove shrubs along the coast. Over the years, Kalanganan had been a target area of port development purposely to spur economic development in the city. To balance coastal protection and port development as well as agriculture located within, a large part on the southern part will be zone as Planned Unit Development (PUD). As PUD, a site development plan could be laid out later integrating port development, preservation of coastal integrity and agriculture in one grand plan. A strip following the Kalanganan road shall be maintained as residential district as settlements have evolved over a period of time. A residential area will also be allocated on the southern part particularly at the City owned property (formerly Doruelo estate) as it is considered an expansion area once a bridge will be constructed. Along the strip an institutional use shall be allocated to Datu Ayunan Elementary School to provide support to education on the barangay. The rest will be classified as agriculture and forest per classification of DENR.

Figure 1.29: Barangay Kalanganan Mother



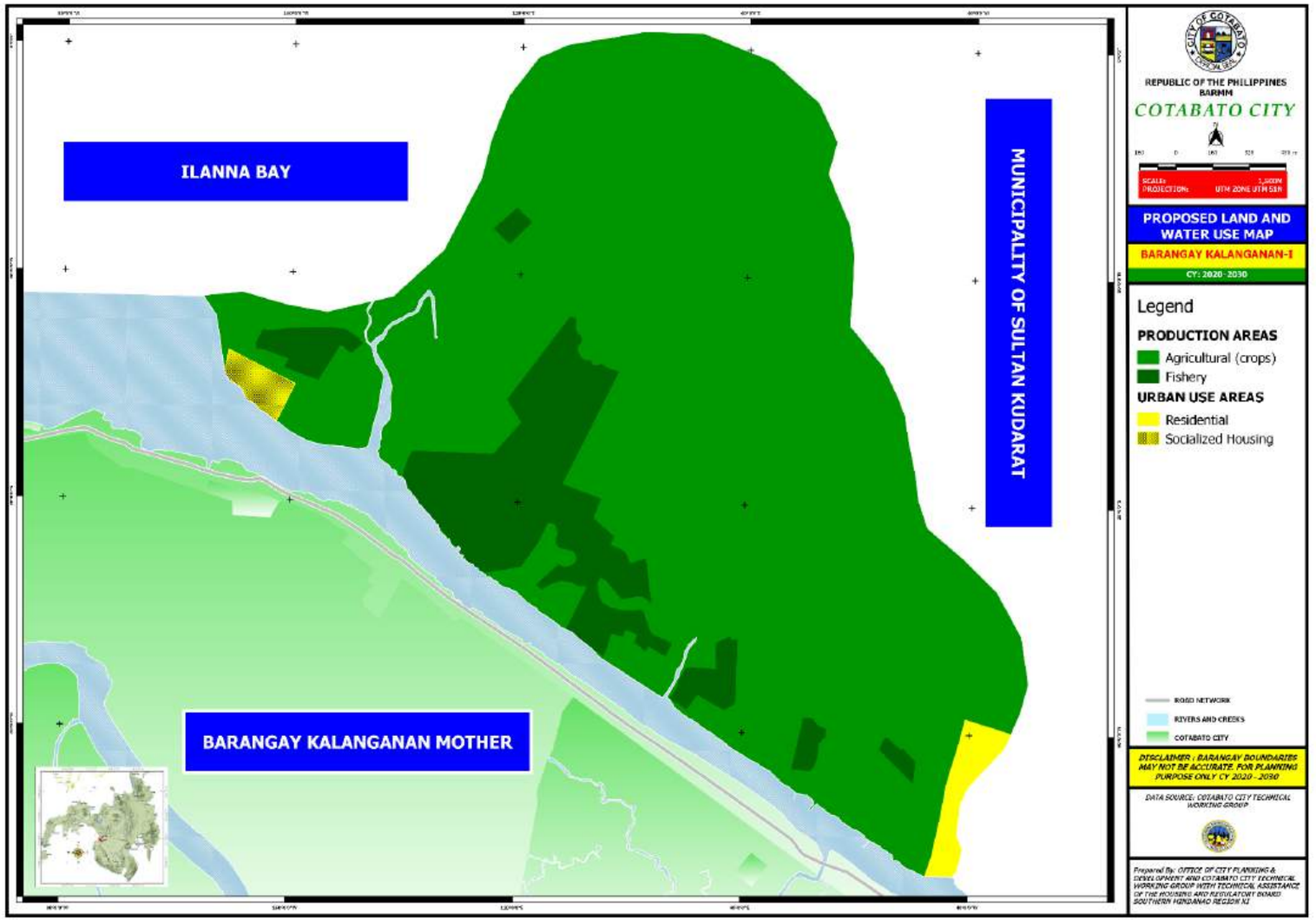
Barangay Kalanganan 1

Table 1.30: Proposed Land Use of Barangay Kalanganan 1

Land Use	Proposed (ha)	% To Total
Crops	855.53	74%
Fishery	79.10	7%
Residential	13.68	1%
Rivers & Creeks	204.57	18%
Roads	5.78	0%
Total	**1158.65**	**100%**

Barangay Kalanganan 1 is also a coastal barangay and the remotest barangay in the city in terms of road access. If one were to go to this barangay overland, one has to pass to through another municipality before reaching this barangay. The most convenient and fastest way to travel is through water transport (e.g., banca) by crossing Rio Grande de Mindanao. Being remote it is dominantly agriculture and will be maintained as agriculture zone. Except for a small portion will be zone as residential where settlements have evolved over the years and where agriculture is not practice.

Figure 1.30: Barangay Kalanganan 1



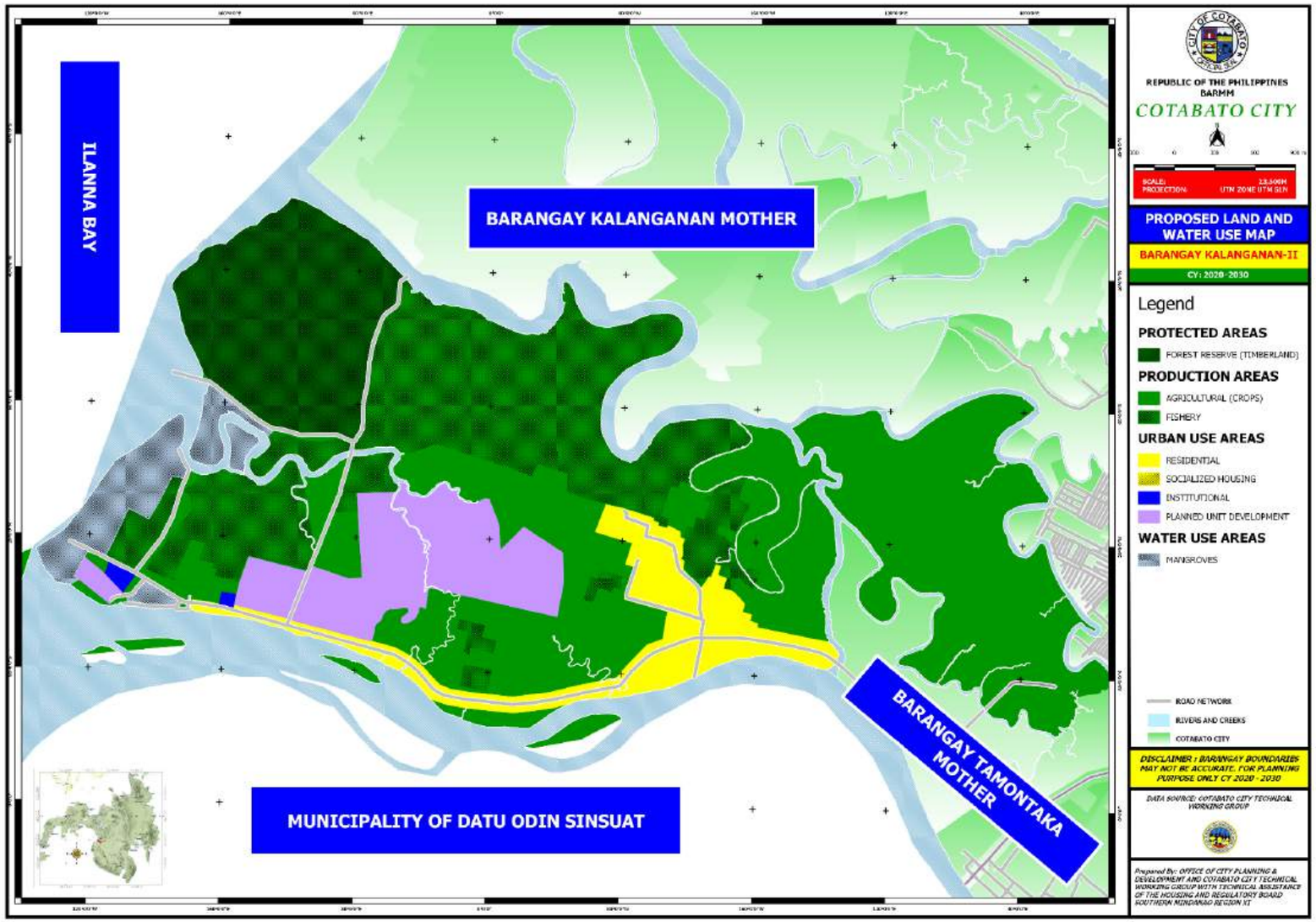
Barangay Kalanganan 2 (Brgy Datu Sarip Sinsuat)

Table 1.31: Proposed Land Use of Barangay Kalanganan 2

Land Use	Proposed (ha)	% To Total
Crops	788.07	37%
Fishery	447.01	21%
Special Institution	0.02	0%
General Institution	3.92	0%
Mangroves	74.39	4%
Residential	133.29	6%
Rivers & Creeks	253.96	12%
Timberland	233.58	11%
Unitary Planned Unit	154.33	7%
Roads	18.94	1%
Total	**2107.52**	**100%**

Barangay Datu Sarip Sinsuat is also coastal barangay at the eastern most part of the city. Like the Kalanganan barangays, the area is widely agriculture/aquaculture with patches of mangrove shrubs. It is also the location of Timako Hill, one of the two elevated areas of the city and the only forested part of the city. The barangay is part of the proposed seaport development covering this barangay as well as adjacent Barangay Kalanganan. Being so, a substantial portion of the barangay shall be zoned as PUD where careful planning could be laid out taking into account the coastal ecotourism, mangroves, agriculture/ aquaculture and forest. Due to its growing settlements in the area, a residential strip will be allocated along the following the stretch of the only road. Institutional zones will be allocated to the famous Sultan Haji Hassanal Bolkiah Mosque, the largest mosque in the Philippines and to the school located not far from it. The rest will be zone as agriculture and forest as classified by DENR.

Figure 1.31: Barangay Kalanganan 2



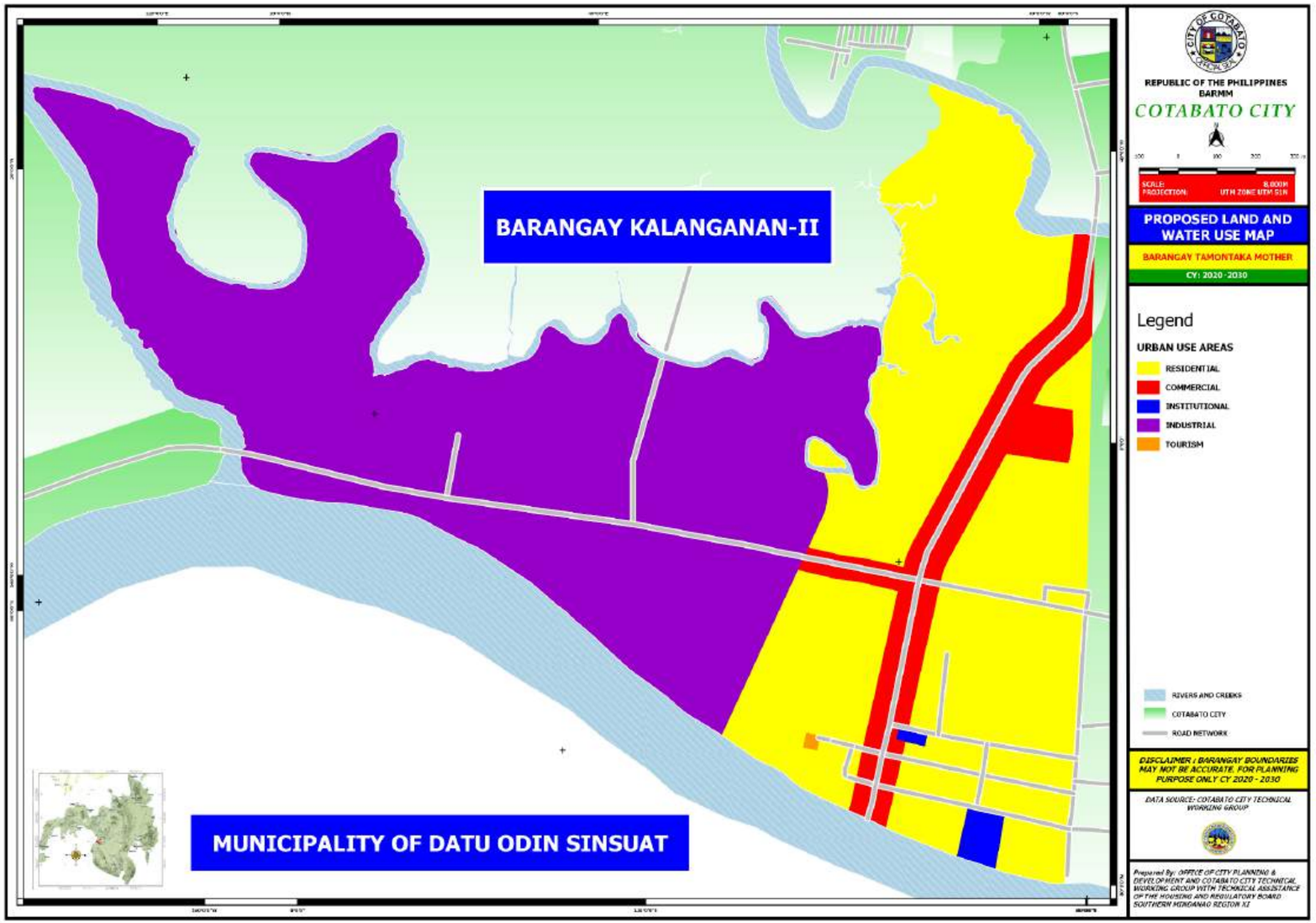
Barangay Tamontaka MB (Brgy Datu Balabaran Rajah Ingkong)

Table 1.32: Proposed Land Use of Barangay Tamontaka Mother

Land Use	Proposed (ha)	% To Total
Commercial	19.20	6%
Industrial	152.90	48%
Special Institution	0.31	0%
General Institution	2.16	1%
Residential	84.15	27%
Rivers & Creeks	48.31	15%
Tourism	0.13	0%
Roads	8.24	3%
Total	**315.40**	**100%**

Barangay Datu Balabaran Rajah Ingkong is located at the border of Cotabato City separating the city from Datu Odin Sinsuat by Tamontaka River. Being in the outer fringe, part of containing an area of 129 hectares was proposed and approved to be the Metro Cotabato Regional Agro-Industrial Center (MCRAIC) by then President Fidel V. Ramos. Fifty (50) hectares of the MCRAIC was purchased by the City Government for income generating projects in exercise of its corporate capacity. The entire 129 hectares shall remain as agro-industrial zone where the City's Halal abattoir also stands. The part along the national highway which is gradually evolving to commercial zone shall be zoned and retained as commercial strip but wider in width. The road leading to the MCRAIC site will be similarly zoned light commercial activities. The rest shall be zoned as residential except the following; Church of Immaculate Concepcion of Tamontaka commonly known as Tamontaka Church which was declared a National Historic Landmark in 2004 to be zoned as Tourism site, Headstart College of Cotabato and Tamontaka Elementary School to be zoned as institutional.

Figure 1.32: Barangay Tamontaka Mother



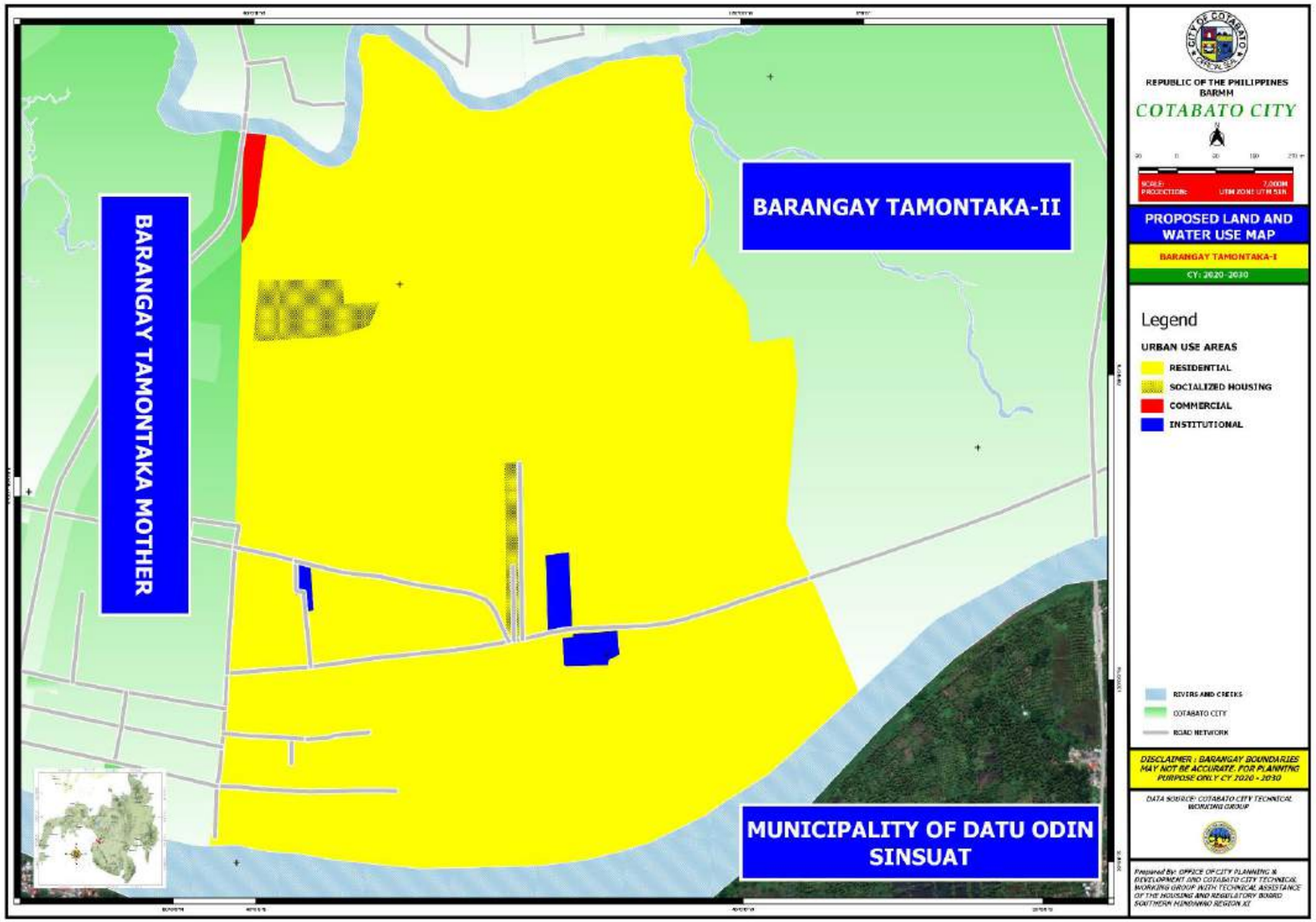
Barangay Tamontaka 1 (Brgy Datu Mama Sa Buayan)

Table 1.33: Proposed Land Use of Barangay Tamontaka 1

Land Use	Proposed (ha)	% To Total
Commercial	0.94	0%
Special Institution	0.11	0%
General Institution	2.10	1%
Residential	197.36	70%
Rivers & Creeks	68.96	25%
Roads	11.44	4%
Total	**280.92**	**100%**

Barangay Datu Mama sa Buayan is dominantly agriculture although a number of parcels have already been subdivided into a residential-size lots per documents of the City Assessor's Office. Although a large part will remain as agricultural lands on the ground the same will be zoned as residential. This barangay are also potential sites for resettlement area in case those people living in government properties, in danger areas, or are being evicted by rightful owners will be resettled. The Madrasah Al-Uloom Wal Hikma and Cotabato City Science Technology High School will be rezoned to institutional uses so as to concretize their presence in the barangay. These facilities have contributed significantly in the barangay in terms of education for our moslem brothers and sisters. The area at the southeastern part of the barangay will be rezoned to agricultural being a potential site for SAFDZ.

Figure 1.33: Barangay Tamontaka 1



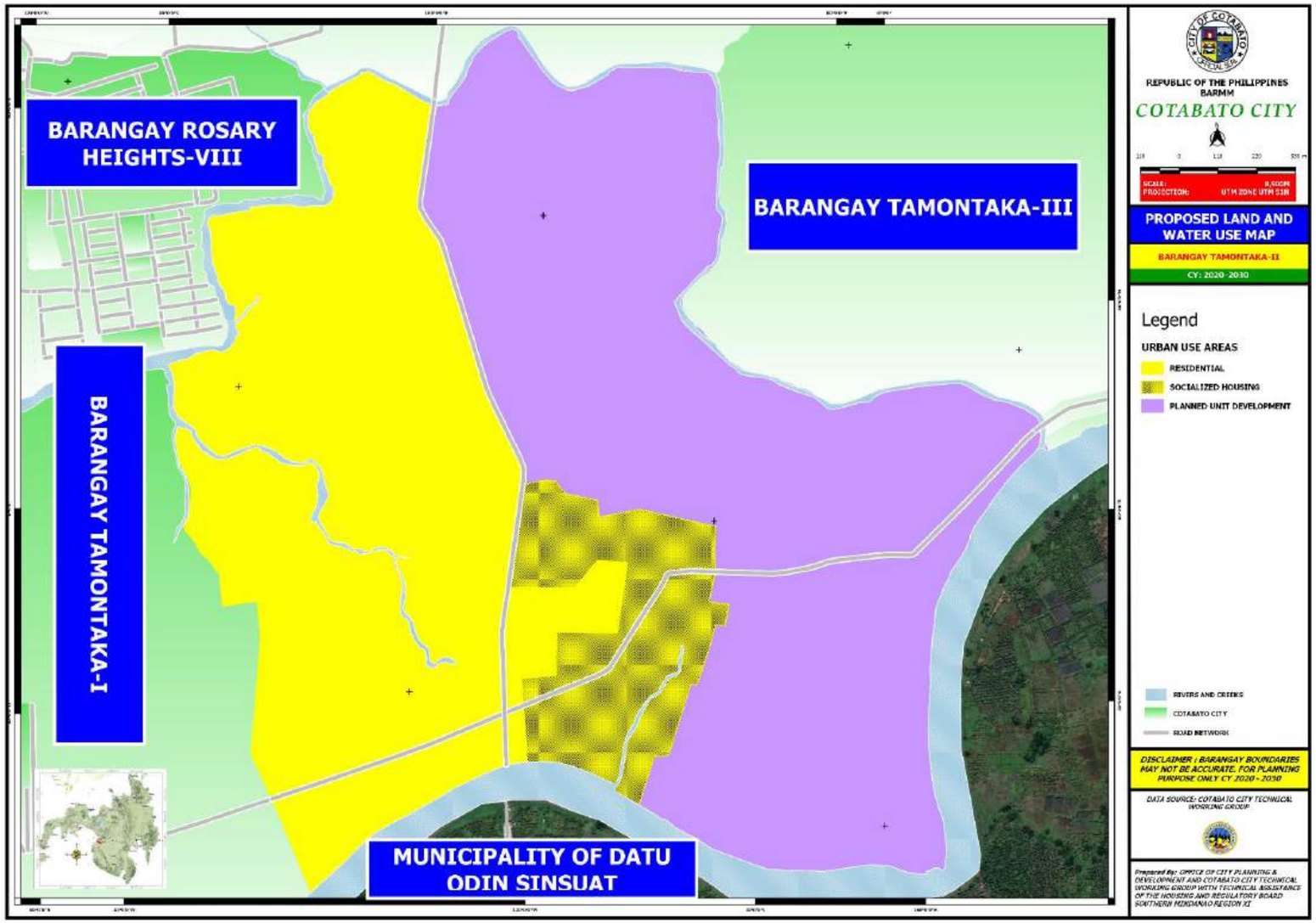
Barangay Tamontaka 2 (Brgy Datu Sapiol "Datu Pio" Pangilan)

Table 1.34: Proposed Land Use of Barangay Tamontaka 2

Land Use	Proposed (ha)	% To Total
Residential	158.63	34%
Rivers & Creeks	92.10	20%
Planned Unit Development	203.54	44%
Roads	7.62	2%
Total	**461.88**	**100%**

This barangay is located at the outer fringe of the city as such dominated by agricultural lands. Although being afar from the center of the city, it has been gradually chosen as settlement site by a few residents. It is a new site for resettlement of displaced families as well as new and proposed resettlement. A large part of Barangay Datu Sapiol Pangilan will be zoned as agricultural being planted with crops and its potential as a SAFDZ. The western part of the barangay shall be zoned as residential since a number of lots have already been subdivided by property owners for residential use although currently planted with crops by other farmers. The residential strip shall follow the stretch of the main road leading to the Barangay Tamontaka 3. Included in the residential strip is Usman Baunga Elementary School since it can co-exist and are allowable in residential zone.

Figure 1.34: Barangay Tamontaka 2



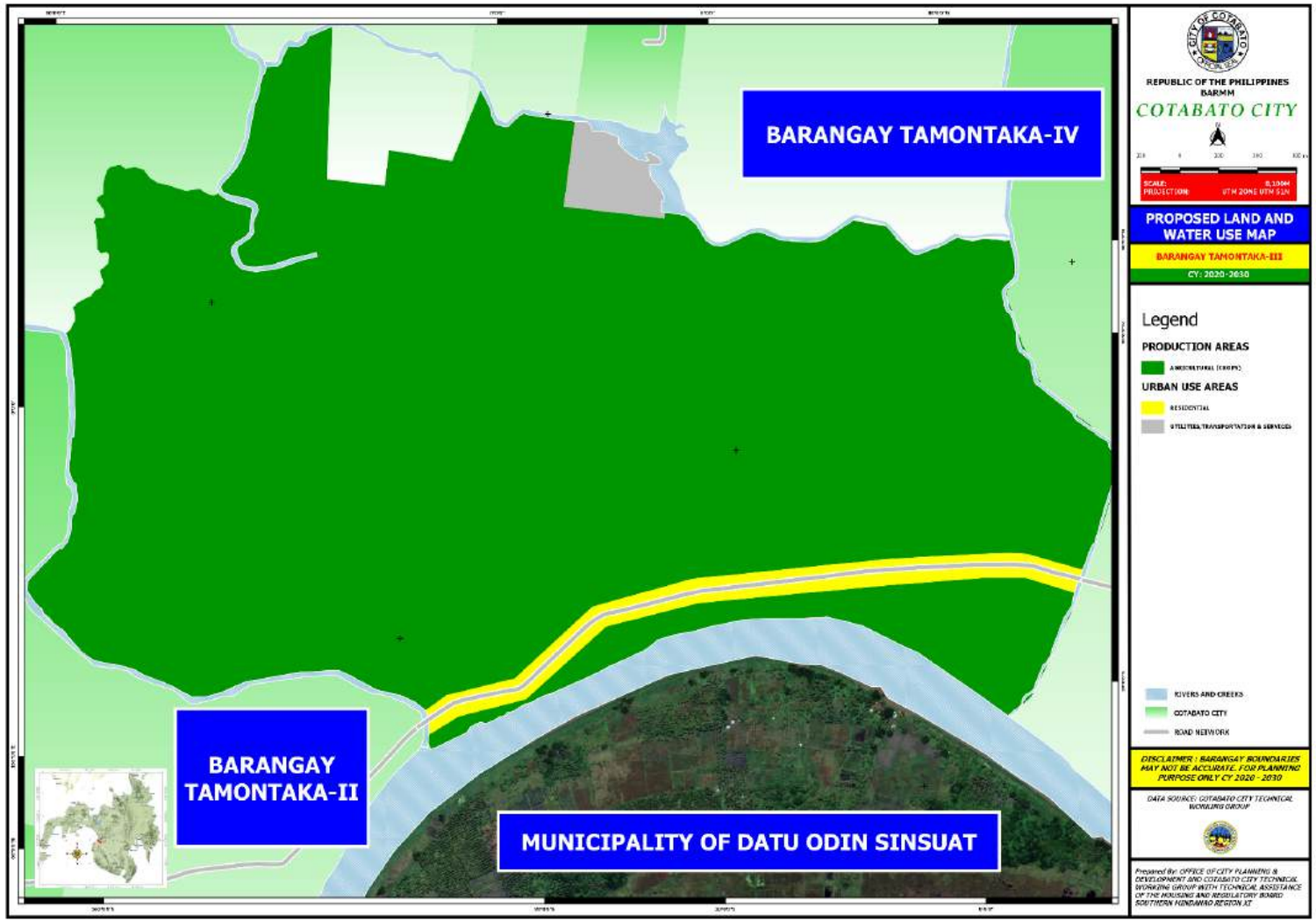
Barangay Tamontaka 3 (Brgy Pagalamatan)

Table 1.35: Proposed Land Use of Barangay Tamontaka 3

Land Use	Proposed (ha)	% To Total
Crops	279.83	53%
Infrastructure	4.80	1%
Residential	11.38	2%
Rivers & Creeks	226.47	43%
Roads	3.14	1%
Total	**525.62**	**100%**

Barangay Pagalamatan is also a remote barangay having a large part of open land. Although a substantial part is planted with crops yet a large part remains open and inaccessible. The barangay has a single -main road that connects to adjacent barangays. Notwithstanding its characteristics, the western part near the border of Tamontaka 2 will be zoned as agricultural. Right opposite the agricultural land is the area for Planned Unit Development (PUD) for a big-ticket project being planned by the City Government. This area will cover most part the open land Tamontaka River to the riverine on the north. A residential strip reckon from the border of Tamontaka 2 towards the PUD will be zone as residential including the area of Pagalamatan Elementary School. This school provides education to children of the barangay and adjacent barangay as well.

Figure 1.35: Barangay Tamontaka 3



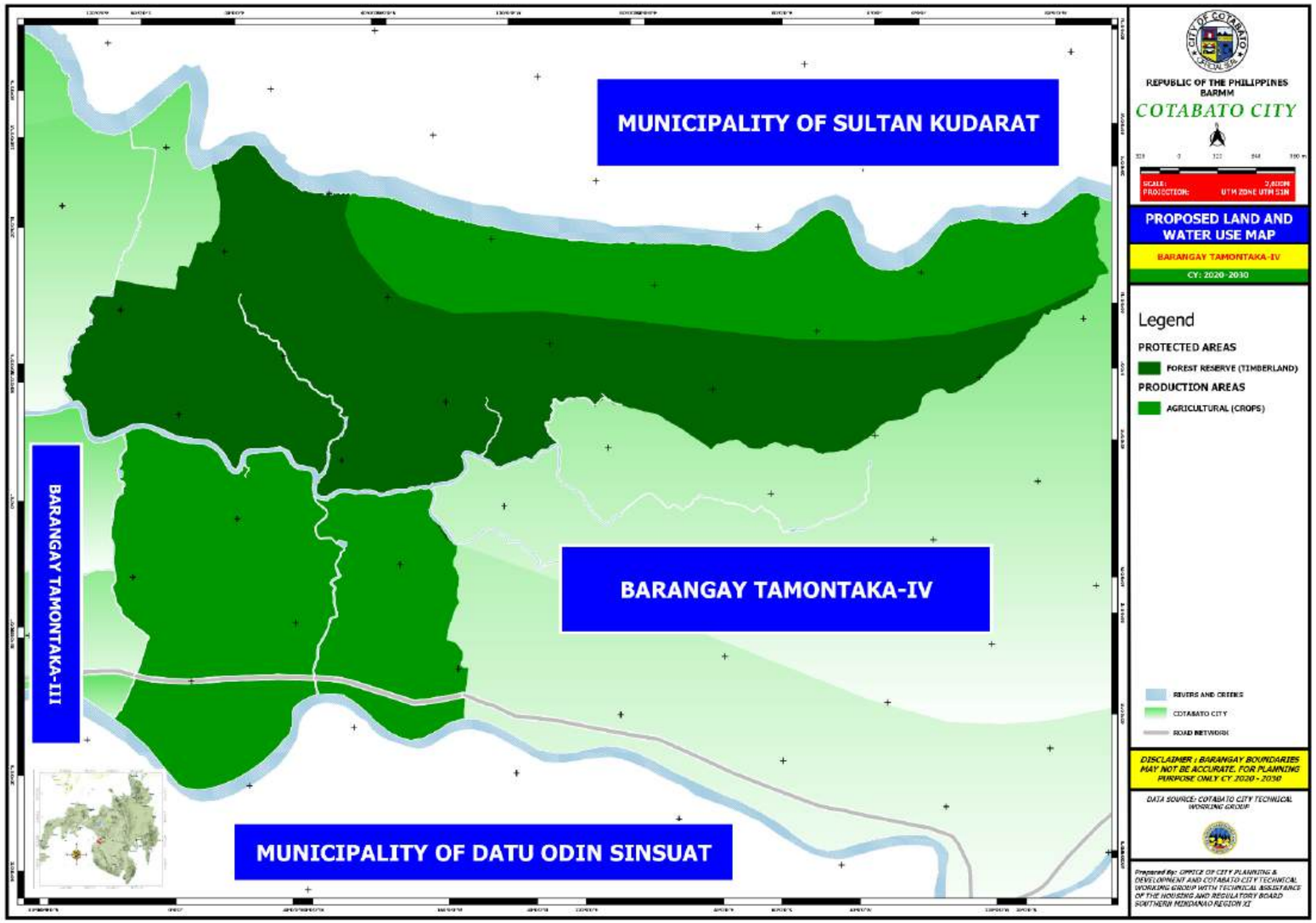
Barangay Tamontaka 4 (Brgy Tuan A. Barakat)

Table 1.36: Proposed Land Use of Barangay Tamontaka 4

Land Use	Proposed (ha)	% To Total
Crops	773.74	41%
Rivers & Creeks	244.77	13%
Timberland	854.31	45%
Roads	7.65	0%
Total	**1880.48**	**100%**

Barangay Tuan A. Barakat is next to Barangay Pagalamatan following the road heading towards the eastern part of the city. It is an agricultural barangay located at the outer fringe of the city. This area will be zone as agricultural zone and may be included in the SAFDZ. On the western part of the barangay, adjacent the borders of Barangay Pagalamatan will be zone as part of the Planned Unit Development for a future development project of the city. Although there are settlements (minimal) along the road, the same will be classified as agriculture since most of those dwellings belong to farmers and agriculture workers in the northern part of the barangay a Forest Reserve (Timberland) per DENR classification.

Figure 1.36: Barangay Tamontaka 4



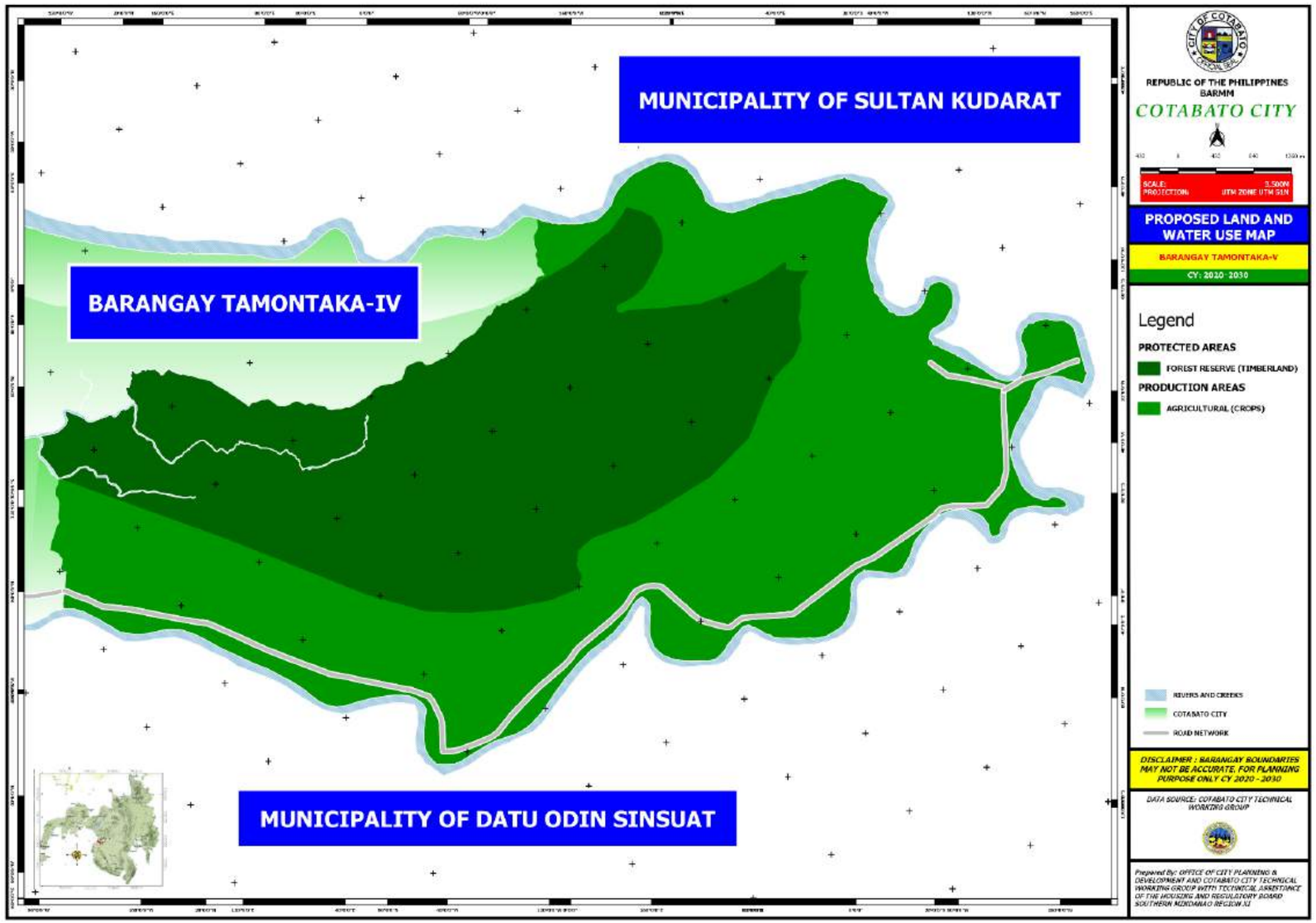
Barangay Tamontaka 5 (Brgy Diocolano)

Table 1.37: Proposed Land Use of Barangay Tamontaka 5

Land Use	Proposed (ha)	% To Total
Crops	2902.22	53%
Rivers & Creeks	769.88	14%
Timberland	1807.90	33%
Roads	14.90	0%
Total	**5494.90**	**100%**

Barangay Diocolano is the remotest barangay on the east direction of the city. It is an agricultural barangay which will be maintained in the next planning period. Included in the proposed land use is the area that will be allocated to Forest Reserve (timberland) per DENR classification. A SAFDZ area will also be allocated after due consultation with the appropriate agency or office of the city.

Figure 1.37: Barangay Tamontaka 5



2.13 LAND USE POLICIES

2.13.1 ECONOMIC SECTOR:

- Preservation of historic/cultural heritage landmarks:
  - ✓ fute fantad *(White Soil, Teduray's most sacred ground)* at Uruk Tantawan, PC Hill
  - ✓ Quincentennial Historical Marker for Maguindanao at Cotabato City Plaza
  - ✓ Old City Hall Museum
  - ✓ Cotabato Empire Provincial Capitol at PC Hill
  - ✓ Church of Immaculate Concepcion of Tamontaka (Old Tamontaka Church)
  - ✓ Quirino Bridge *(American-Filipino friendship and good will monument)*
  - ✓ Tocao Mansion
  - ✓ Maguindanao Provincial Jail and House of Correction at PC Hill
  - ✓ The Mindanao Cross: Archival Holdings
  - ✓ Cotabato City Sangguniang Panglungsod Building
  - ✓ Burke Building, Notre Dame University

- Develop, improve & operationalize tourism, establishments, structures:
  - ✓ Bagua Kutawato Cave
  - ✓ Takumi Butai Japanese Memorial Shrine
  - ✓ City Plaza
  - ✓ Timako Hill
  - ✓ Shine Kutang Bato - colorful hillside residential houses in PC Hill
  - ✓ Organization markers at PC Hill
  - ✓ Tantawan Park at PC Hill
  - ✓ People's Palace
  - ✓ Bangsamoro Government Center
  - ✓ Kalanganan Bai Walk

- Develop and improve religious establishment:
  - ✓ Immaculate Concepcion Cathedral
  - ✓ Sultan Hassanal Bolkiah Grand Mosque
  - ✓ Cotabato City Bell Church (*Taoist temple*)
  - ✓ St. Michael Church, PC Hill (built on fete fantad)
  - ✓ Chinese Chapel
  - ✓ Mosques & Churches
  - ✓ Chinese Temple

- Submission & adoption of Food Security Plan
- Planting of flood-resistant crops and practice cropping pattern
- Hybridization and practice planting/production of rice varieties
- Formulation of Sustainable Area Development Plan
- Formulation of Coconut Development Plan
- Practice organic production
- Formulation of Fishery Code
- Formulation of City Ordinance for gathering of crablets and crab breeders
- Encourage insurance of farmers and their crops

2.13.2 INFRASTRUCTURE SECTOR

- Mixture of undesirable land uses shall be minimized
- Develop a road network that shall be systematically connected (connecting to dead-end-roads) and spread to the urban periphery
- Observe required buffers for residential, commercial, and industrial land use
- Building with multi-stories shall adherence to Structural Code and National Building Code. (For Disaster protection)
- Proposed housing settlement/subdivision shall be discouraged in areas highly susceptible to flood
- In areas where retention is an option, structures shall have the proper mitigating and adaptive measures
- Provision of open space for public safety:
  - ✓ Flood control reservoir, flood-prone areas, drainage channels
  - ✓ Legal easements of waterways
  - ✓ Planting strips, road island, and sidewalks
  - ✓ Power transmission routes
- Cell phone sites

2.13.3 ENVIRONMENT

- Preservation and maintenance of the quality of air, water, and environmental values through EIA and environmental clearance certificate will be given priority;
- Sufficient buffer strip shall be provided in areas where there are mixed and allowable use to avert the undesirable influence of high-intensity use to low intensity land uses;
- Proposed settlements in flood-prone areas shall be elevated or on stilt whenever deemed possible
- Provision of setback and easement zones shall be observed whenever applicable especially in new development.

- Areas that are at high to very risk to flooding/flash floods and other hazards, as determined by the LGU or relevant national agencies/entities shall be designated as environmentally-constrained areas. Future settlement development or expansion shall be regulated and/or directed away from these areas.
- Maintain stability of river bank through periodic clean up and vegetation
- Integration and develop climate change adaptation and disaster risk reduction strategies in development plans of the city
- Maintain a clean and safe sustainable coastal environment and preserve its wildlife through policies and activities
- Institutionalize nature-based solution/greening to address climate change challenges and urbanization
- Encourage private sector participation in environmental initiatives
- Mainstream Energy Efficiency and Conservation through creation of Local Energy Efficiency and Conservation Plan and promote Energy Conserving Design on Buildings in the issuance of building permits

2.13.4 SOCIAL SECTOR

- Enhance mobility of person with disability/disabled persons by requiring certain buildings, institutions, establishments and public utilities to install facilities and other devices
- Support Lactation Stations to all health and non-health facilities, establishment or institutions
- Encourage appropriate national/regional offices to apply climate proofing of all existing school buildings (retrofitting & flood mitigation measures
- Provision of open space for the enhancement of health, welfare, and well-being, such as:
  - ✓ Ecological Waste Management Areas, including areas hosting Material Recovery Facilities (MRF), composting, etc.
  - ✓ Areas that improve air and water quality
  - ✓ Cemeteries and Memorial Parks
  - ✓ Designated area for Muslim Cemetery
  - ✓ Designated areas for active and passive recreation
  - ✓ Playgrounds, sports fields, play lots
  - ✓ Walks, trails, tracks for hiking, jogging, etc.
  - ✓ Areas for outdoor recreation, passive or active
  - ✓ Recreational open grounds inside schools, institutional facilities, private property

2.14 WATER USE POLICIES

- Ecological communities along coastal area shall be protected and a fish sanctuary shall be identified as haven for all aquamarine species;
- Rivers and Creeks shall be optimized for transport and trading route
- Develop plans to optimize use of rivers and creeks for tourism or recreation
- Eastment should be utilized for river bank protection projects (e.g bamboo planting, esplanade/promenade)
- Establishment of seaport shall as much as possible disturb foreshore areas and/or coastal protected areas.

2.14.1 MAJOR DEVELOPMENT PROGRAMS

a. ECONOMIC SECTOR:

- Opening/Construction/Rehabilitation of Farm-to-Market roads
- Completion of Commercial Seaport
- Establishment of "Welcome" Arc at Entry/Exit points of the City
- Establishment of Economic Enterprise/s:
    - Public Market
    - Halal and Non-Halal products
    - Cotabato City Integrated Transport Terminal
    - EcoPark
    - Trade & Cultural Center
    - IT Park

b. INFRASTRUCTURE SECTOR

- Land reclamation through use dredged silt
- Construction/Establishment of Flood Control and Drainage Program
- Adoption of "Green" Building Design
- Periodic dredging and clean up drive of major rivers of Cotabato City
- Establishment of Riverine Transport System
- Establishment of International Airport
- Establishment of aesthetically designed road network along the Circumferential roads (East and West)
- Establishment of biking/motorcycle lane and walkable pathway at main thoroughfares
- Construction of West Diversion Road (Tsunami/Storm Surge barrier)
- Construction/Raising Road elevation of Cotabato City East Diversion Road (Flood Barrier)
- Construction of an Integrated Public Terminal for Cotabato City
- Establishment of Renewable Energy/Solar Energy for Government owned buildings

c. ENVIRONMENT & DRRM

- Coastal mangrove planting & rehabilitation along the coast of Barangays Kalanganan Mother, Kalanganan 1 &Kalanganan 2, Poblacion 8, 9, Tamontaka 3, 4, & 5
- Bamboo planting along riverbanks for riverbank protection (easement area)
- Establishment of Septage Management Facility and encourage provision of appropriate septic tanks for every household
- Establishment of Bio-medical Management Facility or any alternate and acceptable facility to Sanaitary landfill
- Establishment of Materials Recovery Facility on every barangay and School
- Implementation of Solid Waste Management Act of 9003 in city and barangay level

- Develop Timako Hill as an ecotourism park and conduct assessment on endemic and wildlife species
- Conduct Survey and Registration of Protected Area Occupant (SRPAO) within the area of Timako Hill
- Determination/Demarcation of mangrove areas at Kalanganan
- Conduct of rapid assessment and inventory of wildlife at the coastal area of Kalanganan including Timako Hill
- Update/Formulate Energy Efficiency and Conservation Plan for Cotabato City

d. SOCIAL SECTOR

- Land banking for socialized housing, resettlement & Open Spaces/Parks and Playgrounds
- Establishment of sports and recreation facilities
- Establishment of Esplanade
- Establishment of Socialized Housing Project/s with private and public partners
- Construction of additional Police & Fire Stations in strategic areas
- Construction of additional school building
- Completion of Children's Park/ Ecological Friendly parks
- Construction of Additional Health Facilities (Laboratories, storage rooms, etc.)
- Establishment of birthing facilities in strategic areas
- Establishment of Muslim Cemetery
- Establishment of additional Christian Cemetery

2.15 CLUP AND ZONING ORDINANCE IMPLEMENTATION STRATEGY/ARRANGEMENT

Cotabato City has undergone a lot of changes and challenges as urban development sprawls to its entire land area in addition to the increasing population and persistence of climate change. With the implementation of the previous Comprehensive Land Use Plan (CLUP) guided by the approved Zoning Ordinance, the city government has been robust in its campaign and compliance with the required process of approving appropriate spatial utilization in accordance to government mandates.

In adopting and implementing an updated Comprehensive Land Use Plan with another nine years coverage period as well as a reformed Zoning Ordinance adaptive to present demands, a much-needed consideration for institutional challenges should be taken into account. It is a common downfall of any good plan when support for proper implementation is not provided. Thus, it is equally important to strengthen the resources, institutional structures and procedures to respond to the vision, goals and objectives of the CLUP.

At present, there are existing and functioning operating units and special bodies/committees as well as institutional structure and systems and procedures in place. For consistent development regulations, the city government has also established a permitting system including the Business One Stop Shop (BOSS) which is a single place to process application for business permits, mayor's permits, fire inspection, etc. as mandated by Republic Act 11032 or the Ease of Doing Business and Efficient Government Service Delivery Act of 2018.

In the process of updating the CLUP, a review of the present organizational structure has been done to identify issues and concerns that needs to be addressed. It is critical to recognize these challenges especially on the concerned implementing bodies to mitigate recurrence as the city government moves along with the implementation of the updated plan. Most of the identified issues are in relation to provision of adequate manpower and capacity building as shown in the table below:

ORGANIZATIONAL STRUCTURE AND SUPPORT

Offices/ADHOC Bodies Implementing CLUP	Issues and Concerns	Recommended Action
Office of the City Planning and Development Coordinator	ISSUES: • Inadequate staff • Lack of expertise/training CONCERNS: • Ensures that client conforms with the Land Use and Zoning Ordinance • Implement zoning and land uses measures	• Additional plantilla position • Budget for capacity program
Office of the City Engineer	ISSUES: • Inadequate staff • Needs capacity Building • Absence of Office of the Building Officials CONCERNS: • Ensures that the client conforms with the National Building Code • Ensures that the identified location has the capacity to carry above 4 meters storey building • The designed area should require floor area ratio (provision of parking space) • Requires Building Design	• Additional plantilla position • Budget for capacity building • Creation of the Office of the Building Officials • Provide building permits and inspection • Issues plans and evaluation and review • Amend provisions of Ordinances that are difficult to enforce or unworkable, example
Office of the City Assessor	• Ensure and update property, including tax declarations and fees • Conduct property assessment • Certifies ownership exact barangay and location of property base on TCT no. of land title presented	• Issue property tax clearances and tax declaration

Office of the City Planning and Development Coordinator – Housing Projects (Shelter Division)	• Ensures conformity in terms of housing and subdivision laws	• Issue Development permit for subdivision and condominium projects
City Disaster Risk Reduction and Management Center	• Provide disaster clearance certificate as to the livable location/structure and conforms with the disaster plan • Implement DRRM Measures	• Issue safety clearance
Housing Board	• Recommend relocation sites and settle issues	
Zoning/Enforcement Office	• Evaluate application as to the conformity to CLUP and ZO and conduct inspection	• Issue locational clearance
Local Zoning Board of Appeals	• Hear and determine case filed before it • Hear and determine cases of opposition to application	
Barangay	• Certify the location/establishment as to no objection or any conditions • Ensure the safety and order • Helps in the monitoring of projects and its conformity to CLUP/ZO	
Office of the City Environment and Natural Resources Officer	• Provides the condition in proper solid/hazardous waste management and other environmental control concern especially if project hazardous waste (e.g., Hospital) • Implement the foreshore plan/Ensures the protection of foreshore areas against construction	• Issue Environmental clearance
Bureau of Fire	• Application shall be in accordance with the design provision to fire safety	• Issue fire safety certificate
Office of the City Agriculturist	• Determine if proposed project is within SAFDZ area	
Office of the City Health Officer	• To ensure the health of the community by conducting ocular inspection on poultry farms, piggery and similar activities	• Issue health certificate or sanitary permit
Business Licensing Div.	• Accept business license application and refer to zoning division as to the conformity of the location to the CLUP • Requires new business to secure locational clearance/ building permit prior to securing building permit • Implement the Local Revenue Code/ Collection of Zoning fees	• Issue Business permit

2.15.1 LGU PERMITTING SYSTEM

To enable the CLUP to be fully functional, there will be an enhancement of the established permitting system that will focus on overseeing land and water use development regulations consistent and in conformity with the approved CLUP and Zoning Ordinance through properly assessing applications for land use development permits and management schemes.

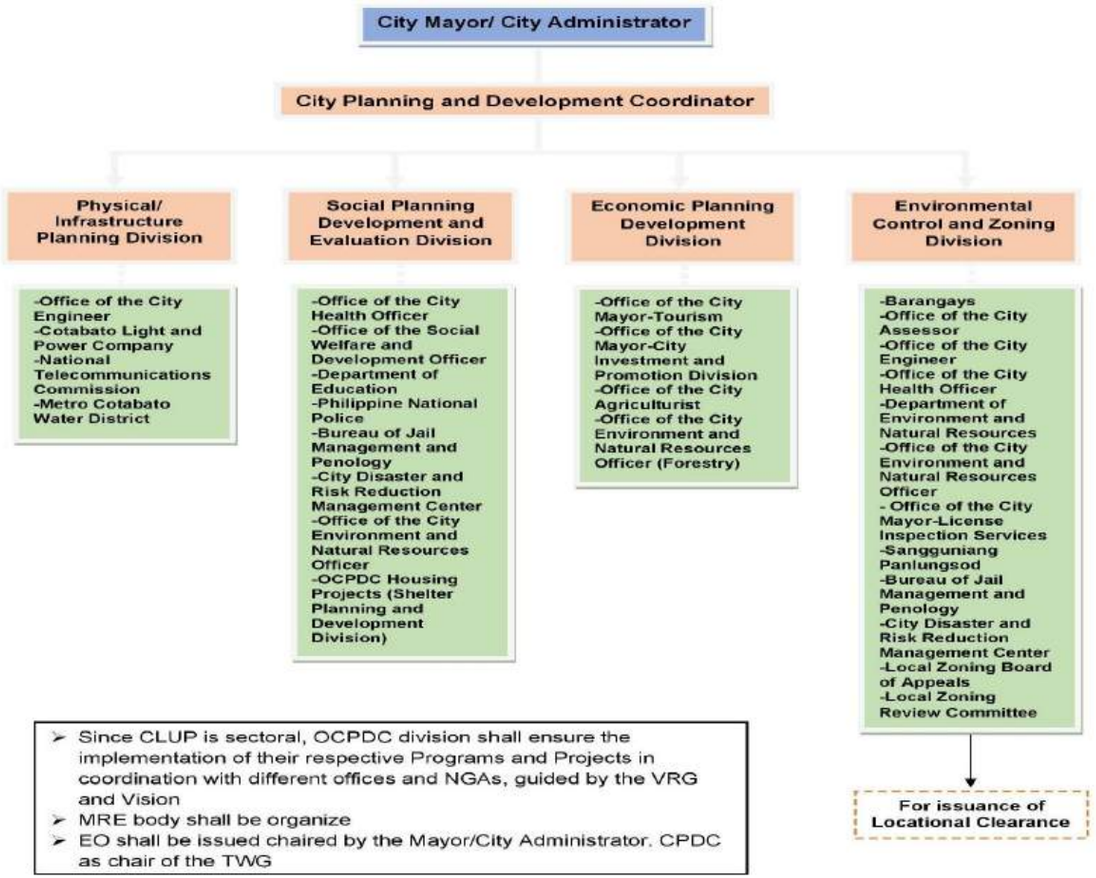
LGU PERMITTING SYSTEM

LICENSE	OFFICE
Locational Clearance for Projects	Zoning Officer/CPDC – Office of the City Planning and Development Coordinator (OCPDC)
Certificate of Land Classification	Zoning Officer/CPDC – Office of the City Planning and Development Coordinator (OCPDC)
Building Permits and Fencing Permit	Office of the City Engineer City Disaster and Risk Reduction Management Center (Hazard exposure)
Certificate of Occupancy	Office of the City Engineer
Preliminary Subdivision and Development Plan	Sangguniang Panlungsod upon evaluation and recommendation of OCPDC
Development Permits for Subdivision Projects	Sangguniang Panlungsod upon evaluation and recommendation of OCPDC
Business Permits	Business Permits and Licensing Division
Certificate of Non-Coverage/ Environmental Compliance Certificate	Department of Environment and Natural Resources OCPDC Barangay
Environmental Clearance	Office of the City Environment and Natural Resources Officer
Billboard and Tarpaulin Permit	Office of the City General Services Officer
Real Property/Tax Declaration (as requirement for LC)	Office of the City Assessor/ Office of the City Treasurer
Procurement Clearance and Permits	Office of the City General Services Officer

2.15.2 ORGANIZATIONAL CHART TO IMPLEMENT CLUP/ZO

A holistic approach is necessary to achieve a successful implementation of the CLUP through recognizing strengthened partnerships and cooperation among stakeholders and correspondingly ensure coverage of all thematic areas of concern as well as localization into community level. This is reflected in the organizational chart wherein appropriate consideration of all involved stakeholders is executed.

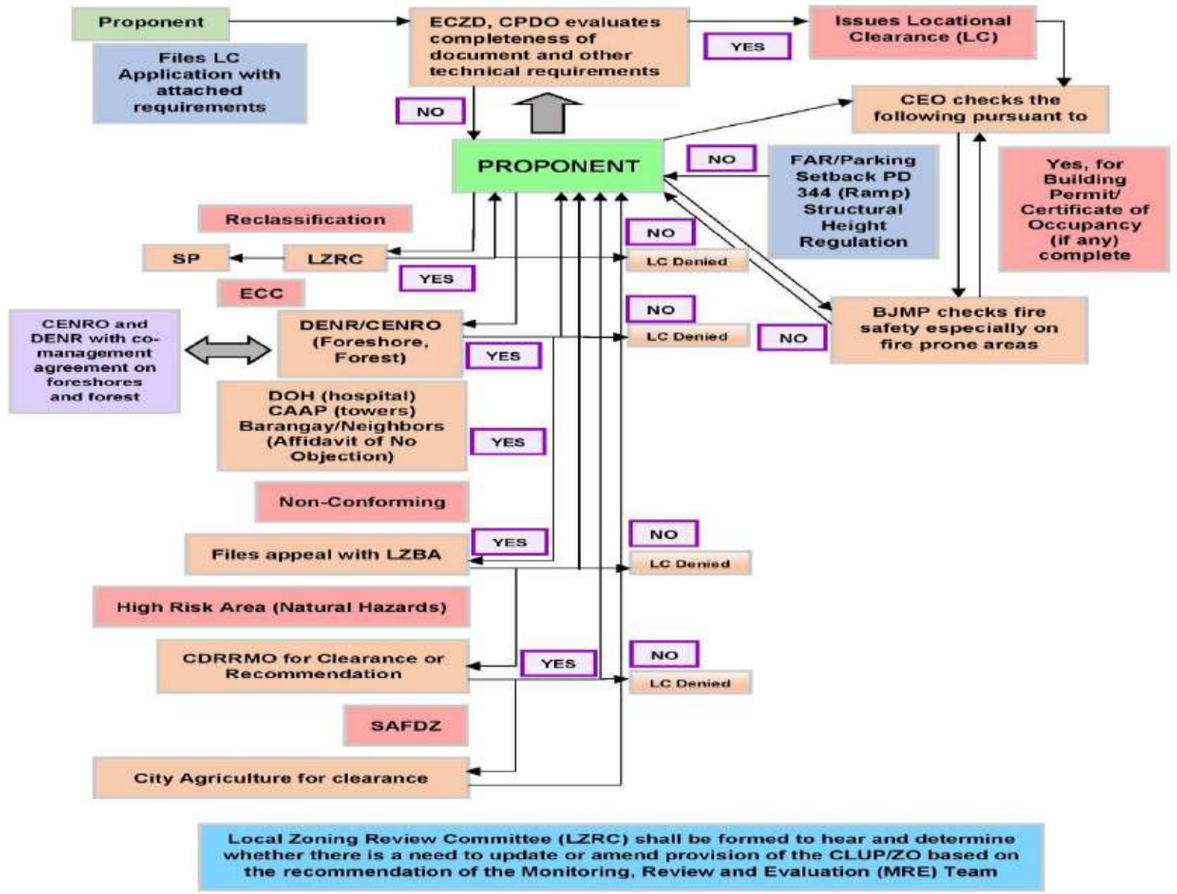
ORGANIZATIONAL CHART TO IMPLEMENT CLUP/ZO



2.15.3 PROCESS / FLOW OF IMPLEMENTATION

An intensive guide or approach for the full and successful implementation relies on the process to be undertaken by the implementing bodies. Therefore, the Planning Team has come up with the following process flow.

ZONING ORDINANCE IMPLEMENTATION PROCESS



2.16 MONITORING REVIEW AND EVALUATION SYSTEM

The City Government of Cotabato recognizes the importance of creating a Monitoring, Review and Evaluation (MRE) Body that will focus on the progress tracking of the Comprehensive Land Use Plan implementation. The body will aim for an effective MRE system that will help the city government achieve the vision in the CLUP through centering on development efforts and interventions. For a realistic and effective monitoring, review and evaluation of the CLUP and ZO, the following will compose the MRE Body:

MONITORING, REVIEW AND EVALUATION BODY

MRE composition	
City Mayor	Chairperson
LGU Offices	
City Administrator	Vice Chairman
City Planning & Development Coordinator	Member, Chair TWG
City Assessor	Member
City Environment and Natural Resources Officer	Member
City Public Safety Officer	Member
City Disaster Risk Reduction Management Officer	Member
City Engineer	Member
City Social Welfare and Development Officer	Member
City Health Officer	Member
City Agriculturist	Member
City Tourism Officer	Member
MBHTE-BARMM Division of Cotabato City head	Member
Philippine National Police head	Member
Bureau of Jail Management and Penology Head	Member
Bureau of Fire Protection Head	Member
Representatives from three (3) Civil Society Organizations	Member
BARMM Offices	
Representative from MENRE-BERDS	
Representative from BCPCH	
Representative from MENRE-MGB / BARMM-READi / PHIVOLCS / PAGASA / NAMRIA	

Functions:

- ✓ Assess the accomplishment and direction vis-à-vis VRG and Vision
- ✓ Assess the performance of respective programs and projects as contained in the CLUP
- ✓ Assess whether the intended impact of the project has been achieved
- ✓ Assess and evaluate the implementation of CLUP through permits issued, decision mapping or LUZIS
- ✓ Recommend to Mayor or LZRC if amendment of CLUP/ZO necessary
- ✓ Focal Offices to report regularly to the MRE team and provide information on whether the objectives have been achieved; provide recommendation if necessary

In land-use management within the area of the local government, there are integrated special areas and thematic concerns that are often subject to diverging interests where subsequent enforcement of the CLUP poses challenges. The following offices are identified to handle focal interests of specific thematic concerns.

THEMATIC AREA	**FOCAL PERSONS/OFFICE**	
Forestry	Office of the City Environment and Natural Resources Officer	- Implement preservation of identified forest per approved Forest Land Use Plan
Coastal, Marine and other water bodies and Environment	Office of the City Environment and Natural Resources Officer	- Implement the preservation of coastal and foreshore areas guided by the approved Foreshore Development Plan - Implement the RA 9003;
Heritage Conservation/Eco Tourism	Office of the City Mayor - Tourism	- Preservation of the Tourist destination/spot; Tourism Development Plan
Climate Change/Disaster Risk	City Disaster Risk Reduction and Management Center	- Implement the CDRRMO Plan and Risk Reduction Measures guided by the Approved City Disaster Risk Reduction and Management Plan
Agriculture	Office of the City Agriculturist	- Implementation and preservation of SAFDZ - Approved SAFDZ plan Food Security Plan
Land Use	Office of the City Planning and Development Coordinator- Zoning Division	- Implement ZO, monitors implementation of ZO using approved ZO – CZC, CNC, Variance or Exception, Notice of Violation, Order to Present Proof of LC
Infrastructure	Office of the City Engineer	- Evaluation of Building Structures and other related Infra Projects. - Notice of Violation - Notice

Education	MBHTE-BARMM Division of Cotabato City	
Health	Office of the City Health Officer	- Annual Operation plan - Local Health Investment Plan
Protection	Philippine National Police, Bureau of Fire Protection, Bureau of Jail Management and Penology	

THEMATIC AREA	**FOCAL PERSONS/OFFICE**	
Social Services	Office of the Social Welfare and Development Services Officer	- GAD Plan - Social Protection Plan - Local Investment for the Protection of Childre
Relocation and resettlement	Office of the City Mayor, Office of the City Planning and Development Coordinator, Office of the Social Welfare and Development Services Officer	
Housing	Office of the City Planning and Development Coordinator – Housing Projects	
Public Safety	Office of the City Public Safety Officer	

A Report Card Performance Indicator is created to assist the key offices in their capacity assessment for the implementation, monitoring, review and evaluation of CLUP and ZO especially in areas with thematic concerns. There was due consideration given to specific zoning categories that will make the CLUP and ZO applicable and functional, eventually leading to a successful implementation and proper MRE execution.

REPORT CARD PERFORMANCE INDICATOR

Thematic Area	**Indicator**
Forestry	Whether Timaco Hill Preserved/Protected Whether Mangrove areas have been exploited or not Whether the same has been exploited or not, reforested or not
Coastal, Marine and other water bodies and Environment	Whether Prese Coastal, marine and other water bodies and environment, rivers and creeks preserved Observed of easement along rivers, creeks, coastline? whether foreshore areas have been encroached or not

Climate Change and Disaster Risk	Determine areas and population with high susceptibility to hazards (increase or decrease) Determine no. of permits granted in high-risk areas no. of establishments conforming to adaptation measures Determine public institution located in high-risk areas(increase or decrease) Government investment for public structures for adaptive capacity measures Recommend adaptation measures Calculate the response action in case of calamity
Land Use	CPDO/Zoning Division Permits issued in high-risk areas % of reclassified agricultural lots Non-conforming uses Number of appeals filed before the LZBA
Heritage Conservation/Eco-Tourism	identified Tourist spot preserved? Investment requirement for the preservation, operation, and maintenance of identified tourist spot
Agriculture	Identified production area (agricultural and fishery) (increase or decrease) Opportunities for HALAL Industry (present) Number of farmer and fisherfolk beneficiaries Agri development projects (fish landing, irrigation, fish pens) achieved? Whether SAFDZ has been maintained or gradually converted Presence of settlements in SAFDZ area
Infrastructure	Identified infrastructure development projects (roads and bridges, FCD) Identified and recommend stability of government buildings Recommend safety measures Future needs of the road, transportation facilities, telecommunication network, sewage, water and electric system attained? Provision of open spaces for parking area/green building attained Land for public infrastructure available? Whether there is a significant increase in building infrastructure to provide links to different land uses Whether increase or decrease in power and water supply
Education	infrastructure needs for education purposes achieved? Identified future land area requirement, school building, classrooms, sports facility and other facilities Whether classroom-pupil ratio attained Identified future health facilities, and area requirement
Health	Identified future health facilities, and area requirement

	Whether the health-manpower ratio has been attained -Doctors - Nurses - Midwives
Protection	Future protective facilities and area requirement (Police sub-stations, Fire sub-stations, Jail) Increase or decrease in crime solution efficiency Peaceful (per Vision) or not No. of Police outpost/stations Policeman to population ratio attain? Firearm to policeman ratio? No of fire stations Number of fire incidents responded Jail situation improved No of cells increased (congested)
Social Welfare	Identified Social Infrastructures (Day Care Center, Women Center, etc.) Morbidity rates Mortality rates Malnutrition Immunization Determines housing
Housing	Determines housing backlog and housing programs Implement laws for subdivisions and socialize housing Inventory of lands available for housing purposes and provision for socialize housing Inventory of informal settlers Allocated lands for socialized housing Provide policy
Public Safety	Provide policy and strategies that reduce crimes Establishment of a Public Safety Office Ensuring public order and safety Ensures protection of person in their community

REPUBLIC OF THE PHILIPPINES
BANGSAMORO AUTONOMOUS REGION IN MUSLIM MINDANAO
CITY GOVERNMENT OF COTABATO

COTABATO CITY

COMPREHENSIVE LAND USE PLAN C.Y. 2020-2029

Sectoral Studies

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1. ECOSYSTEM ANALYSIS

1.1 Climate and Disaster Risk Assessment (CDRA) (SEPARATED)

1.1.1 Climate Change Vulnerability Assessment

1.1.2 Disaster Risk Assessment

1.2 Forest Ecosystem

Situational Analysis:

Cotabato City has only mangrove forest with a total land area of 670 hectares based on the DENR XII data as of December 10, 2010. There are 12 identified mangrove species out of 65 have been found in the mangrove forest of Cotabato City based on the study conducted by Dimalen and Rojo.

These mangroves are highly valuable ecosystems, providing an array of essential goods and services which contribute significantly to the livelihoods, well-being and security of coastal communities (Duke et al.,2014) in addition, Mangroves contribute significantly to the global carbon cycle and produce large amounts of litter in the form of falling leaves, branches and other debris. Besides, mangrove habitats contribute to complex food webs and energy transfers (Kathiresan, 2012). Thus, effective management of mangrove forest to ensure its sustainability is necessary. Floristic inventory and diversity assessments are necessary to understand the present diversity status and conservation of forest biodiversity (Jayakumar et al., (2011).

The mangrove forest in the city is slowly in denude considering the lack of knowledge of some individuals that senselessly cut mangrove trees and make it as charcoals, fire woods and artistic decorative thing without doing the replanting. There are no accountable managers or groups that are literally working on the conservation and preservation of the areas. This situation places these resource assets at the risk of decreasing its ecological and socio-economic values because of potential threats of destruction

The conversion of mangrove areas to a fishpond areas also contribute to slowly phasing out of trees that eventually also destruct the breeding sanctuary of fishes, seashells, crabs and other coastal water animal species. These are in relation to the growing population that needs a larger area for space for living. In addition, the illegal settlers and the improper disposal of solid waste and garbage also affect the growing mangroves. Thus, deforestation occurs.

Deforestation simply means clearing of forest cover or tree plantations to accommodate the need for space. It involves permanent end of forest cover to make the land available for residential, commercial and agricultural purpose.

Slash-and-burn or 'kaingin system" has been one of the illegal activities in the City. This occurred due to several reasons, which include the need of money, both in terms of profitability as well as providing for one's family in most scenarios; lack or no forest laws, need for space for housing.

Many farmers cut or remove the mangrove trees for increasing space for cultivation and/or fodder land for grazing and surviving livestock or turning it to fishponds.

Destroying the forests means destroying the myriad creatures and flora. It is the removal of forests leading to several ecological imbalances. The destruction of the ecosystems is taking a heavy toll on biodiversity. Hence, the promotion of CBFM, especially in degraded areas is imperative. Further, there was also laxity in the enforcement of forestry laws.

Cotabato City is susceptible to flooding. Floods result when land is covered with water due to overflowing of a source such as rivers. It resulted from the accumulation of rainwater by drainage due to prolonged and heavy rains. Floods also lead to soil erosion and landslide of agricultural areas and denuded mountain slopes. The forest covers and/or presence of trees would help mitigate the burdens of flooding. However, due to its denudation, highly susceptibility to flooding is aggravated.

The forest is an ecosystem that provides numerous ecological services and functions. The intact and extensive forests help mitigate the impacts of natural disasters brought by heavy rains, like flooding, landslides, soil erosion, sedimentation, and siltation, among others.

The forest further plays a crucial role in maintaining water cycles, including its vital importance in mitigating the impacts of the changing climatic conditions. Most of the forests and forestlands form part of the upper watershed, which play a vital role in ensuring the environmental and economic sustainability of production in downstream areas.

Further, Cotabato City is a coastal area. The activities in the upper areas have direct effect in its low-lying areas. With the close proximity of coastal areas to human population centers, it have suffered disproportionately and mainly from man-made stresses. Habitat loss here has far-reaching impacts on the entire ocean's biodiversity. These critical areas, which include estuaries, swamps, marshes, and wetlands, serve as breeding grounds or nurseries for nearly all marine species.

Programs and Projects Approved/Funded for implementation

Name / Type of Project	Location	Type	Proponent (Government, Private, other)	Estimated Start Date	Estimated Date of Completion
Riverbank protection project (Planting of Mangrove & Bamboo)	Tamontaka and Kalanganan Areas	RiverBank Protection	Government	January 1, 2023	December 31, 2028
Mangrove planting along shorelines of Barangay Kalanganan Mother, 1 and 2.	Kalanganan Mother, 1 and 2.	Mangrove Reforestration	Government	January 1, 2023	December 31, 2028
Development of Timaku Hill as eco-tourism park.	Kalanganan 2	Rehabilitaion	Government	January 1, 2023	December 31, 2028
Coastal Clean-up drive	Tamontaka and Kalanganan Areas	RiverBank.Coatal Protection	Government	January 1, 2023	December 31, 2028
Installation of communal toilets at informal settler site along the riverbank and shoreline.	Tamontaka and Kalanganan Areas	RiverBank.Coatal Protection	Government	January 1, 2023	December 31, 2028
Completion of Forest Land Use Plan	Cotabato City	Instituitional	Government	January 1, 2023	December 31, 2028
Completion of Foreshore Development Management Plan	Cotabato City	Instituitional	Government	January 1, 2023	December 31, 2028

For the following:

Table FO–1. Major Usage and Land Uses of Watersheds/Sub-watershed (Sample)
Table FO–2. Forest-Watershed Area of the City
Table FO–3. Danger Areas per Watershed
Table FO–4. Settlement in Hazard Prone Areas per Watershed
Table FO–5. Distribution of Biodiversity Conservation Area by Watershed

There is no existing watershed in Cotabato City.

Table FO-6. Policy Option for Consideration in the Zoning Ordinance

Land Use Plan	Policy Option/Management Prescription
Protection Zone	
Environmentally Critical and Constrained Area	No cutting of trees; Rehabilitation to make dominant use of endemic species; non-buildable- building of any kind of structures not allowed.
Water Bodies/River Easements	No cutting of trees. Maintain easement of at least 40meters on both side of rivers. In identified flood prone area, put additional buffer easement as necessary after assessment of level of vulnerability. Non-buildable- nostructure of any kind may be allowed. Serves as part ofthe BIODIVERSITY CORRIDOR. Rehabilitation in areascurrently denuded and/or cultivated must be in multistorey (agro-forestry) type
Community Watershed/Primary Water Sources	No cutting of trees; Rehabilitation to make dominant useof endemic species; non-buildable-building of any kindof structures not allowed
Coastal and Mangroves	No cutting of mangroves; Planting of more mangroves insuitable areas and identified prone to storm surges. Recommended relocation of existing structures, and/or imposition of adaptation mechanism on building standards
Production Zone	
Settlement Area (Existing)	Inventory of legitimate claimant. Maintain easements of 40 meters from riverbanks. Follow building standards. In support of biodiversity, maintain Barangay Tree Parks.
Sustainable Forest Production	Based on site suitability assessment, allowed investment and activities include: agroforestry, high value crops, and industrial tree plantation. There should be balance of use for timber/lumber purposes between and other nontimber uses. Maintain blocks of tree buffer strips in between non-timber uses in complement of biodiversity use.
Overlay Zone	
Biodiversity Conservation	Biodiversity conservation must be mainstreamed in all types of uses within forestlands and A & D Lands be it protection and production.
Certificate of Ancestral Domain	Management should be based on ADSDPP. The future zoning, which must be based on their traditional practices, must be added or harmonized with these recommended zones and land uses
Eco-Tourism Zone	Use of semi to non-permanent structures. Apply for Special Use Permit. Further define use regulation prior to issuance of special use permit that incorporate biodiversity, and other protective uses of the forestlands.

Table FO-7. Strategic Objective

The increase utilization of mangroves, making it as charcoal, woods, furniture and among others have cause environmental degradation on mangroves forest resulting to blunt and complete devastation of the biodiversity in the forest. Some were converted to fish ponds and agri-cultivating areas making the forest denuded. Thus, there is a need for reforestation, tree planting and reviving the environmental condition of the forest to enable to increase the biodiversity and recommended strategies includes;

The forest land utilization has caused the environmental degradation particularly because of the various activities in the forest lands of the municipality. These activities support the growing population, which includes agricultural activities, road development, formation of settlements, continued harvesting of cutting of forest cover. Because the forest land coverings were converted to various land uses, it has brought perennial problems on erosion of the uplands and sedimentation of rivers, which will eventually can cause disasters such as flooding in settlements and production areas.

While there are initiatives for new reforestation, still the accomplishment for its maintenance was alarming because targets are not met, which can be attributed to limited funds for the program. Poor solid waste management and pollution of waterways has contributed to flooding in settlement areas.

Objectives	Strategies
1. Rehabilitation of Forest and Forestland and Management of Coastal and Marine Resources	Establishment forest and mangrove plantations
2. Closure of open access areas and growing of mangrove trees to rehabilitate its denuded forest lands and areas	Establishment of demonstration farms and training centers with the City Agriculture Office in providing regenerated planting materials. Financial support shall be provided to tenure holders in growing forest trees and intensify investment promotion
3. Intensify the existing initiatives	Dredging of rivers, riverbank stabilization and reforestation of mangrove areas.
4. Strengthen existing structures	Multi-Sectoral Committees on Forest Protection and Committees on Forest Products Monitoring
5. Strengthen agro-forestry activities in agriculture-producing areas and Strengthen advocacy	Forest protection laws and management geared towards increased protection of mangrove areas, clean water, clean air and increase biodiversity;
6. Institutionalize the environment impact statement, environmental accounting and tree planting activities along riparian and water zones	Sustain the management and protection of National Integrated Protected Areas System (NIPAS), environmentally critical areas and strengthen the operation of Protected Area Management Boards (PAMBs);

7. Intensify advocacy at all levels on disaster risk management and encourage public participation in the rehabilitation, conservation/protection and disaster mitigation measures especially in environmentally challenging areas/ecosystems	Strengthen existing alliances and formation of the new ones for the improvement of ecological integrity; Encourage public-private sector collaboration in the development and management of mangrove forestlands and potential eco-tourism sites

Table FO–8. Forest Sector Analysis Matrix:

The strict implementation of City Ordinance on the prohibition of cutting and destroying the mangroves is very much needed to ensure the proliferation of various mangrove species and promote good ecological balance for mangrove growth. The ordinace must also come with effective IEC materials to ensure that the purpose of preserving the mangrove forest is understood and appreciated by the communities and constituents.

TECHNICAL FINDINGS / OBSERVATIONS	IMPLICATIONS (EFFECTS)	POLICY OPTIONS/INTERVENTIONS
Destruction of mangrove forests	• Increased risk to tsunami and storm surges • Destruction of spawning grounds and adversely affect fisheries resources which could impact on livelihood of communities	• Strict implementation of City Ordinance No. 4348, Series of 2015 (An Ordinance Strictly Prohibiting the Cutting and Destruction of Mangroves in the City of Cotabato for Whatever Purpose and the Imposition of Penalties to Violators • Conduct IEC on values and importance of mangroves • Development of mangrove plantation
Denuded condition of watersheds which are sources of water for irrigation and domestic use	• Leads to water shortages for irrigation and domestic use especially during dry season	• Strict enforcement of Zoning Ordinance • Rehabilitation of denuded watersheds
Declining forests cover	• Availability of forests products (timber and non-timber) to communities is expected to decline • Availability of forests to provide environment	• Strict protection of existing natural forests • Creation of multi-sectoral forest protection committees • Strict enforcement of Zoning Ordinance

	services, such as watershed protection and reduction of flooding risks will also decline	
Climate change hazards	• Degradation of natural ecosystem, decrease in natural species populations and decrease in ecosystem goods and services • Increase disaster risks/hazards	• Relocation of communities living and/or working in danger/hazard areas • Protection of "upstream" natural habitats (e.g.) forests upstream (Timako Hill) for landslide prone communities, mangrove and coral reefs adjacent to coastal communities
Proper utilization of mangrove forests	•	• City Ordinance No. 4348, series of 2015 (An Ordinance Strictly Prohibiting the Cutting and Destruction of Mangroves in the City of Cotabato for Whatever Purpose and the Imposition of Penalties to Violators
Land Title (more claimants)	• Individual strategies of destroying the forest	• DENR Policy
Land concessioners		• DENR Policy

Table FO–9. Population of Indigenous Cultural Communities of ICC/IP in communities

Eight percent (8%) of the total population occupies indigenous cultural communities, based on the records provided by the Ministry of Indigenous People's Affairs (MIPA).

Barangays	Indigenous Cultural Communities	Estimated Population	Status of CADC/CADT	Remarks (indicate conflicts with other claimants)
Rosary Heights I	Teduray	**936 (22%)**	N/A	N/A
Rosary Heights II	Teduray	**364 (8%)**	N/A	N/A
Rosary Heights IV	Teduray	**218 (5%)**	N/A	N/A
Rosary Heights V	Teduray	**651 (11%)**	N/A	N/A
Rosary Heights VI	Teduray	**210 (3%)**	N/A	N/A
Rosary Heights VIII	Teduray	**346 (3%)**	N/A	N/A
Rosary Heights IX	Teduray	**318 (4%)**	N/A	N/A
Rosary Heights X	Teduray	**2,866 (18%)**	N/A	N/A
Rosary Heights XI	Teduray Lambangian	**1,574 (9%)**	N/A	N/A
Rosary Heights XII	Teduray	**352 (7%)**	N/A	N/A
Rosary Heights XIII	Teduray	**184 (3%)**	N/A	N/A
Mother Barangay Rosary Heights	Teduray Lambangian	**762 (5%)**	N/A	N/A
Poblacion III	Teduray	**228 (7%)**	N/A	N/A
		9,009 (8%)		

Source: *Ministry of Indigenous People's Affairs, Bangsamoro Autonomous Region in Muslim Mindanao*

There is no land classified as ancestral domain in Cotabato City. There is no Certificate of Ancestral Domain Title (CADT) or Certificate of Ancestral Domain Claim (CADC) issued by either the National Commission on Indigenous People (NCIP) or the Ministry of Indigenous Peoples Affairs (MIPA) in Cotabato City.

Table FO–10. Migration Pattern in Forestlands

Barangays	Migration Rate			Causes of Migration
	2010	2015	2020	
Forestlands				
Kalanganan 2	.05	.05	.05	Development of the area
Coastal/Mangroves				
Kalanganan Mother	.05	.05	.05	Development of the area
Kalanganan 1	.05	.05	.05	Development of the area

Source: *Philippine Statistics Authority, Bangsamoro Autonomous Region in Muslim Mindanao*

The development of the area, the construction of a proposed seaport, and the completion of the circumferential road resulted in people tending to migrate to these barangays.

Table FO-11. Forest Land Use Practices of Household in Forestlands

Farming Practices/No. of Household Involved							
Barangay	Slash and Burn	Shifting Cultivation	Open Cultivation	SALT	Commercial Fertilizer or Chemical	Organic Method	Others
Kalanganan 2	NONE	NONE	NONE	NONE	NONE	NONE	44 (fishpond)

Source: *Office of the City Agriculturist, City Government of Cotabato*

Timako Hill is the only identified forestland in the city and is not categorized as a production forest area. The city government, through the City Environment and Natural Resources Office, is currently working on measures to protect this forest reserve and control the buildup of business establishments along its boundaries. The only livelihood farming practices among households living near the forest area are aquaculture, namely fishponds.

Table FO-12. Forest Based Livelihood Activities and the Number of Households Involved

No. of Household Involved						
Barangays	Total Farming	Agroforestry	Charcoal	Making Rattan	Gathering	Etc
Kalanganan 2	NONE	NONE	NONE	NONE	3	44 (fishpond)

Source: *Office of the City Agriculturist, City Government of Cotabato*

Timako Hill is the only identified forestland in the city and is not categorized as a production forest area. The city government, through the City Environment and Natural Resources Office, is currently working on measures to protect this forest reserve and control the buildup of business establishments along its boundaries. The only livelihood farming practices among households living near the forest area are aquaculture, namely fishponds.

Table FO–13. Past and Ongoing Projects or Investments in Forest Rehabilitation

Barangay	Past & Ongoing Project/s	Period covered/ Started	Type of Project Interventions	Species	Area (has.)	Implementing Unit	Status	Source of Funds	Cost (Php)
Kalanganan Mother, Kalanganan 1, Kalanganan 2, Tamontaka 4, Tamontaka 5 and Poblacion 9	Cooperative month celebration	Yearly	Celebration with tree planting activity	Osborniaoctodonta, Sonneratia alba, Nipa fruticans, Rhizophora mucronate, Avecinaofficinales, Aegicerascorniculatum, Scyphiphorahydrophyllaceae and Sonneratiacaseolaris	To be identified	Office of the City Cooperative Officer	Ongoing	GAD / Other priority	150,000.00
	Youth day celebration	Yearly	Celebration with tree planting activity		To be identified	Youth Development Office	Ongoing	Children's fund	100,000.00
	Prevention and mitigation program	Yearly	Tree planting activity		To be identified	City Disaster Risk Reduction and Management Office	Ongoing	LDRRM Fund	100,000.00
	Land and tree planting activity with youth organizations	Yearly	Tree planting activity		To be identified	City Environment and Natural Resources Office	Ongoing	LDRRM Fund	3,000,000.00
	Community engagement	Yearly	Tree planting		To be identified	OCM – Community and	Ongoing	Other priority	150,000.00

	program		activity			Cultural Affairs Division			
	Tree planting and awareness raising	Yearly	Tree planting activity		To be identified	OCM – Office on Legal Services	Ongoing	Other priority	15,000.00
	Greening program	Yearly	Tree planting activity		To be identified	City Environment and Natural Resources Office	Ongoing	Other priority	500,000.00
	Tree planting	Yearly	Tree planting activity		To be identified	NGAs and other offices of BARMM	Ongoing	GAA	-
	Tree planting	Yearly	Tree planting activity		To be identified	NGOs, CSOs	Ongoing	-	-

Source: *Annual Investment Plan of the City Government of Cotabato / Office of the City Planning and Development Coordinator*

Most of the projects or investments focused on forest rehabilitation are tree planting activities for the remaining forest areas of the city in Kalanganan barangays, particularly the mangrove areas near Timako Hill. Some other tree planting activities are oftentimes conducted near the marshland areas of Tamontaka 4, 5, and Poblacion 9.

Types of Tenure or Ownership Rights in Forestlands

Titled lands around the base of Timako hill were acquired prior to the devolution of subdivision plans to the LGU by virtue of Local Government Code of 1991. Some of it was transferred or sold to another until this day. The private titling in Timako was stayed when LGUs were given the responsibility in maintaining ecologicaal balance in the respective jurisdiction. At present, the matter has been taken into account and collaborative actions have been taking place. Names of the owners have been kept anonymous in compliance to the Data Privacy Act of 2012.

Tenure/Ownership Rights	Area Covered (SQM)	Tenure Holder/Name of Organization	No. of Members
CBFM/CSC			
CADT			
Reservation			
Residential	31,600 SQ.M	Private	n/a

Residential	45,672	Private	n/a
Residential	42,209	Private	n/a
Residential	25,144	Private	n/a
Residential	35,628	Private	n/a
Residential	23,587	Private	n/a
Residential	150,000	Private	n/a
Residential	3,366	Private	n/a
Residential	114,578	Private	n/a
Residential	102,289	Private	n/a
Residential	118,010	Private	n/a
Residential	104,219	Private	n/a
Residential	57,060	Private	n/a
Residential	25,481	Private	n/a
Residential	25,621	Private	n/a
Residential	69,168	Private	n/a
Residential	105,563	Private	n/a
Residential	19,943	Private	n/a
Residential	19,330	Private	n/a
Residential	34,289	Private	n/a
Residential	231,299	Private	n/a
Residential	44,389	Private	n/a
Residential	41,214	Private	n/a
Residential	64,349	Private	n/a
Residential	40,000	Private	n/a
Residential	37,976	Private	n/a
Residential	49,998	Private	n/a
Residential	42,020	Private	n/a
Residential	34,847	Private	n/a
Residential	26,263	Private	n/a
Residential	24,616	Private	n/a
Residential	44,348	Private	n/a
Residential	20,000	Private	n/a
Residential	79,074	Private	n/a

Residential	20,000	Private	n/a
Residential	20,000	Private	n/a
Residential	20,000	Private	n/a
Residential	20,000	Private	n/a
Residential	20,000	Private	n/a
Residential	20,000	Private	n/a

Table FO-15. Mining Rights in the City of Cotabato

Mining Application/Rights	Area Covered			Duration (coverage of Rights)
	A & D Land	Forestland	Type of Minerals	
NONE	NONE	NONE	NONE	NONE

There are no mining activities in the city of any kind. The Mines and Geosciences Bureau has not issued mining rights in Cotabato City. This can be attributed to the geographical design of the city where most of its area is situated below sea level. Only Timako hill and PC hill are elevated areas in the city. Both are lacking in size for commercial mining. Moreover, the city government has no plans to utilize the areas for such endeavors.

Table FO–16. Summary of Problems/Issues/Threats in Forestlands

Barangays	Problems/Issues/threats	Scope of the Problem
Kalanganan 2	Land titling	Existing land titles and applications for land titling were filed in DENR XII and MENRE-BARMM.
	Construction of business establishments along the Timako hill	Absence of a buffer zone, operationalization of business establishments near Timako Hill
	Construction of residential houses along the Timako hill	Absence of a buffer zone near Timako Hill

The prevalence of different anthropogenic activities on Timako Hill has threatened the natural ecosystems, the flora and fauna found in this forest reserve. Enacting legislation in the Bangsamoro Parliament establishing the Protected Area Management Board (PAMB) for Timako Hill will help resolve these issues.

Table FO–17. Summary of Conflicts in Forestlands

Barangays	Type of Conflict	Entities Responsible for Resolving the Conflicts	Status of Conflicts
Kalanganan 2	Rido	BLGU and CENRO	Manageable, but will require assistance from the Ministry of Public Order and Safety (MPOS) to resolve the conflict.
	Land grabbing and titling	BLGU and CENRO	Unresolved, need intervention / assistance from the national and regional governments.
	Illegal cutting	BLGU and CENRO	Minimized, need to strengthen the enforcement capacities of the forest rangers assigned by MENRE.

Common concerns among the locals in Kalanganan 2 are conflicts among families, illegal cutting of mangroves, as well as land grabbing and titling. The authorities regulating these have assessed these incidents and provided intervention. However, further intervention from the Bangsamoro government will help resolve these occurrences.

Table FO–17. Elevation Distribution in Cotabato City

Elevation	A and D (ha)	Forestland (ha)	Total (ha)	%
0-300	14,150.375	3448.625	17,599	100
300-500				
500-800				
800-1,000				
1,000- and UP				
Total	14,150.375	3448.625	**17,599**	**100**

Most of the areas of Cotabato City is situated below sea level. All of Cotabato City is under the 300 meter above sea level mark. An estimate of 3448.625 hectares belong to forestland. The rest are alienable and disposable lands. Timako Hill is the highest elevation in the city with 197 meters above sea level

Table FO–18. Degree of Susceptibility of the City to Hydrometeorological Hazards

Hazard	A and D	Forestland	Coastal	Total	%
High Susceptibility to Flooding	10,607.60	2063.994		12,671.59	72.00
Low to Moderate Susceptibility to Flooding	4,129.93	1,182.655		5,312.59	30.19
High Susceptibility to Landslide					
Moderate Susceptibility to Landslide	0.44	201.976		202.42	1.15
Low Susceptibility to Landslide					

More than ten thousand hectares of alienable and disposable land are highly susceptible to flooding. More than 2 thousand hectares of forestland are highly susceptible to flooding. Only 0.44 hectares of alienable and disposable land are identified. Timako Hill is the only forest area identified as highly susceptible to landslide. During the planning period, the coastal areas were not separated from the A and D.

Table FO–19. Existing/Current Vegetative Cover by Land Classification/Ecosystem

Vegetative Cover	A and D (ha)	Forestland (ha)	Island (ha)	Mangrove/Coastal (ha)	Total (ha)
		n/a	**n/a**	**650**	

Note: It is recommended that forest/vegetative cover be prepared for the entire territory of LGU for use in the integrated analysis, especially in relation to knowing the situation of the watershed (vis-à-vis geologic hazard mitigation, water production value, and overall value in relation to water regulation functions of vegetative cover, and for biodiversity).

Table FO–20. Forest-related Uses in Forestlands

Land Uses	Forestland (ha)	Mangrove/Coastal (ha)	Total (ha)	%of Total (ha) of Forestlamd
Community Watershed(Declared or Informal)	**0**	**670**	**670**	**670**
Critical Habitat/Biodiversity Conservation Area	**0**	**0**	**0**	**0**
Industrial Tree Planting	**0**	**0**	**0**	**0**
Agro Forestry	**0**	**0**	**0**	**0**
ETC	**0**	**0**	**0**	**0**
Total	**0**	**670**	**670**	**670**

Table FO–21. Vegetative Cover in Forestlands

Vegetative Cover	Forestland (ha)	Mangrove/Coastal (ha)	Total (ha)	%of Total (ha) of Forestlamd
Brushland/ Grassland	0	679	670	670
Coconut Plantation	0	0	0	0
Rice Paddies	0	0	0	0
Sugarcane	0	0	0	0
Settlement	0	0	0	0
ETC	0	0	0	0
Total	0	679	670	670

Note: These are basically forestland conversion issues. Typical situation in the Philippines is the massive encroachment of forestland for agricultural uses and settlements. In the analysis, land use practices may also be discussed and analyzed how they contributed to loss of vegetative or forest cover. All information on vegetative cover and land uses can be combined in one map, except when some areas covered with vegetation has been allocated (by law or proclamation) and managed for specific purpose, e.g., natural forest declared as critical habitat or sanctuary; grasslands utilized for pasture based on approved lease agreement, etc.

Table FO–22. Biodiversity of Mangroves Inventory

Species	Located Sighted			Cite Status	Threats	Degree of Threats
	K1	KM	K2		human	
Rhizophoraceae Rhizophora apiculata Blume.	0	0	57	57	disturbances occurring in the site due to its accessibility. crab hunting and shell picking, timber cutting for charcoal production and mangrove conversion to fishponds	
Rhizophora mucronata Lamk.	0	0	36	36		
Ceriopstagal (Perr.) C.B. Rob.	0	0	175	175		
Avicenniaceae Avicennia alba K. Hin (Blume) Bakh	13	3	5	21		
Acanthaceae Avicennia officinales L.	0	8	6	14		
Combretaceae Lumitzera racemosa Willd.	4	6	40	50		
Lythraceae Sonneratia alba J. Smith	2	0	0	2		
Sonneratia caseolaris (L.) Engl.	8	0	9	17		
Meliaceae Xylocarpus granatum Koem.	0	2	14	16		
Myrsinaceae Aegicera scorniculatum (L.) Blanco	0	0	126	126		
Aegiceras floridum Roem & Schults	0	0	2	2		
Myrtaceae Osbornia octodonta F. Muell.	0	0	16	16		
Grand Total	27	19	486	532		

Source: Floral diversity of a mangrove forest in Cotabato City, Philippines, 2018

Cotabato City has rich and diverse variety of mangroves. The recorded most abundant in 2018 is the specie *Ceriopstagal (Perr.) C.B. Rob* with 175 sightings. It was followed by the specie *Myrsinaceae Aegicera scorniculatum (L.) Blanco* with 126 sightings.

1.3 Coastal Ecosystem

Cotabato City lies 7°11´ 49..12" north latitude and 124014'5.15 " east longitude (mark: New City Hall Flagpole) . It is 689.9 nautical miles southeast of Manila and is around 235 kilometers from Davao City. (CLUP 2010) The City exercises territorial jurisdiction over thirty-seven (37) barangays enclosed by a land mass that is traversed by tributaries originating from the two (2) rivers, the Rio Grande de Mindanao and Rio Grande de Tamontaka. The two (2) big rivers basically surround the city from the north and southern part side making it virtually a delta. The City is characterized by a palpable landscape of flat to undulating slope except for the two (2) elevated areas, the Pedro Colina (PC) Hill and the Timako Hill. Since the city is largely flat, there is no major erosion anywhere in the city.

The City is a fast developing city where business and employment opportunities abound resulting to influx of people. The rapid population growth has exerted too much pressure on its natural resources. Like all other Local Government Units (LGUs) with coastal area, the city has suffered gradual and consistent degradation of its coastal resources which in turn affected adversely the city's coastal ecosystem.

The degradation was a result of a long period of neglect on the proper management of the coastal environment. Human-induced activities has contributed so much to destruction of coastal regime. These activities include siltation brought about by deforestations upstream, unabated cuttings of mangrove trees, rapid conversion of mangrove areas into inland fishponds and homesteads, uncontrolled dumping of solid and liquid wastes into the sea, and the ineffective enforcement or lack of fishery laws that should protect the coastal resources.

Coastal resources like mangroves, coral reefs and sea grasses, among others, bring various benefits to the coastal regime. Mangroves for example, have critical functions in the maintenance and sustenance of other coastal resources. They are not only known in extending coasts but in protecting the coasts from excessive erosion. The leaf detritus of the mangroves contributes a major energy input into fisheries. They also serve as gateways for fish, shellfish, and their larvae that migrate between inland and offshore waters as well as nursery and spawning grounds for many species.

1.4 Biodiversity

Biodiversity or biological diversity refers to the variety of living species including plants, animals, bacteria, and fungi at all its levels, from genes to ecosystem, and can encompass the evolutionary, ecological, and cultural processes that sustain life. It is not limited to the species that people consider to be rare, threatened, or endangered but every living thing from humans to small organisms like microbes, fungi, and vertebrates. While biodiversity is so rich that many species has yet to be discovered in developing cities like Cotabato City, many species are being threatened with extinction due to human activities. However, there is no study yet conducted as to biodiversity in different ecosystems in the city like mangroves, freshwater, aquatic, timberland, and the lake.

There are potential areas for biodiversity assessment in Cotabato City. These include the protected Timako Hill, a timberland area located at Barangay Kalanganan 2 and the Kutawato Cave located at Barangay Rosary Heights 1. There were also sightings of endangered wildlife in the city. On September 2022, the BARMM-MENRE together with the CENRO Cotabato City rescued and freed an endangered Brahminy Kite Eagle at Barangay Poblacion 7. According to the MENRE, having this species in Cotabato City can be an indication of a rich biodiversity.

2. SPECIAL AREA STUDIES

2.1 Green Growth

Special area like the Timako Hill is given paramount importance to preserve it as a protected area or at least be maintained a forest as zoned in the city's Comprehensive Land Use Plan. The Ministry of Environment, Natural Resources, and Energy (MENRE) informed the City Government of Cotabato that the Timako Hill which was classified as a timberland or forest habitats like mangrove areas can also be considered special areas. However, there is no special study yet that has been conducted on this matter. Studies like the Forest Land Use Plan and Foreshore Development Plan were formulated with the help of the Department of Environment and Natural Resources Region XII and were now at the City Environment and Natural Resources Office.

Under the proposed Zoning Ordinance (Vol 2 of the CLUP), Timako Hill has been classified as a Forest Reserved Sub-Zone. Once approved, this would provide protection to Timako Hill.

2.2 Urban Design and Development

Urban Design is an approach to the design of buildings and the spaces between them that focuses on specific design processes and outcomes. Urban design is concerned with the arrangement, appearance and function of cities. It is both a process and an outcome of creating localities in which people live, engage with each other, and engage with the physical place around them.

The design and development are mostly the contributions made by private investors for commercial buildings being put up in the city. Malls and Shopping Centers are considered major part of this contribution to urban design and development.

Urban design from the government sector includes the People's Palace, Bangsamoro Government Center, the Quirino Bridge, and heritage buildings like the Old City Hall and the Provincial Capitol Building. Part of urban design from the government sector also includes public markets, slaughterhouses, Fiesta shopping center, city plaza and among others.

The city plaza is located at the heart of the city and serves as the center of urban design. It is a social space where people gather, meet, play, and talk. Aside from these, the city plaza also has a stage for the expression of music and arts, showmanship, and others. The most recent rehabilitation of the

plaza improved its condition and even provided special features including the dancing fountain which added to the beauty and grace of the place attracting more people visiting the city.

The city also exhibits the architectural beauty of its major shopping malls namely the Mall of Alnor and the City Mall Cotabato. Aside from these commercial establishments, there were also religious structures like the Grand Mosque and the Notre Dame Cathedral which were both aesthetically pleasing public places. The Grand Mosque, a majestic Islamic landmark for worship features 14 golden domes and four minarets soaring up to about 40 meters high. Its design was inspired by the modern and classical masjids in Turkey, Dubai, and the Arabian Gulf and incorporates architectural character from the Filipino Muslim culture.

2.3 Heritage Conservation

Preserving historical and cultural heritage is a captivating endeavor that involves safeguarding and nurturing our rich legacy, ensuring its endurance while amplifying the profound messages and timeless values it embodies. Cotabato City has a lot of notable historic and cultural heritage landmarks across the city. These landmarks date back to the first settlers of Cotabato, *Abu Mamalu* and *Abu Tabunaway*, and the establishment of pre-modern government to the present. Conservation efforts to preserve these landmarks vary in approach and will be discussed in the succeeding paragraphs.

The *fute fantad*, or white soil, located at Uruk Tantawan, the highest peak of Pedro Colina's (PC) hill, is considered Teduray's most sacred ground. St. Michael's Church was built on the said sacred ground, intended to protect and preserve its cultural and historical significance. Additionally, the location of the *fute fantad* is at the center of a military base of the Armed Forces of the Philippines (AFP) and can only be accessed every Sunday during the congregational mass.

On October 19, 2021, the National Historical Commission of the Philippines (NHCP) placed in the city its 30th National Historical Marker, known as the *Quincentennial Historical Marker for Maguindanao*, as part of the circumnavigation of the world by the Spaniards. The marker is proof that the early settlers of *Citta Grande*, now divided into several parts of the provinces of Maguindanao, Cotabato, Sultan Kudarat, and Cotabato City, the Teduray, Dulangan Manobo, and the Maguindanaons, had a culture and civilization distinct from other parts of the Philippines prior to the arrival of the Spaniards. The city government regularly maintains the said marker, which is located fronting the Old City Hall Museum.

In the heart of the city stands the ancestral house of Senator Salipada Pendatun, who was regarded as the father of Cotabato City. *Senator Salipada K. Pendatun's Ancestral House* is adorned with intricate Maranao and Maguindanao architectural motifs. Its towering pillars, intricately crafted with Bangsamoro metal and wood artworks, stand proudly, welcoming guests into a spacious hallway that tells stories of the historical and cultural significance of the late senator's colorful life as a lawyer, politician, and general of the Armed Forces of the Philippines. The sprawling grounds boast lush gardens where vibrant blooms intertwine with the fragrance of history, inviting visitors to explore the legacy of one of Mindanao's most prominent figures. It is now maintained and preserved by his descendants, who opt to minimize its exposure to preserve its grandeur.

Transformed from a former city hall into a vibrant museum, *Cotabato City's Old City Hall Museum* was built in 1936, showcasing Spanish colonial architecture. Within its walls, the museum meticulously preserves Cotabato's past, showcasing artifacts, photographs, and immersive exhibits. This transformation symbolizes the city government's dedication to honoring history, inviting visitors to explore and celebrate the city's rich cultural tapestry while emphasizing the importance of conservation and heritage preservation for future generations.

The *Cotabato Empire Provincial Capitol*, which was built during the American period in the early 1900s at PC Hill, was also one of the oldest government buildings in Cotabato City. The Old Provincial Capitol Building was the former seat of the empire for the Province of Cotabato from 1914 to 1973. Additionally, the Philippine Military used it as the former Philippine Constabulary's headquarters and for the Regional Community Defense Group Army Reserve Command. It was renovated in 2018 by the National Historical Commission of the Philippines with the intent of putting up a regional museum. Now it is awaiting turnover to the BARMM government to further conserve its prestige.

The Church of the Immaculate Conception of Tamontaka, commonly known as the *Old Tamontaka Church*, represents Cotabato City's rich history and resilience. This treasured location, which was once part of the Jesuit Tamontaka Mission, was designated a National Historic Landmark on July 19, 2004. It was originally established near the Tamontaka River in 1872 and then relocated to its current location in 1879. Despite the devastation caused by the 1976 Moro Gulf Earthquake and a fire in May 1994, the community's unwavering dedication quickly repaired this historical treasure every time it faced tremendous difficulty. Its Spanish-inspired architecture and spiritual significance have been scrupulously preserved, mirroring stories of faith and endurance. The Old Tamontaka Church stands tall as a National Historic Landmark, honoring its heritage for future generations.

The *Quirino Bridge*, a monument to American-Filipino friendship and good will, stands as a cultural icon, constructed in the 1950s under President Elpidio Quirino's tenure. It underwent restoration after the earthquake in 1976, but continued use caused structural deterioration, making it inaccessible. Presently, it is closed for comprehensive reconstruction by the Department of Public Works and Highways, aiming not just for restoration but to fortify its original design.

The *Tocao Mansion*, named after the late Sergio Ferraren Tocao, the Presidential Adviser of Presidents Magsaysay, Garcia, and Marcos, is a heritage house located in front of Notre Dame RVM. The said heritage house has sociopolitical significance because three former presidents of the Philippines used it while they were in the city to draft laws for the amendment of the Constitution. The late Sergio F. Tocao was a former delegate of the lone district of the province of Cotabato. The mansion is now occupied by a non-governmental organization, but the preservation of its structure and design is still given utmost importance.

The *Maguindanao Provincial Jail and House of Correction*, situated at PC Hill, remains the oldest correctional facility in the province of Maguindanao, retaining its original location since its establishment in 1973. Despite its official founding date, the structure itself dates back further, likely constructed during the Spanish colonial era as a penitentiary. Notably, an eagle emblem adorning the building suggests its utilization during the 1930s Commonwealth government era. Throughout the 1960s, it served as a shared facility for two government agencies—the Philippine Constabulary, using the right wing as its detention center, and the Provincial Government prison guards on the left wing. Only in 1973 did the provincial government of Maguindanao assume full control, officially designating it as the Maguindanao Provincial Jail and House of Correction.

The *Mindanao Cross: Archival Holdings* has a wealth of information about the region's religious, cultural, and political events. It is the Philippines' oldest and most enduring Catholic newspaper. The Mindanao Cross was first seen on the streets of Cotabato on February 6, 1948, thanks to a printing press supplied to the Oblates by the Oblates of Mary Immaculate missionary Gerard Mongeau, who later became the first bishop of Cotabato. The Mindanao Cross has evolved into a news source for the entire province of Cotabato, pioneering peace reporting and advocating for Muslim-Christian cooperation and the preservation of Moro, indigenous, and Christian cultures, and traditions in the country's south. With the threats of the digital world, the Mindanao Cross is now using online platforms to upload their news articles to provide information to people and ensure the continuity and readability of the newspaper.

The *Cotabato City Sangguniang Panglungsod Building*, located beside the residence of former Senator Salipada K. Pendatun, the original owner, was originally a commercial building that was sold to the city government of Cotabato and was transformed into a hospital known as Cotabato City General Hospital. At that time, it was the lone city public hospital serving the city and nearby municipalities, but due to the growing number of patients in the city and the establishment of the regional hospital in Cotabato City, it was retrofitted and transformed into the city's legislative building. It was originally part of the Pendatun residence and features an exterior painted white with an Islamic-inspired architectural design. Awaiting the construction of a new legislative building for the Cotabato City Sangguniang Panglungsod, it will still serve its present purpose until it is vacated and preserved for its historical significance.

The *Burke Building of Notre Dame University* is the main academic building of the university. It is made up of permanent structures with walls painted white and green. It bears the university logo, name, vision, and mission statement, which can be seen at the left entrance. It currently has 32 classrooms, 3 faculty offices, and 10 restrooms. It was built on February 19, 1961, and was inaugurated and blessed by His Excellency Archbishop Salvatore Siino, Papal Nuncio to the Philippines. It was named after Fr. James Burke, OMI, one of the pioneer OMI missionaries in the Philippines and the Oblate Provincial Superior from 1957 to 1963. Notre Dame University is a center of peace in this southern part of Mindanao. In this building, at the NDU Peace Center Office, the Government of the Republic of the Philippines (GRP) and the Moro Islamic Liberation Front (MILF) signed a peace agreement on February 17, 1999. For decades, the school has continued to participate in peace programs to implement its mission of educating and advocating peace in Mindanao.

There are a lot of places and structures in Cotabato City with cultural and historical significance undergoing development, improvement, and operationalization to be utilized as tourism establishments and for other purposes, such as the *Bagua Kutawato Cave, Takumi Butai Japanese Memorial Shrine, City Plaza, Tantawan Park, Bangsamoro Government Center*, and *Kalanganan Bai Walk*, most of which are used for recreation activities, and some are still being contested for heritage preservation, such as the *Timako Hill*.

While the conservation, development, and improvement of religious establishments such as *Immaculate Concepcion Cathedral, Sultan Hassanal Bolkiah Grand Mosque, Cotabato City Bell Church, St. Michael Church*, other Mosques and Churches, are left to their private ownership or religious organizations. In Cotabato City, being one of the oldest cities in the Philippines that predates Spanish colonization, every structure and every landmark tells a story. They stand as guardians of a legacy, calling forth preservation and evolution hand in hand, ensuring that the vibrant echoes of history resonate through generations yet to come.

2.4 ANCESTRAL DOMAIN

Ancestral domain or ancestral lands refer to the lands, territories and resources owned or occupied by indigenous people by themselves or through their ancestors. Although there are several indigenous people groups present in the Cotabato City, records show that there is no ancestral domain or ancestral lands documented in the city.

3. HUMAN RESOURCE / DEMOGRAPHIC PROFILE

3.1 Population Composition by School-Age, Working-Age, Dependent-Age Group and Sex, Year 2015

Table DE1 shows the population composition by school going age, by level of education, working age, labor Force and dependent population as of the 2015 Population Census, by sex and sex ratio. The city has a total school going population of 137,210 ages 3-22 years old whereby the male comprises a total population of 67,871 or 49.46% from the total school going population, while the female population recorded a little higher at 69,339 or 50.53%, this make the sex ratio of 98%. The school going population breaks down into four (4) levels of education: For the Pre-school (aged 3-6 years old) the city has a total population of 28,928; Elementary (7-12 years old) registered the largest population for the school going children at 42,280; followed by Secondary (13-18 years old) with a total count of 41,547 and the least is the tertiary level (19-22 years old) at 24,455 students.

Table DE-1. Population Composition by School-Age, Working-Age, Dependent-Age Group and Sex, Year 2015

Age Group	Both Sexes	Male		Female		Sex Ratio
		No.	%	No.	%	
School going population						
Pre-school (3-6)	28,928	14,993	52%	13,935	48%	1.08
Elementary (7-12)	42,280	21,289	50%	20,991	50%	1.01
Secondary (13-18)	41,547	20,031	48%	21,516	52%	0.93
Tertiary (19-22)	24,455	11,558	47%	12,897	53%	0.90
Working Age (15-64)	185,950	89,476	48%	96,474	52%	0.93
Labor Force (15 and over)	187,285	90,113	48%	97,172	52%	0.93
Dependent Population	112,273	56,737	51%	55,536	49%	1.02
Young Dependents (0-14 Yrs. Old)	103,797	52,800	51%	50,997	49%	1.04
Old Dependents (65 Yrs Old & over)	8,476	3,937	46%	4,539	54%	0.87

Source: Computed based on latest NSO/PSA data on household population by age group
Note: Sex ratio = (No. of male/No. of female) x 100

The Philippine Statistics Authority (PSA) defines *Working Age Population* as referring to persons aged 15 years old and over who are present at the time of visit whose usual place of residence is the sample household regardless of their length of stay in the household. The city has recorded a total of 185,950 persons in the Working Age Population (15-64 years old) of which 48% comprise the male and 52% female with a 93% sex ratio. *Labor force* is defined as referring to the population 15 years old and over, who are called workforce, in abled-bodied, willing people who are currently employed or looking for work. The city has a total of 187,285 individuals belonging to the *Labor force* with the same sex ratio proportion with the *working age. Dependent population* refers to a population that does not work and relies on others for the goods and services they consume. There are 2 kinds of dependent population, the young dependents comprising the ages 0-14 years old and old dependent comprising ages 65 and over. The city has a total dependent population of 112,273 or 37.5% from the total population; 34.7% belongs to the young dependents and about 2.8% are old dependents.

3.2 Population Distribution by Age Group and Sex CY 2015 and 2010

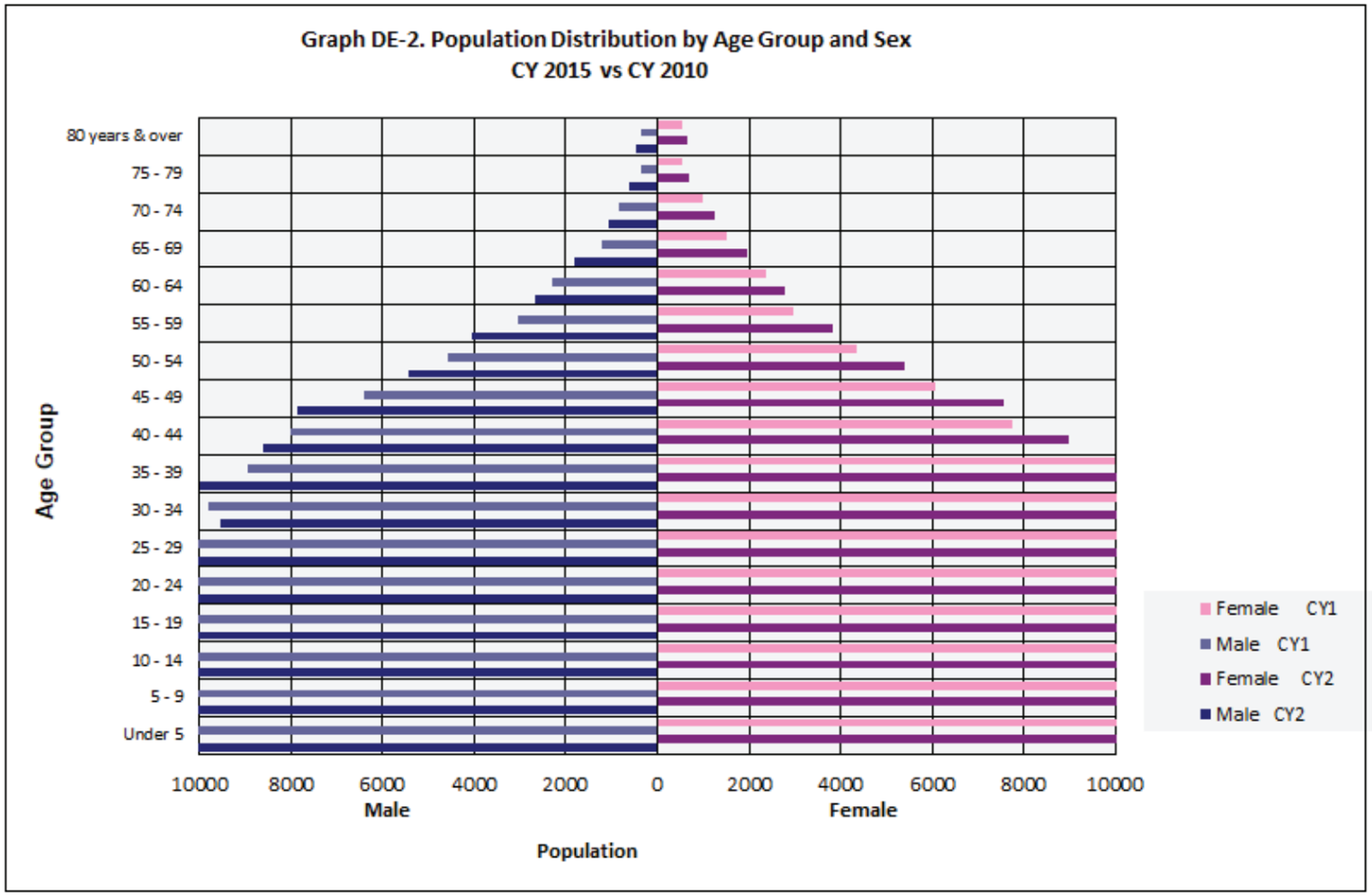
Table DE-2 Illustrates the population distribution by age bracket and by sex for the time period 2010 compared to 2015. In 2010 the city total population was at 271, 609 having 133,380 males, slightly lower than the female population at 138,229. In 2015 Census recorded a total population of 299,438 that is an additional 27,829 persons from the previous census, with total male population of 146,934 and the female at a constant slightly higher with the male at the total count of 152,504. The young dependents comprise the ages from 0-14 years old recording a total of 95,204 in 2010 and reached 103,993 in 2015, they are the group who are unable to support themselves and depend on their providers to survive. The children population ages 0-17 year-old registered at 114,560 or 41.21% from the total population in 2010 with 57,293 male and the female slightly lower at 57,267 children. In 2015 the children population went up to 124,956 children with male population at 63,013 and the female again slightly lower at 61,943.

The labor force or the working population range from ages 15-64 years old composed of 170,037 individuals in 2010 and reached 186,956 in 2015, this group supports the dependents both young and old. The old dependents belong to ages from 64 years old and over recorded a total count of 6,368 Senior Citizens in 2010 and 8,489 in 2015. The Women in Reproductive Age (WRA) comprising the ages 15-45 years old registered a total of 77,799 women or 29% from the total population in 2010 and 78,834 in 2015. The widest population group for both 2010 and 2015 were from the age bracket 5-9 years old.

Table DE-2 Population Distribution by Age Group and Sex CY 2015 and 2010

Age Group	Censal Year 2 (2015)			Censal Year 1 (2010)		
	Male	Female	Total	Male	Female	Total
Under 5	17,725	16,537	34,262	15,130	14,660	29,790
5 - 9	18,007	17,293	35,300	16,787	16,262	33,049
10 - 14	17,236	17,195	34,431	16,149	16,216	32,365
15 - 19	16,521	18,246	4,767	15,379	16,882	32,261
20 - 24	13,707	15,369	29,076	12,695	13,923	26,618
25 - 29	11,610	12,822	24,432	11,362	12,660	24,022
30 - 34	9,552	10,894	20,446	9,803	10,494	20,297
35 - 39	10,008	10,986	20,994	8,944	10,006	18,950
40 - 44	8,631	9,000	17,631	8,017	7,773	15,790

45 - 49	7,857	7,583	15,440	6,399	6,061	12,460
50 - 54	5,438	5,396	10,834	4,569	4,355	8,924
55 - 59	4,046	3,846	7,892	3,058	2,974	6,032
60 - 64	2,654	2,790	5,444	2,297	2,386	4,683
65 - 69	1,810	1,955	3,765	1,231	1,532	2,763
70 - 74	1,063	1,257	2,320	836	985	1,821
75 - 79	606	683	1,289	365	528	893
80 years & over	463	652	1,115	359	532	891
Total	146,934	152,504	299,438	133,380	38,229	271,609


Graph DE-2. Population Distribution by Age Group and Sex
CY 2015 vs CY 2010
80 years & over
75 - 79
70 - 74
65 - 69
60 - 64
55 - 59
50 - 54
45 - 49
40 - 44
35 - 39
30 - 34
25 - 29
20 - 24
15 - 19
10 - 14
5 - 9
Under 5
Age Group
10000
8000
6000
4000
2000
0
2000
4000
6000
8000
10000
Male
Female
Population
Female CY1
Male CY1
Female CY2
Male CY2

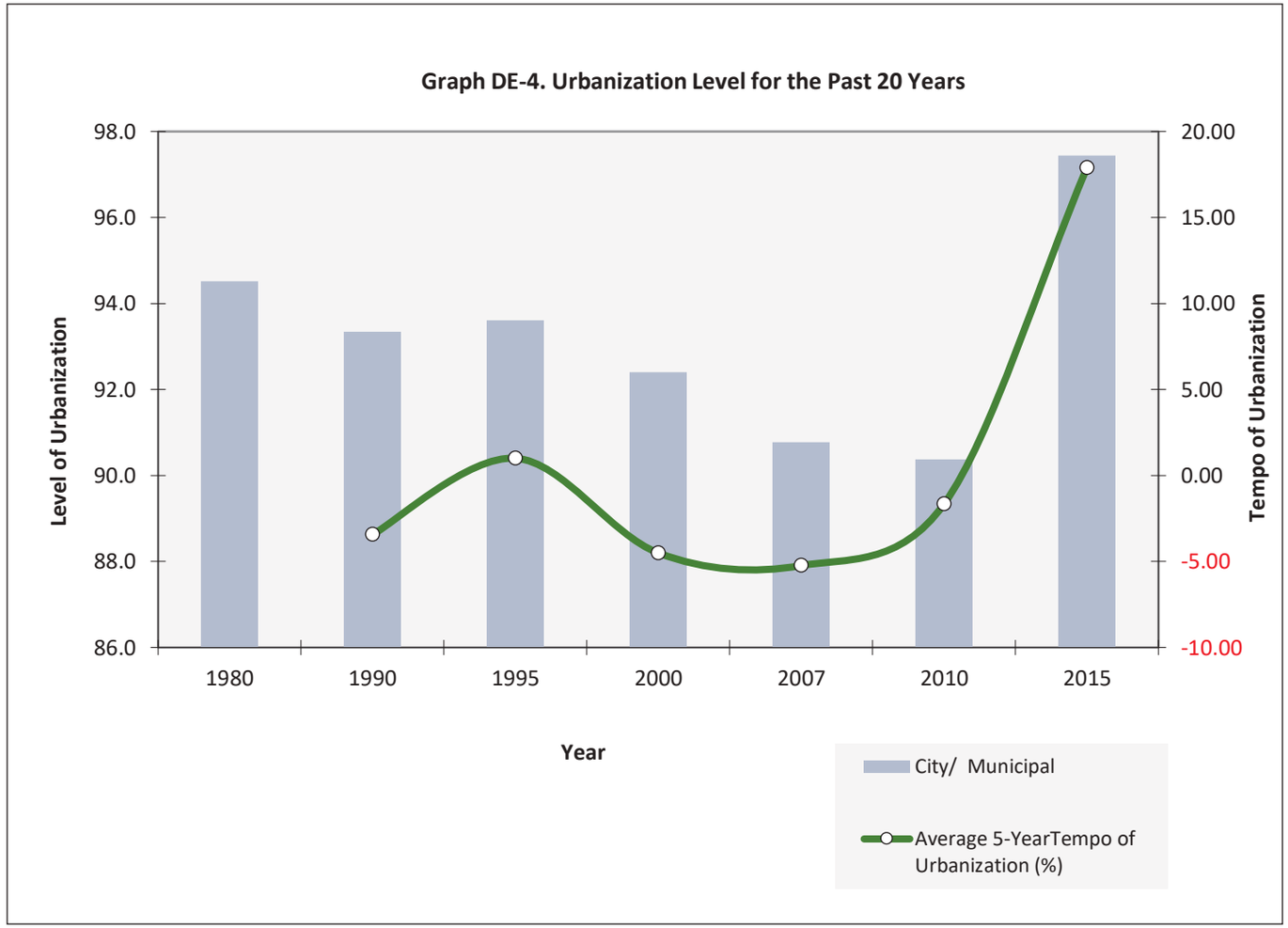
3.3 Urbanization Levels for the Past 20 Years

In 1980 the city recorded a total population of 83,871, of which the urban population is at 79,270 and 4,601 inhabitants in the rural barangays, this means the city is 94.5% urban level; in 1990, after 10 years, a rapid increase of 4.96% in the urban population, it has reached to a total of 118,601 urban dwellers and recorded more than 45% increase for rural areas at 8,464; from 1995 to 2000 showed a decreasing pattern of -4.50% or 92.4% urban; and in 2007 showed the biggest lift from 2.04% to 7.91% urban tempo reaching a total urban population of 235,245 and then turn in a sudden drop to the lowest point of 1.47% urban tempo And in 2015, normalized the urban tempo to 3.76 % urban growth, registering a total of 291,790 urban inhabitants and only 7,648 rural dwellers in 2015.

Table DE-4. Urbanization Level for the Past 20 Years

Year	City/Municipal Population			Average Yearly Population Growth Rate (%)		Average 5-YearTempo of Urbanization (%)	Level of Urbanization (%)	
	Urban	Rural	Total	Urban	Rural		City	Provincial
1980	79,270	4,601	83,871				94.5	45.5
1990	118,601	8,464	127,065	4.96	8.40	-3.43	93.3	44.8
1995	137,398	9,381	146,779	3.17	2.17	1.00	93.6	44.0
2000	151,400	12,449	163,849	2.04	6.54	-4.50	92.4	45.2
2007	235,245	23,908	259,153	7.91	13.15	-5.24	90.8	47.0
2010	245,637	26,149	271,786	1.47	3.12	-1.65	90.4	
2015	291,790	7,648	299,438	3.76	-14.15	17.91	97.4	

Notes:
Average 5-Year Tempo of Urbanization (%) = (Ave. Urban Pop'n Growth Rate – Ave. Rural Pop'n Growth Rate)
Level of Urbanization = Urban Population/Total Population) x 100


Graph DE-4. Urbanization Level for the Past 20 Years
98.0
96.0
94.0
92.0
90.0
88.0
86.0
Level of Urbanization
20.00
15.00
10.00
5.00
0.00
-5.00
-10.00
Tempo of Urbanization
1980
1990
1995
2000
2007
2010
2015
Year
City/ Municipal
Average 5-YearTempo of Urbanization (%)

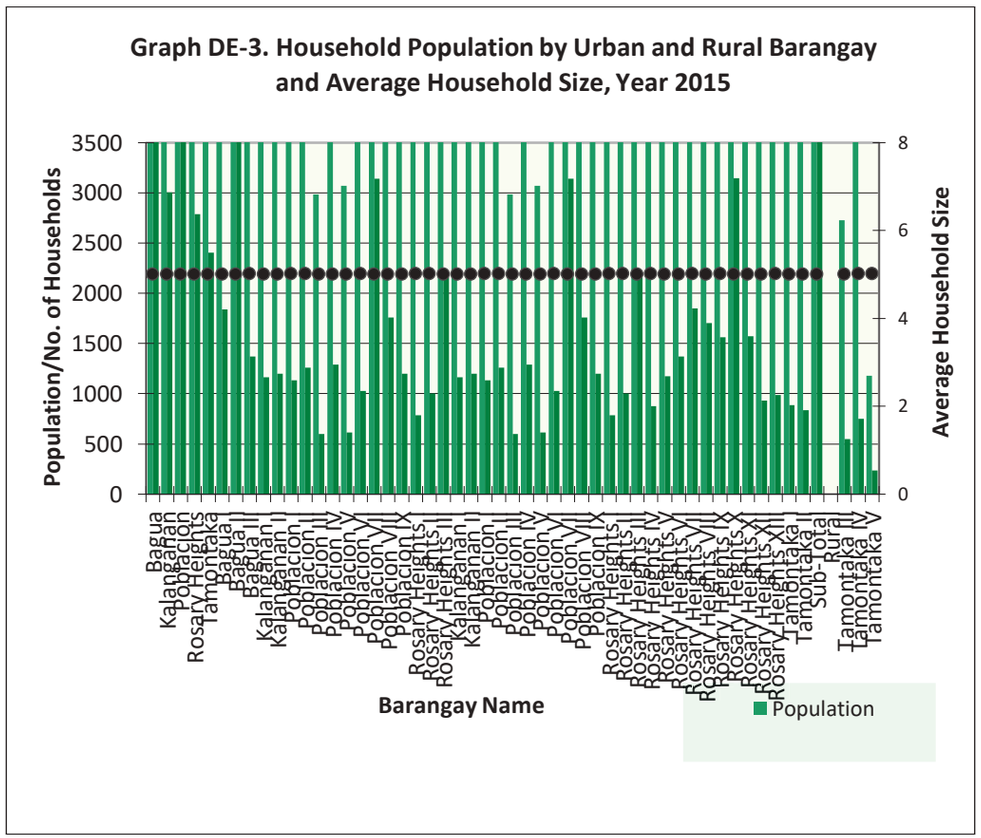
3.4 Household Population by Urban and Rural Barangay and Average Household Size, Year 2015

Table DE- 3. Household Population by Urban and Rural Barangay and Average Household Size, Year 2015

Barangay	Population	Number of Household	Average Household Size
Urban			
Bagua	18,137	3,627	5.00
Kalanganan	15,019	3,004	5.00
Poblacion	20,734	4,147	5.00
Rosary Heights	13,943	2,789	5.00
Tamontaka	12,027	2,405	5.00
Bagua I	9,206	1,841	5.00
Bagua II	19,720	3,944	5.00
Bagua III	6,847	1,369	5.00
Kalanganan I	5,808	1,162	5.00
Kalanganan II	5,999	1,200	5.00
Poblacion I	5,677	1,135	5.00
Poblacion II	6,302	1,260	5.00
Poblacion III	2,985	597	5.00
Poblacion IV	6,456	1,291	5.00
Poblacion V	3,070	614	5.00
Poblacion VI	5,151	1,030	5.00
Poblacion VII	15,712	3,142	5.00
Poblacion VIII	8,786	1,757	5.00
Poblacion IX	5,998	1,200	5.00
Rosary Heights I	3,931	786	5.00
Rosary Heights II	5,006	1,001	5.00
Rosary Heights III	10,786	2,157	5.00
Rosary Heights IV	4,377	875	5.00
Rosary Heights V	5,870	1,174	5.00
Rosary Heights VI	6,846	1,369	5.00
Rosary Heights VII	9,257	1,851	5.00
Rosary Heights VIII	8,524	1,705	5.00
Rosary Heights IX	7,802	1,560	5.00
Rosary Heights X	15,732	3,146	5.00
Rosary Heights XI	7,864	1,573	5.00
Rosary Heights XII	4,664	932.8	5.00
Rosary Heights XIII	4,947	989	5.00
Tamontaka I	4,423	885	5.00
Tamontaka II	4,184	837	5.00
Sub-Total	**291,790**	**58,355**	5.00
Rural			
Tamontaka III	2,730	546	5.00
Tamontaka IV	3,741	748	5.00
Tamontaka V	1,177	235	5.00
Sub-Total	**7,648**	**1,529**	5.00
Total	**299,438**	**59,884**	

Source: National Statistics Office/Municipal Records

The DILG guidelines for the formulation of Comprehensive Development Plan (CDP) and the Philippine Statistics Coordination Board (PSCB) defines the urban areas as follows: 1) If a barangay has a population of 5,000 or more, then a barangay is considered urban or; 2) If a barangay has at least one establishment with a minimum of 100 employees, a barangay is considered urban, or 3) If a barangay has 5 or more establishment with a minimum of 10 employees, and 5 or more facilities within the two kilometer radius from the barangay is considered urban. The city has 37 barangays - 33 barangays are identified urban with a total population of 285,982 or 57,336 households, using the average household size of 5 for Cotabato City and 4 barangays were classified as rural with only 13, 456 population or a, 1,530 household. Hence the city is 97.40% urban and 2.59% rural. Registering a total population of 299,438 and total household of 58,866 for Census Year 2015 for both rural and urban areas.



3.5 Population Density by Barangay, Year 2015

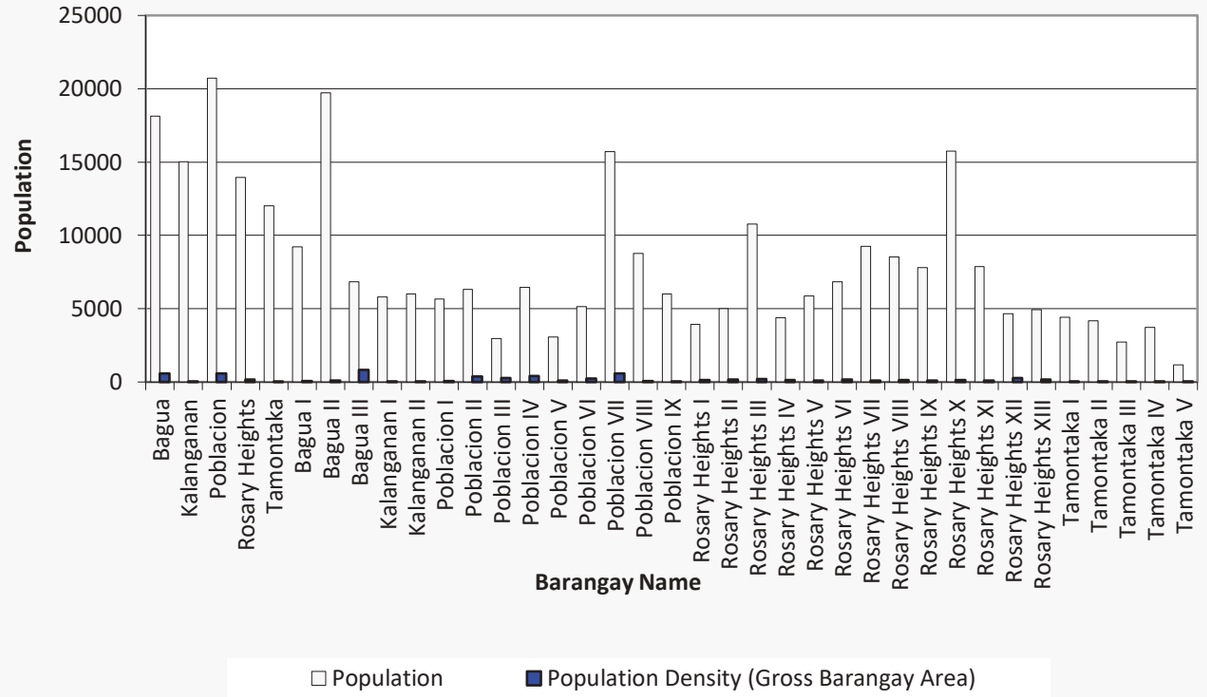
Population Density refers to the number of people living in each unit of area. Hence, the city has a total Land Area of 17,599 square hectares and presently has a density of 17.014 persons per square hectares. The table above shows the population density by barangay, and it registered that in 2015 the most densely populated barangay is Barangay Bagua 3 at 821 persons per square hectare, followed by Barangay Bagua Mother at 599 persons per square hectare, next is Poblacion Mother at 583 persons per square hectare, while the least dense barangay is Tamontaka 5 at less than 1 person per square hectare, followed by Tamontaka 4 at 2 person per square hectare and third is Kalanganan 2 at 3 persons per square hectare.

Table DE-5. Population Density by Barangay, Year 2015

Barangay	Population	Gross Area (ha)	Population Density (Gross Barangay Area)	Barangay	Population	Gross Area (ha)	Population Density (Gross Barangay Area)
Urban				Rosary Heights IV	4,377	32.53	135
Bagua	18,137	30.28	599	Rosary Heights V	5,870	59.96	98
Kalanganan	15,019	2,206.63	7	Rosary Heights VI	6,846	38.66	177
Poblacion	20,734	35.59	583	Rosary Heights VII	9,257	81.56	114
Rosary Heights	13,943	77.44	180	Rosary Heights VIII	8,524	59.67	143
Tamontaka	12,027	315.40	38	Rosary Heights IX	7,802	85.14	92
Bagua I	9,206	185.71	50	Rosary Heights X	15,732	104.56	150
Bagua II	19,720	176.36	112	Rosary Heights XI	7,864	84.77	93
Bagua III	6,847	8.34	821	Rosary Heights XII	4,664	16.25	287
Kalanganan I	5,808	1,158.65	5	Rosary Heights XIII	4,947	31.60	157
Kalanganan II	5,999	2,107.52	3	Tamontaka I	4,423	280.92	16
Poblacion I	5,677	68.24	83	Tamontaka II	4,184	461.88	9
Poblacion II	6,302	17.19	367	**Subtotal**	**291,790**	**9,698**	**30**
Poblacion III	2,985	10.71	279	**Rural**			
Poblacion IV	6,456	15.96	405	Tamontaka III	2,730	525.62	5
Poblacion V	3,070	28.13	109	Tamontaka IV	3,741	1,880.48	2
Poblacion VI	5,151	22.72	227	Tamontaka V	1,177	5,494.90	0
Poblacion VII	15,712	26.66	589	**Subtotal**	**7648**	**7,901.00**	**7**
Poblacion VIII	8,786	166.92	53	**Total**	**299,438.00**	**17,599.00**	**17**
Poblacion IX	5,998	1,594.27	4	Notes:			
Rosary Heights I	3,931	28.98	136	Population Density = Population divided by Gross Area			
Rosary Heights II	5,006	27.92	179				
Rosary Heights III	10,786	50.88	212				

Source: City Planning and Development Office

Graph DE-5. Population Density by Barangay, 2015



Source: City Planning and Development Office

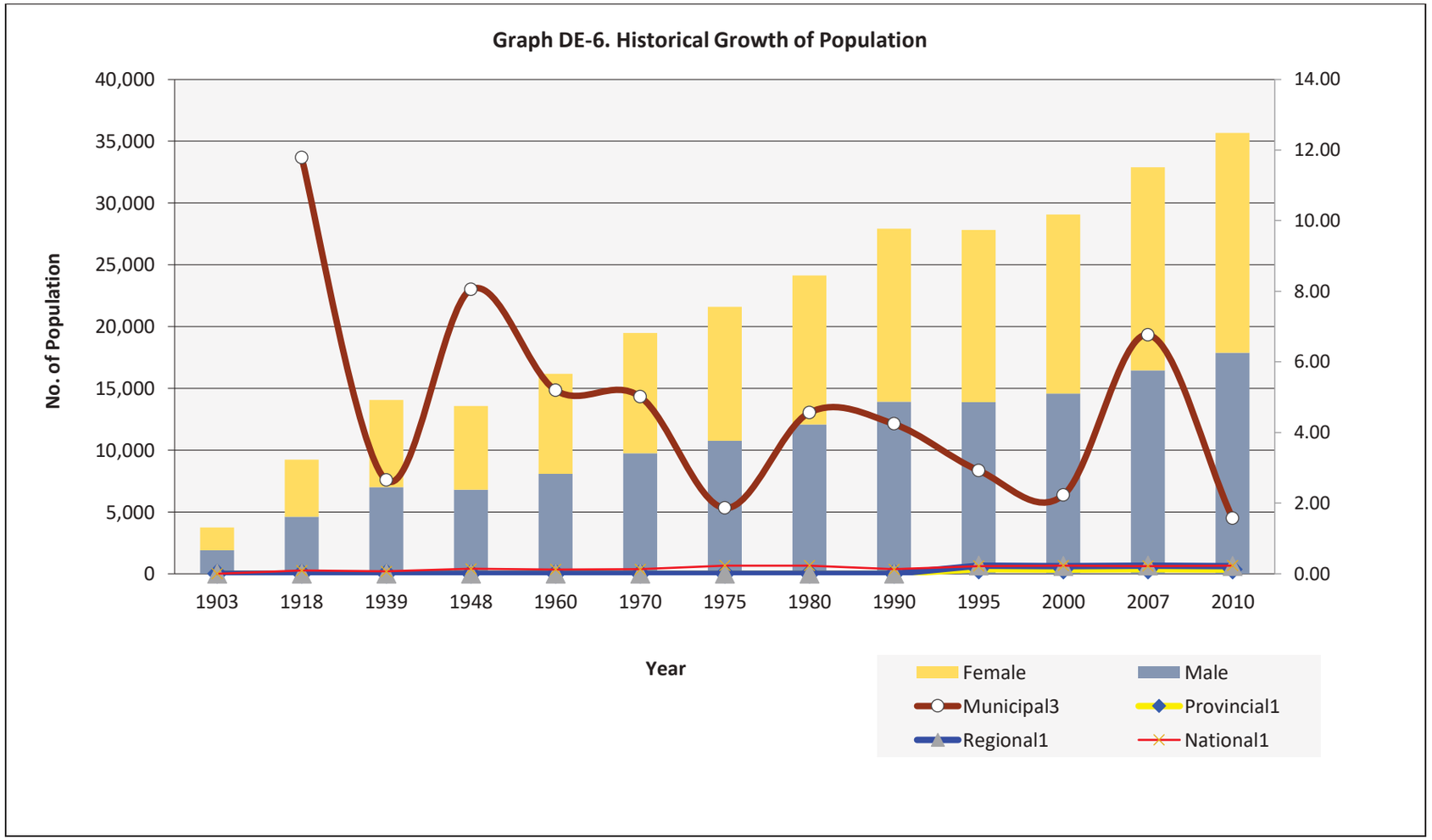
3.6 Historical Growth of Population

The 1st Census was conducted in 1903 recording only a total population of 1,103 inhabitants, next was in 2018 registering the city population at 5,870 with a growth rate of 11.79% from the first census, the biggest growth rate recorded in the history of the city in a period of 15 years; then a drop in growth rate was recorded in 1939 at only 2.65% in 21 years. 1948 recorded the second highest growth rate at 8.05% in just a 9 years interval, registering a total population of 20,407; 1960 and 1970 nailed the growth rate at 5% or slightly higher. 1975 registered the second lowest growth rate, registering only an additional of 5,913 individuals to its population from 1970 or 1.86%; 1980 and 1990 again peg its growth rate at 4.56% and 4.24% respectively; the down trend in growth rate continues in 1995 and 2000 at 2.93% and 2.22%. 2007 registered the third highest growth rate at 6.77% in only 7 years, the highest increase in terms of additional individuals of 95,304, registering a total population 259,153; 2010 recorded the lowest growth rate at 1.58% in only 3 years with registered total population of 271,609 and the latest census resulted a total population of 299,438 holding the record of third lowest growth rate at 1.97% in 5 years.

Table DE-6. Historical Growth of Population

Year	City						Annual Growth Rate (%)			
	Population[1]			Increase/Decrease[2]						
	Male	Female	Total	Male	Female	Total	City[3]	Provincial[1]	Regional[1]	National[1]
1903	541	562	1,103			-				
1918	2,880	2,990	5,870	2,339	2,428	4,767	11.79			
1939	4,988	5,178	10,166	2,108	2,188	4,296	2.65			
1948	10,014	10,393	20,407	5,025	5,216	10,241	8.05			
1960	18,401	19,098	37,499	8,387	8,705	17,092	5.20			2.87
1970	30,023	31,161	61,184	11,622	12,063	23,685	5.02	5.30	6.32	3.03
1975	32,924	34,173	67,097	2,902	3,011	5,913	1.86	0.26	1.44	2.75
1980	41,155	42,716	83,871	8,231	8,543	16,774	4.56	3.54	4.73	2.66
1990	62,351	64,714	127,065	21,195	21,999	43,194	4.24	3.07	3.37	2.33
1995	72,024	74,755	146,779	9,674	10,040	19,714	2.93	2.30	3.25	2.32
2000	80,401	83,448	163,849	8,376	8,694	17,070	2.22	2.29	2.69	2.36
2007	127,166	131,987	259,153	46,766	48,538	95,304	6.77	2.19	2.41	2.04
2010	33,380	138,229	271,609	6,214	6,242	12,456	1.58	3.39	2.68	1.57
2015	146,934	152,504	299,438	13,554	14,275	27,829	1.97	2.27	1.90	1.70

Source: NSO/PSA
Use latest annual growth rate from Table DE-15


Graph DE-6. Historical Growth of Population
No. of Population
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
1903
1918
1939
1948
1960
1970
1975
1980
1990
1995
2000
2007
2010
Year
Female
Male
Municipal3
Provincial1
Regional1
National1

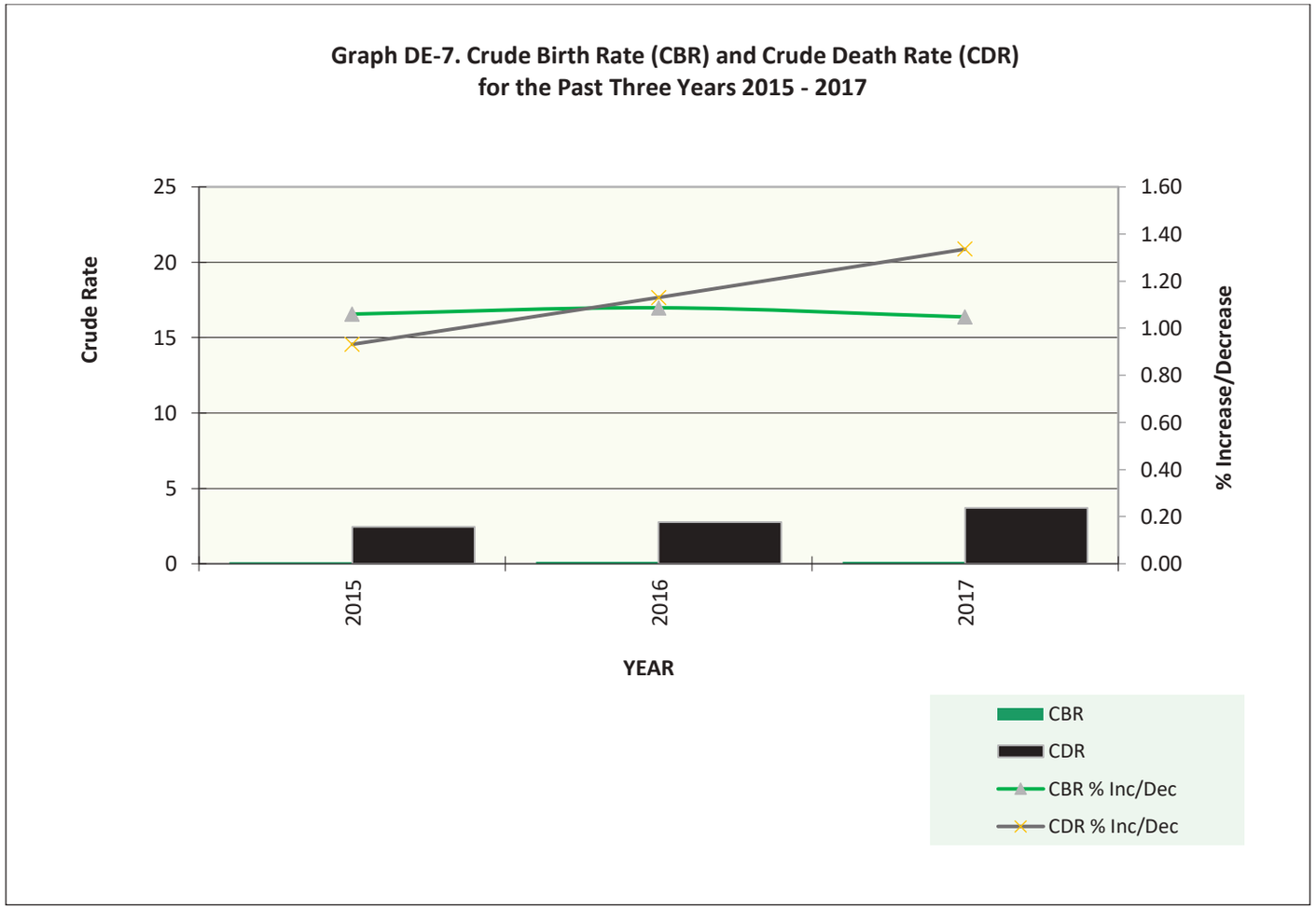
3.7 Crude Birth Rate and Crude Death Rate for the Past Three Years (2015-2017)

The City Health Office reported a gradual increasing trend in Crude Birth Rate, it has recorded 10.95% in 2015 and 11.90% in 2016, but slightly dropped in 2017 by 1.05%. The city is the seat of the Cotabato Regional and Medical Center (CRMC), a public tertiary hospital that caters to all health care needs from the neighboring towns, and this directly affects the crude birth rate and death rate for the city as all cases were recorded in Cotabato City.

Table DE-7. Crude Birth Rate (CBR) and Crude Death Rate (CDR) for the Past Three Years/Planning Period (2015- 2017)

Period	CBR	% Increase/Decrease from Previous Year	CDR	% Increase/ Decrease from Previous Year
2015	10.95%	1.06	2.45	0.93
2016	11.90%	1.09	2.77	1.13
2017	12.47%	1.05	3.7	1.34

Notes:
Crude Birth Rate (CBR) refers to the number of live births per 1,000 mid-year population
Crude Death Rate (CDR) refers to the number of deaths per 1,000 mid-year population


Graph DE-7. Crude Birth Rate (CBR) and Crude Death Rate (CDR)
for the Past Three Years 2015 - 2017
Crude Rate
25
20
15
10
5
0
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
% Increase/Decrease
2015
2016
2017
YEAR
CBR
CDR
CBR % Inc/Dec
CDR % Inc/Dec

3.8 Literacy Rate of Population 10 Years Old and Over, by Sex, Year 2015

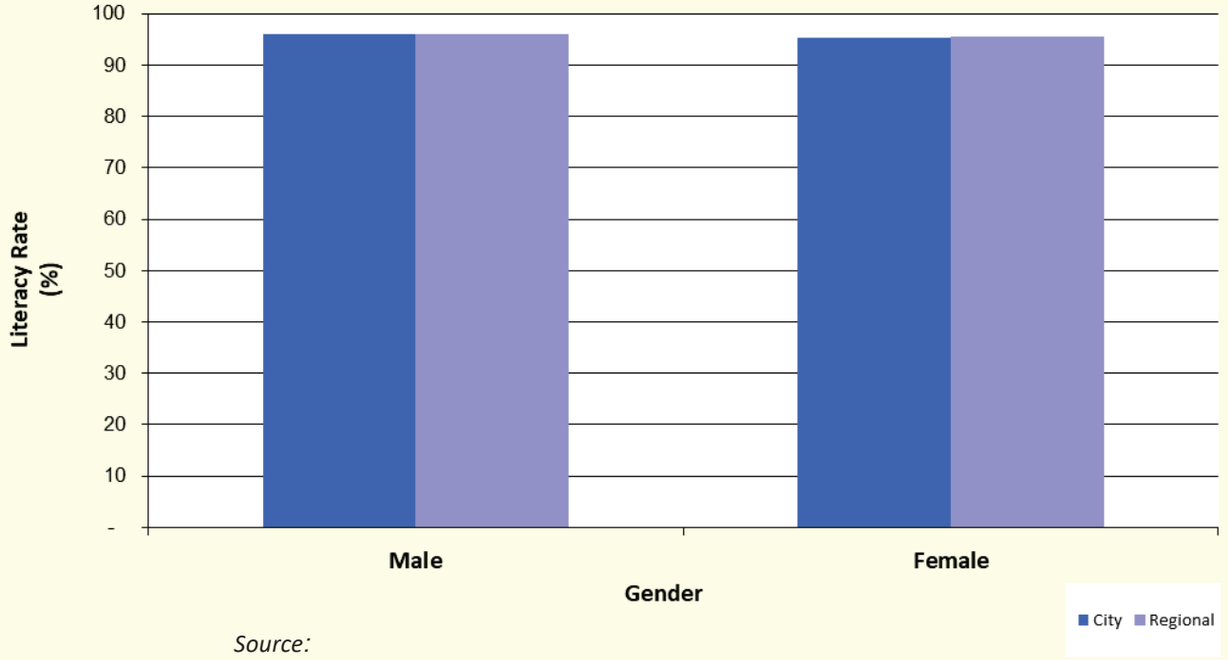
The city Literacy Rate as of 2015 for both sexes is 96%, the male also participated with 96% literacy rate and comprises a total population of 106,897 while the female is at 95% or a total of 112,971, slightly down by 1% with the male counterpart. This means that both male and female in Cotabato City show almost similar levels of literacy with females slightly more literate. Region XII shows a mirror like image with the city having a total Literacy Rate of 96% for both male and female and also 96% for male and 95% for females. However, the city Illiteracy rate is recorded at only 4% for both sexes with only 4% for the male and 5% for the female. Again, the Region shows an identical pattern of 4% illiteracy rate for the entire region for both male and female and 4% goes to male and 5% to female.

Table DE-8. Literacy Rate of Population 10 Years Old and Over by Sex, 2015

Indicator	City						Regional					
	Male		Female		Both Sex		Male		Female		Both Sex	
	No.	Rate %	No.	Rate %	No.	Rate %	No.	Rate %	No.	Rate %	No.	Rate %
Literate	106,897	96	112,971	95	219,868	96	1,708,529	96	1,631,938	95	3,340,467	96
Illiterate	4,305	4	5,703	5	10,008	4	69,392	4	77,934	5	147,326	4
Total (Population >10yr)	1,202		118,674		29,876		1,777,921		1,709,872		3,487,793	

Note:
Rate (%) = (No. per indicator/Total population > 10 yr) x 100

Graph DE-8. Literacy Rate of Population 10 Years Old and Over by Sex, Year 2015



Source:

3.9 Mother Tongue Distribution among Households Year 2010

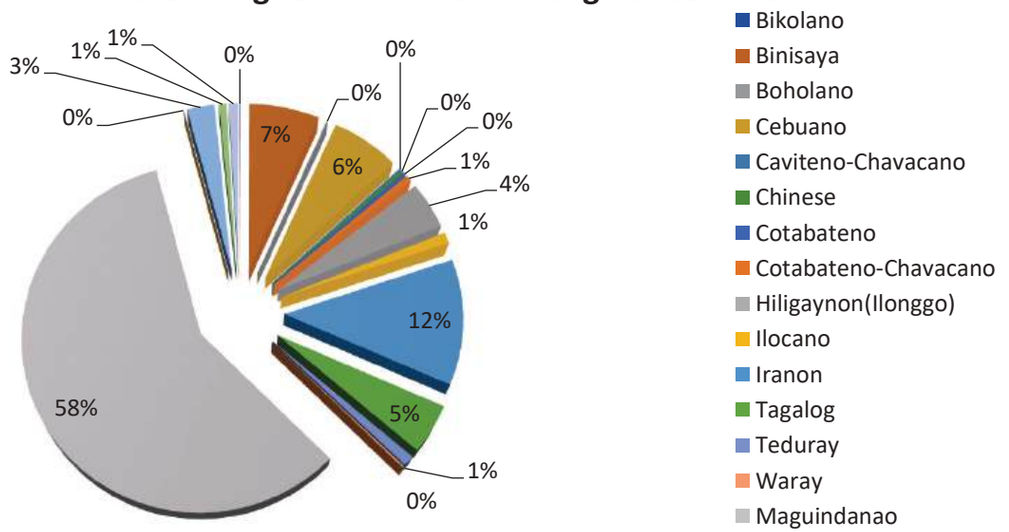
The latest disaggregated record for population distribution by Mother Tongue by the Philippine Statistical Authority (PSA) was during the Population Census 2010. For planning purposes, the office has projected the population distribution by mother tongue for 2015 by using the participation rate of the given languages below. The table shows that the city is a majority Maguindanao speaking community comprising 58% of the population, followed by Iranon at 11.7%, 6.53% are Binisaya, and 6.38% were Cebuano, and the rest belong to relatively other local language. This shows that Cotabato City is predominantly composed of Maguindanaoan communities. However, in general, Tagalog is the medium of communication.

Table DE-9 . Household Population by Mother Tongue, Year 2015

Mother Tongue	Household No.	% of Total Households
Bajao	236	0.078789731
Bikolano	176	0.058908210
Binisaya	19,570	6.535497719
Boholano	269	0.089835020
Cebuano	19,117	6.384177255
Caviteno-Chavacano	459	0.153161346
Chinese	723	0.241523661
Cotabateno	942	0.314422571
Cotabateno-Chavacano	1,737	0.580245868
Hiligaynon(Ilonggo)	13,363	4.462665081
Ilocano	3,095	1.033470909
Iranon	35,150	11.738565364
Tagalog	13,898	4.641230593
Teduray	2,924	0.976403580
Waray	505	0.168624751
Maguindanao	174,735	58.354472790
Manobo	65	0.021722402
Maranao	7,638	2.550725491
Tausog	2,160	0.721257396
Others	2,678	0.894300263
Total	299,438	100

Source: Census of Population, NSO/PSA

Graph DE-9b. Mother Tongue Distribution among Households

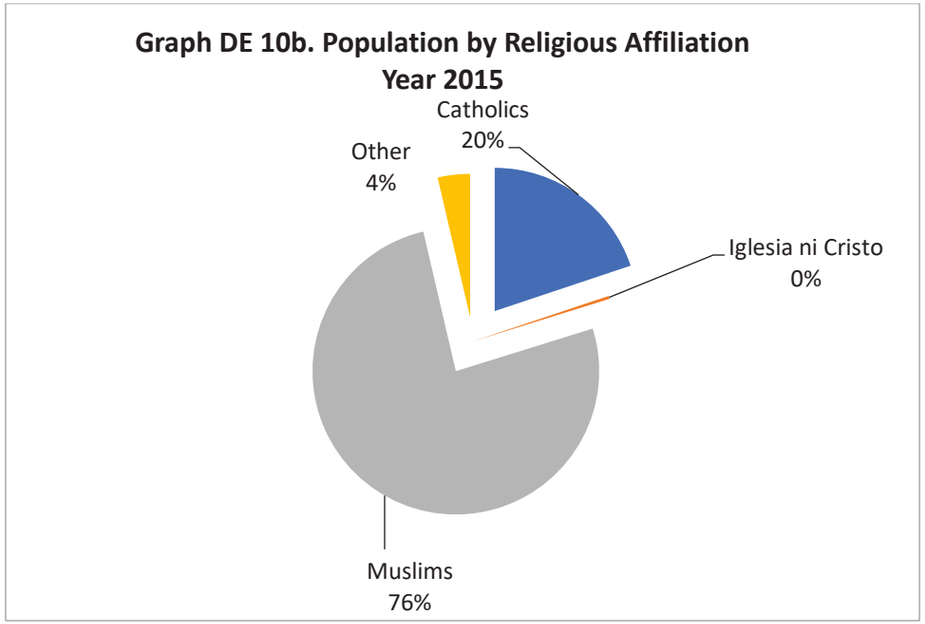


3.10 Population by Religious Affiliation, Year 2015

Table DE-10 shows the population distribution by Religious Affiliation in 2015. The Muslims and/or Islam have the greatest number at 228,036 which is 76% of the entire population. Roman Catholic is second at a count of 59,493 which is 20%. Iglesia ni Kristo had the least number at 989 or less than 1 percent of the total population. Others were distributed from other religious affiliation registering a total of 10,920 or 4%.

Table DE-10. Population by Religious Affiliation, Year 2015

Religious Affiliation	No. of People	% of Total Population
Catholics	59,493	20%
Iglesiani Cristo	989	0%
Muslims	228,036	76%
Other	10,920	4%
Total	299,438	100%



3.11 Inventory of Religious Establishment, Year 2019

Table DE-11 Inventory of Religious Establishment Year 2019

Barangay	Name of Religious Establishment	Type of Religion	Area (sq m)	Hazard Susceptibility (H/M/L)								Used as Evacuation Center (Y/N)
				Fl	Tc	Eq	Vo	Ln	Ts	Su	Others	
Bagua Mother	Masjid Al Ansar (Mahad)	Islam	360.47	H					M			N
	Masjid Amir BinnKhatab	Islam	77.25	H					M			N
	Masjid Dumama	Islam	305.21	H					M			N
	Masjid Muttakim	Islam	149.87	H					M			N
	Masjid Nahda	Islam	106.81	H					M			N
	Masjid Noor	Islam	112.01	H					M			N
	Masjid Palacala	Islam	122.67	H					M			N
	Masjid Sampalo (Lao)	Islam										N

	Sr.San Roque Chapel	Catholic	1186.21	H					M			N
Bagua 1	Masjid Abubakar Sidiqq (SKC)	Islam	241.44	H					M			N
	Masjid Al Husain	Islam	288.71	H					M			N
	Masjid Amir Ahmad Mohamaad Al Saadi	Islam	286.6	H					M			N
	Masjid Bajunaid	Islam	110.69	H					M			N
	Masjid DarulUnsing	Islam	147.09	H					M			N
	Masjid Iqra	Islam	217.47	H					M			N
	Masjid MidtimbangUdasan	Islam	159.54	H					M			N
	Masjid Norodin	Islam	144.1	H					M	L		N
	Masjid Omar	Islam	33.62	H					M			N
	Masjid Pagalungan	Islam	156.16	H					M			N
	Masjid Piang	Islam	244.93	H					M			N
	Masjid Rahmani	Islam	211.87	H					M			N
Bagua 2	Masjid Rahman	Islam	102.55	H					M			N
	Masjid RajamudaBudtong	Islam	98.62	H					M			N
	Masjid Waqaf	Islam	121.49	H					M			N
	Masjid UmmolMuhminin	Islam	110.61	H					M			N
	Masjid Hadji Abubakar Kambal Al Islamiya	Islam	100.49	H					M			N
	Masjid Fatmah	Islam	152.75	H					M			N
	Masjid Al-Ittihad	Islam	389.32	H					M			N
	Masjid Al Ayob	Islam	142.86	H					M			N
	Masjid Rahmaniya	Islam	142.86	H					M			N
	Masjid Albayan	Islam	65.69	H					M			N
	Masjid Khalid Binn Waled	Islam	70.71	H					M			N
	Masjid Raja BansaSahifa	Islam	164.03	H					M			N
	Masjid Abdulraof	Islam	27.84	H					M			N
	Masjid Purok Magungaya	Islam	68.98	H					M			N
	Masjid Ibadur Rahman	Islam	102.55	H					M			N
	Masjid Usman	Islam	278.96	H					M			N
	Masjid Mlok	Islam	48.4	H					M			N
	Masjid Kutabato Islamic Center	Islam	1293.73	H					M			N
	Masjid Haya AydulKabisiRahima Allah	Islam	87.02	H					M			N
Bagua 3	Masjid Amina	Islam	86.65	L					M			N
	San Vicente Ferrer	Catholic	117.72	L					M			N

	San Pedro Chapel	Catholic	53.95	L					M			N
RH Mother	Masjid NurulHuda	Islam	301.65	L					M			N
	Masjid Camsa	Islam	64.49	L					M			N
	Masjid Attayniyah	Islam	112.52	L					M			N
	Masjid Samama Compound	Islam	185.17	L					M			N
	Masjid Macadar	Islam	120.63	L					M			N
	Masjid AsSafah	Islam	161.91	L					M			N
	Masjid Maniri	Islam	142.09	M					M			N
	Masjid Ampatuan	Islam	204.36	M					M			N
	Masjid Nurul Iman	Islam	128.61	L					M			N
	Our Lourdes Chapel	Catholic	46.27	L					M			N
	Immaculate Conception	Catholic	231.96	L					M			N
	Our Lady Of Fatima	Catholic	121.46	L					M			N
	Our Lady of Rosary Parish Church	Catholic	1,909.05	L					M			N
	Masjid Al Hidaya DPWH	Islam	264.57	L								N
RH 1	Sto. Niño Chapel	Catholic	231.26	VH				M	M			N
	St. Michael Archangel	Catholic	391.47	VH				M	M			N
	Four Gospel Church	Protestant	603.92	L					M			N
	Masjid Tantawan	Islam	25.44	VH				M	M			N
RH 2	Our Lady of Fatima	Catholic	85.02	L								N
	Imaccculate Concepcion Cathedral	Catholic	2449.83	L								N
	Our Lady Of Lourdes Chapel	Catholic	146.89	L								N
	Our Mother of Perpetual Help Chapel	Catholic	197.59	L								N
	Pit SenyorSto. Niño Chapel	Catholic	129.45	L								N
	Masjid Ampatuan	Islam	86.46	L								N
RH 3	Masjid DR. Blah K. Usman	Islam	205.03	L								N
	Masjid Al Rahman	Islam	93.19	L								N
	Masjid Maulana	Islam	232.73	L								N
	Masjid Doton	Islam	100.51	L								N
	Masjid Abubakar	Islam	124.88	L								N
	Masjid Al Huda	Islam										N
	Masjid Lauban	Islam	221.11	L								N
	Masjid Nora	Islam	107.19	L								N
	Masjid Sampulna	Islam										N

	Sr. Santo Nino Chapel	Catholic	66.55	L								N
	Sr. San Agustin	Catholic	48.36	L								N
	ArchibishopMonguea Chapel	Catholic	675.04	L								N
RH 4	Masjid Al Burhan	Islam	648.77	L								N
	Masjid Purok Dimaseray	Islam	104.9	L								N
	Masjid CCSPC	Islam	201.02	L								N
	Christ the King	Protestant	282.75	L								N
	Bible Babtist Church	Protestant	279.35	L								N
	St.Eugene De Mazenod Chapel	Catholic	304.93	L								N
	Sr. Santo Nino CHAPEL	Catholic	94.18	L								N
	Dr.P Ocampo High School	Catholic	987.02	L								N
RH 5	Masjid Hidaya	Islam										N
	Masjid Andig	Islam	90.57	L								N
	Masjid Khairan	Islam	172.69	L								N
	Masjid 5th Street	Islam	69.89	L								N
	Masjid Bin Usman	Islam	26.83	L								N
	Masjid Al MadinaIslamiya	Islam	313.03	M								N
	Mother Perpetual Church	Catholic	158.5	L								N
	IglesianiKristo	Protestant	1552.23	L								N
RH 6	Masjid AL-Qraifi	Islam	201.21	L								N
	Masjid Al-nur	Islam	93.32	L								N
	Masjid Bahrain	Islam	126.29	L								N
	Masjid Al Huda	Islam	151.01	L								N
	Masjid Hidaya	Islam	382.66	L								N
	Masjid BDA	Islam	827.2	L								N
	Masjid Al-Bumabarak	Islam	132.51	L								N
	Jesus Christ Church	Protestant	742.35	L								N
	Our Lady of Mediatrix Church	Catholic	487.18	L								N
	Immaculate Conception	Catholic	92.49	L								N
RH 7	Masjid Barter	Islam	147.47	L								N
	Masjid Sidik	Islam	376.7	L								N
	Masjid Al-Aqsa	Islam	122.3	L								N
	Masjid Mangulamas	Islam										N
	Masjid AL-Adza	Islam	140.03	M								N

	Masjid Abdulrahman	Islam	151.69	L								N
	Masjid Dawwah	Islam										N
	Masjid Kalilintad	Islam	188.56	M								N
	Masjid Darussalam	Islam	115.31	L								N
	Masjid Al-Mansoor Albuahir	Islam	102.76	L								N
	Church of Christ	Protestant	387.11	L								N
	Sta. Cruz Chapel	Catholic	250.51	L								N
RH 8	Masjid Dimapanat	Islam	215.59	L								N
	Masjid Jaffar BinnMokalid	Islam	26.67	L								N
	Masjid Unged	Islam	156.56	H								N
	Masjid Ohood	Islam	101.68	L					M			N
	Masjid Division	Islam	35.16	L								N
	Masjid Inon	Islam	54.64	L								N
	Saint Joseph The Worker Parish	Catholic	1371.71	L					M			N
RH 9	Masjid Gufran	Islam	56.31	L					M			N
	Masjid Kunesa	Islam	57.76	L					M			N
	Masjid Samama	Islam	21.6	L					M			N
	Masjid Em Manor	Islam	195.47	L					M			N
	Masjid Rahma	Islam	19.66	L					M			N
	Masjid Binembakan	Islam	33.04	L					M			N
	Masjid Al-noor	Islam	656.62	L								N
	Chapel Sto. Nino	Catholic	193.42	L								N
	Church of Christ	Protestant	193.42	L								N
	Church of Refuge New Life	Protestant										N
	San Isidro Church	Catholic	23.62	L								N
RH 10	Masjid Altihadya	Islam										N
	Masjid AsSandre	Islam										N
	Masjid Yusof Kasuyo	Islam							M			N
	Bai Mombu Amp. (Masjid)	Islam										N
	Anchor Bay Evangelista Church	Protestant										N
	Mandanas Elem School	Catholic/Islam/Protestant							M			N
	Bishop Palace	Catholic	913.71	L								N
	OND Mother House	Catholic										N
	New Horizon Southern Baptist Church	Protestant							M			N

	Assemble of God Family Fellowship	Protestant	78.41	L								N
	Masjid CRMC	Islam	103.79	L								N
	United Pentecostal Church	Protestant										N
	Episcopal Church	Protestant	273.94	L								N
	Marian Movement of Priest	Catholic										N
	A4 College of Peace & Wise	Catholic/Islam/Protestant										N
	Good Sheperd	Protestant										N
	Masjid Al Hidaya	Islam	264.57	L								N
	Masjid Midtimbang/Ampatuan	Islam	167.8	L					M			N
	Masjid Al-Sharip	Islam	220.18	L					M			N
	Masjid Rajah Buayan	Islam										N
	Masjid Saqafah	Islam	188.99	L					M			N
	Masjid Canizares	Islam	90.54	L								N
	Masjid Abduljabbar	Islam										N
	Masjid Nur alhuda	Islam	23.58	M					M			N
	Masjid Taubah	Islam	21.94	L					M			N
	Masjid Balabaran	Islam	121.46	H					M			N
	Masjid Al hudaBagundang	Islam	60.65	M					M			N
	Masjid UmmoFalih	Islam	132.18	L					M			N
	Masjid Khadigyah	Islam	52.8	M					M			N
	San Isidro Labrador	Catholic	23.62	L								N
	Sr. Sto. Niño Canizares	Catholic	215.49	L								N
RH 11	Masjid Morsid	Islam	58.29	L					M			N
	Madrasah Morsid	Islam	91.88	L					M			N
	Masjid Al Haqq	Islam	153.02	L					M			N
	Masjid Fatima	Islam	43.57	L					M			N
	Masjid Alison	Islam	220.34	L								N
	Masjid Al Wihdah	Islam	71.37	L					M			N
	Masjid Al Musineen	Islam										
	Masjid KhalizhahraniyTalapas	Islam	114.3	L								
	Chapel San Roque	Catholic	137.25	L								
	Our Lady of Peñafrancia	Catholic	406	L								N
	San Antonio Four Square Gospel	Protestant	70.42	L					M			N
	San Antonio De Padua	Catholic	109.53	M					M			N

	United Penti Costal Church Phil	Protestant	175.6	H					M			N
	San Pablo Sacred Heart	Catholic	599.59						M			
RH 12	Masjid Al-Rahman	Islam	64.28	L					M			N
	Masjid Zamzam	Islam	326.48	L					M			N
	San Antonio Padua 1	Catholic	50.2	M					M			N
	San Antonio Padua 2	Catholic	220.1	L					M			N
RH 13	Masjid Abubakar Kimpo	Islam	120.12	L					M			N
	Masjid Jainab	Islam	110.95	L					M			N
	Masjid Jaime NurolIslami	Islam	407.62	L					M			N
	Kingdom Hall Jehova'sWittnesses	Protestant	212.18	L					M			N
Pob. Mother	Masjid Al-Tujjar	Islam	59.88	L								N
	Masjid A-Lil Amir	Islam	48.1	L								N
	Masjid Nurul Islam	Islam	99.57	M								N
	Masjid Sogiya	Islam	74.86	L								N
	Masjid Solano Buliao 1	Islam	11.37	L								N
	Masjid Pindulonan	Islam	118.61	L								N
	Masjid Ali Macarban	Islam	80.92	M								N
	Masjid Abubakar As Siddiq	Islam	76.72	L								N
	Masjid IB'N Omar	Islam	49.89	L								N
	Masjid Campio	Islam	166.1	M								N
	Masjid Ulandangen 2	Islam	92.63	L								N
	Masjid Haron	Islam										N
	Masjid SiddikhLumayon	Islam	115.34	M								N
	Masjid Lumayon 1	Islam	176.63	M								N
	Masjid Al Motaire	Islam										N
	Masjid Bangsamoro	Islam	53.88	M								N
Pob. 1	Masjid Tawbah	Islam	85	M								N
	Masjid DatuLukes	Islam	480.83	H								N
	San Isidro Labrador Chapel	Catholic	45.41	VH								N
Pob. 2	Masjid Daud	Islam	109.6	L								N
	Masjid Baital	Islam	83.47	M								N
	Masjid Motaire	Islam	316.22	L								N
	Bahay Maria Chapel	Catholic	121.01	L								N
Pob. 3	Masjid Hja. Subia (Doton)	Islam	437.16	M								N

	Masjid Sampulna	Islam	50.6	L								N
	St.Joseph Chapel	Catholic	90.32	M								N
Pob. 4	Masjid Al Salaama	Islam	0.094156	L								N
	Seventh Day Adventist Church	Protestant	318.67	L								N
	Southern Babtist Church	Protestant	696.83	L								N
	Our Lady Fatima Church	Catholic	470.99	L								N
Pob. 5	Queen of Peace	Catholic	1997.46	L					M			N
	Sta. Clara Chapel	Catholic	170.79	L					M			N
	Bell Church	Catholic	341.2	L					M			N
	Masjid Takwa	Islam	143.37	M					M			N
	Masjid Razzak	Islam	150.83	L					M			N
	Senior Santo Niño	Catholic	201.96						M			
Pob. 6	Masjid Al Abasi	Islam	462.34	M					M			N
	Masjid Sulaiman	Islam	47.14	M					M			N
Pob. 7	Masjid Hannan	Islam	166.97	VH					M			N
	Masjid Aisha	Islam	54.94	VH					M			N
	Masjid Salih Ali Azhrani	Islam	50.55	VH					M			N
	Masjid Yusofi	Islam	266.44	VH					M			N
	Masjid Lauban	Islam	97.32	M					M			N
	Masjid Hasanah	Islam	35.63	VH					M			N
	Masjid Sultan	Islam	144.84	VH					M			N
	Masjid Abubakar	Islam	69.55	VH					M			N
	Masjid Al Aman	Islam	73.75	VH					M			N
Pob. 8	MASJID KITFI	Islam										N
	MASJID RAHMAN	Islam										N
	MADRASAH NAJIYAT	Islam										N
	MASJID BAI LAGA AL ISLAMIYAH	Islam										N
	MASJID DATU ALI BASAH	Islam										N
	MASJID DATU SEMA KALANTUNGAN	Islam										N
Pob. 9	MASJID BQI MARIA PINADTAYA	Islam										N
	MASJID RAMPAK	Islam										N
	MASJID SAKARGILING	Islam										N
	MASJID SHUHADA AL ISLAM	Islam										N
	MASJID AL RASHEED (PUROK DALUBAGAN)	Islam										N

	MASJID ADZIS	Islam										N
	MASJID HIDAYA	Islam										N
	MASJID PIQAW DAWAH ISLAMIYA	Islam										N
	MASJID PINGUIMAN ORIGINAL	Islam										N
	MASJID PINGUIAMAN 1	Islam										N
	MASJID MORO ISLAMIYAH	Islam										N
Kal. Mother	Masjid SaripaGuiad	Islam							H			N
	Masjid Muslimin	Islam	145.35	VH					H			N
	Masjid Khalid Binn Waled	Islam	321.12	VH					H			N
	Masjid Datu Ali Ayunan	Islam	223.7	VH					H	H		N
	Masjid Matabalao Maulana	Islam	102.49	VH					H	H		N
	Masjid Bacol Islamiyah	Islam	216.41	H					H	M		N
	Masjid Arap	Islam	126.96	H					H	L		N
	Masjid Nasser Bansalao	Islam	143.93	H					H	H		N
	Masjid Basser (Sangingan)	Islam	70.41	H					H	M		N
	Masjid Dante Pasawilan	Islam	80.5	H					M			N
	Masjid Failol	Islam	182.4	H					M			N
	Sr. Santo Niño Chapel	Catholic	251.33	VH					H	M		N
	Knight Of Columbus	Catholic	484.11	H					H	H		N
Kal. 1	Masjid Kalanganan 1	Islam	221.89	H					M	L		N
Kal. 2	Majisd Baiwalk	Islam	176.15	H					H	H		N
	Masjid 1 (Kal 2)	Islam	106.28	H					H	H		N
	Masjid 2 (Kal 2)	Islam	104.45	H					M	M		N
	Masjid 3 (Kal 2)	Islam	87.51	H					M	L		N
	Masjid 4 (Kal 2)	Islam	52.14	H					M			N
	Masjid 5 (Kal 2)	Islam	102.89	H					M			N
	Masjid Al Abassi	Islam	219.02	H					H	H		N
	Masjid Anawi 14 (White Mosque)	Islam	310.08	H					M			N
	Masjid Ashia	Islam	102.77	H					H	H		N
	Masjid Datu Manguda Ibad	Islam	124.01	H					M			N
	Masjid Guinakit	Islam	106.12	H					H	H		N
	Masjid Ibrahim	Islam	29.92	H					M			N
	Masjid Kuwait	Islam	427.07	H					H	H		N
	Masjid Orphan	Islam	343.81	H					H	H		N

	Masjid Shiek Hassan	Islam	206.75	H					M			N
	Grand Mosque	Islam	14181	H					H	H		N
Tam. Mother	Mosque 1 (Tam MB)	Islam	100.31	H					M			N
	Mosque 2 (Tam MB)	Islam	303.63	H					M			N
	Mosque 3 (Tam MB)	Islam	481.8	H					M			N
Tam. 1	Tamontaka 1 Masjid	Islam	73.99	M					M			N
	Tamontaka 2 Masjid	Islam	130.93	H					M			N
	Masjid Saqafa	Islam	122.45	H					M			N
	Masjid DarolMarhama	Islam										N
	Masjid Aisha Sultan Alkhiyaily	Islam	375.38	H					M			N
Tam. 2	Tamontaka 2 Masjid	Islam	102.4	M								N
	Masjid Ibrahim Nanding	Islam	74.21	M								N
Tam. 3	Masjid Pagalamatan	Islam	639.78	H								N
	Masjid Al Hassan Ala	Islam	150.18	H								N
	Tamontaka 3 Masjid	Islam	104.42	H								N
	Masjid Shiek Muhammad Zayd Al Zayd	Islam	103.75	H								N
Tam. 4	Masjid 1 Tamontaka 4	Islam	139.1	H								N
	Masjid 2 Tamontaka 4	Islam	278.9	M								
	Masjid Al Rahma	Islam	229.07	H								N
	Masjid Najma Alkaire	Islam	215.91	H								N
	Masjid SabahaAwdhasshamrie	Islam	67.75	H								N
	Masjid RasdidAlalAmadi	Islam	87.4	H								N
Tam. 5	Tamontaka 5 Masjid 1	Islam	122.88	H								N
	Tamontaka 5 Masjid 2	Islam	185.84	H								N
	Tamontaka 5 Masjid 3	Islam	130.74	H								N
	Tamontaka 5 Masjid 4	Islam	160.56	H								N
	Tamontaka 5 Masjid 5	Islam	453.92	VH								N
	Tamontaka 5 Masjid 6	Islam	53.71	VH								N
	Tamontaka 5 Masjid 7	Islam	198.18	VH								N
	Tamontaka 5 Masjid 8	Islam	231.37	VH								N

Indicate level of susceptibility for all hazards: High (H), Moderate (M), Low (L)
Notes:

Types of hazards – Flood (Fl), Tropical Cyclone (Tc), Earthquake (Eq), Volcano (Vo), Landslide (Ln), Tsunami (Ts), Storm Surge (Su), Others (e.g. coastal erosion, sea level rise, land Fsubsidence,liquefaction, strong wind, change in temperature, change in rainfall, etc.)

Evacuation center - indicate if used as evacuation center; Yes (Y), No (N)

3.12 Labor Force Population by Sex and Employment Status, Year 2015

Labor Force Population refers to those individuals ages 15 to 65 years old. Cotabato City comprises a total of 185,950 working population or 59.3% share from the entire population. Ninety-three point five percent (93.5%) of the city's Labor Force population are gainfully employed, of which 45.9% are male and 47.6% female, and only 6.5% are unemployed, 8.2% of which were unemployed females. The Regional situation of labor force recorded a total labor force participation rate of 65% or 831,072 belonging to 15 years old and over. And a total of 806,970 are gainfully employed (97.1%) and only 24,102 are unemployed (2.9%).

Table DE-12. Labor Force Population by Sex and Employment Status, Year 2015

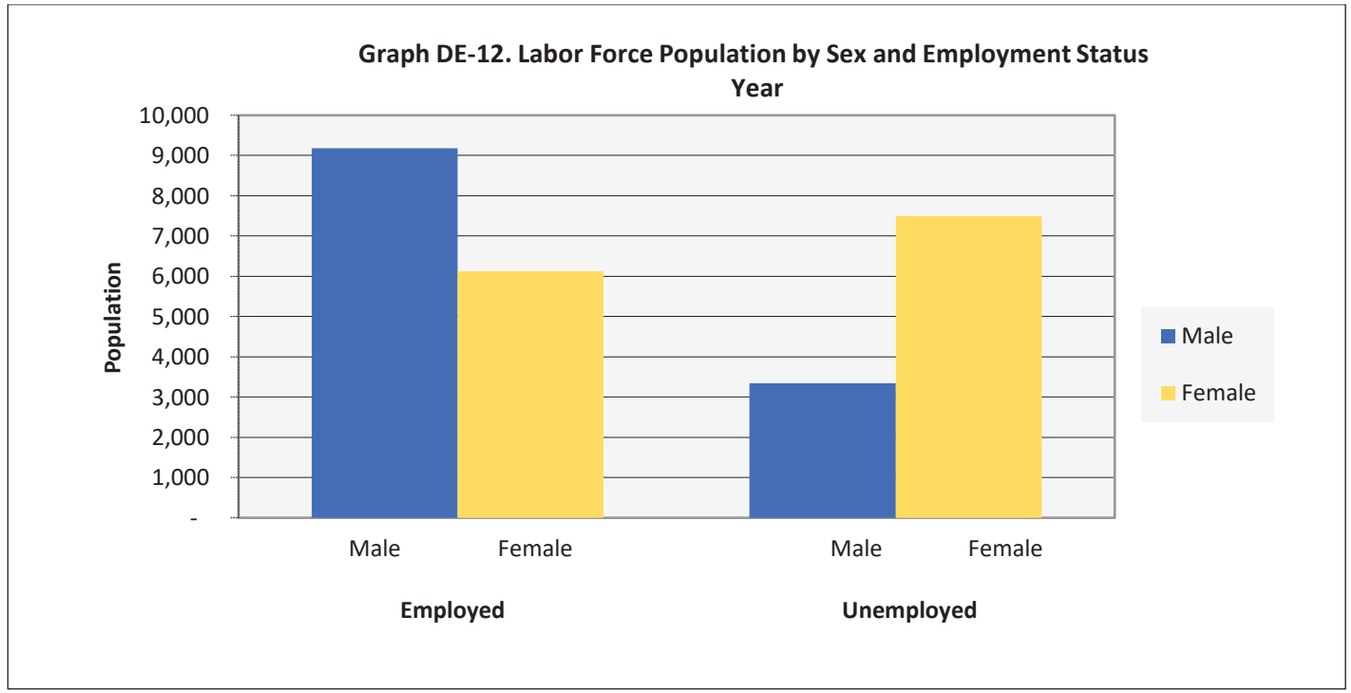
Sex	City					Region XII					
	Population 15 Yrs and Over	Employed	%	Unemployed	%	Population 15 Yrs and Over	Employed	%	Unemployed	%	*Not in Labor Force
Male	89,476	85,315	45.9	4,161	4.7			0.0	-	0.0	
Female	96,474	88,548	47.6	7,926	8.2			0.0	-	0.0	
Both Sexes	185,950	173,863	93.5	12,087	6.5	831,072	806,970	97.1	24,102	2.9	

Notes:

Refer to Table DE-1 to fill up column 2 for the city/municpality. For data on province, use NSO data.

$$\%\ Employed = \frac{Employed\ Population\ X\ 100}{Population\ 15\ Yrs\ and\ Over\ 100}$$

$$\%\ Unemployed = \frac{Unemployed\ Population\ X\ 100}{Population\ 15\ Yrs\ and\ Over}$$



3.13 Household Population 5 Years Old and Over by Highest Educational Attainment, Year 2015

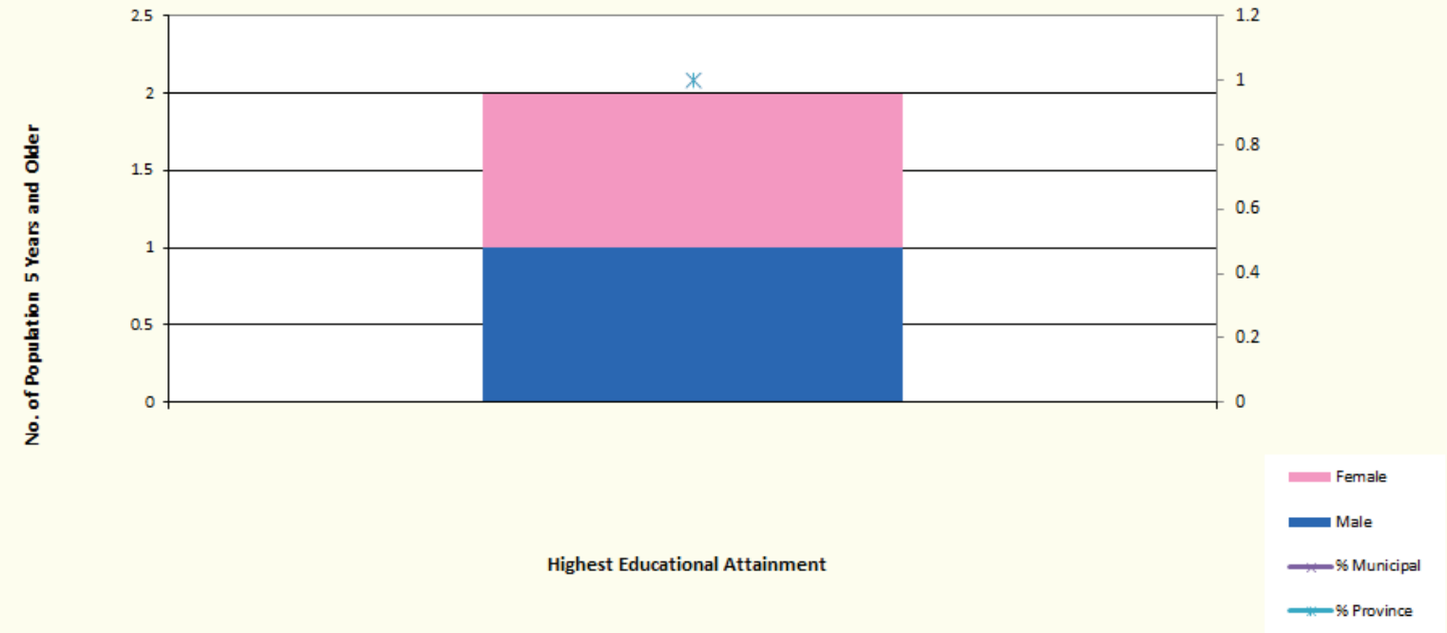
Table DE-14 Shows the household population 5 years old and over by highest educational attainment as of the population census result 2015 for Cotabato City and Region XII. The city is composed of 3% population with a pre-school educational attainment, that goes the same with the region. Thirty-seven percent (37%) acquired elementary level, while the region is slightly higher at 41%; 33% of the population attained Secondary Level and the region at 36%; 3% of the city constituents have Tech-Voc courses while the region slide down at 2%; 23% achieve College Level and/or graduated with degree courses while the region only at 17% College Level or professionals; and less than 1% having post baccalaureate degree, also same goes with the region. Male dominate in terms of numbers from the preschool to elementary level but shift to female at Secondary, Vocational and College Level. Male slightly dominates in Post Baccalaureate degree.

Table DE-14. Household Population 5 Years Old and Over by Highest Educational Attainment, Year 2015

Highest Educational Attainment	City						Regional	
	Male		Female		Both Sexes		Both Sexes	
	No.	%	No.	%	No.	%	No.	%
Pre-School	4,165	4	3,857	3	8,022	3	125,443	3
Elementary	**45,180**	**38**	**44,306**	**36**	**89,486**	**37**	**1,530,691**	**41**
Primary (Grade 1-3)	25,109	21	24,114	19	49,223	20	832,668	22
Intermediate (Grade 4-6)	11,142	9	11,051	9	22,193	9	290,032	8
Graduate	8,929	8	9,141	7	18,070	7	407,991	11
Secondary	**39,139**	**33**	**42,027**	**34**	**81,166**	**33**	**1,369,431**	**36**
Undergraduate	18,141	15	19,676	16	37,817	16	618,665	16
Graduate	20,998	18	22,351	18	43,349	18	750,766	20
Technical/Vocational Course	**3,418**	**3**	**3,528**	**3**	**6,946**	**3**	**78,517**	**2**
Voc-Undergraduate	28	0.02	45	0	73	0	3,174	0.1
Voc-Graduate	3,390	3	3,483	3	6,873	3	75,343	2
College	**26,719**	**22**	**30,335**	**24**	**57,054**	**23**	**652,251**	**17**
College Undergraduate	17,298	15	19,140	15	36,438	15	348,463	9
Academic Degree Holder	9,421	8	11,195	9	20,616	8	303,788	8
Post Baccalaureate	250	0.21	243	0.20	493	0.20	5,158	0.14
TOTAL	**118,871**		**124,296**		**243,167**		**3,761,491**	

Note: % = (Total No./No. per level) x 100

Graph DE-14. Population 5 Years Old and Over by Highest Educational Attainment
Year



Source:

3.14 Population Projection

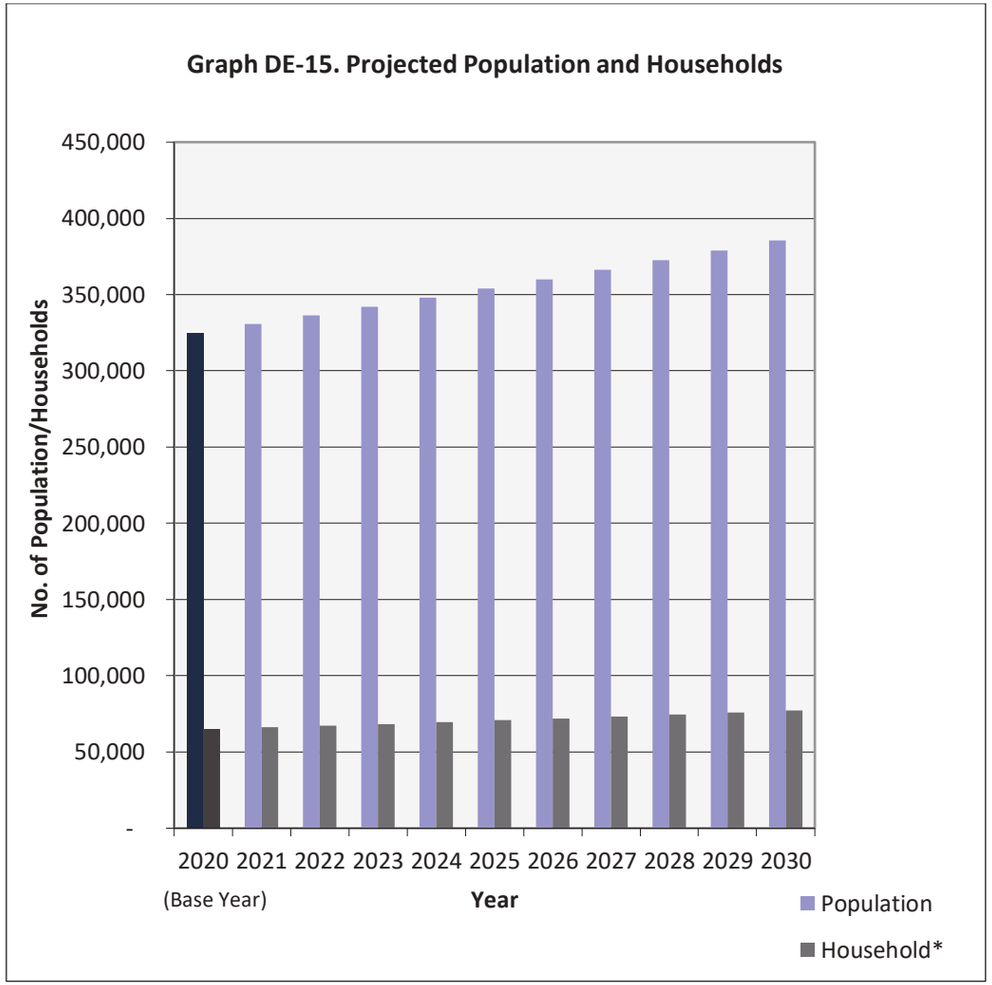
The City's actual count during the Population Census in 2020 is 325,079 with an average Growth Rate of 1.72% and the city Average Household size at 4.9 or more or less 5 persons for every household. The city's projected population and household population using the above growth rate will reach approximately a total count of 354,014 by 2025 with 70,803 households, making an average additional count of more or less 5,787 persons per annum. By 2030, we are expecting to reach 385,525 individuals in the city or about 77,105 households.

a. Projected Population and Households

Table DE- 15. Projected Population and Households
Annual Population Growth Rate:1.86%
Average HH size: 4.90

Year	Population	Household*
2020	325,079	65,016
2021	330,670	66,134
2022	336,358	67,272
2023	342,143	68,429
2024	348,028	69,606
2025	354,014	70,803
2026	360,103	72,021
2027	366,297	73,259
2028	372,597	74,519
2029	379,006	75,801
2030	385,525	77,105

Source: NSO/PSA
Note:
Use latest annual population growth rate derived from Table DE-6
**Using the average household size derived from Table DE- 3*


Graph DE-15. Projected Population and Households
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
-
No. of Population/Households
2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030
(Base Year)
Year
Population
Household*

b. Population Projection by Barangay, Year 2020-2030

Table DE-16 shows the City Population Projection by barangay using 2015 as the base year to 2030, computing an annual average Population Growth Rate of 1.86% and applying participation rate by barangay and classified according to urban and rural barangays. The city identified 34 Urban Barangays in 2015 with a total population of 291,790 urban settlers or a 97.47% urban tempo and only 7,648 Rural settlers of 2.55%. Barangay Poblacion Mother being the most populated barangay has a participation rate of 6.92% from the total population. In 2020, the city has approximately 22,735 citizens, by 2025 it will reach 24,930, and in 2030 is expected to reach 27,336.

Barangay Bagua 2 ranks second (2nd) as Most populated barangay having a 6.59% share from the total population. In 2020, they are about 21,623 residents. By 2025, they will have 23,711 residents and is expected to reach 25,999 by 2030. Barangay Tamontaka 5 is the least populated barangay, classified as rural barangay with only 0.39% share from the total population. In 2020, it has a population of only 1,291 people. By 2025, it will reach about 1,415 individuals, and is expected to reach 1,552 by 2030.

Table DE-16. Projected Population by Barangay, Year 2020-2030

BARANGAY	2015	Participation Rate (PR)	Population										
			2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
TOTAL	**299,438**	**1**	**328,341**	**334,448**	**340,669**	**347,005**	**353,460**	**360,034**	**366,731**	**373,552**	**380,500**	**387,577**	**394,786**
Urban													
Bagua	18,137	0.0606	19,888	20,258	20,634	21,018	21,409	21,807	22,213	22,626	23,047	23,476	23,912
Kalanganan	15,019	0.0502	16,469	16,775	17,087	17,405	17,729	18,058	18,394	18,736	19,085	19,440	19,801
Poblacion	20,734	0.0692	22,735	23,158	23,589	24,028	24,475	24,930	25,394	25,866	26,347	26,837	27,336
Rosary Heights	13,943	0.0466	15,289	15,573	15,863	16,158	16,458	16,765	17,076	17,394	17,718	18,047	18,383
Tamontaka	12,027	0.0402	13,188	13,433	13,683	13,938	14,197	14,461	14,730	15,004	15,283	15,567	15,857
Bagua I	9,206	0.0307	10,095	10,282	10,474	10,668	10,867	11,069	11,275	11,485	11,698	11,916	12,137
Bagua II	19,720	0.0659	21,623	22,026	22,435	22,853	23,278	23,711	24,152	24,601	25,058	25,525	25,999
Bagua III	6,847	0.0229	7,508	7,648	7,790	7,935	8,082	8,233	8,386	8,542	8,701	8,862	9,027

Kalanganan I	5,808	0.0194	6,369	6,487	6,608	6,731	6,856	6,983	7,113	7,246	7,380	7,518	7,657
Kalanganan II	5,999	0.0200	6,578	6,700	6,825	6,952	7,081	7,213	7,347	7,484	7,623	7,765	7,909
Poblacion I	5,677	0.0190	6,225	6,341	6,459	6,579	6,701	6,826	6,953	7,082	7,214	7,348	7,485
Poblacion II	6,302	0.0210	6,910	7,039	7,170	7,303	7,439	7,577	7,718	7,862	8,008	8,157	8,309
Poblacion III	2,985	0.0100	3,273	3,334	3,396	3,459	3,524	3,589	3,656	3,724	3,793	3,864	3,935
Poblacion IV	6,456	0.0216	7,079	7,211	7,345	7,482	7,621	7,762	7,907	8,054	8,204	8,356	8,512
Poblacion V	3,070	0.0103	3,366	3,429	3,493	3,558	3,624	3,691	3,760	3,830	3,901	3,974	4,048
Poblacion VI	5,151	0.0172	5,648	5,753	5,860	5,969	6,080	6,193	6,309	6,426	6,545	6,667	6,791
Poblacion VII	15,712	0.0525	17,229	17,549	17,875	18,208	18,547	18,892	19,243	19,601	19,965	20,337	20,715
Poblacion VIII	8,786	0.0293	9,634	9,813	9,996	10,182	10,371	10,564	10,760	10,961	11,164	11,372	11,584
Poblacion IX	5,998	0.0200	6,577	6,699	6,824	6,951	7,080	7,212	7,346	7,483	7,622	7,764	7,908
Rosary Heights I	3,931	0.0131	4,310	4,391	4,472	4,555	4,640	4,727	4,814	4,904	4,995	5,088	5,183
Rosary Heights II	5,006	0.0167	5,489	5,591	5,695	5,801	5,909	6,019	6,131	6,245	6,361	6,480	6,600
Rosary Heights III	10,786	0.0360	11,827	12,047	12,271	12,499	12,732	12,969	13,210	13,456	13,706	13,961	14,221
Rosary Heights IV	4,377	0.0146	4,799	4,889	4,980	5,072	5,167	5,263	5,361	5,460	5,562	5,665	5,771
Rosary Heights V	5,870	0.0196	6,437	6,556	6,678	6,802	6,929	7,058	7,189	7,323	7,459	7,598	7,739
Rosary Heights VI	6,846	0.0229	7,507	7,646	7,789	7,934	8,081	8,231	8,385	8,540	8,699	8,861	9,026
Rosary Heights VII	9,257	0.0309	10,151	10,339	10,532	10,728	10,927	11,130	11,337	11,548	11,763	11,982	12,205
Rosary Heights VIII	8,524	0.0285	9,347	9,521	9,698	9,878	10,062	10,249	10,440	10,634	10,832	11,033	11,238
Rosary Heights		0.0261											

IX	7,802		8,555	8,714	8,876	9,041	9,210	9,381	9,555	9,733	9,914	10,099	10,286
Rosary Heights X	15,732	0.0525	17,251	17,571	17,898	18,231	18,570	18,916	19,267	19,626	19,991	20,363	20,741
Rosary Heights XI	7,864	0.0263	8,623	8,783	8,947	9,113	9,283	9,455	9,631	9,810	9,993	10,179	10,368
Rosary Heights XII	4,664	0.0156	5,114	5,209	5,306	5,405	5,505	5,608	5,712	5,818	5,927	6,037	6,149
Rosary Heights XIII	4,947	0.0165	5,425	5,525	5,628	5,733	5,839	5,948	6,059	6,171	6,286	6,403	6,522
Tamontaka I	4,423	0.0148	4,850	4,940	5,032	5,126	5,221	5,318	5,417	5,518	5,620	5,725	5,831
Tamontaka II	4,184	0.0140	4,588	4,673	4,760	4,849	4,939	5,031	5,124	5,220	5,317	5,416	5,516
Sub-Total	**291,790**	**0.9745**	**319,955**	**325,906**	**331,968**	**338,143**	**344,432**	**350,838**	**357,364**	**364,011**	**370,782**	**377,678**	**384,703**
Rural													
Tamontaka III	2,730	0.0091	2,994	3,049	3,106	3,164	3,223	3,282	3,344	3,406	3,469	3,534	3,599
Tamontaka IV	3,741	0.0125	4,102	4,178	4,256	4,335	4,416	4,498	4,582	4,667	4,754	4,842	4,932
Tamontaka V	1,177	0.0039	1,291	1,315	1,339	1,364	1,389	1,415	1,442	1,468	1,496	1,523	1,552
Sub-Total	**7,648**	**0.0255**	**8,386**	**8,542**	**8,701**	**8,863**	**9,028**	**9,196**	**9,367**	**9,541**	**9,718**	**9,899**	**10,083**

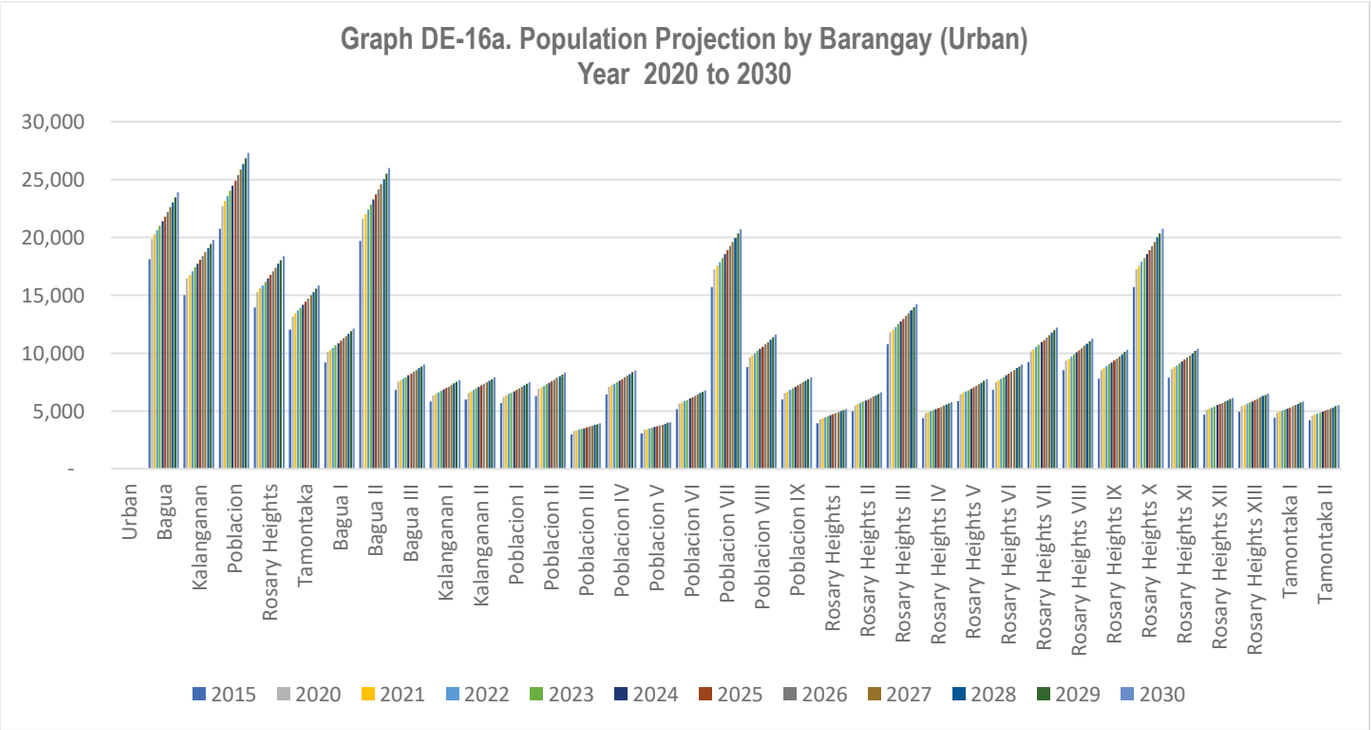
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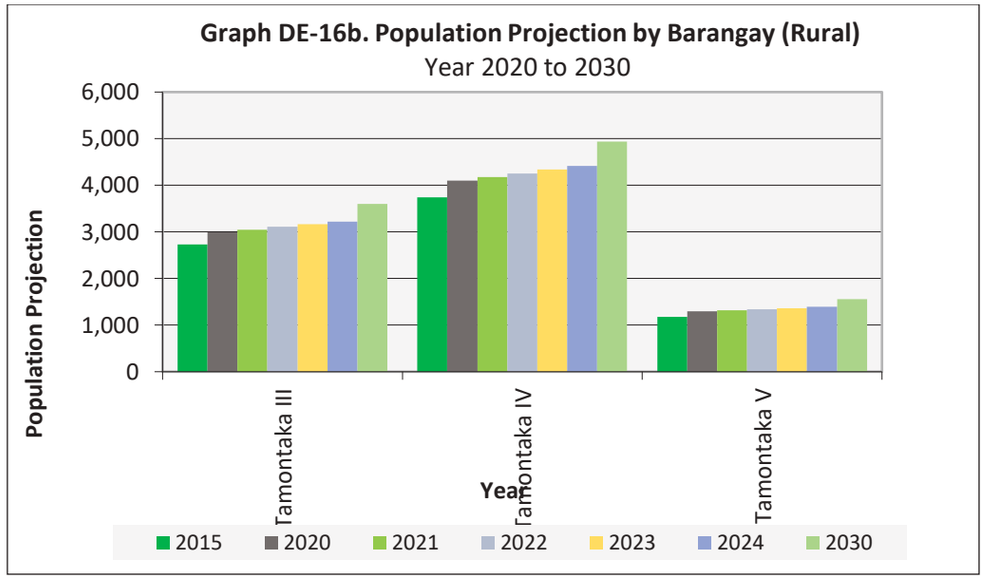
** Use latest census data*

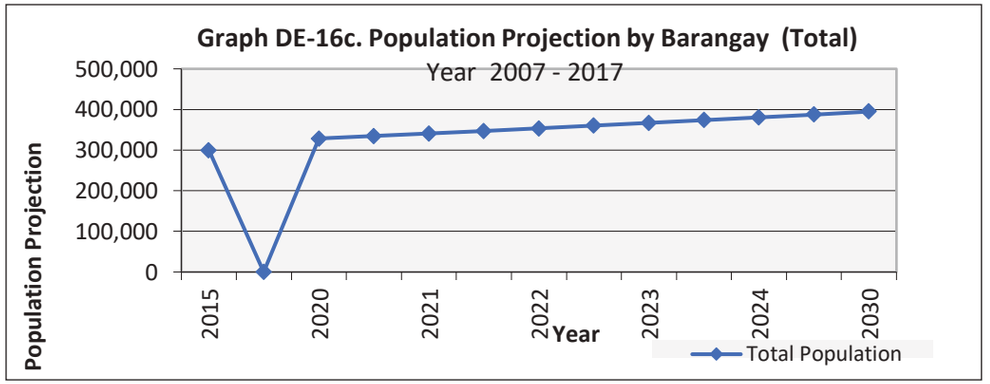
PR = Brgy. Pop'n / Pop'n of city

Pop'n projection per Brgy. = PR of Brgy. X ProjectedPop'n of city

See Table DE-15 for projected population of city


Graph DE-16a. Population Projection by Barangay (Urban)
Year 2020 to 2030
30,000
25,000
20,000
15,000
10,000
5,000
-
Urban
Bagua
Kalanganan
Poblacion
Rosary Heights
Tamontaka
Bagua I
Bagua II
Bagua III
Kalanganan I
Kalanganan II
Poblacion I
Poblacion II
Poblacion III
Poblacion IV
Poblacion V
Poblacion VI
Poblacion VII
Poblacion VIII
Poblacion IX
Rosary Heights I
Rosary Heights II
Rosary Heights III
Rosary Heights IV
Rosary Heights V
Rosary Heights VI
Rosary Heights VII
Rosary Heights VIII
Rosary Heights IX
Rosary Heights X
Rosary Heights XI
Rosary Heights XII
Rosary Heights XIII
Tamontaka I
Tamontaka II
2015
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030





c. Projected School-Going Age Population, Labor Force and Dependent Population

Table DE-17 Shows the City Projected Population Distribution by School-Age Population, Labor Force and Dependent Population. Using the 2015 population as the base year and population growth of 1.86% and applying participation rate by age group for planning purposes, the city recorded a total of 137,210 School Going population in 2015, comprising the ages from 3 to 22 years old. They share 0.46% of the entire population. By 2021, the city will have a total projected count of 150,454 students, adding by an average of more or less 2,207 pupils annually. By 2025, they will reach to 164,977 learners, and is expected to increase to 180,901 pupils by 2030.

Labor Force Population or the Working population are composed of 15 to 65 years old. They are the people who provide to the dependent population for their subsistence. In 2015 they comprise a total of 185,950 individuals or 62% of the entire population. By 2021, there will be 207,691 workers in the city growing by more of less 3,624 persons per year. The labor force will register a total of 223,580 by 2025, and is expected to increase to 245,161 by 2030.

Dependent population are those belonging to ages 0-14 years old or otherwise known as young dependents. The second (2nd) set are those belonging to 65 years old and over or known as the old dependents. They comprise 38% of the population, 35% of which are the young dependents and only 3% elderlies. The Young dependents will register a count of 115,933 youngsters by 2021 while the Senior Citizens at only 9,467. By 2025, the city will have 124,802 young dependents and 10,191 elderly dependents. By 2030, there will be 136,848 young dependents and 11,175 elderly dependents.

Table DE-17. Projected School-Age Population, Labor Force, and Dependent Population

Grouping	Base year	Participation Rate		Projected Population									
			2021	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Population	299,438		328,341	334,448	340,669	347,005	353,460	360,034	366,731	373,552	380,500	387,577	394,786
School going population	137,210	0.46	150,454	153,253	156,103	159,007	161,964	164,977	168,045	171,171	174,355	177,598	180,901
Pre-school	28,928	0.10	31,720	32,310	32,911	33,523	34,147	34,782	35,429	36,088	36,759	37,443	38,139
Elementary	42,280	0.14	46,361	47,223	48,102	48,996	49,908	50,836	51,782	52,745	53,726	54,725	55,743
Secondary	41,547	0.14	45,557	46,405	47,268	48,147	49,043	49,955	50,884	51,830	52,794	53,776	54,777
Tertiary	24,455	0.08	26,816	27,314	27,822	28,340	28,867	29,404	29,951	30,508	31,075	31,653	32,242
Labor Force	185,950	0.62	203,899	207,691	211,554	215,489	219,497	223,580	227,739	231,974	236,289	240,684	245,161
Dependent	112,273	0.37	123,110	125,400	127,732	130,108	132,528	134,993	137,504	140,062	142,667	145,320	148,023
Young (0-14)	103,797	0.35	113,816	115,933	118,089	120,286	122,523	124,802	127,123	129,488	131,896	134,350	136,848
Old (65 and over)	8,476	0.03	9,294	9,467	9,643	9,822	10,005	10,191	10,381	10,574	10,771	10,971	11,175

Source: Computed based on NSO/PSA Data

Notes: PR = Population of grouping / Total population Projection per year = PR x projected total population

d. Doubling time of growth rate of population

The highest population growth rate was recorded in Population Census 1948. This was the time after the war that the Republic intends to rise up from its devastation. The sudden lift in population was attributed to the economic program of President Manuel Roxas, who push the economic development towards Mindanao which was known and bearing a popular slogan of "Mindanao as the Land of Promise".

The increase in population between the period 1970-1975 was attributed to the Peace and Order issues. The city was surrounded with towns and municipalities affected by armed conflict and became host to fleeing evacuees for safety, medical services, temporary shelter and food supply.

During this period the city is a booming city, it offers trading services because of the presence of small shipping line from and going to Zamboanga, Pagadian, Ilo-ilo and other parts of the country, which popularized the barter trade. The port and airport activity pushed to the stability of commercial businesses. The city is also known for offering quality education because of the establishment of Private Educational Institution such as the Notre Dame Schools and Cotabato Chinese Institute (CCI). It has also good source of power/energy and potable water supply. The health institution is also located in the city both public (Cotabato Hospital at the foot of PC Hill) and private (Notre Dame Hospital).

Table DE. 18. Population Growth and Growth Rate, Cotabato City, 1903-2015

Censal Year	Population	Additional Population	Growth Rate (%)	RANK
March 02, 1903	1,103			
December 31, 1918	5,870	4,767	1.23	least
January 01, 1939	10,166	4,296	6.36	
October 01, 1948	20,407	10,241	8.05	highest
February 16, 1960	37,499	17,092	5.2	
May 06, 1970	61,184	23,685	5.02	
May 01, 1975	67,097	5,913	1.86	
May 01, 1980	83,871	16,774	4.56	
May 01, 1990	127,065	43,194	4.24	
September 01, 1995	146,779	19,714	2.74	
May 01, 2000	163,849	17,070	2.39	
Aug. 1, 2007	259,153	95,304	6.53	2nd highest
Aug. 1, 2010	271,786	12,633	1.8	
Aug. 1, 2015	299,438	27,652	1.86	

Source: PSA

During the 1980 to 1990, though the city is surrounded with towns and municipality with peace and order issues, it remains the center of trading and commerce in the region. The presence of financial institution, as hub for education, hospital and medical services, home of the Regional seat of Government and ARMM, and center of Media, and reliable source of energy and water were among the strength of the city.

From 1990 to 1998, this was during the administration of then Pres. Cory Aquino. The administration of Mayor Badoy responded to the economic reform of the said administration by introducing transparent government and infrastructure development, like opening and concreting of roads, introducing the socialized housing program and delivery of basic social services that resulted to the vibrant economy of the city.

In 2000 to 2006, selective declaration of Martial Law was declared in Mindanao due to the Maguindanao Massacre in Nov. 23, 2009, peace and order issues escalated in the area. The city being the seat of ARMM, hosted temporary residents in the city and latter resettled. The incoming residents from various towns with various culture and beliefs, carrying issues of poverty and survival, somehow contribute to the rising crime incident in the city. Hence, many of the locals experienced and/or victims of crime. These incidents created a chilling effect to city residents and many of the old-time residents and the Filipino Chinese opted to move to other towns.

The sudden increase in population in 2007 was attributed to the land dispute and geographical claim somewhere in Pikit Municipality and its neighboring towns plus the taking over of Camp Abbubakar during the administration of Pres. Estrada created mass evacuation to the city coming from affected areas.

The declaration of PD 304 in March 30, 2004 or known as the transfer of Regional Seat from Cotabato City to Koronadal City, has become mandatory. Affected families has slowly moved to the new regional seat for economic and security reasons.

In 2010 the population growth stabilized due to improving peace and order situation marking only the population growth at 1.80%, a wait and see period, and slightly increases in 2015 at 1.86% that slowly creating a good economic climate due to stable peace and order.

The table below shows the projected growth of the city from 2016-2053 at an average Population Growth Rate of 1.86%, hence, the city is growing by an average of 5,665 or more people per year. The city projected population by 2020 is at 328,342 and will reach about 394,787 people by 2030. Applying the average Population Growth Rate (PGR) of 1.86% annually, the city population is projected to will double its size by year 2052, or within 37.26 years with an estimated population count of 592,165, a little faster compared to 2010 PGR at 1.80% which will double in 38.5 years.

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Table DE 19. Population Projection by Year, 2015-2053

YEAR	ESTIMATED POPULATION	YEAR	ESTIMATED POPULATION
2015	299,438		
2016	305,008	**2035**	432,893
2017	310,681	**2036**	440,944
2018	316,460	**2037**	449,146
2019	322,346	**2038**	457,500
2020	328,342	**2039**	466,010
2021	334,449	**2040**	474,677
2022	340,670	**2041**	483,506
2023	347,006	**2042**	492,500
2024	353,461	**2043**	501,660
2025	360,035	**2044**	510,991
2026	366,731	**2045**	520,495
2027	373,552	**2046**	530,177
2028	380,500	**2047**	540,038
2029	387,577	**2048**	550,083
2030	394,787	**2049**	560,314
2031	402,129	**2050**	570,736
2032	409,609	**2051**	581,352
2033	417,227	**2052**	592,165
2034	424,988	**2053**	603,179

Source: City Planning and Development Office

e. Fertility Rates in Cotabato City in comparision with the Region

Cotabato City shows the lowest fertility rate among its neighboring province and follow a decreasing trend from 2.9% in year 2000-2005; slightly down at 2.7% in 2005-2010; decreasing again to 2.52% in year 2010-2015 and probably at 2.34% by year 2015-2020. This must be attributed to the massive awareness on reproductive health of the city and to the new normal lifestyle of modern women that are now more conscious of their career and economic and family security. The highest fertility rate was from Sarangani Province, followed by Sultan Kudarat and the lowest was registered to Cotabato City and next lowest is South Cotabato Province. The table is sourced from the 2015 Regional Social and Economic Trends issued by the Philippine Statistics Authority (PSA) Regional Office XII, which shows regional and provincial projection on Fertility Rates from 2000 to 2020 at a medium assumption.

DE-20 Projected Total Fertility Rates by Province/City 2000-2020
(Medium Assumption)

Province/City	2000-2005	2005-2010	2010-2015	2015-2020
Region XII	4.04	3.77	3.51	3.27
Cotabato	4.16	3.87	3.61	3.36
South Cotabato	3.74	3.49	3.25	3.03
Sarangani	4.59	4.28	3.98	3.71
Sultan Kudarat	4.21	3.92	3.65	3.4
Cotabato City	2.9	2.7	2.52	2.34

f. Life Expectancy in Cotabato City

Table DE-21 shows the Cotabato City life expectancy at birth by sex. Registering an expectancy for the male for year 2000-2005 at age 64.23 and showing an improving life expectancy for the preceding year at age 66.23 during the period 2005-2010, moving at the age 67.73 for the period 2010-2015 and projected to reach the age of 68.93 by year 2015-2020. The female shows a higher life expectancy than male. They achieve the age of 68.70 during the period 2000-2005, and continue to improve in 2005-2010 at age 70.70, reaching the age of 72.20 for the period 2010-2015, and projected to reach the age of 73.7 by 2015-2020.

Table DE-21. Projected Life Expectancy at Birth by Sex, Cotabato City, 2000-2020

Sex	2000-2005	2005-2010	2010-2015	2015-2020
Male	64.23	66.23	67.73	68.93
Female	68.7	70.7	72.2	73.7

4. ECONOMIC SECTOR

4.1 Agriculture (Crops, Livestock, Fishery, Agrarian Reform)

a. Existing Situation

Cotabato City has a total of sixteen (16) agricultural barangays out of thirty-seven (37) barangays in the City. It has a vast agricultural area based on the actual figure from the City Agriculture Division of the Office of the City Mayor of more or less 8,620.62 hectares representing 48.98% of the total land area of the city of 17,599 hectares. Only 2,075.00 hectares were maximized for agricultural crops for the year 2018. While 1,266.24 hectares were maximized for agricultural crops for the year 2019.

1. **Existing Major Agricultural Crops by Area, Production and Market, 2018 & 2019**

As shown in the table below major crops are rice, corn, banana and coconut. Rice is planted in the sixteen (16) agricultural barangays of the city. Corn is cultivated in the Tamontaka areas, Banana and Coconut are found in Kalanganan, Tamontaka and Poblacion rural barangays. Farminers used the traditional way of farming.

The sixteen (16) classified agricultural barangays in Cotabato City provide 8,620.62 has. of total agricultural land in 2020 which is lesser than that of year 2018 at 9,495.27 hectares. Based on 2018 data, primary crops planted in Cotabato City were rice, coconut, corn and banana which accounts land utilization of 15.17%, 5.03%, 3.82% and 0.16% respectively. Specifically, total land utilization for rice was 1,310 ha, for coconut was 478 has., corn with 280 has., and banana had the least with 7 hectares land utilization. As a whole, 2,075 hectares of agricultural land was utilized for rice, coconut, corn and banana for 2018. This was 24.70% of total agricultural land This reduced to 1,266.24 hectares in 2019 which is 15.18% of agricultural land.

Furthermore, among the 16 agricultural barangays, Brgy. Tamontaka 5 possessed the largest agricultural land area which had 2580 hectares or 47% of its total land area. However, Poblacion 9 had the highest agricultural land utilization which had 216 hectares or 22.36% of its total agricultural land *compared* to 66 hectares (2.56%) agricultural land utilization of Brgy. Tamontaka 5. This is however, attributed to the geographical condition of Tamontaka 5 where other farming practices are more appropriate. Meanwhile, Brgy. RH 5 had the least agricultural land having 12.52 hectares in which 12 hectares was used for rice in 2018.

Table EC2-Existing Major Agricultural Crops by Area, Production and Market, 2018 & 2019

Major Crop	Location (Barangay)	Total Land Area	Total Agri Land	Area 2018	Area 2019	Annual Production 2018	Annual Production 2019	Product Market	No. of Farmer	No. of Tenants	Type of Farming Technology	Existing Agricultural Support Facilities	Hazard Susceptability (H/M/L)

												s												
				ha	% Utilization	ha	% Utilization	Volume (50kls/bag)	Value (Php)	Volume (50kls/bag)	Value (Php)					Pre - Harvest	Post Harvest	Fl	Tc	Dr	Eq	Ln	Ts	Su	Others
RICE	BAGUA 1	185.59	94.96	8	8.42	6.25	6.58	509.6	433,160.00	398.13	338,406.25	Local	5	1	Traditional			L							
	BAGUA 2	176.24	93.046	32	34.39	27.15	29.18	2,038.40	1,732,640.00	1,729.46	1,470,036.75	Local	21	4	Traditional			L							
	KALANGANAN MB	2,206.50	955.51	46	4.81		0	2,930.20	2,490,670.00	-	-	Local	31	6	Traditional					L			H		Sea Level Rise
	KALANGANAN 1	1,158.50	628.94	34	5.41		0	2,165.80	1,840,930.00	-	-	Local	23	5	Traditional					L			H		
	KALANGANAN 2	2,107.40	1202.8	140	11.64		0	8,918.00	7,580,300.00	-	-	Local	93	19	Traditional					L			H		
	POBLACION 1	68.119	36.947	20	54.13		0	1,274.00	1,082,900.00	-	-	Local	13	3	Traditional			H							
	POBLACION 8	166.8	128.16	135.5	105.73	79.46	62	8,631.35	7,336,647.50	5,061.55	4,302,318.38	Local	90	18	Traditional			H		H					
	POBLACION 9	1,594.10	968.15	216.5	22.36		0	13,791.05	11,722,392.50	-	-	Local	144	29	Traditional			H		H					
	RH 5	59.84	12.517	12	95.87	10.12	80.85	764.4	649,740.00	644.64	547,947.40	Local	8	2	Traditional										
	RH 9	85.02	18.246	15	82.21	42.51	232.98	955.5	812,175.00	2,707.89	2,301,703.95	Local	10	2	Traditional										
	TAMONTAKA MB	315.04	207.17	110	53.1	110	53.1	7,007.00	5,955,950.00	7,007.00	5,955,950.00	Local	73	15	Traditional			H		L					
	TAMONTAKA 1	280.92	180.78	123	68.04		0	7,835.10	6,659,835.00	-	-	Local	82	16	Traditional			H		L					
	TAMONTAKA 2	461.88	326.01	102	31.29	90	27.61	6,497.40	5,522,790.00	5,733.00	4,873,050.00	Local	68	14	Traditional			H		L					
	TAMONTAKA 3	525.51	262.85	139	52.88	123	46.79	8,854.30	7,526,155.00	7,835.10	6,659,835.00	Local	93	19	Traditional			H		L					
	TAMONTAKA 4	1,880.40	941.71	111	11.79	111	11.79	7,070.70	6,010,095.00	7,070.70	6,010,095.00	Local	74	15	Traditional			H		L					
	TAMONTAKA 5	5,494.80	2580	66	2.56	66	2.56	4,204.20	3,573,570.00	4,204.20	3,573,570.00	Local	44	9	Traditional			H		L					
Total			**8,637.80**	**1,310.00**	**15.17**	**665.49**	**7.7**	**83,447.00**	**70,929,950.00**	**42,391.66**	**36,032,912.73**														
CORN	KALANGANAN MB	2,206.50	955.51	5	0.52	5	0.52	533.33	453,333.33	533.33	453,333.33	Local	3	1	Traditional					L			H		
	KALANGANAN 1	1,158.50	628.94	86	13.67	73	11.61	9,173.33	7,797,333.33	7,786.67	6,618,666.67	Local	57	11	Traditional					L			H		
	KALANGANAN 2	2,107.40	1202.8	15	1.25	15	1.25	1,600.00	1,360,000.00	1,600.00	1,360,000.00	Local	10	2	Traditional					L			H		
	POBLACION 1	68.119	36.947	6	16.24	6	16.24	640	544,000.00	640	544,000.00	Local	4	1	Traditional			H		L					
	TAMONTAKA MB	315.04	207.17	2	0.97	2	0.97	213.33	181,333.33	213.33	181,333.33	Local	1	0	Traditional			H		L					
	TAMONTAKA 1	280.92	180.78	5	2.77	5	2.77	533.33	453,333.33	533.33	453,333.33	Local	3	1	Traditional			H		L					
	TAMONTAKA 2	461.88	326.01	5	1.53	5	1.53	533.33	453,333.33	533.33	453,333.33	Local	3	1	Traditional			H		L					
	TAMONTAKA 3	525.51	262.85	50	19.02	40	15.22	5,333.33	4,533,333.33	4,266.67	3,626,666.67	Local	33	7	Traditional			H		L					
	TAMONTAKA 4	1,880.40	941.71	40	4.25	22	2.34	4,266.67	3,626,666.67	2,346.67	1,994,666.67	Local	27	5	Traditional			H		L					
	TAMONTAKA 5	5,494.80	2580	66	2.56	31	1.2	7,040.00	5,984,000.00	3,306.67	2,810,666.67	Local	44	9	Traditional			H		L					

Total			**7,322.72**	**280**	**3.82**	**204**	**2.79**	**29,866.67**	**25,386,666.67**	**21,760.00**	**18,496,000.00**														

Banana	KALANGANAN MB	2,206.50	955.51	2	0.21	2	0.21	22,317.72	18,970,057.87	22,317.72	18,970,057.87	Local	1	0	Traditional					L			H		
	KALANGANAN 1	1,158.50	628.94	3	0.48	3	0.48	50,858.91	43,230,069.64	50,858.91	43,230,069.64	Local	1	0	Traditional					L			H		
	TAMONTAKA 1	280.92	180.78	1	0.55	1	0.55	58,979.98	50,132,979.31	58,979.98	50,132,979.31	Local	1	0	Traditional			H		L					
	TAMONTAKA 5	5,494.80	2580	1	0.04	1	0.04	4,132.71	3,512,806.20	4,132.71	3,512,806.20	Local	1	0	Traditional			H		L					
Total			**4345.23**	**7**	**0.16**	**7**	**0.16**	**136,289.31**	**115,845,913.03**	**136,289.31**	**115,845,913.03**														
Coconut	BAGUA 1	185.59	94.96	5	5.27	3.75	3.95	9,000	117,000.00	6,750	87,750.00	Local	3	1	Traditional			L							
	BAGUA 2	176.24	93.046	3	3.22	3	3.22	5,400	70,200.00	5,400	70,200.00	Local	2	0	Traditional			L							
	KALANGANAN MB	2,206.50	955.51	3	0.31		0	5,400	70,200.00	-	-	Local	2	0	Traditional					L					
	KALANGANAN 1	1,158.50	628.94	60	9.54		0	108,000	1,404,000.00	-	-	Local	40	8	Traditional					L					
	KALANGANAN 2	2,107.40	1202.8	15	1.25		0	27,000	351,000.00	-	-	Local	10	2	Traditional					L					
	POBLACION 1	68.119	36.947	2	5.41		0	3,600	46,800.00	-	-	Local	1	0	Traditional			H							
	POBLACION 8	166.8	128.16	70	54.62	74	57.74	126,000	1,638,000.00	133,200	1,731,600.00	Local	47	9	Traditional			H		L					
	POBLACION 9	1,594.10	968.15	90	9.3	86	8.88	162,000	2,106,000.00	154,800	2,012,400.00	Local	60	12	Traditional			H		L					
	TAMONTAKA MB	315.04	207.17	10	4.83	10	4.83	18,000	234,000.00	18,000	234,000.00	Local	7	1	Traditional			H		L					
	TAMONTAKA 1	280.92	180.78	50	27.66	50	27.66	90,000	1,170,000.00	90,000	1,170,000.00	Local	33	7	Traditional			H		L					
	TAMONTAKA 2	461.88	326.01	70	21.47	63	19.32	126,000	1,638,000.00	113,400	1,474,200.00	Local	47	9	Traditional			H		L					
	TAMONTAKA 3	525.51	262.85	50	19.02	50	19.02	90,000	1,170,000.00	90,000	1,170,000.00	Local	33	7	Traditional			H		L					
	TAMONTAKA 4	1,880.40	941.71	30	3.19	30	3.19	54,000	702,000.00	54,000	702,000.00	Local	20	4	Traditional			H		L					
	TAMONTAKA 5	5,494.80	2580	20	0.78	20	0.78	36,000	468,000.00	36,000	468,000.00	Local	13	3	Traditional			H		L					
Total			**8607.033**	**478**	**5.55**	**389.75**	**4.53**	**860,400.00**	**11,185,200.00**	**701,550.00**	**9,120,150.00**														

Source: CMO-Agriculture Division
Notes:
Product Market – Local/Export
Type of Farming Technology – Traditional, Modern, Ecological
Indicate level of susceptibility for all hazards: High (H), Moderate (M), Low (L)

2. **Comparative Agricultural Crop Areas and Production, 2018-2019**

Agricultural land use areas continue to decline. In effect, one can observe the fall in the volume of production in various crops. This is to be expected as the city continues to increase in population due to the number of people from neigboring municipalities finding job opportunities in the city. Many agricultural areas are converted to residences. Rice production took the most toll as it decreased by 49% from 83,477 metric tons to 42,391.66 metric tons.

Table EC-3. Comparative Agricultural Crop Areas and Production, 2018-2019

Major Crops	Area(ha)			Volume of Production MT		
	2018	2019	%Increase/ Decrease	2018	2019	%Increase/ Decrease
Rice	1,310.00	665.49	-49%	83,447.00	42,391.66	-49%
Corn	280.00	204.00	-27%	29,866.67	21,760.00	-27%
Coconut	478.00	389.75	-18%	860,400.00	701,550.00	-18%
Banana	7.00	7.00	0%	136,289.31	136,289.31	0%
Total	2,075.00	1,266.24	-39%	1,110,002.98	901,990.97	-19%

Source: Office of City Agriculturist

3. **Existing Livestock and Poultry Farms, 2018**

Livestock and poultry raising in Cotabato City are generally practiced in backyard with only limited number of heads and sold for local markets in the city. Brgy. Kalanganan 2 had the highest number of heads of carabaoes (16) and cattles (32). While they shared the same spot with Brgy. Tamontaka 5 for number of heads of goat (60). For poultry, Barangay Kalanganan2 had the most chicken raised in the backyard (350) and Brgy. Tamontaka 5 for ducks (350).

Table EC-4. Existing Livestock and Poultry Farms, 2018

Type	Barangay	Total Land Area	Total Agri Land	Area(ha)	No. of Heads	Production Classification	Production		Product Market	No. of Tenants	Hazard Susceptibility(H/M/L)							
							Volume (kg)	Value (kg)			Fl	Tc	Dr	Eq	Ln	Ts	Su	Others
Livestock																		
Carabao																		
	Poblacion 1	68.12	36.947	42.0583	6	Backyard	1,800	171,000.00	Local	1	**H**							
	Kalanganan 2	2,107.40	1202.8	1534.5189	16	Backyard	4,800	456,000.00	Local	3			**L**			**H**		Sea Level Rise
	Tamontaka 2	461.88	326.01	369.142	6	Backyard	1,800	171,000.00	Local	1	**H**		**L**					
	Tamontaka 3	525.51	262.85	291.063	6	Backyard	1,800	171,000.00	Local	1	**H**		**L**					
	Tamontaka 4	1,880.40	941.71	716.353	12	Backyard	3,600	342,000.00	Local	2	**H**		**L**					
	Tamontaka 5	5,494.80	2580	2414.298	6	Backyard	1,800	171,000.00	Local	1	**H**		**L**					
	Bagua 1	185.59	94.96	129.0804	6	Backyard	1,800	171,000.00	Local	1	**L**							

				5,496.51	**58**		**17,400**	**1,653,000.00**										
Cattle																		
	Rosary Heights 5	59.84	12.517	25.546	7	Backyard	2450	269,500.00	Local	1								
	Kalanganan 2	2,107.40	1202.8	1534.5189	32	Backyard	11200	1,232,000.00	Local	5			**L**			**H**		Sea Level Rise
	Kalanganan 1	1,158.50	628.94	592.3672	30	Backyard	10500	1,155,000.00	Local				**L**			**H**		Sea Level Rise
	Tamontaka 2	461.88	326.01	369.142	7	Backyard	2450	269,500.00	Local	1	**H**		**L**					
	Tamontaka MB	315.04	207.17	215.8045	14	Backyard	4900	539,000.00	Local	2	**H**		**L**					
				2,737.38	**90**		**31,500**	**3,465,000.00**										
Goat																		
	Kalanganan MB	2,206.50	955.51	2214.3771	200	Backyard	6,000	828,000.00	Local	40			**L**			**H**		
	Kalanganan 1	1,158.50	628.94	592.3672	30	Backyard	900	124,200.00	Local	6			**L**			**H**		Sea Level Rise
	Kalanganan 2	2,107.40	1202.8	1534.5189	60	Backyard	1,800	248,400.00	Local	12			**L**			**H**		Sea Level Rise
	Tamontaka 3	525.51	262.85	291.063	30	Backyard	900	124,200.00	Local	6	**H**		**L**					
	Tamontaka 4	1,880.40	941.71	716.353	30	Backyard	900	124,200.00	Local	6	**H**		**L**					
	Tamontaka 5	5,494.80	2580	2414.298	60	Backyard	1,800	248,400.00	Local	12	**H**		**L**					
				7,762.98	**410**		**12,300**	**1,697,400.00**										
Poultry																		
Chicken	Kalanganan MB	2,206.50	955.51	2214.3771	300	Backyard	270	32,400.00	Local	13			**L**			**H**		
	Kalanganan 1	1,158.50	628.94	592.3672	150	Backyard	135	16,200.00	Local	6			**L**			**H**		Sea Level Rise
	Kalanganan 2	2,107.40	1202.8	1534.5189	170	Backyard	153	18,360.00	Local	7			**L**			**H**		Sea Level Rise
	Tamontaka 3	525.51	262.85	291.063	350	Backyard	315	37,800.00	Local	15	**H**		**L**					
	Tamontaka 4	1,880.40	941.71	716.353	100	Backyard	90	10,800.00	Local	45	**H**		**L**					
	Tamontaka 5	5,494.80	2580	2414.298	300	Backyard	270	32,400.00	Local	13	**H**		**L**					
				7,762.98	**1,370**		**1,233**	**147,960.00**										
Duck	Kalanganan MB	2,206.50	955.51	2214.3771	100	Backyard	90	11,430.00	Local	4			**L**			**H**		
	Kalanganan 1	1,158.50	628.94	592.3672	160	Backyard	144	18,288.00	Local	7			**L**			**H**		Sea Level Rise
	Kalanganan 2	2,107.40	1202.8	1534.5189	100	Backyard	90	11,430.00	Local	4			**L**			**H**		Sea Level Rise
	Tamontaka 3	525.51	262.85	291.063	150	Backyard	135	17,145.00	Local	6	**H**		**L**					
	Tamontaka 4	1,880.40	941.71	716.353	150	Backyard	135	17,145.00	Local	6	**H**		**L**					
	Tamontaka 5	5,494.80	2580	2414.298	200	Backyard	180	22,860.00	Local	9	**H**		**L**					
				7,762.98	**860**		**774**	**98,298.00**										
				31,523	**2,788**		**63,207**	**7,061,658**										

4. **Existing fishing grounds and Aquaculture Production**

Fisherfolks based in the 3 Kalanganan Barangays (Kalanganan Mother, Kalanganan 1 and Kalanganan 2) are engaged in fishing off the coast of Illana Bay while fishpond owners operate their own brackish water fishponds. Even the members of fishpond cooperatives tend to their own fishponds.

Workers are hired on a piece-rate basis as the need arises during harvest, casting of fingerlings at the start of the production cycle, and maintenance activities. It is more simplified in the case of freshwater fishpond owners as they are all engaged in backyard-raising and do not demand labor support.

Table EC-5. Existing Fishing Grounds and Aquaculture Production, Year 2018

Fishing Grounds	Barangay	Production		Post-Harvest Facilities				Product Market	Hazard Susceptibility (H/M/L)							
		Volume (mt)	Value	Type	Number	Capacity	Status		Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Marine																
Illana bay	Kalanganan 1	10	1,125,000.00	Fish Landing	2	1 MT /day	NR/N.O	Local	L					H		
Moro Gulf	Kalanganan 2	16	1,150,000.00	Ice Plant	2	120 blocks/day	N.O	Local	L					H		
	Kalanganan MB	26	2,250,000.00						L					H		
Inland																
Fishponds	Kalanganan 1	90	8,550,000.00	Processing Facilities	2	0.2 MT/day	O	Local	L					H		
	Kalanganan 2	35	3,325,000.00						L					H		
	Kalanganan MB	150	14,250,000.00						L					H		

Source: BFAR, CMO-AD

5. Water Irrigation Systems

There are no functional irrigation systems currently present in Cotabato City.

6. Existing Agricultural Support Facilities and Services

Table below shows the agricultural equipment present in the agricultural barangays of the city. Most of this equipment are provided by NGA's through the regional offices such DA XII, DAR and BFAR.

Table EC-7. Existing Agricultural Support Facilities and Services, 2018

Post Harvest Facilities and Support	Barangay	No.	% Utilization	Type /Capacity	Remarks
Rice Mill	Tamontaka 3	1	100	Mobile	Operational
	Bagua 2	2	67	Mobile	Operational
		1	33	Mobile	Non-Operational
Multi Purpose Drying Pavement/ Solar Dryer	Bagua 2	2	100	Mobile	Operational
	Bagua 1	1	100	Mobile	Operational
	Rosary Height 5	1	100	Mobile	Operational
	Poblacion 1	1	100	Mobile	Operational

	Kalanganan MB	1	100	Mobile	Operational
	Kalanganan 2	1	100	Mobile	Operational
	Tamontaka MB	3	100	Mobile	Operational
Private Tresher/ Association	Poblacion 9	1	100	Mobile	Operational
	Bagua 1	1	100	Mobile	Operational
	Poblacion8	1	100	Mobile	Operational
Hand Tractor	Tamontaka 4	1	100	Mobile	Operational
	Tamontaka 5	1	100	Mobile	Operational
	Poblacion8	6	75	Mobile	Operational
		2	25	Mobile	Non-Operational
	Bagua 2	3	75	Mobile	Operational
		1	25	Mobile	Operational
Source: MAO, C/MPDO					

7. Agricultural Occupations/Groups in Urban and Rural Areas

The are four Agricultural occupations/groups found in the agri-barangays as shown in the table below. Crop farmers have the largest number at 880 persons members registered. Inland and coastal water fisherfolks are second having 476 persons members registered.

Table EC-8. Agricultural Occupations/Groups in Urban and Rural Areas, 2018

Major and Minor Occupation Groups	Barangay	Urban			Rural			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
FARMERS										
Crop Farmers	BAGUA 1			15						15
	BAGUA 2			21						21
	KALANGANAN MB			31						31
	KALANGANAN 1			23						23
	KALANGANAN 2			93						93
	POBLACION 1			13						13
	POBLACION 8	72	16	88				72	16	88
	POBLACION 9			144						144
	RH 5			8						8
	RH 9			10						10
	TAMONTAKA MB			73						73
	TAMONTAKA 1			82						82
	TAMONTAKA 2			68						68
	TAMONTAKA 3						93			93
	TAMONTAKA 4						74			74
	TAMONTAKA 5						44			44

Livestock and Dairy Farmers	POBLACION 1			1						1
	KALANGANAN 2			3						3
	TAMONTAKA 2			1						1
	TAMONTAKA 3						1			1
	TAMONTAKA 4						2			2
	TAMONTAKA 5						1			1
	BAGUA 1			1						1
	ROSARY HEIGHTS 5			1						1
FISHERFOLKS										
Aqua- Farm cultivators	KALANGANAN 1			52						52
	KALANGANAN 2									
	KALANGANAN MB									
Inland and Coastal Waters Fisherfolks	KALANGANAN 1			476						476
	KALANGANAN 2									
	KALANGANAN MB									
Deep Sea Fisherfolks	KALANGANAN 1			98						98
	KALANGANAN 2									
	KALANGANAN MB									
TOTAL		**72**	**16**	**1302**			**215**	**72**	**16**	**1517**

Source: NSO/PSA

8. Strategic Agriculture and Fisheries Development Zones (SAFDZ)

EC-9 Strategic Agriculture and Fisheries Development Zones (SAFDZ)

Name of SAFDZ area (if applicable)	Barangay	Area (ha)	Type of SAFDZ	Hazard Susceptibility (H/M/L)						
				FI	**Tc**	**Eq**	**Vo**	**Ln**	**Ts**	**Others**
	Tamontaka MB	207.171	Strategic Crop Sub- Devt.Zone	H		L				
	Tamontaka 1	180.7772	Strategic Crop Sub- Devt.Zone	H		L				
	Tamontaka 2	326.01	Strategic Crop Sub- Devt.Zone	H		L				
	Tamontaka 3	262.852	Strategic Crop Sub- Devt.Zone	H		L				
	Tamontaka 4	941.71	Strategic Crop Sub- Devt.Zone	H		L				
	Tamontaka 5	2531.043	Strategic Crop Sub- Devt.Zone	H		L				
		50.00	Strategic Livestock Sub- Devt. Zone	H		L				

Name of SAFDZ area (if applicable)	Barangay	Area (ha)	Type of SAFDZ	Hazard Susceptibility (H/M/L)						
				Fl	Tc	Eq	Vo	Ln	Ts	Others
	Kalanganan Mother	945.511	Strategic Crop Sub- Devt.Zone			L			H	
		10.00	Strategic Livestock Sub- Devt. Zone			L			H	
		873.275	Strategic Fishery Sub Devt. Zone			L			H	
	Kalanganan 1	628.9405	Strategic Crop Sub- Devt.Zone			L			H	
		275.358289	Strategic Fishery Sub Devt. Zone			L			H	
	Kalanganan 2	902.835	Strategic Crop Sub- Devt.Zone			L			H	
		300.00	Strategic Livestock Sub- Devt. Zone			L			H	
		380.356489	Strategic Fishery Sub Devt. Zone			L			H	
	Poblacion 1	36.947	Strategic Crop Sub- Devt.Zone	H						
	Poblacion8	128.158	Strategic Crop Sub- Devt.Zone	H		H				
	Poblacion 9	968.147	Strategic Crop Sub- Devt.Zone	H						
	Rosary Heights 5	12.517	Strategic Crop Sub- Devt.Zone							
	Bagua 1	94.96	Strategic Crop Sub- Devt.Zone	L						
	Bagua 2	125.81	Strategic Crop Sub- Devt.Zone	L						

Notes:

Type of SAFDZ
Strategic Crop Sub-development Zone
Strategic Livestock Sub-development Zone
Strategic Integrated Crop/Livestock Sub-development ZoneSub-development Zone
Strategic Integrated Crop/Fishery Sub-development Zone
Strategic Integrated Crop/Livestock/Fishery
Strategic Integrated Fishery and Livestock Sub-development Zone
Remaining NPAAADReservation; SD – Sand dunes/beach area;
NIPAS; Proposed Tourism; Agro-Forestry Zone
Watershed/Forestry Zone

9. Agrarian Related Concerns

Table below shows that 4,880.87 hectares are covered with Certificate of Landownership Award or Emancipation Patent (CLOA/EP) under the Comprehensive Agrarian Reform Program (CARP) of the Department of Agrarian Reform (DAR). The said CLOAs/EPs have been issued to some 445 farmer beneficiaries.

EC-10. Agrarian Related Concerns, 2018

Concerns	Location	Total Brgy Area	Area (ha)	No. of Farmer - Beneficiaries
A. CARPable Lands				
1. Covered				
2. To be covered				

B. Agrarian Reform Communities (ARCs)	Tam3	525.51	262.85	93
	Tam4	1,880.40	941.71	74
	Tam5	5,494.80	2580	44
	Pob8	166.80	128.16	90
	Pob9	1,594.10	968.15	144
Total		**9,661.61**	**4,880.87**	**445**

Source: MARO, PARO

10. **Comparative Area Utilization of Significant Agricultural Activities**

Crop production had a significant decrease in area utilization from 2018 to 2019. While livestock and poultry increased land area utilization. Fishing in inland fishponds also increased in area utilization. The inland fishpond utilization from 2018 and 2019 are larger in comparison to the present total fishery areas at 1,529 hectares.

Table EC-11. Comparative Utilization of Significant Agricultural Activities

Activities	2018		2019	
	Area (ha)	%	Area (ha)	%
Crop Production	2,075.00	24.02	1,266.24	14.66
Livestock/ Poultry	7,031.03	22.30	7,762.98	89.87
Fishing	1,667.84	109.08	1,672.54	109.39

b. Current and Future Needs

11. **Current and Projected Agricultural Production**

In calculating projected crop productions, average conditions and harvests per crop were used as the constant variables. The annual average decreasing trend in land areas was calculated. In 2010, the agricultural land recorded was 8,620.62 hectares. Starting 2020, the agricultural land use proposed has been 7,564.56 hectares. These figures were measured using the QGIS. In that 10-year span, the average annual trend was a decrease of 105.6069 hectares per year. This was used to project the agricultural land areas for the next 10 years. Afterwards, the projected agricultural areas were multiplied to the average conditions and harvests per crop. Assuming a steady decrease in agricultural land, rice production volume is expected to decline to 414,590.60 kilograms in 2030. Corn production volume is expected to decline to 27,935.86 kilograms in 2030. Banana producton volume is expected to

decline to 1,093,681.06 kilograms. Coconut production volume is expected to decline to 648,155.53 kilograms in 2030. In the case of livestocks, reported numbers of animals butchered in slaughterhouses maintained by the local government from 2018 to 2022 were used to calculate the average increase or decrease in production in the last 5 years from 2018 to 2022. This was used to project livestock production in the next few years. By 2030, volume of production of carabaos is expected to increase to 39,000 kilograms. Volume of production of cattles is expected to increase to 71,050 kilograms. Volume of production of goats is expected to increase to 4,776 kilograms.

Item	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Rice	481,862.21	475,135.04	468,407.88	461,680.72	454,953.56	448,226.40	441,499.24	434,772.08	428,044.92	421,317.76	414,590.60
Corn	33,568.23	33,004.99	32,441.76	31,878.52	31,315.28	30,752.05	30,188.81	29,625.57	29,062.34	28,499.10	27,935.86
Banana	1,437,165.43	1,402,816.99	1,368,468.56	1,334,120.12	1,299,771.68	1,265,423.24	1,231,074.81	1,196,726.37	1,162,377.93	1,128,029.49	1,093,681.06
Coconut	753,725.23	743,168.26	732,611.29	722,054.32	711,497.35	700,940.38	690,383.41	679,826.44	669,269.47	658,712.50	648,155.53
Carabao	29,400.00	34,200.00	35,400.00	35,850.00	36,300.00	36,750.00	37,200.00	37,650.00	38,100.00	38,550.00	39,000.00
Cattle	49,700.00	64,050.00	46,550.00	49,612.50	52,675.00	55,737.50	58,800.00	61,862.50	64,925.00	67,987.50	71,050.00
Goat	7,680.00	8,490.00	10,080.00	10,635.00	11,190.00	11,745.00	12,300.00	12,855.00	13,410.00	13,965.00	14,520.00

12. **Current and Projected Food Consumption**

The projected demand/consumption of Cotabato City was calculated by multiplying projected populations to per capita consumption of each commodity. Per capita consumption was referenced from PSA FIES 2018. The projected population was based on census 2020 and the growth rate 1.74. By 2030, projected demand for well-milled rice is expected to be 6,663,391.76 kilograms. Projected demand for regular-milled rice is expected to be 30,060,588.22 kilograms. Projected demand for NFA rice is expected to be 1,695,784.92 kilograms. Projected demand for corn is expected to be 35,151.81 kilograms. Projected demand for beef is expected to be 185,416.12 kilograms. Other products have been also considered in PSA FIES 2018. These are also included in the calculations.

Items	BARMM	Cotabato City	Projected Demand (kg)									
		2020 (Base)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Crops												
Well-Milled Rice	17.25	5,607,612.75	5,705,185.21	5,804,455.43	5,905,452.96	6,008,207.84	6,112,750.66	6,219,112.52	6,327,325.08	6,437,420.53	6,549,431.65	6,663,391.76
Regular-Milled Rice	77.82	25,297,647.78	25,737,826.85	26,185,665.04	26,641,295.61	27,104,854.15	27,576,478.62	28,056,309.34	28,544,489.13	29,041,163.24	29,546,479.48	30,060,588.22

NFA Rice	4.39	1,427,096.81	1,451,928.29	1,477,191.85	1,502,894.98	1,529,045.36	1,555,650.75	1,582,719.07	1,610,258.38	1,638,276.88	1,666,782.90	1,695,784.92
Corn	0.091	29,582.19	30,096.92	30,620.61	31,153.40	31,695.47	32,246.97	32,808.07	33,378.93	33,959.73	34,550.62	35,151.81
Livestock												
Pork	0.1	32,507.90	33,073.54	33,649.02	34,234.51	34,830.19	35,436.24	36,052.83	36,680.15	37,318.38	37,967.72	38,628.36
Beef	0.48	156,037.92	158,752.98	161,515.28	164,325.65	167,184.91	170,093.93	173,053.57	176,064.70	179,128.22	182,245.05	185,416.12
Chicken	2.04	663,161.16	674,700.16	686,439.95	698,384.00	710,535.88	722,899.21	735,477.65	748,274.97	761,294.95	774,541.48	788,018.50
Chicken Eggs	30	9,752,370.00	9,922,061.24	10,094,705.10	10,270,352.97	10,449,057.11	10,630,870.71	10,815,847.86	11,004,043.61	11,195,513.97	11,390,315.91	11,588,507.41
Roundscad (Galunggong)	4.33	1,407,592.07	1,432,084.17	1,457,002.44	1,482,354.28	1,508,147.24	1,534,389.01	1,561,087.37	1,588,250.29	1,615,885.85	1,644,002.26	1,672,607.90
Tilapia	1.26	409,599.54	416,726.57	423,977.61	431,354.82	438,860.40	446,496.57	454,265.61	462,169.83	470,211.59	478,393.27	486,717.31
Milkfish	0.79	256,812.41	261,280.95	265,827.23	270,452.63	275,158.50	279,946.26	284,817.33	289,773.15	294,815.20	299,944.99	305,164.03

13. **Current and Projected Food Requirement**

The projected food requirements were calculated using the standards recommended by the Food and Nutrition Council. These figures were then multiplied to the projected populations in the next few years up to 2030. Among the recommendations, cereals and cereal products were recommended in larger volumes while protein sources such as meat, fish, and poultry were recommended in lesser volumes. Fruits were also recommended in lesser volumes.

Item	Standard Requirement (Kg./year)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Cereals and Cereal Products	124	40,309,796	41,011,186	41,724,781	42,450,792	43,189,436	43,940,932	44,705,504	45,483,380	46,274,791	47,079,972	47,899,164
Fish, Meat and Poultry	54	17,554,266	17,859,710	18,170,469	18,486,635	18,808,303	19,135,567	19,468,526	19,807,278	20,151,925	20,502,569	20,859,313
Fruits	28	9,102,212	9,260,590	9,421,725	9,585,663	9,752,453	9,922,146	10,094,791	10,270,441	10,449,146	10,630,962	10,815,940

14. **Food Balance Sheet**

Between crop production and consumption, there is a projected growing deficit over time that is expected to continue to increase by 2030. This is due to the fact that agricultural lands continue to diminish because of land conversion to residential. This is to accomodate the continuous migration of people from neighboring municipalities looking for job and business opportunities. Moreover, as population of the city increases so does food consumption. For livestock production, only beef has been considered in the calculation since there were limited data to project poultry production. FIES 2018 also did not include average goat and carabao consumption. Thus, only beef production and consumption are compared. The result shows a relatively steady deficit

in supply in the coming years since both production and consumption have an increasing trend with production significantly lower than consumption. Cotabato City relies much on trading goods and services with other municipalities. This is how the city manages the deficits in its own production.

By 2030, the surplus/deficit between production and consumption will be the following. Deficit on well-milled rice is projected to increase to 1,806,539.99 kilograms. Deficit on regular-milled rice is projected to increase to 9,605,605.47 kilograms. Deficit on NFA rice is projected to increase to 150,671.04 kilograms. Deficit on corn is projected to increase to 7,215.94 kilograms. Deficit on beef is projected to increase to 114,366.12 kilograms.

Between crop, meat and fruit production, and food requirement, there are also projected growing deficits over time that are expected to continue to increase by 2030. These are also because of the continuous decline of agricultural lands and the expected increase of the population that affects the overall food requirements of the city.

By 2030, the surplus/deficit between production and food requirement will be the following. Deficit on rice is projected to increase to 44,365,063.69 kilograms. Deficit on corn is expected to increase to 3,091,573.81 kilograms. Deficit on beef is expected to increase to 11,875,341.71 kilograms. Deficit on carabao is expected to increase to 7,027,879.60 kilograms. Deficit on goat is expected to increase to 1,831,522.02 kilograms. Deficit on bananas is expected to increase to 6,001,285.24 kilograms. Deficit on coconuts is expected to increase to 3,072,818.42 kilograms.

	2020				2021				2022				2023				2024				2025			
FOOD ITEMS	**PRODUCTION**	**FOOD ITEMS**	**CONSUMPTION**	**SURPLUS/DEFICIT**	**PRODUCTION**	**FOOD ITEMS**	**CONSUMPTION**	**SURPLUS/DEFICIT**	**PRODUCTION**	**FOOD ITEMS**	**CONSUMPTION**	**SURPLUS/DEFICIT**	**PRODUCTION**	**FOOD ITEMS**	**CONSUMPTION**	**SURPLUS/DEFICIT**	**PRODUCTION**	**FOOD ITEMS**	**CONSUMPTION**	**SURPLUS/DEFICIT**	**PRODUCTION**	**FOOD ITEMS**	**CONSUMPTION**	**SURPLUS/DEFICIT**
Crops																								
Rice	481,862.21	**Well-Milled**	1,869,204.25	-1,387,342.04	475,135.04	**Well-Milled**	1,901,728.40	-1,426,593.36	468,407.88	**Well-Milled**	1,934,818.48	-1,466,410.59	461,680.72	**Well-Milled**	1,968,484.32	-1,506,803.60	454,953.56	**Well-Milled**	2,002,735.95	-1,547,782.38	448,226.40	**Well-Milled**	2,037,583.55	-1,589,357.15
		Regular-Milled Rice	8,432,549.26	-7,950,687.05		**Regular-Milled Rice**	8,579,275.62	-8,104,140.57		**Regular-Milled Rice**	8,728,555.01	-8,260,147.13		**Regular-Milled Rice**	8,880,431.87	-8,418,751.15		**Regular-Milled Rice**	9,034,951.38	-8,579,997.82		**Regular-Milled Rice**	9,192,159.54	-8,743,933.14
		NFA Rice	475,698.94	6,163.27		**NFA Rice**	483,976.10	-8,841.05		**NFA Rice**	492,397.28	-23,989.40		**NFA Rice**	500,964.99	-39,284.27		**NFA Rice**	509,681.79	-54,728.22		**NFA Rice**	518,550.25	-70,323.85
Corn	33,568.23	**Corn**	29,582.19	3,986.04	33,004.99	**Corn**	30,096.92	2,908.08	32,441.76	**Corn**	30,620.61	1,821.15	31,878.52	**Corn**	31,153.40	725.12	31,315.28	**Corn**	31,695.47	-380.19	30,752.05	**Corn**	32,246.97	-1,494.93
Livestock																								
Beef	49,700.00	**Beef**	156,037.92	-106,337.92	64,050.00	**Beef**	158,752.98	-94,702.98	46,550.00	**Beef**	161,515.28	-114,965.28	49,612.50	**Beef**	164,325.65	-114,713.15	52,675.00	**Beef**	167,184.91	-114,509.91	55,737.50	**Beef**	170,093.93	-114,356.43

	2020				2021				2022				2023				2024				2025			
FOOD ITEMS	PRODUCTION	CATEGORY	REQUIREMENT	SURPLUS/DEFICIT	PRODUCTION	CATEGORY	REQUIREMENT	SURPLUS/DEFICIT	PRODUCTION	CATEGORY	REQUIREMENT	SURPLUS/DEFICIT	PRODUCTION	CATEGORY	REQUIREMENT	SURPLUS/DEFICIT	PRODUCTION	CATEGORY	REQUIREMENT	SURPLUS/DEFICIT	PRODUCTION	CATEGORY	REQUIREMENT	SURPLUS/DEFICIT
Rice	481,862.21	Cereals and Cereal Products	37,684,556.05	-37,202,693.85	475,135.04	Cereals and Cereal Products	38,340,267.33	-37,865,132.29	468,407.88	Cereals and Cereal Products	39,007,387.98	-38,538,980.10	461,680.72	Cereals and Cereal Products	39,686,116.53	-39,224,435.81	454,953.56	Cereals and Cereal Products	40,376,654.96	-39,921,701.40	448,226.40	Cereals and Cereal Products	41,079,208.76	-40,630,982.35
Corn	33,568.23	Cereals and Cereal Products	2,625,239.95	-2,591,671.71	33,004.99	Cereals and Cereal Products	2,670,919.12	-2,637,914.13	32,441.76	Cereals and Cereal Products	2,717,393.11	-2,684,951.36	31,878.52	Cereals and Cereal Products	2,764,675.75	-2,732,797.23	31,315.28	Cereals and Cereal Products	2,812,781.11	-2,781,465.83	30,752.05	Cereals and Cereal Products	2,861,723.50	-2,830,971.46
Beef	49,700.00	Fish, Meat and Poultry	10,053,549.44	-10,003,849.44	64,050.00	Fish, Meat and Poultry	10,228,481.20	-10,164,431.20	46,550.00	Fish, Meat and Poultry	10,406,456.77	-10,359,906.77	49,612.50	Fish, Meat and Poultry	10,587,529.12	-10,537,916.62	52,675.00	Fish, Meat and Poultry	10,771,752.13	-10,719,077.13	55,737.50	Fish, Meat and Poultry	10,959,180.61	-10,903,443.11
Carabao	29,400.00	Fish, Meat and Poultry	5,947,170.09	-5,917,770.09	34,200.00	Fish, Meat and Poultry	6,050,650.85	-6,016,450.85	35,400.00	Fish, Meat and Poultry	6,155,932.17	-6,120,532.17	35,850.00	Fish, Meat and Poultry	6,263,045.39	-6,227,195.39	36,300.00	Fish, Meat and Poultry	6,372,022.38	-6,335,722.38	36,750.00	Fish, Meat and Poultry	6,482,895.57	-6,446,145.57
Goat	7,680.00	Fish, Meat and Poultry	1,553,546.47	-1,545,866.47	8,490.00	Fish, Meat and Poultry	1,580,578.18	-1,572,088.18	10,080.00	Fish, Meat and Poultry	1,608,080.24	-1,598,000.24	10,635.00	Fish, Meat and Poultry	1,636,060.84	-1,625,425.84	11,190.00	Fish, Meat and Poultry	1,664,528.30	-1,653,338.30	11,745.00	Fish, Meat and Poultry	1,693,491.09	-1,681,746.09
Banana	1,437,165.43	Fruits	5,970,806.59	-4,533,641.16	1,402,816.99	Fruits	6,074,698.63	-4,671,881.63	1,368,468.56	Fruits	6,180,398.39	-4,811,929.83	1,334,120.12	Fruits	6,287,937.32	-4,953,817.20	1,299,771.68	Fruits	6,397,347.43	-5,097,575.75	1,265,423.24	Fruits	6,508,661.27	-5,243,238.03
Coconut	753,725.23	Fruits	3,131,405.41	-2,377,680.17	743,168.26	Fruits	3,185,891.86	-2,442,723.59	732,611.29	Fruits	3,241,326.38	-2,508,715.08	722,054.32	Fruits	3,297,725.46	-2,575,671.13	711,497.35	Fruits	3,355,105.88	-2,643,608.52	700,940.38	Fruits	3,413,484.72	-2,712,544.34

2026				2027				2028				2029				2030			
PRODUC	FOOD	CONSUM	SURPLUS/D	PRODUC	FOOD	CONSUM	SURPLUS/D	PRODUC	FOOD	CONSUM	SURPLUS/D	PRODUC	FOOD	CONSUM	SURPLUS/D	PRODUC	FOOD	CONSUM	SURPLUS/D

TION	ITEMS	PTION	EFICIT	TION	ITEMS	PTION	EFICIT	TION	ITEMS	PTION	EFICIT	TION	ITEMS	PTION	EFICIT	TION	ITEMS	PTION	EFICIT
441,499.24	Well-Milled	2,073,037.51	-1,631,538.26	434,772.08	Well-Milled	2,109,108.36	-1,674,336.28	428,044.92	Well-Milled	2,145,806.84	-1,717,761.92	421,317.76	Well-Milled	2,183,143.88	-1,761,826.12	414,590.60	Well-Milled	2,221,130.59	-1,806,539.99
	Regular-Milled Rice	9,352,103.11	-8,910,603.87		Regular-Milled Rice	9,514,829.71	-9,080,057.63		Regular-Milled Rice	9,680,387.75	-9,252,342.82		Regular-Milled Rice	9,848,826.49	-9,427,508.73		Regular-Milled Rice	10,020,196.07	-9,605,605.47
	NFA Rice	527,573.02	-86,073.78		NFA Rice	536,752.79	-101,980.71		NFA Rice	546,092.29	-118,047.37		NFA Rice	555,594.30	-134,276.54		NFA Rice	565,261.64	-150,671.04
30,188.81	Corn	32,808.07	-2,619.26	29,625.57	Corn	33,378.93	-3,753.36	29,062.34	Corn	33,959.73	-4,897.39	28,499.10	Corn	34,550.62	-6,051.53	27,935.86	Corn	35,151.81	-7,215.94
			-				-				-				-				-
58,800.00	Beef	173,053.57	-114,253.57	61,862.50	Beef	176,064.70	-114,202.20	64,925.00	Beef	179,128.22	-114,203.22	67,987.50	Beef	182,245.05	-114,257.55	71,050.00	Beef	185,416.12	-114,366.12
2026				2027				2028				2029				2030			
PRODUCTION	CATEGORY	REQUIREMENT	SURPLUS/DEFICIT	PRODUCTION	CATEGORY	REQUIREMENT	SURPLUS/DEFICIT	PRODUCTION	CATEGORY	REQUIREMENT	SURPLUS/DEFICIT	PRODUCTION	CATEGORY	REQUIREMENT	SURPLUS/DEFICIT	PRODUCTION	CATEGORY	REQUIREMENT	SURPLUS/DEFICIT
441,499.24	Cereals and Cereal Products	41,793,986.99	-41,352,487.75	434,772.08	Cereals and Cereal Products	42,521,202.36	-42,086,430.28	428,044.92	Cereals and Cereal Products	43,261,071.28	-42,833,026.36	421,317.76	Cereals and Cereal Products	44,013,813.92	-43,592,496.16	414,590.60	Cereals and Cereal Products	44,779,654.29	-44,365,063.69
30,188.81	Cereals and Cereal Products	2,911,517.49	-2,881,328.68	29,625.57	Cereals and Cereal Products	2,962,177.90	-2,932,552.32	29,062.34	Cereals and Cereal Products	3,013,719.79	-2,984,657.45	28,499.10	Cereals and Cereal Products	3,066,158.52	-3,037,659.42	27,935.86	Cereals and Cereal Products	3,119,509.67	-3,091,573.81
58,800.00	Fish, Meat and Poultry	11,149,870.35	-11,091,070.35	61,862.50	Fish, Meat and Poultry	11,343,878.10	-11,282,015.60	64,925.00	Fish, Meat and Poultry	11,541,261.58	-11,476,336.58	67,987.50	Fish, Meat and Poultry	11,742,079.53	-11,674,092.03	71,050.00	Fish, Meat and Poultry	11,946,391.71	-11,875,341.71
37,200.00	Fish, Meat and Poultry	6,595,697.96	-6,558,497.96	37,650.00	Fish, Meat and Poultry	6,710,463.10	-6,672,813.10	38,100.00	Fish, Meat and Poultry	6,827,225.16	-6,789,125.16	38,550.00	Fish, Meat and Poultry	6,946,018.88	-6,907,468.88	39,000.00	Fish, Meat and Poultry	7,066,879.60	-7,027,879.60
12,300.00	Fish, Meat and Poultry	1,722,957.83	-1,710,657.83	12,855.00	Fish, Meat and Poultry	1,752,937.30	-1,740,082.30	13,410.00	Fish, Meat and Poultry	1,783,438.41	-1,770,028.41	13,965.00	Fish, Meat and Poultry	1,814,470.24	-1,800,505.24	14,520.00	Fish, Meat and Poultry	1,846,042.02	-1,831,522.02
1,231,074.81	Fruits	6,621,911.98	-5,390,837.17	1,196,726.37	Fruits	6,737,133.25	-5,540,406.88	1,162,377.93	Fruits	6,854,359.37	-5,691,981.43	1,128,029.49	Fruits	6,973,625.22	-5,845,595.73	1,093,681.06	Fruits	7,094,966.30	-6,001,285.24
690,383.41	Fruits	3,472,879.36	-2,782,495.94	679,826.44	Fruits	3,533,307.46	-2,853,481.01	669,269.47	Fruits	3,594,787.01	-2,925,517.53	658,712.50	Fruits	3,657,336.30	-2,998,623.80	648,155.53	Fruits	3,720,973.95	-3,072,818.42

b. AGRICULTURE ANALYSIS MATRIX

TECHNICAL FINDINGS / OBSERVATIONS	IMPLICATIONS (EFFECTS)	POLICY OPTIONS/INTERVENTIONS
Cereals (Rice and Corn)		
There are maximum of 2 cropping only within a year	Limited production of grains	Conduct of Feasibility study/soil analysis on the right variety of seeds to be used in the City Trading activities to address
No identified standard variety of seeds	Difficulty of regulating quality seedlings	Conduct of techno demo sites for rice/ Farmers field study Seed dispersal of the suited variety
Integrated Pest Management was not being observed by the farmers	High percentage of Crop damages	Conduct of Farmers seminar on the different way of Integrated Pest Management Provision of technical assistance on pest management
Increasing production costs	Farmers needs more capital for production	Improve Credit Facilities and expand options for lending packages Financial management seminars and cost cutting
Lower market price of farm produce	Smaller profit for farmers versus invested capital	Conduct market matching Conduct training on value adding of Agricultural products
Prevalence of traditional farming methods	Farmers are hesitant of exploring new farming innovations	Conduct techno demo and Farmers Field School
Limited personnel overseeing the enforcement of agricultural laws	Laidback monitoring and evaluation of agricultural activities	Conduct information, dissemination activities Identify and train Barangay Agricultural Technician Grant incentive allowance for Barangay Agricultural Technician Conduct regular monitoring and evaluation
HVCDP		
Lack of technology adoption	Only few farmers are well equipped in HV crop farming	Conduct Farmer Field School Establish techno demo site
Interest of some urban area people into alternative methods in farming	Urban settlers are eager for new technologies on urban agriculture	Conduct training and seminar on Hydro and Aqua phonics
Land conversion	Agricultural lands are decreasing	Maximize land through introduction of new technology
Not enough Agricultural Technician	Limited personnel equipped in handling high value crops	Identify and train Barangay Agricultural Technician
Little to no organic agriculture practices in the city	Organically grown products are rarely found at the local markets	Conduct information dissemination on Organic Agriculture production

LIVESTOCK		
Data is limited to livestock culled in slaughterhouses	No record of livestocks raised backyard	Conduct of livestock inventory per barangay
Lack of area for pasture	Insufficient source of forage	Identify pasture areas for forage planting
Livestock raisers tend to stick with outdated methods of animal care	Poor animal health	Introduce innovations on proper animal health care Encourage regular visits to and from the City Veterinarian Conduct training on Good Animal Practices
Not enough manpower for monitoring	• Untimely updates of data	• Identify and train Barangay Agricultural Technician
AGRI-BUSINESS SECTOR		
Agricultural products are mainly sold as raw	• Products are being purchased in a low amount; • Availability of processed agri – products in the market is limited	• Conduct training on Value Adding of different Agricultural products
Local products have small venue for product promotion	• Most products are not exposed to bigger markets	• Participate in the different Trade fair events within the region
Local entrepreneurs have less product certifications	• Only few entrepreneurs meet market standards	• Financial support and networking to various certifications boards
FISHERY		
Limited knowledge on proper fish culturing	• Possible contribution on water pollution	• Conduct related trainings and seminars • Conduct water quality assessment
Many fishermen are oblivious of few existing fishery laws	• Increasing number of fishermen engaged in unlawful activities	• Conduct frequent local information dissemination
Substandard fishpond dikes	• Reduced quality in fish production	• Grant of financing for fishpond dikes repair
Declining number of farmers who engaged in Fish culturing	• Decreased of high value fishery products in the local market	• Support livelihood through Fishing paraphernalia
Declining volume of fish catch	• High market cost of fishery products	• Proposed an ordinance to regulate fishing acitivities
City Fishery ordinances are not in line with the National Fishery Law	• Unorganized implementation	• Conduct stake-holders consultation and workshop for the formulation of City Fishery Law

c. Agricultural Related Projects, Approved/Funded for Implementation

Name / Type of Project	Location	Type	Proponent (Government, Private, other)	Estimated Start Date	Estimated Date of Completion
Independent Comp. City Agri - Fishery Council (ICCAFC)	CAO Office	RAFC Fund	Government	January 1, 2023	December 31, 2030
Fishery & Aquatic Resources Management Council	CAO Office	regular fund	Government	January 1, 2023	December 31, 2030
Cotabato City Halal Agri - Fishery Council	CAO Office	regular fund	Government	January 1, 2023	December 31, 2030
Seeds Dispersal	14 agricultural barangays	Regular Fund	Government	January 1, 2023	December 31, 2030
Seedling Dispersal	14 agricultural barangays	DA	Government	January 1, 2023	December 31, 2030
Establishment of Nursery	Rosary Heights 10 - Techno Demo Site	DA/ Regular Fund	Government	January 1, 2023	December 31, 2030
Concoctions as a support to organic production	Rosary Heights 10 - Techno Demo Site	Regular Fund	Government	January 1, 2023	December 31, 2030
Provision of Farm Inputs	Rosary Heights 10 - Techno Demo Site	Regular Fund	Government	January 1, 2023	December 31, 2030
Learning Site	Kalanganan 2	ATI	Government	January 1, 2023	December 31, 2030
Training on Urban Agriculture	Rosary Heights 10 - Techno Demo Site		Government	January 1, 2023	December 31, 2030
Provision of Farm Inputs	14 agricultural barangays	DA	Government	January 1, 2023	December 31, 2030
Strengthening of Farmers Association	37 Farmers Associations	Regular Fund	Government	January 1, 2023	December 31, 2030
Seeds Dispersal	14 agricultural barangays	DA	Government	January 1, 2023	December 31, 2030
Feasibility Study on suited variety of seeds in the city	Tamontaka 5	PhilRice	Government	January 1, 2023	December 31, 2030
Farmers City Wide Registry	14 agricultural barangays	Regular Fund	Government	January 1, 2023	December 31, 2030
Training on Integrated Pest Management	14 agricultural barangays	Regular Fund	Government	January 1, 2023	December 31, 2030
Establishment of Techno Demo sites	14 agricultural barangays	Regular Fund	Government	January 1, 2023	December 31, 2030

Training on Value Adding of Rice based Products	14 agricultural barangays	Regular Fund	Government	January 1, 2023	December 31, 2030
Support to MSME's	20 MSME's of the city	Regular Fund	Government	January 1, 2023	December 31, 2030
Value Adding Training	100 women and youth	Regular Fund	Government	January 1, 2023	December 31, 2030
Market Matching on Agricultural products	20 entrepreneurs of the city	Regular Fund	Government	January 1, 2023	December 31, 2030
Livestock Dispersal	14 agricultural barangays	DA	Government	January 1, 2023	December 31, 2030
Halal Feeds	Tamontaka MB - Halal Feedmill	Regular Fund	Government	January 1, 2023	December 31, 2030
Halal Feedmill	Tamontaka MB	DA/LGU	Government	January 1, 2023	December 31, 2030
Animal Inventory	16 agricultural Barangay	Regular Fund	Government	January 1, 2023	December 31, 2030
Establishment of Pasture area for livestock animals				January 1, 2023	December 31, 2030
Training on Good Animal Practices	Tamontaka MB	DA	Government	January 1, 2023	December 31, 2030
Farm Equipment	3 Fas	DA fund	Government	January 1, 2023	December 31, 2030
Machinery Inventory	16 agricultural barangays	regular fund	Government	January 1, 2023	December 31, 2030
Aquaculture Inputs	3 coastal barangays	BFAR /Regular fund	Government	January 1, 2023	December 31, 2030
Fisherfolk & Boat Registration	3 coastal barangays	Regular Fund	Government	January 1, 2023	December 31, 2030
Hatchery	Tamontaka and Kalanganan Barangay	BFAR BUB	Government	January 1, 2023	December 31, 2030
Operation of Bantay Dagat	3 coastal barangays	Regular Fund	Government	January 1, 2023	December 31, 2030
Training of Bantay Dagat	Coastal Area	Disaster Fund	Government	January 1, 2023	December 31, 2030
Community Fish Landing	Inland water and Coastal barangay	BFAR	Government	January 1, 2023	December 31, 2030
Credit Facility	Coastal Barangay	DOE	Government	January 1, 2023	December 31, 2030

4.2 Forestry

a. Existing Situation

Forest plays a crucial role in maintaining water cycle, includes its vital importance in mitigating the inputs of the changing climate condition. Due to the development priorities and expanding population, there was a decline in the forest cover. Forests are vital to life on earth, they purify the air we breathe, filter the water we drink, prevent erosion and act as an important buffer against climate change.

One of the majority forests which is located in rural area is Timako Hill where trees are preserved and protected. It is a home to several species such as monkeys, birds, bats and other flora and fauna. In 2017, the Sangguniang Panglunsod of Cotabato City filed a resolution requesting President Rodrigo Roa Duterte to declare Timako Hill as a national park or a forest reserve. A wide expanse of mangrove area is seen in the area of Timako Hill.

Presently, the City's forestland is situated at Barangays Tamontaka 3, 4 & 5 with a total land area of 6,333.84903 square meters. The said area also doubled up as the City's agricultural area where rice, corn, coconut and other endemic and rare species of flora and fauna are found.

The development priorities of the City and the expanding population, however, have made these resources openly accessible to pressures (illegal cutting, conversion, encroachment) and potential destruction.

Forest conversion associated with conversion of lands, migration and increase in the population are phenomena attributed to the deterioration of forests and forestland values. Fortunately, Cotabato City was spared from illegal logging activities. However, due to the fast-paced changing of our time, including its population growth, the increasing need for space is turning out to be an area of concern. The desperate need for land for agricultural, industrial and most importantly for livelihood means, deforestation occurs.

Cotabato City has only mangrove forest with a total land area of 670 hectares based on the DENR XII data as of December 10, 2010. There are 12 identified mangrove species out of 65 have been found in the mangrove forest of Cotabato City based on the study conducted by Dimalen and Rojo.

These mangroves are highly valuable ecosystems, providing an array of essential goods and services which contribute significantly to the livelihoods, well-being and security of coastal communities (Duke et al.,2014) in addition, Mangroves contribute significantly to the global carbon cycle and produce large amounts of litter in the form of falling leaves, branches and other debris. Besides, mangrove habitats contribute to complex food webs and energy transfers (Kathiresan, 2012). Thus, effective management of mangrove forest to ensure its sustainability is necessary. Floristic inventory and diversity assessments are necessary to understand the present diversity status and conservation of forest biodiversity (Jayakumar et al., (2011).

The mangrove forest in the city is slowly in denude considering the lack of knowledge of some individuals that senselessly cut mangrove trees and make it as charcoals, fire woods and artistic decorative thing without doing the replanting. There are no accountable managers or groups that are literally working on the conservation and preservation of the areas. This situation places these resource assets at the risk of decreasing its ecological and socio-economic values because of potential threats of destruction

The conversion of mangrove areas to fishpond areas also contribute to slowly phasing out of trees that eventually also destruct the breeding sanctuary of fishes, seashells, crabs and other coastal water animal species. These are in relation to the growing population that needs a larger area for space for living. In addition, the illegal settlers and the improper disposal of solid waste and garbage also affect the growing mangroves. Thus, deforestation occurs.

Deforestation simply means clearing of forest cover or tree plantations to accommodate the need for space. It involves permanent end of forest cover to make the land available for residential, commercial and agricultural purpose.

Slash-and-burn or 'kaingin system" has been one of the illegal activities in the City. This occurred due to several reasons, which include the need of money, both in terms of profitability as well as providing for one's family in most scenarios; lack or no forest laws, need for space for housing.

Many farmers cut or remove the mangrove trees for increasing space for cultivation and/or fodder land for grazing and surviving livestock or turning it to fishponds.

Destroying the forests means destroying the myriad creatures and flora. It is the removal of forests leading to several ecological imbalances. The destruction of the ecosystems is taking a heavy toll on biodiversity. Hence, the promotion of CBFM, especially in degraded areas is imperative. Further, there was also laxity in the enforcement of forestry laws.

Cotabato City is susceptible to flooding. Floods result when land is covered with water due to overflowing of a source such as rivers. It resulted from the accumulation of rainwater by drainage due to prolonged and heavy rains. Floods also lead to soil erosion and landslide of agricultural areas and denuded mountain slopes. The forest covers and/or presence of trees would help mitigate the burdens of flooding. However, due to its denudation, highly susceptibility to flooding is aggravated.

The forest is an ecosystem that provides numerous ecological services and functions. The intact and extensive forests help mitigate the impacts of natural disasters brought by heavy rains, like flooding, landslides, soil erosion, sedimentation, and siltation, among others.

The forest further plays a crucial role in maintaining water cycles, including its vital importance in mitigating the impacts of the changing climatic conditions. Most of the forests and forestlands form part of the upper watershed, which play a vital role in ensuring the environmental and economic sustainability of production in downstream areas.

Further, Cotabato City is a coastal area. The activities in the upper areas have direct effect in its low-lying areas. With the close proximity of coastal areas to human population centers, it has suffered disproportionately and mainly from man-made stresses. Habitat loss here has far-reaching impacts on the entire ocean's biodiversity. These critical areas, which include estuaries, swamps, marshes, and wetlands, serve as breeding grounds or nurseries for nearly all marine species.

Area and Location of Disposable Lands by Sub-Category and Primary Use

Land Classification	Location	Area (ha)	% to Total City Land Area
1. Alienable and Disposable Lands (A and D)		**14150.38**	**80%**
2. Forest Land	RH 5, Pob 8, Pob 9, Kal Mother, Kal 2, Tam 4, Tam 5	**3448.625**	**20%**
2.1 Production Forest			
2.2 Protection Forest		3448.625	
Total		**17599**	**100%**

Theoretically, lands are classified either as Alienable and Disposable or forestlands. This classification is based on slope. Areas with slope 0-18 percent are A & D lands while those beyond 18 percent are considered forestlands. No forest area is used for commercial purposes. All of the forest land in Cotabato City are protected areas.

Volume of Production by Type of Concessionaires, and Year:

As to the volume of production of forest products, there was no established number or volume of production considering there was no established industry that is into production.

Existing Programs and Plans for Forestlands

PPAS	TIMEFRAME	FUND SOURCE
Nursery Rehabilitation and Seedling Production	2020-2030	20% CDF/LDRRMF/Others
Boundary Delineation	2020-2030	20% CDF/LDRRMF/Others
Preparation of Management and Development Plan	2020-2030	20% CDF/LDRRMF/Others
Information, Education and Communication Campaign to enjoin participation of the local communities in the development of the site;	2020-2030	20% CDF/LDRRMF/Others
Expedite the issuance of agreements or tenure	2020-2030	20% CDF/LDRRMF/Others
Protection, rehabilitation and development of the co-managed areas.	2020-2030	20% CDF/LDRRMF/Others
Preparing and/or implementing management plan including annual work plan and resource use plan;	2020-2030	20% CDF/LDRRMF/Others
Orientation on CBFM program	2020-2030	20% CDF/LDRRMF/Others
Conduct of technical skills training and organizational diagnosis and strengthening to CBFM, POs and IPs, and training on simple bookkeeping, among other trainings;	2020-2030	20% CDF/LDRRMF/Others

Current and Projected Needs

The increase utilization of mangroves, making it as charcoal, woods, furniture and among others have cause environmental degradation on mangroves forest resulting to blunt and complete devastation of the biodiversity in the forest. Some were converted to fish ponds and agri-cultivating areas making the forest denuded.

Thus, there is a need for reforestation, tree planting and reviving the environmental condition of the forest to enable to increase the biodiversity and recommended strategies includes;

The forest land utilization has caused the environmental degradation particularly because of the various activities in the forest lands of the municipality. These activities support the growing population, which includes agricultural activities, road development, formation of settlements, continued harvesting of cutting of forest cover.

Because the forest land coverings were converted to various land uses, it has brought perennial problems on erosion of the uplands and sedimentation of rivers, which will eventually can cause disasters such as flooding in settlements and production areas.

While there are initiatives for new reforestation, still the accomplishment for its maintenance was alarming because targets are not met, which can be attributed to limited funds for the program. Poor solid waste management and pollution of waterways has contributed to flooding in settlement areas.

- Rehabilitation of Forest and Forestland and Management of Coastal and Marine Resources should be undertaken like establishing forest and mangrove plantations.

- Closure of open access areas and growing of mangrove trees to rehabilitate its denuded forest lands and areas. In support to this endeavor is the establishment of demonstration farms and training centers with the City Agriculture Office in providing regenerated planting materials. Financial support shall be provided to tenure holders in growing forest trees and intensify investment promotion.

- Intensify the existing initiatives particularly the dredging of rivers, riverbank stabilization and reforestation of mangrove areas.

- Strengthen existing structures such as the Multi-Sectoral Committees on Forest Protection and Committees on Forest Products Monitoring;

- Strengthen agro-forestry activities in agriculture-producing areas;
- Strengthen advocacy on forest protection laws and management geared towards increased protection of mangrove areas, clean water, clean air and increase biodiversity;

- Institutionalize the environment impact statement, environmental accounting and tree planting activities along riparian and water zones;

- Sustain the management and protection of National Integrated Protected Areas System (NIPAS), environmentally critical areas and strengthen the operation of Protected Area Management Boards (PAMBs);

- Intensify advocacy at all levels on disaster risk management and encourage public participation in the rehabilitation, conservation/protection and disaster mitigation measures especially in environmentally challenging areas/ecosystems;

- Strengthen existing alliances and formation of the new ones for the improvement of ecological integrity;

- Encourage public-private sector collaboration in the development and management of mangrove forestlands and potential eco-tourism sites;

FORESTRY ANALYSIS MATRIX

TECHNICAL FINDINGS / OBSERVATIONS	IMPLICATIONS (EFFECTS)	POLICY OPTIONS/INTERVENTIONS
Destruction of mangrove forests	• Increased risk to tsunami and storm surges • Destruction of spawning grounds and adversely affect fisheries resources which could impact on livelihood of communities	• Strict implementation of City Ordinance No. 4348, Series of 2015 (An Ordinance Strictly Prohibiting the Cutting and Destruction of Mangroves in the City of Cotabato for Whatever Purpose and the Imposition of Penalties to Violators • Conduct IEC on values and importance of mangroves • Development of mangrove plantation
Denuded condition of watersheds which are sources of water for irrigation and domestic use	• Leads to water shortages for irrigation and domestic use especially during dry season	• Strict enforcement of Zoning Ordinance • Rehabilitation of denuded watersheds
Declining forests cover	• Availability of forests products (timber and non-timber) to communities is expected to decline • Availability of forests to provide environment services, such as watershed protection and reduction of flooding risks will also decline	• Strict protection of existing natural forests • Creation of multi-sectoral forest protection committees • Strict enforcement of Zoning Ordinance
Climate change hazards	• Degradation of natural ecosystem, decrease in natural species populations and decrease in ecosystem goods and services • Increase disaster risks/hazards	• Relocation of communities living and/or working in danger/hazard areas • Protection of “upstream” natural habitats (e.g.) forests upstream (Timako Hill) for landslide prone communities, mangrove and coral reefs adjacent to coastal communities
Proper utilization of mangrove forests	•	• City Ordinance No. 4348 , series of 2015 (An Ordinance Strictly Prohibiting the Cutting and Destruction of Mangroves in the City of Cotabato for Whatever Purpose and the Imposition of Penalties to Violators

Land Title (more claimants)	•	• DENR Policy
Land concessioners	•	• DENR Policy

4.3 Industry

a. Existing Situation

In the past two (2) decades, when development planning was instituted in the City of Cotabato, the city's development direction revolves around attaining its set vision, goals and objectives of becoming a progressive city aligned to its development strategies focused on the optimum utilization of its natural resource base, particularly agriculture and fisheries, trade and commerce, and development of tourism and services sector, and heavy industries tend to thrive more at nearby localities and not in the city as it may pose pollutive and hazardous threat to the health of the community.

While Cotabato City's industry sub-sector is still in its early stage, directed to the establishment of light to medium industries with the allotment of a 50-hectares area situated at Barangay Tamontaka Mother as proposed Special Economic Zone to house various industries such as IT Park, medical tourism facility, where the Halal Slaughterhouse is also situated. The said area will also house proposed Integrated Overland Terminal, the new Mega Market and other facilities lined up for the city's developing industry park.

The establishment of a city port and airport (both would cater international markets) which are so far the biggest if not the most ambitious in the near future is expected to open doors

In the past few years, there has been no presence of industrial establishments in the city. This is in accordance to the priorities of the local city government which strives to pursue environmental protection and public health of both constituents and visitors alike. The table below shows the various standards in industrial use in an urban area. It may be classified as light, medium, or heavy. The recommended number of populations is also provided. Light intensity industrial land use allows the activities of non-pollutive and non-hazardous industries. These include the following but are not limited to: drying fish, biscuit factory and manufacturing of other similar dried bakery products, doughnut and hopia factory, macaroni, spaghetti and other noodles, manufacture of luggage, handbags, wallets and small leather goods, among others. Many can be prepared at people's homes. These are commonly known as cottage industries. Also allowed are non-pollutive but hazardous industries. These include but are not limited to the following: manufacture of house furnishing, textile bag factories, embroideries and weaving apparel, sawali, nipa and split cane factory, among others.

Another classification next to light intensity is called medium intensity industrial land use. This standard classification allows the activities of pollutive but non-hazardous and pollutive-hazardous industries. Some examples of pollutive but non-hazardous industries are: manufacturing and canning of ham, bacon and native sausage, poultry processing and canning, ice plants and cold storage, corn mill and rice mill, among others. Some examples of pollutive-hazardous industries are: flour mills, coffee manufacturing, unprepared animal feeds and prepared feeds for animals, underwear and outerwear knitting mills, manufacture of rough lumber, unworked and worked lumber, among others.

Last classification is called heavy intensity industrial land use. This standard classification allows activities of highly pollutive but non-hazardous industries, highly pollutive-hazardous industries, highly pollutive and extremely hazardous industries, pollutive and extremely hazardous industries, and non-pollutive but extremely hazardous industries. Cotabato City focuses on lighter intensity land use industries. Further study shall be conducted before the local government shall allow venture into higher intensity industrial land uses.

Table EC- 22. Industrial Land Intensity Standards

Intensity[1]	*Hectare per 1000 Population*	*Hectare per Person*
Light	0.8	0.0008
Medium	2.5	0.0025
Heavy	4	0.004
GROSS	7.3	0.0037

1. Historical Data on Industrial Areas for the last 5 years (2015-2020)

In the past few years, there has been no presence of industrial establishments in the city. This is in accordance to the priorities of the local city government which strives to pursue environmental protection and public health of both constituents and visitors alike. Most of the developed land in the zone were intended for residential and commercial (mostly warehouses) in character particularly at Barangay Poblacion 7. Moreover, the presence of informal settlers in the area has negated the proposed expansion of industrial or other high-intensity uses. The formerly known Metro Cotabato Regional Agro-Industrial Center located at Brgy Tamontaka Mother will be the proposed site of the Agro-Industrial/Industrial Center. At present, it has been identified as an Ecozone area of Cotabato City. Careful consideration has been made in the past for any industries that will be allowed to operate in the city, taking into account the unique and sensitive ecosystem of the area.

2. Inventory of Existing Industrial Establishment by Intensity, Capitalization and Employment, 2020.

As mentioned in the previous section, there have been no active industrial establishments operating in the city.

3. **Inventory of Existing Industrial Establishments by Manufacturing/Industrial Prcoess, Raw Material Input; Production and Markets, Year_**

As mentioned in the previous section, there have been no active industrial establishments operating in the city.

4. Local Revenue and Industrial Establishments for the Last Five Years

No local revenue generated from industrial establishments have been recorded for the last five years due to the absence of industrial activity in the city.

5. Fuel and Chemical Depot

Cotabato City has no fuel and chemical depots within its territorial jurisdiction. Generation of new sources of energy such as coco biodiesel, solar, biomass, biogas and hydroelectricity plants are included in our list of investment priority areas.

6. Existing Hazardous and/or pollutive industries

There has been no existing hazardous and/or pollutive industries within the territory and jurisdiction of Cotabato City

7. Natural resources with potential for industrial development (mining, manufacturing, logging, etc.)

The Kalanganan area is rich in aquatic life. It has the potential for light industrial development such as mechanization of food processing for value-added products. However, any industrial development or activity should not disturb the natural habitat of mudcrabs that are prolific in the area.

8. Inventory of Local Policies Relating to Industrial Development, Year 2020.

Table EC-29. Inventory of Local Policies Relating to Industrial Development, Year 2020

PP	Barangay	Budget	Implementing Agency	Sources of Fund	Time Frame
2017 Investment Incentive Code of Cotabato City	37 Barangays	n/a	Cotabato City Investment Board	LGU	2017-Present
Cotabato City Public-Private Partnership for the People (P4)	37 Barangays	n/a	Cotabato City Investment Board	LGU	2018-Present

Cotabato City has two identified policies relating to industrial development. These are the 2017 Investment Incentive Code of Cotabato City and Cotabato City Public-Private Partnership for the People (P4). The amendment of the local investment code is in the works in order to better accommodate the growth of the local economy of Cotabato City.

b. Current and Future Needs

1. Current and Projected Industrial Area Requirement

Table EC-23. Current and Projected Industrial Area Requirement

Year	Population	Area Requirement (ha)	Industrial Land Intensity	Year	Population	Area Requirement (ha)	Industrial Land Intensity
2020	325,079	260.06	Light	2026	360,528	288.42	Light
2021	330,735	264.59	Light	2027	366,801	293.44	Light
2022	336,490	269.19	Light	2028	373,184	298.55	Light
2023	342,345	273.88	Light	2029	379,677	303.74	Light
2024	348,302	278.64	Light	2030	386,284	309.03	Light
2025	354,362	283.49	Light	Industrial Area Requirement = Pop'n. divided by 1,000 and multiplied by standard area			

Most of the industries operating in Cotabato City are cottage industries. These are often home-based. They do no or minimal pollution and hazard to the people and the environment. The city government has continued to maintain only light-intensity industries in the city. Light-intensity industries required 0.80 hectares per 1,000 population and 0.0008 hectares per person. For 2020, it has been calculated that the City requires an area of 260.06 hectares for light-intensity industries according to industrial land intensity standards. By 2028, it is projected to increase to 297.61 hectares since the population is expected to increase to 372,012.

c. INDUSTRY ANALYSIS MATRIX

TECHNICAL FINDINGS/OBSERVATIONS	IMPLICATIONS (EFFECTS)	POLICY OPTIONS/INTERVENTIONS
There are no apparent big industries being operated within the city	No revenue for the industry sector	Establishment of a Special Economic Zone and encourage major players in the industry to set-up manufacturing plants Develop an investment promotion plan in close coordination with DTI and BOI
Prevailing gaps in our Halal Industry	Not yet ready for global market	To partner with Education Institutions (HEIs) in advancing the Halal Industry in the city
Absence of mechanized operations to boost our food industry/manufacturing, factories	Can't cope up with the demands of the market	To increase air, sea and land linkages for greater interconnectivity and mobility of people and products

Cotabato City's urbanization was designed at a pace that is understood and accepted by the community, that way, they are able to respond and eager to participate. Upgrading our facilities, improvement of our road networks, exposing our MSME sector to the technology advancement and innovations available to them and ensuring the high-performance levels of our partner service providers – making sure that there are no power and water service interruptions particularly in our Center Business Districts (CBDs) – are contributing factors that spurred the economic growth of our city.

Through the years, we have cultivated an entrepreneurial culture among Cotabatenos with the help of our partner agencies like the Department of Trade and Industry, Department of Agriculture, Department of Labor and Employment, Department of Science and Technology and Technical Education and Skills Dev't. Authority with active participation from the private sector particularly the four chambers of commercein the city. We have also strengthened our Local MSME Development Council to take the lead in the development of our MSME Sector especially now that we are positioning Cotabato City to be the country's Halal Hub.

The proposed Special Economic Zone is envisioned to bring forth robust industrial activity in the city and will serve as an engine that will propel the achievement of our developmental goals.

d. Programs/Projects Approved and Funded for Implementation

PPA	Time Frame	Source of Fund	Assigned Agency
Establishment of Super City (integrated Cotabato business district)	2023-2030	Community Development Fund, Other Fund Sources	City Mayor's Office, City Engineer's Office, Investment and Promotion Division, City Tourism

The creation of complementary systems that make up the Super City shall facilitate the growth and sustainability of the industrial activities and establishments. In the approach to creating a Super City, the objective is to promote Cotabato City that provides core infrastructure and gives a decent quality of life to its citizens, a clean and sustainable environment, and application of "SMART" solutions. The focus is on sustainable inclusive development, and the idea is to look at compact areas, create a replicable model which will act like a light house to other aspiring cities.

4.4 Commerce & Trade

a. Existing Situation

Cotabato City currently serves as the center for economic support activities particularly on trade and finance, where economic activities not to mention the other support services such as social, physical, cultural and other basic services is considerably growing.

Currently is one of the highest bank deposits in Mindanao with a total of Php18,736,523,000.00 deposits as of June 30, 2017 with 150,406 bank accounts. The city has twenty one (21) banking institutions both classified as private and government and twenty two (22) other financial institutions mostly private in nature. Due to high bank deposits and good economic dynamism, the Bangko Sentral ng Pilipinas has its Central Mindanao branch in the city with its own building undergoing construction at the Gov. Gutierrez Avenue in Barangay Rosary Heights 7.

The City's commercial activities in the past two (2) decades were generally confined within the Central Business District in Barangays Poblacion 5 and 6 considered as downtown areas and at the new urban core or uptown in Barangays Rosary Heights Mother, 7, 9 and 10, where some commercial activities started to extend towards Tamontaka area specially during nightime.

1. Inventory of Commercial Areas

Commercial areas can be clustered into three. These are the Central Business District, Commercial Strips, and Public Markets. The Central Business District is located down town and covering parts of Poblacion 5 and Poblacion 6. It has the largest area at 26.7908 hectares. Second is the commercial strips scattered in barangays Rosary Heights 7, Rosary Heights 9, Rosary Heights 10, and Rosary Heights Mother. These cover a total area of 3.1060 hectares. Lastly, the public markets cover barangays Poblacion 6 and Poblacion Mother. These have a total area of 2.4902 hectares.

Table EC-16. Inventory of Commercial Areas, 2018

Type of Commercial Areas	Location	Area (ha)	Market Catered	
			Local	Outside (export)
1. CBD (Downtown)		26.7908		

	Poblacion 5	19.7889	√	
	Poblacion 6	7.0020	√	
2. Commercial Strip		**3.1060**		
	RH 7	0.9348	√	
	RH 9	0.9363	√	
	RH 10	0.6377	√	
	RH MB	0.5972	√	
3. Public Markets		**2.4902**		
	Poblacion 6	0.5983	√	
	Poblacion MB	1.8919	√	
Grand Total		**32.3870**		

Source: Treasurer's Office/Market Administrator/Primary Survey

The city has local and national-based shopping centers. Local-based shopping centers like Superama, Sugni, Mall of Alnor, and Southseas Mall have been in competition with the national-based shopping centers like City Mall, Puregold, Robinsons Supermarket and Department Store, Centro Department Store, and SM Savemore. At present, Cotabato City is one of the fastest growing economies in the BARMM region. Construction works for the KCC Mall is now on-going. NCCC Malls, a Davao-based mall corporation have also confirmed their interest to build their mall within the city.

The city government of Cotabato is persevering to pursue the "highly urbanized **halal hub"** status for Cotabato City in the next years. With the recent development in the local economic activities and the relatively peaceful environment in Cotabato City, the local government is working double time to multiply its growth and be able to compete in the **global arena**.

2. Historical Data on Commercial Areas 2011- 2020

Table EC- 17. Historical Data on Commercial Areas 2011-2020

Location	Commercial Areas (ha)		% Increase/ Decrease
	2011	2020	
URBAN			
Bagua MB	0.5732	0.4986	**-15**
Bagua 1	0.3124	0.2717	**-15**
Bagua 2	0.8841	0.769	**-15**
Bagua 3	0.3977	0.3459	**-15**
Kalanganan MB	0.5561	0.4837	**-15**
Kalanganan 1	0.1154	0.1004	**-15**
Kalanganan 2	2.2670	1.9719	**-15**
Poblacion MB	2.9955	2.6056	**-15**
Poblacion 1	1.6398	1.4264	**-15**
Poblacion 2	0.0569	0.0495	**-15**
Poblacion 3	0.4374	0.3805	**-15**
Poblacion 4	2.3886	2.0777	**-15**
Poblacion 5	15.6822	13.641	**-15**
Poblacion 6	5.3180	4.6258	**-15**
Poblacion 7	2.5644	2.2306	**-15**
Poblacion 8			
Poblacion 9	0.0301	0.0262	**-15**
RH MB	2.3731	2.06425	**-15**
RH 1	1.8188	1.58206	**-15**
RH 2	0.6694	0.5823	**-15**
RH 3	0.4946	0.4302	**-15**
RH 4	0.8039	0.6993	**-15**
RH 5	1.0010	0.8707	**-15**
RH 6	0.4747	0.4129	**-15**
RH 7	5.0082	4.3563	**-15**
RH 8	0.6595	0.5737	**-15**
RH 9	5.0810	4.4197	**-15**
RH 10	2.9962	2.6062	**-15**
RH 11	0.9799	0.8524	**-15**
RH 12	0.9036	0.786	**-15**
RH 13	1.9038	1.656	**-15**

Tamontaka MB	2.9578	2.5728	**-15**
Tamontaka 2	0.3540	0.3079	**-15**
RURAL			
Tamontaka 5	0.2113	0.1838	**-15**
Total	64.9095	56.46101	**-15**

Source: LGU Business Permits Department/Primary Survey
Note: LGUs may opt to present a 5-year interval data for the last 5 to 10 years

The previous comprehensive land use plan did not take into account the commercial areas per barangays. It only provided that the commercial land use of Cotabato City in 2010 covers 64.91 hectares of land. Thus, the participation rates were calculated using the measurements of each barangay and the total commercial area in 2020. In 2020, the total commercial land recorded was 56.46 hectares. There had been a significant difference given that building footprints were used in measuring the total land areas covered through the Quantum Geographic Information System (QGIS) tool while old methods and maps were used in measuring the 2010 commercial areas. In 2020, Poblacion 5 had the largest commercial area at 13.641 hectares. While Poblacion 9 had the smallest area at 0.0262 hectares.

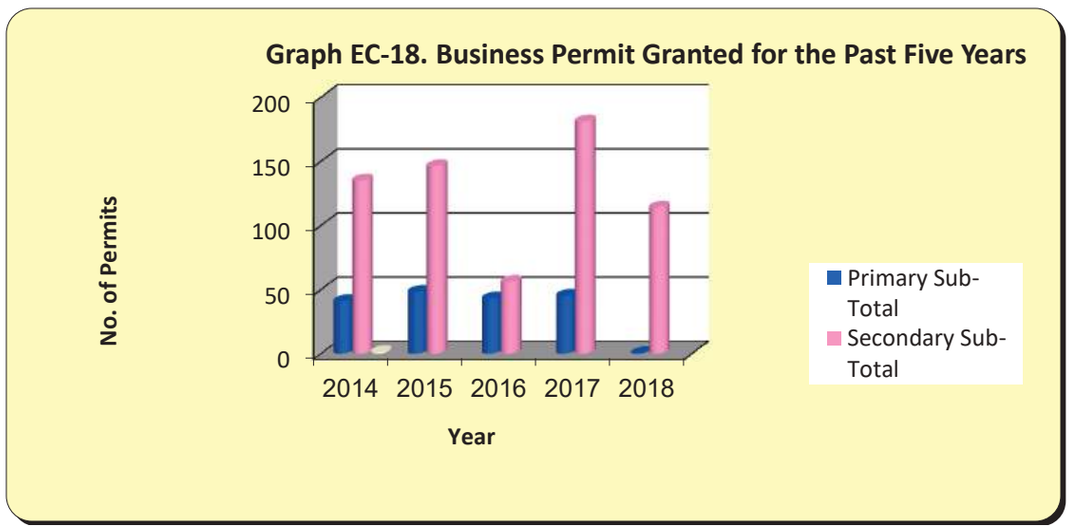
3. Business Permits Granted for the Past Five Years

Table EC-18. Business Permits Granted for the Past Five Years

Business Permits	2014		2015		2016		2017		2018	
	No.	%	No.	%	No.	%	No.	%	No.	%
Primary										
Agriculture	41	100%	47	98%	42	98%	42	93%	-	0%
Fishing	0	0%	1	2%	1	2%	3	7%	-	0%
Mining & Quarrying	0	0%	0	0%	0	0%	0	0%	0	0%
Primary Sub-Total	41	2%	48	2%	43	2%	45	1%	0	0%
Secondary										
Manufacturing	9	7%	10	7%	8	14%	10	6%	4	3.5%
Electricity, Gas & Water Supply	34	25%	42	29%	45	80%	50	28%	42	37%
Construction	92	68%	94	64%	3	5%	121	67%	68	60%
Secondary Sub-Total	135	5%	146	6%	56	2%	181	4%	114	100%
Tertiary										
Wholesale & Retail trade/repair of motor vehicles motorcycles personal & household goods	964	39%	876	36%	831	34%	992	23%	338	10%
Hotels/Restaurants	130	5%	126	5%	194	8%	187	4%	72	2%
Transport, Storage &Communication	455	19%	501	21%	430	18%	2,180	50%	2,322	68%
Financial Intermediation	153	6%	159	7%	177	7%	195	5%	14	.40%
Real Estate, Renting &Business Activities	210	9%	199	8%	243	10%	239	6%	222	6.5%

Public Administration &Defense/ Compulsory Social Security	0	0%	0	0%	0	0%	0	0%	0	0%
Education	22	1%	20	1%	20	1%	21	0%	29	.85%
Health & Social Work	112	5%	112	5%	109	4%	35	1%	5	.15%
Other Community, Social &Personal Service activities	395	16%	423	18%	423	17%	472	11%		
Private Household w/ Employed Persons	*		*		*		*		401	12%
Extra-Territorial Organizations & Bodies										
Tertiary Sub-Total	2,441	90%	2,416	92%	2,427	93%	4,321	92%	3,403	100%
Others	94	3%	4	0%	88	3%	146	3%		
TOTAL	2,711		2,614		2,614		4,693			

Source: City Treasury Office/Mayor's Office



For primary economic activities, agriculture, hunting and forestry had the most business permits granted from 2014 to 2018. For secondary economic activities, construction had the most business permits granted from 2014 to 2015. In 2016, electricity, gas and water supply had the most business permits granted. In 2017 and 2018, construction had the most business permits granted again for secondary economic activities. For tertiary economic activities, wholesale & retail trade/repair of motor vehicles motorcycles personal & household goods had the most business permits granted for three years from 2014 to 2016. In 2017 and 2018, transport, storage & communication took the first spot by having the greatest number of business permits granted.

4. Commercial Establishment by Economic Activities

Table EC-19. Inventory of Commercial Establishment by Economic Activities

Economic Activities	2018		2019		% Increase/(Decrease) Over Previous Year	
	No. of Establishments	No. of Employment	No. of Establishments	No. of Employment	No. of Establishments	No. of Employment
Wholesale and Retail Trade	1,120	3,824	1,527	4,460	407	636
Hotel and Restaurants, Transport & Storage	279	1,112	425	4,519	146	407
Communication	48	94	68	163	20	69
Financial Intermediation	218	567	244	663	26	96
Real Estate	220	251	307	441	87	190
Renting and Business Activities	230	277	325	481	95	204
Public Administration and Defense	15	264	18	218	3	46
Education	33	794	44	936	11	142
Health and Social Work	23	339	32	445	9	106
Other Community, Social and Personal Service Activities	176	518	228	671	52	153
Private Household with Employed persons	-	-	-	-	-	-
Extra Territorial Organizations and Bodies	-	-	-	-	-	-
TOTAL	**2,362**	**8,040**	**3,218**	**12,997**	**856**	**2,049**

Source: LGU Business Permits Department/Primary Survey/LEIPO

Wholesale and retail trade had the greatest number of establishments from 2018 to 2019. It also had greatest number of employments in 2018 but it dropped second place in 2019. Hotel and Restaurants, Transport & Storage had the greatest number of employees in 2019. Wholesale and retail trade had the highest increase both in establishments and in employments. While communications had the lowest increase both in establishments and in employment. These were prior to the COVID-19 outbreak and the warning from having proximate transactions.

5. Employment by Type/Classification/Type of Business and Trade

Table EC-20. Employment by Type/Classification/Type of Business and Trade

Type/Classification Kind of Business and Trade	No. of Employment	Revenue (Php)	Population served/ Markets catered	
			Local	Outside (export)
Wholesale Trade and Retail	4,784	4,646,357,678.51		
Banking and Finances	1,238	652,944,060.48		
Real Estate/ Construction	327	57,064,226.16		
Services	7,666	2,312,048,354.09		
Others	917	73,465,570.33		
TOTAL	**14,932**	**7,741,879,889.57**		

Source: Treasurer's Office/Mayor's Office

Note:

Services include Hotels and Restaurants, transport, storage, communication, education, health and social work, public administration and defense (refer to PSIC).

There have been 14,932 total employments last 2019. The largest portion belong to the services sector with a total of 7,666 employment. The largest revenue belongs to the wholesale trade and retail with a total revenue of more than 4.6 billion pesos. The least number of employments belong to the real estate/construction sector. This sector also has the lowest total revenue of at least 57 million pesos.

6. Existing Programs and Plans for Commerce and Trade

Table EC- 21. Existing Programs and Plans for Commerce and Trade, 2019

Programs/ Projects *	Location (Barangay)	Budget Allocation	Schedule of Implementation	Funding Sources	Implementing Agency/ies
Consumer Protection Program	Cotabato City	44,600.00	January to December	DTI	DTI 12 Cotabato City/ Consumer Protection Division
Consumer Education and Advocacy Program	Cotabato City	218,000.00	January to December	DTI	DTI 12 Cotabato City/ Consumer Protection Division
Diskwento Caravan	Cotabato City	35,000.00	May	DTI	DTI 12 Cotabato City/ Consumer Protection Division
Negosyo Serbisyo Sa Barangay	Cotabato City	3,500.00	July	DTI	DTI 12 Cotabato City/ Negosyo Center
One Town One Product	Cotabato City	149,420.00	January to December	DTI	DTI 12 Cotabato City/ Negosyo Center
Shared Service Facility (Trainings and Seminars)	Cotabato City	215,580.00	January to December	DTI	DTI 12 Cotabato City/ Business Dev't. Division
NegoSolusyon	Cotabato City	102,000.00	June	DTI - 51,000.00; LGU-Cot. City - 51,000.00	DTI 12 Cotabato City/ Business Dev't. Division

Source: Interview with MPDC, Peoples Economic Council (PEC)

Notes:

* Includes Capital Credit Schemes, Tax Holidays/Incentives and the like, Commerce and Trade Prioritization Plan

In 2019, many of the programs, projects, and activities for trade and commerce were implemented with the funding and technical support from the Department of Trade and Industry 12. Many of which were devolved later into the local government unit's care. Some of the key programs include the Consumer Protection Program and Consumer Education and Advocacy Program.

b. Current and Future Needs

Factors and constraints that inhibit the growth of commerce and trade need to be considered. These are: adequacy of the existing commercial service centers to serve the population considering the nature and distribution of commercial area, location criteria and standard, as well as its influence areas outside the city, efficiency of support facilities such as garbage collection/solid waste management in all commercial establishments especially the market and slaughter areas, adequacy of power/water supply versus requirements, efficiency of infrastructure and traffic problems within the vicinity of the public market and commercial establishments, and needs of the population for certain facilities/services. The gap between the total demand and the existing services constitutes the development needs. It is also important to consider the need for financing source for commercial development as well as the need for particular manpower skill and the corresponding training based on existing trends/demand of the commerce and trade sector

1. Current and Projected Commercial Area Requirement

COTABATO CITY	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Commercial Area	53.80435	68.12224	82.44014	96.75804	111.0759	125.3938	139.7117	154.0296	168.3475	182.6654	196.9833

Current commercial area recorded is 53.80435 hectares. By 2030, it is expected to increase to 196.9833 hectares. Each year, there is an increase of 14.31789692 hectares in the projected commercial area requirement.

c. COMMERCE AND TRADE ANALYSIS MATRIX

TECHNICAL FINDINGS/OBSERVATIONS	IMPLICATIONS (EFFECTS)	POLICY OPTIONS/INTERVENTIONS
Increasing demand for e-commerce	• More businesses are going digital	• Conduct of capability seminars on online marketing and its regulations to increase the level of confidence of MSMEs in online banking • Educate local producers on how to access popular and safe e-commerce sites with the help of our Negosyo Center business counselors
Poor internet signal to uphold the	• Low productivity • Poor business to consumer service	• Improve/enhance the ICT facility • Improvement of logistics and distribution network

demand of e-commerce	• Inefficient/unsuccessful delivery of business transactions	
Deteriorating condition of the Mega Market	• Decreasing revenue from market operations	• Improvement/relocation/ replacement of the existing mega market
Increased traffic volume and inadequate parking areas in the CBD	• Loss of revenue for most establishments	• Implement a workable traffic improvement plan

Key observations in commerce and trade situation of the city include the demand for e-commerce as well as the lack of internet connectivity infrastructure supporting this service. Addressing these concerns are a big step in future proofing local businesses. Another observation is the deteriorating condition of the Mega Market. For market operations to become prosperious, relocation/or renovation of the market is of utmost importance since the mega market serves as a central avenue in trading commodities. This leads us to another concern. There is the need for a better traffic scheme and strategy that will facilitate and mitigate the increase of traffic volume and inadequate parking.

d. Programs/Projects Approved/Funded for Implementation

PROGRAM	PROGRAM COMPONENTS	ACTIONS/INTERVENTIONS	TIMEFRAME	FUND SOURCE
Investment Promotion	1.1 Formulation of City Investment Promotion and Action Plan	1.1.1 Create Technical Team w/ partner academe or consultancy group 1.1.2 Conduct consultative meetings with business sector/stakeholders and workshops 1.1.3 Participate in meetings and workshops 1.1.4 Hire personnel with good technical writing skills 1.1.5 Draft City Investment Promotion and Action Plan and submit to the City Council for ratification	2020-2030	LGU
	1.2 Allot capacity building resources 1.3Production of investment promotion materials	1.2.1 Include budget appropriation 1.2.2 Hire personnel with good visual design and software skills 1.2.3 Production of investment	2020-2030	LGU

		promotion materials for distribution to various business groups and cities		
	1.4 Creation of Online Marketing & Selling Website	1.4.1 Enter into contract with a professional IT company to create the website 1.4.2 Assign team/personnel to handle and test-run the website	2020-2030	LGU
MSME Development Program	1.1 Capability Development Trainings & Seminars	1.1.1 Profiling of MSMEs for enrolment in the program 1.1.2 Coordinate with other GAs for their menu of services for MSMEs 1.1.3 Creation of an Advocacy Plan with stakeholders (for the Sustainable Livelihood Program) 1.1.4 Invite industry experts as speakers/trainors 1.1.5 Conduct trainings and seminars 1.1.6 Reactivation of the Cotabato City Local MSME Dev't. Council and providing annual budget for its operation/activities	2020-2030	LGU
	1.2 Allot capacity building resources	1.2.1 Include annual budget appropriation	2020-2030	LGU
	1.3 Marketing & Promotion	1.3.1 Participation of MSMEs in regional and national trade fairs and exhibits 1.3.2 Join Business Matching activities 1.3.3 Include Annual budget appropriation	2020-2030	LGU
	1.4. Support to Business Growth	1.4.1 Hire graphic designer to design logo and packaging of 10 chosen MSME products 1.4.2 Submit 10 chosen food products to DOST for Certification (Nutritional Value)	2020-2030	LGU

		1.4.3 Selection of MSMEs eligible for financial assistance 1.4.4 Collaborate with schools and business groups for Science, Technology and Innovation (STI) projects on identified priority industries 1.4.5 Formulation of criteria for the incentive program for STI projects 1.4.6 Identification of STI project for funding assistance 1.4.7 Conduct information, awareness, education drive on the benefits of a BCRR Plan 1.4.8 Conduct seminars/workshops for MSMEs in the formulation of their Business Continuity, Rehabilitation and Recovery (BCRR) Plan 1.4.9 Participate in seminars and workshops 1.4.10 Consult with industry stakeholders for the establishment of MSME Technology Center 1.4.11 Identification of equipment/machineries and fixtures for the MSME Tech. Center 1.4.12 Coordinate with identified offices for assistance 1.4.13 Design manual of operation		

4.5 Tourism

a. Existing Situation

Tourism is an essential component of the economy of the Philippines due to the substantial contribution it makes to the gross domestic product as well as the vast number of people employed in the sector.

Cotabato City, the oldest city in the south and dubbed as the "*Philippines First Asean City*" is home to numerous cultural gems, its diverse culture composed of Muslims, Chinese, Lumads and other ethnicities who came as immigrants way back in the olden days.

Over the years, Cotabato City has been taming to be a potential tourist destination in this part of South-Central Mindanao. Its accessibility being a gateway with its existing Awang domestic airport located at a nearby municipality of Datu Odin Sinsuat, its connectivity to other cities and other municipalities of SOCCSKSARGEN and BARMM Regions is linked by roads in good condition are some factors that could possibly bring Cotabato City in the map of tourist destination in the country.

Cotabato City boosts its number of visitors for only 39,060 in 2012, it has now a total of 411,508 visitors in 2018 making it as one of the top tourist destinations in BARMM.

In 2015, the number of hotels, inn and pension houses increases, posting an all-time high tourist arrivals growth of 241.01%, so far the highest in Region 12, and Cotabato City has approximately 63.97% hotel occupancy rate, ranking 1st in the region.

Within the city are variety of tourist destinations one could possibly enjoy and experience such as the following:

The Grand Mosque – known to be the biggest Mosque (place of worship for Muslims) in the country. Donated by Sultan Hassanal Bolkiah of Brunei, the Grand Mosque which is located at Barangay Kalanganan 2 remains to be the City's top tourist destination.

Royal Brass Wares – uniquely and manually handcrafted and shaped metal wares by a few muslim craftsman and artists living in a community whose skills are deeply intertwined with culture and tradition and has been handed down through generations by their forefathers. These artistic gem known as brass ware are produced into gongs and metal crafts using a traditional method of molding.

Majestic People's Palace - boasting of beautiful Malay architecture, this is the seat of the City Government. The "Palasyo ng Masa' is proudly built purely from local taxes. The design is a mixture of Christian, Islamic and Tribal influences to best represent the people of the city.

Maguindanaoan Delicacydubbed as "Maguindeli" - a traditional sweet delicacy mainly made with rice and coconut milk prepared in and on banana leaf or pandan leaf "salay" these delicacies give the perfect taste of Sweet Delicacies of Maguindanaoan.

Kutawato Cave - a historical cave that reminds the colorful past of the Cotabateños.It reminisces the rich past behind the heroism of their ancestors. The Kutawato cave once serves as the havens to the natives during the Spanish era. Dubbed as the only Cave situated in the heart of the City.

Al-Jamela Weaving Center - where the famous Maguindanao handwoven fabric *"inaul"* is made. The workshop displays examples of local weaving and patchwork, including a number of vintage pieces.

Traditional Muslim Attire - a traditional attire worn by Muslims that gives an Islamic religious symbolism. This Attire made up of popular fabric called 'Inaul'.

Timako Hill - in front of the majestic Grand Mosque, stands enchanting Timako Hill. Shrouded in mystery and steeped in folklore that attract tourist that seeking for exciting adventure.

Archaic Cotabato City Hall - a century-old structure which used to house local government offices. Soon be transformed into a museum, it showcases the unique and antique design depicting Muslim art.

Enticing Tantawan Park - A monument to Sultan Dipatuan Kudarat remembering his heroic acts located at the foot of PC Hill. Locals also use the park for the relaxing massage offered by the therapist. Sultan Kudarat is the 7th ruler of the Maguindanao Sultanate who was instrumental in the expansion and rise of the Sultanate and feared by the Spanish colonizers.

Sacred Tamontaka Church - officially declared as a landmark by the National Historical Institute, this is the oldest church in South Central Mindanao. It was built by the Jesuits in 1872.

Inaul Fabric - a popular handwoven fabric and one of the most versatile handwoven textile ever conceived. Inaul is the traditional woven cloth of the Maguindanaon as a "malong", a tubular skirt or "sarong". A treasured cultural tradition as it symbolize distinction and royalty.

Festivals and events – major celebrated festivals of the city are the following:

Shariff Kabungsuan Festival – celebrated every December 15-19 in honor of Shariff Mohammad Kabunsuan, an Arab missionary from Johore who planted the seed of Islam in Central Mindanao. On this event, certain presentations are performed such as dances. There are also many recreational activities and sports. Highlights in this festival are Street Dancing Parade, Banca Race and the re-enactment of Shariff's arrival

Araw ng Kutabato (Cotabato Day) – celebrated every June 12–25, this is the biggest celebration in all of the city's festivals. This festival is held to commemorate the city's charter day

Festival of Lights - A Christmas celebration organized by the Notre Dame schools in Cotabato City, celebrated every December of the year.

Feast of the Immaculate Conception - since the Mary, mother of Jesus as the Immaculate Concepcion, is regarded by the patron saint of the city by its Catholic population every 8th day of December.

Malls, Hotels, Restaurants, Resorts - the City's tourism activities are supported by facilities such as malls and shopping centers, hotels, restaurants and other recreational establishments, listed below:

Mall/Shopping Centers – **13 establishments/branches** (South Seas Mall, Robinsons Dept. Store at the Mall of Alnor, City Mall of Cotabato, SuperamaHypermart (6 branches), Puregold Cotabato (2 branches), Fiesta Mall Cotabato, Sugni Super Store, City Mall. Worth mentioning are the upcoming malls of KCC and hopefully NCCC

Hotels - Recently the number of hotels, inn and pension houses increases, in 2015 the city post an all-time high tourist arrivals growth of 241.01% highest on region 12, and Cotabato City has a 63.97% hotel occupancy rate, wherein the City ranked 1 in region 12.

1a. Inventory of Tourism Establishments

Table EC-34A. Inventory of Tourism Establishments, Year 2018

Name of Tourist Attraction	Brgy.	Area (ha)	Type of Tourism Product and Services	Description	No. of Visitors	Accommodation		Name of Owner
						Type	No. of Rooms	
Alnor Hotel	RH-10		MICE, HOTEL			HOTEL	72	NORAISA NUL
Em Manor	RH-9		MICE, HOTEL			HOTEL	86	IBRAHIM
El Manuel	Pob 5		MICE, HOTEL			HOTEL	36	MANUEL TAN
Sardonyx Plaza	RH-7		PENSION			PENSION	17	
Estosan Hotel	RH-7		MICE, HOTEL			HOTEL	36	
Rafael Pension Hauz	Brgy RH-10		PENSION			PENSION	29	ALBANO
Precious Bonita Inn	Brgy RH 13		INN			INN	10	BANSIL
Azaleas Pension Hauz	Mother Brgy. RH		PENSION			PENSION	10	CARIM
Double Decker	BrgyPob 5		PENSION			PENSION	15	
Balai Azul	BrgyPob 5		PENSION			PENSION	12	
Citi Plaza Hotel	BrgyPob 5		HOTEL			HOTEL	28	DATUMANONG
Filipino Hotel	BrgyPob 5		HOTEL			HOTEL	37	
Diamond Hotel	BrgyPob 5		HOTEL			HOTEL	30	
Novotel	BrgyPob 5		HOTEL			HOTEL	29	
Grand Rio	BrgyPob 5		HOTEL			HOTEL	13	SEMA
Pagana	Brgy RH-10		DORMITEL/MICE			DORMITEL	12	
Pacific Heights	Brgy Bagua 2		MICE, HOTEL			HOTEL	10	
N4 Pension House	BrgyPob 6		PENSION			PENSION	27	
Tocao's Inn	BrgyPob 4		INN			INN	6	
Lavander	Brgy RH 13		INN			INN	10	
Cai	Brgy RH 13		INN			INN	18	
Kapitbahay Ni Ate	Brgy RH 13		INN			INN	31	
Carta De Amor	Brgy RH 13		INN			INN	16	

Source: OCM-Tourism, Trade and Industry Division

Alnor Hotel has the most rooms among the establishments listed at 72 rooms while Tocao's Inn has the least number of rooms at six. Eleven of the tourism establishments are hotel type accomodations. Six tourism establishments are pension houses. Six tourism establishments are inns. One tourism establishment is a dormitel.

1b. Inventory of Tourism Attractions

Table EC-34B. Inventory of Tourism Attractions, Year 2018

Unique ID for tourist attraction	Name of tourist attraction	Name of Barangay	Type of tourist attraction: natural; cultural manmade; historical; religious; other	Description of attraction	Number of visitors in a year	Annual revenue from entrance fee etc. (Peso)	Name of Owner
none	Grand Mosque	Brgy. Kalanganan 2	Religious	Sultan Hassanal Bolkiah of Brunie donated the mosque which is the known to be the biggest in the country	187,186	No entrance fee	Being cared off to the family of former Cong. Digs Dilangalen
none	Tamontaka Church	Datu Balabaran	Religious	Officially declared as a landmark ny the NHI, this is oldest churh in South Central Mindanao, built by the Jesuits in 1872.	no data	No entrance fee	Government owned land
none	Bay Walk	Brgy. Kalanganan 2	manmade		no data	No entrance fee	Government owned land
none	Timako Hill	Brgy. Kalanganan 2	natural	The enchanting Timako Hill shrouded in mystery and steep in folklore that attract tourist that seeking for exciting adventure.	no data	No entrance fee	Government owned land (Protected Land)
none	Tantawan Park	Rosary Heights 1	manmade/historical	The enticing Tantawan Park, an historical park remeberin g the heroic act of Muhammad Kudarat.	no data	No entrance fee	Government owned land

none	Kutawato Cave	Rosary Heights 1	natural	The Kutawato Cave, an historical cave that reminds the colourful past of the Cotabatenos. It reminisces the rich behind the heroism of their ancestors. Serves as the havens to the natives during spanish era.	18,307	No entrance fee	Government owned land
none	Old ProvL Capitol Bldg	Rosary Heights 1	manmade/historical			No entrance fee	Government owned land
none	Takumi Butai Shrine	Rosary Heights 10	manmade/historical		2,040	No entrance fee	private property
none	Visitor's Info Center	Poblacion 6	manmade/historical	A century old structure which used to local government offices before. Tranformed now to visitors's information center and Museum, It showcases the unique and antique design depicting Muslim art.	7,755	No entrance fee	Government owned land
none	Cotabato Brasswares	Brgy. Kalanganan 1	historical	Handcrafted and shaped according to the City's rich culture, they are use as house embellishments and musical intruments exemplifying the skills of the Cotabatenos.	3,291	No entrance fee	private property

Out of 10 tourist attractions listed, Grand Mosque is the most visited with 187,186 visitors in 2018 while Takumi Butai Shrine has the least recorded tourist visitations at 2,040 visitors in 2018. Two of the tourist attraction listed are under privately owned land. Eight of the tourist attraction listed are under government owned land.

2. Accessibility of Existing Tourism Establishment and Tourist Attraction

Table EC-35. Accessibility of Existing Tourism Establishment and Tourist Attraction, 2018

Name of Tourism Establishment	[1]Means of Transportation Available	Distance from Nearest Airport (km)	Distance from Nearest Seaport (km)	Distance from National Highway (km)	[2]Access Road		[3]Accessibility
					Pavement	Condition	
Em Manor Hotel	land	5.3 kms	26.9 kms		cement	good	1
Alnor Hotel	land	6.0 kms	26.6 kms		cement	good	1
Sardonyx Pension House	land	6.3 kms	26.3 kms		cement	good	1
Estosan Hotel	land	6.9 kms	25.8 kms		cement	good	1
Rafael Pension Hauz	land	6.9 kms	22.3 kms		cement	good	1
Precious Bonita Inn	land	7.7 kms	22.6 kms		cement	good	1
Azaleas Pension Hauz	land	7.1 kms	22.5 kms		cement	good	1
El Manuel Hotel	land	9.1 kms	20.9 kms		cement	good	1
Double Decker	land	9.0 kms	21.1 kms		cement	good	1
Balai Azul	land	9.0 kms	21.1 kms		cement	good	1
Citi Plaza Hotel	land	9.0 kms	21.1 kms		cement	good	1
Filipino Hotel	land	9.0 kms	21.1 kms		cement	good	1
New Diamond Hotel	land	9.0 kms	20.9 kms		cement	good	1
Novotel	land	11.8 kms	20.5 kms		cement	good	1
Grand Rio	land	11.8 kms	20.5 kms		cement	good	1
Pagana	land	6.7 kms	27.0 kms		cement	good	1
Pacific Heights	land	8.4 kms	22.2 kms		cement	good	1

Source: OCM-Tourism, Trade and Industry Division

There are 17 tourism establishments listed showing the distance from the airport and seaport. The tourism establishment nearest to the airport is Em Manor Hotel at 5.3 kilometers. The farthest to the airport is El Manuel Hotel at 9.1 kilometers. The tourism establishment nearest to the seaport are Novotel and Grand Rio Hotel. Both are at 20.5 kilometers away from the seaport. The farthest to the seaport is Pagana at 27 kilometers. The distance of tourism establishments from the nearest national highway is not provided. Regardless, most of the tourism establishments are strategically placed beside the national highway. All of the establishments listed above are accessible through the use of an ordinary vehicle.

3. Facilities in Existing Tourism Establishments and Market Catered

Table EC-36. 3. Facilities in Existing Tourism Establishments and Markets Catered, 2018

Name of Tourism Establishment	[1]Facilities Present								No. of Employees	Markets Catered
	af	ff	cf	mf	ef	s/f	tr	others		

Em Manor Hotel	/		/		/					International
Alnor Hotel	/	/	/		/	/	/			International
Sardonyx Pension House	/		/		/					national
Estosan Hotel	/		/		/					national
Rafael Pension Hauz	/		/							national
Precious Bonita Inn	/		/							national
Azaleas Pension Hauz	/		/							national
El Manuel Hotel	/		/		/					national
Double Decker	/		/							national
Balai Azul	/		/							national
Citi Plaza Hotel	/		/							national
Filipino Hotel	/		/							national
Name of Tourism Establishment	[1]Facilities Present								No. of Employees	Markets Catered
New Diamond Hotel	/		/							national
Novotel	/		/							national
Grand Rio	/		/							national
Pagana	/		/		/					national
Pacific Heights	/		/		/					national

Source: OCM-Tourism, Trade and Industry Division

Out of 17 tourism establishments, two are catering to international markets. Fifteen are catering to national markets. All of the tourism establishments listed have accommodation facilities. Accomodation facilities include hotels, resorts, picnic huts, cottages, comfort rooms, dressing/change rooms, swimming pools, and vehicular parking. Only Mall of Alnor has its own financial facility within the area. Financial facilities include banks and money changers. All of the tourism establishments have telecommunications. Seven out of 17 tourism establishments have eating facilities. Eating facilities include restaurants and other food and beverage facilities. Only Alnor Hotel has its own shopping facility within the area. Shopping facilities include shopping centers/malls, and handicraft stores/souvenir shops. Only Alnor Hotel has its own travel facility within the area. Travel facilities include travel agencies and tour operators, airline offices, passenger ferry/shipping services, Tourist transport operators, airline offices, passengers ferry/shipping services, and rent-a-car services.

4. Inventory of Tourism Establishments and Support Facilities

Barangay	Accomodation Facilities	Restaurants	Travel Agencies/Offices	Transport Services
Bagua 2	Pacific Heights			
Poblacion 4	Tocao's Inn	Kaleds Beef Pares Madcow Balbacuahan Sweet Toothcake and Pastries		
Poblacion 5	El Manuel Hotel Double Decker Balai Azul Citi Plaza Hotel Filipino Hotel Diamond Hotel Novotel Grand Rio	Reese Resto Royal Rebecca Buffet		
Poblacion 6	N4 Pension House	Mang Gorio Bahay Kainan Mardoney's Magnolia House and Fastfood Smiley Restaurant Mang Inasal Jollibee	Philippine Airlines Ticket Office	
Poblacion 7				Mindanao Star Bus Terminal Colido Van Terminal Kutoco Van Terminal
Rosary Heights Mother	Azaleas Pension Hauz	Cheraf's Kitchenette Tatis Resto and Grill Golden Lace Resto and Swimming Pool J3 Restobar Sukidesu		
Rosary Heights 4		Jetoy's Hitoan MYKOSZ Unli Samgyeopsal		
Rosary Heights 6		SamGyupSalam Korean Restaurant		
Rosary Heights 7	Sardonyx Plaza Estosan Hotel	The Lemon Hub Café Le Sorelle Makkhan Asian Fusion		

		Treasure Food Hauz Moro Café Glamour Resto and Caterer M's Restaurant Bulgogi and Beyond Penong's Barbeque and Grill Afiara Cafe		
Rosary Heights 9	Em Manor	Manang Net's Lechon House Cren Cuisine Gemmaley's Foodhauz Tagpuan Coffeeshop Good Eats Inbox		
Rosary Heights 10	Mall of Alnor Rafael Pension Hauz Pagana	Mamarich Delights Cuisine Hashy's Asian Cuisine Garahe Bistro Teacup Time Resto-Café Mommy's Sutukil and Seafood Mercy's Kitchen Angkol Dodong's Lutong Bahay Pagana Cotabato Penong's Barbeque Seafood and Grill Isang's Chicken Inasal Lutong Pinoy ni Aling Precy Cora Bless Resto Chowking Drive Thru Las Hermanas Jollibee ORC Drive Thru Bo's Coffee Greenwich		ALNor Taxi Husky Bus Terminal
Rosary Heights 13	Lavander Cai Kapitbahay Ni Ate	Crave MadJava Tatis Restobar and Grill		

	Carta De Amor	Sukidesu El Hitoan- Main Noodles and Bowls Café MIndanaw Mamita's Kitchen Pirates Kitchen ONYX BBQ and Eatery Circuit Bistro		

There are 22 listed accommodation facilities to choose from where tourists visiting Cotabato City can opt to stay. Eight of these are located in barangay Poblacion 5. The barangay with the greatest number of dining establishments is Rosary Heights 10 at 17. Poblacion 6 has the only traveling agency office. This is the Philippine Airlines. Three transport terminals can be found in Poblacion 7. Two can be found in Rosary Heights 10.

5. Local Revenue and Employment by Tourism Activities for the Past Five Years

Table EC-37. Local Revenue and Employment by Tourism Activities for the Past Five Years

Year	Local Revenue	Employment (No.)			Increase/ (Decrease)
		M	F	Total	
2015	118,560,572.91			7,410.00	
2016	137,664,764.97	n/a	n/a	8,152.00	742
2017	164,725,665.96			8,987.00	835
2018	170,797,389.23	12,358	526	12,889.00	3,902
2019	108,802,389.76	14,164	660	14,824.00	1,935

Source: OCM-Tourism, Trade and Industry Division

There has been an increasing trend in local revenue and employment from tourist activities in the last five years. The largest was from 2019 where 108,802,389.76 pesos was recorded and 14,824 people were employed. From 2015 to 2017, no sex disaggregated data were recorded. From 2018 onwards, gender and development sensitivity practices such as gender profiling were taken more into consideration. In 2018, 12,358 males were employed while 526 females were employed. In 2019, 14,164 males were employed while 660 females were employed.

6. Inventory of Tourist by Country of Origin for the Past Five Years

Table EC-38. Inventory of Tourist by Country of Origin for the Past Five Years

Name of Tourist Attraction/ Establishment	No. of Tourists/Visitors									
	2014		2015		2016		2017		2018	
	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign
Grand Mosque	no data	no data	no data	no data	182,501	1,256	159,209	572	187,186	321
Al Jamellah	no data	no data	no data	no data	1,087	455	22,712	259	12,308	180
Tantawan Park	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
Kutawato Cave	no data	no data	no data	no data	4,466	90	3,813	121	2,050	27
Old ProvL Capitol Bldg	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
Takumi Butai Shrine	no data	no data	no data	no data	1,843	52	478	27	264	17
Visitor's Info Center	no data	no data	no data	no data	no data	no data	5,637	56	7,735	67
Cotabato Brasswares	no data	no data	no data	no data	no data	no data	1,743	84	3,291	52
Overnight TOURISTS	56,084	3,493	72,330	4,975	145,562	23,427	196,259	1,203	190,852	1,809
Day TOURISTS	no data	no data	124,728	1,143	199,020	1,508	196,168	1,112	218,843	1,108

Source: OCM-Tourism, Trade and Industry Division

The highest recorded local tourist visiting overnight was during 2017 at 196,259 tourists. While the lowest recorded local tourist visiting overnight was during 2014 at 56,084 tourists. The highest recorded foreign tourist visiting overnight was during 2016 at 23,427 tourists. While the lowest recorded foreign tourist visiting overnight was during 2017 at 1,203 tourists. Various local tourist attractions do not have recorded local and foreign tourist visits. The highest recorded local tourist visiting during daytime is 218,843 tourists in 2018. While the lowest recorded local tourist visiting during 2018 at daytime is 1,108 tourists.

7. Cultural and Tourism Activities/Festivals

Table EC-39. Cultural and Tourism Activities/Festivals

Activity	1Frequency of Activity	2Duration of Activity
Araw ng Cotabato	yearly	9 days
Shariff Kabunsuwan Festival	yearly	5 days
Maliwanag Ang Pasko	yearly	18 days
Eid'lFit'r Celebration	yearly	1 day
Eid'l Adha	yearly	1 day
Chinese New Year	yearly	1 day
Tourism Month	yearly	1 month
Immaculate Concepcion Day	yearly	5 days

Source: OCM-Tourism, Trade and Industry Division
Notes:
1Frequency of Activity - yearly, semestral, quarterly or monthly activity
2Duration - e.g. number of days the activity is held

Shariff Kabungsuan Festival is celebrated every December 15-19 in honor of Shariff Mohammad Kabunsuan, an Arab missionary from Johore who planted the seed of Islam in Central Mindanao. On this event, certain presentations are performed such as dances. There are also many recreational activities and sports. Highlights in this festival are Street Dancing Parade, Banca Race and the re-enactment of Shariff's arrival. This is one of the major celebrations in the city. Araw ng Kutabato (Cotabato Day) is celebrated every June 12–25, this is the biggest celebration in all of the city's festivals. This festival is held to commemorate the city's charter day. Locals, whether they be muslims, Christians, or indigenous peoples, partake in the feast and festivities.

Festival of Lights is a Christmas celebration organized by the Notre Dame schools in Cotabato City, celebrated every December of the year. The Feast of the Immaculate Conception, is celebrated by its Catholic population every 8th day of December since Mary, mother of Jesus as the Immaculate Concepcion, is regarded by the patron saint of the city.

Eid'l Fit'r marks the end of Ramadan, the Muslim holy month of fasting, and is celebrated during the first three days of Shawwal, the 10th month of the Islamic calendar. The Muslim use of a lunar calendar means that it may fall in any season of the year. Eid'l Adha is a festival of sacrifice. It is a major Muslim festival that celebrates the faith and obedience of Prophet Ibrahim, who was willing to sacrifice his son Ismail, for God. God intervened and provided a ram as a substitute for Ismail, and Muslims commemorate this event by slaughtering an animal and sharing the meat with the poor, family, and friends. Eid'l Adha falls on the 10th day of Dhu al-Hijjah, the last month of the Islamic lunar calendar, and coincides with the completion of the hajj, the pilgrimage to Mecca. The date of this feast varies each year according to the sighting of the new moon, and in 2023, it is expected to start on June 28 and end on June 29.

Chinese New Year is also known as Lunar New Year or Spring Festival. This holiday falls on the second new moon after the winter solstice on December 21. Each year the New Year in China falls on a different date than on the Gregorian calendar. The dates usually range sometime between January 21 and February 20.

Tourism Month is celebrated during September. This is in accordance to Proclamation No. 894, s. 1996 of former president, Fidel V. Ramos where it is specified that the State shall promote, encourage, and develop tourism as a major national socio-economic activity. Whereas, in order to coincide with the declaration of the World Tourism Organization and Proclamation No. 1942, and to instill national consciousness on tourism as an instrument of progress towards an accelerated national development, unity and identity as a nation, it is proper and fitting that the observance of National Tourism Week be moved from the first week of May of every year pursuant to Proclamation No. 549 dated April 6, 1990, to the last week of September of every year.

8. Potential Tourist Attraction in the Locality

Table EC-40. Potential Tourist Attraction in the Locality

Barangay	[1]Potential Attraction	[2]Within Forest Land (ha)	Within A & D Lands (ha)
BrgyKalanganan 1	Hill (Timako)	Protection Area	
	Caves	Protection Area	
	Mangroves	Protection Area	
	Grand Mosque	Protection Area	
	Bay Walk	Protection Area	
	Natural Forest River	Protection Area	
BrgyKalanganan 2	Natural Forest River	Protection Area	
	Mangroves	Protection Area	
Rosary Heights 1	Caves	Protection Area	
	Cave Bats	Protection Area	
	Tantawan Park	Protection Area	
Tamontaka Mother	Tamontaka Church		

Source: OCM-Tourism, Trade and Industry Division
Notes:

[2]Within Forest Lands - indicate whether production or protection area
Indicate level of susceptibility for all hazards - High (H), Moderate (M), Low (L)

Out of the four listed barangays, Kalanganan 1 has the greatest number of potential tourist attractions at six. This includes the famous Grand Mosque. It is known to be the biggest Mosque (place of worship for Muslims) in the country which was donated by Sultan Hassanal Bolkiah of Brunei. Rosary Heights 1 has three potential tourist attractions. Kalanganan 2 has two potential tourist attractions. Tamontaka Mother has one potential tourist attraction. This is the Tamontaka Church which holds historical significance in Cotabato City. This is a Roman Catholic church in Cotabato City, Philippines

which is the oldest church in the city and was established by Jesuit priests in 1872. The church has a Spanish architecture and design, but only the façade remains from the original structure after suffering an earthquake and a fire.

b. TOURISM ANALYSIS MATRIX

TECHNICAL FINDINGS / OBSERVATIONS	IMPLICATIONS (EFFECTS)	POLICY OPTIONS/INTERVENTIONS
Perceived unstable peace and order condition	negative image of the City	improved local governance Ronda Patrol every night around the City police visibility installation of CCTV camera at strategic areas especially of highly populated places
Festivals are not well-known	not well attended	improve the festival activities to attract more tourists and local spectators
Deteriorating historical landmarks, artifacts, facilities and undeveloped destinations or attractions	No visitors	Revitalize historical landmarks, artifacts, facilities and allocate fund support and technical support for the development of tourist destinations/attractions
Lack of DOT accredited hotels, restaurants, and travel and tours companies and trained tour guides	no trained tourist guides in all tourist attractions no organized, not trained and oriented local driver's association to be visitor-friendly	Coordinate with the business licensing office. Require hotels, restaurants, and travel and tours companies and trained tour guides to be accredited to DOT especially those handling foreign tourists. Initiate training recommended by DOT.
Lack of tourism-oriented culture and appreciation	Stakeholders like women and indigenous people have no active involvement in tourism-related livelihood activities	Integrate livelihood programs to tourism promotion. Show women and indigenous people the benefits of venturing in the tourism industry.

As one can observe in the table, there is a need to boost the tourism industry in general. This involves solving a lot of factors that affect the condition of the tourism industry. One concern that needs to be addressed is the need for tourists to feel safe and secure as they roam around the city. Another is to make festivals known across various generations and genders whether they be locals or outsiders. Next, various historical landmarks and tourism spots need an overhaul to look vibrant and memorable. This is then complemented by having DOT accredited hotels, restaurants, and travel and tours companies and trained tour guides that is certain to provide satisfactory and commendable services. Lastly, the local government should showcase the vast potential of the tourism industry since the city is rich and unique in terms of history, food, and destinations.

c. Programs/Projects Approved/Funded for Implementation

PROGRAM	PROGRAM COMPONENTS	ACTIONS/INTERVENTIONS	TIMEFRAME	FUND SOURCE
INSTITUTIONAL DEVELOPMENT	1.1 Establishment of Operational Tourism Office Building (PRIORITY PROJECT)	• Accreditation of Tourist –related establishment, programs and plans. • Provision of assistance to Tourist –related establishment. • Development of Tourism product • Mapping of Culture and Arts • Implementation of Tourism-related infrastructure projects	2020-2030	20% CDF/ OTHERS
	1.2 TOURISM CODE	• Development of Tourism Code • Conduct Consultations	2020-2030	20% CDF/ OTHERS
CULTURAL HISTORICAL BACKGROUND	2.1 AREA DEVT. FOR QUINCENTENNIAL MARKER (PRIORITY PROJECT) • Landscaping and area devt of historical site	• Identification of Historical sites • Beautification and Landscaping • Preservation of historical Mark of each area.	2020-2030	20% CDF/ OTHERS
	2.2 CULTURAL MAPPING of COTABATO CITY (PRIORITY PROJECT)	• Conduct Cultural Mapping • Established Data Base on Cultural Mapping	2020-2030	20% CDF/ OTHERS
	2.3 LANDSCAPING AND REHABILITATION OF THE OLD CITY HALL Phase 2 (PRIORITY PROJECT)	• Construction of Drainage facilities • Rehabilitation of room parturitions in the 1st floor area. • Flood Control Projects • Landscaping and beautification	2020-2030	20% CDF/ OTHERS
	2.4 CONSTRUCTION OF "GINAKIT" FLOATING RESTAURANT (PRIORITY PROJECT) • Cultural Display • Food Display	• Production of Culture Crafts • Collection, compilation and reproduction of Music, Dances and songs • Displays and reproduction of decorations, foods and souvenirs	2020-2030	20% CDF/ OTHERS
	2.5 KUTAWATO MURAL	• IEC on the Historical Background of Cotabato City • Mural Painting on the selected identified freedom wall located in the areas.	2020-2030	20% CDF/ OTHERS
	2.6 ANNUAL CELEBRATIONS	• Araw ng Cotabato • Shariff Kabunsuan Festival • Chinese New Year	2020-2030	20% CDF/ OTHERS

		• Tourism Month • Heritage Month • Arts Month		
DEVELOPMENT PLAN FOR TOURISM PRODUCT	3.1 TOURISM BRANDING DEVELOPMENT • Institutional Support Structure • Entrepreneurial Promotion	• Conduct Consultation • Distribute IEC • Craft Production • Promotion • IEC • Conduct Orientation on Product Development • Conduct Trade Fairs, Product Exhibits and Promotional Sales	2020-2030	20% CDF/ OTHERS
	3.2 LOCAL ACCREDITATION OF TOURISM RELATED ESTABLISHMENTS	• Extending assistance to tourism related establishments in their accreditation to DOT • Local implementation of local city regulation • Supervision over tourism related establishments	2020-2030	20% CDF/ OTHERS

5. SOCIAL SECTOR

5.1 Education

Existing Situation

Currently, there are 16 private elementary schools, 31 private elementary schools, 15 private high schools, 13 public high schools, and 14 Private Colleges, and 1 Public College, and 39 Madrasahs, and 11 Technical Schools, and 2 Specialty Schools. The table above shows the inventory of schools and their current conditions. Many of the facilities are in good condition while only few facilities are in poor condition. None are reported to be in critical condition.

Datu Ayunan Elementary School, located in Kalanganan Mother, has the largest area in the Elementary Level at 50,000 sq. meters. For the secondary level schools, CCNHS-MAIN CAMPUS has the largest area at 80,098 Sq. m. located at Rosary Heights 4. For the tertiary level, Notre Dame University has the largest land area at 99,701 sq. m. Most of the tertiary schools are from the private sector.

Elementary schools that have laboratories were from private schools namely: ND Cathedral Cotabato City Elementary School, NDU Elementary Training Department, Albert Einstein Elementary School, and ND RVM College of Cotabato. ND ETD and Cotabato City Institute has a shop. Less than half of the elementary schools listed have at least one library in good condition. Only Agape School, has a library with poor condition. All of the elementary schools, with the exception of Timako Elementary School, have one functional clinic. All elementary schools have functional comfort rooms with Cotabato City Central Pilot School having the most number available at 148. Most of the schools that have playground were functional. As a practice all public schools may be used as evacuation centers in the case when the two (2) city evacuation centers and barangay identified evacuation facility may be fully occupied.

Several schools are highly susceptible to earthquake as shown in the table SO-2. Flooding is the primary natural calamity experienced in Cotabato City due to its geophysical situation that is below sea level and basin from the upstream rivers and lakes. Schools that are frequently affected are the following: Cot City Central Pilot School, LR Sebastian ES, Tamontaka CS, Timako ES, Vilo ES, and Krislamville ES have medium hazard susceptibility. Mandanas ES, Datu Usman ES, Lugay-Lugay CS, Datu Ayunan ES, Darping ES, Amirol ES, Pagalamatan ES, Buaya-Buaya ES, Bubong ES, Usman Baunga ES, Diocolano ES, Mokamadali ES, Datu Siang CS, J. Marquez ES, and Muamad ES have high susceptibility for flood. For tropical cyclone, 24 elementary schools listed are highly susceptible to hazard. Also, three elementary schools are medium susceptible. During the 1976 Earthquake the city experienced a tsunami affecting the kalanganan barangays, hence six (6) elementary schools were identified with medium hazard susceptibility to tsunami. One school, Tamontaka CS, is medium hazard susceptible to tsunami, due to its location just a few meters from the Tamontaka River, Seven elementary schools are highly susceptible to storm surge. Only one, Tamontaka CS, is medium susceptible to storm surge.

For secondary schools, all listed do not have laboratories. For stores, CANIZARES NHS, Pilot Provincial Science & Technology HS, and DIOCOLANO ANNEX, all have 3 stores each in good condition. DATU SEMA KALANTUNGAN has 2 stores in good condition. DON E. SERO ANNEX, J. Marquez NHS, BUAYA-BUAYA ANNEX, BUBONG ANNEX, and ND VILLAGE NHS, all have one store each in good condition.

Secondary schools, CCNHS-MAIN CAMPUS, CCNHS-ROJAS SITE, ND VILLAGE NHS, CANIZARES NHS, PPSTHS (Pilot Provincial Science & Technology HS, DATU AYUNAN NHS, Datu Siang NHS, DATU SEMA KALANTUNGAN, and LR SEBASTIAN, have one library in good condition each.

All of the secondary schools listed, except PC Annex, has one clinic each in good condition. All secondary schools listed have available comfort rooms in good condition. ND Village NHS has the largest number at 56 comfort rooms. All, except PC Hill Annex, have one playground in good condition.

There are two specialty schools here in Cotabato. One is Notre Dame Center for Catechesis (School for Cathechesis). Another is Notre Dame Hospital and School of Midwifery (School for Midwifery). Meanwhile, there are 8 technical schools present in Cotabato City.

In summary, Diocolano Annex and Bubong Annex High Schools are highly susceptible to five hazards, namely, flood, tropical cyclone, earthquake, tsunami, and storm surge. There are 35 schools that are highly susceptible to flood. There are 46 schools that are lowly susceptible to flood. There are 9 schools that are moderately susceptible to flood. There are 5 schools that are very highly susceptible.

There are 35 schools with moderate susceptibility to tsunamis. There are 6 schools with high susceptibility to tsunamis. There are 13 schools with high susceptibility to storm surge.

a. Schools by Level, Type, Facilities and Condition, SY 2018

There are 40 schools highly susceptible to flood, 15 moderately susceptible to flood, 66 schools lowly susceptible to flood, and 9 schools that are very highly susceptible. There are 37 schools highly susceptible to tropical cyclone, and 4 schools moderately susceptible to tropical cyclone. There are 40 schools highly susceptible to earthquake. Also, there's a school moderately susceptible to earthquake, namely, CCNHS- Main Campus. There are 53 schools with moderate susceptibility to tsunamis, and 11 schools with high susceptibility to tsunamis. There are 13 schools with high susceptibility to storm surge

SO-2. Schools by Level, Type, Facilities and Condition, SY 2018

School	Barangay	Area Occupied (ha)	Ownership	Facilities And Condition							Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)						
				Lab.	Shop	Library	Clinic	Comfort Room	Playground	Others (Specify)		Fl	Tc	Eq	Ln	Ts	Su	Others
Nahda Central Academy	Bagua Mother	675.28	Private	N	N	G	G	G	G		N	H				M		
Rasheeda High School	Bagua Mother	1226.36	Private	N	N	G	G	G	G		N	H				M		
Kutawato Darussalam College Inc. (Mahad)	Bagua Mother	10000 sq.m.	Private	N	N	G	G	G	G		N	H				M		
ND Learning Center	Bagua Mother	833 sq.m.	Private								N							
Lugay-Lugay CS	Bagua 1	2,722 sq.m.	Public	N	N	G	G	G	G	with covered court	Y	H	H	H		M	H	
IQRA Academy Of Mindanao	Bagua 1	1547.86	Private	P	N	G	P	G	G		N	H				M		
Shariff Kabunsuan College	Bagua 1	19,928 sq.m.	Private	N	N	G	G	G	G		N	H				M		
Datu Usman ES	Bagua 2	4,312 Sq. m.	Public	N	N	N	G	G	G		Y	H	H	H		M		
Madrasah Nurol Iman	Bagua 2	453.17	Private								N	H				M		
Madrasah Rahmaniya	Bagua 2	846.3	Private								N	H				M		
Madrasah Ibadur Rahman	Bagua 2	235.02	Private								N	H				M		
Madrasah Hadji Abubakar Kambal Al Islamiya	Bagua 2	290	Private								N	H				M		
Aviation Technology School of Cotabato	Bagua 3	391 sq.m.	Private								N	H				M		
Madrasa Amina	Bagua 3	140.21	Private								N	H				M		
Madrasah	Bagua 3	544.48	Private								N	H				M		
Sero Central Elementary School	Rosary Heights Mother	10,018 sq. m.	Public	N	N	G	G	G	G	with covered court	Y	L	H	H				
Mangiging Education Center, Inc.	RH Mother	2,164 sq.m.	Private	N	N	G	G	G	G		N							
Cotabato Sacred Heart Learning Center Inc.	RH Mother	872.41	Private	N	N	G	G	G	G		N							
PC Hill ES	Rosary Heights 1	2,225 sq. m.	Public	N	N	N	G	G	G		Y				M			
CCNHS-ROJAS SITE	Rosary Heights 1	4,300 Sq. m.	Public	N	N	G	G	G	G		Y	L	M	H		M		
PC HILL Elem. School ANNEX	Rosary Heights 1	2,225 sq. m.	Public	N	N	N	G	G	G		Y				M			
PC Hill Site Annex/JR/SENIOR HIGH	RH 1	2,225 sq. m.	Public	N	N	N	N	G	N	with covered court	Y				M			
Coland System Technology	RH 1	924 sq.m.	Private	N	N	G	G	G	N		N	L						
Notre Dame Cathedral Cotabato City Elementary School Inc.	RH 2	10,179 sq.m.	Private	G	N	G	N	G	G	with Gymnasium	N	L						
NDU Elementary Training Dept.	RH 3	4564.87	Private	G	G	G	G	G	G	with covered court	N	L						
NDU JR High School	RH 3	5.4	Private	G	G	G	G	G	G		N	L						

NDU-Senior High School	RH 3	3727.24	Private	G	G	G	G	G	G		N	L						
Notre Dame University	RH 3	99,701 sq.m.	Private	G	G	G	G	G	G	with Gymnasium: Science Bldg, chapel, soccer field	N	L						
Madrasah Mahad Saleh	RH 3	35.26	Private	G	G	G	G	G	G			L						
Notre Dame Center for Catechesis	RH 3	196.219	Private					G			N	L						
CCNHS-MAIN CAMPUS	Rosary Heights 4	80,098 Sq. m	Public	N	N	G	G	G	G		Y	L	H	M				
Menang Institute of Technology	RH 4	746.22	Private	N	N	G	G	G	N		N	L						
SKIA Elementary Annex	RH 4	3887.03	Private	N	N	G	G	G	G		N	L						
CCSPC Laboratory High School/JUNIOR & SENIOR HIGH	RH 4	1239.66	Public	N	N	G	G	G	G		N	L						
CCSPC College	RH 4	8860.31	Public	G	G	G	G	G	G	with gymnasium	N	L						
Coland Senior High	RH 4	741 sq.m.	Private	N	N	G	G	G	N		N	L						

School	Barangay	Area Occupied (ha)	Ownership	Facilities And Condition							Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)						
				Lab.	Shop	Library	Clinic	Comfort Room	Playground	Others (Specify)		Fl	Tc	Eq	Ln	Ts	Su	Others
Notre Dame of Cotabato (ND Boys Dept.)	RH 4	20,114 sq.m.	Private	G	G	G	G	G	G	with gymnasium	N	L						
DR.P OCAMPO HIGH SCHOOL	RH 4	1,081 sq.m.	Private	G	N	G	G	G	G		N	L						
Don E. Sero ES	Rosary Heights 5	10,000 Sq. m.	Public	N	N	G	G	G	G	with covered court	Y	L	H	H				
DON E. SERO ANNEX	Rosary Heights 5		Public	N	N	G	G	G	G		Y	L	H	H				
Dr.P Ocampo College	RH 5	2,437 sq.m.	Private	G	G	G	G	G	G		N	L						
Madrasa Al Madina Islamiya	RH 5		Private								N							
Krislamville ES	Rosary Heights 6	877 Sq. m.	Public	N	N	N	G	G	G	with covered court	y	L	H	H				
SKE College Inc. Madrasah	RH 6	624.93	Private	N	N	G	G	G	G		N	L						
Lord Peace Learning Center	RH 7	1,051 Sq. m.	Private	N	N	G	G	G	N		N							
Albert Einstain elem./high school	RH 7	4,503 sq.m.	Private	G	N	G	G	G	G	with covered court	N	L						
Madrasah Abdul Rahman	RH 7	136.39	Private								N	L						
Madrasatu Ta Leefil Qu Loob Al Islamiya	RH 7	304.16	Private								N	L						
Notre Dame Village Central Elem. School	RH 8	26,986 sq.m.	Public	N	N	G	G	G	G	with covered court	Y	L	H	H		M		
ND VILLAGE NHS	Rosary Heights 8	4,791 Sq. m.	Public	N	G	G	G	G	G	with covered court	Y	H	H	H		M		
Saint Joseph The Worker Parish	RH 8		Private								N							
Madrasah Inon	RH 8	620.49	Private								N	H						
ST. Benedict College(JHS/SHS)	RH 9	2627.43	Private	G	N	G	G	G	G	with covered court	N	L						
St. Benedict Elementary	RH 9	504.88	Private	N	N	G	G	G	G		N	L						
New Life Institute Elementary	RH 9	364.315	Private	N	N	G	G	G	G		N	L						
Fernanda Borbon Elem. School	RH 9	1000 sq. m.	Public	N	N	N	G	G	G		Y							
Notre Dame Hospital and School of Midwifery	RH 9	19,999 sq.m.	Private	G	N	G	G	G	G	with covered court	N	L						
San Vicente Academy	RH 9	825.56	Private	N	G	G	G	G	G		N	L						
Mandanas ES	Rosary Heights 10	1,762 sq.m.	Public	N	N	N	G	G	G	with covered court	Y	L	H	H		M		

CANIZARES NHS	Rosary Heights 10	15,000 Sq. m.	Public	G	G	G	G	G	G	with covered court	N	L	H	H		M		
AMA Computer College-Cotabato Campus	RH 10	464 sq.m.	Private	G	N	G	G	G	N		N	L						
St. Peter St. Paul Elem.school	RH 10	3,584 Sq.m.	Private	N	N	G	G	G	G	with covered court	N	L						
Madrasah Baraka Orphange	RH 10	19.7	Private								N	L				M		
A4 College of Peace & Wise	RH 10		Private								N							
STI Pansacala	RH 10	1443.22	Private	N	N	N	G	G	G		N	L				M		
Madrasah Tarbiyyato Wa Thaqfatol Islamia	RH 10	31.74	Private								N	L						
Madrasah Hadji Ding Naki Al-Islamie	RH 10	35.05	Private								N	L				M		
Madrasah Embluwa Islamiyah	RH 10	39.97	Private								N	M				M		
Madrasah Mohammad Subaihe Al Islamie	RH 10	89.25	Private								N	M				M		
LR Sebastian ES	Rosary Heights 11	8,873 sq.m.	Public	N	N	G	G	G	G	with covered court	Y	L	M	H		M		

School	Barangay	Area Occupied (ha)	Ownership	Facilities And Condition							Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)						
				Lab.	Shop	Library	Clinic	Comfort Room	Playground	Others (Specify)		Fl	Tc	Eq	Ln	Ts	Su	Others
LR SEBASTIAN Site CCNHS ANNEX	Rosary Heights 11		Public	N	N	G	G	G	G		Y	L	H	H		M		
Idar Technical School	RH 11		Private								N	L				M		
Madrasah Morshid	RH 11	58.29	Private								N	L				M		
Rojas ES	Rosary Heights 12	3,750 Sq. m	Public	N	N	N	G	G	G	with covered court	Y	L	M	H		M		
AR Pacheco Elem. (Main)	RH 12	181.17	Private	N	N	G	G	G	N		N	L				M		
AR Pacheco high sch. Bld2	RH 12	64.32	Private	N	N	G	G	G	N		N	L				M		
AR Pacheco College, Inc.	RH 12	472.86	Private	N	N	G	G	G	N		N	M				M		
AR Pacheco Senior High	RH 12	682.07	Private	N	N	G	G	G	N		N	M				M		
Notre Dame RVM Collegeof Cotabato	RH 13	22,781 sq.m.	Private	G	G	G	G	G	G	with gymnasium	N	L				M		
Kimpo Elementary School	RH 13	1,340 Sq. m.	Public	N	N	G	G	G	G	with covered court	Y	L	M	H		M		
J.Marquez Elementary School	Poblacion Mother	4,151 Sq. m	Public	N	N	G	G	G	G	with covered court	Y	M	H	H				
Madrasah Mahad Ali Amir	Pob. Mother	1,600 sq.m.	Private								N	M						
Madrasah Ali-Macarban Al Islamiyah	Pob. Mother	95.2	Private								N	M						
Madrasah	Pob. Mother	926.01	Private								N	L						
J. Marquez NHS (JHS/SHS)	Poblacion Mother	4,151 Sq. m.	Public	N	G	G	G	G	G	with covered court	Y	M	H	H				
Cotabato City Institute	Pob. 1	22,427 Sq. m.	Private	N	G	G	G	G	G	with gymnasium	Y	VH						
Madrasah Al Mutaire Al Islamiya	Pob. 2	164.1	Private	G	N	G	G	G	G		N	L						
CAS Memorial Inc.	Pob. 2	645.67	Private								N	L						
TESDA	Pob. 3	123.82	Public								N	M						
Madrasah Hadja Subia Quran Reading Institute	Pob. 3		Private								N	M						
Innovative System Institute	Pob. 3	400.95	Private								N	L						
Notre Dame Learning Center	Pob. 3	392.65	Private								N	L						
Madrasah Hadja Subia Educational Center	Pob. 3	955.47	Private								N	M						
Vilo ES	Poblacion 4	2,200 sq. m.	Public	N	N	G	G	G	G	with covered court	Y	L	H	H				
Dela Vida College	Pob. 4	476 sq.m.	Private	N	N	G	G	G	N		N	L						

Academia de Mindanao	Pob. 5	234.42									N	L				M		
Headstart College	Pob. 5	736 sq.m.	Private	N	N	G	G	G	G	with covered court	N	L				M		
Agape School	Pob. 5	1,100 Sq.m.	Private	N	N	P	P	G	G	with Computer Lab	N	L				M		
CAD I.T	Pob. 5	1,503 sq.m.	Private	N	N	G	G	G	N		N	L						
Cot City Central Pilot School	Poblacion 6	40,200 sq. m.	Public	N	N	G	G	G	G	with covered court	Y	L	H	H		M		
TESDA XII	Pob. 6	715.09	Public								N	L				M		
STI College	Pob. 6	994.04	Private								N	M				M		
STI ANNEX	Pob. 6	236.75	Private								N	M				M		
Academia Technology In Mindanao	Pob. 6	328.27	Private	G	N	G	G	G	N		N	M				M		
Datu Siang Central Elementary School	Poblacion 7	1,559 Sq. m	Public	N	N	G	G	G	G	with covered court	Y	VH	H	H		M		
Muamad ES	Poblacion 7	10,000 Sq. m.	Public	N	N	G	G	G	G	with covered court	Y	H	H	H		M		
Datu Siang NHS	Poblacion 7	3,000 Sq. m.	Public	N	N	G	G	G	G	with covered court	Y	VH	H	H		M		
Madrasah Datu Sema Kalamtungan	Pob. 8		Private							with gymnasium	N	L						
Madrasah Moro Islamiyah	Pob. 8		Private								N	L						

School	Barangay	Area Occupied (ha)	Ownership	Facilities And Condition							Used as Evacuation Center (Y/N)	Hazard Susceptibility (H/M/L)						
				Lab.	Shop	Library	Clinic	Comfort Room	Playground	Others (Specify)		Fl	Tc	Eq	Ln	Ts	Su	Others
Kutawato Institute of Technology Foundation Inc. (KITFI)	Pob. 8		Private	N	N	G	G	G	G	with covered court	N	L						
Madrasah Najiyat	Pob. 8		Private								N	L						
Madrasah Adzis	Pob 9		Private								N	VH						
Maunad Elementary School	Pob 9	10,000 sq.m.	Private								N	VH						
Madrasah Shuhada Al Islam	Pob 9		Private								N	VH						
Madrasah Kalid Bin Waled	Kal. Mo.	170.04	Private								N	VH				H	H	
Madrasah Nuro Daawah Islamie	Kal. Mo.	181.34	Private								N	H				M		
DATU AYUNAN NHS (JHS/SHS)	MB Kalanganan	50,000 Sq. m.	Public	N	N	G	G	G	G	with covered court	Y	VH	H	H		H	H	
Datu Ayunan Elementary School	Kal. Mo.	50,000 Sq. m.	Public	N	N	G	G	G	G	with covered court	Y	VH	H	H		H	H	
Amirol Elementary School	Kal. Mo.	1,238 Sq. m.	Public	N	N	N	G	G	G	with covered court	Y	H	H	H		M	H	
Darping ES	Kalanganan 1	5,000 Sq. m.	Public	N	N	N	G	G	G		Y	H	H	H		M	H	
Madrasah (Madrasah Nurol-Iman Al-Islamiyah)	Kalanganan 1	801.19	Private								N	H				M	L	
Buaya-Buaya ES	Kalanganan 2	5000 Sq. m	Public	N	N	N	G	G	G		Y	H	H	H		H	H	
CCNHS (Buaya-Buaya Site) ANNEX (HS)	Kalanganan 2	2,000 Sq. m.	Public	N	G	N	G	G	G	with covered court	Y	H	H	H		H	H	
Bubong ES	Kalanganan 2	5000 Sq. m	Public	N	N	N	N	G	G	with covered court	Y	H	H	H		H	H	
Timako ES	Kalanganan 2	2,000 Sq. m.	Public	N	N	N	N	G	G		Y	H	H	H	M	H	H	
Buaya Buaya High School	Kal. 2	5000 Sq. m	Public	N	N	N	G	G	G		Y	H	H	H		H	H	
CCNHS-(BUBONG Site) ANNEX	Kalanganan 2	5,000 Sq. m.	Public	N	G	N	G	G	G	with covered court	Y	H	H	H		H	H	
Madrasah Ashafieyah Al Islamiya	Kal. 2	216.65	Private								N	H				H	H	
Tamontaka Central Elementary School	Tamontaka MB	9,272 Sq. m.	Public	N	N	G	G	G	G	with covered court	Y	H	H	H		M	M	
PPSTHS (Pilot Provincial Science & Technology HS	Tamontaka 1	26,262 Sq. m.	Public	N	G	G	G	G	G	with covered court	Y	H	H	H		M		
Madrasah Darol Marhama	Tam. 1		Private								N	H				H		
Madrasah Al Uloom Wal Hikma	Tam. 1	2086.63	Private								N	H				M		

Usman Baunga ES	Tamontaka 2	5100 Sq. m	Public	N	N	N	G	G	G	with covered court	Y	M	H	H				
Masjid Ibrahim Nanding	Tam. 2		Private								N	M						
Pagalamatan ES	Tamontaka 3	1,500 Sq. m	Public	N	N	N	G	G	G	with covered court	Y	H	H	H				
Madrasah Pagalamatan	Tam. 3	639.78	Private								N	H						
Mokamadali ES	Tamontaka 4	5,000 Sq. m.	Public	N	N	N	G	G	G	with covered court	Y	H						
CCNHS Datu Sema Kalantungan Site	Tam. 4	22615 Sq.m.	Public	N	G	G	G	G	G		Y	H	H	H				
Mokamadali Elementary School	Tam. 4	5,000 Sq. m.	Public	N	N	N	G	G	G	with covered court	Y	H	H	H				
Madrasah Najma Akaire	Tam. 4	382.89	Private							with gymnasium	N	H						
Diocolano ES	Tamontaka 5	5,078 Sq. m	Public	N	N	N	G	G	G		N	H	H	H				
Madrasah Hadji Esmail Nongka Al Islamie	Tam. 5	115.08	Private								N	H						
CCNHS ANNEX Diocolano Site) JHS/SHS	Tam. 5	1431.15	Public	N	G	N	G	G	G		Y	H	H	H				
Jamiat Cotabato and Institute of Technolgy, Inc.			Private	G	N	G	G	G	G	G- Multi-purpose	N	L						

Source: DepEd District Office, Primary Survey

b. Student-Teacher and Student-Classroom Ratio by Level, SY 2018

Based on school year 2019-2020 enrollment data, there are 71,573 leaners enrolled in public and private schools and including in the State Universiry College/Local University College (SUC/LUC). Overall, there are more females (51%) than male enrolles.

More than seven out of ten or 73% (51,985) learners are enrolled in DepEd schools. The public school system caters to 4,316 (8%) kinder learners, 27,920 (53%) elementary learners, 15,848 (30%) Junior High School learners, and 4,634 (9%) Senior High School learners.

Private schools meanwhile have a total population of 18,857 or 27% learners. However, for the current year, there has been a decrease of 84 kindergarten entrants compared to school year 2018-2019. School year 2019-2020 data likewise shows that senior high school population in private school is sifnificantly higher that in public schools since school year 2016-2017. Most of the growth of the enrollment is attributed to increasing retention among junior high school completers moving to senior high school and to the government highly subsidized SHS education in private institutions.

The total number of teachers on all sectors and level of education for school year 2019-2020 are 2,429. Public school have a total population of 1,1861 teachers. There are more female (1,505) than male (356) teachers. However, private school population is 568 teachers. The mobility of teaching profession from private to public schools can be attributed to adequate renumeration and other rmeans of job satisfaction and fulfillment.

The total number of classrooms on all sectors and level of education are 1,435 wherein 29% belongs in private schools and 71% in public schools. The student and classroom ratio for the private and public schools does meet the standard of 1:40. However, for highly dense public schools particularly in the secondary level, they practice two (2) shifting classes. The morning session starts at 5:00 in the morning to 12:00 noon time and the next shifts starts at 12:00 noon to 7:00 in the evening.

Table SO-3. Student-Teacher and Student-Classroom Ratio by Level, SY 2018

Type/Level	Enrollment			No. of Teachers			No. of Classrooms	Student/ Teacher Ratio	Student/ Classroom Ratio
	Male	Female	Total	Male	Female	Total			
Private									
Preparatory	483	409	892	7	59	66	36	25	25
Elementary	2464	2272	4736	35	190	225	215	40	22
Secondary									
Junior High School (Grade 7 – 10)	3816	4239	8055	56	143	199	121	40	67
Senior High School (Grade 11 - 12)	2397	2777	5174	18	60	78	50	40	103
Sub-Total	9160	9697	18857	116	452	568	422	33	45
Public									
Preparatory	2165	2151	4316	5	97	102	46	25	94
Elementary	14167	13753	27920	136	829	965	669	29	42
Secondary									
Junior High School (Grade 7 – 10)	7131	8116	15247	143	459	602	249	40	40
Senior High School (Grade 11 - 12)	2030	2472	4502	72	120	192	49	40	40
Sub-Total	25493	26492	51985	356	1505	1861	1013	28	51

Source: DepEd District Office, Individual Private School

Notes:

Classification: public or private = $\frac{\text{Total Enrollment}}{\text{Total No. of Teachers}}$ Student-TeacherRatio

Student-Classroom Ratio = $\frac{\text{Total Enrollment}}{\text{No. of Classrooms}}$

c. Tertiary and Vocational/ Technical Schools by Type and Total Enrollment, SY 2019

Cotabato City has a total of 18 Tertiary Schools with only one (1) Public School and the only State University in the City. The rest are privately operated universities and colleges. Out of the 18 there are three (3) specialy schools namely: the Notre Dame Center for Catechesis, Notre Dame Hospital abd school of Midwifery and the Aviation Technology School of Cotabato.

Among the 18 tertiary schools 13 were located in low susceptibility to flooding, 2 schools were identified with moderate susceptibility to flooding and 2 are located in highly susceptibility to flooding; 1 school is identified with low susceptibility to earthquake, while 6 are identified with moderately susceptible to tsunami.

The city has a total of 8 Technical/Vocational Schools. Two (2) TESDA Schools and six (6) privately operated Tech/Voc schools. Only the Academia de Technologia in Mindanao, Inc. is located in moderate susceptibility for flooding and tsunami.

Table SO-4. Tertiary and Vocational/ Technical Schools by Type and Total Enrollment, SY 2019

Name of School	Location (Brgy)	Area (sq.m)	Ownership	Total Enrollment	
				M	F
Tertiary					
AMA Computer College	RH 10	464	Private	31	40
Antonio R. Pacheco College, Inc.	RH 12	472.86	Private	207	344
Coland Systems Technology, Inc.	RH 1	924	Private	684	826
Cotabato City State Polytechnic College	Barangay RH 4	8860.31	Public	2,562	3,033
Dela Vida College, Inc.	Pob. 4	476	Private	21	75
Dr. P Ocampo Colleges, Inc.	RH 5	2439	Private	127	521
Headstart College of Cotabato	Pob. 5	736	Private	933	299
Jamiat Cotabato and Institute of Technology, Inc.	Tam. Mo.		Private	48	51
Kutawato Darussalam College, Inc.	Bag. Mo.	10000	Private	15	28
Mindanao Capitol College, Inc.	Pob. 6		Private	82	108
Notre Dame Center for Catechesis	RH 3	196.219	Private	5	21
Notre Dame Hospital and School of Midwifery	RH 9	19.999	Private	15	206
Notre Dame University	RH 3	99,701	Private	868	1263
ND-RVM College of Cotabato	RH 13	22,781	Private	135	242
Shariff Kabunsuan College	Bag. 1	19,928	Private	30	87
St. Benedict College of Cotabato	RH 9	2,627.93	Private	143	200
STI College of Cotabato	Pob. 5	994.04	Private	553	538
SKE College Inc. Madrasah	RH 6	624.93	Private		
Voc./Tech.					
Idar Technical School	RH 11		Private		
Central Mindanao Computer School			Private		
Academia de Technologia in Mindanao, Inc.	Pob. 5	234.42	Private	35	16
MenangInstitue of Technology		746.22	Private		
Kutawato Institute of Technology Foundation Inc. (KITFI)	Pob. 8		Private		
Aviation Technology School of Cotabato	Bag. 3	391	Private		
TESDA	Pob. 3	123.82	Public		
TESDA XII	Pob. 6	715.09	Public		
Total	-		-	6,494	7,898

Source: CHED ROXII

Notes:

Ownership –Public/Private
Indicate level of susceptibility for all hazards: High (H), Moderate (M), Low (L)
Types of hazards – Flood (Fl), Tropical Cyclone (Tc), Earthquake (Eq), Volcano (Vo), Landslide (Ln), Tsunami (Ts), Storm Surge (Su), Others (e.g. coastal erosion, sea level rise, land subsidence, liquefaction, strong wind, change in temperature, change in rainfall, etc.)

d. Historical Enrollment by Level for the Past Five School Years

Over the past five years, seven four percent (74%) learners in the formal system are enrolled in Public School, twenty five percent (25%) in Private School and one percent (1%) in State University College (SUC) / Local State University College (LUC). The public school system caters to seven-point three percent (7.3%) kinder learners, fourty six percent (46%) elementary learners, thirty three percent (33%) Junior High School learners, and thirteen point seven percent (13.7%) Senior High School Learners. Overall, there are slightly more females (51%) than male enrollees (49%).

Kindergarten enrollment is expected to stabilize from 5,208 for school year 2019-2020 to 5,313 entrants for school year 2020-2021 based on the data from the Early Registration conducted last February 2020. School year 2017-2018 up to school year 2019-2020, Kindergarten population has grown for the last three (3) years, where it reached its peak in school year 2018-2019 with a growth in population by a total of 68 learners or 1%.

Elementary enrollment (Grades 1 to 6) displays a decreasing trend for the past five (5) years, a decrease of 1,637 learners from SY2015-2016 to 2016-2017. Followed by a -0.8% in SY 2016-2017 to SY 2016-2017, a slight decline of -0.7% in SY 2017-2018 to SY 2018-2019 and the biggest gap was recorded between SY 2018-2019-SY 2019-2020 by -15.7%.

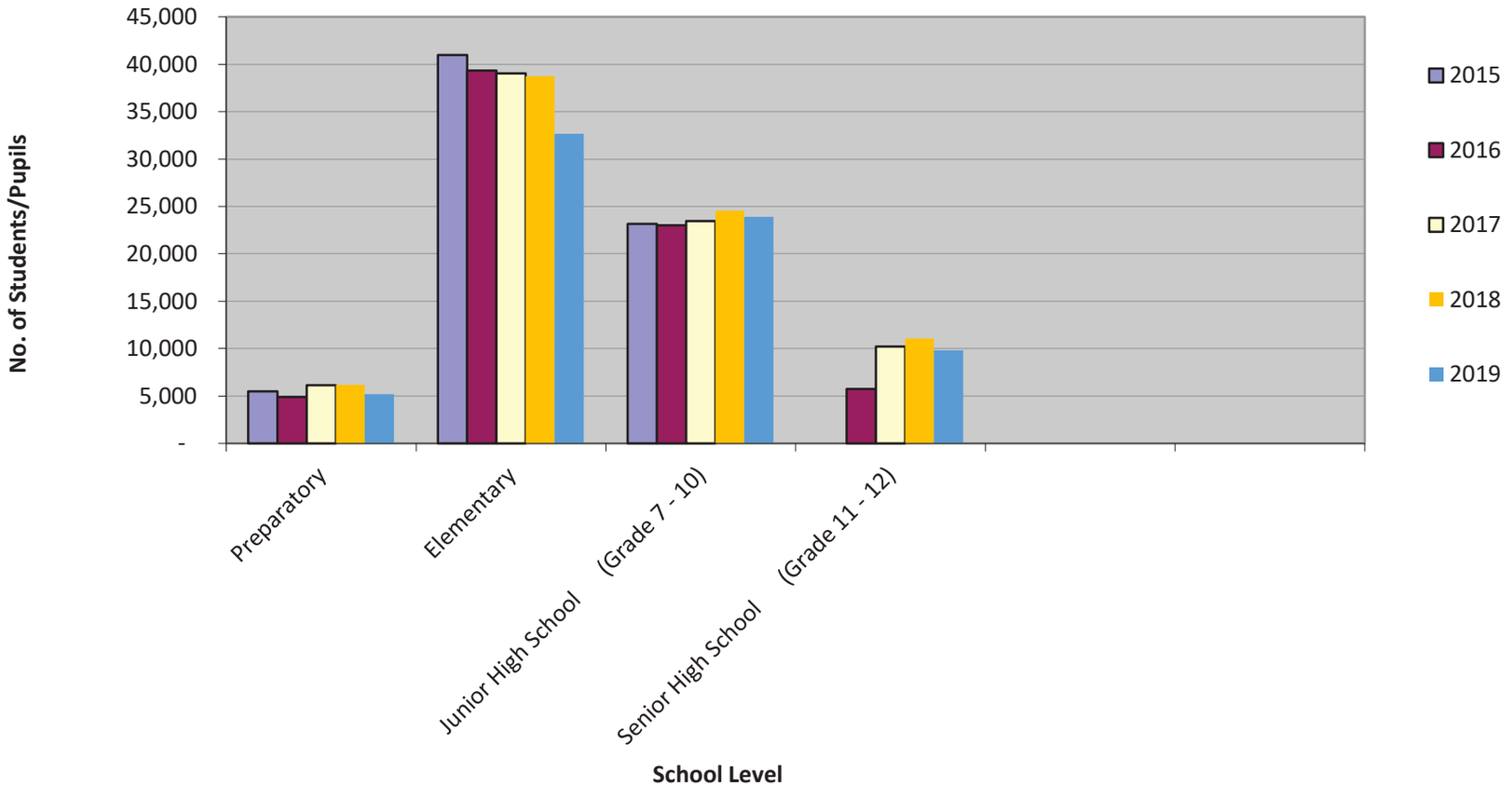
Junior High School population has grown from school year 2017-2018 to the present, where it reached its peak in school year 2018-2019 with an increase of 1,243 learners or five percent (5%) compared to the previous school year. Overall, the data show a fluctuating Junior High School enrollment trend for five school years.

Senior High School population displays an increasing trend in enrollment starting from school year 2016-2017 to the SY 2017-2018. However, a decrease of -11.3% is recorded in SY 2019-2020.

Table SO-5. Historical Enrollment by Level for the Past Five School Years

Level	2015			2016				2017				2018				2019			
	M	F	Total	M	F	Total	Increase/ Decrease (%)	M	F	Total	Increase/ Decrease (%)	M	F	Total	Increase/ Decrease (%)	M	F	Total	Increase/ Decrease (%)
Preparatory	2,854	2,639	5,493	2,541	2,377	4,918	10.4678682	3,167	2,959	6,126	24.6	3,129	3,065	6,194	1.1	2,648	2,560	5,208	-15.9
Elementary	20,782	20,194	40,976	20,020	19,319	39,339	-4.0	19,813	19,227	39,040	-0.8	19,679	19,073	38,752	-0.7	16,631	16,025	32,656	-15.7
Secondary																			
Junior High School (Grade 7 - 10)	10,944	12,195	23,139	10,683	12,316	22,999	-0.6	11,026	12,415	23,441	1.9	11,520	13,045	24,565	4.8	11,167	12,736	23,903	-2.7
Senior High School (Grade 11 - 12)	-	-	-	2,550	3,187	5,737	#DIV/0!	4,540	5,671	10,211	78.0	4,855	6,203	11,058	8.3	4,486	5,320	9,806	-11.3
TOTAL	34,580	35,028	69,608	35,794	37,199	72,993		38,546	40,272	78,818		39,183	41,386	80,569		34,932	36,641	71,573	

Graph SO-5. Historical Enrollment by Level for the Past Five School Years



e. Historical Enrollment Participation Rate for the Past Five Years

Table SO-7 shows the Historical Enrollment Participation Rate (EPR) or Net Enrollment Rate for the past five years. The enrollment participation rate is based on the total number of actual students who registered for enrollment in relation to the total expected school going population (5-18 years old) for a certain period.

The table shows a fluctuating trend for the kindergarten level from 2014-2018. It implies that although the official school age starts at 5 years, there is still significant percentage of families sending their children to primary school at a later year, thus contributing to the decline of the EPR/NER. This is probably because some parents do not really feel comfortable sending their children to school at such age. Registering at 53.68% enrollment in 2014 and increasing in 2015 at 59.22% anda sudden drop in 2016 at only 43.53%. In 2017 registered the highest enrollment of 60.18% and slide down to 52.26% in 2018.

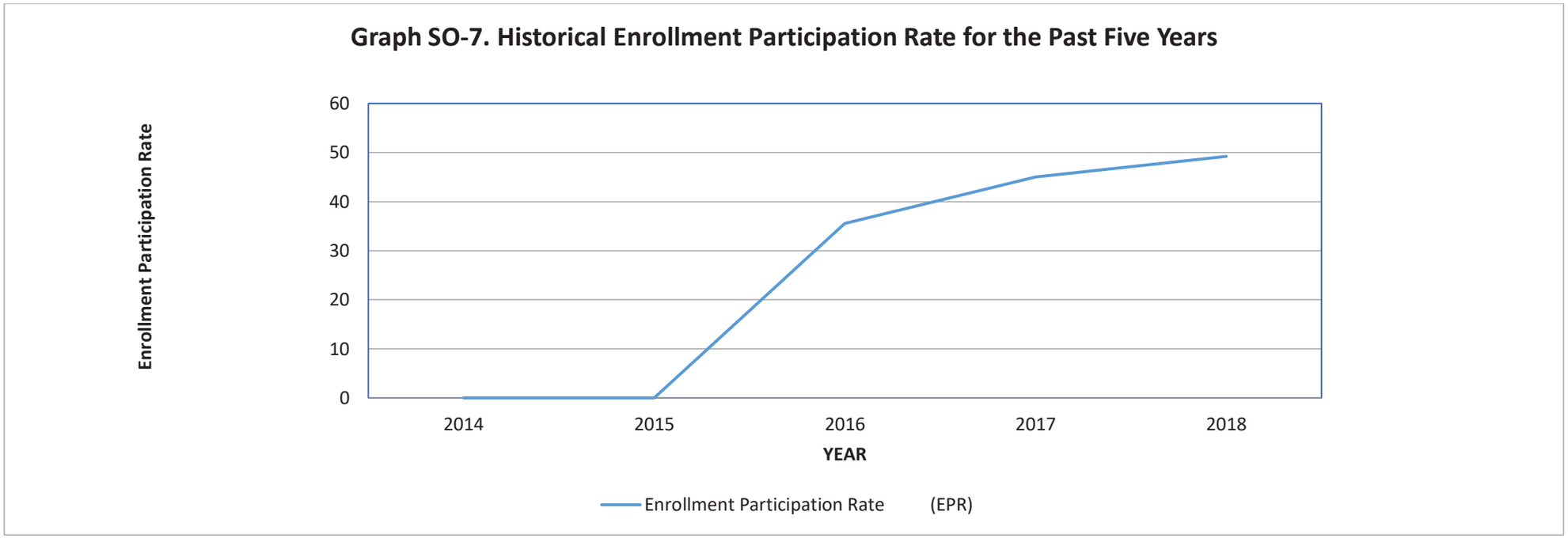
The Elementary level registered a participation rate of 67.68% in 2014 and decreased at 63.22% in 2015 and down by 61.51% in 2017 but gained enrollment in 2017 at 69.89% and a quite steady figure in 2018 at 69.16%.

The Junior High School shows a more stable trend of participation rate, recoding at 55.13% in 2014 to 55.72 in 2015, a gradual decrease in 2016 at 53.76 and regained the enrollment in 2017 at 64.66% to 69.49% in 2018. The first batch of senior high school is recorded only in 2017 registering an enrollment rate of 35.51%, and shows a n increasing trend of 45.01% in 2018 and 49.22% in 2018.

Table SO-7. Historical Enrollment Participation Rate for the Past Five Years

Year	Kindergarten	Elementary	Junior HS	Senior HS
2014	53.68	67.68	55.13	0
2015	59.22	63.22	55.72	0
2016	43.53	61.51	53.76	35.51
2017	60.18	69.89	64.66	45.01
2018	52.26	69.16	69.49	49.22

Source: District Office, DepEd
Note:
EPR = (No. of enrollees by level/school-going age population of relevant age level) x 100



Current and Future Needs:

1. Projected Classroom, Teacher Requirements in Public Schools by Level

Table SO-6 shows the projected classroom and teacher requirement in Public Schools from Year 2020 to 2030. For 2020, the city has a projected school going population in public school from Kindergarten to Grade 12 level of 123,639 learners. This is expected to increase to 148,659 by 2030. The standard ratio for students to classrooms used in the computation is 1:35. This is according to the recommendations of the "Class Size and Conditions Act" introduced by Senator Grace Poe which seeks to help alleviate the problem of oversized classes in the country. For 2020, the overall classroom requirement is 3,533. This is expected to increase to 4,247 in 2030.

The standard teacher to pupil ratio for preschool children is 1 teacher to 25 pupils. For 2020, the required number of teachers for kindergarten is 1,269. This is expected to increase to 1,526 teachers by 2030. For the rest of the grade levels, the minimum requirement is 15 students per teacher and the maximum is 65 students per teacher. The ideal ratio is 50 students per teacher. For elementary grade level, the required number of teachers is 927 in

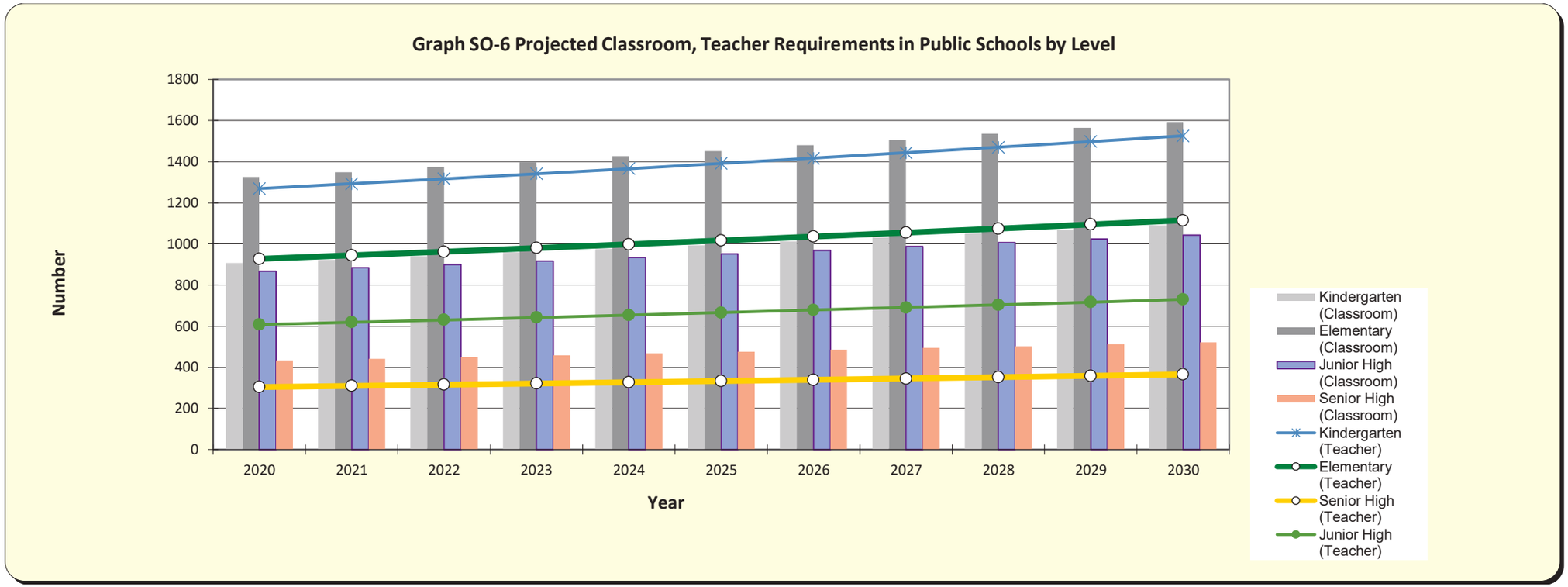
2020. This is expected to increase to 1,115 teachers by 2030. For Junior High, the required number of teachers in 2020 is 607. This is expected to increase to 730 teachers in 2030. For Senior High, the required number of teachers is 304. This is expected to increase to 365 teachers in 2030.

Table SO-6. Projected Classroom, Teacher Requirements in Public Schools by Level

Level	Planning Period										
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Projected Enrollment	**123,639**	**125,938**	**128,281**	**130,667**	**133,097**	**135,573**	**138,094**	**140,663**	**143,279**	**145,944**	**148,659**
Kindergarten	31,720	32,310	32,911	33,523	34,147	34,782	35,429	36,088	36,759	37,443	38,139
Elementary	46,361	47,223	48,102	48,996	49,908	50,836	51,782	52,745	53,726	54,725	55,743
Junior High School	30,372	30,936	31,512	32,098	32,695	33,303	33,923	34,554	35,196	35,851	36,518
Senior High School	15,186	15,468	15,756	16,049	16,348	16,652	16,961	17,277	17,598	17,925	18,259
Classroom	**3,533**	**3,598**	**3,665**	**3,733**	**3,803**	**3,874**	**3,946**	**4,019**	**4,094**	**4,170**	**4,247**
Kindergarten	906	923	940	958	976	994	1,012	1,031	1,050	1,070	1,090
Elementary	1,325	1,349	1,374	1,400	1,426	1,452	1,479	1,507	1,535	1,564	1,593
Junior High School	868	884	900	917	934	952	969	987	1,006	1,024	1,043
Senior High School	434	442	450	459	467	476	485	494	503	512	522
Teacher	**3,107**	**3,165**	**3,224**	**3,284**	**3,345**	**3,407**	**3,470**	**3,535**	**3,601**	**3,668**	**3,736**
Kindergarten	1,269	1,292	1,316	1,341	1,366	1,391	1,417	1,444	1,470	1,498	1,526
Elementary	927	944	962	980	998	1,017	1,036	1,055	1,075	1,095	1,115
Junior High School	607	619	630	642	654	666	678	691	704	717	730
Senior High School	304	309	315	321	327	333	339	346	352	359	365

Note:

Refer to Demographic Study for the Projected School-Going Age Population (Table DE-17 of Demographic Study)



2. Projected Enrollment (Elementary Level)

Projecting the enrollment numbers of elementary grade level was completed using enrollment data of previous school years from the Philippine Statistics Authority. Existing enrollment show decreasing trends in enrollment. Thus, these affected projections in the following years. Total enrollment in the elementary grade in 2021 is 24,768. This is to decrease to 16,796 enrollments in 2030.

Grade Level	Projected 2021-2022	Projected 2022-2023	Projected 2023-2024	Projected 2024-2025	Projected 2025-2026	Projected 2026-2027	Projected 2027-2028	Projected 2028-2029	Projected 2029-2030
Grade 1	4,197	4,108	4,018	3,928	3,838	3,749	3,659	3,569	3,479

Grade 2	4,956	5,116	5,275	5,434	5,593	5,753	5,912	6,071	6,230
Grade 3	4,467	4,321	4,176	4,030	3,885	3,739	3,594	3,448	3,303
Grade 4	3,609	3,316	3,023	2,730	2,437	2,144	1,851	1,558	1,265
Grade 5	3,922	3,613	3,303	2,994	2,685	2,376	2,066	1,757	1,448
Grade 6	3,617	3,299	2,980	2,662	2,344	2,026	1,707	1,389	1,071
Total	**24,768**	**23,771**	**22,775**	**21,778**	**20,782**	**19,785**	**18,789**	**17,792**	**16,796**

Table SO-1. Education Analysis Matrix

Technical Findings/ Observations	Implications (Effects)	Policy Options/ Interventions
Educational Infrastructure		
Classroom overcrowding	With the number of learners enrolled in schools increasing, schools are forced to put more learners in each classroom. This overcrowding can have negative effects on teachers' morale, learners' behavior and classroom equipment.	Construction of new school buildings/classrooms with adequate educational materials and facilities; LGU shall identify public lands for education purposes; Land Banking for future needs
Poor condition of classrooms	The poor condition of classrooms affects the performance of teachers and students. In this case, the teachers are always pressured to make sure all their learners will have equal opportunities in learning, hearing and understanding the lessons.	To obtain budgetary allocation for the repair, rehabilitation and maintenance of school buildings.
Schools that are easily flooded or situated in flood-prone areas	The increase in flood intensity and frequency affects the total well-being of learners in regard to: access to food, health, school attendance, access to clean water and sanitation, physical and social security. Flooding causes loss of learning hours, outbreak of waterborne diseases, and frequent absenteeism leading to learner's poor academic performance.	Learners need to be taught how to prepare, mitigate, prevent, respond to and recover from flood disasters. Both structural and non-structural measures need to be put in place to reduce the vulnerability of schools and learners to flood disasters. Building codes and standards need to be enforced to avoid the use of substandard buildings and building materials, as these threaten the lives of learners and teachers. Before any construction of public buildings, there is need for land-use planning and zoning so that areas that are fragile will not be occupied. There is also need for road maintenance to schools and construction of bridges so that all the communities and schools will be accessible by road.

Inappropriate school fencing	School fencing not only provide adequate protection, but also be aesthetically pleasing. Fencing helps school to establish ownership and to define tangible perimeters, encouraging responsible usage of land by the public and minimizing "unowned" space.	Budget allocation and effective planning in the installation and repair of fencing around school grounds and play areas.
Learners with disabilities continue to encounter physical barriers to educational services, such as a lack of ramps in school buildings, heavy doors, inaccessible washrooms, and/or inaccessible transportation to and from school.	Learners with disabilities continue to face negative attitudes and stereotypes in the education system. Lack of knowledge about and sensitivity to disability issues on the part of some educators, staff and learners can make it difficult for learenrs with disabilities to access educational services equally.	Provide capability trainings to teachers, administrators and supervisors involved in delivering quality education to learners with certain exceptionalities.
		The inclusive education for children and youth with special needs should be made available to children aged zero to four at child development and day care centers. Establishing early detection and interventions in these centers can help learners with disabilities in their developmental milestones, particularly when they join regular classes.
Declining achievement level of elementary and secondary students based on National Achievement Tests (NAT)	Declining quality of education	To capacitate child development workers efficiently and effectively so they can address developmental delays and provide minimum interventions for learners with disabilities.
		Infrastructure problems should be addressed so that future generations of learners do not suffer the physical challenges generated at present.
		Investing and givingfull support to teachers for their in-service professional development and provide the proper incentives through career progression and promotion opportunities as they develop their teaching proficiency” and deeper engagement of stakeholders for support and collaboration.
Large number of drop-out at the secondary level and repetition rate in the elementary,	The school dropout will negatively affect social, economic and learners’ academic achievements.	Intensify Drop-Out Reduction Program through expansion of Open High School Program and additional Community Learning Centers. To ensure universal practices improving the transition mechanism from Grade 6 to 7, strengthening school's capacity to retain learners in school, and expanding
Disparity between the Net Enrollment rate in elementary and secondary		

level is attributed to family's income and the ratio of elementary and secondary schools		the coverage of inclusive education to bring all learners to school through Indigenous People Education (IPED), Muslim Education and community learning centers to ALS.
Education Support Initiatives in Muslim Education	This will provide the Muslim learners with a morally Islamic atmosphere.	Additional Muslim teachers to handle ALIVE classes at public schools.
Education Technology Internet connectivity for public schools -The connections are still either too weak or nonexistent not only in those remote localities from where students have had to walk for kilometers and cross rivers to the nearest school during pre-pandemic times, but even in some urban areas.	Study shows that a decreased implementation of technology will decrease learners' comprehension of content and development of skills in such areas as analytical reasoning, problem solving, information evaluation, and creative thinking.	Many learners are relying on technology for their academic needs. It is recommended to monitor learners' usage and attitudes toward technology. It is also important to best support those learners who are not using the technology. Future studies are needed to address how using technology may contribute to the long-term retention of knowledge and acquisition of skills such as interpersonal communication, psychomotor (a skill that requires the involvement of both mental and physical abilities), and cognitive skills within different courses.
The bottlenecks and barriers in the implementation of Senior High School (SHS): only a few could provide a reasonably diverse set of tracks and strands. For schools that could somehow offer SHS, many had to make do with inadequate classrooms, laboratories, or workshops.	Learners lost the opportunity for hands-on experience of their chosen tracks and strands	Make more realistic assessment of delivery of program inputs (teachers, learning resources, school buildings, facilities, tools and equipment) considering procurement and capacity issues
		Continue program advocacy and dialogue with different stakeholders to improve their understanding of the needs of the program and to rally support for it
		Review of curriculum content, with consideration to teachers' and students' perspectives
		Continue to address the inadequacies in program inputs (teachers, learning resources, school buildings, facilities, tools and equipment).
		Sustain and enhance the implementation of the SHS Voucher Program despite the disruptive effects of the national health emergency.
		Enhance the comprehensive career guidance program to ensure tracks and strands are learners' choice-relevant, timely, community driven and responsive.

Reshaping education amidst COVID-19	The longer it takes for education to continue, the more chances for the learner to drop out of school; learners mind will easily be taken over by the virtual world of games; it may even wander off to juvenile delinquency; will be disinterested and unmotivated to continue education, and becoming detrimental to himself, to his family and to the society.	To prepare our teachers and learners for what we call as the new normal in the education system. Teachers and learners in the new normal in education shall be efficient in the use of technology; finding the best learning platform for students to use; and addressing the educational needs unique to each community.
		Identify recovery measures that the government could take in response to the pandemic and ensure that the country has a sustainable and a resilient education system during emergency situations.
		To strengthen the capability of our schools for them to provide quality education even during crises and calamities.

Program/Projects Approved and Funded for Implementation:

The need to construct more room facilities, fencing of schools, land filling to flood–prone school areas and improving infrastructure that are resilient to climate (weather) change, man-made and natural-made calamities to ensure the safety and protection of the learners. The standard of education must also be constantly improving to enable to achieve more topnotchers and achievers. Free education and more scholarship grants must be promoted to encourage learners to pursue education and livelihood assistance to poor families of good standing students and learners. Thus, programs. projects and activities are aligned to "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all."

no	PROGRAM	PROGRAM COMPONENTS	ACTIONS/INTERVENTIONS	TIMEFRAME	FUND SOURCE
Education Services		(Project)	(Activities)		
1	Infrastructure Development	1.1 Construction and improvement of School Buildings and facilities	1.1.1 Construction of School Buildings, Classrooms and Assessment Center SHS TVL 1.1.2 Construction of Senior High School Techbook Laboratory Workshop Building 1.1.3 Construction of Science Laboratory to identified schools 1.1.4 Construction of School Building for Children/learners with special needs 1.1.5 Construction of school fences to identified schools	2020-2030	DepEd/20% CDF
2	Disaster Risk reduction Program	1.2 Disaster preparedness and public safety	1.2.1 Construction of Flood Control System to identified flood prone schools 1.2.2Public and Private schools to formulate DRRM Plan 1.2.3Installation of early warning devices to all schools 1.2.4 Construction of Land Slide protection at Timako ES, Kal. 2	2020-2030	DepEd/LDRRMF
3	Multi-Grade Education in	1.3 Teachers Capacity Development	1.3.1 Training on Effective approach of Teaching in the Multi-Grade Education. 1.3.2 Integrating the Culture of Peace in the educational curriculum	2020-2030	DepEd

	the far-flung areas		1.3.3 IT Trainings for Teachers		

5.2 Health

a. General Heath Situation

Vital statistics on the health status of Cotabato City can be divided into the following: (1) Morbidity; (2) Mortality, and (3) Natality. Analysis on the upward or downward trend of these statistics is a significant detail for health program planning and interventions. Common causes of illness and death among all ages are identified to shed light to the proper health care systems improvement.

Morbidity

From 2015 to 2020 more or less half of these morbidities for all ages are lifestyle induced. Pneumonia reveals to be a great health issue since it remained the top 1 highest cause of morbidity in the city in the 5-year period. COVID 19 which is an emerging infectious disease had already climbed to top 3 and is still climbing higher in the present situation. Meanwhile, four of the most common deadly lifestyles diseases also make it to the top 10 causes of illness of the people namely hypertension, diabetes mellitus, heart disease and kidney diseases.

Crude Birth rate is derived by dividing live births (LB) to the baseline projected total population (TP) per 1,000 population. The table below shows the trend of CBR is increasing despite the decrease in population due to the adjustment brought about by the 2015 Census. Thus, by analogy it can be inferred that the decrease of the baseline total population in 2018 has shown little or no significant impact as the upward trend of birth rates per year has not been disturbed.

The 2015 Regional Social and Economic Trends (RSET) registered the Projected Total Fertility Rate of the city from 2000-2020 at 2.34% while the province is a little higher at 3.27%.

The Crude Death Rate of Cotabato City for 2019 is 3.65 which means that around 4 deaths occurred in the city every 1,000 population . This has increased from the previous figure of 3.18. Despite the rise, the Crude Death Rate (CDR) of Cotabato City is still lower than the national CDR of 5.6 or deaths per 1,000 population.

Tabel SO-10 shows the CDR computed by dividing the number of deaths to the baseline total population. The data show an increasing trend by 2015 to 2019. However, in 2018 there is a drop in the CDR because of the total adjustment made in the total Population which was based in the 2015 Census. It is also noteworthy to mention that despite the significant drop of population from 2017 to 2018, the difference between the two years is very minimal. Moreover, there is an observable slight increase in CDR from 2018 to 2019.

The number of deaths, for the past five (5) years, is generally higher among men compared to women. It is inferred that men's illness are commonly attribute to lifestyle diseases. As generally observed, the male population tends to engage in external vices like smoking, drinking liquors and substance abuse. They are also more exposed to hard labour, like construction, chemical and machinery operation.

Data on the death of an infant (below one (1) year old) and children below 5 years old pose a significant aspect on the part of health program interventions. The national target is zero (0) death.

In 2019, the Infant Mortality Rate is 4.87 which means that there are around 5 deaths in the city for every 1,000 livebirths.

The table below shows that infant mortality and under five mortality rate is on an upward trend except for a significant decrease in 2018. This is attributed to the fact that the figures in 2018 only reflect those who are residents of the city. However, despite the decrease it is still the highest in Region XII. However, the infant mortality rate of Cotabato City reached the target set in the National Objectives for Health 2022 which is ≤15 deaths per 1,000 live births.

The 2018 RSET register only 1 maternal case for Cotabato City in 2015 and 3 cases in 2016, while no available data yet for 2017 to 2019. The region recorded 79 Maternal Mortality cases in 205 and 61 in 2016.

Table SO-10. General Health Situation for the Past Five Years

Health Indicator	City										Provincial	
	2015		2016		2017		2018		2019		2015-2020	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Fertility												
Crude Birth Rates (CBR)	3,852	10.95	4,403	11.90	6,700	20.93	7,261	22.98	7,383	22.94		
Total Fertility Rate (TFR)		2.34		2.34		2.34		2.34		2.34		3.27
Morbidity												
General Medical												
Consultative Rate												
Hospitalization Rate												
Mortality												
Crude Death Rate (CDR)	861	2.45	1,028	2.77	1,186	3.70	1,045	3.31	1,176	3.65		
Proportioned Mortality Rate(PMR)												
Infant Mortality Rate(IMR)	25	6.49	30	6.81	139	20.75	35	4.82	30	4.87		

Young Child Mortality Rate(YCMR)	38	9.87	43	9.77	143	21.34	42	5.78	39	6.33		
Maternal Mortality Rate (MMR)	1		3								140	

Source: 2015 RSET

b. Medical Facilities in Cotabato Ctiy

The city is the center of Medical care and Services in Region XII and BARMM. We have the presence of medical field specialists. There are total of 5 hospitals in Cotabato City. Five (4) of them are privately owned and all primary level Hospitals. Only the Cotabato Regional Medical Center is a government run hospital. It is a Tertiary level and a Regional Center Health facility catering to Region XII and BARMM area. It has the most capacity to cater in-house patients having 375 beds. The hospital with the least number of beds is Unified Doctors Hospital at 24 beds. Out of 5 hospitals, only CRMC disclosed its number of personnel. It has 143 doctors, 294 nurses, 144 midwives, and 397 other personnel.

The publicly owned medical health facilities include the Office on Health Services (OHS) Main Health Center and all the 37 barangays has their respective Barangay Health Stations except for Barangays RH 10, RH MB and Tam MB has extension Health Stations, hence having a total of 40 Barangays Health Centers.

The Office on Health Services has 3 doctors, 27 nurses, and 4 midwives. Each barangay health stations have one midwife each.

All of the facilities are operational. Four hospitals including the office on health services have low susceptibility to flood. Cotabato Peuriculture Center is moderately susceptible to flood. For the barangay health stations, 3 are very highly susceptible to flood, 9 are highly susceptible to flood. While 20 are lowly susceptible to flood.

There are 8 medical facilities said to be moderately susceptible to tsunami.

Table SO-11. Medical Health Facilities and Personnel, Year 2018

Name of Health Facility	Brgy.	Ownership	Capacity (No. of Beds)	No. of Personnel						Physical Condition	Hazard Susceptibility (H/M/L)						
				Doctors	Nurses	Midwives	Sanitary Inspectors	Others	Total		Fl	Tc	Eq	Ln	Ts	Su	Others
Hospital																	
a.Cotabato Regional and Medical Center	Rosary Heights 10	Public	375	143	294	144	0	397	978	Operational	L						
b.Notre Dame Hospital (Private)	Rosary Heights 9	Private	100							Operational	L						
c. Cotabato Medical Specialist	Rosary Heights 2	Private	45							Operational	L						
d. United Doctors Hospital	Rosary Heights 2	Private	24							Operational	L						
e. Cotabato Puericulture Center	Poblacion 6	Private	30							Operational	M						
f. Office on Health Services	Rosary Heights	Public	N/A	3	27	4				Operational	L				M		

	Mother Barangay																
Barangay Health Station																	
1.) BHS 1	Bagua Mother	Public	N/A			1				Operational	H				M		
2) BHS 2	Bagua I	Public	N/A			1				Operational	H				M		
3) BHS 3	Bagua II	Public	N/A			1				Operational	H						
4) BHS 4	Bagua III	Public	N/A			1				Operational	L						
5) BHS 5	Kalanganan Mother	Public	N/A			1				Operational	H				M		
6.) BHS 6	Kalanganan I	Public	N/A			1				Operational	VH						
7) BHS 7	Kalanganan II	Public	N/A			1				Operational	H				M		
8) BHS 8	Poblacion Mother	Public	N/A			1				Operational	L						
9) BHS 9	Poblacion I	Public	N/A			1				Operational	VH						
10) BHS 10	Poblacion II	Public	N/A			1				Operational	L						
11.) BHS 11	Poblacion III	Public	N/A			1				Operational	L						
12) BHS 12	Poblacion IV	Public	N/A			1				Operational	L						
13) BHS 13	Poblacion V	Public	N/A			1				Operational	L				M		
14) BHS 14	Poblacion VI	Public	N/A			1				Operational	L				M		
15) BHS 15	Poblacion VII	Public	N/A			1				Operational	VH				M		
16.) BHS 16	Poblacion VIII	Public	N/A			1				Operational							
17) BHS 17	Poblacion IX	Public	N/A			1				Operational							
18) BHS 18	Rosary Heights Mother	Public	N/A			1				Operational	L						
19) BHS 19	Rosary Heights I	Public	N/A			1				Operational	L						
20) BHS 20	Rosary Heights II	Public	N/A			1				Operational	L						
21.) BHS 21	Rosary Heights III	Public	N/A			1				Operational	L						
22) BHS 22	Rosary Hneights IV	Public	N/A			1				Operational	L						
23) BHS 23	Rosary Heights V	Public	N/A			1				Operational	L						

Name of Health Facility	Brgy.	Ownership	Capacity (No. of Beds)	No. of Personnel						Physical Condition	Hazard Susceptibility (H/M/L)						
				Doctors	Nurses	Midwives	Sanitary Inspectors	Others	Total		FI	Tc	Eq	Ln	Ts	Su	Others
24) BHS 24	Rosary Heights VI	Public	N/A			1				Operational	L						
25) BHS 25	Rosary Hneights VII	Public	N/A			1				Operational							
26.) BHS 26	Rosary Heights VIII	Public	N/A			1				Operational	L						
27) BHS 27	Rosary Heights IX	Public	N/A			1				Operational	L						
28) BHS 28	Rosary Heights X	Public	N/A			1				Operational	L						
29) BHS 29	Rosary Heights XI	Public	N/A			1				Operational	L						
30) BHS 30	Rosary Heights XII	Public	N/A			1				Operational							
31.) BHS 31	Rosary Heights XIII	Public	N/A			1				Operational	L						
32) BHS 32	Tamontaka Mother	Public	N/A			1				Operational	H				M		
33) BHS 33	Tamontaka I	Public	N/A			1				Operational							

34) BHS 34	Tamontaka II	Public	N/A			1				Operational	H						
35) BHS 35	Tamontaka III	Public	N/A			1				Operational							
36.) BHS 36	Tamontaka IV	Public	N/A			1				Operational	H						
37) BHS 37	Tamontaka V	Public	N/A			1				Operational							
38) BHS 38 RH10-B	Rosary Heights 10	Public	N/A			1				Operational	L						
39) BHS 39 RHMB - Ext	Rosary Heights Mother	Public	N/A			1				Operational	L				M		
40) BHS 40 TamMB EXT	Tamontaka Mother	Public	N/A			1				Operational	H						

Source: Office on Health Services

Notes:

Ownership – Public/Private
Physical Condition – Operational (O), Needs Repair (NR), Not Operational (NO)
Indicate level of susceptibility for all hazards: High (H), Moderate (M), Low (L)
Types of hazards – Flood (Fl), Tropical Cyclone (Tc), Earthquake (Eq), Volcano (Vo), Landslide (Ln), Tsunami (Ts), Storm Surge (Su), Others (e.g. coastal erosion, sea level rise, land subsidence, liquefaction, strong wind, change in temperature, change in rainfall, etc.)

c. Ten Leading Causes of Morbidity and Mortality for the Past Five Years

In the past 5 years, the top-ranking causes to morbidity is Pneumonia, followed by gastroenteritis, followed by hypertension, followed by pulmonary TB and UTI in a constant same order. While from Rank 6 to 10 namely Heart Disease, Diabetes Mellitus, Bronchial Asthma, Malnutrition and measles with only a minor change in terms of order.

Table SO-12. Ten Leading Causes of Morbidity for the Past Five Years

Causes	MORBIDITY				
	2014	2015	2016	2017	2018
1. Pneumonia	3051	2982	3267	2619	3377
2. Gastroenteritis	2483	1980	1625	1391	1568
3. Hypertension	2123	1870	1625	1391	1568
4. PTB	706	1217	704	979	1149
5. UTI	559	521	525	469	765
6. Heart disease	506	307	205	193	197
7. Diabetis mellitus	322	300	358	286	466
8. Bronchial asthma	259	193	181	143	159
9. Malnutrition	193	337	161	61	33
10. Measles	193	21	2	5	245
TOTAL	**10,395**	**9,728**	**8,653**	**7,537**	**9,527**

Source:Office on Health Services

Table SO-13. Ten Leading Causes of Mortality for the Past Five Years

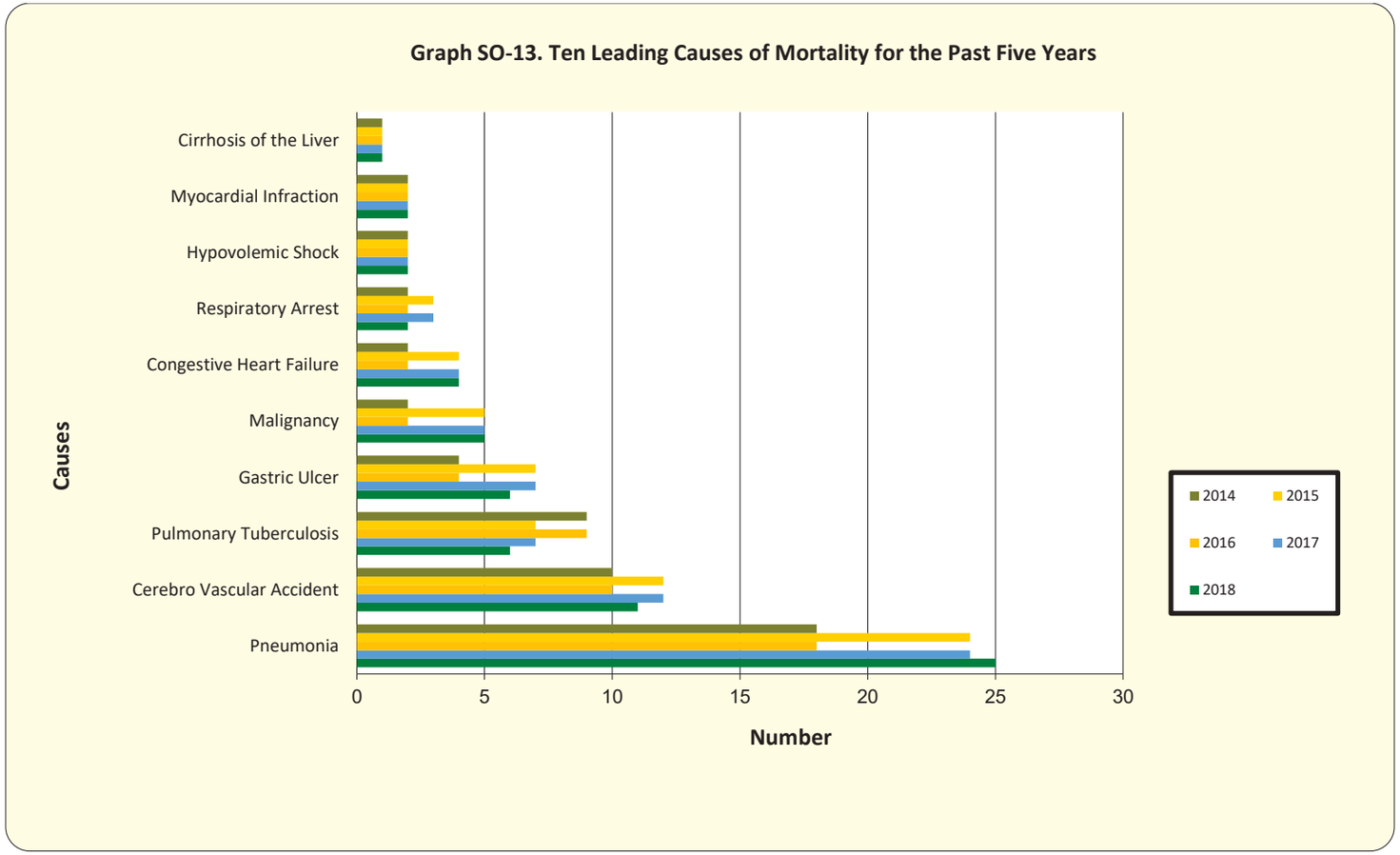
Causes	City																			
	2014				2015				2016				2017				2018			
	M	F	Total	%	M	F	Total	%	M	F	Total	%	M	F	Total	%	M	F	Total	%
Pneumonia	10	8	18	34.6	10	14	24	35.8	10	8	18	34.6	10	14	24	35.8	15	10	25	39.1
Cerebro Vascular Accident	6	4	10	19.2	8	4	12	17.9	6	4	10	19.2	8	4	12	17.9	6	5	11	17.2
Pulmonary Tuberculosis	8	1	9	17.3	3	4	7	10.4	8	1	9	17.3	3	4	7	10.4	2	4	6	9.4
Gastric Ulcer	1	3	4	7.7	4	3	7	10.4	1	3	4	7.7	4	3	7	10.4	3	3	6	9.4
Malignancy	0	2	2	3.8	1	4	5	7.5	0	2	2	3.8	1	4	5	7.5	2	3	5	7.8
Congestive Heart Failure	2	0	2	3.8	2	2	4	6.0	2	0	2	3.8	2	2	4	6.0	3	1	4	6.3
Respiratory Arrest	2	0	2	3.8	1	2	3	4.5	2	0	2	3.8	1	2	3	4.5	2	0	2	3.1
Hypovolemic Shock	0	2	2	3.8	1	1	2	3.0	0	2	2	3.8	1	1	2	3.0	2	0	2	3.1
Myocardial Infraction	1	1	2	3.8	2	0	2	3.0	1	1	2	3.8	2	0	2	3.0	2	0	2	3.1
Cirrhosis of the Liver	1	0	1	1.9	1	0	1	1.5	1	0	1	1.9	1	0	1	1.5	0	1	1	1.6
TOTAL			52				67				52				67				64	

Source: Office of Health Services

Note:

% = (Total per cause/Overall total) x 100

Tabulate data for at least 3 consecutive years if data for the last 5 years is not available



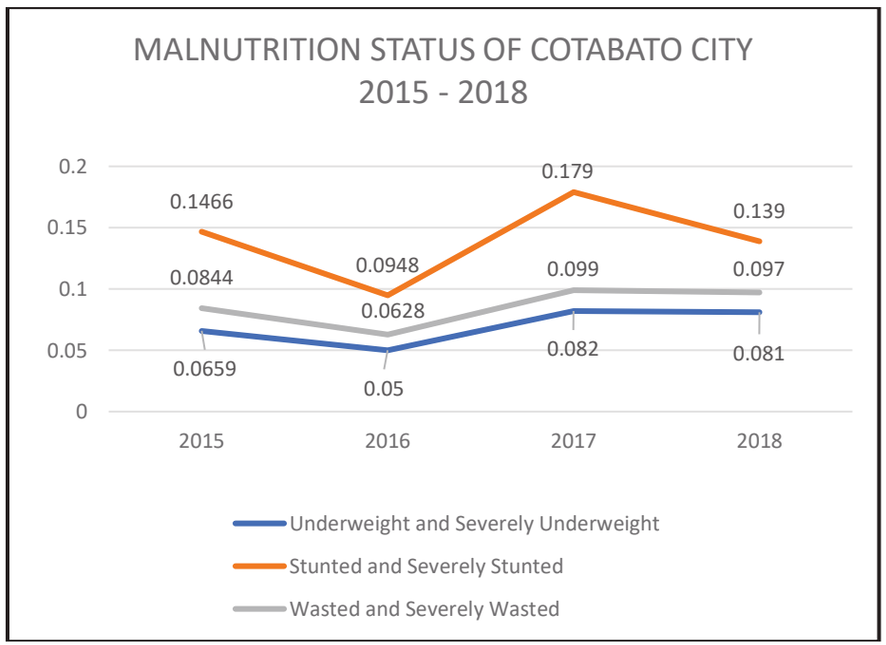
d. Malnutrition Situation

The Table SO-14 shows the Malnutrition situation of Cotabato City for the past 5 years from the period 2014-2018 where the City registered as the highest prevalence rate in the region in 2018 at 11. 50% while the region at only 3.41%. The Normal, Underweight and severely underweight children display a down trend from 2014 to 2016 but start to go up in 2017 to 2018, while the over-weight shows a fluctuation trend.

Table SO-14. Malnourished Children for the Past Five Years

Degree of Malnutrition	COTABATO CITY					2018 Prevalence Rate	
	2014	2015	2016	2017	2018	City	Region XII
	#	#	#	#	#		
Normal	19,322	16,871	14,438	11,098	9,214		
Underweight	1,223	889	885	762	899	11.50	3.41
Severely Underweight	569	332	217	249	445		
Over-weight	533	425	592	503	690		

Source: 2019 RSET, PSA
Notes: % = (No. per degree of malnutrition/Total no. of children) x 100



e. Cemeteries / Memorial Parks

Presently Cotabato City has only one available public cemetery which is the Malagapas Cemetery with an area of 1.5 hectare, partitioned in the following - 1 ha. for Christian and .5ha. for Muslim. The old public cemetery located along Ramon Rabago Street, Barangay Rosary Heights Mother is already at its full capacity and cannot anymore accomodate burials.

The Malagapas Cemetery should cater to all who like their dead/decease family buried there. However, it has been observed that most of those who bury their dead/deceased are those who cannot afford the cost of a private memorial park. This maybe because of the implication that it was a former dumpsite and the location is water logged during the rainy season.

The Local Government is on its way to establish apartment type niches at the Malagapas Cemetery to address the above-mentioned water-logged problem and provide a more comfortable feel of the living relatives. It intends to strategically enclose the area to maximize the use of available space of the cemetery. At least 300 units of apartment type cemetery niches is viable and targeting to complete 150 units by 2021 and the other 150 units by 2022.

For future requirement, the city is identifying another site for public cemetery for both Muslim and Christian at Barangay Poblacion 8.

Table SO-15. Cemeteries and Memorial Parks, Year 2018

Name of Cemetery/ Memorial Park	Brgy.	Ownership	Area (ha)	Capacity (No. of Plots)	Remarks
Malagapas Cemetery	RH 10	City Government	1.5 has	101 plots	Public
Muslim Cemetery, Malagapas, RH 10	RH 10	City Government			Public
Public Cemetery	RH Mother Barangay	City Government	1 has.	3855 plots	Public
Catholic Cemetery	RH 1	Private	1.44 has	4,322 plots	Catholic
Chinese Cemetery	RH IV	Private	1.53 has	3,920 plots	Chinese

Source: CENRO 2019

Notes:

Ownership – Public/Private

Remarks may include other characteristics of the cemetery: for example, if the cemetery is only for Catholics, Muslim, etc.

f. Occupied Housing Units by Type of Toilet Facilities

Table SO-16 is derived from the CBMS survey conducted in 2017-20218 for the household type of toilet facilities. The team currently covers about 80-90% of the entire household population. Out of the total 51,435 household surveyed 49,438 household have sanitary toilet facility or 96%, while a total of 2,000 household have unsanitary toilet facilities or 3.8% of the total household surveyed.

Table SO-16. Number of Households in Occupied Housing Units by Type of Toilet Facilities, Year 2018

Barangay	Type of Toilet Facility (No.)							
	Sanitary				Unsanitary			
	Own Flush	Shared Flush	Closed Pit Latrine	TOTAL	Open Pit Latrine	Drop/ Overhang	No Facility/ Field	TOTAL
Bagua MB	1,779	564.00	175	2,518	50	-	21	71
Kalanganan MB	1,680	602	319	2,601	115	-	144	259
Poblacion MB	2,014	547	311	2,872	38		20	58
Rosary Heights MB	1,515	400	171	2,086	8		2	10
Tamontaka MB	1,459	594	247	2,300	79		29	108
Bagua 1	926	284	144	1,354	13		97	110
Bagua 2	2,043	557	306	2,906	56		9	65
Bagua 3	1,041	418	87	1,546	6		13	19
Kal. 1	369	141	138	648	81		17	98
Kal. 2	508	199	230	937	147		41	188
Poblacion 1	572	194	86	852	89		11	100
Poblacion 2	717	247	106	1,070	28		3	31
Poblacion 3	408	155	48	611	9		4	13
Poblacion 4	623	248	62	933	1		1	2
Poblacion 5	386	215	9	610	2		-	2
Poblacion 6	312	169	45	526	9		2	11
Poblacion 7	1,730	591	323	2,644	119		84	203
Poblacion 8	834	348	156	1,338	25		19	44
Poblacion 9	488	154	80	722	13		1	14
RH 1	782	200	46	1,028	11		-	11
RH 2	772	224	60	1,056	1		1	2
RH 3	1,465	468	367	2,300	29		21	50
RH 4	658	166	58	882	10		-	10
RH 5	909	259	117	1,285	3		1	4
RH 6	741	167	190	1,098	1		-	1
RH 7	1,124	369	118	1,611	33		3	36
RH 8	1,064	284	74	1,422	6		2	8
RH 9	1,040	344	110	1,494	11		11	22
RH 10	1,751	770	340	2,861	30		43	73
RH 11	927	148	115	1,190	4		4	8

Barangay	Type of Toilet Facility (No.)							
	Sanitary				Unsanitary			
	Own Flush	Shared Flush	Closed Pit Latrine	TOTAL	Open Pit Latrine	Drop/ Overhang	No Facility/ Field	TOTAL
RH 12	537	97	49	683	2		-	2
RH 13	530	232	59	821	1		-	1
Tam. 1	486	84	51	621	7		2	9
Tam. 2	265	180	35	480	62		35	97
Tam. 3	187	124	447	758	25		22	47
Tam. 4	407	72	41	520	188		1	189
Tam. 5	133	51	67	251	24	-	-	24
TOTAL	33,182	10,866.00	5,387	49,435	1,336	-	664	2,000

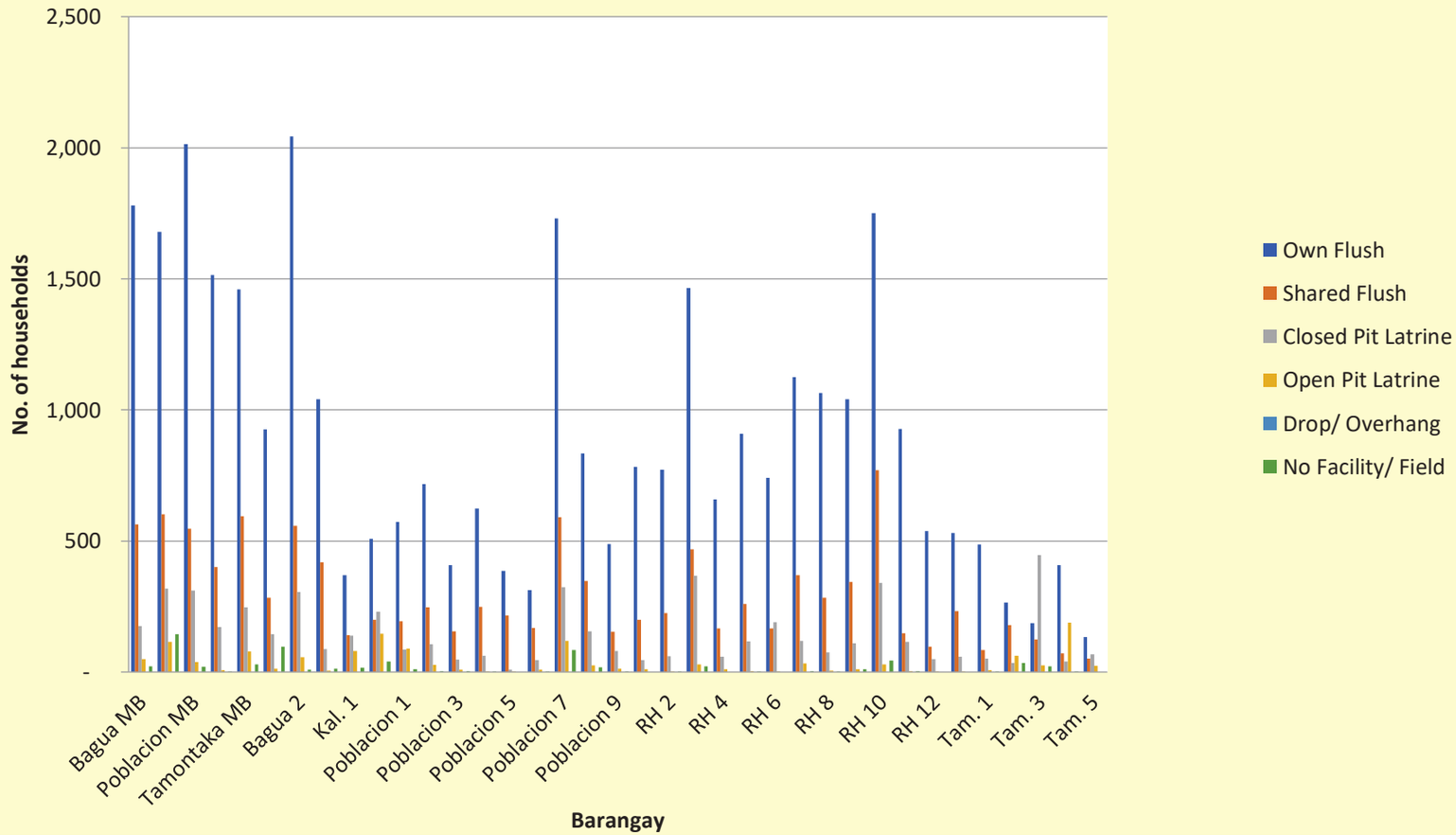
Source: CPDO-CBMS 2017

Notes:

Type of Toilet Facility

1. *Own flush – refers to water-sealed type of toilet facility leading to a depository, and is used exclusively by a household*
2. *Shared flush – same as own flush but shared with other households*
3. *Closed Pit Latrine – toilet facility without water-sealed bowl and box for sitting/squatting. The depository is usually made of tubes with concrete/clay covered top with a small opening.*
4. *Open Pit Latrine – same as closed pit but without covering*
5. *Drop/Overhang – can be a pail system wherein fecal matter is contained in a pail and is picked up for disposal, or any other type of toilet facility not belonging to the earlier types*
6. *No facility/field – refers to households without toilet facility*

Graph SO-16. Number of Households in Occupied Housing Units by Type of Toilet Facilities Year 2017



g. Projected Requirements for Barangay Health Facilities, Year 2020-2030

Presently the city has a total of 40 Barangay Health Stations and 1 Main Health Center.The standard requirement is to have 1 barangay health station per 5,000 population. Basing on the projected population at an average annual growth rate of 1.86% the city will have a population of 338,345 by 2020 and the needed health facility shall be 68 BHS. On 2021 the population will be 334,452 and the needed requirement shall be 69 BHS, an additional 1 unit of Barangay Health Station from 2020 to year 2023. There shall be a total of 73 public health facility by year 2024 and additional of 1 unit per year from 2025 to 2030 with an estimated population of 394,791. The population also require an additional Main Health Centers to distribute quality universal health services to the populace.

Table SO- 17. Projected Requirements for Barangay Health Facilities, Year 2020-2030

Barangay	No. of Barangay Health Station*																					
	2020		2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
	Proj. Pop.	BHS Needs	Proj. Pop.	BHS Needs	Proj. Pop.	BHS Needs	Proj. Pop.	BHS Needs	Proj. Pop.	BHS Needs	Proj. Pop.	BHS Needs	Proj. Pop.	BHS Needs	Proj. Pop.	BHS Needs	Proj. Pop.	BHS Needs	Proj. Pop.	BHS Needs	Proj. Pop.	BHS Needs
Bag MB	19,888	4	20,258	4	20,635	4	21,019	4	21,409	4	21,808	4	22,213	4	22,626	5	23,047	5	23,476	5	23,913	5
Bagua I	10,095	2	10,283	2	10,474	2	10,669	2	10,867	2	11,069	2	11,275	2	11,485	2	11,699	2	11,916	2	12,138	2
Bagua 2	21,624	4	22,026	4	22,436	4	22,853	5	23,278	5	23,711	5	24,152	5	24,602	5	25,059	5	25,525	5	26,000	5
Bagua 3	7,508	2	7,648	2	7,790	2	7,935	2	8,082	2	8,233	2	8,386	2	8,542	2	8,701	2	8,863	2	9,027	2
Kal MB	16,469	3	16,775	3	17,087	3	17,405	3	17,729	4	18,059	4	18,395	4	18,737	4	19,085	4	19,440	4	19,802	4
Kal I	6,369	1	6,487	1	6,608	1	6,731	1	6,856	1	6,984	1	7,114	1	7,246	1	7,381	1	7,518	2	7,658	2
Kal 2	6,578	1	6,700	1	6,825	1	6,952	1	7,081	1	7,213	1	7,347	1	7,484	1	7,623	2	7,765	2	7,909	2
Pob MB	22,735	5	23,158	5	23,589	5	24,027	5	24,474	5	24,929	5	25,393	5	25,865	5	26,347	5	26,837	5	27,336	5
Pob 1	6,225	1	6,341	1	6,459	1	6,579	1	6,701	1	6,826	1	6,953	1	7,082	1	7,214	1	7,348	1	7,485	1
Pob 2	6,910	1	7,039	1	7,169	1	7,303	1	7,439	1	7,577	2	7,718	2	7,861	2	8,008	2	8,157	2	8,308	2
Pob 3	3,273	1	3,334	1	3,396	1	3,459	1	3,523	1	3,589	1	3,656	1	3,724	1	3,793	1	3,863	1	3,935	1
Pob 4																						

	7,079	1	7,211	1	7,345	1	7,481	1	7,621	2	7,762	2	7,907	2	8,054	2	8,204	2	8,356	2	8,512	2
Pob 5	3,366	1	3,429	1	3,492	1	3,557	1	3,624	1	3,691	1	3,760	1	3,829	1	3,901	1	3,973	1	4,047	1
Pob 6	5,648	1	5,753	1	5,860	1	5,969	1	6,080	1	6,193	1	6,308	1	6,426	1	6,545	1	6,667	1	6,791	1
Pob 7	17,229	3	17,549	4	17,876	4	18,208	4	18,547	4	18,892	4	19,243	4	19,601	4	19,966	4	20,337	4	20,716	4
Pob 8	9,634	2	9,813	2	9,996	2	10,182	2	10,371	2	10,564	2	10,760	2	10,961	2	11,164	2	11,372	2	11,584	2
Pob 9	6,577	1	6,699	1	6,824	1	6,951	1	7,080	1	7,212	1	7,346	1	7,483	1	7,622	2	7,764	2	7,908	2
RH MB	15,289	3	15,573	3	15,863	3	16,158	3	16,459	3	16,765	3	17,077	3	17,394	3	17,718	4	18,047	4	18,383	4
RH 1	4,310	1	4,390	1	4,472	1	4,555	1	4,640	1	4,726	1	4,814	1	4,903	1	4,995	1	5,088	1	5,182	1
RH 2	5,489	1	5,591	1	5,695	1	5,801	1	5,909	1	6,019	1	6,131	1	6,245	1	6,361	1	6,479	1	6,600	1
RH 3	11,827	2	12,047	2	12,271	2	12,499	2	12,732	3	12,969	3	13,210	3	13,456	3	13,706	3	13,961	3	14,220	3
RH 4	4,800	1	4,889	1	4,980	1	5,073	1	5,167	1	5,263	1	5,361	1	5,461	1	5,563	1	5,666	1	5,771	1
RH 5	6,437	1	6,557	1	6,679	1	6,803	1	6,929	1	7,058	1	7,190	1	7,323	1	7,460	1	7,598	2	7,740	2
RH 6	7,507	2	7,647	2	7,789	2	7,934	2	8,081	2	8,232	2	8,385	2	8,541	2	8,700	2	8,861	2	9,026	2
RH 7	10,151	2	10,340	2	10,532	2	10,728	2	10,928	2	11,131	2	11,338	2	11,549	2	11,764	2	11,982	2	12,205	2
RH 8	9,347	2	9,521	2	9,698	2	9,878	2	10,062	2	10,249	2	10,440	2	10,634	2	10,832	2	11,033	2	11,239	2
RH 9	8,555	2	8,714	2	8,876	2	9,041	2	9,209	2	9,381	2	9,555	2	9,733	2	9,914	2	10,098	2	10,286	2
RH 10	17,251	3	17,572	4	17,899	4	18,232	4	18,571	4	18,916	4	19,268	4	19,626	4	19,991	4	20,363	4	20,742	4
RH 11	8,623	2	8,783	2	8,947	2	9,113	2	9,283	2	9,455	2	9,631	2	9,810	2	9,993	2	10,179	2	10,368	2
RH 12	5,114	1	5,209	1	5,306	1	5,405	1	5,505	1	5,608	1	5,712	1	5,818	1	5,926	1	6,037	1	6,149	1
RH 13	5,425	1	5,526	1	5,629	1	5,733	1	5,840	1	5,949	1	6,059	1	6,172	1	6,287	1	6,404	1	6,523	1

Tam MB	13,188	3	13,433	3	13,683	3	13,938	3	14,197	3	14,461	3	14,730	3	15,004	3	15,283	3	15,567	3	15,857	3
Tam 1	4,850	1	4,940	1	5,032	1	5,126	1	5,221	1	5,318	1	5,417	1	5,518	1	5,620	1	5,725	1	5,831	1
Tam 2	4,588	1	4,673	1	4,760	1	4,849	1	4,939	1	5,031	1	5,124	1	5,220	1	5,317	1	5,416	1	5,516	1
Tam 3	2,994	1	3,050	1	3,106	1	3,164	1	3,223	1	3,283	1	3,344	1	3,406	1	3,470	1	3,534	1	3,600	1
Tam 4	4,102	1	4,178	1	4,256	1	4,335	1	4,416	1	4,498	1	4,582	1	4,667	1	4,754	1	4,842	1	4,932	1
Tam 5	1,291	1	1,315	1	1,339	1	1,364	1	1,390	1	1,416	1	1,442	1	1,469	1	1,496	1	1,524	1	1,552	1
Total	328,345	68	334,452	69	340,673	70	347,010	71	353,464	73	360,038	74	366,735	75	373,556	76	380,504	78	387,582	79	394,791	80

Note:

**Computed based on ratio of 1 Barangay Health Station per 5,000 population and using the projected population in demographic study.*

Table SO-9. Health and Sanitation Analysis Matrix

Technical Findings/ Observations	Implications (Effects)	Policy Options/ Interventions
Infrastructure Needs of the City Health Office is growing and there are no clear guidelines and policy for the provision of space.(Space for Nutrition Center, HIV and AIDS Primary Care Hub, Teen Center, TB-DOTS Center, Warehouse and Cold-Storage, Sanitation and Environment Center, Health Emergency Center, Birthing Homes, Barangay Health Stations)	Loss of Investment Opportunities from the DOH through the HFEP and others; and deprivation of quality service in the health deliveries.Mismatch use of space at the main health center sharing with LGU motorpool-next to the birthing facility	Clear Guidelines and Policy should be discussed in the LHB and recommendations forwarded to the Executive and the Legislative branches
Improper disposal of healthrelated waste from the LGU	Population may be at risk due to exposure	Policy on technology for health waste disposal; provision of space.
Human Resource on Health deficit due to shortage, population growth, and fast turn-over	Health Service Delivery may not be delivered or there may be deterioration of services	HR requirements should be reviewed and recommendations submitted to the Executive and the Legislative for actions

Congested public cemetery	Risks of burials spilling and encroaching on adjoining properties, roads and cemetery pathways- critical areas (along Sinsuat Avenue, Motorpool near DPWH)	Expansion of existing cemetery in suitable areas; closure of cemetery; identification ofpotential land for cemetery; Development of a Master Plan for Cemetery under the Enterprise Development of the City; the emerging of a crematorium and columbarium services is also a potential enterprising project for the city with minimum land requirement
	Cause of heavy traffic during Observation of Undas	Rerouting of traffic flow during Undas and no parking policy
Improper disposal /inadequate treatment of hazardous/pollutive hospital/industrial wastes	Population at risk to infection/spread of diseases	Policy that waste generators shall be responsible for the proper management and disposal of waste and to bear the costs attendant to it, while waiting for the facility to be provided by the City Government.
		Provision of space/ technology for the disposal /treatment of hospital/industrial hazardous wastes
		Imposition of pollution charge policy
Presence of ecoli / contamination of river water/ bodies of water	Exposure to water borne diseases	Periodic testing of water source
	Health risks to families /individuals using water or bathing from these sources/bodies of water	Construction of communal sanitary toilet
		Promote zero open defecation
		Provide/establish a septage treatment facility
No available suitable space for sanitary land fill with in the city	The existing dumpsite is due for closure and may be source of contamination of ground water	Sourcing out for suitable site for sanitary landfill; adoption of solid waste technology
Absence of Nutrition Center		Construction of Nutrition Center
Absence of Bahay Pag-Asa		Construction of Bahay Pag-asa
No garage for Medical automobile such as ambulance, mobile dental van	Quick depreciation of serviceable life of vehicle	Construction of garage for ambulance, dental van and other service vehicle
Limited stockroom/storage room for medical equipment and medical supply	Absence of suitable storage may result to difficulty in practicing the proper storage of medical supplies that may result to spoilage	Construction of warehouse and cold storage for OHS medical supply
Unpaved frontage of OHS Office	During rainy season, the public and the health service providers are having difficulty crossing the murky and unhealthy surface going to the health office	Concreting of the OHS façade with landscaping including parking spaces

5.3 Solid Waste Management

The city is collecting an average solid waste of 58,345.43 tons per day from domestic or households, and 20,418.72 tons per day from commercial establishment, an average of 4,474.74 tons per day from Industrial, and only .37 tons per day from hospital and 25,002.08 tons per day from other source, all are disposed in the controlled dumpsite at Biniruan dumpsite in Barangay Pob. 9.

a. Solid Waste Generation by Source, Year 2018

During the start of the then Mayor Jojo Guiani administration, he strictly imposed the implementation of City Ordinance 2360 or the practice of waste segregation at source. An intensified information and education dissemination on the practice of 4 Rs was impose for all sectors. The barangays are mandated to not collect garbage that are not segragated at source. But the problem was household and other establishments slowly adopt and practice the waste segregation, however, there was no proper scheduling of pick-up for waste that are separated accordingly to their respective classification. The segregated waste were collected and dump into the same pick-up point and during collection time, all are mixed and hauled into the same dumptruck. This must be the implication of the limited available resources, equipment and manpower that shall accomplish a 2-shift collection daily with only 5 serviceable dumptrucks and 5 serviceable compctors for the entire city.

Table SO-18. Solid Waste Generation by Source, Year 2018

Source	Types of waste	Volume of solid waste generated (Tons/day)	Volume of solid waste collected (kg/day)	Disposal methods/ treatment facilities	Disposal site
Domestic/HH	mixed	58,345.43	58,345.43	Controlled Dumpsite	Pob. 9, Biniruan Dumpsite
Commercial	mixed	20,418.72	20,418.72	Controlled Dumpsite	
Industrial	mixed	4,474.74	4,474.74	Controlled Dumpsite	
Hospital/Institutional	mixed	0.37	0.37	Controlled Dumpsite	
Others	mixed	25,002.08	25,002.08	Controlled Dumpsite	

b. Methods of Solid Waste Disposal/Treatment

Out of the 37 barangays only 31 barangays are being serve of the city Solid waste collection and disposal. Twenty-five (25) of which have already established their house-to-house collection system and bringing them to the designated pick-up points. The pick-up point designated by CENRO is the point where the barangays shall accumulate their collected solid waste for disposal at a given schedule. The CENRO do not have at present the data on the number of household practicing composting, recycling, burning and maintaining individual open pit.

The city is collecting an average of 108.61 tons of solid waste per day, all are being dispose at Biniruan dumpsite. As of Rep. Act 9003, otherwise known as Solid Waste Management Act of 2000, stating order that operation of controlled dumpsite shall be allowed only until February 16, 2006 and all LGUs shall shift into sanitary land fill.

At the dumpsite, an Effective Microorganism (EM) solution is being used to treat garbage at the disposal facility, it is a disinfentant, deodorizer and decomposer solution as treatment to garbage.

Table SO- 19. Methods of Solid Waste Disposal/Treatment, Year 2018

dsiplMethods	Quantity (Total municipal solid waste generated) (Tons/day)	No. of household served	Agency Responsible
1. Collected and disposed to:			
- Open Dump			
- Controlled Dump	108.61	31 barangay served	CENRO
- Sanitary Landfill			
2. Composting	31,548.47		BLGU
3. Recycling	7,037.94		BLGU
4. Not collected:	9,078.82		BLGU
- Burned			
- Dumped in individual open pit (not burned)			
5. Others			
Animal Feed	14,560.83		

Source: CENRO, 2019

Programs/Projects Approved and Funded for Implementation:

PROGRAM COMPONENTS	ACTIONS/INTERVENTIONS	TIMEFRAME	BUDGET
1**. Waste Diversion** 1.1 Composting of Biodegradable Waste. 1.2 Barangay Material Recovery Facility 1.3 School based SWM Program • MRF • Bring Me	• Strengthen the IEC campaign to barangay's and school's for waste segregation including operation of material recovery facility and the importance of backyard composting. • Re-activation of Barangay Ecological Solid Waste Management Committee. • Establish the barangay waste collection system. • Partnership with junkshop operators for the recovery/buying of recyclables.	2020-2030	LDRRMF/20% CDF
2. **Waste Reduction** 2.1 3R's • Reduce, Reuse and Recycle 2.1 Backyard Composting 2.3 Waste Banking 2.4 Banning the use of plastic as secondary packaging material and use of Styrofoam as food and beverage container	• Full implementation of City Ordinance 4203 • Regular conduct of Inspection • Apprehension and penalizing of violators	2020-2030	LDRRMF/20% CDF
3. **Waste Collection and Disposal** 3.1 Upgrading of vehicles, equipment and motor pool operation.	• Purchase of additional heavy equipment and vehicles and lot for Motorpool. • Computerization of fleet management and installation of GPS Mapping System. • Technical training/Orientation of personnel on operation and maintenance of Mapping systems and programs.	2020-2030	LDRRMF/20% CDF

	• Relocation of CENRO Motorpool. Construction of building/garage for CENRO Motorpool.		
4. **Beatification and Rehabilitation** 4.1 Proposed safe closure and rehabilitation of Biniruan dumpsite (Pob 9) 4.2 Conversion of old Malagapas Dumpsite into Eco-Park (RH 10) 4.3 Improvement/Rehabilition of road leading to Biniruan dumpsite. (Pob 9)	• Conversion of dumpsite into an Eco-park. • Formulation of development plan. • Installation/construction of park amenities • Conversion of dumpsite into an Eco-park. Concreting of road leading to Biniruan dumpsite	2020-2030	LDRRMF/20% CDF

5.4 Housing

a. Housing Situation for the Past Three Censal Years

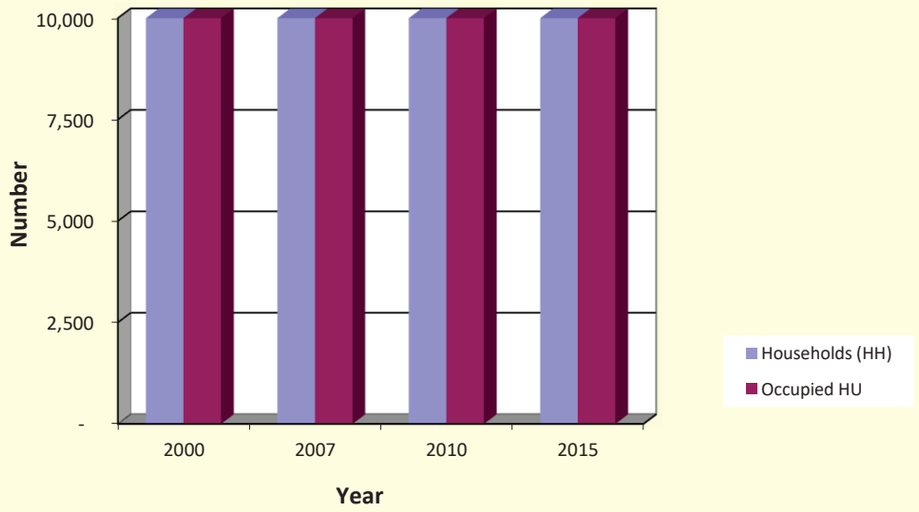
The table below shows the housing situation for the past three censal years. From 2000 to 2015, there has been an increase in number of households. However, the percentile rate at which households have been increasing for the past 15 years has mellowed down to 6.70%. For the household population, housing units, and occupied housing units, there have been fluctuations in the rate of increase for the past three censal years. Ratio of HH to Occupied HU in 2000 is 0.18 which decreased in 2007 to 0.17. Then it increased in 2010 to 0.19 and increased again in 2015 to 0.41. Ratio of HH Population to Occupied HU in 2000 is 5.42 which increased in 2007 to 5.81. Then, in 2010, it decreased to 5.36 which further decreased in 2015 to 2.42.

Table SO-24. Housing Situation for the Past Three Censal Years

	2000 No.	2007 No.	2010 No.	2015 No.
Households (HH)	31,227	45,403	55,171	58,866
Household Population	161,517	257,821	271,609	298,223
Housing Units (HU)	29,794	44,411	50,645	123,260
Occupied HU	29,794	44,411	50,645	123,260
Vacant HU	-	0	0	0
Ratio of HH to Occupied HU	0.18	0.17	0.19	0.41
Ratio of HH Population to	5.42	5.81	5.36	2.42

Occupied HU				

Graph SO-24. Housing Situation for the Past Three Censal Years



Source: National Statistics Office/Philippine Statistics Authority

b. Housing Backlog

The table below shows the backlog trend from 2000 to 2015. The Doubled – Up Households have fluctuating rate from 0.6 to 0.89. Unacceptable Housing Units have a rising rate from 0.01 to 0.10. Makeshift / Salvage/ Improvised HU have a decreasing rate from 0.007 to 0. Others have a decreasing rate from 0.37 to 0.

Table SO-25. Housing Backlog, Year 2018

Backlog	2000		2007		2010		2015	
	No.	%	No.	%	No.	%	No.	%
Doubled – Up Households	1433	0.6046414	992	0.54	4526	0.97	2879	0.89
Unacceptable Housing Units	39	0.0164557	15	0.01	53	0.01	335	0.10
Makeshift / Salvage/ Improvised HU	18	0.0075949	2	0.001	63	0.0135	2	0.00
Others	880	0.37	821	0.45	8	0.00	11	0.00
Total Backlog	2370		1830		4650		3227	

Source: RSET 2015 and 2018, PSA

Notes:

Backlog:

1. *Doubled – Up (DUHH) = No. of Households (HH) – No. of Housing Units (HU)*
2. *Unacceptable Housing Units = 5% of HU made of mixed materials*
3. *Mixed Materials = HU with walls and roof made of wood, cogon/Nipa/ Anahaw, asbestos and others (NSO data on Occupied HU by construction materials*
4. *Makeshift / Salvage / Improvised HU (per NSO data)*

c. Informal Settlement Areas, 2018

The preceding table shows the list of informal settlers from the year 2018. There are four: Cynthia Village Phase 1, Sulog Urban Poor, Cynthia Village Phase 2 and Malagapas Resettlement Project. Cynthia Village Phase 1 in Tamontaka 1, has the largest area at 3.80 hectares. All are in the residential zoning classification. Sulog Urban Poor has the greatest number of households at 500. Cynthia Village Phase 1, located in Tamontaka 1, and Malapas Resettlement, located in RH 11, are both complete in utilities.

Table SO-26. Informal Settlement Areas, Year 2018

Brgy.	Name of Settlement (if applicable)	Area (ha)	Land Ownership	Zoning Classification	Pro-gram/s	Age ncy	No. of House-holds	Population			Settler s Origin	Year Occup ied	Utilities Present (Y/N)						Hazard Susceptibility (H/M/L)							
								M	F	Total			W	P	S	T	C	othe rs	Fl	Tc	Eq	Vo	Ln	Ts	Su	Oth ers
Tamontaka 2	Cynthia Village Phase 1	3.80	private	Residential	Housing	LGU	259			-	City	2018	Y	Y	Y	Y	Y									
Kalanganan 2	Sulog Urban Poor	5	private	Residential	Housing	LGU	500				City				Y	Y			H				L		M	
Kalanganan 2	Cynthia Village Phase 2	0.30	private	Residential	Housing	LGU	21								Y	Y			H				L		M	
RH 11	Malagapas Resettlement Project	3.1	public	Residential	Housing	LGU	312				City	2002	Y	Y	Y	Y	Y		L							

Source: City Planning and Development Office, Shelter Planning and Development Division

Table __. HOUSEHOLDS WHO ARE INFORMAL SETTLERS BY BARANGAY

Barangay	Population	NUMBER OFHOUSEHOLDS	HOUSEHOLDS WHO ARE SQUATTERS	
Bagua	18,137	3,627	436	2.4%
Kalanganan	15,019	3,004	393	2.6%
Poblacion	20,734	4,147	300	1.4%
Rosary Heights	13,943	2,789	265	1.9%
Tamontaka	12,027	2,405	352	2.9%
Bagua I	9,206	1,841	194	2.1%
Bagua II	19,720	3,944	218	1.1%
Bagua III	6,847	1,369	104	1.5%
Kalanganan I	5,808	1,162	79	1.4%
Kalanganan II	5,999	1,200	146	2.4%
Poblacion I	5,677	1,135	146	2.6%
Poblacion II	6,302	1,260	171	2.7%
Poblacion III	2,985	597	50	1.7%
Poblacion IV	6,456	1,291	94	1.5%
Poblacion V	3,070	614	73	2.4%
Poblacion VI	5,151	1,030	72	1.4%
Poblacion VII	15,712	3,142	628	4.0%
Poblacion VIII	8,786	1,757	180	2.0%
Poblacion IX	5,998	1,200	99	1.7%
Rosary Heights I	3,931	786	86	2.2%
Rosary Heights II	5,006	1,001	152	3.0%
Rosary Heights III	10,786	2,157	402	3.7%
Rosary Heights IV	4,377	875	61	1.4%
Rosary Heights V	5,870	1,174	105	1.8%
Rosary Heights VI	6,846	1,369	59	0.9%
Rosary Heights VII	9,257	1,851	200	2.2%
Rosary Heights VIII	8,524	1,705	122	1.4%
Rosary Heights IX	7,802	1,560	154	2.0%
Rosary Heights X	15,732	3,146	509	3.2%
Rosary Heights XI	7,864	1,573	74	0.9%
Rosary Heights XII	4,664	933	57	1.2%
Rosary Heights XIII	4,947	989	67	1.4%
Tamontaka I	4,423	885	69	1.6%
Tamontaka II	4,184	837	105	2.5%
Tamontaka III	2,730	546	58	2.1%
Tamontaka IV	3,741	748	212	5.7%
Tamontaka V	1,177	235	11	0.9%
TOTAL	299,438	59,888	6,503	10.9%

*Households living in public places; with rented/owned house or lot, or rent-free house or lot without consent of the owner over total number of households
**Number of households living in public places; with rented/owned house or lot, or rent-free house or lot without consent of the owner over total number of households

Source: CBMS Census 2017

d. Inventory of Residential Subdivisions

The table below shows the 31 subdivisions categorized to social housing. The remaining two subdivisions are categorized to economic housing. Among them, Notre Dame Village has the largest area at 20.79 hectares with 421 housing units/lots. However, Ville de Reve has more housing units at 530 while only having an area of 11.23 hectares. Many of the subdivisions are classified as flood prone areas.

Table SO-27. Inventory of Residential Subdivisions, Year 2018

Name of Subdivision/ Condominium	Type	Barangay	Area (ha)	No. of Lots/ Units	Hazard Susceptibility (H/M/L)							
					Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
1. AL-HUDA	Socialized Housing	RH-3	0.25	50								
2. Bliss Housing	Socialized Housing	RH 8	4.19	54	H							
3. Brgy. Pag-asa HOA	Socialized Housing	RH6	1.22	80								
4. CYNTHIA Village Phase 1 (Jaskat)	Socialized Housing	Tam 2	3.80	358	H							
5. CYNTHIA Village Phase 2	Socialized Housing	Tam 2	1.60	187								
6. Concerned Riverside	Socialized Housing	RH 10	2.02	99	L							
7. Dapdap Urban Poor	Socialized Housing	RH 2	0.96	65	L							
8. Fed. Of Women in Coop.	Socialized Housing	Tam. MB	3.40	85	H							
9. Federville	Socialized Housing	RH 11	8.60	495	L							
10. Happy Homes	Economic Housing	RH 10	0.67	55	L							
11. Immaculada Concepcion	Socialized Housing	RH 2	0.31	65	L							
12. Libra HOA	Socialized Housing	RH2	0.61	72								
13. Mamalo HOA	Socialized Housing	Kal. 2	0.30	30	H				L		M	
14. Manuel Tan Subdivison	Socialized Housing	RH 7	3.34	143	L							
15. Mentor's Village	Socialized Housing	RH 11	3.99	406	L							
16. NAKABASIL HOA	Socialized Housing	RH3	0.32	40								
17. ND Village	Socialized Housing	RH 8	20.79	421	L							
18. Pagbabago HOA	Socialized Housing	MBRH	0.46	73								
19. Peñafrancia Village	Socialized Housing	RH 11	6.49	571	L							
20. Purok Maunawain	Socialized Housing	RH MB	1.00	75	L							
21. Purok Sibuyan HOA	Socialized Housing	MBRH	0.55	87								
22. Purveyors	Socialized Housing	RH 11	7.48	322	L							
23. SAMAKA HOA	Socialized Housing	MB Poblacion	0.64	138								
24. San Pablo Village	Socialized Housing	RH 11	6.27	381	L							
25. Sigla HOA	Socialized Housing	Tam-1	6.80	356								
26. Sto. Niño Urban Poor	Socialized Housing	RH 2	0.58	25	L							

27. Sulog Housing Project	Socialized Housing	Kal. 2	5.00	257	H				L		M	
28. Tanghal Subdivision	Socialized Housing	Bagua 2	10.76	453	H	for validation						
29. Umpungansa Al-Hidaya Urban Poor	Socialized Housing	Pob 2	0.30	54	M							
30. United Muslim Christian HOA	Socialized Housing	RH12	0.65	66								
31. Virgo Urban Poor	Socialized Housing	RH 9	6.89	414	L							
32. United Urban Poor	Socialized Housing	RH 11	1.98	113	L							
33. Ville de Reve	Economic Housing	Tamontaka 1	11.23	530	H							
			20.10	1,057.00								

Source: Local Shelter Plan 2012-2020

e. Resettlement Areas

The table below shows the inventory of resettlement areas. There are ten areas available. Cynthia Village Phase 1 (Jaskat) has the greatest number of households at 358 more housing units at 359. United HOA has the least number of housing units and households at 66. All of the listed resettlement areas have access to water, electricity, toilet, communication, and access road. Both United HOA and Malagapas Resettlement Project Phase 1 have access to sewerage systems. Both Cynthia Villages Phase 1 and 2 are highly susceptible to flooding. While Malagapas Resettlement Project Phase 1 is lowly susceptible to flooding.

Table SO-28. Resettlement Areas, Year 2018

Name of Resettlement Area	Barangay	Land Ownership	No. of Households	No. of Housing Units	Utilities/ Facilities/ Amenities	Administration	Hazard Susceptibility (H/M/L)							
							Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
CNTHIA Village Phase 1 (Jaskat)	Barangay Tam. 2	Private	358	359	Water, Electricity, Toilet, Communication, Access Road	LGU	H							
CYNTHIA Village Phase 2 Tam. 2	Barangay Tam. 2	Private	161	161	Water, Electricity, Toilet, Communication, Access Road	LGU	H				L		M	
Pagbabago HOA	MBRH	Gov't.	73	73	Water, Electricity, Toilet, Communication, Access Road	SHFC								
Purok Sibuyan HOA	MBRH	Gov't.	87	87	Water, Electricity, Toilet, Communication, Road	SHFC								
Libra HOA	RH2	Private	72	72	Water, Electricity, Toilet, Communication, Access Road	Private								
NAKABASIL HOA	RH3	Private	130	80	Water, Electricity, Toilet, Communication, Access Road	Private								
Brgy. Pag-asa HOA	RH6	Private	99	99	Water, Electricity, Toilet, Communication, Access Road	Private								
UNITED HOA	RH12	Private	66	66	Water, Electricity, Sewerage, Toilet, Communication, Access Road	Private								
SAMAKA HOA	MBPoblacion	Gov't.	136	136	Water, Electricity, Toilet,	SHFC								

					Communication, Access Road									
Malagapas Resettlement Project Phase 1	Barangay RH 10	Gov't.	312	312	Water, Electricity, Sewerage, Toilet, Communication, Road	LGU	L							
Total					1,494.00	1,445.00								

Source: City Planning and Development Office, Shelter Planning and Development Division

Notes:
Land Ownership - Government/Private
Administration – NHA, GK, Habitat, LGU, Others
Indicate level of susceptibility for all hazards. High (H), Moderate (M), Low (L)

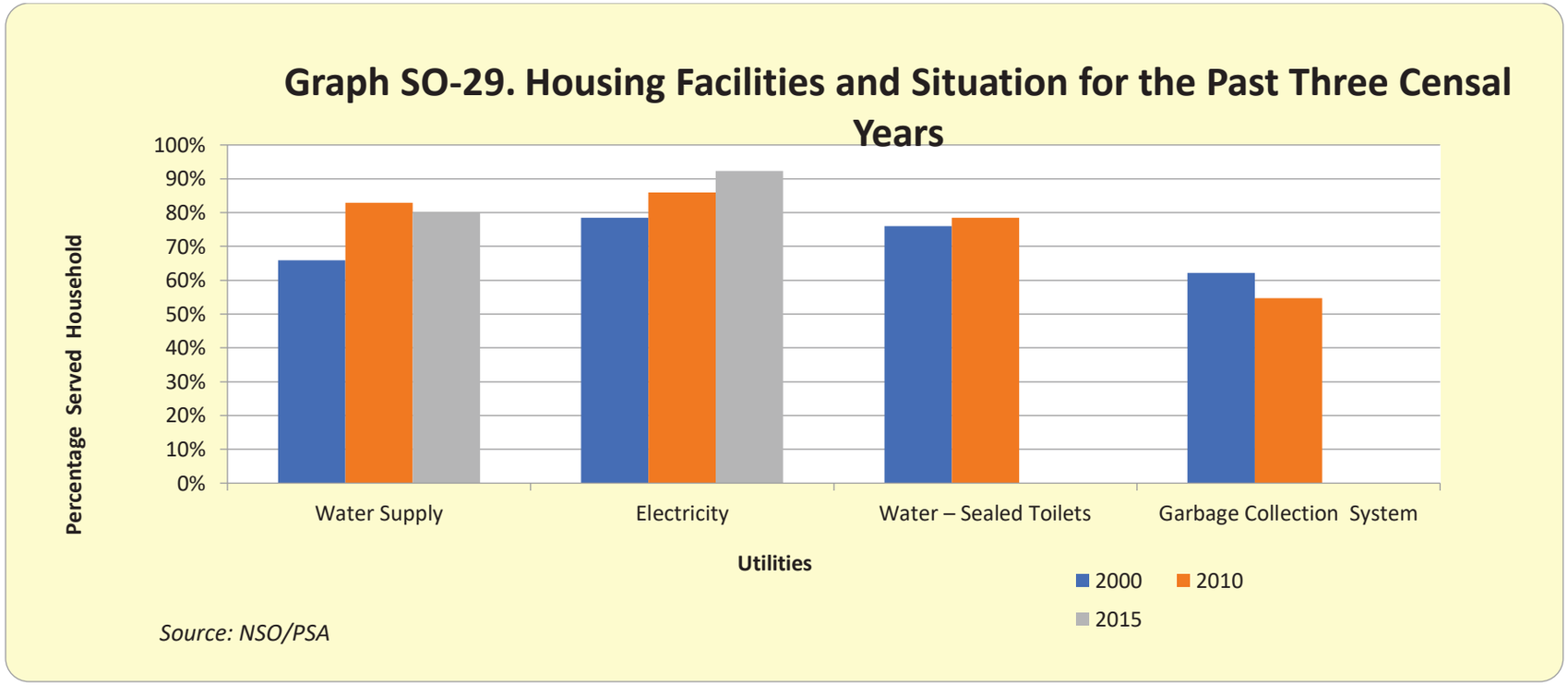
f. Housing Facilities and Utilities Situation for the Past Three Censal Years

Housing lots owned/amortized have been increasing and decreasing for the last three censal years. The same can be observed with housing lots rented, housing lots being occupied for free with consent of the owner, and housing units being occupied for free without consent of owner. All categories has seen an increase in 2010 and decrease in 2015.

Table SO-29. Housing Facilities and Utilities Situation for the Past Three Censal Years

Utilities	2000			2010			2015		
	Housing Units	No. Served	% Served	No. of Housing Units	No. Served	% Served	No. of Housing Units	No. Served	% Served
Water Supply	31,227	20,563	1	55,171	45,707	1	58,866	47,195	
Electricity	31,227	24,501	1	55,171	47,426	1	58,866	54,320	1
Water – Sealed Toilets	31,227	23,751	1	55,171	43,299	1	58,866		-
Garbage Collection System	31,227	19,432	1	55,171	30,183	1	58,866	-	-
Total		166,615			166,615			01,515	

Source: RSET 2018
Note:
% Served = (No. Served/Housing Units) x 100



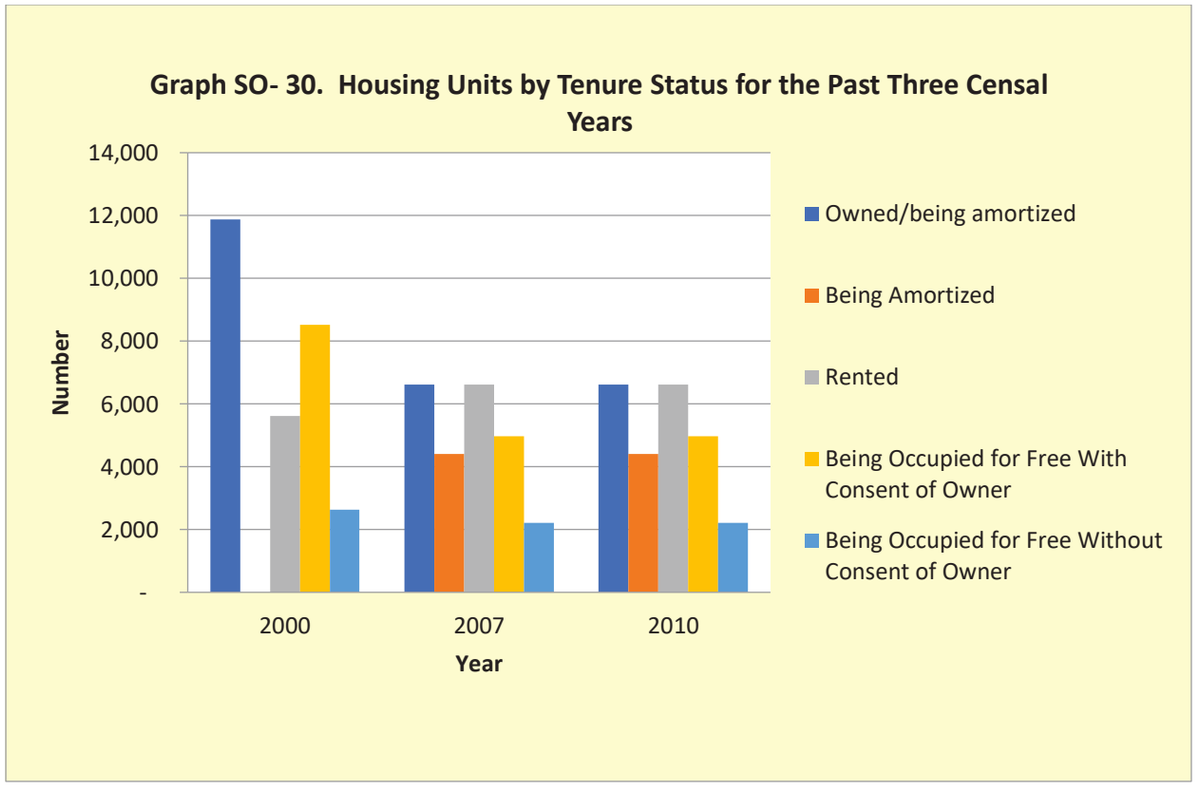
g. Occupied Housing Units and Lots by Tenure Status for the Past Three Censal Years

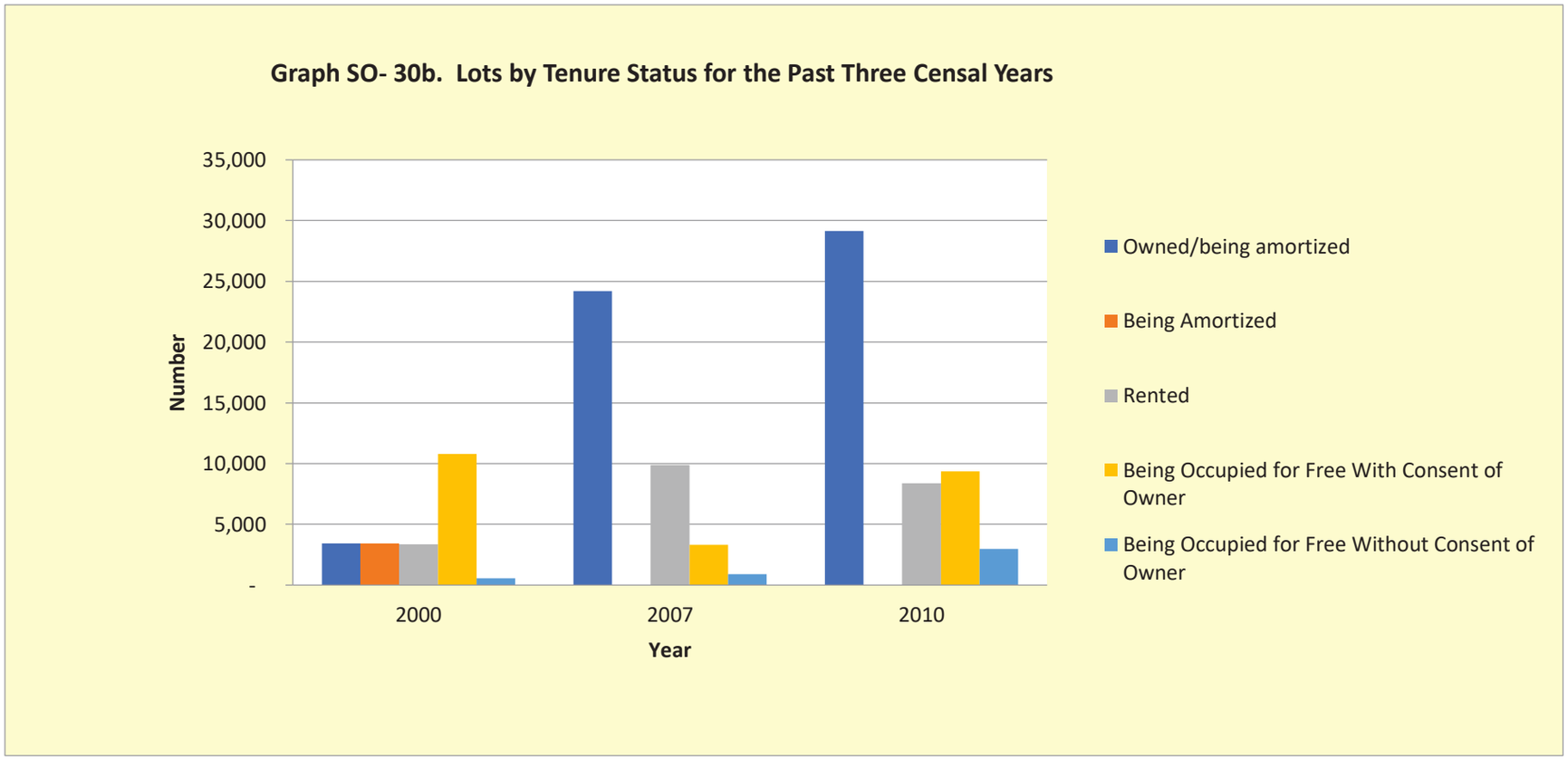
Table SO-30. Occupied Housing Units and Lots by Tenure Status for the Past Three Censal Years

Tenure Status	2007				2010				2015			
	Housing Unit		Lot		Housing Unit		Lot		Housing Unit		Lot	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Owned/being amortized	6,618	27%	24,187	63%	6,618	27%	29,155	58%	6,618	27%	23,632	79%
Being Amortized	4,412	18%		0%	4,412	18%		0%	4,412	18%	-	0%
Rented	6,617	27%	9,874	26%	6,617	27%	8,389	17%	6,617	27%	3,715	12%
Being Occupied for Free	4,963	20%		9%	4,963	20%		19%	4,963	20%	2,420	8%

With Consent of Owner			3,315				9,344					
Being Occupied for Free Without Consent of Owner	2,206	9%	886	2%	2,206	9%	2,990	6%	2,206	9%	291	1%
Total	24,816	100%	38,262	100%	24,816	100%	49,878	100%	24,816	100%	30,058	100%

Source: RSET 2015 and 2018, PSA
Note:
% = (No. of housing units per tenure status/Total no. of housing units) x 100





h. Occupied Housing Units by Condition (State of Repair) of the Building and Year Built, Year 2007

According to the table above, year 2001-2007 have the largest number of total housing units occupied. Out of those occupied, 9,018 need no repair/minor repair, 1,755 need major repair, 45 are dilapidated/condemned, 241 are under renovation/being repaired, 89 are unfinished construction, 134 are under construction, and 507 are not reported. Data shows an increasing trend in all categories as the population of the city increases.

Table SO-31. Occupied Housing Units by Condition (State of Repair) of the Building and Year Built, Year 2007

Year Built	Total Occupied Housing Unit	CONDITION (State of Repair) OF THE BUILDING						
		Needs No. Repair/Minor Repair	Needs Major Reapir	Dilapidated/ Condemned	Under Renovation/ Being Repaired	Unfinished Construction	Under Construction	Not Reported
2001-2007	11,791	9,018	1,755	45	241	89	134	507
1996-2000	10,075	7,706	1,500	39	206	76	115	435
1991-1995	8,656	6,620	1,288	33	177	66	99	373
1981-1990	7,159	5,475	1,066	27	146	54	81	310
1971-1980	4,540	3,473	676	17	93	34	52	195
1961-1970	2,450	1,874	365	9		19	28	105
1960 or earlier	1,161	888	173	4	24	9	13	50
Not Applicable	7	6	1	0	0	0	0	0
Don't Know/Not reported	2,035	1,556	303	8	42	15	23	88
TOTAL	47,874	36,616	7,127	182	979	362	545	2,063

Source: RSET 2015 AND 2018, PSA

i. Inventory of Potential Lands for Housing, Year 2009

There are 71 potential lands listed. Four of these potential housing areas are already owned by the City Government of Cotabato. Twenty-two of these are classified as residential lands. Forty-eight of these are classified as agricultural lands. Juan B. Gutierrez owns the land with the current highest market value at 11,462,590 pesos while only having an area of 5.47 hectares. This is likely due to its classification as residential land. Whereas, Eusebio Tanghal owns the land with the largest area at 18.46 hectares which is classified as agricultural land.

Table SO-32. Inventory of Potential Lands for Housing, Year 2009

Owner	TCT No.	Barangay	Area (ha)	Classi-fication	Fair Market Value	Actual Land Use	Zoning Classi fication	Utilities Present (Y/N)					
								W	P	S	R	T	C
1. City of Cotabato		RH 10	5.98	Gov't. Owed	598,000.00		Residential	Y	Y	N	Y	Y	Y
2. City of Cotabato		RH 10	4.86	Gov't. Owed	243,170.00		Residential	Y	Y	N	Y	Y	Y
3. Mama Mangelen		Tam 1	3.00		2,400,000.00		Residential						
4. City of Cotabato (formerly owned by Esteban Doruelo)		Kal MB	7.58		3,847,000.00		Residential						
5. City of Cotabato (formerly owned by Melania		Kal MB	6.4589		3,277,890.00		Residential						

Owner	TCT No.	Barangay	Area (ha)	Classi-fication	Fair Market Value	Actual Land Use	Zoning Classi fication	Utilities Present (Y/N)					
								W	P	S	R	T	C
Doruelo)													
6. Narriman Ibra		Kal 2	11.38		5,690,000.00		Agricultural						
7. Mustapha Usop		Kal 2	11.3062		327,160.00		Agricultural						
8. Kamad Raganding		Kal 2	10.22		295,710.00		Agricultural						
9. Heirs of Mamarinta		Kal 2	5.63		162,880.00		Agricultural						
10. P & A Realty Dev't. Corp.		Kal 2	5.88		164,360.00		Agricultural						
11. Evelyn S. Wee		Kal 2	10.53		304,810.00		Agricultural						
12. Tulunganen Flauta		Kal 2	8.0875		234,020.00		Agricultural						
13. Yu Kian Guan Hardware	T-40636	Pob 8	2.86		84,500.00		Agricultural						
14. Benjamin Tan	T-19875	Pob 8	2.74		1,027,630.00		Agricultural						
15. Nasser Kabalo	T-37069	Pob 8	2.82		1,220.00		Agricultural						
16. SibugaoMadalanda		Pob 8	7.27		206,310.00		Agricultural						
17. Butu Kamad	T-384	Pob 8	5.85		174,140.00		Agricultural						
18. Madu Maneku ET ALS	T-392	Pob 8	6.40		184,170.00		Agricultural						
19. Sabino Liakin		Pob 8	5.51		163,870.00		Agricultural						
20. H. Salahuddin Muhammad	T-629	Pob 9	3.62		131,890.00		Agricultural						
21. Laman Salik	T-17729	Pob 9	3.67		24,810.00								
22. Laman Salik	T-20651	Pob 9	3.63		98,410.00		Agricultural						
23. Dodong and Samuel Alamada	T-23273	Pob 9	4.00		89,330.00		Agricultural						
24. Nalambai S. Ibad	T-1782	Pob 9	8.90		178,900.00		Agricultural						
25. Eugenio Camello	T-28475	Tam M.	3.41		782,880.00		Residential						
26. Eugenio Camello	T-28476	Tam M.	3.15		103,320.00		Residential						
27. Eusebio Tanghal	T-1454	Kal M	18.46		534,200.00		Agricultural						
28. Evelyn S. Wee	T-22243	Kal 2	10.53		327,160.00		Agricultural						
29. H. Mustapha Usop		Kal 2	5.63		162,880.00		Agricultural						
30. P & A Realty Dev't. Corp.	T-41188	Kal 2	5.68		164,360.00		Agricultural						
31. Cesar Datuwata	19635	Kal 2	2.68		77,490.00		Agricultural						
32. Mohammad H. Adil	T-7413	Tam 1	8.83		267,260.00		Agricultural						
33. EnlayTukan	T-640	Tam 1	3.67		106,050.00		Agricultural						
34. PNB		Tam 1	6.74		195,120.00		Agricultural						
35. LimputBaguilan	R.O. 64(411)	Tam 1	3.00		90,800.00		Agricultural						
36. Musa Umpad		Tam 1	3.05		92,370.00		Agricultural						
37. Milagros Lobinco	T-3374	Tam 1	3.21		760,690.00		Residential						
38. Antonio Santos		RH 11	4.66		4,226,380.00		Residential						

Owner	TCT No.	Barangay	Area (ha)	Classi-fication	Fair Market Value	Actual Land Use	Zoning Classi fication	Utilities Present (Y/N)					
								W	P	S	R	T	C
39. Atty. Sergio Tocao		RH 11	6.64		134,860.00		Agricultural						
40. Fernando L. Go		RH 11	2.50		50,760.00		Agricultural						
41. PNB		RH 6	1.05		2,014,590.00		Residential						
42. Pin Nen Sero		RH 6	0.82		1,350,120.00		Residential						
43. Pin Nen Sero		RH 6	1.00		1,595,180.00		Residential						
44. Hrs. of Fernanda Vda. De Gutierrez		RH 9	3.05		90,420.00		Agricultural						
45. Hrs. of Fernanda Vda. De Gutierrez		RH 9	5.56		164,590.00		Agricultural						
46. Dionisio Gutierrez, Jr.		RH 9	6.57		7,917,930.00		Agricultural						
47. Hrs. of Fernanda Vda. De Gutierrez		RH 9	2.09		61,870.00		Agricultural						
48. Hrs. of Alfredo S. Ortuoste		RH 10	2.69		78,620.00		Agricultural						
49. Eugenio Camello		Tam MB	4.4097		3,138,450.00		Residential						
50. Bai Farida S. Kadatuan		Pob 8	0.801		294,100.00		Residential						
51. Benjamin Tan		Pob 8	2.7435		1,027,630.00		Residential						
52. Dania Sangkupan		Pob 8	2.8173		86,210.00		Agricultural						
53. Kalasuwan Kusain		Pob 9	1.34		36,260.00		Agricultural						
54. Basilio P. Wee		Bag 1	5.30		169,190.00		Agricultural						
55. Tuasi Adam (Dec.)		Bag 2	1.96		59,620.00		Agricultural						
56. ManebekLaguiem		Bag 2	2.06		62,210.00		Agricultural						
57. Rosita Sero		RH 5	3.89		94,530.00		Agri/Res.						
58. Sulayla Sero		RH 5	14.71		489,420.00		Agricultural						
59. Pinky Sero		RH 5	3.20		100,030.00		Agricultural						
60. Consolacion P. Vda de Sero		RH 5	4.99		156,100.00		Agricultural						
61. Sps. Elisa & Chi Cheng Tan		RH 9	1.84		3,895,610.00		Comm/Res.						
62. Juan B. Gutierrez		RH 9	5.4717		11,462,590.00		Residential						
63. Hrs. of Fernanda Vda. De Gutierrez		RH 9	3.00		6,275,540.00		Residential						
64. Ret. Maj. Gen Delfin		RH 9	4.14		8,566,220.00		Residential						
65. Aurora Riego Carag Et Als		RH 10	1.84		54,400.00		Agricultural						
66. Bai Debra Ibad Hundegger		RH 10	1.27		38,470.00		Agricultural						
67. Vicente Tiu		Tam MB	1.59		800,780.00		Residential						
68. Vito Rojas		Tam MB	1.56		67,400.00		Residential						
69. Dra. Lourdes A. De Luna		Tam MB	1.62		48,020.00		Agricultural						
70. Manuel C. Tan		Tam MB	1.51		1,376,830		Residential						
71. Elizabeth Tan		Tam MB	1.60		1,461,050		Agricultural						

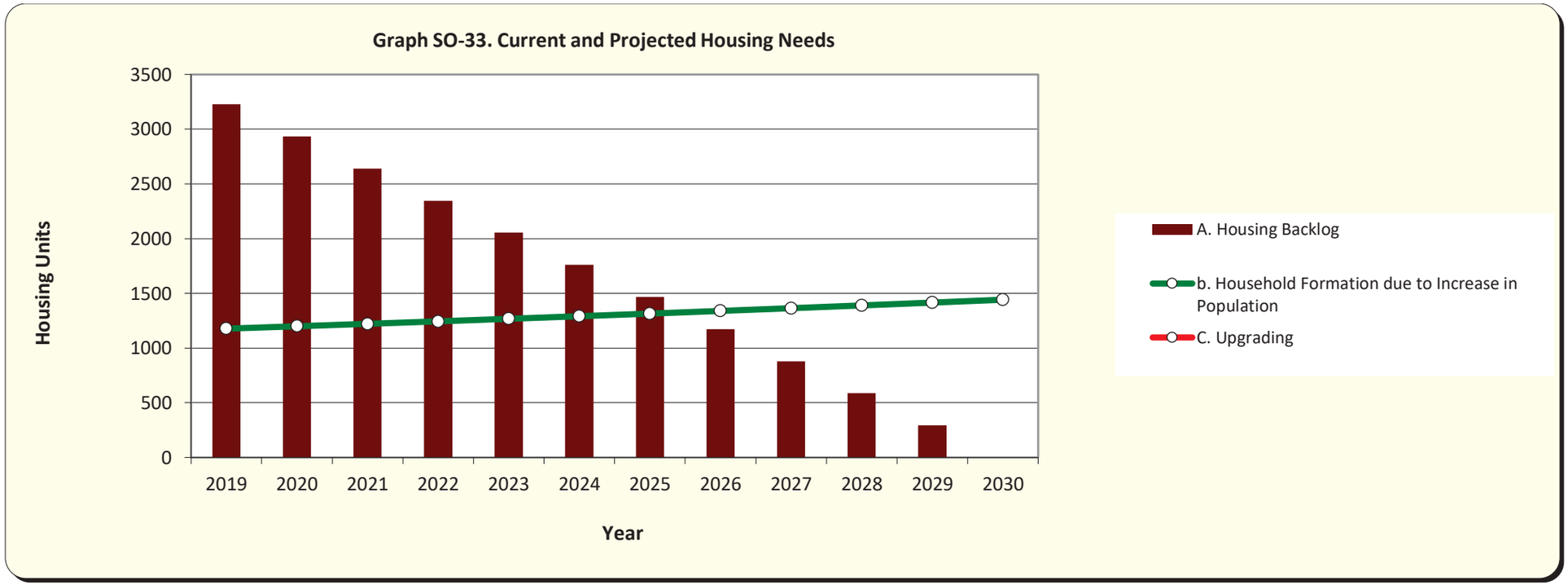
j. Current and Projected Housing Needs

The table below shows the housing backlog in 2019 was 3227 units. Assuming that the housing backlog will be fully solved by 2030, the future backlogs for succeeding years are expected to shrink by an estimate of 293 every year. Household formation is calculated by subtracting the projected number of households by the previous number of households. By 2030, it is expected to reach to 1,442 households. There is no data available regarding the upgrading housing units. By year 2030, the housing backlog is expected to be fully addressed.

Table SO- 33. Current and Projected Housing Needs

Housing Needs		Future Housing Needs										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
A. Housing Backlog	3227	2934	2640	2347	2054	1760	1467	1173	880	587	293	0
b. Household Formation due to Increase in Population	1177	1199	1221	1244	1267	1291	1315	1339	1364	1390	1415	1442
C. Upgrading												
TOTAL	**4,404**	**4,133**	**3,862**	**3,591**	**3,321**	**3,051**	**2,782**	**2,513**	**2,244**	**1,976**	**1,709**	**1,442**

Source: Shelter Plan 2012-2020
A. Current housing backlog may be assumed to be equally addressed within the planning period.
Example: Planning period = 10 years
Backlog = 1,000 units
Addressed yearly at = 100 units
Hence housing need to backlog is: Y1 = 1000 – 100 = 900
Y2 = 900 - 100 = 800
Y3 = 800 - 100 = 700
Y4 = 700 - 100 = 600
Y5 = 600 - 100 = 500
Y10 = 500 - 500 = 0



Summary of Shelter Needs:

The increasing incidence of families without decent homes brought about by limited housing developers, absence of community mortgage program for socialize housing and limited maintenance for housing development funds coupled with the land location where 70% of Cotabato City is below sea level. The increase socio-economic development of the city also attracts local immigrants and informal settlers considering the city is at heart of Maguindanao Province. These situations have resulted to uncontrolled settlements in both public and private properties and road right of way; proliferation of illegal/informal settlers and high development cost for housing thus, there is a need for the City Government to intervene with policies that will address the issues and concerns on the shelter needs of the city, this includes the crafting and updating of Local Shelter Plan, Housing Financing Assistance and Land inventory for socilaize housing programs.

Table SO-23. **HOUSING ANALYSIS MATRIX**

Technical Findings/ Observations	Implications *(Effects)*	Policy Options/ Interventions
Increasing incidence of families without decent home	Uncontrolled settlements in public and private properties, Road Right of Way	Identify suitable and decent lands for relocation
	Proliferation of Illegal/ Informal settlers	Conduct of Census and Tagging for Beneficiaries
	Gradual relocation of household in danger & high-risk places	Update of Land Inventory for socialized housing
		Financial and Technical assistance for informal settlers
		Identify potential lands for relocation
		Land Banking for Housing purposes
Absence/Limited developers engage in housing program	Less opportunity for low-income household to own a decent house	Lot acquisition for housing purposes by LGU
Absence of Community Mortgage Program for Socialize Housing		
About 70% of the city's land area is below sea level	High development cost	Reusing the silt material that are dredged from the 2 major rivers to fill the low-lying public lands
Scarcity and high cost of residential land		Conversion of agricultural land for residential uses
Insufficient/limited maintenance and development funds from the local government devoted for infrastructure	Access roads remain underdeveloped or poorly maintained; poor flood control and drainage facilities	
Absence/Lack of Community Associations who can act as Community Mortgage Program (CMP) Mobilizer	Delay in the availment of Housing Programs from the National Government and/or Housing related agencies	Provide attractive investment incentives
Seeming lack of concern from barangays to address and abate the further proliferation of informal settlers	Presence of the increasing informal settlers promotes increasing social problems	
Lack of available premium lands for resettlement purposes	High cost of land on per square meter basis because of locational advantage; location of re development costs due to lack of infrastructure facilities (access roads)	
Insufficient funds for land procurement/development	Procurement of land/s for relocation and resettlement of informal settlers is on Limited scale	
Lack of personnel manning the Shelter Division at CPDO	delayed actions on matters concerning housing programs/projects	
Out-dated Local Shelter Plan & inactive Housing Board	The housing and resettlement program could not be properly implemented because there are no local guidelines/policies in place	
Upsurge of population due to in-migration	Bigger responsibility for the local government unit in terms of allocating resources for housing and other basic social services	

PROGRAMS/PROJECTSAPPROVED ANF FUNDED FOR IMPLEMENTATION:

The access to basic good services for the past six (6) years has gradually improved and has been a priority by the city government thus, more migrants and visitors love to visit the place making illegal settlers and occupants increase in numbers. However, the kind of settling and housing needs a community has been a picture of how progressive a community is. Hence, providing low-cost housing and shelter plan is one of the priority programs that the present administration wanted to focus. Provision of decent, affordable low-cost housing will not only ensure migrants and settlers of a permanent residency but also uplift livelihood conditions and proper access to basic services.

Public housing, also known as social housing or subsidized housing, is a form of housing tenure in which the property is usually owned by a government authority, either central or local. This could also refer to any rental housing that may be owned and managed by the state, by non-profit organizations, or by a combination of the two, usually with the aim of providing affordable housing. Social housing is generally rationed by a government through some form of means-testing or through administrative measures of housing need. One can regard social housing as a potential remedy for housing inequality.

Developing cities are usually coupled with good housing communities, subdivisions and condo housing units, this mirrors how progressive a city or community is; It also reflect how the government spent wisely on their local communities improving government infrastructure; it generates healthier population that comes with a healthier economy and job opportunities and allows better opportunities for investing in the future with more affordable housing.

No.	PROGRAM	PROGRAM COMPONENTS	ACTIONS/INTERVENTIONS	TIMEFRAME	FUND SOURCE
3					
Housing	Technical Planning and Infrastructure Development (***TPID)***	**3.1** Opening of New Resettlement/ Neighbourhood Sites	3.1.1 Negotiation with the landowner/s 3.1.2Procurement of land (Land Banking) 3.1.3Land Development 3.1.4 Conduct of surveys 3.1.5 Preparation of subdivision scheme 3.1.6 Site Development (embankment of road networks / drainage construction) 3.1.7 Finalization of Beneficiaries Roster 3.1.8 Distribution / Raffle of home-lot assignment 3.1.9 House Construction	2020-2030	20% CDF/ OTHER SOURCES
	Technical Planning and Infrastructure	**3.2** Site Development of fifteen (15) existing and propose relocation sites	3.2.1 Site Inspection of the fifteen (15) existing relocation sites, specifically: a. Purok Sibuyan HOA @ MBRH	2020-2030	20% CDF/ OTHER SOURCES

	Development (***TPID)***		b. Pagbabago HOA @ MBRH c. United MC HOA @ Brgy. RH12 d. SAMAKA HOA @ Brgy. MPoblacion e. LIBRA HOA @ Brgy. RH2 f. ICCUPAI HOA @ Brgy. RH2 g. AL HUDA HOA @ Brgy. RH3 h. BualansaKalimudan HOA @Brgy.Pob2 i. Brgy. Pag-asa HOA @ Brgy. RH6 j. MAKAPA HOA @ Brgy. Tam 2 k. Attawniyah HOA @ Brgy. MBRH l. Kadtabangay HOA @ Brgy. Tam 4 m. Pag-asa HOA @ Brgy. Mother Tam. n. Tribal Village HOA @ Brgy. Tam. 2 o. Pagkakaisa HOA @ Brgy. RH6 3.2.2 Program of Works preparation 3.2.3 Submission and approval of the proposal 3.2.4 Implementation and documentation 3.2.5 Assessment and Evaluation on the impact of the program 3.2.6 Construction of River wall at CVP2		
	Community Organizing and Community Development	**3.3** Provision of Dwelling Opportunities and Social Preparation	3.3.1 Courtesy Calls / Protocols 3.3.2 Consultation / Dialogues 3.3.3 Background Investigations 3.3.4 Community Preparation / Assembly / Organization 3.3.5 Community Organization 3.3.6 Registration of HOA's to HLURB and BIRAccreditation of HOA's to PCUP & SP 3.3.7 Orientation on the various options Housing Program (CMP, Habitat, Gawad,etc….) Annual reports submission	20% CDF/ OTHER SOURCES	20% CDF/ OTHER SOURCES
	Research and Documentation	**3.4** Profiling and Data Management	3.4.1. Census / Tagging 3.4.2 Beneficiary Listing and Profiling 3.4.3 Data Gathering 3.4.4 Data Encoding 3.4.5 Inventory of Lands	20% CDF/ OTHER SOURCES	20% CDF/ OTHER SOURCES

			3.4.6 Land and Title Verification Individualization of Titles		
		3.5 Amortization Collection	3.5.1 Collection of loan accounts 3.5.2Updating of debts 3.5.3 Releasing of certificates and clearanceS		
	Capability Building and Organizational Development	3.6 Capacity Development (Trainings and Seminars)	3.6.1Training Needs Analysis (TNA) 3.6.2 Training Designs and Programs 3.6.3 Budget Preparation, Allocation and approval 3.6.4 Conduct of trainings on the ff: a. Basic Community Orientations b. Team Building Seminars c. Para-Legal Trainings d. Leadership Training Seminars e. Gender Sensitivity Trainings f. Forums, Symposia, Conferences and FGD's g. Basic Financial Accounting, Cash Receipts and Disbursement and Financial Report Seminar h. Training on Parliamentary procedures and basic documentations		
		3.7 Sustainable Livelihood and Entrepreneurial Program	3.7.1 Project Proposals Making 3.7.2 Livelihood Trainings 3.7.3 Provision of self-help and self-employment program 3.7.4 Cooperative Formation/ Community Loaning Program 3.7.5 Regular Monitoring and Assessment 3.7.6 Seed Capital		
	Coalition Building and Advocacy Work	**3.7 *Linkages and Networking***	3.8.1 Data Profiling 3.8.2 Establishing connections 3.8.3 Conduct of Housing Summit / Housing Forum		
	Coalition Building and Policy Advocacy Work	**3.8 *Policy Advocacy***	3.8.1 Lobby for the Endorsement from the Executive 3.8.2 Drafted propose ordinance 3.8.3 Advocates (NGO's and PO's) forum towards a petition 3.8.4 Number of Public hearings conducted	3.8.7	3.8.8

			3.8.5 Attendance to 1st, 2nd and 3rd Reading at SP 3.8.6 Proposal approved into a City Ordinance		
		3.9 Institution Building	3.9.1 Creation of the Local Housing Office	3.9.2	3.9.3

5.5 Social Welfare Services

The Social Welfare Services has the largest scope of services, it is popularly tag as the services from “womb to tomb”, catering to several sub-sector such as children, women, senior citizens, PWD, Solo Parents, Urban Poor, Family and other individuals in difficult circumstances. The OSWDS extends assistance to the Office for Senior Citizens Affairs (OSCA). However, with the LGU limited resources the following are the observable gaps:

There was an abrupt increase among the Senior Citizens client, that may be due to the Socialize Pension Program of the National Government and other propose benefits that are lining up for legislation purposes; Though there is a Model Center for Senior Citizen but was not conveniently located for the Older person to frequently visit the center, hence they are aspiring for some more comfortable space/venue to establish their Senior Citizen Center.

The limited home care facility for Senior Citizen is Bahay Maria, the only existing home care facility for the aged, run by a religious organization, presently can no longer accommodate the demand. Hence, the sector appeals for the establishment of a Government Home Care Facility and/or for those senior citizen who can afford can establish a home for retirees.

The services for children is the highest client demand. It comprises several sub-sector namely: children ages 3-6 or known as Day Care Children, Youth, CICL, CAR, etc. The most urgent need for now is the establishment of Bahay Pag-asa. This is one of the demands of the DILG to address the need of the unprecedented number of drug surenderees and to house Children in Conflict with the Law (CICL). The next concern is the deteriorating condition of our Social Development Center (SDC) and Women Crisis Center (WCC). Other concerns are the absence of a Child Minding Center to address the concern of working mothers or parents; the absence of a protectory facility for the youth and women offender. Only 1 barangay do not have a Day Care Center due to no more buildable public space, and several Day Care Centers are needing rehabilitation. There are also Day Care Centers with common CR, or without kitchen or handwashing facility, while some are located in danger zones and needs relocation, and several barangays needs additional Day Care Centers due to increasing population.

The women protection services are pretty good. Currently the Child Minding space is on-going at the City Hall lobby to cater to the toddlers of LGU employees and walk-in client with toddlers. The presence of a Women Crisis Center provides security and temporary shelter to VAW cases, however the center needs some rehabilitation, same as the Productivity Skills Center (PSCB) – a training center that provides sewing skills to women. In compliant to DILG mandate, all barangays have established their respective VAWC Desk. However, one weakness is observable - the low implementation of the private and public institution for the establishment of a breast feeding room and absence of Child Minding Facility at the barangay level.

Our PWD are in high hopes for the establishment of a PWD Center, and for the strict implementation of the accessibility law and aspiring for the establishment of an appropriate learning facility for students with special needs. PDAO is working to make the city a PWD Friendly City.

The youth sector also lobbying for the establishment of a Youth Hub facility, while for the other services, the OSWDS is in dire need for the construction of a stockroom for their stockpile. The city has existing 2 evacuation center but recommending for a policy that all barangays should establish their respective evacuation center considering that the city is 75% below sea level. Other concerns are the absence of a halfway house for the mentally deranged individuals and provide a policy supporting for the establishment of a mental facility at the CRMC.

The current facilities listed herein are the facilities that are necessary to be established in order to effectively serve the public and efficiently deliver the social welfare and development programs for Cotabato City.

a. Children:

The OSWDS highly recommends the completion of the Bahay Pag-asa in accordance to the full implementation of the CLJIP or the Comprehensive Local Juvenile Intervention Program, rehabilitation of Day Care centers, SDC, WCC; completion of the Senior Citizen Building; Completion of the Child Minding space at the City Hall, Establishment and completion of the Multi-purpose building/ Relief Good stock room; Construction of additional Day Care Centers; Completion of the PWD center and establishment of evacuation centers to calamity prone barangays in the city; and establishment of breastfeeding facility in public places.

Structures such as the child-minding facility room located at the ground floor of the City Hall is now ongoing and is expected to operate on the 3rd quarter year 2021. In addition, the senior citizen physical building is already completed, April of 2021, based on the latest progress, the permits for the power connection are already approved and is now undergoing process for review and inspection by the Cotabato light and power company for the electricity connection - - in line with this, the elevator is the only facility to be installed in the said building after the power will be installed. The said building is expected to be turned over and will be fully operational by the last quarter of 2021.

Along with services for children development and welfare, the Bahay Pag-asa is in dire need to be finished and completed since this is the most important facility the LGU has to have during the full implementation of the CLJIP where children in conflict with the law that has ongoing court cases ages 15-18 must be housed in the said facility. This building has a total budget of Php 13,000,000.00 - - but because it is solely funded by the City LGU, construction of the said facility building is still ongoing, thus, dividing the total budget per implementing years based on the funds availability.

Two existing centers (SDC and WCC) is also in dire need for rehabilitation and repair re: water leaks, rusted roofs, dilapidated windows, wall leaks, etc.,

1. Social Welfare Facilities, Services and Clientele, Year 2019

Other facilities listed herein is also recommended to be established within 6 to 9 years to reach out and provide the unmet needs of Cotabato city constituents.

Table SO-35. Social Welfare Facilities, Services and Clientele, Year 2019

Facility	Barangay	Services Offered	Type of Clientele	No. of Clientele	Staff	Ownership	Physical Condition	Hazard Susceptibility (H/M/L)						
								Fl	Tc	Eq	Ln	Ts	Su	Others
Senior Citizen Center	RH 5	Used for meetings, socialization activities, socio-cultural activivties	60 years old and above	2,409	2	Go'vt.	Fair							
Senior Citizen Building	RH 10	Activity Center, Multi-purpose Haall	60 years old and above	On-going Costruction	0	Go'vt.	Fair	L						
Evacuation center-City Gov't.	RH 10	Temporary Shelter for evacues	Victims of Calamities	0	0	Go'vt.	Fair	L				M		
Evacuation Center-Regional	RH 10	Temporary Shelter for evacues	Victims of Calamities	0	0	Go'vt.	Fair	L				M		
Bahay Maria	Pob 2	Home Care for abandoned Senior Citizens	abandoned 60 years old and above	30	2 Social Workers/ 8 House Parents/2 Sisters	NGO	Fair	L						
Women Crisis Center	Pansacala, RH 10	Temporary Shelter for disadvantage and abused women	18-59 years old Disadvantages, abused and VAW	4	6	Go'vt.	Fair	L				M		
Social Development Center (SDC)	Pansacala, RH 10	Drop-in Center/Temporary Shelter for Street Children and CICL	Children and Youth	36	5	Go'vt.	Fair	L				M		
PSCB	Pansacala, RH 10	Skills Training/ Capability Building	Disadvantage Women	38	4	Go'vt.	Fair	L				M		
Center for the Handicapped	San Isidro, RH 10	Skills Training/ Capability Building for PWDs	PWDS			Go'vt./DSWD XII	Fair	L				M		
Day Care Centers:														
1	RH MB	Day Care Services	3-4 years old	70	1	Gov't.	Fair	L						
2	Purok Pascual, RH MB	Day Care Services	3-4 years old	40	1	Gov't.	Poor	L						
3	Purok Maunawain, RH MB	Day Care Services	3-4 years old	48	1	Gov't.	Critical	L						

4	RH 1	Day Care Services	3-4 years old	50	1	Gov't.	Poor	L			L			
5	Purok Jasmin, RH 2	Day Care Services	3-4 years old	30	1	Gov't.	Critical	L						
6	Purok Katahimikan, RH2	Day Care Services	3-4 years old	32	1	Gov't.	Critical	L						
7	Purok Sampaloc, RH 2	Day Care Services	3-4 years old	32	1	Gov't.	Fair	L						
8	Purok Shariff Kabunsuan, RH 3	Day Care Services	3-4 years old	45	1	Gov't.	Poor	M						
9	RH 4	Day Care Services	3-4 years old	40	1	Gov't.	Fair	L						
10	RH 5	Day Care Services	3-4 years old	32	1	Gov't.	Fair	M						
11	Purok Pinnen, RH 6	Day Care Services	3-4 years old	60	1	Gov't.	Fair	L						
12	Purok Krislamville, RH 6	Day Care Services	3-4 years old	34	1	Gov't.	Fair	L						
13	RH 7 Extension	Day Care Services	3-4 years old	60	1	Gov't.	Fair	L						
14	Purok Imba, RH 7	Day Care Services	3-4 years old	30	1	Gov't.	Critical	L						
15	Purok Maharlika, RH 7	Day Care Services	3-4 years old	40	1	Gov't.	Critical	H						
16	Bliss, RH 8	Day Care Services	3-4 years old	45	1	Gov't.	Critical	H				M		
17	Borbon, RH 9	Day Care Services	3-4 years old	60	1	Gov't.	Fair	L						
18	Virgo, RH 9	Day Care Services	3-4 years old	33	1	Gov't.	Critical	H				M		
19	Purok Esteros, RH 9	Day Care Services	3-4 years old	47	1	Gov't.	Critical	L						
20	San Isidro, RH 10	Day Care Services	3-4 years old	52	1	Gov't.	Fair	L				M		
21	Purok Bitara, RH 10	Day Care Services	3-4 years old	45	1	Gov't.	Fair	L				M		
22	Purok Pag-asa, RH 10	Day Care Services	3-4 years old	35	1	Gov't.	Poor	L				M		
23	Purok Balabaran, RH 10	Day Care Services	3-4 years old	32	1	Gov't.	Poor	L				M		
24	Purok Mamalangkay, RH 10	Day Care Services	3-4 years old	35	1	Gov't.	Fair	L				M		
25	RH XI	Day Care Services	3-4 years old	45	1	Gov't.	Poor	L						
26	San Pablo, RH 11	Day Care Services	3-4 years old	40	1	Gov't.	Poor	L						
27	RH XII	Day Care Services	3-4 years old	45	1	Gov't.	Fair	L						
28	RH XIII	Day Care Services	3-4 years old	35	1	Gov't.	Fair	L						
29	Pob MB	Day Care Services	3-4 years old	60	1	Gov't.	Poor	L						
30	Purok Datukaka, Pob 1	Day Care Services	3-4 years old	40	1	Gov't.	Poor	L						
31	Purok Lu Shin	Day Care Services	3-4 years old	30	1	Gov't.	Critical	H						

	Khan, Pob 1													
32	Purok Honeybee, Pob 2	Day Care Services	3-4 years old	45	1	Gov't.	Poor	L						
33	Annex, Pob 2	Day Care Services	3-4 years old	48	1	Gov't.	Critical	H						
34	Pob 3	Day Care Services	3-4 years old	36	1	Gov't.	Poor	H						
35	Purok Malipayon, Pob 4	Day Care Services	3-4 years old	45	1	Gov't.	Fair	L						
36	Pob 5	Day Care Services	3-4 years old	45	1	Gov't.	Poor	L						
37	Purok Mapayag, Pob 7	Day Care Services	3-4 years old	40	1	Gov't.	Poor	L					M	
38	Purok Sultan, Pob 7	Day Care Services	3-4 years old	20	1	Gov't.	Critical	VH					M	
39	Purok Bailaga, Pob 8	Day Care Services	3-4 years old	55	1	Gov't.	Poor	H						
40	Purok Katamlangan, Pob 8	Day Care Services	3-4 years old	40	1	Gov't.	Critical	VH						
41	Purok Kalantungan, Pob 8	Day Care Services	3-4 years old	32	1	Gov't.	Fair	L						
42	Purok Dimalanes, Pob 8	Day Care Services	3-4 years old	45	1	Gov't.	Poor	H						
43	Biniruan, Pob 9	Day Care Services	3-4 years old	35	1	Gov't.	Poor	H						
44	Purok Datu Ali, Tam MB	Day Care Services	3-4 years old	58	1	Gov't.	Fair	L						
45	Tam 1	Day Care Services	3-4 years old	50	1	Gov't.	Fair	L						
46	Purok Datu Pio, Tam 2	Day Care Services	3-4 years old	21	1	Gov't.	Critical	H						
47	Tam 3	Day Care Services	3-4 years old	29	1	Gov't.	Critical	H						
48	Tam 4	Day Care Services	3-4 years old	45	1	Gov't.	Critical	H						
49	Tam 5	Day Care Services	3-4 years old	30	1	Gov't.	Critical	H						
50	Campo Muslim, Bag MB	Day Care Services	3-4 years old	32	1	Gov't.	Poor	M					M	
51	Purok Sampalok, Bag MB	Day Care Services	3-4 years old	60	1	Gov't.	Critical	H					M	
52	Lugay-Lugay, Bag 1	Day Care Services	3-4 years old	60	1	Gov't.	Critical	H					M	
53	Bag 2	Day Care Services	3-4 years old	60	1	Gov't.	Fair	L					M	
54	Bag 3	Day Care Services	3-4 years old	40	1	Gov't.	Poor	H						
55	Purok Balas, Kal MB	Day Care Services	3-4 years old	33	1	Gov't.	Critical	H					H	M
56	Purok Kalimudan,	Day Care Services	3-4 years old	30	1	Gov't.	Poor	L					H	M

	Kal MB													
57	Purok Kidupo, Kal 1	Day Care Services	3-4 years old	31	1	Gov't.	Critical	VH					M	
58	Purok Darping, Kalanganan 1	Day Care Services	3-4 years old	35	1	Gov't.	Critical	VH					M	
59	Purok Linao, Kal 1	Day Care Services	3-4 years old	30	1	Gov't.	Critical	VH					M	
60	Purok Limbayanagi, Kal 2	Day Care Services	3-4 years old	30	1	Gov't.	Fair	L					M	
61	Bubong, Kal 2	Day Care Services	3-4 years old	65	1	Gov't.	Poor	M					M	
62	Purok Bedtasan, Kal 2	Day Care Services	3-4 years old	44	1	Gov't.	Critical	H					M	
63	Purok Buwaya-buwaya, Kal. 2	Day Care Services	3-4 years old	44	1	Gov't.	Poor	L						
64	Purok Pimbaglan, Kal 2	Day Care Services	3-4 years old	37	1	Gov't.	Poor	L					M	

Source: Office on Social Welfare Services

Notes: Services offered:
1. Family Life Education and Counseling
2. Family Planning Assistance
3. Day Care Services, Supplemental Feeding
4. Medical Care
5. Relief/Rehabilitation

Type of Clientele:
1. Disadvantaged families
2. Depressed Area
3. Disadvantaged women (18-59 years old)
4. Pre-school Children/Children (0-12 years old)
5. Youth (13-24 years old)

Ownership - Public /Private
Physical Condition:Fair - well maintained/serviceable
Poor - needs improvement
Critical - needs priority action
Indicate level of susceptibility for all hazards: High (H), Moderate (M), Low (L)

The said ratings on the physical conditions and hazard susceptibility of our facilities are validated, evaluated and checked by our social worker together with the CDRR, barangay, and Engineering where the said facilities was thoroughly inspected based on the report submitted to OSWDS.

Senior Citizens have three dedicated facilities. One is the Model Center, located in Rosary Heights 5 which is serving more than 2,000 clients. Another is the Senior Citizen Building, located in Rosary Heights 10 which is currently under construction. Both are government-owned. The third facility, Bahay Maria, houses 30 abandoned senior citizens from the city. It is managed by 2 social workers, 8 house parents, and 2 nuns. it is NGO-owned. The two latter facility are both low susceptible to flooding.

Serving as temporary shelters during times of calamity, two government-owned evacuation centers are situated in Rosary Heights 10. One is constructed by the local city government. The other is constructed by the regional government, both are susceptible to low flooding. The Women Crisis Center which temporary houses 4 disadvantaged and abused women at a time is managed by 6 staffs; the Social Development Center (SDC) presently provide temporary shelter to 36 street children and CICL is manned by 5 staffs; together in the same site, the PSCB, a productivity training center for women are all located in a government own property located in Pansacala, RH 10 and are susceptible to low flooding. The Center for the Handicapped is situated at San Isidro, RH 10. It is where livelihood trainings center for PWD-related services are offered has a low susceptibility to flooding.

There are a total of 64 daycare centers in the city. All are government-owned where each is manned by one daycare staff. The average children caterred in a Day Care Center range from 30 to 60. The highest recorded is from Mother Barangay Rosary Heights with 70 Day Care Children. Out of the 64 DC Centers, 5 are susceptible to very high flooding, 18 with high susceptibility, 4 Moderately susceptible and 37 with low susceptibility, while 1 is vulnerable to low landslide, and 21 with moderate susceptibility to tsunami and 2 centers are vulnerable to high tsunami. Two DC centers are with moderate susceptibility to Storm surge. Barangay Poblacion 6 do not have a Day Care Center due to no more buildable public space and as an alternate established a Supervised Neighborhood Play (SNP) Activity.

Pertaining to the structural condition of the 64 Day Care Centers, twenty needs repair, 10 are susceptible to fire, while 6 are no longer functioning or demolished, 15 needs relocation and 4 needs construction and 1 needs a temporary structure.

2. Historical Number of Population Served by Type of Clientele System

The current data herein are the total number of clients served within the said years and was able to receive all the programs and services applicable to the said clients based on the recommendation of the social worker handling the case re: women in especially difficult circumstances, children in need of special protection, CICL and CAR.

In line with the Persons with disabilities, senior citizens, and solo parents, these are the total number registered, evaluated, and validated on the said implementing years.

Day care children and SNP children total number stated herein are the number of children enrolled 62-day care centers of the city and SNP within the 37 barangays of Cotabato city thus, other day care children that are not listed herein are children that are enrolled to private schools.

Table SO- 36. Historical Number of Population Served by Type of Clientele System

Type of Clientele	Previous Years			Current/Latest Year	
	2016	2017	2018	2019	Percentage
Women in especially difficult circumstances	12	39	21	12	0.15
Children in need of special protection	20	13	14	15	0.18
Persons with Disabilities	1,020	1,364	1,722	1,940	23.54
Senior Citizens	1,009	1,709	2,409	2,875	34.89
Solo Parents	191	1,713	31	32	0.39
Day Care Children	3,000	3,113	3,011	2,846	34.53
Youth					
SNP Children	277	477	555	521	6.32

CICL/CAR	14/20	15/13	18/16	5/8	547.79
TOTAL	5,529	8,428	7,763	8,241	100.00

Source: OSWDS, 2019

The current data herein are the total number of clients served within the said years and was able to receive all the programs and services applicable to the said clients based on the recommendation of the social worker handling the case re: women in especially difficult circumstances, children in need of special protection, CICL and CAR.

In line with the Persons with disabilities, senior citizens, and solo parents, these are the total number registered, evaluated, and validated on the said implementing years.

Day care children and SNP children total number stated herein are the number of children enrolled 62-day care centers of the city and SNP within the 37 barangays of Cotabato city thus, other day care children that are not listed herein are children that are enrolled to private schools.

Table SO-34. **SOCIAL WELFARE SERVICES ANALYSIS MATRIX**

Technical Findings/ Observations	Implications (Effects)	Policy Options/ Interventions
SENIOR CITIZENS		
Abrupt increase and growing population/client among Senior Citizens	Unmet senior citizens' need for socialization and more active community involvement	Establishment of a Senior Citizen Center.
Model Center for Senior Citizen not conveniently located for Senior Citizen (interior of Barangay RH 5)		Scooped Financial Support from Cong. Datul for the construction of Senior Citizen Building, the city counterpart provided the lot/space located at Datu Udtog Matalam. The said building is currently waiting for the power connection and installation of elevator and is expected to be turn-over this year 2021
Lack of comfortable space to accommodate the Senior Citizens specially during the distribution of Social Pension		
Absence of a Home Care for Senior Citizen that is Government Own for Abandoned and/or indigent		Establishment of a Government Home care for Senior Citizen
Absence of a Retirees Home Care for Senior Citizens		Establishment of a Retirees Own and controlled Home Care
CHILDREN		
Absence of Bahay Pag-asa Facility	Disrupted services due to absence of facility. CICL ages 15-18 years old temporary being housed at SDC	Continuing of Capital build-up for the construction of Bahay Pag-asa
SDC is in dire need of rehabilitation	Poor service delivery; children safety and comfort is at risk	Rehabilitation of the SDC

Absence of Child Minding Center	Attributing to habitual absenteeism of parents, which directly affects the income or productivity of the parents, mental and emotional discomfort to working parents	Construction of a Child Minding Center
CICL		
Absence of protectory facility for the youth and women offender	CICL and CAR clients temporarily being admitted at SDC for rehabilitation and undergo psycho-social services; VAWC clients to WCC with programs and activities suitable to the clients needs, hence, this mix arrangement of victims of abuses and offenders may promote conflict of the 2 different clientele	Establishment of youth and women protectory facility
DAY CARE SERVICES		
Barangay Poblacion 6 has no Day Care Center due to no buildable public land	Day Care children opted to attend Day Care classes in nearby Day Care Centers	Establishment of Supervise Neighborhood Play (SNP)
Some Day Care Centers with already dilapidated structures, needs construction/rehabilitation and additional centers for newly established relocation sites, and augmentation due to increasing Day Care Children population	Affects the quality of learning and the learning environment	Rehabilitation/Construction of Day care Centers
Not all Daycare Centers are with separate male and female comfort rooms, kitchen, limited hand washing facility	Quality of Day Care services is affected	Barangay Annual Investment program to prioritized the Day Care Facilities
Some Day Care Centers located in danger zones, needs relocation	Exposes Day Care Children to possible accident or danger	Relocation of identified Day Care Centers
Women		
Implementation of RA 9710 provision of space for breastfeeding in all public places	Discomfort Nursing mothers	Support a legislation for the implementation of a breast feeding room for nursing mothers
WOMEN and FAMILY		
The rehabilitation of the Women Crisis Center is in dire need for rehabilitation	Affects the quality of service and the serviceable life of the facility	Rehabilitation of WCC
PSCB needing rehabilitation	Affects the quality of service, service life of the machineries	Rehabilitation of the PSCB
PWDs		
Absence of Bahay na walang hagdan and PDAO Building	Affects the productivity of PWD and discomfort of	Establishment of PDAO and establishment of a training center for

	PWDs for an appropriate PDAO building/office	PWD
Low implementation of the Accessibility Law	Mobility difficulty of PWDs	Strict implementation of the Accessibility Law
No appropriate learning facility for children with special needs	Children with special needs are discourage to go to school and eventually became illiterate	Establishment of an Educational Facility for children with special needs
Youth		
Absence of youth Hub	No conducive place for the youth to hold/conduct their activities; Risk of influence on violent extremism, involvement on gangs and organized groups	Construction/establishment of a Youth Hub;
Other Services:		
Absence of Stock room for relief Goods/ Temporary shelter	Stockpile are stored in the City Hall Lobby, disrupting the regular office transactions If no proper storage for stockpile, may affect the quality of goods and Shelf life.	Construction of storage for relief goods to preserve shelf life of goods
Absence of a halfway house for mentally deranged individuals	Mentally deranged individuals roaming around the city streets	Passage of a resolution recommending CRMC for the establishment for a mental facility/halfway house.
The 2 evacuation Centers may not be enough in the case of high flooding	Climate Adaptive initiative to mitigate low risk during flooding/community resiliency plan considering that Cotabato City is a Catchment of the Cotabato River Basin	Policy to all Barangays to establish an evacuation center integrated in their DRRM plans

Social Welfare Related Projects /Approved Funded for Implementation:

P/A/P	Implementing Year		Implementing Office/Department
	2021	2022	
GENERAL PUBLIC SERVICES			
Social Welfare and Development Services Program, Projects, and Activities			
Financial Assistance to women in crisis situation	/	/	OSWDS
Training for social services providers on the proper handling of VAWC cases	/	/	OSWDS
Provision of Support to women crisis center (WCC)	/	/	OSWDS
Reproduction of IEC materials and supplies for the 37 barangay VAW Desk	/	/	OSWDS

Maintenance operation of SDC	/	/	OSWDS
Reproductive Health FP Orientation, congress and training	/	/	OSWDS
BSPO year end evaluation/Planning workshop	/	/	OSWDS
Physical and psychosocial care involving stress and financial management seminar	/	/	OSWDS
Conduct of BSPO enhancement capability Building (Refresher course), SHAPE orientation & training at barangay levels (selected mothers) TEEN-trail orientation to private and public schools	/	/	OSWDS
Parental care and guidance to healthy living	/	/	OSWDS
Women's Month Celebration (Proclamation No. 227, Providing the observance of Women's Month)	/	/	OSWDS
ERPAT - Livelihood Assistance and Skills Training with Starter Kits	/	/	OSWDS
Provision of Support to ERPAT- Livelihood Assistance and skills training	/	/	OSWDS
OFW Help desk - orientation and consciousness training for social workers and other concern agencies in Cotabato City	/	/	OSWDS
Provision of Learning package Education Development	/	/	OSWDS
Capability and enhancement support to Social workers, house parents, and OSWDS employees on capacity building and updating programs	/	/	OSWDS
Strengthening CCWC Network	/	/	OSWDS
CCWC review and reporting activity	/	/	OSWDS
Production of IEC Materials and Supplies and supplies in advocacy against human trafficking	/	/	OSWDS
Conduct quarterly meetings and conferences for solo parents	/	/	OSWDS
Educational support to deserving indigent solo parent children	/	/	OSWDS
Capability Enhancement and Development Training for Day Care workers and kindergarten teachers	/	/	OSWDS
Capability Enhancement of Daycare parents in handling children with special needs	/	/	OSWDS

Enhanced women's desks and VAWC monitoring system in the barangay level	/	/	OSWDS
Expansion to women council membership	/	/	OSWDS
Conduct of 3-day workshop on perkada modules, 2 days U4U congress/convention, conducted teen trail advocacy, enhancement training for U4U facilitators	/	/	OSWDS
Psychosocial debriefing LSI and OFWs due to covid	/	/	OSWDS
Training for social workers, implementers, immediate case response team on proper case handling for VAWC cases	/	/	OSWDS
Livelihood assistance (Starter Kits to PSCB graduates, Updated training on sewing techniques and designs.	/	/	OSWDS
PSCB supplies and Materials, Operation and Maintenance	/	/	OSWDS
Capacity Building and exposure for client beneficiaries (travel)	/	/	OSWDS
Value formation against illegal drugs	/	/	OSWDS
Solo parent Congress	/	/	OSWDS
Solo parent year-end assessment and review	/	/	OSWDS
Women's Activity Review and Reporting (Women's congress)	/	/	OSWDS
WCC client- beneficiaries' skills and capability enhancement program	/	/	OSWDS
World population day celebration, the conduct of population quiz show	/	/	OSWDS
Monitoring and Evaluation of VAWC Desk function and response (to be conducted quarterly)	/	/	OSWDS
Legal Assistance for WCC client-beneficiaries	/	/	OSWDS

PROGRAM	PROGRAM COMPONENTS	ACTIONS/INTERVENTIONS	TIMEFRAME	FUND SOURCE
Social Welfare Services				
Infrastructure Development	4.1 Construction/Improvement of essential Social Welfare Facilities	4.1.1 Construction/Improvement of Stockroom and warehouse	2020-2030	20% CDF
		4.1.2 Expansion and Improvement of Stockroom	2020-2030	20% CDF
		4.1.3 Improvement of the Stock Room	2020-2030	20% CDF
		4.1.4Construction of BahayPag-asa	2020-2030	20% CDF
		4.1.5 Establishment of a Child Minding Center	2020-2030	20% CDF
		4.1.6 Completion/improvement of the Child Minding Space at the People's Palace	2020-2030	20% CDF
		4.1.7 Construction of teen Center and youth hub	2020-2030	20% CDF
		4.1.8 Expansion and Repair of WCC & SDC	2020-2030	20% CDF
		4.1.9 Construction of SNP covered session areas in the 37 barangays	2020-2030	20% CDF
		4.1.10 Establishment of additional Day Care Centers	2020-2030	20% CDF
		4.1.11 Relocation of DCCs	2020-2030	20% CDF
		4.1.12Improvement and repair of dilapidated Day Care Centers	2020-2030	20% CDF
Children Welfare Program	4.2 Early Child Care and Development (ECCD)/ Day Care Services	4.2.1 Delivery of Day Care Services (Honorarium of DCWs, Supply and mats.)	2020-2030	GENERAL FUND
		4.2.2 Provision of Play Equipment and Learning Materials for DCCenters (RA10410)	2020-2030	GENERAL FUND
		4.2.3 Reproduction of Module for DC Program/New Normal	2020-2030	GENERAL FUND
		4.2.4 Support to ECCD Committee	2020-2030	GENERAL FUND
		4.2.5 Conduct of Joint Quarterly Meeting (CCECCD Committee and LCPC Committees) and Attendance to Webinar on Children Welfare Program	2020-2030	GENERAL FUND
		4.2.6 Delivery of health and Nutrition Services (Feeding Program, vegetable gardening)	2020-2030	GENERAL FUND
		4.2.7Completion of Children's Park	2020-2030	GENERAL FUND
		4.2.8 Provision of Parks and Playground for children in every barangay	2020-2030	GENERAL FUND
		4.2.9 Creation of Permanent items for DCWs	2020-2030	GENERAL FUND
		4.2.10Purchase of Bus for Mobile Library	2020-2030	GENERAL FUND
		4.2.11 Delivery of SNP Services	2020-2030	GENERAL FUND
		4.2.12 Strengthening the 4 Committees of Child Rights (Planning/ Research and Programming for LCPC including supplies and materials)	2020-2030	GENERAL FUND
		4.2.13.Representation to Meetings, seminars, conventions,	2020-2030	GENERAL FUND

		trainings and planning forum on children Services		
		4.2.14 Radio Program for Children's Welfare Programs, Projects and Literacy Activities (once a weekairtime for 1 hour for 1 year(12 months)	2020-2030	GENERAL FUND
		4.2.15 Online Learning Sessions: Webinar on Leadership Management & Adolescent Health duringCoVid Pandemic	2020-2030	GENERAL FUND
		4.2.16 Positive Approaches that can help manage stress, avoid conflict, enjoy better interaction with children especially during quarantine	2020-2030	GENERAL FUND
		4.2.17 Virtual Psychological First Aid Training of Trainors	2020-2030	GENERAL FUND
		4.2.18 Educational Assistance for Indigent elementary and HS school children	2020-2030	GENERAL FUND
		4.2 19 Support to Supervised Neighborhood Play (SNP) as Home-based ECCD	2020-2030	GENERAL FUND
		4.2 20 Program Support to ALS and ALIVE (Para Teachers) Program	2020-2030	GENERAL FUND
		4.2.21 Capability Building seminar and Training for Day Care Workers (meals and snacks, suppliesand materials, RP Honorarium, other materials)	2020-2030	GENERAL FUND
		4.2.22 Day Care Workers Week Celebration	2020-2030	GENERAL FUND
		4.2.23 Search for Outstanding Day Care Workers & other Volunteers Loyalty Award	2020-2030	GENERAL FUND
		4.2.24 Support to Day Care Workers Federation (Travel Expenses for Training / Seminars Outside Cotabato City and or modular requirements for update	2020-2030	GENERAL FUND
		4.2.25 Procurement of Initial Learning Materials for Mobile Library	2020-2030	GENERAL FUND
		4.2.26 Repair and maintenance of Mobile Library vehicle	2020-2030	GENERAL FUND
		4.2.27 Assistance to Sustainable Early Education & Development (SEED)	2020-2030	GENERAL FUND
		4.2.28 Establishment of Mobile Library	2020-2030	GENERAL FUND
	4.3 Children's Right to Survival	4.3.1 Free Birth Registration for DCChildren (LCR)	2020-2030	GENERAL FUND
		4.3.2 Implementation of WASH Program(Provision of Wash Facilities & hygiene kits andCelebration of Global Hand Washing Day, Best Practice on Hand washing advocacies)	2020-2030	GENERAL FUND
		4.3.3 Provision of whistle to DCChildren	2020-2030	GENERAL FUND
		4.3.4 World Water Day and World Toilet Day Celebration	2020-2030	GENERAL FUND
		4.3.5 Zero Open Defecation (ZOD) Program	2020-2030	GENERAL FUND
		4.3.6 Nutrition and Health Support to children	2020-2030	GENERAL FUND

		4.3.7 Celebration of Nutrition Month	2020-2030	GENERAL FUND
		4.3.8 Provision of Social Protection Services for children victims of violence, CAR, CICL	2020-2030	GENERAL FUND
	4.4 Children's Right to Protection	4.4.1 Installation of Social Welfare Mechanism (VAWC Desk, IMTF, BCPC)	2020-2030	GENERAL FUND
		4.4.2 Support to Social Protection Committee and its services	2020-2030	GENERAL FUND
		4.4.3 Training for Proper Usage of Whistle for children as their protective equipment and provision of whistles for small groups of parents/children in batches	2020-2030	GENERAL FUND
		4.4.4 Safe Online Information Drive	2020-2030	GENERAL FUND
		4.4.5 Support to Street Education Program (RA4881-Hon. of Street Educators, planning WS, M&E, Trngs., Meetings)	2020-2030	GENERAL FUND
		4.4.6 Psycho-Social Activities /Sessions to Street Children	2020-2030	GENERAL FUND
		4.4.7 Training on Protocol to Reach Out to Children in Street Situation	2020-2030	GENERAL FUND
		4.4.8 Financial Assistance to CNSP/Children at Risk & whose parent test positive to Covid& other infectious diseases for transportation, medical, psychosocial services	2020-2030	GENERAL FUND
		4.4.9 Support to Children in Emergency	2020-2030	GENERAL FUND
		4.4.10 Psychosocial support to children under stress situation	2020-2030	GENERAL FUND
		4.4.11 Psychosocial Debriefing for Drug Dependents	2020-2030	GENERAL FUND
		4.4.12 Family Tracing Reunification (FTR) Sustainability Support Program (RA10821)	2020-2030	GENERAL FUND
		4.4.13 Social case study report	2020-2030	GENERAL FUND
		4.4.14 Provision of Assistance to children in crisis situation base on SWO assessment	2020-2030	GENERAL FUND
		4.4.15 Support to advisory Drug Council & Drug Surenderees (RA 9165)	2020-2030	GENERAL FUND
		4.4.16 Protection and rehabilitation program to Children victims of abuses (Child rescue and rehabilitation Program)	2020-2030	GENERAL FUND
		4.4.17 Values Formation Session (RA 9344) at SDC	2020-2030	GENERAL FUND
		4.4.18 Augmentation of Social Welfare Worker Service Providers	2020-2030	GENERAL FUND
		4.4.19 Publication for Foundling Casesin Newspapers and Media	2020-2030	GENERAL FUND
		4.4.20 Implementation of the Comprehensive Local Juvenile	2020-2030	GENERAL FUND

		Intervention		
		4.4.21 Programs (CLJIP) for CICL/ CAR (Case management)	2020-2030	GENERAL FUND
		4.4.22 Livelihood and Educational Assistance to CICL after treatment and rehabilitation program	2020-2030	GENERAL FUND
		4.4.23 Financial Assistance to CICL in attending scheduled monthly case conference as required in the disposition of their cases	2020-2030	GENERAL FUND
		4.4.24 Values Formation and Life Coaching Sessions for Children at Risk/Children in need of Special protection (CNSP)	2020-2030	GENERAL FUND
		4.4.25 Strengthening the BCPC Program (BCPC Functionality)	2020-2030	GENERAL FUND
	4.5 Children's Right to Participation	4.5.1 Strengthening the LCPC	2020-2030	GENERAL FUND
		4.5.2 Children's Month Celebration	2020-2030	GENERAL FUND
		4.5.3 Children's Festival (Community Based)	2020-2030	GENERAL FUND
		4.5.4 Children's Competition	2020-2030	GENERAL FUND
		4.5.5 Kick Off Celebration: (Online Platforms Representative per Cluster: Spoken Word Poetry/ Song/ Dance-Meals, supplies and materials, decorations and prizes)	2020-2030	GENERAL FUND
		4.5.6 "Tapatan 2022"- Consultation with children & youth	2020-2030	GENERAL FUND
		4.5.7 BosesngKabataan Radio Program	2020-2030	GENERAL FUND
		4.5.8 State of Children's Report	2020-2030	GENERAL FUND
		4.5.9 Children's Welfare Best Practices Documentary Competition	2020-2030	GENERAL FUND
		4.5.10 Children's Month Culmination Program	2020-2030	GENERAL FUND
Program Support for the Youth	4.6 Youth Welfare, Development and Protection Program	4.6.1 Administrative Support to Youth Center	2020-2030	GENERAL FUND
		4.6.2 Child Welfare Section/ staff Capability Building, planning, meetings, updating (including supplies and materials)	2020-2030	GENERAL FUND
		4.6.3 Mandatory-Continuing Training for Barangay Officials	2020-2030	GENERAL FUND
		4.6.4 LinggongKabataan Celebration (R.A. 10742)	2020-2030	GENERAL FUND
		4.6.5 Support to Local Youth Development Council Meetings	2020-2030	GENERAL FUND
		4.6.6 Support to LYDC activities and programs	2020-2030	GENERAL FUND
		4.6.7 Youth on Social Media Awareness	2020-2030	GENERAL FUND
		4.6.8 The Heart in Art: A Painting Exercise for Peace	2020-2030	GENERAL FUND
		4.6.9 BrigadaSkwela	2020-2030	GENERAL FUND
		4.6.10 Recycle Materials Arts Competition	2020-2030	GENERAL FUND

		4.6.11 Benchmarking Activity	2020-2030	GENERAL FUND
		4.6.12 Earth Day Celebration	2020-2030	GENERAL FUND
		4.6.13 Mental Health Awareness Program	2020-2030	GENERAL FUND
		4.6.14 Youth Business Forum	2020-2030	GENERAL FUND
		4.6.15 Multimedia and Digital Platforms Workshops	2020-2030	GENERAL FUND
		4.6.16 Cotabato Youth Delegate Support	2020-2030	GENERAL FUND
		4.6.17 Violence on Women (VAW) Awareness among youth women	2020-2030	GENERAL FUND
		4.6.18 Cotabato City Youth Leadership Academy	2020-2030	GENERAL FUND
		4.6.19 Public Speaking and Effective Writing Workshop	2020-2030	GENERAL FUND
		4.6.20 Online Sexual Exploitation Seminar	2020-2030	GENERAL FUND
		4.6.21 Youth Vote	2020-2030	GENERAL FUND
		4.6.22 Scholarship for indigent children	2020-2030	GENERAL FUND
		4.6.23 City Government Scholar's Alumni Night	2020-2030	GENERAL FUND
Program Services for PWDs and for Senior Citizens	4.7 Advocacy and Awareness Campaign and welfare services for PWD and Senior Citizens	4.7.1 Information Dissemination and awareness campaign of RA 7277, BP 344 and other related law through IEC, Radio Program, leaflets, Signage, Social Media and symposium	2020-2030	GENERAL FUND
		4.7.2 Strict implementation of the Accessibility Law	2020-2030	GENERAL FUND
		4.7.3 Formulation of PWD Code	2020-2030	GENERAL FUND
		4.7.4 Implementation of RA 7277, Sec. 5-Equal Opportunity for employment	2020-2030	GENERAL FUND
		4.7.5 Representation of PWD in Barangay Councils	2020-2030	GENERAL FUND
		4.7.6 Strict implementation of the BP 344	2020-2030	GENERAL FUND
		4.7.7 Equipage of PWD Livelihood Skills Training Center	2020-2030	GENERAL FUND
		4.7.8 Leadership Training for the 37 Barangay PWD Leaders	2020-2030	GENERAL FUND
		4.7.9 Provision of Assistive Devices to PWDs and SC	2020-2030	GENERAL FUND
		4.7.10 Educational Assistance for PWDs (Elementary, High School and tertiary level)	2020-2030	GENERAL FUND
		4.7.11 PWD Team Leader Monthly Meeting	2020-2030	GENERAL FUND
		4.7.12 National Disability Prevention and Rehabilitation (NDPR) Week Celebration	2020-2030	GENERAL FUND
		4.7.13 Livelihood training/skills enhancement	2020-2030	GENERAL FUND
		4.7.14 Livelihood Assistance to PWDs (Starter Kits)	2020-2030	GENERAL FUND
		4.7.15 Financial Assistance grant for livelihood Project	2020-2030	GENERAL FUND
		4.7.16 Honorarium to 20 CBR	2020-2030	GENERAL FUND
		4.7.17 PWD Summit	2020-2030	GENERAL FUND
		4.7.18 Persons with Disability Affairs Committee quarterly	2020-2030	GENERAL FUND

		meeting		
		4.7.19 Medical and dental Mission for PWDs and Senior Citizens	2020-2030	GENERAL FUND
		4.7.20 Burial Assistance for PWDs and Senior Citizens	2020-2030	GENERAL FUND
		4.7.21 Provision of PWD and Senior Citizen IDs and purchase booklets	2020-2030	GENERAL FUND
		4.7.22 Installation of Internet Connection at PWD Training Center	2020-2030	GENERAL FUND
		4.7.23 Furniture and Fixture of PWD Training Center	2020-2030	GENERAL FUND
		4.7.24 Purchase of 1 unit Multi-cab with Lifter	2020-2030	GENERAL FUND
		4.7.25 Provision of Financial Assistance to disadvantage PWDS	2020-2030	GENERAL FUND
		4.7.26 PWD and Senior Citizens Representation to Trainings, seminars outside the city (Travel allowance, registration, others)	2020-2030	GENERAL FUND
		4.7.27 Financial Assistance for the repair of assistive devices	2020-2030	GENERAL FUND
		4.7.28 Financial assistance for the repair of PWD damages houses affected by calamity	2020-2030	GENERAL FUND
		4.7.29 Purchase of PPEs for PWDs	2020-2030	GENERAL FUND
		4.7.30 Equipage for PWD and Senior Citizen Facilities	2020-2030	GENERAL FUND
		4.7.31 Purchase of hygiene kits for PWDs	2020-2030	GENERAL FUND
		4.7.32 Provision of scholarship for qualified PWDs	2020-2030	GENERAL FUND
		4.7.33 Recognition Day for PWDs Trainees	2020-2030	GENERAL FUND
		4.7.34 Data Banking and Profiling Project of PWDs and SC	2020-2030	GENERAL FUND
		4.7.35 Skills DevelopmentProg. for PWDS & SC	2020-2030	GENERAL FUND
		4.7.36 Economic Program for PWD and SC	2020-2030	GENERAL FUND
		4.7.37 Employment Program for PWDs and SC	2020-2030	GENERAL FUND
		4.7.38 Social Welfare assistance and services to PWD and SC in crisis situation base on the needs assessment by the Social Worker (financial assistance, medical assistance, burial assistance, transportation, etc.)	2020-2030	GENERAL FUND
		4.7.39 Completion of PWD skills development training building	2020-2030	GENERAL FUND
		4.7.40 Support for the Operation of the Office of Person with Disabilities Affairs	2020-2030	GENERAL FUND
		4.7.41 Honorarium of PWDs Interpreters	2020-2030	GENERAL FUND
		4.7.42 Honorarium of CBR Volunteers	2020-2030	GENERAL FUND
		4.7.43 CBR enhancement Training	2020-2030	GENERAL FUND

		4.7.44 Support to SEP Program	2020-2030	GENERAL FUND
		4.7.45 Capability/Value Formation of PWD Leaders	2020-2030	GENERAL FUND
		4.7.46 Benchmarking for PWDs and SC	2020-2030	GENERAL FUND
		4.7.47 Disability consciousness celebration	2020-2030	GENERAL FUND
		4.7.48 Skills enhancement training for SSS staff	2020-2030	GENERAL FUND
		4.7.49 Socio-cultural activity	2020-2030	GENERAL FUND
		4.7.50 Life coaching/Psychological first aid to PWD	2020-2030	GENERAL FUND
		4.7.51 Annual Review of Plans and Evaluation	2020-2030	GENERAL FUND
		4.7.52 Completion of the Senior Citizen Building	2020-2030	GENERAL FUND
		4.7.53 Support to the operation of the Office on Senior Citizen Affairs (OSCA)	2020-2030	GENERAL FUND
		4.7.54 Support to the Operation of the Model Center	2020-2030	GENERAL FUND
		4.7.55 Operation and maintenance of the Senior Citizen Building	2020-2030	GENERAL FUND
		4.7.56 Furnishing of the Senior Citizen Building	2020-2030	GENERAL FUND
		4.7.57 Support to FSCAP Regional Activity	2020-2030	GENERAL FUND
		4.7.58 Senior Citizens Consultative Meetings	2020-2030	GENERAL FUND
		4.7.59 Senior Citizen Assembly and Socio-cultural showcase for senior citizen week	2020-2030	GENERAL FUND
		4.7.60 SC Hataw Exercise	2020-2030	GENERAL FUND
		4.7.61 Barangay Visitation and small groups consultation Meeting	2020-2030	GENERAL FUND
		4.7.62 Livelihood Assistance to qualified SC/ training and skills enhancements	2020-2030	GENERAL FUND
		4.7.63 Financial Assistance to qualified SC	2020-2030	GENERAL FUND
		4.7.64 Senior Citizen Convention and Socio-Cultural Activities	2020-2030	GENERAL FUND
		4.7.65 Lakbay Aral	2020-2030	GENERAL FUND
		4.7.66 Support to release Social Pension of Senior Citizen	2020-2030	GENERAL FUND
		4.7.67 Purchase of Medical Emergency kits for Senior Citizen	2020-2030	GENERAL FUND
		4.7.68 Bi-monthly Meeting of Regional FSCAP	2020-2030	GENERAL FUND
		4.7.69 Provision of Special Employment for Poor/Indigent Senior Citizens	2020-2030	GENERAL FUND
		4.7.70 Economic Support to disadvantage group/individuals (Blind, PWDS, etc.)	2020-2030	GENERAL FUND
		4.7.71 Support to Solo Parents and their children services	2020-2030	GENERAL FUND
		4.7.72 Reproductive Health Education	2020-2030	GENERAL FUND
		4.7.73 Support to Family Resource Allocation Management	2020-2030	GENERAL FUND

		4.7.74 Responsible Parenthood Program	2020-2030	GENERAL FUND
		4.7.75 Provision of Comprehensive Health Services	2020-2030	GENERAL FUND
		4.7.76 Solo parent congress	2020-2030	GENERAL FUND
		4.7.77 Transportation assistance in cases of mandatory attendance to outside and inside quarterly meetings and conferences	2020-2030	GENERAL FUND
		4.7.78 Skills Training with starter kits for Solo Parents	2020-2030	GENERAL FUND
		4.7.79 Year-end Assessment and review of Solo Parents	2020-2030	GENERAL FUND
		4.7.80 Educational support to deserving indigent solo parent children	2020-2030	GENERAL FUND
Program Services for Indigenous People	4.8 Preservation of the local culture and distinction	4.8.1 Passage of an Ordinance for the Establishment of a Tribal Hall/Center and providing funds and public land for the purpose	2020-2030	GENERAL FUND
		4.8.2 Establishment of a Tribal Hall/ Center for IPs	2020-2030	GENERAL FUND
		4.8.3 Land Acquisition of land for the establishment of a Tribal Village	2020-2030	GENERAL FUND
		4.8.4 Relocation ICC/IPs living in Road Right of Ways to the Tribal Village site	2020-2030	GENERAL FUND
		4.8.5 Provision of Educational Assistance to Women Indigenous People Registered to TESDA Vocational courses	2020-2030	GENERAL FUND
		4.8.6 Provision of Financial Assistance for High Schools Scholars	2020-2030	GENERAL FUND
		4.8.7 Livelihood Skills Training for the less fortunate women IPs	2020-2030	GENERAL FUND
		4.8.8 Celebration of SAWIT Festival during Month of October	2020-2030	GENERAL FUND
		4.8.9 Medical and Dental Mission for IPS during the SAWIT FESTIVAL	2020-2030	GENERAL FUND
		4.8.10 SAWIT Trade Fair	2020-2030	GENERAL FUND
		4.8.11 Cultural Sports	2020-2030	GENERAL FUND
		4.8.12 ONO Making Training for members of IPs	2020-2030	GENERAL FUND
		4.8.13 Passage of an ordinance supporting the representation of IP at the barangay level	2020-2030	GENERAL FUND
Crisis Intervention	4.9 Emergency Relief Assistance Operations	4.9.1 Operation and Maintenance of the Stock room	2020-2030	GENERAL FUND
		4.9.2 Emergency Assistance based on the social case study conducted by the social worker, including financial assistance, medical assistance, transportation assistance, food assistance, etc.	2020-2030	GENERAL FUND
		4.9.3 Construction of Warehouse for the supply	2020-2030	GENERAL FUND

		4.9.4 Procurement of 2 units (Van) Response Vehicle for relief operation	2020-2030	GENERAL FUND
		4.9.5 Annual LTO registration and periodic Repair and maintenance of social welfare service vehicles	2020-2030	GENERAL FUND
		4.9.6 Support to emergency response activities during calamities	2020-2030	GENERAL FUND
		4.9.7 Purchase of stock file (relief goods)	2020-2030	GENERAL FUND
		4.9.8 Emergency employment for essential service providers during emergency situation	2020-2030	GENERAL FUND
		4.9.9 Procurement of portable shelters	2020-2030	GENERAL FUND
		4.9.10 Procurement of portalets	2020-2030	GENERAL FUND
		4.9.11 Procurement of Tents	2020-2030	GENERAL FUND
		4.9.12 Equipage for relief operation	2020-2030	GENERAL FUND
		4.9.13 Provision of Emergency Mobilization Fund for relief and response operation	2020-2030	GENERAL FUND
Rehabilitation Program	4.10 Sustainable Livelihood and Entrepreneurial Program	4.10.1 Food for work Program	2020-2030	GENERAL FUND
		4.10.2 Project Proposal Making	2020-2030	GENERAL FUND
		4.10.3 Livelihood Trainings	2020-2030	GENERAL FUND
		4.10.4 Provision of Self-help and self-employment program	2020-2030	GENERAL FUND
		4.10.5 Skills Development	2020-2030	GENERAL FUND
		4.10.6 Purchase of infrastructure materials essential for emergency operations	2020-2030	GENERAL FUND
		4.10.6 Social Amelioration Program	2020-2030	GENERAL FUND
		4.10.8 Provision of Emergency Mobilization Fund for rehabilitation operation	2020-2030	GENERAL FUND
	4.11 Social Preparation	4.11.1 Consultation/Dialogues	2020-2030	GENERAL FUND
		4.11.2 Background Investigations	2020-2030	GENERAL FUND
		4.11.3 Community Preparation/Assembly/Organization	2020-2030	GENERAL FUND
Gender and Development Program	4.12 GAD Program and services	4.12.1 Gender Mainstreaming Program	2020-2030	GENERAL FUND
		4.12.2 Women's Month celebration	2020-2030	GENERAL FUND
		4.12.3 Financial Assistance to women in crisis	2020-2030	GENERAL FUND
		4.12.4 Training on Violence of Children & Women's rights and proper case handling	2020-2030	GENERAL FUND
		4.12.5 Women in Crisis Social Welfare and Protection Services	2020-2030	GENERAL FUND
		4.12.6 Provision of Mental Health Services for Women in Crisis	2020-2030	GENERAL FUND
		4.12.7 Establishment of Anti-Trafficking Help Desk	2020-2030	GENERAL FUND
		4.12.8 WCC client-beneficiaries skills and capability	2020-2030	GENERAL FUND

		enhancement		
		4.12.9 Reproduction of IEC materials and supplies for the 37 Barangay VAW Desk	2020-2030	GENERAL FUND
		4.12.10 Monitoring and Evaluation of VAW Desk Function and response (to be conducted quarterly)	2020-2030	GENERAL FUND
		4.12.11 Legal Assistance for WCC client-beneficiaries	2020-2030	GENERAL FUND
		4.12.12 Financial Assistance, Year-End Assessment and Evaluation, Transportation assistance, meeting and conference, community based advocacy trainings on related laws	2020-2030	GENERAL FUND
		4.12.13 Operation and Maintenance of PSCB	2020-2030	GENERAL FUND
		4.12.14 Operation and Maintenance of Women Crisis Center	2020-2030	GENERAL FUND
		4.12.15 Operation and Maintenance of Social Development Center (SDC)	2020-2030	GENERAL FUND
		4.12.16 Operation and Maintenance of the Child Minding Space	2020-2030	GENERAL FUND
		4.12.17 Operation and maintenance of the Evacuation Center	2020-2030	GENERAL FUND
		4.12.18 Conduct of 3 day workshop on Perkada Modules, 2 Days U4U Congress/	2020-2030	GENERAL FUND
		Convention, conduct of Teen Trail Advocacy, Enhancement Training for U4U facilitators	2020-2030	GENERAL FUND
		4.12.19 Conducted value formation	2020-2030	GENERAL FUND
		4.12.20 World Population Day celebration, conduct of Population Quiz Show	2020-2030	GENERAL FUND
		4.12.21 Conduct of BSPO Enhancement Capability Building, SHAPE Orientation & Training at Barangay Levels, TEEN-trail Orientation to private and Public Schools	2020-2030	GENERAL FUND
		4.12.22 Assessment and review on progress and implementation	2020-2030	GENERAL FUND
		4.12.23 Conduct of Reproductive Health FP Orientation for MOVE, Family Life Congress, Trainers on PES	2020-2030	GENERAL FUND
		4.12.24 Livelihood assistance and skills training with Starter Kits for Women	2020-2030	GENERAL FUND
		4.12.25 Workshop on policy making for OFW help Desk in Cotabato City, Orientation and	2020-2030	GENERAL FUND
		Consciousness on RA 9208, honorarium for Resource Person	2020-2030	GENERAL FUND
		4.12.26 Psychosocial sessions	2020-2030	GENERAL FUND
		4.12.27 Capability enhancement training and development for DC Teachers	2020-2030	GENERAL FUND

		4.12.28 Support to Women Council	2020-2030	GENERAL FUND
		4.12.29 Gender Awareness Program	2020-2030	GENERAL FUND
		4.12.30 Capability enhancement/ orientation for training and development for DC Teachers to equip them in handling children with special needs	2020-2030	GENERAL FUND
		4.12.31 Capability and enhancement support given to FAME	2020-2030	GENERAL FUND
		4.12.32 Mental health and wellness session for Social Workers	2020-2030	GENERAL FUND
		4.12.33 Gender Based Violence & Child Protection in Covid: Information Drive toProtectionActors	2020-2030	GENERAL FUND
		4.12.34 Parenting Capability Services	2020-2030	GENERAL FUND
		4.12.35 Creation of GAD Unit	2020-2030	GENERAL FUND
		4.12.36 Program Support to GFPS	2020-2030	GENERAL FUND
		4.12.37 Administrative Support to GAD Programs	2020-2030	GENERAL FUND
		4.12.38 Kasalang Bayan	2020-2030	GENERAL FUND
	4.13 Program Services for Solo Parents and other vulnerable sector	4.13.1 PamaskongHandog for Families below the poverty threshold	2020-2030	GENERAL FUND
		4.13.2 ERPAT	2020-2030	GENERAL FUND
		4.13.3 Perkada	2020-2030	GENERAL FUND

5.6 Protective Services

Cotabato City Police Office currently have 4 stations and 1 City Mobile Force Company situated at Poblacion 6, RH Mother, Datu Balabaran, Bagua Mother and RH 1, PC Hill respectively. Police officers are significant to the growth of economic and social development because they have a key function and authority with regards to keeping the peace, maintaining public security and safety, and preserving common property for citizens in the community and society. Chief of Police of the said stations were doing all their efforts and responsibilities to give the services as to what is being mandated which is "TO SERVE AND PROTECT". However, with the growing security demands of a rapidly changing society, the tasks of Law Enforcers in the city becomes even more difficult. This is a great challenge that our police force has no face and admittedly, in the performance of these tasks, our police personnel are sometimes placed in bad light because of some operational lapses.

Concerns include but are not limited to: community-police relations, mass shootings, gang related crimes, rapid changes in technology, current pandemic situation, and challenges in keeping up with capital investment to include police equipment and facilities. These stations and mobile company are currently experiecing shortages of facilities which caused to the provision of poor and delayed services. Here are the factors affecting the effectiveness of police performance.

In summary thereof, stations have poor station buildings, living quarters and even section offices which cause to slow processing and delivery of services resulting to negative feedbacks and impressions of the citizens. Hence, it is suggested to submit report and outsource support from the LGU and other stakeholders in order to provide adequate space for the personnel in the stations. Police stations should be designed in such a way that it conveys a message of community integration.

Insufficient number of patrol cars which slows and delays the crime response and response time. With this, stations should nsubmit report for declaration of BER vehicles for replacement and strengthen liaising with the LGU and other stakeholders in order to have additional patrol cars as needed.

With the limited area perimeteer of the stations, there is no available garage for mobile patrol vehicles which results to the rapid deterioration of the said vehicles. There should be a proper garage for the patrol cars to avoid the delay of responding time to any incident.

Increase in the number of shooting incidents in 2019 as compared to 2018 has a big impact in public safety, economic development and peace and order in the city. It makes the citizens feel unsafe and unsecured even walking in the streets especially at night. It has been recommended that the police personnel to conduct periodec review and evaluation of operational and tactical plan. (EMPO and increase Police Visibility.

The police stations will no longer be suitable for thier occupants which could result in lack of storage space and poor working conditrions. With this, shortage of Police forces to population ratio is a problem. It results to not to be able to meet the response time. It is suggested to have and additional Police Stations that can maximize public accessibility and police visibility, as well as permit an effective, timely response to citizen needs and concerns.

With the limited perimeter of the Police Stations, there is limited space detention cell while other stations have no available detentions cells it can cause the detention cell to be crowded. There is also no available detention cell for womenand youth offenders which causes them in joining the hardcore criminals and they are being used as protectory by common offenders. There should be detention cell for every Police station and there should be a separate detention cell and facilities for women and youth offenders.

A successful police station design should embrace safety and security maintaining the satisfaction of citizens and address crimes in thier respective area of responsibilities that positively impact the quality of community life.

A Police Station is a building which serves to accomodate police officers, other members of staff and clientele. These buildings often contain offices and accommodation for personnel and vehicles, along with locker rooms, temporary holding cells and interview/interrogation rooms. The provision of key resources and equipment to police is essential to increase their capacity to respond rapidly and effectively to incidents of violence.

However, Police Stations and City Mobile Company is Cotabato City Police Office mostly have poor facilities and equipment. As to Police Personnel to population ratio, it says that there is an inadequate number of police personnel compare to the population in the area. For the record, Police Station 1 has 51 personnel with 1:2040 ratio; Police Station 2 has 52 personnel with 1:2069 ratio; Police Station 3 has 48 personnel with 1:769 ratio; Police Station 4 has 48 personnel with 1:1523 ratio; and City Mobile Company has 173 personnel with 1:1859 ratio. With regards to the lot area of the police stations and mobile company, it is relatively small to accomodate the number of police personnel alone, not including function rooms for women's desk, investigation room, detention cell, locker

area, ammunition stock room, conference room and other essential spaces needed for the service of protection. Some stations are not strategicalylocatied, they were either, nearby to an infrastructure of a school, in squatter area, which client find it hard to recognize immediately. Allstations are functional as well as the mobile patrol cars.

With regards to the level of hazard susceptability, only Police Station 1 has the possibility for flooding. CMFC have the low level on landslide because of its uphill location. Police Station 1 and 4 have the low level for storm surge due to its proximity to Rio Grande River.

a. Protective Services by Facilities and Equipment, Year 2018

The provision of equipment is an important means to build institutional response capacity and can also be used as a mechanism to encourage progress. All police facilities, stations or units should be adequately equipped to respond to their immediate needs. Infrastructure and equipment needs to be in place and adequate for operating capabilities.

Table SO-39. Protective Services by Facilities and Equipment, Year 2018

Type of Services	Barangay	Area (sq m)	Physical Condition of Facility	No. of Personnel
Police				
Headquarters	RH 1	1400	Fair	56
Sub-Station				
Police Station 1	Poblacion 6	200	Poor	51
Police Station 2	RH Mo.	220	Poor	52
Police Station 3	Datu Balabaran	260	Poor	48
Police Station 4	Mother Brgy Bagua	160	Poor	48
CMFC	RH 1	600	Fair	173
Traffic	Poblacion 6	90	Poor	18
Total				446
Fire Protection				
Headquarters	Pob. 5	600	Poor	20
Sub-Station	RHMB	150	Fair	5
Jail Management				
Provincial Jail	(Maguindanao)	1200	Fair	
District Jail				
City/Mun. Jail	Pob. 5	322	Poor	45
Others				
Total				

Source: Philippine National Police, Bureau of Jail Management and Penology, Bureau of Fire Protection
Physical condition of facility – fair, poor, critical
Vehicle type – Patrol car; prisoner van; motorcycle; bicycle; patrol boats

b. Barangay Security Force and Volunteers by Type of Service, Year 2019

All the 37 Barangays are required to install their DRRM Unit in compliance to DILG Resiliency Program. The Barangay DRRM is allocating 5% annually of their total income or known as DRRM Fund, it is distributed to allocate 30% for the response operation in the case of calamity and 70% for preparedness either, mitigation of adaptation measures.

On the other hand, they also allocate for their Peace and Order drawn from their General Fund which supports their peace and order effort or for the maintenance of their auxilliary forces/BPAT or Tanods, maintenance of outpost and Ronda Patrol.Generally,each barangay has a minimum of at least 20 tanods and some volunteers, but some with peace and order issues like Brgy. Kal 2 has 40 Tanods and volunteers. All barangays invested to have communication gadgets and sound system. They were issued Multicab vehicle for their security and rescue operations. For the barangays along the big rivers such as Brgy. Bagua Mother and Tamontaka Mother they acquired rescue boats.

Tanods are issued with their respective uniforms and for some includes batuta. Some Barangay Officials were issued firearms. (see table below)

Table SO-40. Barangay Security Force and Volunteers by Type of Service, Year 2019

Type of Services	Number of Security Force/Volunteer	Facilities / Equipment	Condition of facilities/ equipment
Brgy Bagua Mother Security Forces and Volunteers	20 Tanods, 40 Volunteers	1 Multicab (for SWM but the Barangay is using it for security purposes as the need arises); 5 units Icom Radios, 1 unit sound system, 1 unit speed boat	All functional
Brgy Bagua 1 Security Forces and Volunteers	20 Tanods, 10 Volunteers	BrgyMulticab	Non-functional
		Icom Radio	Functional
Brgy Bagua 2 Security Forces and Volunteers	20 Tanods, 24 Volunteers	Fire Arms, Brgy Vehicle, Icom Radio	All functional
Brgy Bagua 3 Security Forces and Volunteers	20 Tanods, 11 Volunteers	Brgy Vehicle	Non-functional
		Icom Radio	Functional
Brgy RH 2 Security Forces and Volunteers	4 Tanods, 20 Volunteers	Batuta, Brgy Vehicle, Icom Radio	All functional
Brgy RH 3 Security Forces and Volunteers	20 Tanods, 15 Volunteers	2 units Icom Radio, 1 set Computer	Functional
		1 unit Multicab	Non-functional
Brgy RH 4 Security Forces and Volunteers	10 Tanods, 10 Volunteers	Brgy Vehicle, Icom Radios, Sound System	All functional
Brgy RH 5 Security Forces	10 Tanods, 10 Volunteers	Fire Arms, Brgy Vehicle,	All functional

and Volunteers		Icom Radio	
Brgy RH 6 Security Forces and Volunteers	20 Tanods, 10 Volunteers	Brgy Vehicle, Icom Radios, Sound System	All functional
Brgy RH 7 Security Forces and Volunteers	20 Tanods, 3 Volunteers	Icom Radio	Functional
		BrgyMulticab	Non-functional
Brgy RH 9 Security Forces and Volunteers	20 Tanods, 7 Volunteers	Brgy Vehicle, Icom Radio	All functional
Brgy RH 11 Security Forces and Volunteers	20 Tanods, 10 Volunteers	BrgyMulticab,	Non-functional
		Garbage Truck, Icom Radio	All functional
Brgy RH 12 Security Forces and Volunteers	8 Tanods, 5 Volunteers	Fire Arms, Brgy Vehicle, Icom Radio	All functional
BrgyPob. 1 Security Forces and Volunteers	20 Tanods, 10 Volunteers	Brgy Vehicle, Icom Radio	All functional
BrgyPob. 2 Security Forces and Volunteers	20 Tanods, 31 Volunteers	Batuta, Brgy Vehicle, Icom Radio	All functional
BrgyPob. 3 Security Forces and Volunteers	20 Tanods, 20 Volunteers	Brgy Vehicle, Icom Radios, Sound System	All functional
BrgyPob. 4 Security Forces and Volunteers	20 Tanods, 11 Volunteers	Icom Radio	Functional
BrgyPob. 8 Security Forces and Volunteers	20 Tanods, 5 Volunteers	Icom Radios, sound system, computer	All functional
BrgyPob. 9 Security Forces and Volunteers	20 Tanods, 16 Volunteers	Brgy Vehicle, Icomredios, Sound System	All functional
BrgyKalanganan Mother Security Forces and Volunteers	20 Tanods, 20 Volunteers	1 unit vehicle	Non-functional
		Icom Radios, Mega Phone	Functional
Brgy Kal. 2 Security Forces and Volunteers	40 Tanods, 40 Volunteers	1 unit computer set, Icon Radios	Functional
		1 unit Multicab	Non-functional
Brgy Tam. MB Security Forces and Volunteers	20 Tanods, 32 Volunteers	BrgyMulticab, Rescue Boat, Icom Radios, Sound System, computer	All functional
Brgy Tam. 2 Security Forces and Volunteers	20 Tanods, 5 Volunteers	Brgy Vehicle, Icom Radios, 1 unit computer	All functional
Brgy Tam. 3 Security Forces and Volunteers	20 Tanods, 10 Volunteers	Brgy Vehicle, Icom Radios	All functional
Brgy Tam. 5 Security Forces and Volunteers	10 Tanods, 15 volunteers	1 unit brgy vehicle	Functional
		2 units Icom Radio	Non-functional

Source: Barangay Office

All the 37 Barangays are required to install their DRRM Unit in compliance to DILG Resiliency Program. The Barangay DRRM is allocating 5% annually of their total income or known as DRRM Fund, it is distributed to allocate 30% for the response operation in the case of calamity and 70% for preparedness either, mitigation of adaptation measures.

On the other hand, they also allocate for their Peace and Order drawn from their General Fund which supports their peace and order effort or for the maintenance of their auxilliary forces/BPAT or Tanods, maintenance of outpost and Ronda Patrol.Generally,each barangay has a minimum of at least 20 tanods and some volunteers, but some with peace and order issues like Brgy. Kal 2 has 40 Tanods and volunteers. All barangays invested to have communication gadgets and sound system. They were issued Multicab vehicle for their security and rescue operations. For the barangays along the big rivers such as Brgy. Bagua Mother and Tamontaka Mother they acquired rescue boats.

Tanods are issued with their respective uniforms and for some includes batuta. Some Barangay Officials were issued firearms. (see above table)

c. Fire Incidence for the Past Five Years

Table SO-41 shows the Fire Incidence for the past five (5) years. In 2015 only 13 fire incidences were recorded and then increased to 22 in 2016 then slightly increasing by 1 case from 2017 to 2018 and drops to only 15 cases in 2019.

The most common causes of fire were electrical, especially of what happened in 2015, were mostly the causes was electrical disturbance. This was the time the country experienced shortage in electricity and need to ration the supply. The second common causes was accidental such as unattended lighted cadle or mosquito coil of cooking stove, followed by gas leakage from LPG tanks. There are other causes like grass fire, automotive fire and there are some that are still undetermined.

Table SO- 41. Fire Incidence for the Past Five Years

Barangay	Origin / cause	Frequency of Occurrence				
		2019	2018	2017	2016	2015
Gov. Gutierez, RH 7	Overheated Extension wire	/				
Purok Pinnen, RH 6	Overheated Electric Fan	/				
Purok Sibuyan, RH MB	Unattended lighted candle	/				
Pob. 9	Grass Fire	/				
Purok Gumamela, Sousa Ext. St. RH 13	Overheated of defective electric fan	/				
Purok Maunawain, RHMB	Leakage current	/				
Pansacala St, RHMB	Short circuit electrical wires	/				
Don Rufino Alonzo St., Pob 5	Electrical short circuit	/				
Nayon Shariff, RH 3	LPG stove gas leakage	/				
Pansacala ST., RH 10	Faulty wiring	/				

Pob. 5	Overheated food warmer	/				
Malagapas, RH 10	Overheated TV set	/				
Mega Market, Pob MB	Overheated Ceiling Fan	/				
Sero ES, RH MB	Electrical short circuit	/				
Pob. 5	Vehicular Fire-motorcycle	/				
RH 3	Electrical short circuit		/			
Campo Muslim, Bag. MB	Electrical overload		/			
Purok Dimales, Tukananes, Pob. 7	Electrical overload		/			
Tamse Road, Pob. 4	Undetermined		/			
Mercury St., RH 8	Electrical arcing caused by frayed conductors		/			
Pastor Kimpo, RH 13	Defective airconditioning unit		/			
Malagapas, RH 10	Open flame		/			
Camasi, Pob 9	Overheated Ceiling Fan		/			
Mega Market, Pob MB	Undetermined		/			
Tam MB	Undetermined		/			
RLA, ARMM, RH 7	Defective airconditioning unit		/			
Ruffo Manara, RH 10	Overheated Electric Fan		/			
Ramon Rabago St., RH 10	Electrical overload-freezer		/			
RH 10	Electrical Post short circuit		/			
Jasmin St., RH 6	Unattended cooking stove		/			
COMELEC XII, RH 13	undetermined		/			
Purok Sampalok, Bagua MB	Unattended lighted mosquito coil		/			
Ante Comp., RH 4	Unattended lighted candle		/			
Zone 2, RH 1	Undetermined		/			
Urban Poor, RH 3	Undetermined		/			
Zone 7, RH 1	Open flame from lighter igniting combustible materials		/			
Tabunaway Blvd, Pob. 5	Arcing electrical short circuit of flourescent lamp		/			
Mangongan Road, Bag 2	Undetermined		/			
RHMB	lighted cigarette butt		/			
Cotabato Regional and Medical Center	Button of Control Panel at the Electrical Equipment Room/Accidental			/		
Manday, Bagua MB	Bedroom of Pesquira Residence/Accidental			/		
MJ Photocopy Center, Pob. 6	Overheating of Device Video Recorder of CCTV/Accidental			/		
Esteros, RH 9	Uyak Kusain's Residence/Undertermined			/		
Purok Sampalok, Bagua MB	Electrical Disturbance			/		
Purok Datu Wali, Tam MB	Worn out Electrical Wire Insulator/Accidental			/		
De Mazenod Ave., RH 4	Electrical Disturbance			/		

Beestop, Corner Don Rufino Alonzo St. & Sinsuat Ave.	Northwest Portion of the Restaurant/Accidental			/		
Red Ribbon, Pob. 5	Cashier Area of Red Ribbon at Ground Floor/ Overheated Electrical Appliances			/		
Haj. Amina Usop Res., Brgy RH 3	Front wall of Usop Residence/Accidental			/		
Mantigue Res., BrgyPob. 4	Ceiling of Comfort Room/Accidental			/		
Marlon Alejano Res., Pob 1	Electrical Disturbance			/		
Purok Kabuntalan, Pob MB	2nd Floor of Diocolano Residence/Accidental			/		
Barangay Hall, Pob. 8	Electrical Wire of Aircondition Unit/Accidental			/		
Ampatuan Res., Bag 2	Electrical Disturbance			/		
Lugay-lugay, Bag MB	Electrical Disturbance			/		
Ecop Res., Pob 7	Ameen Escop'sResiddence/ Undermined			/		
IMT Site, Jasmin St., RH MB	Gas Stove in the Kitchen of Security Escorts/Accidental			/		
Mike Guiamad Res., Bag 2	Electrical Disturbance			/		

Barangay	**Origin / cause**	**Frequency of Occurrence**				
		2019	**2018**	**2017**	**2016**	**2015**
Purok 3, RH 9	Electric Fan Placed on a small table near the bed and curtain/Accidental				/	
Vehicular Fire, Pob 6	Frayed Wire Connecting Battery/ Accidental				/	
Reyes Fam Res., Bag 3	Electrical Disturbance				/	
Tandang Sora St., RH MB	Ceiling of Cobita's Residence/ Accidental				/	
Moon St., Zenaida Subd., RH 5	Gas Lamp/Accidental				/	
Purok Lu Shin Kham, Pob. 1	Cooking Area of Montes Residence/ Accidental				/	
Bonifacio St., Pob. 6	4th Floor of Violtan Laundry Place/ Accidental				/	
Purok Pinagsamahan, RH 2	Area where dried grasses and rotten woods were piled/Accidental				/	
Sinsuat Ave., Pob. 5	Kitchen Hood/ Accidental				/	
CCSPC Agriculture Structure, RH 4	Convenience Outlet (left Portion of the Building/Accidental)				/	
#8 Don Abelardo St., Pob 4	2nd Floor Door 4, Bueno Apartment/Electrical Accident				/	
Manara St., RH 10	Dining Area of Conselo's Residence/ Accidental				/	
Purok Gumbila, Tam MB	Master Bedroom Datu Tungko/ Accidental				/	
Gutierrez Ave., RH 9	At the Cashier of Abigail Enterprises/Accidental				/	
Purok 5, RH 9	Extension House of PeñasEstablisment/ Accidental				/	
Pansacala St., Slaughter Hse, RH 10	Living Room of Lumapinit's Residence. Owner transferring				/	

	diesel fuel to smaller container/ Accidental					
Kakar, Pob 8	Overheating of Electrical Appliance/ Accidental				/	
Jupiter, RH 9	2nd Floor of Teosoro's Boarding House/ Accidental				/	
Purok Kalilintad, RH 7	Ceiling of Kitchen Area/ Accidental				/	
Calda Pizza, Al Nor, RH 9	Overheating of Gas Oven Located at the Kitchen Area/ Accidental				/	
Usman Subd., Bag 2	Mrs. Bai MaitumBirurar's Room/ Accidental				/	
Datu UdtogMatalam Ave., RH 10	Kitchen of Jerry Abas Residence/ Accidental				/	
Purok Mabagal, Lugay-lugay, Bagua 1	Gas Leakage at the valave of LPG tank/ Accidental				/	
#003 Lapu-lapu St., Nayon Shariff, RH 3	Ceiling Particularly at the Living room/ Accidental				/	
Purok 1, Gov. Gutirrrez Ave., RH 9	Connie's Bakeshop/ Undermined				/	
Tukananes, Brgy. Pob. 7	BadriaDagdaban Ali Residence/ Undermined				/	
Jose Lim Sr. St., Bagua MB	Overheated Ballast Burst open in Flames/ Accidental					/
Japalguiani Sr., St. Pob 5	Sparked Exposed Electrical Wiring/ Accidental					/
Purok 3, RH 1	Unattended lighted mosquito coil/ Accidental					/
Dona Estrella St., Pob 3	Kitchen Area/ Accidental					/
City Assessor's Office, People's Palace, RH 10	Defective Airconditioning Unit/ Accidental					/
Phase 1, 1st Road, Malagapas, RH 10	In the main strairway of the residential structure where the convenient outlet/ Accidental					/
Sinsuat Ave., RH 10	Unattended Light Candle/ Accidental					/
Datu Liwa Candao St., RH 3	Electrical Disturbance					/
Kutawato Darussalam College, Bag MB	Electrical Disturbance					/
Nayon Shariff, RH 3	Electrical Disturbance					/
Kimpo Subdivision, RH 5	Electrical Disturbance					/
Zone 1, RH 1	Electrical Disturbance					/
Total		**15**	**24**	**24**	**22**	**13**

Source: Bureau of Fire Protection Local Fire Protection Office

d. Crime Incidence by Barangay for Adults for the Past Five Years

For the past five years, here is the data on Crime incidence by barangay for adults. There are two (2) types of crime in the data - The Index and Non-index Crimes. The Index Crimes are sufficiently significant and which occur with sufficient regularity to be meaningful. Included in this category are murder, physical injury, robbery, theft and rape. On the other hand, Non-Index crimes are all types of crimes not considered as index crimes.

The table shows the comparison on Index and Non-Index Crimes from 2015-2019. In summary thereof, there was a decrease in crime cases in Cotabato City Police Office.

In year 2015, Index Crimes on Murder has a total of 106 cases. Twenty-two (22) cases were solved and has 129 male offenders. Homicide with 1 case that was unsolved and offender was male. For the Physical injury, recorded a total of 282 cases with 292 male and 26 female offenders and 102 cases were solved. Rape cases had 19 cases with 18 male and 1 female offenders and 12 cases were solved. On Criminal against property, robbery recorded a total of 227 cases with 246 male and 1 female offenders, thirty-one (31) cases were solved. On Theft, out of 366 cases,122 were solved involving 370 male and 36 female offenders.

In 2016, cases decreased on Murder by 21,7% or a total of 83 cases, 14 of which were solved involving 91 male offenders. Still 1 homicide case was recorded with male offender. A decrease of 33.7% on Physical Injury with 20 cases solved from the total of 187, involving 181 male and 25 female offenders. Rape decreased with 26.3% with 10 out of 14 cases were solved having all male offenders. On crime against Property, out of 227 cases, 12 were solved with 227 male and 5 female offenders. Theft increased with 372 cases and 71 were solved. Offenders with 335 male and 69 females.

In 2017, a declining trend for Index Crime on Murder recording a total of 62 (25%) cases with 30 solved, involving 68 male and 1 female offenders. There was an increase in Homicide, recording a total of 28 cases with 12 solved involving 32 male offenders. Physical Injury decreased to 102 cases (45.5%) with 12 solved and involving 102 males and 18 female offenders. Rape cases gradually decrease recording a total of 13(7.1%), wherein 9 cases were solved. Crime against Property on Robbery recording a 52% decreased compared to last year, registering only a total of 109 cases and 7 case of which are solved, involving 112 males and 1 female offenders. Theft recorded a 53% decrease with a total of175 cases, 36 cases were solved involving 157 male and 29 female offenders.

In 2018, a continuing decline of 54% for the Murder crime compared to 2017 was recorded, registering only a total of 28 cases with 15 cases solved, involving 38 male offenders. Homicide also shows a downward trend recording only 28 cases with 25 cases solved involving 14 males and 44 female offenders. Physical injury recorded 36 cases (64.7%) where 25 were solved, involving 44 males and1 female offenders. Rape cases also decrease recording 12 (7.7%) cases and 11 cases solve involving 16 male offenders. On Crime against Property, Robbery decreased with 42.2%. Out of 63 cases, 27 were solved with 95 males and 2 female offenders. Theft also decreased by 63.4% with 34 cases solved out of 64 total cases., involving 59 males and 20 female offenders.

In 2019 a slight increase in the Murder cases was recorder registering a total of 32 cases and 9 of which were solved, involving 43 male offenders. Homicide continues to decline registering a total of 10 cases (70.6%) and 4 of which were solve, involving 13 male offenders. A decrease of 47.2 % on Physical Injury, recording19 cases, 7 of which were solve, involving 31 male offenders. Rape case decreased by 66.7% all 4 cases were solved involving 4 maleoffenders. On Crime against Property, Robbery recorded the lowest record within 5 years with 12 cases solved out of the 38 total cases, involving 49 male and 1 female offenders. Lastly, theft recorded a total of 27(57.8%) cases and 15 cases were solved, involving 33 males and 5 female offenders.

Generally for the past five years, the percentile for Crime against Person were the following: Murders 69.8%., Homicide increased, Physical Injury 67.4% and Rape 78.9%. For Crime against Person, Robbery 83.3% and Theft 92.6%.

Table SO-42. Crime Incidence by Barangay for Adults for the Past Five Years

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
BAGUA 1	Crimes Against Person																				
	Murder	1		1		1		1		1	1	1									
	Physical Injury	5	3	5						2		1	1								
	Rape					1	1	1													
	Theft	6	2	5	1					2		2		1	1	3					
BAGUA 2	Crimes Against Person																				
	a. Murder	9	2	9						4	2	4		2	1	1					
	b. Homicide									1	1	2						1	1	1	
	c. Physical Injury	3	2	4						4		4						1		1	
	d. Rape													1	1	1		1	1	1	
	Crimes Against Property																				
	a. Robbery	5	2	5		3		3		3		3		2	2	3					
	b. Theft	9	6	8	1	2	2	3		1		1						1	1		1
BAGUA 3	Index Crimes																				
	Crimes Against Person																				
	a. Murder	3	1	3		2		2		2	1	2						1	1	1	
	b. Physical Injury	7	1	7	1	7	2	7		1		1		1		1					
	c. Rape					1		1													
	Crimes Against Property																				
	a. Robbery	1		1		6	2	6		1		1						1		2	
	b. Theft	7	3	7		5		6													
	Non-index Crimes																				
KALANGANAN 1	Index Crimes																				
	Crimes Against Person																				
	a. Murder									1	1	4									
	b. Homicide																				
	c. Physical Injury																	1		1	
	d. Rape																				
	Crimes Against Property																				
	a. Robbery													1	1	11					
	b. Theft					1	1	1						1	1	2					
	Non-index Crimes																				

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
KALNAGNAN 2	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1		1														2	1	2	
	b. Homicide	1		1																	
	c. Physical Injury	3	1	3		2		2												1	
	d. Rape													1	1	1					
	Crimes Against Property																				
	a. Robbery					1		1													
	b. Theft									2	1	2									
	Non-index Crimes																				
MB BAGUA	Index Crimes																				
	Crimes Against Person																				
	a. Murder	4	1	7		3	2	3						2	2	7					
	b. Homicide													2	1	3		1		1	
	c. Physical Injury	20	13	20	1	7	3	7		4	3	3	1	3	2	3					
	d. Rape																				
MB BAGUA	Crimes Against Property																				
	a. Robbery	7	2	9		1		1		1	1	1		2	2	3					
	b. Theft	16	7	15	1	8	2	8		1	1	1									
	Non-index Crimes																				
MB KALANGANAN	Index Crimes																				
	Crimes Against Person																				
	a. Murder	4	2	4		3	2	3						1	1	1					
	b. Homicide									1	1	2									
	c. Physical Injury	5	3	6	1	3	1	4		2	1	2		1	1	1		1	1	1	
	d. Rape																				
	Crimes Against Property																				

	a. Robbery					1		1						1	1	2					
	b. Theft	4	2	4		1	1	2		3	2	4									

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
MB POBLACION	Index Crimes																				
	Crimes Against Person																				
	a. Murder	17	5	24		9	1	9		4	4	4		3	3	4		1		1	
	b. Homicide					1	1	1		2	1	2									
	c. Physical Injury	10	5	12	1	9	5	9		3		3		1	1	1				1	
	d. Rape	1		1		1	1	1						1	1	1					
	Crimes Against Property																				
	a. Robbery	9	2	9		4		4		5		6		2	1	2		2	1	2	
	b. Theft	24	12	21	4	20	9	17	4	7	2	6	1	3	1	3					
	Non-index Crimes																				
MB ROSARY HIEGHTS	Index Crimes																				
	Crimes Against Person																				
	a. Murder	3		3		2	1	3		3		3		1		1					
	b. Physical Injury	26	7	27		18	1	20	1	7		8		1		1					
	c. Rape													1	1	1					
	Crimes Against Property																				
	a. Robbery	27	1	28		24	1	24		5		4	1	2	1	3		4	2	5	
	b. Theft	20	4	19	1	24	1	22	2	12	1	12		2		2		1	1	1	
	Non-index Crimes																				
MB TAMONTAKA	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1		1		3	1	3		2	2	2						2		2	
	b. Homicide									1	1	1		2	2	2					
	c. Physical Injury	6	1	6	2	2		5	2	1		1		1	1	1		1		1	
	d. Rape	1	1	1																	
	Crimes Against Property																				
	a. Robbery	3		3		2		2													

	b. Theft	12		18		4	1	4	1	4	2	4		1		1		1		1	
	Non-index Crimes																				

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
POBLACION 1	Index Crimes																				
	Crimes Against Person																				
	Murder	1		1						1	1	1									
	Physical Injury	2	1	1		3		3													
	Rape	1	1	1		1	1	1													
POBLACION 2	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1		1		2		2		1		1									
	b. Physical Injury					2		3		1		1				1					
	Crimes Against Property																				
	a. Robbery									3		3									
	b. Theft	2		2		1		1										1	1	3	
POBLACION 3	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1	1	1		2		2										2		3	
	b. Physical Injury	1		1		6		6		1		1									
	c. Rape					1		1		1	1	1									
	Crimes Against Property																				
	a. Robbery	1		1		3		3		1		1									
	b. Theft	1	1	1		2	1	1	1					1		1					
POBLACION IV	Index Crimes																				
	Crimes Against Person																				
	a. Murder					4		4						2	1	2		5		6	
	b. Physical Injury	6	3	5	1	1		1		2	1	3	2					2	1	4	
	c. Rape	1		1						1		1									
	Crimes Against Property																				
	a. Robbery	6	2	8		9		9		8		8		2		3					
	b. Theft	12	6	12	2	12	2	12		16	3	12	5	3	2	2	1	3	3	4	
	Non-index Crimes																				

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
POBLACION V	Index Crimes																				
	Crimes Against Person																				
	a. Murder	8	3	15		9	2	12		6	4	7		5	1	6		2		4	
	b. Homicide									3		3		1		1					
	c. Physical Injury	28	8	27	3	16	2	12	7	14	1	13	1	4	3	5		1	1	1	
	d. Rape					2	2	2		3	3	3									
	Crimes Against Property																				
	a. Robbery	25	3	26		29		27	4	11		11		8	3	10	2	3	1	9	
	b. Theft	75	30	83	9	146	31	130	28	51	12	40	15	19	10	15	10	4	3	2	2
	Non-index Crimes																				
POBLACION VI	Index Crimes																				
	Crimes Against Person																				
	a. Murder	10	1	14		9		9		4		4		3	1	3		4		5	
	b. Homicide									2		2		2	1	2					
	c. Physical Injury	25	5	28		27		21	5	9	1	11		1	1	3		3	1	3	
	d. Rape	2	1	1	1					1		1									
	Crimes Against Property																				
	a. Robbery	10	2	9	1	18	3	19		5	1	6									
	b. Theft	43	13	43	3	42	9	36	14	16	3	15	1	5	3	6	4	1	1	2	
	Non-index Crimes																				
POBLACION VII	Index Crimes																				
	Crimes Against Person																				
	a. Murder					1		1						1		1		1	1	2	
	b. Homicide									1		1									
	c. Physical Injury	4	1	4		2		3						1	1	1					
	d. Rape									1		1									

	Crimes Against Property																			
	a. Robbery	1	1	1		1	1	1												
	b. Theft	4	2	3	1	1		1		2		2		1		1				
	Non-index Crimes																			

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
POBLACION VIII	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1		1						1		1									
	Crimes Against Property																				
	a. Robbery	1		1																	
	b. Theft					1			1	2		2									
	Non-index Crimes																				
POBLACION IX	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1		1																	
	b. Homicide																				
	c. Physical Injury	1		1																	
	Crimes Against Property																				
	a. Robbery					1		1													
	b. Theft	2		2																	
	Non-index Crimes																				
ROSARY HIEGHTS 1	Index Crimes																				
	Crimes Against Person																				
	a. Murder	4	1	5						1	1	1		2		2					
	b. Homicide									1	1	1						1	1	2	
	c. Physical Injury	8	1	10		12		13		3		3	1					1		2	
	d. Rape	3	2	3		1	1	1		2	1	2		1	1	1					
	Crimes Against Property																				
	a. Robbery	22	4	24		7		8		2	1	2		7	3	13					
	b. Theft	10	4	9	1	7	1	7		5		4	1	1			1				
	Non-index Crimes																				
ROSARY HIEGHTS II	Index Crimes																				
	Crimes Against Person																				
	a. Murder	3	1	3		2		2		1		1						2	1	3	
	b. Homicide									2	1	2									

	c. Physical Injury	9	3	10		3	1	2	1	3	1	5		1		1		1	1	1	
	d. Rape					2	1	2						1	1	1					
	Crimes Against Property																				
	a. Robbery	10	4	10		20	3	21		13		13						4	1	4	
	b. Theft	17	2	19	2	12		9	4	8		8		2	2	2		1	1		1

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
ROSARY HIEGHTS III	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1		1		2	1	2						1		1		1		1	
	b. Homicide																				
	c. Physical Injury	4		4		4	2	4		2	1	5		1	1	1		1	1	3	
	d. Rape													2	2	2					
	Crimes Against Property																				
ROSARY HIEGHTS III	a. Robbery	11	1	16		4		4		3		3		2	1	2		1		1	
	b. Theft	7		5	2	4	1	4		3	1	3		1		1					
	Non-index Crimes																				
ROSARY HEIGHTS IV	Index Crimes																				
	Crimes Against Person																				
	a. Murder	2		2						3	2	3						2	2	2	
	b. Homicide									1		1		3	1	3					
	c. Physical Injury	15	9	16	2	7		5	2	2		4		1	1		1	1		1	
	d. Rape					1		1													
	Crimes Against Property																				
	a. Robbery	5		6		3		3		4		4		5	1	6		3	1	3	1
	b. Theft	6	3	6		11	1	11		2		1	1								
	Non-index Crimes																				
ROSARY HEIGHTS V	Index Crimes																				
	Crimes Against Person																				
	a. Murder																				
	b. Homicide									3	2	3		1		1					
	c. Physical Injury	5	4	5		5		5		2		3		2	2	2					
	d. Rape	1	1	1														1	1	1	

	Crimes Against Property																		
	a. Robbery	2		2		4	1	4		5		5		1		1			
	b. Theft	1		1		3	1	2	2	2		2							
	Non-index Crimes																		

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
ROSARY HEIGHTS VI	Index Crimes																				
	Crimes Against Person																				
	a. Murder	2		3		1		1		1	1	3									
	b. Homicide									1		1		2	1	2					
	c. Physical Injury	5	2	4	1	4		3	1	7	1	4	2	2	1	3					
	d. Rape	1		1										1	1	1					
	Crimes Against Property																				
ROSARY HEIGHTS VI	a. Robbery	3		4		5		5		6		6		2		2		3		5	
	b. Theft	7	2	7		4		2	2	3	2	2	1								
	Non-index Crimes																				
ROSARY HEIGHTS VII	Index Crimes																				
	Crimes Against Person																				
	a. Murder	5		5		6	1	7		4	2	3	1					2	1	3	
	b. Homicide									1		1		1		1		2		2	
	c. Physical Injury	10	3	9	2	5		5	1	9		6	6	2	1	3					
	d. Rape	1	1	1		1	1	1		1	1	1									
	Crimes Against Property																				
	a. Robbery	7	1	7		18		18		7		9		4	1	5		4	2	4	
	b. Theft	13	4	14		10	1	9	1	7		9		10	6	8	2	6	2	13	
	Non-index Crimes																				
ROSARY HEIGHTS VIII	Index Crimes																				
	Crimes Against Person																				
	a. Murder	5		5		4		4		2		2		1	1	2					
	b. Homicide									2	2	4		1	1	1					
	c. Physical Injury	11	4	12	2	5		7		1		1		3	3	3					
	d. Rape	2	2	2						1	1	1		1	1	1					

	Crimes Against Property																				
	a. Robbery	8		10		11		11		4	1	4									
	b. Theft	5	1	2	4	2		1	1	1			1	2	1	2					
	Non-index Crimes																				

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
ROSARY HEIGHTS IX	Index Crimes																				
	Crimes Against Person																				
	a. Murder	2		2		2		2		5	1	6		3	3	6		1	1	1	
	b. Homicide																				
	c. Physical Injury	13	2	13	1	6		4	2	3	1	4		2	1	2		3		5	
	d. Rape																				
	Crimes Against Property																				
	a. Robbery	23	3	23		12		12		5	1	6		3	2	4		4	1	4	
	b. Theft	17	4	15	3	8	2	11	1	5	1	7	1	3	1	3		3		3	
	Non-index Crimes																				
ROSARY HEIGHTS X	Index Crimes																				
	Crimes Against Person																				
	a. Murder	10	2	10		10		10		9	4	9						2	1	4	
	b. Homicide									2	1	2		9	4	9		2	1	4	
	c. Physical Injury	29	12	28	4	21	1	20	2	12	1	9	3	4	2	5		2	1	3	
	d. Rape	2	2	2						1	1	1						1	1	1	
	Crimes Against Property																				
	a. Robbery	17	1	18		18	1	18		7		7		5	1	5		6	2	7	
	b. Theft	24	10	26	1	20	2	18	2	11	2	9	2	6	5	6	1	5	2	4	1
	Non-index Crimes																				
ROSARY HEIGHTS XI	Index Crimes																				
	Crimes Against Person																				
	a. Murder	2	1	2		2		2		2		2									
	b. Homicide													1	1	1					
	c. Physical Injury	4	2	4		3		3		3		3									
	d. Rape																	1	1	1	

	Crimes Against Property																		
	a. Robbery	5		5		9		8	1	4	1	4		2		2			
	b. Theft	4	1	5		6		5	1	3	1	3		1	1		1		
	Non-index Crimes																		

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
ROSARY HEIGHTS XII	Index Crimes																				
	Crimes Against Person																				
	a. Murder																	1		2	
	b. Homicide									1		1		1		1					
	c. Physical Injury	2	1	2		3	1	3		2		2									
ROSARY HEIGHTS XII	d. Rape																				
	Crimes Against Property																				
	a. Robbery	4	1	4		1		1						3	3	4					
	b. Theft	5		5		3	1	2	1	2		2									
	Non-index Crimes																				
ROSARY HEIGHTS XIII	Index Crimes																				
	Crimes Against Person																				
	a. Murder	3	1	3		1		1		3	2	3									
	b. Homicide									2		2		2		2		1		1	
	c. Physical Injury	14	5	18	2	3	1	2	1	1		1		2	2	2					
	d. Rape	2		2		1	1	1						1		5					
	Crimes Against Property																				
	a. Robbery	13	1	15		11		11		5		5		9	4	14		3	1	3	
	b. Theft	12	3	12		12	1	10	3	4	2	4									
	Non-index Crimes																				
TAMONTAKA I	Index Crimes																				
	Crimes Against Person																				
	a. Murder					2	2	5						1	1	1		1		1	
	b. Homicide																				
	c. Physical Injury	1			2	1		2		1			1	1	1	3				2	

	d. Rape	1	1	1						1	1	1									
	Crimes Against Property																				
	a. Robbery	1		1		1		1		1	1										
	b. Theft	1		1										1		1					
	Non-index Crimes																				

Barangay	Type of Crime	Year 2015				Year 2016				Year 2017				Year 2018				Year 2019 (Jan 1-Aug 22, 2019)			
		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender		Total	Cases solved	Offender	
				Male	Female			Male	Female			Male	Male			Male	Male			Male	Male
TAMONTAKA II	Index Crimes																				
	Crimes Against Person																				
	a. Murder	1		1		1	1	1													
	b. Physical Injury													1		1					
	c. Rape					1	1	1						1	1	1					
TAMONTAKA IV	Index Crimes																				
	Crimes Against Person																				
	a. Murder									1	1	1									
	b. Homicide																				

Notes:
Types of Crime:

1. *Index Crimes - crimes which are sufficiently significant and which occur with sufficient regularity to be meaningful. Included in this category are the following crimes: murder, physical injury, robbery, theft and rape*
2. *Non-Index Crimes – all types of crimes not considered as index crimes*

e. Crime Incidence by Barangay for Children (below 18 years old) in Conflict with the Law for the past five years.

Children in conflict with the law refers to anyone under 18 who comes into contact with the justice system as a result of being suspected or accused of committing an offence. Currently, children under the age of 15 in the Philippines are exempt from criminal liability, but subject to intervention by the government under the provision of the Juvenile Justice and Welfare Act of 2006.

In 2015, 1 case of Homicide - male was solved im MB Tamontaka. On Physical Injury, a total of 10 cases was solved. All were males and came from Barangay MB Poblacion (1), MB Tamontaka (1), Pob. 4 (1), Pob. 5 (1), Pob. 7 (2), and RH 4 (4). There were 2 cases of Rape was solved in Barangay Pob. 7 and RH 9. While on Crime against Property, a total of 21 cases on theft were solved. (2) Bagua 2 - male, (3) MB Poblacion - 2 male and 1 female, (2) MB Rosary Heights - male, (1) Poblacion 2 - male, (5) Poblacion 5 - male, (3) Poblacion 6 - 2 males and 1 female, (2) RH 9 - male, and (3) RH 13 - male. On Non-index Crime, two (2) crime incidence committed by CICL was solved in MB Rosary Heights.

In 2016 on Crimes against Persons, three (3) cases on Physical Injury were solved - all males at Barangay Bagua 2, RH 7 and RH 10. On crime against Property, there was one (1) robbery case solved at RH 6 - male offender. A total of 20 cases solved on Theft. Barangays were MB Poblacion (1) - male, Pob. 4 (1) - male, Pob. 5 (10) - 5 males and 5 females, Pob. 6 (1) - male, RH 1 (1) - male, RH 2 (1) - male, RH 6 (1) - male, RHH 7 (2) - 1 male and 1 female, RH 10 (2) - 1 male and 1 female. For Non-index Crimes on crime incidence committed by CICL, there were 2 cases solved in Barangay MB Tamontaka - male and RH 10 - male.

Table SO-43 shows Crime Incidence by Barangay for Children (below 18 years old) in Conflict with the Law for the past five years.

Barangay	Type of Crime	2015				2016				2017				2018				2019			
		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender	
				Male	Female			Male	Female			Male	Female			Male	Female			Male	Female
Bagua 2	Index Crimes																				
	Crimes Against Person																				
	a. Physical Injury					1	1	1													
	Crimes Against Property																				
	a. Theft	2	2	2																	
MB Bagua	Crimes Against Property																				
	a. Theft													1	1	1					
	Non-index Crimes																				
	a. Crime Incidence Commited by CICL													3	3	3					
MB Poblacion	Index Crimes																				
	Crimes Against Person																				
	a. Physical Injury	1	1	1																	
	Crimes Against Property																				
	b. Theft	3	3	2	1	1	1	1						1	1		1				
MB Rosary Heights	Index Crimes																				
	Crimes Against Person																				
	a. Physical Injury									1	1	1									
	Crimes Against Property																				
	a. Theft	2	2	2																	
	Non-index Crimes																				
	a. Crime Incidence Commited by CICL	2	2	2																	
MB Tamontaka	Index Crimes																				
	Crimes Against Person																				

	a. Homicide	1	1	1																	
	b. Physical Injury	1	1	1																	
	Crimes Against Property																				
	a. Theft									1	1	1									
	Non-index Crimes																				
	a. Crime Incidence Commited by CICL					1	1	1						1	1	1					

Barangay	Type of Crime	2015				2016				2017				2018				2019			
		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender	
				Male	Female			Male	Female			Male	Female			Male	Female			Male	Female
Pob 2	Crimes Against Property																				
	a. Theft	1	1	1										2	2	2					
Pob 3	Non-index Crimes																				
	a. Crime Incidence Commited by CICL									1	1	1									
Pob 4	Index Crimes																				
	Crimes Against Person																				
	a. Physical Injury	1	1	1																	
	Crimes Against Property																				
	a. Theft					1	1	1										1	1		1
Pob 5	Index Crimes																				
	Crimes Against Person																				
	a. Physical Injury	1	1	1																	
	Crimes Against Property																				
	a. Theft	5	5	5		10	10	5	5	2	2	1	1	3	3	3		5	5	2	3
	Non-index Crimes																				
	a. Crime Incidence Commited by CICL																	1	1	1	
Pob 6	Crimes Against Property																				
	a. Theft	3	3	2	1	1	1	1		1	1	1									
Pob 7	Index Crimes																				
	Crimes Against Person																				
	c. Physical Injury	2	2	2														1	1	1	
	d. Rape	1	1	1																	
	Crimes Against Property																				
	a. Robbery																				

	b. Theft					1	1	1													
	Non-index Crimes																				
	a. Crime Incidence Commited by CICL					1	1	1										2	2	2	
RH 2	Crimes Against Property																				
	c. Theft					1	1	1										1	1	1	
RH 4	Index Crimes																				
	Crimes Against Person																				
	a. Physical Injury	4	4	4						2	2	1	1					1	1	1	

Barangay	Type of Crime	2015				2016				2017				2018				2019			
		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender		Total	Cases Solved	Offender	
				Male	Female			Male	Female			Male	Female			Male	Female			Male	Female
RH 6	Crimes Against Property																				
	a. Robbery					1	1	1													
	b. Theft	1	1	1																	
RH 7	Index Crimes																				
	Crimes Against Person																				
	a. Physical Injury					1	1	1													
	Crimes Against Property																				
	a. Theft					2	2	1	1												
RH 8	Index Crimes																				
	Crimes Against Person																				
	a. Physical Injury									1	1	1						1	1	1	
RH 9	Index Crimes																				
	Crimes Against Person																				
	a. Rape	1	1	1																	
	Crimes Against Property																				
	a. Theft	2	2	2																	
RH 10	Index Crimes																				
	Crimes Against Person																				
	a. Physical Injury					1	1	1													
	Crimes Against Property																				
	a. Theft					2	2	1	1												
	Non-index Crimes																				
	a. Crime Incidence Commited by CICL					1	1	1		1	1	1									
RH 13	Index Crimes																				
	a. Rape													1	1	1					

	Crimes Against Property																				
	a. Theft	3	3	3						1	1		1	1	1	1					
	Non-index Crimes																				
	a. Crime Incidence Commited by CICL									1	1	1									
Tam 5	Crimes Against Property																				
	a. Theft									1	1	1									

Source: Local PNP
Notes: *Types of Crime: Index Crimes - crimes which are sufficiently significant and which occur with sufficient regularity to be meaningful. Included in this category are the following crimes: murder, physical injury, robbery, theft and rape*
Non-Index Crimes – all types of crimes not considered as index crimes

In 2017, the cases were decreasing. For Index Crimes on Physical Injury, 4 cases were solved in barangay MB Rosary Heights (1) - male, RH 4 (2) - 1 male and 1 female, and RH 8 (1) - male. While on Crime against Property, 6 cases on theft were solved. Baragays are MB Tamontaka (1) - male, Pob. 5 (2) - 1 male and 1 female, Pob. 6 (1) - male, RH 13 (1) - female and Tam. 5 (1) - male. Crime incidence committed by CICL has 3 cases solved at Barangay Pob. 3, RH 10, and RH 13 - all males.

In 2018, 1 ape case was solved in Rh 13 - male. For Crime against Properties, 1 robbery was solved in RH 10 - male and 8 on theft cases solved in Barangay MB Bagua (1) - male and RH 13 (1) - male. Crime incidence committed by CICL has 4 cases solved in Barangay MB Bagua (3) and MB Tamontaka (1) - all males.

In the year 2019, 3 cases on Physical Injury was solved in Barangays Pob. 7, RH 4 and RH 8 - all males while crime against property on robberry has 1 solved case in Barangay RH 9 - male and on theft were 7 cases solved in barangays Pob. 4 (1) - female, Pob. 5 (5) - 2 male and 3 females and RH 2 (1) - male. On crime incidence committed by CICL, 4 cases solved in barangays Pob. 5 (1) - male, RH 1 (2) - male and RH 11 (1) - male.

The data shows that there was a decrease in both Index and Non-Index Crimes from 2015 - 2019 on Crime Incidence by Barangay for Children below 18 years old.

f. Current and projected manpower requirement for the protective services from 2021 to 2030.

Table SO-44 shows the Current and projected manpower requirement for the protective services from 2021 to 2030.

In 2019, the existing number of police force is 446 police personnel. In 2020, the projected requirement is 657 police personnel. Thus, 211 newly assigned police forces are needed. Assuming the deficit is resolved that year, 12 additional police personnel are needed per year from 2021 to 2022. Then, 13 additional police personnel per year are needed from 2023 to 2026. This goes up to 14 additional police personnel per year from 2017 to 2030.

For the fire force, there are 25 existing personnel in 2019. In 2020, the projected requirement is 164 fire personnel. Thus, 139 newly assigned fire personnel are needed. Assuming the deficit is resolved in that year, 3 additional fire personnel each year from 2021 to 2028 are needed. This goes up to 4 fire personnel each year from 2029 to 2030.

For jail personnel, there are 45 existing personnel in 2019. In 2020, the projected requirement is 66 jail personnel. Thus, 21 newly assigned jail personnel are needed. Assuming the deficit is resolved that year, one additional jail personnel per year is needed from 2021 to 2030.

Table SO-44. Current and Projected Requirement for Police, Fire and Jail Personnel

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Population*	322,346	328,342	334,448	340,669	347,005	353,460	360,035	366,731	373,552	380,500	387,577	394,786
Police Force**	446	657	669	681	694	707	720	733	747	761	775	790
Fire Force	25	164	167	170	174	177	180	183	187	190	194	197
Jail Personnel	45	66	67	68	69	71	72	73	75	76	78	79

Notes:
**based on population increase rate = 2.4% per annum*
*** computed based on population projection and standard ratios*

Table SO-38. **PROTECTIVE SERVICES ANALYSIS MATRIX**

Technical Findings/ Observations	Implications (Effects)	Policy Options/ Interventions
BFP		
A. Fire sub-stations are not strategically positioned within the city	1. No installed fire-station in the Southern part of the city that may take longer response time	Propose installation of fire sub-station on the southern part of the city
	2. ExtremeTraffic conditions	Conduct seminars to TMU regarding prioritization of emergency vehicles
	3. Narrow streets for firetruck to pass in case of fire incidence	
B. Outdated Fire Trucks	1. No recent issuance of modern firetrucks	Requisition of modern fire fighting capabilities/ Modernization of firefighthing equipment
	2. No high rise building firefighting capabilities	Procurement of fire ladder trucks to be utilized for high rise building fire fighting operations
C. Increasing number of fire incidents in urban barangays	1. Delayed implementation of Oplan Ligtas na Pamayanan	Increase the number of barangays subject for Oplan Ligtas na Pamayanan (facilitate formulation of hazard maps and community fire protection plan, and training of Community Fire Auxillary Group)

D. Some newly erected buildings are not fire safety compliant	1. Delayed Processing of Building Permits	Stoppage of all on-going construction of non-compliant contractors
	2 Lack of Information and Education Campaign on Business Permit, BuildingPermit andCertificate of Occupancy Processing	Intensifying information and education campaign on Business Permit, Building Permit and Certificate of Occupancy Processing
	3. Non-implementation of Ease of doing business act - building permit and certificate of occupancy one-stop-shop	Establishment of building Permit, and certificate of occupancy one-stop-shop
Limited storage room for response equipment	Shortened servicce life of equipment	
Delapidated Main Fire Station		
PNP		
Poor state of Police Station Buildings, living quarters and section offices	Slow processing and delivery of services resulting to negative feedbacks and impressions.	Submit report and outsource support from the LGU and other stakeholders.
Insufficient number of patrol cars and	Slow crime response.	Submit report for declaration of BER vehicles for replacement
	Delay response time	Strengthen liaising with the LGU and other stakeholders
Increase in the number of shooting incidents in 2019 as compared to 2018	Unsafe, unsecured feeling of city residence	Conduct periodic review and evaluation of operational and tactical plan. (EMPO); increase police visibility
Shortage of Police forces to population ratio	Unable to meet the response time	Additional forces and additional police stations
No available detention cell for women and youth offenders	Youth and women offenders may be joining the hard core criminal	Construction of detention cell for women and youth offenders
Limited space detention cell and/or other PNP precinct has no available detention cell	Crowded cell	Construction of detention cell for every police station
No available garage for mobile patrol vehicle	Rapid deterioration of mobile patrol vehicles	Construction of garage for patrol cars
Women and youth protectory is being use by common offenders	Youth and women offenders are mixed with hard core criminals	Construction of separate youth and women protectory facility
BJMP		
Dilapidated Jail Facilities, located right beside the river	Prone for escape and to natural hazard like high tide liquifaction	Construction of New JailFacility
Congested Jail	High health risk, especially for highly communicable diseases	

	No enough room for sleeping, resorted to shifting of sleep time	
Limited Jail officer	Jail Staff are expose to security threat	
Limited clinic space	Can accommodate only for first aid treatment	Provision of ample space for clinic
No ambulance	No available ambulance in case of emergency	Provision of Ambulance
No staff vehicle for official business	No available staff vehicle for official transactions	Provision of Staff
No available garage for the 3 L300 Van	Rapid deterioration of vehicles	Privision of garage
No buildable space for conjugal Room		Construction of Conjugal Rooms
Limited number of Comfort Rooms	Clogging Comfort Rooms	Contruction og additional comfort Rooms for male and female
No available space for worship for both Muslim and Christians	PDL Deprived to exercise their Faith	Provision of prayer room for both Muslim and Christians
Absence of Bahay Pag-asa	No available reformation facility for youth offenders	Construction of Bahay Pag-asa
No avaiable space for Welfare Development like space for sunbathing, exercise, workshops, guidance counseling, therapeutic sessions, ALS and TESDA Training	Absence of alternative activity to spend the time in prison, increases the thought to formulate an escaape plan or promote gangsterism inside the cell	Provision of space for Welfare Development
Limited Firearms of the Jail Officers	Security threats for jail officers	Provision of ample firearms to Jail Offficers

Programs/Projects Approved/Fundedfor Implementation:

No.	PROGRAM	PROGRAM COMPONENTS	ACTIONS/INTERVENTIONS	TIMEFRAME	FUND SOURCE
Protection					
	Infrastructure Development Program for Public Safety	5.1 Infrastructure Capability Building in the delivery of public safety and DRRM services	5.1.1Completion of the Public Safety Command Center/911 5.1.2 Installation of CCTV Camera along thoroughfares 5.1.3 Establishment of evacuation Center in the barangays 5.1.4 Construction of PNP Station at the City Government of Cotabato Property, Barangay RH 10 5.1.5 Construction of Radio Repeater/Installation of Communication Equipment 5.1.6 Construction of Storage room and garage for DRRMO	2020-2030	20% CDF/POPS/Other Sources

	DRRM Program	5.2 Disaster Risk Reduction Management and Preparedness	5.2.1 Establishment of Emergency Response Team (ERT) and WASAR 5.2.2 Procurement of HAZMAT Vehicle and equipment 5.2.3 Procurement of Uniforms for ERT, WASAR and HAZMAT Teams 5.2.4 Capacitate the Schools, and community and other public facilities in Disaster Risk Reduction 5.2.5 Strengthen Functionalities of BADACs and accountability of law enforcers 5.2.6 Conduct linkages and collaborative meetings with stakeholders on safety and security plans 5.2.7 .Public and Private Schools with DRRM Plan 5.2.8 Community Risk Assessment of the 37 Barangays 5.2.9 Capacity Training for DRRM Responders/ rescuers 5.2.10 Installation of Early warning devices in all public Institutions, (Schools, Government Buildings, Public Market, Terminals and Parks) 5.2.11 Tsunami Warning device in all Coastal Barangays 5.2.12 All Day Care Center integrated DRR in their lessons and well informed evacuation plan 5.2.13 Conduct of synchronize drill for all possible disaster situation 5.2.14 Barangays with DRRM Plan 5.2.15 DRRM Awareness and Orientation to barangay/Community/Youth 5.2.16 Provision of DRR-IEC Materials 5.2.17 Conduct of Quarterly Council Meeting 5.2.18 Conduct of Pre-disaster Risk Assessment (PDRA) Meeting 5.2.19 Support to GawadKalasag and SGLG 5.2.20 Reorganization of the City Emergency Response Team (CERT) 5.2.21 Capacity Building and Training of the ff: a. Basic Life Support b. Standard First Aid c. Urban Search and Rescue	2020-2030	20% CDF/POPS/Other Sources

			d. Water Search and rescue e. Collapsed Structure Search and Rescue 5.2.22 DRRM Equipage (medical/Disaster) a. TOT for Psychosocial Intervention b. Rapid Damage Needs Assessment c. Camp Coordination and camp Management (CCCM) d. Capacity Building and Training Incident Command System (Level 1-4) e. Rescue Boat Operation and Maintenance f. Conduct of Drills Fire/Earthquake/Bombing/MCI) 5.2.23 Updating/Formulation of Plans: *a. Contingency Plans* *b. LDRRM Plan* *c. Early Warning System Protocols* d. *BDRRM Plan* 5.2.24 Insurance coverage for Responders 5.2.25 Purchase of Medical Supplies and Equipment 5.2.26 Purchase of SAR Equipment 5.2.27 Purchase of Communications Equipment 5.2.28 Stress Debriefing for Responders 5.2.29 CDRRM Operation Center 5.2.30 Purchase and installation of Early Warning Device 5.2.31 Installation of Electronic Information (LED) Board at Strategic Place in the City for Public Information 5.2.32 Provision of Comprehensive Disaster and Resiliency Program 5.2.33 Support to Response Program to Emerging/Re-emerging Disease/Pandemic		
		5.3 Prevention and mitigation	5.3.1 Bamboo/mangrove/Tree Planting Activity 5.3.2 Clean Up Drive 5.3.3 Relocation of Household settled in Danger zones, along the Rio Grande de Mindanao River 5.3.4 Construction of River Bank Protection along the Rio Grande de Mindanao River 5.3.5 Construction of Drainage Canal	2020-2030	20% CDF/POPS/Other Sources

			5.3.6 Cleaning/Clearing of Drainage Canals 5.3.7 Repair and covering the open manhole along city sidewalks 5.3.8 Reconstruction of Roads and Bridges 5.3.9 Desilting of the Rio Grande de Mindanao and Tamontaka River		
		5.4 Rehabilitation and Recovery	5.4.1Cash for Work 5.4.2 Livelihood Program	2020-2030	20% CDF/POPS/Other Sources
	Public Safety Service Delivery	5.5 Public Safety Services	5.5.1 Implementation of the Discipline Hour for minors and RONDA Patrol 5.5.2 Formulation of Road Safety Plan 5.5.3 Installation of Road signages 5.5.4 Establishment of Public Safety Office and Assistance Center 5.5.5 Implementation of Discipline Hour for Minors 5.5.6 Creation of Hazardous Materials (HAZMAT) Response Team against Chemical, Biological, Radiological, Nuclear and Explosives (CBRNE) Attack	2020-2030	20% CDF/POPS/Other Sources
		5.6 Road safety Assistance	5.3.10 5.6.1 Updating/Formulation of Plans: e. *Contingency Plans* f. *LDRRM Plan* g. *Early Warning System Protocols* h. *BDRRM Plan* 5.6.2 Strict implementation of the traffic laws 5.6.3 Strict implementation of City Ordinance 4407, series of 2016 5.6.4 TulongDaan 5.6.5 Provision of TMU Uniforms	2020-2030	20% CDF/POPS/Other Sources

		5.7 Public Health Safety	5.7.1 Implementation of the Preventive Health Protocols 5.7.2 Implement EO in the Prevention on the spread of COVID 19 5.7.3 Conduct of training workshop on Pandemic Awareness 5.7.4 Procurement of Type A1 Ambulance for COVID 5.7.5 Procurement of Service Vehicle for Public Safety and Ordinance Implementation 5.7.6 Procurement of Service Vehicle for PNP SWAT 5.7.7 Procurement of medicine and medical equipment essential for fighting against COVID 19	2020-2030	20% CDF/POPS/Other Sources
	Infrastructure Development (PNP)	5.8 Construction of additional police precinct;	5.8.1 Establishment of 8 Standard PNP Stations in identified strategic areas in the city (with separate WCPD offices, with adequate WCPD Facilities and equipment like child's playroom and child minding space, with WCPD mobile and PNP Ladies quarters) 5.8.2 Relocation of City Jail outside of the CBD and residential zone 5.8.3 Improvement of PNP existing dilapidated stations with provision of ample space for detention cell 5.8.4 Construction of New City Jail 5.8.5 Establishment of 8 BFP Stations	2020-2030	20% CDF/POPS/Other Sources
	Organizational Capacity Development	5.9 Crime Prevention	5.9.1 Activate emergency hotline numbers 5.9.2 Provision of at least 3 mobile patrol cars per PNP station 5.9.3Meet the National Standard of 1 Police to 500 populatio ratio and 1 fireman to 2000 population 5.9.4Acquisition of basic tools and equipment and facilities needed in fire and crime Prevention 5.9.5 Conduct patrol and increase police visibility in strategic areas 5.9.6.Acquisition of basic tools and equipment for crime prevention like gun, patrol car and communication equipment	2020-2030	20% CDF/POPS/Other Sources

			5.9.7 Strengthening the implementation of searching procedures 5.9.8 Strengthening intelligence gathering 5.9.9 Enhance child and women protection services (VAWC)		
	Anti-Illegal Drug Operations	5.10 Anti-Illegal Drug Campaign	5.10.1 Conduct of Anti-Illegal Drug Operations 5.10.2 Information campaign through radio announcement against use, manufacture and selling illegal drugs 5.10.3 Establishment of Task Force Kutawato 5.10.4 Rehabilitation Program for drug patients/surrenderees 5.10.5 Intensify DOUBLE BARREL RELOADED against illegal drugs.	2020-2030	20% CDF/POPS/Other Sources
	Fire Prevention Program	5.11 Organizational and Facilities Development Program	5.11.1 Rehabilitation of Dilapidated BFP Head Quarter Station 5.11.2 Modernization of fire fighting equipment 5.11.3 Fire Safety Seminars & Drills in the barangays 5.11.4 Establishment of additional Fire-sub station in Strategic area. 5.11.5 Awareness Campaign on fire prevention 5.11.6 Sustain emergency hotline numbers 5.11.7 Conduct Ugnayansa Barangay 5.11.8 Strengthening BJMP TC Program to inmates 5.11.9 Strengthening and upgrading livelihood programs of inmates. 5.11.10 Conduct seminar and training to inmates. 5.11.11 Implement other programs of BJMP	2020-2030	20% CDF/POPS/Other Sources

5.7 Sports and Recreation

a. Existing Sports and Recreational Facilities

The table SO 46 shows the city existing sports facilities. A total of 75 Sports and recreation facilities having fair physical conditions, except for the Central Pilot Elementary School Oval track and field that is poorly maintained. Forty three of the facilities are publicly owned and 31 were from private sector.

Facilities having high susceptability to flooding while 11 with medium and 47 with low susceptability. There are 38 facilities were identified having medium susceptability to tsunami, they were the barangays belonging to the coastal areas and 1 or Kalanganan mother with high susceptability for tsunami and surge. Two of the facilities with medium susceptability to landslide, these are located at the PC Hill.

Thirteen of the public facilities were allowed to be use as evacuation center.

Table SO-46. Existing Sports and Recreational Facilities by Barangay, Year 2018

Barangay	Type of Facility	Lot Area (ha/sq m)	Ownership	Physical Condition of Facility	Used as Evacuation Center (Y/N)
Bagua Mother	San Roque Gym	436.24	Public	Fair	
	Mahad Covered Court	436.24	Private	Fair	
	Rasheeda Basketball Court	436.24	Private	Fair	
Bagua 2	Day Care Playground		Public	Fair	N
Poblacion MB	Playground	1300 sqm	Public	Fair	Y
Pob. 1	CCI Gymnasium		Private	Fair	N
	CCI Open Field		Private	Fair	N
Pob. 2	Mini Park	436.24	Public	Fair	N
	Half basketball Court	40 sq.m.	Public	Fair	N
Pob. 3	Covered Court	436.24	Public	Fair	N
Pob. 4	Re-creation Hall	60	Public	Fair	Y
Poblacion 4	Half basketball Court	50 sq.m.	Public	Fair	N
Poblacion 5	Playground		Public		
	Basketball Court		Private		
Poblacion 6	Bodybuilding Gym 1	160 sq.m.	Private	Fair	N
	Bodybuilding Gym 2	300 sq.m.	Private	Fair	N
	Billiard Hall 1	32 sq.m.	Private	Fair	N
	Billiard Hall 2	32 sq.m.	Private	Fair	N

	Billiard Hall 3	32 sq.m.	Private	Fair	N
	City Plaza, Play Ground/ Open Space	600 M²	Public	Fair	N
	Half basketball Court		Private	Fair	N
	PP1 Basketball Court		Private	Fair	N
	PCG Basketball Court		Private	Fair	N
	Half basketball Court		Private	Fair	N
	Central Pilot Oval/Track and field		Public	Poor	Y
	Central Pilot Covered Court		Public	Fair	Y
Poblacion 7	School Ground		School Property	Fair	N
	Brgy. Gymnasium	1,000	Public	Fair	H
Pob. 8	Madrasa Multi-Purpose Hall	60	Private	Fair	N
Rosary Heights Mother	LGU Tennis Court		Public	Fair	N
	Golden Lace Swimming Pool		Private	Fair	N
Rosary Heights 1	Basketball Court	1000sqm	Public	Fair	N
	PNP Tennis Court	1000sqm	Public	Fair	N
RH 2	NDSAC Gym		Private	Fair	N
RH 3	NDU Gymnasium		Private	Fair	N
RH 3	NDU Soccer Field		Private	Fair	N
	NDU Open Tennis Court		Private	Fair	N
RH 4	Brgy. Gymnasium	1,000	Public	Fair	Y
	NDBoys Gymnasium		Public	Fair	N
	NDBoys Open Tennis Court		Public	Fair	N
	CCSPC Track and Field		Public	Fair	N
	CCSPC Gymnasium		Public	Fair	N
	CCSPC Open Tennis Court		Public	Fair	N
	CNHS Main Covered Court		Public	Fair	N
RH 5	Don E. Sero Elem. School Covered Court	436.24	Public	Fair	N
RH 6	Krislammville Elem. School Covered Court	436.24	Public	Fair	Y
RH 7	Sideout Badminton Court		Private	Fair	N
	BARMM Open Field		Public	Fair	N
	A Fitness Gymnasium		Private	Fair	N
	Citi Mall Cinema Theater		Private	Fair	
RH 8	DepEd Covered Court		Public	Fair	N

	St. Joseph Parish Covered Court		Private	Fair	N
	NDVillage H/S Covered Court		Public	Fair	N
	NDVillage E/S Covered Space		Public	Fair	N
Rosary Heights 9	Basketball Open Court	portion of 1,921 sqm	Public	Poor	Y
	AL Nor Cinema Theater		Private	Fair	N
Rosary Heights 9	St Benedict Covered Basketball Covered Court		Private	Fair	N
	Al Nor Swimming Pool		Private	Fair	N
Rosary Heigts 10	RH 10 Open Basketball Court		Public	Fair	N
	Canizarez High School Covered Court		Public	Fair	N
Rosary Heigts 10	Children's Park		Public		N
	People's Palace Open Space		Public	Fair	N
Rosary Heights 11	Basketball Court		Public	Fair	Y
	Tennis Court		Private	Fair	Y
	Covered Court	500	Public	Fair	Y
Rosary Heights 12	USAID Community Center		USAID Donated	Fair	Y
	Basketball Court	436.24	Public	Fair	Y
	Sports Court	1000sqm.	Private	Fair	Y
RH 13	RVM Gymnasium		Private	Fair	N
	Pizzaro Swimming Pool		Private	Fair	N
Kal. Mother	Basketball Court	436.24	Public	Fair	N
Kal. 2	Covered Court	436.24	Public	Fair	N
	Bay walk		Public	Fair	N
	Bike Lane		Public	Fair	N
Tam. 2	Multi-Purpose Hall	70	Public	Fair	N

Source: City Planning and Development Office, Engineering Office, Office of the Sagguniang Kabataan (SK).
Notes:
Type of Facility – Sports or Recreational
Ownership - public/private
Physical Condition of Facility – Fair, Poor, Critical

Indicate level of susceptibility for all hazards: High (H), Moderate (M), Low (L)

b. Proposed Recreation Facilities

The city is looking for a national sponsor to fund the Sports Complex, the Office of the City Assessors is on its process of the inventory of public lands that is potential location for the Construction of a Sports Complex.

Out of the 37 barangays only 14 barangays signify proposals to put up a sports facility, others may already have existing sports facilities. The most commmon is construction of either a covered or open basketball court, which can also use into other sports activities. Some opted for a construction of multi purpose building, that can also be use for recreational space and some sports events. Barangay Kalanganan 2 signify to propose for a Construction of a Gymnasium. However we have to consider the susceptability of their propose location. Bagua 2 and 3 are with high flood and medium Tsunami susceptability. The Rosary Heights Barangays has low to flood susceptability. Poblacion 8 at low flood susceptability while Pob. 9 and Kalanagan Mother has very high flood suscetability and Kal. 2, Tamontaka mother and Tamontaka 5 with high flood susceptability.

Table SO-47. Proposed Recreation Facility, Year 2019

Proposed Recreation Facility	Barangay	Type of Facility	Ownership	Area (ha/sq m)
Sports Complex				
	Bagua Mother			
	Bagua 1			
Construction of Brgy Basketball Court	Bagua 2	Basketball Court	Public	
Construction of Brgy Covered Court	Bagua 3	Covered Court	Public	
	RH Mother			
	RH 1			
Concreting of Basketball Court	RH 2	Basketball Court	Public	
Lot acquisition and construction of Multi-purpose Hall	RH 3	Multi-purpose Hall	Public	50,000 sq.m.
	RH 4			
Construction of Brgy Basketball Court	RH 5	Basketball Court	Public	
	RH 6			
	RH 7			

	RH 8			
	RH9			
	RH 10			
Construction of a Covered Court	RH 11	Covered Court	Public	
Construction of a Recreation Center/Multi-purpose Building	RH 12	Recreation Center	Public	50 sq.m.
	RH 13			
	Pob. Mother			
	Pob. 1			
	Pob. 2			
	Pob. 3			
	Pob. 4			
	Pob. 5			
	Pob. 6			
	Pob. 7			
Construction of Multi-purpose Building	Pob. 8	Multi-purpose Building	Public	
Construction of Covered Court		Covered Court	Public	50 sq.m.
Construction of Covered Court	Pob. 9	Covered Court	Public	50 sq.m.
Lot acquisition and construction of Multi-purpose Hall	Kal. Mother	Multi-purpose Hall	Public	
Construction of Covered Court		Covered Court	Public	
	Kal. 1			
Construction of a Multi-purpose Hall	Kal. 2	Multi-purpose Hall	Public	
Construction of Gymnasium		Gymnasium	Public	
Construction of Multi-purpose Hall	Tamontaka Mother	Multi-purpose Hall	Public	
	Tam. 1			
	Tam. 2			
	Tam. 3			
	Tam. 4			
Construction of a Multi-purpose Hall	Tam. 5	Multi-purpose Hall	Public	

Note:

Type of Facility – Sports or Recreational
Indicate level of susceptibility for all hazards: High (H), Moderate (M), Low (L)
Types of hazards – Flood (Fl), Tropical Cyclone (Tc), Earthquake (Eq), Volcano (Vo), Landslide (Ln), Tsunami (Ts), Storm Surge (Su), Others (e.g. coastal erosion, sea level rise, land subsidence, liquefaction, strong wind, change in temperature, change in rainfall, etc.)

a. Needs Analysis: Presence, Absence and Condition of Socio Services by Barangay

Table SO-49. Needs Analysis: Presence, Absence and Condition of Socio Services by Barangay

Barangay	Administration		Housing (Y/N)			Health (Y/N)				Education (Y/N)				Social Welfare (Y/N)			Protection (Y/N)			Recreation (Y/N)	
	BH		IS	SH	RS	H		PC	PrC	E		S	T	D	Sc	MH	P		F	MF	
	Y/N	C*				Y/N	C*			Y/N	C*						Y/N	C*		Y/N	C*
Bagua Mother	Y	F	Y			Y	F			Y	F	Y	Y	Y	N		Y	F			
Bagua 1	Y	F	Y	N	N	Y	F	N	Y	Y	F	Y	Y	Y	N	N	N	NA	N	N	N
Bagua 2	Y	F	Y	Y	N	Y	F		Y	Y	F	N	N	Y	N	N	N	NA	N	N	
Bagua 3	Y	F	Y	N	N	Y	F	N	N	Y	F	N	N	Y	N	N	N	NA	N	N	N
RH Mother	Y	F	Y	N	N	Y	F	Y	Y	Y	F			Y	N	Y	Y	F	Y	Y	F
RH 1	Y	F	Y			Y	F		Y	Y	F	Y	Y	Y			Y	F		Y	F
RH 2	Y	F	Y	Y	N	Y	F	N	N	Y	F	N	N	Y	N	N	N	NA		N	NA
RH 3	Y	F	Y	N	N	Y	F	N	N	Y	F	Y	Y	Y	Y	N	N	NA	N	N	N
RH 4	Y	F	Y	Y	N	Y	F	N	Y	Y	F	Y	Y	Y	N	N	N	NA	N	N	N
RH 5	Y	F	Y	N	N	Y	F	N	N	Y	F	Y	Y	Y	Y	N	N	NA		Y	Y
RH 6	Y	F	Y	Y	Y	Y	F	N	N	Y	F	Y	N	Y	N	Y	N	NA	N	N	N
RH 7	Y	F	Y	Y	Y	Y	F	N	N	Y	F	Y	N	Y	N	Y	N	NA	N	Y	F
RH 8	Y	F	Y	Y	N	Y	F	N	N	Y	F	Y	N	Y	N	Y	N	NA	N	Y	F
RH9	Y	F	Y	N	N	Y	F	Y	Y	Y	F	Y	Y	Y	N	N	N	NA		N	N
RH 10	Y	F	Y	N	Y	Y	F	Y	N	Y	F	Y	Y	Y	Y	Y	N	NA	N	Y	F
RH 11	Y	F	Y	Y	N	Y	F	N	N	Y	F	Y	N	Y	N	Y	N	NA	N	Y	F
RH 12	Y	F	Y	N	N	Y	F	N	N	Y	F	Y	Y	Y	N	Y	N	NA	N	Y	F
RH 13	Y	F	Y			Y	F			Y	F	N	Y	Y	N	N				Y	F
Pob. Mother	Y		Y											Y							
Pob. 1	Y	F	Y	N	N	Y	F	N	N	Y	F	Y	N	Y	N	N	Y	F	N	Y	F
Pob. 2	Y	F	Y	N	N	Y	F	N	N	Y	F	N	N	Y	N	N	N	NA		N	N
Pob. 3	Y	F	Y	N	Y	Y	F	N	N	Y	F	N	N	Y	N	N	N	NA		N	
Pob. 4	Y	F	Y	N	N	Y	F	N	N	Y	F	Y	Y	Y	N	Y	N	NA	N	Y	
Pob. 5	Y	F	Y			Y	F							Y					Y		
Pob. 6			Y			Y	F							N			Y	F			
Pob. 7			Y			Y	F							Y				NA			
Pob. 8	Y	F	Y	N	Y	Y	F	N	Y	Y	F	Y	N	Y	N	Y	N	NA	Y	Y	Y
Pob. 9	Y	F	Y	N	N	Y	F	Y	Y	Y	F	N	N	Y	N	N	N	NA	N	N	N

Kal. Mother	Y	F	Y	Y	Y	Y	Y	N	Y	Y	F	Y	Y	Y	N	N	Y	C	N	N	N
Kal. 1			Y															NA			
Kal. 2	Y	F	N	N	N	Y	C	Y	N	Y	F	Y	N	Y	N	Y	N	NA	N	N	N
Tamontaka Mother	Y	F	Y	N	N	Y	Y	N	Y	Y	F	N	Y	Y	N	Y	Y	F	N	Y	Y
Tam. 1			N															NA			
Tam. 2	Y	F	Y	Y	Y	Y	C	N	Y	Y	F	N	N		N	Y	Y	NA	N	N	N
Tam. 3	Y	F	Y	N	N	Y	C	Y	N	Y	F	N	N		N	N	N	NA	N	N	N
Tam. 4			Y															NA			
Tam. 5	Y	F	Y	N	N	Y	C	N	Y	Y	F	Y	Y		N	N	N	NA	N	N	N

Notes:
Check presence of the followingper barangay – Yes (Y), No(N)

(BH) Barangay Hall
(IS) Informal Settlers
(SH) Socialized Housing
(RS) Relocation Site
(H) Health Station/Center
(PC) Public Cemetery
(PrC) Private Cemetery (eg. memorial parks, crematorium, etc.)
(E) Elementary School
(S) Secondary School

C* – Condition
Indicate if the following facilities are functioning – Functioning (F), Not Functioning (NF), Not applicable (NA)
(BH) Barangay Hall
(H) Health Station/Center
(E) Elementary School
(P) Police Outpost
(MF) Multipurpose Recreational Facilities
(T) Tertiary
(D) Day Care Center

(Sc) Senior Citizen Center
(MH) Multipurpose Hall
(P) Police Outpost
(F) Fire Station
(MF) Multipurpose Recreational Facilities

Table SO-45. **SPORTS AND RECREATION ANALYSIS MATRIX**

Technical Findings/ Observations	Implications (Effects)	Policy Options/ Interventions
No sports complex or public sports facility for public use	Limited opportunity for residents to indulge in sports and recreation; RROW and other public space are being utilized as playing area	Identify areas for sports and recreation; scoop for national agency support for the construction of a sports complex
Limited sports facilities for public use, because not all barangays has ample space to be utilize for sports and recreation use Generally the sports facilities were in-schools	Road right of way being utilized as sports and recreation activities The public having low access to the utilization of the facilities	To provide a venue for sports and recreation, the public plaza and the open ground at the people's palace are being allowed for some sports, recreation and academic extra curricular activities
Absence of bowling alleys and other sports events	Sports enthusiast has limited opportunity to develop their choice/ field of sports	
Only 2 privately owned sports facility namely the Side out (Badminton Court) and NDSAC		

Gym (basketball and volleyball)and 2 private gym		
Some offices like the PNP and DPWH has tennis court facilities	PNP and DPWH employees enjoy access to the tennis court for sports and fitness purposes	
No venue/facility for long board, skate board, and bicycle lane	Sports enthusiast for these field of sports are using the main highway during the late afternoon that exposes the risk of their safety and traffic jam	Establishment of appropriate facility for the identified sports
Senior Citizen utilize the city plaza for conducting their regular hataw	Senior Citizen enjoy the access of the city plaza for their physical enhancement program	
Citi Mall provided a regular schedule for fitness program for the public	Mall goers enjoy and participate in the fitness program	
The city employees only enjoy the spirit of sports during the Araw ng Cotabato and Shariff Kabunsuan Festival for only identified sports events(Dart, basketball, volleyball, tennis and others)		
Some Sangguniang Kabataan (SK) Council conducts sports activity like basketball and volleyball for boys. Young girls sports activity were usually left behind	There is a gender gap in conducting the sports activity in the city. Generally sports league were participated by men and a few events for women	Establishment of sports facilities and sports events that women can participate
For special occasion the concrete pavement in front of the People's Palace is converted into a volleyball court		Establishment of a sports facility for City Government employees use
Absence of a Children and teen parks	The city plaza and the People's palace ground are utilized for children and youth activities	Establishment of a teen park and children's park in the city, if possible pocket parks and/or by cluster; this can be integrated in our river bank protection project utilizing the easement- 3 meters or the LGU shall declare them danger zone)
Location of sports/ recreational facilities in/ near danger areas e.g. cliffs; health hazards e.g. landfill	Risk to the lives/ health of the people	Provide measures to avoid accidents/ any danger; relocate sports/ recreational facilities away from any health hazard structure/ infrastructure

Programs/Projects Approved/Fundedfor Implementation:

PROGRAM	PROGRAM COMPONENTS	ACTIONS/INTERVENTIONS	TIMELINE	FUND SOURCE

Cotabato City Sports Program	Infrastructure Development	6.1.1 Construction of Cotabato City Sports Complex 6.1.2 Construction of clustered children's park/teen park and open spaces for rest and recreation 6.1.3 Establishment of indoor physical fitness equipment for all ages 6.1.7 Establishment of Sports and Recreation Facilities for Senior Citizens, Children and PWDs 6.1.8 Establishment of Esplanade using the river bank protection easement and putting of light structured facilities with green spaces 6.1.9 Establishment of every barangay and public schools sports/recreation facilities. 6.1.10 Completion of the Children's Park 6.1.11Preserve and maintain the City Sports Arena and its sports equipment and facilities	2020-2030	20% CDF/Other Sources
	Develop a city-wide media and marketing campaign promoting physical fitness and sports activity.	6.2.1 Formulation of Cotabato City Sports Development Plan 6.2.2 Work in partnership with local stakeholders (Academe, malls, barangays) to develop and support an enhanced program of physical fitness and sports in the city. 6.2.3 Increase access to sports facilities, particularly on school and club sites and barangays which will have a wider community benefits.	2020-2030	20% CDF/Other Sources
	Develop and enhance opportunities provided in public parks, open spaces and recreation areas.	6.3.1 Acquire necessary sports equipment and facilities 6.3.2 Increase regular participation by Local residents in all physical fitness and sports activities 6.3.3 Increase social, economic and health benefits delivered by physical fitness and sports activities	2020-2030	20% CDF/Other Sources

6. PHYSICAL /INFRASTRUCTURE RESOURCES (Inventory of Maps and Tables)

6.1Transportation Network (Internal and External Linkages)

1. Road Network (Existing situation)

The road network systems within Cotabato City are categorized as national roads, city roads, and barangay roads. These road networks also vary in surface type. Some of which are already asphalt overlaid, some are concreted or are called Portland Cement Concrete Pavement, some are gravel surfaced, and some are still unpaved earth roads. Through the years, the city's infrastructure development can be widely seen on its road network systems expanding its linkage by about 11.27% from 2009 to 2020. As of year 2020, the total length of the roads of Cotabato City is already at 218.271 kilometers. Of this total length, about 2.99% at 6.531 kilometers are already asphalt overlaid, 62.55% at 136.53 kilometers are Portland Cement Concrete Pavement, about 34.28% at 74.832 kilometers are gravel-surfaced, and the remaining 0.17% at 0.378 kilometers are still unpaved earth roads.

Despite the rapid improvement of the city's road network system over the years, there are still portions of the roads that needs immediate improvement, upgrading, and/or maintenance, especially in barangays that relies on farm to market roads to support their small income-generating operations. It is observed that developing the roads on the rural areas of the city are less complex than improving the roads in the central business districts. The problem with the roads on the commercial areas of the city are their narrow widths inadequate to cater large volume of vehicles. Expanding these roads became more challenging and impractical because the lot areas adjacent to the roads which may potentially increase the width of the roads are still properties privately owned by individuals with complete titles. In some cases, where widening is possible, issues abound particularly on the road-right-of-way (RROW). Thus, the City Government works to resolve these issues and pave the way to improve these road infrastructures.

As of now, the volume of vehicles in both major and minor roads of the city continuously increase and aggravate the city's traffic. To resolve traffic issues in the city, the LGU has been implementing absolute-no-parking along the national roads no right-side parking on some selected streets of the city, and enforcement of traffic ordinances and other traffic policies. Aside from these, the city LGU is also planning on implementing re-routing schemes as to utilize some city roads for public transport use.

The table IF-2 below shows the inventory of the city's roads with their respective classification, width, length and surface type. In addition to that, it also shows the projected degree of susceptibility of these roads to flooding, storm surge, tsunami, landslide and other hazards. As for the flooding, almost all the roads are at medium to low susceptibility to flooding except for the entire barangay Rosary Heights 1 which is situated at the PC Hill and are not susceptible to flooding. However, due to its high elevation, it was mapped to have some of its roads to be moderately susceptible to

landslide. This is the same with some of the roads located on and near the Timako Hill of the barangay Kalanganan 2 also mapped to have moderate susceptibility to land slide. Aside from these hazards, there are also roads that are low to highly susceptible to tsunami and storm surge. These are the roads directly located near the open seas at the Illana Bay especially for the barangays Kalanganan Mother, Kalanganan 1, and Kalanganan 2, as well as their adjacent barangays including some roads located at barangays Poblacion 5, 6 and 7, and Bagua Mother, 1, 2, and 3.

Table IF-2. Inventory of Roads by System Classification and Type of Pavement, Year 2020

Unique ID for road	Road Name	Classification	Right of Way (RoW)	Total Length (Km)	Road Surface Type												Hazard Susceptibility (H/M/L)							
					Concrete			Asphalt			Gravel			Earth											
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
12CCO001	Purok Buliao 1 Road	Brgy Road										0.00%					M							
12CCO002	Purok Buliao 2 Road	Brgy Road	5.44/3.95	0.365																				
12CCO003	Doña Blanco Str.	Brgy Road	13.27/8.11	0.182	0.18249	100.00%			0.00%			0.00%					M							
12CCO004	Purok Lumayon 4 Road	Brgy Road	8.32/4.24	0.15	0.14958	100.00%			0.00%			0.00%					M							
12CCO005	Purok Lumayon 3 Road	Brgy Road	9.80/5.72	0.11	0.11039	100.00%			0.00%			0.00%					M							
12CCO006	Purok Lumayon 1 Road	Brgy Road	5.29/4.21	0.241	0.24071	100.00%			0.00%			0.00%					M							
12CCO007	SK Pendatun Ext.	City Road	10.42/5.32	0.977	0.57185	58.51%			0.00%		0.40555	41.49%					H							
12CCO008	Japal Jojo Guiani Str.	Brgy Road	7.13/4.70	0.235	0.23503	100.00%			0.00%			0.00%												
12CCO009	Road 1	Brgy Road	7.04/4.10	0.082		0.00%			0.00%		0.08226	100.00%												
12CCO010	Road 2	Brgy Road	7.09/4.12	0.082		0.00%			0.00%		0.08237	100.00%												
12CCO011	Road 3	Brgy Road	7.04/4.10	0.083	0.08324	100.00%			0.00%			0.00%												
12CCO012	Road 4	Brgy Road	7.07/4.10	0.083		0.00%			0.00%		0.08314	100.00%												
12CCO013	Road 5	Brgy Road	7.10/4.08	0.083		0.00%			0.00%		0.08327	100.00%												
12CCO014	Unnamed road	Brgy Road	15.53/5.77	0.19	0.19024	100.00%			0.00%			0.00%												
12CCO015	Buliao Road A	Brgy Road	6.24/4.07	0.036	0.03616	100.00%			0.00%			0.00%												
12CCO016	Buliao Road B	Brgy Road	5.95/3.71	0.057	0.05739	100.00%			0.00%			0.00%												
12CCO017	Jose Lim Street Ext.	Nat'l Road	13.15/7.71	0.228	0.2282	100.00%			0.00%			0.00%					H					M		
12CCO018	Don Rufino Alonzo Str.	City Road	23.05/16.17	0.111	0.11122	100.00%			0.00%			0.00%					L							
12CCO019	Martinez Steet	Brgy Road		0.19	0.19024	100.00%			0.00%			0.00%					L							
12CCO020	Anacleto Badoy Str.	Nat'l Road		0.313	0.31309	100.00%			0.00%			0.00%					M							
SUBTOTAL				4.325	3.588	82.97%	-	-	0.00%	-	0.737	17.03%	-	-	-	-								-
Poblacion I																								
12CCO021	Purok Datukaka Street	Brgy Road	5.17/	0.267	0.26703	100.00%			0.00%			0.00%					VH							
12CCO022	Purok Lushin Khan Road	Brgy Road	5.13/	0.407	0.40711	100.00%			0.00%			0.00%					VH							
12CCO023	RS Buan Road 1	Brgy Road	7.17/	0.196	0.19601	100.00%			0.00%			0.00%					M							
12CCO024	RS Buan Road 2	Brgy Road	6.47/	0.44	0.17474	39.70%			0.00%		0.26545	60.30%					M							
12CCO025	Unnamed road	Brgy Road	5.50/	0.066		0.00%			0.00%		0.06603	100.00%												
12CCO026	Purok Turion 1 Road	Brgy Road	5.54/	0.954	0.369	38.69%			0.00%		0.58463	61.31%					VH							
12CCO027	Anacleto Badoy Str.	National Road		0.582	0.5818	100.00%			0.00%			0.00%					VH							
SUBTOTAL				2.912	1.996	68.54%	-	-	0.00%	-	0.916	31.46%	-	-	-	-								-
Poblacion 2																								
12CCO028	SK Pendatun Ave.	City Road	9.82/6.89	0.635	0.44141	69.56%			0.00%		0.19313	30.44%					L							

12CCO029	Atienza Street	Brgy Road	10.52/5.08	0.035		0.00%			0.00%		0.03511	100.00%					L							
12CCO030	Deocesan Street	Brgy Road	6.60/5.22	0.271	0.10863	40.16%			0.00%		0.16188	59.84%					L							
12CCO031	Tiburcio Chavez Str.	Brgy Road	10.89/3.25	0.398	0.13826	34.75%			0.00%		0.25959	65.25%					L							
12CCO032	Aurora Soriano Str.	Brgy Road	12.00/5.16	0.263	0.17139	65.10%			0.00%		0.0919	34.90%					M							
12CCO033	Doña Pilar Street	City Road	11.03/4.51	0.27		0.00%			0.00%		0.26969	100.00%					L							
12CCO034	Doña Teresa Street	City Road	9.61/4.09	0.288	0.04131	14.35%			0.00%		0.24662	85.65%					L							
12CCO035	Charles Quintana Str.	Brgy Road		0.151	0.01585	10.47%			0.00%		0.13553	89.53%					L							
12CCO036	Gunsang Street	Brgy Road	6.56/2.78	0.107	0.09514	89.33%			0.00%		0.01136	10.67%					M							
12CCO037	Suraik Macmod Street	Brgy Road	5.93/4.00	0.157	0.1376	87.73%			0.00%		0.02	12.27%					H							
12CCO038	Hamsa Rampak Street	Brgy Road	6.63/2.88	0.076		0.00%			0.00%		0.07618	100.00%					H							
12CCO039	Macacua Watamama Str.	Brgy Road	5.00/2.90	0.058		0.00%			0.00%		0.0579	100.00%					H							
12CCO040	Road 1	Brgy Road	8.50/4.19	0.218	0.21822	100.00%			0.00%			0.00%												
12CCO041	Road 2	Brgy Road	5.60/2.67	0.095	0.06428	67.86%			0.00%		0.03044	32.14%												
12CCO042	Anecleto Badoy Str.	Nat'l Road	11.66/7.00	0.346	0.34556	100.00%			0.00%			0.00%					L							
SUBTOTAL				3.366	1.778	52.81%	-	-	0.00%	-	1.589	47.19%	-	-	-	-								-
Poblacion 3																								
12CCO043	Doña Teresa Str.	City Road	9.74/4.10	0.291	0.2453	84.40%			0.00%		0.04534	15.60%												
12CCO044	Estrella Street	Brgy Road	9.75/4.02	0.263	0.16	60.88%			0.00%		0.10304	39.12%					H							
12CCO045	Don Jesus Street	City Road	11.23/4.17	0.178		0.00%			0.00%		0.17759	100.00%					L							
12CCO046	Don Cesar Street	City Road	16.90/4.45	0.364	0.36	100.00%			0.00%			0.00%					M							
12CCO047	Don Abelardo Street	City Road	10.00/5.00	0.188	0.19	100.00%			0.00%			0.00%												
12CCO048	Doton Street	Brgy Road	7.55-5.35	0.269	0.26	95.33%			0.00%		0.01258	4.67%												
12CCO049	Anecleto Badoy Street	Nat'l Road	0/7.00	0.211	0.21	100.00%			0.00%			0.00%					L							
12CCO050	Fausto Tamse Road	City Road	0/5.47	0.21279	0.21	100.00%			0.00%			0.00%												
12CCO051	Notre Dame Avenue	Nat'l Road	0/7.29	0.191	0.19	100.00%			0.00%			0.00%												
SUBTOTAL				2.168	1.83	84.39%	-	-	0.00%	-	0.339	15.61%	-	-	-	-								-
Poblacion 4																								
12CCO052	Notre Dame Avenue Ext.	Nat'l Road	15.16/11.88	0.437	0.437	100.00%			0.00%			0.00%					L							
12CCO053	SK Pendatun Ave	City Road	15.55/	0.337	0.34	100.00%			0.00%			0.00%					L							
12CCO054	Fausto Tamse Road	City Road	9.27/5.75	0.46192	0.46	100.00%			0.00%			0.00%					L							
12CCO055	Quezon Avenue	Nat'l Road	20.00/15.89	0.12	0.12	100.00%			0.00%			0.00%					L							
12CCO056	Don Abelardo Street	City Road	9.56/4.00	0.254	0.25	100.00%			0.00%			0.00%					M							
12CCO057	Don Cesar Street	City Road	16.13/5.25	0.251	0.25	100.00%			0.00%			0.00%					L							
12CCO058	Doña Teresa Street	City Road	9.69/4.05	0.24	0.1	100.00%			0.00%		0.13726	57.26%					L							
12CCO059	Don Jesus Vilo Street	Brgy Road	15.30/10.97	0.108	0.06	100.00%			0.00%		0.05	48.57%					L							
12CCO060	Don Antonio Marquez Str	Brgy Road	4.76/3.52	0.297	0.14	100.00%			0.00%		0.15	51.91%					L							
12CCO061	Dona Lugarda Blanco Str.	City Road	11.01/5.88	0.1833	0.18	100.00%			0.00%			0.00%					L							
12CCO062	Fatima Street	Brgy Road	5.44/3.51	0.117	0.12	100.00%			0.00%			0.00%					L							
12CCO063	Don Tomas Martinez Str.	Brgy Road	9.37/4.29	0.137	0.08	100.00%			0.00%		0.05528	40.25%					L							
12CCO064	San Isidro Street	Brgy Road	5.57/3.32	0.229	0.07	100.00%			0.00%		0.15932	69.51%					L							
12CCO065	Doña Pilar Street	City Road	6.55/3.37	0.238	0.07	100.00%			0.00%		0.1669	70.04%					L							
12CCO066	Soriano Street	Brgy Road	2.84/2.00	0.102	0.1	100.00%			0.00%			0.00%					L							
12CCO067	Doña Consolacion Martinez Street	Brgy Road	5.24/6.86	0.13	0.098	100.00%			0.00%		0.03175	24.48%					L							

12CCO068	Deocesan Street	Brgy Road	5.95/3.03	0.272	0.102	100.00%			0.00%		0.16957	62.44%					L							
12CCO069	Brgy Hall Dona Lutgarda Blanco Street road	Brgy Road	4.76/3.64	0.095	0.095	100.00%			0.00%			0.00%					L							
12CCO070	Tomas Martinez Street	Brgy Road	10.35/6.45	0.13	0.098	100.00%			0.00%		0.03175	24.48%					L							
SUBTOTAL				4.14	3.182	76.86%	-	-	0.00%	-	0.958	23.14%	-	-	-	-								-
12CCO071	Don Rufino Alonzo Street	City Road	18.24/10.09	0.59	0.586	100.00%			0.00%			0.00%					L					M		
Poblacion 5																								
12CCO072	Quezon Avenue	Nat'l Road	16.60/12.65	0.73	0.727	100.00%			0.00%			0.00%					L					M		
12CCO073	Jose Lim Street	Nat'l Road	16.08/11.49	0.55	0.551	100.00%			0.00%			0.00%					M					M		
12CCO074	Japal Guiani Street	City Road	17.49/6.49	0.48	0.48	100.00%			0.00%			0.00%					M					M		
12CCO075	Rajah Tabunaway Boulevard	City Road	6.45/5.80	0.26	0.255	100.00%			0.00%			0.00%					M					M		
12CCO076	Maguindanao Creek	Brgy Road	5.01/3.60	0.26	0.258	100.00%			0.00%			0.00%					M					M		
12CCO077	SK Pendatun Avenue	City Road	15.27/9.59	0.53	0.53	100.00%			0.00%			0.00%					L					M		
SUBTOTAL				3.39	3.39	100.00%	-	-	0.00%	-	-	0.00%	-	-	-	-								-
Poblacion 6																								
12CCO078	Raja Tabunaway Boulevard	City Road	4.69/7.05	0.394	0.394	100.00%			0.00%			0.00%					M					M		
12CCO079	Sinsuat Avenue	Nat'l Road	5.70/6.88	0.523	0.523	100.00%			0.00%			0.00%					M					M		
12CCO080	Jose Lim Street	Nat'l Road	17.58/11.32	0.341	0.341	100.00%			0.00%			0.00%										M		
12CCO081	Dorotheo Tabunaway Str.	City Road	18.21/12.67	0.293	0.293	100.00%			0.00%			0.00%					M					M		
12CCO082	Polar	Brgy Road	7.87/4.85	0.086	0.086	100.00%			0.00%			0.00%					M					M		
12CCO083	Abdullah Piang Street	Brgy Road	9.85/4.62	0.088	0.088	100.00%			0.00%			0.00%					M					M		
12CCO084	Bonifacio Street	City Road	18.89/6.13	0.548	0.548	100.00%			0.00%			0.00%					M					M		
12CCO085	Tondo 1	Brgy Road	5.21/3.73	0.111	0.111	100.00%			0.00%			0.00%										M		
12CCO086	Palma Street	Brgy Road	9.57/5.18	0.203	0.203	100.00%			0.00%			0.00%					L					M		
12CCO087	Salem Bagis Street	Brgy Road	3.91/2.98	0.116	0.116	100.00%			0.00%			0.00%					L					M		
12CCO088	Don Roman Vilo Street	City Road	17.08/12.73	0.29	0.29	100.00%			0.00%			0.00%					M					M		
12CCO089	Don Rufino Alonzo Street	City Road	18.24/10.09	0.386	0.386	100.00%			0.00%			0.00%					M					M		
12CCO090	Mabini Street	City Road	4.69/7.05	0.334	0.33406	100.00%			0.00%			0.00%										M		
SUBTOTAL				3.715	3.715	100.00%	-	-	0.00%	-	-	0.00%	-	-	-	-								-
Poblacion 7																								
12CCO091	Road to Datu Siang	Brgy Road	4.30/3.33	0.098	0.0984	100.00%			0.00%			0.00%					VH					M		
12CCO092	No Name (Road 1)	Brgy Road	6.07/4.01	0.061	0.0607	100.00%			0.00%			0.00%					VH					M		
12CCO093	No Name (Road 2)	Brgy Road	6.22/4.02	0.155	0.0779	50.43%			0.00%		0.07659	49.57%					VH					M		
12CCO094	Datu Siang Road	Brgy Road	10.22/5.28	0.311	0.3113	100.00%			0.00%			0.00%					VH					M		
12CCO095	No Name (Road 3)	Brgy Road	5.78/	0.368	0.3678	100.00%			0.00%			0.00%					VH					M		
12CCO096	No Name (Road 4)	Brgy Road	3.01/	0.193	0.193	100.00%			0.00%			0.00%					VH					M		
12CCO097	No Name (Road 5)	Brgy Road	3.34/	0.063	0.0633	100.00%			0.00%			0.00%					VH					M		
12CCO098	No Name (Road 6)	Brgy Road	3.31/	0.065	0.065	100.00%			0.00%			0.00%					VH					M		
SUBTOTAL				1.314	1.237	94.17%	-	-	0.00%	-	0.077	5.83%	-	-	-	-								-
Poblacion 8 - Datu Sema Balabaran Kalantungan																								
12CCO099	Road to Kit Fhi	Brgy Road	10.62/4.45	0.915	0.915	100.00%			0.00%			0.00%												
12CCO100	Road 1	Brgy Road	10.01/5.31	0.307	0.307	100.00%			0.00%			0.00%												
12CCO101	Rosales Street Extension	Brgy Road		1.202	1.11	92.42%			0.00%		0.0911	7.58%					M							

12CCO102	Road 2	Brgy Road	7.8/4.09	0.103		0.00%			0.00%		0.10257	100.00%											
12CCO103	Road 3	Brgy Road		0.191		0.00%			0.00%		0.19053	100.00%											
12CCO104	Road 4	Brgy Road		0.083		0.00%			0.00%		0.083132	100.00%											
12CCO105	Road 5	Brgy Road		0.062		0.00%			0.00%		0.06245	100.00%											
12CCO106	Road 6	Brgy Road		0.168		0.00%			0.00%		0.16811	100.00%											
12CCO107	Road 7	Brgy Road	10.75/5.01	0.487	0.487	100.00%			0.00%			0.00%											
12CCO108	Road 8	Brgy Road	8.21/4.04	0.172		0.00%			0.00%		0.17193	100.00%											
12CCO109	Road 9	Brgy Road	4.49/3.01	0.085		0.00%			0.00%		0.08514	100.00%											
12CCO110	Road 10	Brgy Road	8.65/4.61	0.171		0.00%			0.00%		0.1709	100.00%											
12CCO111	Road 11	Brgy Road	10.67/7.57	0.182		0.00%			0.00%		0.18239	100.00%											
12CCO112	Road 12	Brgy Road	10.52/6.72	0.586	0.586	100.00%			0.00%			0.00%											
12CCO113	Cotabato City East Diversion Road	City Road	10.64/7.01	4.005	4.01	100.00%			0.00%			0.00%					H						
SUBTOTAL				8.72	7.411	85.00%	-	-	0.00%	-	1.308	15.00%	-	-	-	-								-
Poblacion 9																								
12CCO114	Biniruan Road 1	Brgy Road	8.25/6.10	0.718	0.4877	67.91%			0.00%		0.23047	32.09%					M						
12CCO115	Biniruan Road 2	Brgy Road	6.32/4.73	0.474	0.474	100.00%			0.00%			0.00%					M						
12CCO116	Biniruan Road Extension	Brgy Road	8.47/5.21	0.866	0.8658	100.00%			0.00%			0.00%					M						
12CCO117	Unnamed road	Brgy Road	9.86/4.95	1.74	1.7401	100.00%			0.00%			0.00%											
SUBTOTAL				3.798	3.568	93.93%	-	-	0.00%	-	0.23	6.07%	-	-	-	-								-

Unique ID for road	Road Name	Classification	Road Surface Type														Hazard Susceptibility (H/M/L)							
			Right of Way (RoW)	Total Length (Km)	Concrete			Asphalt			Gravel			Earth										
					L (Km)	%	C	L (Km)	%	C	L (Km)	%	C	L (Km	%	C	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Bagua Mother Brgy.																								
12CCO118	Del Pilar Street	Brgy Road	6.44/	0.368	0.3682	100.00%			0.00%			0.00%					H					M		
12CCO119	Road 1 (Banati)	Brgy Road	4.81/	0.171		0.00%			0.00%		0.171	100.00%					H					M		
12CCO120	SK Pendatun Ave.	City Road	12.69/	0.042	0.04	100.00%			0.00%			0.00%					H					M		
12CCO121	Zailon Street	Brgy Road	7.30/4.95	0.226	0.16	71.60%			0.00%		0.06418	28.40%					H					M		
12CCO122	Purok Palmonera Street	Brgy Road	5.64/3.20	0.262	0.19	71.95%			0.00%		0.0735	28.05%					H					M		
12CCO123	Datu Kadir Datumanong	Brgy Road	8.67/5.13	0.556	0.56	100.00%			0.00%			0.00%					H					M		
12CCO124	Kima Road	Brgy Road	8.94/4.21	0.379	0.22	57.79%			0.00%		0.1601	42.21%					H					M		
12CCO125	Jose Lim Sr Ave	Nat'l Road	9.94/7.51	0.49	0.49	100.00%			0.00%			0.00%					H					M		
SUBTOTAL				2.495	2.026	81.21%	-	-	0.00%	-	0.469	18.79%	-	-	-	-								-
Bagua 1																								
12CCO126	Jose Lim Sr Ave	Nat'l Road	9.49/7.51	0.254	0.25	100.00%			0.00%			0.00%					H					M	M	
12CCO127	Purok Matanog Road	Brgy Road	11.34/6.34	0.236	0.24	100.00%			0.00%			0.00%					H					M		
12CCO128	Purok Manisan Road	Brgy Road	5.78/4.15	0.512	0.21	41.61%			0.00%		0.29879	58.39%					H					M		
12CCO129	No Name Road	Brgy Road	5.10/3.40	0.045		0.00%			0.00%		0.04459	100.00%					H					M		
12CCO130	Purok Dangkalangan Road	Brgy Road	7.58/3.83	0.083		0.00%			0.00%		0.08253	100.00%					H					M	L	
12CCO131	Purok Pagalungan Road	Brgy Road	8.09/5.05	0.507	0.51	100.00%			0.00%			0.00%					H					M		
12CCO132	Datu Usman Mampen str.	City Road	5.66/5.06	0.271	0.27	100.00%			0.00%			0.00%					H					M		

12CCO133	Purok Tabanga (B) Road	Brgy Road	5.53/3.70	0.358		0.00%			0.00%		0.35756	100.00%					H					M		
12CCO134	No Name (Road B)	Brgy Road	5.59/3.32	0.141		0.00%			0.00%		0.14142	100.00%					H					M		
12CCO135	Lugay-lugay Street	Brgy Road	6.88/4.11	0.553	0.55	100.00%			0.00%			0.00%					H					M		
12CCO136	Chio St (B) Street	Brgy Road	5.19/2.77	0.042		0.00%			0.00%		0.04173	100.00%					H					M		
SUBTOTAL				3.001	2.034	67.79%	-	-	0.00%	-	0.967	32.21%	-	-	-	-								
Bagua 2																								
12CCO137	Sultan Kawasa Street	Brgy Road	7.16/4.06	0.144	0.03	17.63%			0.00%		0.11865	82.37%					H					M		
12CCO138	Shariff Awliya Street	Brgy Road	9.65/4.95	0.199	0.17	85.12%			0.00%		0.02965	14.88%					H					M		
12CCO139	Putri Tonina Street	Brgy Road		-													H					M		
12CCO140	No Name (Road 2)	Brgy Road	9.49/4.60	0.274		0.00%			0.00%		0.27365	100.00%					H					M		
12CCO141	No Name (Road 3)	Brgy Road	9.30/4.75	0.269	0.09	32.44%			0.00%		0.1819	67.56%					H					M		
12CCO142	Fatima Street	Brgy Road	5.89/4.00	0.185		0.00%			0.00%		0.18492	100.00%					H					M		
12CCO143	Mahad	Brgy Road	6.01/3.81	0.401	0.32	79.94%			0.00%		0.08045	20.06%					H					M		
12CCO144	No Name (Road 4)	Brgy Road	10.01/	0.172	0.1	59.89%			0.00%		0.06891	40.11%					H					M		
12CCO145	No Name (Road 5)	Brgy Road	9.81/5.10	0.483	0.25	51.73%			0.00%		0.23333	48.27%					H					M		
12CCO146	No Name (Road 6)	Brgy Road	7.40/5.47	0.186		0.00%			0.00%		0.18622	100.00%					H					M		
12CCO147	No Name (Road 7)	Brgy Road	9.50/6.00	0.153	0.06	42.01%			0.00%		0.08888	57.99%					H					M		
12CCO148	No Name (Road 8)	Brgy Road	10.03/5.53	0.123		0.00%			0.00%		0.12274	100.00%					H					M		
12CCO149	No Name (Road 9)	Brgy Road	9.81/5.05	0.176		0.00%			0.00%		0.17567	100.00%					H					M		
12CCO150	No Name (Road 10)	Brgy Road	9.00/5.16	0.238	0.05	21.65%			0.00%		0.18622	78.35%					H					M		
12CCO151	Al-itihad Road	Brgy Road	10.14/4.55	0.416		0.00%			0.00%		0.4159	100.00%					H					M		
12CCO152	Datu Usman Mampen Str	City Road		0.589	0.59	100.00%			0.00%			0.00%					H					M		
12CCO153	Ramon Rabago (Espino)	City Road	9.23/5.24	0.306	0.31	100.00%			0.00%			0.00%					H					M		
12CCO154	1st Street Tanghal	Brgy Road	6.33/3.72	0.235		0.00%			0.00%		0.23488	100.00%					H					M		
12CCO155	2nd street Tanghal	Brgy Road	6.51/4.06	0.241		0.00%			0.00%		0.24056	100.00%					H					M		
12CCO156	3rd street Tanghal	Brgy Road	6.48/4.15	0.237		0.00%			0.00%		0.23654	100.00%					H					M		
12CCO157	No Name (Road A)	Brgy Road	6.44/4.09	0.071		0.00%			0.00%		0.07129	100.00%					H					M		
12CCO158	No Name (Road B)	Brgy Road	6.31/4.25	0.21	0.1	48.33%			0.00%		0.10828	51.67%					H					M		
12CCO159	No Name (Road C)	Brgy Road	7.53/4.01	0.053		0.00%			0.00%		0.05349	100.00%					H					M		
12CCO160	No Name (Road D)	Brgy Road	6.31/3.98	0.067		0.00%			0.00%		0.06675	100.00%					H					M		
12CCO161	No Name (Road E)	Brgy Road	6.49/4.60	0.07		0.00%			0.00%		0.06996	100.00%					H					M		
12CCO162	No Name (Road F)	Brgy Road	6.53/4.43	0.147		0.00%			0.00%		0.147147	100.00%					H					M		
12CCO163	No Name (Road G)	Brgy Road	6.01/3.89	0.088		0.00%			0.00%		0.0884	100.00%					H					M		
12CCO164	No Name (Road H)	Brgy Road	10.54/4.84	0.147		0.00%			0.00%		0.14656	100.00%					H					M		
12CCO165	No Name (Road I)	Brgy Road	10.11/5.10	0.167		0.00%			0.00%		0.1671	100.00%					H					M		
12CCO166	Pastor Kimpo Street	City Road	7.18/4.95	0.333	0.17	50.40%			0.00%		0.16499	49.60%					H					M		
12CCO167	Espino	Brgy Road		0.371	0.14	37.23%			0.00%		0.23276	62.77%					H					M		
12CCO168	Mangungan Street	Brgy Road		2.064	2.06	100.00%			0.00%			0.00%					H					M		
12CCO169	Road A	Brgy Road	5.10/4.36	0.291		0.00%			0.00%		0.29108	100.00%					H					M		
12CCO170	Road B	Brgy Road	5.20/4.12	0.088		0.00%			0.00%		0.08754	100.00%					H					M		
12CCO171	Road C	Brgy Road	6.88/2.88	0.158		0.00%			0.00%		0.15823	100.00%					H					M		
12CCO172	Road D	Brgy Road	7.01/5.69	0.111		0.00%			0.00%		0.11089	100.00%					H					M		
12CCO173	Road E	Brgy Road	5.42/4.01	0.276		0.00%			0.00%		0.27626	100.00%					H					M		
SUBTOTAL				9.737	4.438	45.57%	-	-	0.00%	-	5.3	54.43%	-	-	-	-								
Bagua 3																								

12CCO174	Springfield Road	Brgy Road	5.90/4.12	0.071	0.07	100.00%			0.00%			0.00%									M		
12CCO175	Mabini Street	City Road	10.97/6.10	0.499	0.4992	100.00%			0.00%			0.00%					M				M		
12CCO176	SK Pendatun Ave.	City Road	13.06/8.28	0.189	0.19	100.00%			0.00%			0.00%									M		
SUBTOTAL				0.76	0.76	100.00%	-	-	0.00%	-	-	0.00%	-	-	-	-								
Rosary Heights Mother Barangay																								
12CCO177	Sinsuat Avenue	Nat'l Road	15.70/6.88	0.513		0.00%		0.51276	100.00%			0.00%					L						
12CCO178	Ramon Rabago Avenue	Nat'l Road	11.05/6.22	0.912	0.912	100.00%			0.00%			0.00%					L						
12CCO179	Road 1	Brgy Road	10.79/5.23	0.08		0.00%			0.00%		0.08	100.00%					L						
12CCO180	Road 2	Brgy Road	9.74/5.77	0.101		0.00%			0.00%		0.101	100.00%					L						
12CCO181	Tandang Sora Street	Brgy Road	10.68/4.15	0.154	0.15	100.00%			0.00%			0.00%					L				M		
12CCO182	Maunawain Street	Brgy Road	11.00/4.19	0.149	0.15	100.00%			0.00%			0.00%					L						
12CCO183	1st Street	Brgy Road	8.05/4.09	0.099	0.1	100.00%			0.00%			0.00%					L				M		
12CCO184	2nd Street	Brgy Road	5.84/3.89	0.075	0.02	23.04%			0.00%		0.057	76.96%					L				M		
12CCO185	1st Road	Brgy Road	7.05/3.72	0.078		0.00%			0.00%		0.078	100.00%					L				M		
12CCO186	2nd Road	Brgy Road	6.54/3.47	0.069		0.00%			0.00%		0.069	100.00%					L				M		
12CCO187	3rd Road	Brgy Road	8.67/4.31	0.068		0.00%			0.00%		0.068	100.00%					L				M		
12CCO188	4th Road	Brgy Road	4.12/2.23	0.07		0.00%			0.00%		0.07	100.00%					L				M		
12CCO189	St Maria Street	Brgy Road	11.87/6.08	0.266	0.27	100.00%			0.00%			0.00%					L				M		
12CCO190	St Barbara Street	Brgy Road	10.03/6.39	0.34	0.23	68.81%			0.00%		0.106	31.19%					L				M		
12CCO191	Pascual Street	City Road	9.80/4.10	0.288	0.29	100.00%			0.00%			0.00%					L				M		
12CCO192	Purok Maunawain Road to Macapagal Street	Brgy Road	9.92/4.97	0.188	0.19	100.00%			0.00%			0.00%					L						
12CCO193	1st Road	Brgy Road	4.43/3.08	0.136	0.07	50.24%			0.00%		0.068	49.76%					L						
12CCO194	2nd Road	Brgy Road		0.197	0.07	34.83%			0.00%		0.128	65.17%					L						
12CCO195	Road A	Brgy Road	6.55/4.56	0.105		0.00%			0.00%		0.105	100.00%					L						
12CCO196	Road B	Brgy Road	6.39/3.31	0.103		0.00%			0.00%		0.103	100.00%					L						
12CCO197	Road C	Brgy Road	6.87/3.91	0.099		0.00%			0.00%		0.099	100.00%					L						
12CCO198	Road D	Brgy Road	5.59/3.44	0.102		0.00%			0.00%		0.102	100.00%					L						
12CCO199	Roales Street (B)	Brgy Road	9.51/5.60	0.399		0.00%			0.00%		0.399	100.00%					H				M		
12CCO200	(B)	Brgy Road	7.40/5.03	0.311	0.05	17.56%			0.00%		0.256	82.44%					L						
12CCO201	Purok Balikatan (A) Road	Brgy Road	10.02/5.27	0.18		0.00%			0.00%		0.18	100.00%					L				M		
12CCO202	Purok Balikatan (B) Road	Brgy Road	8.79/5.42	0.309	0.06	18.40%			0.00%		0.252	81.60%					L				M		
12CCO203	(B)	Brgy Road	8.71/3.88	0.063		0.00%			0.00%		0.063	100.00%					L						
12CCO204	6th Road	Brgy Road	9.25/5.03	0.247	0.08	30.87%			0.00%		0.171	69.13%					L						
12CCO205	5th Road	Brgy Road	8.15/5.4	0.193	0.09	47.79%			0.00%		0.101	52.21%					L						
12CCO206	4th Road	Brgy Road	10.01/4.41	0.35		0.00%			0.00%		0.35	100.00%					L						
12CCO207	3rd Road (B)	Brgy Road	9.14/6.1	0.338		0.00%			0.00%		0.338	100.00%					L						
12CCO208	2nd Road (B)	Brgy Road	9.07/4.84	0.172	0.07	39.35%			0.00%		0.104	60.65%					L						
12CCO209	1st Road (B)	Brgy Road	8.40/5.71	0.314		0.00%			0.00%		0.314	100.00%					L						
12CCO210	Macapagal Street	City Road	9.73/5.99	0.628	0.63	100.00%			0.00%			0.00%					L				M		
12CCO211	Soledad Sousa Circuit Road	City Road	10.49/5.99	0.421	0.22	51.35%			0.00%		0.205	48.65%					L				M		
12CCO212	Purok Sibuyan (B) Road	Brgy Road	11.62/4.98	0.242		0.00%			0.00%		0.242	100.00%					L						
SUBTOTAL				8.358	3.636	43.51%	-	0.513	6.13%	-	4.209	50.36%	-	-	-	-								
Rosary Heights 1																								

12CCO213	Sinsuat Avenue	Nat'l Road	15.70/6.88	0.674		0.00%		0.67421	100.00%			0.00%												
12CCO214	Carmen Lumibao Street	Brgy Road	11.76/5.39	0.315	0.315	100.00%			0.00%			0.00%												
12CCO215	San Juan Street	Brgy Road	10.33/4.52	0.059	0.06	100.00%			0.00%			0.00%												
12CCO216	Road 1	Brgy Road	10.88/6.60	0.097		0.00%			0.00%		0.09702	100.00%												
12CCO217	Sausa Street	Brgy Road	11.00/6.25	0.506	0.51	100.00%			0.00%			0.00%												
12CCO218	Veterans Avenue	City Road	8.19/6.18	0.775	0.77	100.00%			0.00%			0.00%									M	M		
12CCO219	Heroes Road	Brgy Road	6.41/3.58	0.554	0.55	100.00%			0.00%			0.00%									M			
12CCO220	Road 2	Brgy Road	11.16/8.38	0.099		0.00%			0.00%		0.0992	100.00%												
12CCO221	Road 3	Brgy Road	6.77/3.09	0.07	0.02	29.78%			0.00%		0.0489	70.22%												
12CCO222	TV Juliano Avenue	City Road	13.36/7.02	0.534	0.53	100.00%			0.00%			0.00%												
SUBTOTAL				3.683	2.763	75.04%	-	0.674	18.31%	-	0.245	6.66%	-	-	-	-								
Rosary Heights 2																								
12CCO223	1st Road	Brgy Road	3.62/3.00	0.092	-	0.00%			0.00%		0.092	100.00%					L							
12CCO224	2nd Road	Brgy Road	3.50/3.00	0.107	-	0.00%			0.00%		0.10673	100.00%					L							
12CCO225	Road 2	Brgy Road	0/5.75	0.09	0.004	3.94%			0.00%		0.086	96.06%					L							
12CCO226	Road A	Brgy Road	4.44/3.33	0.055	0.06	100.00%			0.00%			0.00%					L							
12CCO227	Road 1	Brgy Road	4.29/3.16	0.078	0.07	95.61%			0.00%		0.00341	4.39%					L							
12CCO228	Dap-dap Road	Brgy Road	7.15/5.03	0.288	0.12	41.34%			0.00%		0.16881	58.66%					L							
12CCO229	Road B	Brgy Road	6.62/5.83	0.057	0.03	45.74%			0.00%		0.03114	54.26%					L							
12CCO230	Road 3	Brgy Road	9.65/4.69	0.127		0.00%			0.00%		0.12725	100.00%					L							
12CCO231	Angel Bacani Street	Brgy Road	9.13/3.86	0.201	0.2	100.00%			0.00%			0.00%					L							
12CCO232	Clemente Alino Street	Brgy Road	9.57/4.13	0.229	0.23	100.00%			0.00%			0.00%					L					M		
12CCO233	Notre Dame Avenue Extension (Fly-Over)	Nat'l Road	11.42/8.29	0.455	0.45	100.00%			0.00%			0.00%					L							
12CCO234	Notre Dame Avenue Ext.	Nat'l Road	12.83/6.95	0.391	0.39	100.00%			0.00%			0.00%					L					M		
12CCO235	Moreno Subdivision Road	Brgy Road	5.74/4.15	0.204	0.11	53.88%			0.00%		0.09416	46.12%					L							
12CCO236	Road to Bormaheco	City Road	9.40/6.70	0.585	0.59	100.00%			0.00%			0.00%					L							
12CCO237	Road to NDU Back Gate	Brgy Road	9.59/5.18	0.413		0.00%			0.00%		0.413	100.00%					L							
12CCO238	Quezon Avenue	Nat'l Road		0.551	0.55	100.00%			0.00%			0.00%					L							
SUBTOTAL				3.92	2.799	71.38%	-	-	0.00%	-	1.123	28.62%	-	-	-	-								
Rosary Heights 3																								
12CCO239	Road 4	Brgy Road	7.42/4.11	0.243	0.243	100.00%			0.00%			0.00%					L							
12CCO240	Road to San Vicente	Brgy Road	8.43/4.02	0.066	0.07	100.00%			0.00%			0.00%					L							
12CCO241	Road 3	Brgy Road	7.94/4.12	0.103	0.1	100.00%			0.00%			0.00%					L							
12CCO242	Lauban Street	Brgy Road	6.17/3.18	0.087	0.09	100.00%			0.00%			0.00%					L							
12CCO243	Notre Dame Avenue	Nat'l Road	9.17/5.17	0.131	0.11	86.32%			0.00%		0.018	13.68%					L							
12CCO244	Shariff Road	Brgy Road	11.89/5.02	0.267	0.27	100.00%			0.00%			0.00%					L							
12CCO245	No Name	Brgy Road	6.00/3.19	0.037		0.00%			0.00%		0.037	100.00%					L							
12CCO246	Sultan Maetem Ave	Brgy Road	8.59/5.53	0.549	0.44	80.31%			0.00%		0.108	19.69%					M							
12CCO247	5th Street Urban Poor	Brgy Road	7.27/5.24	0.078	0.04	50.31%			0.00%		0.039	49.69%					M							
12CCO248	4th St Urban Poor	Brgy Road	6.50/4.12	0.205	0.21	100.00%			0.00%			0.00%					L							
12CCO249	No Name	Brgy Road	6.50/3.82	0.068		0.00%			0.00%		0.068	100.00%					L							
12CCO250	3rd st Urban Poor	Brgy Road	7.92/4.79	0.134		0.00%			0.00%		0.134	100.00%					L							
12CCO251	2nd St Urban Poor	Brgy Road	6.95/4.18	0.151	0.15	100.00%			0.00%			0.00%					L							
12CCO252	1st St Urban Poor	Brgy Road	5.58/3.59	0.173	0.12	66.97%			0.00%		0.057	33.03%					L							

12CCO253	Datu Alamansa Street	Brgy Road	7.76/4.00	0.377	0.35	92.00%			0.00%		0.03	8.00%					L							
12CCO254	De Mazenod Street	Nat'l Road	13.05/	0.496	0.496	100.00%			0.00%			0.00%					L							
12CCO255	Road 2	Brgy Road	9.29/5.99	0.301	0.18	58.57%			0.00%		0.125	41.43%					L							
12CCO256	Datu Liwa Candao Street	Brgy Road	8.87/5.90	0.439	0.44	100.00%			0.00%			0.00%					L							
12CCO257	Purok Lapu-Lapu Road	Brgy Road	7.81/7.81	0.033	0.03	100.00%			0.00%			0.00%					L							
12CCO258	Purok Solaiman Road	Brgy Road	6.21/3.84	0.21		0.00%			0.00%		0.21	100.00%					L							
12CCO259	Purok Kalimudan Road	Brgy Road	6.52/4.96	0.156		0.00%			0.00%		0.156	100.00%					L							
12CCO260	Sesame Street	City Road	7.80/5.21	0.507	0.36	70.13%			0.00%		0.151	29.87%					L							
SUBTOTAL				4.813	3.68	76.46%	-	-	0.00%	-	1.133	23.54%	-	-	-	-								
Rosary Heights 4																								
12CCO261	Sinsuat Avenue	Nat'l Road	15.70/6.88	0.6		0.00%		0.60041	100.00%			0.00%					L							
12CCO262	Martinez Street	Brgy Road	5.90/5.10	0.205	0.205	100.00%			0.00%			0.00%					L							
12CCO263	Maria Clara Street	Brgy Road	6.50/4.10	0.071	0.071	100.00%			0.00%			0.00%					L							
12CCO264	Dondoy Juliano Street	Brgy Road	8.34/4.14	0.084	0.084	100.00%			0.00%			0.00%					L							
12CCO265	Don E Sero Street	Brgy Road	11.03/6.34	0.062	0.062	100.00%			0.00%			0.00%					L							
12CCO266	Delfin Reynaldo Street	Brgy Road	10.59/5.08	0.234	0.234	100.00%			0.00%			0.00%					L							
12CCO267	General Luna Street	Brgy Road	14.75/6.15	0.36	0.36	100.00%			0.00%			0.00%					L							
12CCO268	De Mazenod Avenue (Front of Iglesia)	Brgy Road	7.53/5.01	0.036	0.036	100.00%			0.00%			0.00%					L							
12CCO269	De Mazenod Avenue (Front of Iglesia)	Brgy Road	7.00/4.43	0.084	0.084	100.00%			0.00%			0.00%					L							
12CCO270	Arong Village Road	Brgy Road	5.62/4.01	0.122	0.122	100.00%			0.00%			0.00%					L							
12CCO271	Sesame Street	City Road	9.36/4.96	0.31	0.091	29.46%			0.00%		0.219	70.54%					L							
12CCO272	Purok Acacia Road	Brgy Road	6.57/4.16	0.136	0.076	55.34%			0.00%		0.061	44.66%					L							
12CCO273	Ante Compound Road	Brgy Road	5.16/3.21	0.181		0.00%			0.00%		0.181	100.00%					L							
12CCO274	Enilo Compound Road	Brgy Road	5.16/3.21	0.061		0.00%			0.00%		0.061	100.00%					L							
12CCO275	No Name	Brgy Road	5.37/6.94	0.228	0.228	100.00%			0.00%			0.00%					L							
12CCO276	Road to NDU Back Gate	Brgy Road	8.76/4.13	0.16		0.00%			0.00%		0.16	100.00%					L							
12CCO277	Sto Niño Chapel Road	Brgy Road	5.39/4.00	0.041		0.00%			0.00%		0.041	100.00%					L							
12CCO278	Road 1	Brgy Road	6.57/3.86	0.039		0.00%			0.00%		0.039	100.00%					L							
12CCO279	Road 2	Brgy Road	6.45/3.24	0.084		0.00%			0.00%		0.084	100.00%					L							
12CCO280	Road 3	Brgy Road	5.40/3.32	0.037		0.00%			0.00%		0.037	100.00%					L							
12CCO281	Road 4	Brgy Road	10.12/5.78	0.071		0.00%			0.00%		0.071	100.00%					L							
12CCO282	Road 5	Brgy Road	4.60/3.22	0.02		0.00%			0.00%		0.02	100.00%					L							
12CCO283	Road 6	Brgy Road	4.00/3.64	0.058		0.00%			0.00%		0.058	100.00%					L							
SUBTOTAL				3.284	1.652	50.29%	-	0.6	18.28%	-	1.032	31.43%	-	-	-	-								
Rosary Heights 5																								
12CCO284	1st Street Don E Sero	Brgy Road	10.34/6.71	0.364	0.315	86.64%			0.00%		0.05	13.36%					L							
12CCO285	2nd Street Don E Sero	Brgy Road	10.27/6.09	0.238	0.19	80.61%			0.00%		0.05	19.39%					L							
12CCO286	3rd street Don E Sero	Brgy Road	11.13/5.93	0.45	0.38	84.61%			0.00%		0.07	15.39%					L							
12CCO287	4th street Don E Sero Don E Sero	Brgy Road	9.53/6.15	0.27	0.27	100.00%			0.00%			0.00%					L							
12CCO288	5th street Don E Sero	Brgy Road	9.99/6.08	0.305	0.3	100.00%			0.00%			0.00%					L							
12CCO289	5th street Don E Sero	Brgy Road	10.00/4.21	0.3915	0.28	70.62%			0.00%		0.12	29.38%					L							
12CCO290	Road 5	Brgy Road	8.60/3.21	0.059		0.00%			0.00%		0.06	100.00%					L							

12CCO291	7th street Don E Sero	Brgy Road		0.3	0.3	100.00%			0.00%			0.00%					L							
12CCO292	8th street Don E Sero	Brgy Road	10.00/5.17	0.17	0.17	100.00%			0.00%			0.00%					L							
12CCO293	9th Street Don E Sero	Brgy Road	7.58/4.81	0.288		0.00%			0.00%		0.29	100.00%					L							
12CCO294	10th Street Don E Sero	Brgy Road	8.61/5.49	0.224		0.00%			0.00%		0.22	100.00%					L							
12CCO295	11th Street Don E Sero	Brgy Road	10.56/8.04	0.322		0.00%			0.00%		0.32	100.00%					M							
12CCO296	Pinhoy Street (End)	Brgy Road	10.59/6.37	0.3926	0.39	100.00%			0.00%			0.00%					M							
12CCO297	Don E Sero Street	City Road	7.69/	0.4517	0.45	100.00%			0.00%			0.00%					L							
12CCO298	Demazenod Avenue	Nat'l Road	13.05/	0.49	0.49	100.00%			0.00%			0.00%					L							
12CCO299	Ondi	Brgy Road	7.41/4.48	1.191	0.67	56.29%			0.00%		0.52	43.71%					L							
SUBTOTAL				5.907	4.215	71.35%	-	-	0.00%	-	1.692	28.65%												
Rosary Heights 6																								
12CC0300	Santos Street	City Road	11.94/	1.035	1.035	100.00%			0.00%			0.00%					M							
12CC0301	Rosales Street	City Road	10.25/	5.38	2.88	53.53%			0.00%		2.5	46.47%					M							
12CC0302	Krislamville Road	Brgy Road	7.41/	0.6646	0.14	21.66%			0.00%		0.52064	78.34%					L							
12CC0303	Unnamed road	Brgy Road	8.69/	0.0664	0.04	52.89%			0.00%		0.03128	47.11%					L							
12CC0304	Road 5	Brgy Road	6.83/	0.7985	0.8	100.00%			0.00%			0.00%					L							
12CC0305	Road 1	Brgy Road	9.43/	0.558	0.56	100.00%			0.00%			0.00%					L							
12CC0306	Purok Pinen Road	Brgy Road	7.02/	0.002	0.002	100.00%			0.00%			0.00%					L							
12CC0307	No Name	Brgy Road	7.77/	0.0614	0.06	100.00%			0.00%			0.00%					L							
12CC0308	Sulayla Street	Brgy Road	6.711/	0.1827	0.18	100.00%			0.00%			0.00%					L							
12CC0309	No Name	Brgy Road	9.21/	0.075		0.00%			0.00%		0.07504	100.00%					L							
12CC0310	No Name	Brgy Road	6.65/	0.1763		0.00%			0.00%					0.17626	100.00%		L							
12CC0311	No Name	Brgy Road	6.75/	0.074		0.00%			0.00%		0.07404	100.00%					L							
12CC0312	No Name	Brgy Road	7.57/	0.0608		0.00%			0.00%		0.06084	100.00%					L							
12CC0313	Road 8	Brgy Road	10.00/	0.1492		0.00%			0.00%		0.14915	100.00%					L							
12CC0314	Road 7	Brgy Road	8.90/	0.193	0.05	23.52%			0.00%		0.14759	76.48%					L							
12CC0315	Road 14	Brgy Road	4.40/	0.1156	0.12	100.00%			0.00%			0.00%					L							
12CC0316	Road 4	Brgy Road	5.35/	0.245		0.00%			0.00%		0.245	100.00%					L							
12CC0317	Road 6	Brgy Road	8.35/	0.1257	0.05	39.48%			0.00%		0.076	60.52%					L							
12CC0318	Rosal Street	City Road	9.12/	0.4871	0.49	100.00%			0.00%			0.00%					L							
12CC0319	Ortouste Street	Brgy Road	10.41/	0.2141	0.21	100.00%			0.00%			0.00%					L							
12CC0320	Ilang-ilang Street	City Road	10.09/	0.5214	0.52	100.00%			0.00%			0.00%					L							
12CC0321	Jasmin Street	City Road	9.45/	0.5016	0.5	100.00%			0.00%			0.00%					L							
12CC0322	Oblate Drive	City Road	8.40/	0.4604	0.46	100.00%			0.00%			0.00%					L							
SUBTOTAL				12.148	8.092	66.61%	-	-	0.00%	-	3.88	31.94%	-	0.176	1	-								
Rosary Heights 7																								
12CC0323	Sinsuat Avenue	Nat'l Road	15.70/6.88	0.6946		0.00%		0.69461	100.00%			0.00%					L							
12CC0324	Road 1 (Ortouste Ext.)	Brgy Road	9.00/5.23	0.637	0.637	100.00%			0.00%			0.00%					L							
12CC0325	Road 3	Brgy Road	6.29/4.75	0.4033	0.35	86.60%			0.00%		0.05403	13.40%					L							
12CC0326	Road 4	Brgy Road	9.35/6.08	0.5153	0.52	100.00%			0.00%			0.00%					L							
12CC0327	Unnamed Road 1	Brgy Road	10.92/5.30	0.2637	0.26	100.00%			0.00%			0.00%					L							
12CC0328	Gonzalo Javier Street	City Road	9.90/4.88	0.9042	0.9	100.00%			0.00%			0.00%					M							
12CC0329	Ortouste Street	Brgy Road	10.41/	0.2141	0.21	100.00%			0.00%			0.00%					L							
12CC0330	Rosal Street	City Road	10.05/5.07	0.3025	0.3	100.00%			0.00%			0.00%					L							

12CC0331	Jasmin Street	City Road	8.00/5.16	0.3148	0.31	100.00%			0.00%			0.00%					L							
12CC0332	Santan Street	Brgy Road	8.56/4.03	0.163	0.16	100.00%			0.00%			0.00%					L							
12CC0333	Bouganvilla Street	Brgy Road	9.08/4.08	0.1709	0.17	100.00%			0.00%			0.00%					L							
12CC0334	Ilang-ilang Street	City Road	10.7/5.21	0.3106	0.31	100.00%			0.00%			0.00%					L							
12CC0335	Albert Einstein Road 1	Brgy Road	9.10/6.06	0.3451	0.35	100.00%			0.00%			0.00%					L							
12CC0336	Oblate Drive	City Road	9.32/4.76	0.534	0.53	100.00%			0.00%			0.00%					L							
12CC0337	Albert Einstein Road 2	Brgy Road	8.48/3.76	0.1496	0.15	100.00%			0.00%			0.00%					L							
12CC0338	Albert Einstein Road 3	Brgy Road	9.71/5.07	0.1552	0.16	100.00%			0.00%			0.00%					L							
12CC0339	R. Garcia St	Brgy Road	10.45/4.78	0.4871	0.31	64.23%			0.00%		0.17423	35.77%					L							
12CC0340	Unnamed Road 2	Brgy Road	9.71/5.15	0.1441	0.14	100.00%			0.00%			0.00%					L							
12CC0341	Ugalingan Street	Brgy Road	6.75/4.00	0.1784	0.18	100.00%			0.00%			0.00%					L							
12CC0342	Dona Avelina Street	City Road		0.3518	0.35	100.00%			0.00%			0.00%					L							
12CC0343	Talitay Street 1	Brgy Road	8.15/5.11	0.6435	0.64	100.00%			0.00%			0.00%					M							
12CC0344	Talitay Street 2	Brgy Road	9.26/5.15	0.2551	0.2	80.00%			0.00%		0.05102	20.00%					M							
12CC0345	R. Garcia Street	Brgy Road	8.02/5.91	0.1711		0.00%			0.00%		0.17113	100.00%					L							
12CC0346	Mercury Street	Brgy Road	7.51/3.84	0.2225	0.11	47.56%			0.00%		0.11667	52.44%					L							
SUBTOTAL				8.531	7.27	85.21%	-	0.695	8.14%	-	0.567	6.65%	-	-	-	-								
Rosary Heights 8																								
12CC0347	Fr Edward Gordon Street	Brgy Road	6.77/5.00	0.391	0.22852	58.51%			0.00%		0.16204	41.49%					L				M			
12CC0348	San Roque Street	Brgy Road	7.27/3.65	0.128		0.00%			0.00%		0.12836	100.00%					L							
12CC0349	Sta Felomina Street	Brgy Road	7.69/3.01	0.123		0.00%			0.00%		0.12346	100.00%					L				M			
12CC0350	St Micahel Street	Brgy Road	8.00/5.00	0.1		0.00%			0.00%		0.09992	100.00%					L				M			
12CC0351	Sta Theresa Street	Brgy Road	8.00/5.01	0.137		0.00%			0.00%		0.13652	100.00%					L				M			
12CC0352	Santa Veronica Street	Brgy Road	7.86/4.47	0.138		0.00%			0.00%		0.13827	100.00%					M				M			
12CC0353	St Isoodre Street	Brgy Road	7.57/3.76	0.154		0.00%			0.00%		0.15376	100.00%					M				M			
12CC0354	San Germinigildo Street	Brgy Road	10.31/5.88	0.165		0.00%			0.00%		0.16531	100.00%					H				M			
12CC0355	Sto Niño Street	Brgy Road	6.33/4.48	0.164		0.00%			0.00%		0.16443	100.00%					L				M			
12CC0356	Block	Brgy Road	10.52/5.22	0.229	0.18	79.50%			0.00%		0.04689	20.50%												
12CC0357	Bliss Road 1	Brgy Road	8.17/4.04	0.263	0.11	43.04%			0.00%		0.14954	56.96%					L				M			
12CC0358	Bliss Road 2	Brgy Road	5.65/7.79	0.117	0.1	84.19%			0.00%		0.0185	15.81%					L				M			
12CC0359	Bliss Road 3	Brgy Road	9.56/5.20	0.188		0.00%			0.00%		0.18829	100.00%					L				M			
12CC0360	Bliss Road 4	Brgy Road		0.113		0.00%			0.00%		0.11329	100.00%					L				M			
12CC0361	Bliss Road 5	Brgy Road	9.00/5.30	0.11		0.00%			0.00%		0.10973	100.00%					L				M			
12CC0362	Bliss Road 6	Brgy Road	7.25/5.28	0.102		0.00%			0.00%		0.10214	100.00%					L				M			
12CC0363	Archbishop Gerald Mongeau Street	City Road	8.04/4.00	0.493	0.49	100.00%			0.00%			0.00%					L				M			
12CC0364	Guadalupe Street	Brgy Road	11.72/6.14	0.606	0.41	66.87%			0.00%		0.20075	33.13%					H				M			
12CC0365	Fr. Egilde Beugon Street	Brgy Road	7.83/3.35	0.247		0.00%			0.00%		0.24676	100.00%					L				M			
12CC0366	Bishop McSorly Street	Brgy Road	10.18/5.00	0.328	0.2	62.44%			0.00%		0.12332	37.56%					L				M			
12CC0367	Fr. J. Boyd Street	Brgy Road		0.39	0.33	83.95%			0.00%		0.06251	16.05%					M				M			
12CC0368	Fr. C. Billman Street	Brgy Road		0.365		0.00%			0.00%		0.36468	100.00%					H							
12CC0369	St. Peter Street	Brgy Road	7.32/3.02	0.099		0.00%			0.00%		0.09947	100.00%					L				M			
12CC0370	St. James Street	Brgy Road	6.33/4.03	0.23		0.00%			0.00%		0.23034	100.00%					L				M			
12CC0371	Sta Isabel Street	Brgy Road	8.06/4.60	0.101		0.00%			0.00%		0.10063	100.00%					L				M			
12CC0372	St. John Street	Brgy Road	6.23/3.15	0.187		0.00%			0.00%		0.1865	100.00%					L				M			

12CC0373	Road 17	Brgy Road	7.13/3.5	0.098		0.00%			0.00%		0.09845	100.00%												
12CC0374	Road 2	Brgy Road	6.73/3.33	0.098		0.00%			0.00%		0.09833	100.00%												
12CC0375	Road 1	Brgy Road	8.17/5.50	0.19	0.07	34.87%			0.00%		0.12389	65.13%												
12CC0376	Fr. Emil Buldoc Street	Brgy Road	8.2/5.08	0.124	0.12	100.00%			0.00%			0.00%					M					M		
12CC0377	Road 16	Brgy Road	5.35/3.21	0.13		0.00%			0.00%		0.1298	100.00%												
12CC0378	Road 26	Brgy Road		0.204		0.00%			0.00%		0.20425	100.00%												
12CC0379	Road 19	Brgy Road	10.83/5.61	0.524		0.00%			0.00%		0.5243	100.00%												
12CC0380	Mercury Street	Brgy Road	7.51/3.84	0.222	0.11	47.56%			0.00%		0.11667	52.44%					L							
12CC0381	Saturn Street	Brgy Road	8.40/3.75	0.543	0.29	52.64%			0.00%		0.257	47.36%					L							
12CC0382	Venus Street	Brgy Road	9.56/6.00	0.27	0.12	45.27%			0.00%		0.14767	54.73%					L							
12CC0383	Moon Street	Brgy Road	11.17/5.20	0.476	0.48	100.00%			0.00%			0.00%					L							
SUBTOTAL				8.546	3.231	37.80%	-	-	0.00%	-	5.316	62.20%	-	-	-	-								
Rosary Heights 9																								
12CC0384	Sinsuat Avenue	Nat'l Road	15.70/6.88	1.47		0.00%		1.47	100.00%			0.00%					L							
12CC0385	Gov Guttierez Avenue	City Road		0.675	0.67463	100.00%			0.00%			0.00%					L							
12CC0386	Road 1	Brgy Road	9.01/6.59	0.116		0.00%			0.00%		0.11613	100.00%					L							
12CC0387	Road 2	Brgy Road	9.18/7	0.197	0.13973	70.87%			0.00%		0.05743	29.13%					L							
12CC0388	Road 3	Brgy Road	8.58/7	0.123	0.12309	100.00%			0.00%			0.00%					L							
12CC0389	Road to San Vicente	Brgy Road	9.56/5.40	0.271	0.06216	22.91%			0.00%		0.20916	77.09%					L							
12CC0390	Road 5	Brgy Road	7.09/4.08	0.12		0.00%			0.00%		0.12032	100.00%					L							
12CC0391	Road 6	Brgy Road	6.98/4.01	0.121		0.00%			0.00%		0.12062	100.00%					L							
12CC0392	Road 7	Brgy Road	11.65/6.34	0.053	0.03029	56.67%			0.00%		0.02316	43.33%					L							
12CC0393	1st Street Gov Guttierez	Brgy Road	5.54/3.00	0.186		0.00%			0.00%		0.18626	100.00%					L							
12CC0394	2nd Street Gov Guttierez	Brgy Road	6.39/4.46	0.18		0.00%			0.00%		0.17992	100.00%					L							
12CC0395	Mercury Street	Brgy Road	7.75/4.09	0.209	0.05	24.22%			0.00%		0.15815	75.78%					L							
12CC0396	Road beside St Benedict	Brgy Road	10.04/5.11	0.102	0.1	100.00%			0.00%			0.00%					L							
12CC0397	Road to PSA	Brgy Road	6.97/4.72	0.148		0.00%			0.00%		0.14795	100.00%					L							
12CC0398	Road at the Back of NDH	Brgy Road	8.65/	0.141		0.00%			0.00%		0.14102	100.00%					L					M		
12CC0399	Road at the Side of NDH	Brgy Road	5.02/	0.203		0.00%			0.00%		0.20287	100.00%					L					M		
12CC0400	1st Road Urban Poor	Brgy Road	9.92/	0.445	0.44	100.00%			0.00%			0.00%					H					M		
12CC0401	2nd Road Urban Poor	Brgy Road	10.51/7.51	0.989	0.74	74.94%			0.00%		0.24792	25.06%					H							
12CC0402	Road 26	Brgy Road	3.71/	0.048		0.00%			0.00%					0.04836	100%		L							
12CC0403	Road 25	Brgy Road	3.92/	0.049		0.00%			0.00%					0.04917	100%		L							
12CC0404	Road 24	Brgy Road	3.27/	0.051		0.00%			0.00%					0.05116	100%		L							
12CC0405	Road 23	Brgy Road	3.66/	0.053		0.00%			0.00%					.05289	100%		L							
12CC0406	Road 22	Brgy Road	3.25/	0.055		0.00%			0.00%		0.05522	100.00%					L							
12CC0407	Road 21	Brgy Road	3.21/	0.059		0.00%			0.00%		0.05926	100.00%					L							
12CC0408	Road 20	Brgy Road	2.67/	0.061		0.00%			0.00%		0.061	100.00%					L							
12CC0409	Road 19	Brgy Road	3.56/	0.063		0.00%			0.00%		0.06305	100.00%					L							
12CC0410	Road 18	Brgy Road	3.19/	0.066		0.00%			0.00%		0.06586	100.00%					L							
12CC0411	Road 17	Brgy Road	4.44/	0.068		0.00%			0.00%		0.06752	100.00%					L							
12CC0412	Road 16	Brgy Road	3.76/	0.07		0.00%			0.00%		0.06967	100.00%					L							
12CC0413	Archbishop Gerald Mongue Street	City Road	7.93/4.48	0.261	0.1	37.15%			0.00%		0.16388	62.85%					L					M		
12CC0414	Road B	Brgy Road	10.15/6.01	0.076		0.00%			0.00%		0.07629	100.00%					L							

12CC0415	Road C	Brgy Road	7.51/4.47	0.068		0.00%			0.00%		0.06838	100.00%					L							
12CC0416	Road 8	Brgy Road	3.58/	0.085		0.00%			0.00%		0.08461	100.00%					L							
12CC0417	Road 7	Brgy Road	3.46/	0.087		0.00%			0.00%		0.08678	100.00%					L							
12CC0418	Circumferencial Road	City Road	9.12/7.00	0.763	0.76	100.00%			0.00%			0.00%					L							
12CC0419	Road A	Brgy Road	4.95/	0.23		0.00%			0.00%		0.22979	100.00%					L							
12CC0420	Road B	Brgy Road	5.73/	0.31		0.00%			0.00%		0.31022	100.00%					L							
12CC0421	Road C	Brgy Road	7.92/	0.073		0.00%			0.00%		0.07326	100.00%					L							
12CC0422	Dona Avelina Street	City Road	4.71/	0.094		0.00%			0.00%		0.09417	100.00%					L							
12CC0423	Road E	Brgy Road	4.12/	0.065		0.00%			0.00%		0.06522	100.00%					L							
12CC0424	Road F	Brgy Road	3.16/	0.087		0.00%			0.00%		0.08669	100.00%					L							
12CC0425	Private	Brgy Road	6.03/	0.06		0.00%			0.00%		0.05993	100.00%					L							
12CC0426	Road H	Brgy Road	4.25/	0.08		0.00%			0.00%		0.08041	100.00%					L							
12CC0427	Road I	Brgy Road		0.181		0.00%			0.00%		0.18103	100.00%					L							
SUBTOTAL				8.913	3.228	36.22%	-	1.47	16.49%	-	4.013	45.03%	-	0.202	4	-								
Rosary Heights 10																								
12CC0428	Road at the Side of City Hall	Brgy Road	20.03/6.68	0.384	0.154	40.24%			0.00%		0.229	59.76%					L				M			
12CC0429	No name 1	Brgy Road	6.99/3.83	0.15		0.00%			0.00%		0.15	100.00%					L				M			
12CC0430	No name 2	Brgy Road	6.95/4.6	0.174		0.00%			0.00%		0.174	100.00%					L				M			
12CC0431	No name 3	Brgy Road	4.56/3.11	0.04		0.00%			0.00%		0.04	100.00%					L				M			
12CC0432	No name 4	Brgy Road	5.88/5.01	0.073		0.00%			0.00%		0.073	100.00%					L				M			
12CC0433	No name 5	Brgy Road	7.39/6.02	0.136		0.00%			0.00%		0.136	100.00%					L				M			
12CC0434	No name 6	Brgy Road	7.98/5.11	0.141		0.00%			0.00%		0.141	100.00%					L				M			
12CC0435	No name 7	Brgy Road	6.21/4.52	0.15		0.00%			0.00%		0.15	100.00%					L				M			
12CC0436	No name 8	Brgy Road	6.23/5.12	0.196		0.00%			0.00%		0.196	100.00%					L				M			
12CC0437	No name 9	Brgy Road	8.69/5.04	0.132		0.00%			0.00%		0.132	100.00%					L				M			
12CC0438	No name 10	Brgy Road	9.56/5.77	0.179		0.00%			0.00%		0.179	100.00%					L				M			
12CC0439	No name 11	Brgy Road	6.73/4.24	0.149		0.00%			0.00%		0.149	100.00%					L				M			
12CC0440	No name 12	Brgy Road	7.20/4.11	0.15		0.00%			0.00%		0.15	100.00%					L				M			
12CC0441	No name 13	Brgy Road	6.42/4.00	0.154		0.00%			0.00%		0.154	100.00%					L				M			
12CC0442	No name 14	Brgy Road	6.70/3.81	0.161		0.00%			0.00%		0.161	100.00%					L				M			
12CC0443	No name 15	Brgy Road	10.46/5.03	0.398	0.108	27.24%			0.00%		0.29	72.76%					L				M			
12CC0444	Road to Canizares School	Brgy Road	7.95/4.49	0.118	0.118	100.00%			0.00%			0.00%					L				M			
12CC0445	Road at the Back of Fiesta Mall (Purok Masagana)	Brgy Road	9.52/6.45	0.34	0.24	70.61%			0.00%		0.1	29.39%					L				M			
12CC0446	Purok Mamarinta Road	Brgy Road	9.23/3.14	0.27		0.00%			0.00%		0.27	100.00%					L				M			
12CC0447	No name 16	Brgy Road	7.46/4.01	0.192		0.00%			0.00%		0.192	100.00%					L				M			
12CC0448	No name 17	Brgy Road	5.83/3.20	0.204		0.00%			0.00%		0.204	100.00%					L				M			
12CC0449	Rufo Manara Street	City Road	6.44/4.02	0.672	0.672	100.00%			0.00%			0.00%					L				M			
12CC0450	Amado Papa Street	Brgy Road	9.45/5.06	0.671	0.474	70.70%			0.00%		0.197	29.30%					L				M			
12CC0451	Gavina Gonzales Street	Brgy Road	7.37/4.58	0.308	0.105	34.03%			0.00%		0.203	65.97%					L				M			
12CC0452	No name 18	Brgy Road	12.83/7.58	0.09	0.046	50.83%			0.00%		0.044	49.17%					L				M			
12CC0453	Catalina Austria Street	Brgy Road	9.99/	0.749	0.126	16.83%			0.00%		0.623	83.17%					L				M			

12CC0454	LR Sebastian Road	City Road	11.42/6.07	0.639	0.639	100.00%			0.00%			0.00%					L					M		
12CC0455	No name 19	Brgy Road	9.89/5.08	0.086	0.086	100.00%			0.00%			0.00%					L					M		
12CC0456	No name 20	Brgy Road	9.25/4.04	0.08	0.08	100.00%			0.00%			0.00%					L					M		
12CC0457	No name 21	Brgy Road	10.35/4.04	0.082		0.00%			0.00%		0.082	100.00%					L					M		
12CC0458	No name 22	Brgy Road	10.80/4.99	0.078		0.00%			0.00%		0.078	100.00%					L					M		
12CC0459	No name 23	Brgy Road	9.66/3.16	0.08		0.00%			0.00%		0.08	100.00%					L					M		
12CC0460	No name 24	Brgy Road	7.67/3.08	0.08		0.00%			0.00%		0.08	100.00%					L					M		
12CC0461	No name 25	Brgy Road	8.68/3.83	0.118		0.00%			0.00%		0.118	100.00%					L					M		
12CC0462	Soledad Street	Brgy Road	11.90/4.18	0.085		0.00%			0.00%		0.085	100.00%					L					M		
12CC0463	Delcano Street	Brgy Road	11.67/4.08	0.257	0.223	86.78%			0.00%		0.034	13.22%					L					M		
12CC0464	Concepcion Street	Brgy Road	10.66/3.69	0.276		0.00%			0.00%		0.276	100.00%					L					M		
12CC0465	No name 26	Brgy Road	8.28/5.07	0.08	0.067	84.23%			0.00%		0.013	15.77%					L					M		
12CC0466	Datu Udtog Matalam Street	City Road	12.41/6.84	0.893	0.893	100.00%			0.00%			0.00%					L					M		
12CC0467	San Isidro Ave	City Road	9.99/5.42	0.699	0.699	100.00%			0.00%			0.00%					L					M		
12CC0468	Pansacala Street	City Road	9.40/6.27	0.66	0.66	100.00%			0.00%			0.00%					L					M		
12CC0469	No name 27	Brgy Road	4.75/2.70	0.122		0.00%			0.00%		0.122	100.00%					L					M		
12CC0470	M. Jarabelo Street	City Road	9.03/4.99	0.758	0.62	81.78%			0.00%		0.138	18.22%					L					M		
12CC0471	No name 28	Brgy Road	10.38/4.11	0.116		0.00%			0.00%		0.116	100.00%					L					M		
12CC0472	No name 29	Brgy Road	9.06/4.01	0.146		0.00%			0.00%		0.146	100.00%					L					M		
12CC0473	No name 30	Brgy Road	9.29/4.94	0.23	0.124	54.15%			0.00%		0.105	45.85%					L					M		
12CC0474	TV Juliano Avenue	City Road	14.03/6.93	0.669	0.669	100.00%			0.00%			0.00%					L					M		
SUBTOTAL				12.613	6.805	53.95%	-	-	0.00%	-	5.808	46.05%	-	-	-	-								
Rosary Heights 11																								
12CC0475	Pelican Street	Brgy Road	6.24/4.1	0.385	0.047	12.10%			0.00%		0.339	87.90%					L					M		
12CC0476	Maya Street	Brgy Road	8.72/3.20	0.365		0.00%			0.00%		0.365	100.00%					L					M		
12CC0477	Loro Street	Brgy Road	3.15/3.75	0.353		0.00%			0.00%		0.353	100.00%					L					M		
12CC0478	Kalaw Street	Brgy Road	6.00/3.40	0.188		0.00%			0.00%		0.188	100.00%					L					M		
12CC0479	Falcon Street	Brgy Road	6.50/3.95	0.245		0.00%			0.00%		0.245	100.00%					L					M		
12CC0480	Lawin Street	Brgy Road	6.15/3.02	0.416		0.00%			0.00%		0.416	100.00%					L					M		
12CC0481	Agila Street	Brgy Road	0.05/3.20	0.402		0.00%			0.00%		0.402	100.00%					L					M		
12CC0482	St Uriel Street / 5AT	City Road	6.02/5.16	0.141		0.00%			0.00%		0.141	100.00%										M		
12CC0483	Road 7	Brgy Road	6.10/3.15	0.111		0.00%			0.00%		0.111	100.00%										M		
12CC0484	Penafrancia 2nd Road	Brgy Road	10.15/4.09	0.371		0.00%			0.00%		0.371	100.00%					L					M		
12CC0485	Penafrancia 1st Road	Brgy Road	10.76/5.59	0.334	0.213	63.77%			0.00%		0.121	36.23%					L					M		
12CC0486	St Gabriel Street	Brgy Road	6.60/3.60	0.296	0.296	100.00%			0.00%			0.00%					L					M		
12CC0487	Federville Village Main Road	City Road	9.89/5.00	0.664	0.664	100.00%			0.00%			0.00%					L					M		
12CC0488	Rufo Manara Street	City Road	10.41/5.10	0.183	0.078	42.78%			0.00%		0.105	57.22%					L					M		
12CC0489	Purveyors 1st Road	Brgy Road	10.53/4.18	0.191	0.191	100.00%			0.00%			0.00%					L					M		
12CC0490	Purveyors 2nd Road	Brgy Road	9.15/4.20	0.192	0.192	100.00%			0.00%			0.00%					M					M		
12CC0491	Purveyors 3rd Road	Brgy Road	10.10/4.30	0.194	0.194	100.00%			0.00%			0.00%					M					M		
12CC0492	Purveyors 4th Road	Brgy Road	9.27/4.14	0.197	0.197	100.00%			0.00%			0.00%					M					M		
12CC0493	Road 9	Brgy Road	9.55/4.22	0.178	0.178	100.00%			0.00%			0.00%										M		
12CC0494	Road 10	Brgy Road	9.25/4.12	0.303	0.181	59.88%			0.00%		0.121	40.12%										M		

12CC0495	Road 11	Brgy Road	7.35/3.22	0.049	0.049	100.00%			0.00%			0.00%									M		
12CC0496	Road 12	Brgy Road	7.38/3.22	0.049	0.049	100.00%			0.00%			0.00%									M		
12CC0497	Road 7	Brgy Road	5.70/3.62	0.247		0.00%			0.00%		0.247	100.00%									M		
12CC0498	Andres Alonzo Street Extension	City Road	7.84/3.12	1.144	0.9	78.67%			0.00%		0.244	21.33%					M				M		
12CC0499	Mentors 1st Road	Brgy Road	6.84/3.85	0.165		0.00%			0.00%		0.165	100.00%					L				M		
12CC0500	Mentors 2nd Road	Brgy Road	8.13/4.20	0.234		0.00%			0.00%		0.234	100.00%					M				M		
12CC0501	Mentors 3rd Road	Brgy Road	5.33/3.84	0.21		0.00%			0.00%		0.21	100.00%					L				M		
12CC0502	Mentors 4th Road	Brgy Road	4.95/3.36	0.184		0.00%			0.00%		0.184	100.00%					L				M		
12CC0503	Mentors 5th Road	Brgy Road	5.82/4.15	0.172		0.00%			0.00%		0.172	100.00%					M				M		
12CC0504	Road 4	Brgy Road	7.21/3.20	0.128		0.00%			0.00%		0.128	100.00%									M		
12CC0505	6th Road	Brgy Road	6.62/3.50	0.13		0.00%			0.00%		0.13	100.00%									M		
12CC0506	5th Road	Brgy Road	6.40/3.35	0.127		0.00%			0.00%		0.127	100.00%									M		
12CC0507	4th Road	Brgy Road	10.04/5.00	0.125		0.00%			0.00%		0.125	100.00%									M		
12CC0508	3rd Road	Brgy Road	9.79/4.03	0.128		0.00%			0.00%		0.128	100.00%									M		
12CC0509	2nd Road	Brgy Road	6.59/3.52	0.128		0.00%			0.00%		0.128	100.00%									M		
12CC0510	1st Road	Brgy Road	7.96/4.29	0.16		0.00%			0.00%		0.16	100.00%									M		
12CC0511	PH-1 3rd Road	Brgy Road	6.12/3.71	0.124		0.00%			0.00%		0.124	100.00%									M		
12CC0512	PH-1 2nd Road	Brgy Road	6.97/3.17	0.1		0.00%			0.00%		0.1	100.00%									M		
12CC0513	PH-1 1strd	Brgy Road	7.17/4.06	0.084		0.00%			0.00%		0.084	100.00%									M		
12CC0514	Unnamed Road 1	Brgy Road	6.02/3.88	0.052		0.00%			0.00%		0.052	100.00%									M		
12CC0515	Unnamed Road 2	Brgy Road	6.65/3.11	0.061		0.00%			0.00%		0.061	100.00%									M		
12CC0516	San Antonio 1st Road	Brgy Road	8.60/4.32	0.139		0.00%			0.00%		0.139	100.00%					M				M		
12CC0517	San Antonio 2nd Road	Brgy Road	8.76/4.98	0.209		0.00%			0.00%		0.209	100.00%					M				M		
12CC0518	Unnamed Road 3	Brgy Road		0.123		0.00%			0.00%		0.123	100.00%									M		
12CC0519	LR Sebastian Road	City Road	10.87/5.03	0.7	0.20085	28.68%			0.00%		0.499	71.32%					M				M		
12CC0520	Mahogany Street	Brgy Road	8.26/4.95	0.256		0.00%			0.00%		0.256	100.00%					H				M		
SUBTOTAL				10.938	3.63	33.19%	-		0.00%	-	7.308	66.81%	-	-	=	-							
Rosary Heights 12																							
12CC0521	Unnamed Road 1	Brgy Road	9.00/3.60	0.157		0.00%			0.00%		0.157	100.00%									M		
12CC0522	Don Agusto Street	Brgy Road	9.20/5.10	0.157	0.108	68.37%			0.00%		0.05	31.63%									M		
12CC0523	Unnamed Road 2	Brgy Road	8.20/4.30	0.327		0.00%			0.00%		0.327	100.00%									M		
12CC0524	Unnamed Road 3	Brgy Road	8.00/5.00	0.159	0.114	72.01%			0.00%		0.044	27.99%									M		
12CC0525	Pastor Kimpo Street	City Road	9.80/5.00	0.251	0.251	100.00%			0.00%			0.00%					M				M		
12CC0526	Gregorio Street	Brgy Road	8.57/4.90	0.211	0.143	67.90%			0.00%		0.068	32.10%									M		
12CC0527	Quiambao Street	Brgy Road	7.80/4.00	0.267	0.179	66.99%			0.00%		0.088	33.01%					L				M		
12CC0528	Felisiano Street	Brgy Road	4.71/3.00	0.18		0.00%			0.00%		0.18	100.00%									M		
12CC0529	Sousa Avenue	City Road	10.07/4.53	0.175	0.175	100.00%			0.00%			0.00%					M				M		
12CC0530	Rosario Rojas Street	Brgy Road	9.80/5.37	0.229	0.197	86.24%			0.00%		0.031	13.76%					L				M		
12CC0531	Siao Street	Brgy Road	7.53/4.15	0.155	0.066	42.56%			0.00%		0.089	57.44%									M		
12CC0532	Tulingan Street	City Road	9..11/5.53	0.129	0.129	100.00%			0.00%			0.00%					H				M		
12CC0533	Cris	Brgy Road	8.00/4.59	0.069		0.00%			0.00%		0.069	100.00%									M		
12CC0534	Tardo	Brgy Road	8.31/5.20	0.087		0.00%			0.00%		0.087	100.00%									M		
12CC0535	Ramon Rabago Street	City Road	10.82/6.25	0.273	0.273	100.00%			0.00%			0.00%									M		
12CC0536	TV Juliano Avenue	City Road	11.00/6.50	0.703	0.703	100.00%			0.00%			0.00%					L				M		

SUBTOTAL				3.529	2.338	66.24%	-	-	0.00%	-	1.191	33.76%	-	-	-	-								
Rosary Heights 13																							
12CC0537	San Juan Street	Brgy Road	7.22/4.00	0.494	0.494	100.00%			0.00%			0.00%					L					M		
12CC0538	San Jose Street	Brgy Road	9.57/5.00	0.205	0.177	86.33%			0.00%		0.028	13.67%					L					M		
12CC0539	San Gregorio Street	Brgy Road	11.00/5.00	0.34	0.206	60.40%			0.00%		0.135	39.60%					L					M		
12CC0540	San Isidro Street	Brgy Road	10.00/5.00	0.365	0.331	90.59%			0.00%		0.034	9.41%					L					M		
12CC0541	San Roque Street	Brgy Road	9.00/5.00	0.157		0.00%			0.00%		0.157	100.00%					L					M		
12CC0542	San Miguel Street	Brgy Road	9.50/5.00	0.241	0.144	59.75%			0.00%		0.097	40.25%					L					M		
12CC0543	Pastor Kimpo Sr Street	Brgy Road	9.30/6.00	0.506	0.506	100.00%			0.00%			0.00%					L					M		
12CC0544	Fecilitas Milan Street	Brgy Road	9.56/5.00	0.551	0.257	46.59%			0.00%		0.294	53.41%					L					M		
12CC0545	San Lorenzo Street	Brgy Road	7.63/4.00	0.179		0.00%			0.00%		0.179	100.00%					L					M		
12CC0546	Unnamed Road	Brgy Road	9.00/4.00	0.233		0.00%			0.00%		0.233	100.00%					L					M		
12CC0547	San Pedro Street	Brgy Road	11.06/6.50	0.203	0.203	100.00%			0.00%			0.00%					L					M		
12CC0548	Soledad Sousa Circuit Road	Brgy Road	11.81/5.00	0.707	0.707	100.00%			0.00%			0.00%					L					M		
12CC0549	Roales Street	Brgy Road	8.70/6.00	0.13	0.13	100.00%			0.00%			0.00%					L					M		
12CC0550	Sta Teresa Street	Brgy Road	4.73/3.45	0.078	0.078	100.00%			0.00%			0.00%					L					M		
12CC0551	Sta Ana Street	Brgy Road	6.65/4.36	0.081	0.081	100.00%			0.00%			0.00%					L					M		
12CC0552	Afes Lai	Brgy Road	7.76/4.42	0.14	0.14	100.00%			0.00%			0.00%					L					M		
12CC0553	Ramon Rabago Street	City Road	10.80/6.25	0.357	0.357	100.00%			0.00%			0.00%					L					M		
12CC0554	TV Juliano Avenue	City Road	12.84/6.52	0.463	0.463	100.00%			0.00%			0.00%					H					M		
12CC0555	Sousa Avenue	City Road	10.00/6.25	0.506	0.506	100.00%			0.00%			0.00%					L					M		
SUBTOTAL				5.936	4.778	80.49%	-	-	0.00%	-	1.158	19.51%	-	-	-	-								
Kalanganan Mother Barangay																							
12CC0556	Cotabato City Circumferencial Road (Western Sect)	City Road	7.60/6.88	8.147	7.12	87.34%		0.88	10.79%		0.15	1.87%					H					H	H	
12CC0557	Road 2	Brgy Road	6.35/4.03	0.347	0.35	100.00%			0.00%			0.00%					H					H	H	
12CC0558	Road 1	Brgy Road	4.55/	0.038		0.00%			0.00%		0.038	100.00%					H					H	H	
12CC0559	Road 2	Brgy Road	4.41/	0.075		0.00%			0.00%		0.075	100.00%					H					H	H	
12CC0560	Road 3	Brgy Road	5.88/	0.056	0.06	100.00%			0.00%			0.00%					H					H	H	
12CC0561	Road 4	Brgy Road	3.61/	0.038		0.00%			0.00%		0.038	100.00%					H					H	H	
12CC0562	Road 5	Brgy Road	3.58/	0.053		0.00%			0.00%		0.053	100.00%					H					H	H	
12CC0563	Road 6	Brgy Road	5.00/	0.07		0.00%			0.00%		0.07	100.00%					H					H	H	
SUBTOTAL				8.824	7.52	85.21%	-	-	9.96%	-	0.426	4.83%	-	-	-	-								
Kalanganan I Barangay																							
12CC0564	Kalanganan 1 Main Road	City Road	5.30/4.85	1.776	0.8	45.26%			0.00%		0.97	54.74%					H					H	H	
12CC0565	Road 1	Brgy Road	5.15/4.85	0.613	0.29	46.59%			0.00%		0.33	53.41%					H					H	H	
SUBTOTAL				2.388	1.089	45.60%	-	-	0.00%	-	1.299	54.40%	-	-	-	-								
Kalanganan II Barangay																							
12CC0566	Cotabato City Circumferencial Road (Western Sect)	City Road	13.91/7.23	7.323	7.32	100.00%			0.00%			0.00%					H					H	H	
12CC0567	Timako Road	Brgy Road	12.95/6.86	0.795	0.8	100.00%			0.00%			0.00%					H				M	H	H	
12CC0568	Timako Road (Towards	Brgy Road	18.31/13.64	1.367	1.37	100.00%			0.00%			0.00%					H				M	H	H	

	Bridge)																							
12CC0569	Timako Road (Towards Left)	Brgy Road	16.98/9.24	0.695	0.7	100.00%			0.00%			0.00%					H				M	H	H	
12CC0570	Bwaya-Bwaya Road	Brgy Road	11.38/5.97	0.244	0.24	100.00%			0.00%			0.00%					H					H	H	
12CC0571	Bai Walk Road 1	Brgy Road	8.61/4.74	0.059	0.06	100.00%			0.00%			0.00%					H					H	H	
12CC0572	Bai Walk Road 2	Brgy Road	5.71/3.55	0.473	0.47	100.00%			0.00%			0.00%					H					H	H	
12CC0573	Adtaban Road (Ice Plant)	Brgy Road	8.62/5.19	0.273	0.27	100.00%			0.00%			0.00%					H					H	H	
12CC0574	No Name	Brgy Road	7.35/3.90	0.298	0.3	100.00%			0.00%			0.00%					H					H	H	
SUBTOTAL				11.528	11.528	100.00%	-	-	0.00%	-	-	0.00%	-	-	-	-								
Tamontaka Mother Barangay																								
12CC0575	Sinsuat Avenue	Nat'l Road	15.70/6.88	1.7		0.00%		1.7	100.00%			0.00%					H					M		
12CC0576	Tamontaka Old Road	City Road	4.85/13.65	0.774	0.77	100.00%			0.00%			0.00%					H					M		
12CC0577	San Juan Street	City Road	11.21/5.12	0.474	0.47	100.00%			0.00%			0.00%					H					M		
12CC0578	Concepcion Street	City Road	11.53/5.05	0.633	0.54	86.03%			0.00%		0.09	13.97%					H					M		
12CC0579	Bai Sultana (Kulong-Kulong) San Francisco Road	City Road	10.68/5.15	0.488	0.49	100.00%			0.00%			0.00%					H					M		
12CC0580	Road 4	Brgy Road	8.49/5.18	0.324	0.32	100.00%			0.00%			0.00%					H					M		
12CC0581	Road 5	Brgy Road	7.19/5.09	0.116	0.12	100.00%			0.00%			0.00%					H					M		
12CC0582	Road 6	Brgy Road	7.28/5.12	0.096	0.1	100.00%			0.00%			0.00%					H					M		
12CC0583	Road 7	Brgy Road	8.54/5.31	0.159	0.16	100.00%			0.00%			0.00%					H					M		
12CC0584	Road 8	Brgy Road		0.324	0.32	100.00%			0.00%			0.00%					H					M		
12CC0585	Road A	Brgy Road	6.49/3.92	0.082	0.08	100.00%			0.00%			0.00%					H					M		
12CC0586	Road B	Brgy Road	4.33/3.29	0.082		0.00%			0.00%		0.08	100.00%					H					M		
12CC0587	Road C	Brgy Road	5.75/4.01	0.721	0.72	100.00%			0.00%			0.00%					H					M		
12CC0588	Bonzain Road	Brgy Road	9.23/4.86	0.439	0.38	85.40%			0.00%		0.06	14.60%					H					M		
12CC0589	SF/Project	Brgy Road	7.22/4.05	0.318	0.32	100.00%			0.00%			0.00%					H					M		
SUBTOTAL				6.731	4.796	71.26%	-	1.7	25.26%	-	0.235	3.49%	-	-	-	-								
Tamontaka 1																								
12CC0590	Road 1	Brgy Road		1.275	1.275	100.00%			0.00%			0.00%					H					M		
12CC0591	San Juan Street	City Road		0.391		0.00%			0.00%		0.391	100.00%					H					M		
12CC0592	Tamontaka- Bubong Road	City Road	8.17/6.59	2.567	1.566	61.00%			0.00%		1.001	39.00%					H					M		
12CC0593	Road 4	Brgy Road	6.55/4.56	0.607	0.607	100.00%			0.00%			0.00%					H					M		
12CC0594	Road 5	Brgy Road	8.70/4.84	0.322	0.076	23.57%			0.00%		0.246	76.43%					H					M		
12CC0595	Road 6	Brgy Road	7.28/	0.124	0.005	3.80%			0.00%		0.119	96.20%					H					M		
12CC0596	Road 7	Brgy Road		0.251	0.251	100.00%			0.00%			0.00%					H					M		
12CC0597	Road 8	Brgy Road	10.29/4.16	0.056		0.00%			0.00%		0.056	100.00%					H					M		
12CC0598	Road 9	Brgy Road	6.68/3.99	0.095		0.00%			0.00%		0.095	100.00%					H					M		
12CC0599	Road 10	Brgy Road	8.00/4.25	0.038		0.00%			0.00%		0.038	100.00%					H					M		
12CC0600	Road 11	Brgy Road	11.54/4.03	0.247		0.00%			0.00%		0.247	100.00%					H					M		
12CC0601	Road 12	Brgy Road		0.259		0.00%			0.00%		0.259	100.00%					H					M		
12CC0602	Road 13	Brgy Road		0.12		0.00%			0.00%		0.12	100.00%					H					M		
12CC0603	Road 14	Brgy Road	10.83/5.83	0.269		0.00%			0.00%		0.269	100.00%					H					M		
12CC0604	Road 15	Brgy Road	6.79/3.33	0.118		0.00%			0.00%		0.118	100.00%					H					M		

12CC0605	Road 16	Brgy Road		0.213		0.00%			0.00%		0.213	100.00%					H					M		
12CC0606	Concepcion Street	City Road		0.381		0.00%			0.00%		0.381	100.00%					H					M		
12CC0607	Road 18	Brgy Road	7.32/4.76	0.217		0.00%			0.00%		0.217	100.00%					H					M		
12CC0608	Road 19	Brgy Road	6.47/4.90	0.163		0.00%			0.00%		0.163	100.00%					H					M		
12CC0609	Road 20	Brgy Road	7.25/5.00	0.099		0.00%			0.00%		0.099	100.00%					H					M		
12CC0610	Road 21	Brgy Road		0.064		0.00%			0.00%		0.064	100.00%					H					M		
12CC0611	Road 22	Brgy Road	10.67/5.99	0.663		0.00%			0.00%		0.663	100.00%					H					M		
SUBTOTAL				8.539	3.779	44.25%	-	-	0.00%	-	4.76	55.75%	-	-	-	-		-		-	-	-	-	-
Tamontaka 2																								
12CC0612	Unnamed Road	Brgy Road	8.08/5.50	1.407	1.41	100.00%			0.00%			0.00%					H							
12CC0613	Cotabato City East Diversion Road	City Road	10.64/7.00	1.697	1.7	100.00%			0.00%			0.00%					H							
12CC0614	Cyn Village Road 1	Brgy Road	8.50/4.98	0.119		0.00%			0.00%		0.12	100.00%					H							
12CC0615	Cyn Village Road 2	Brgy Road	7.45/4.78	0.058		0.00%			0.00%		0.06	100.00%					H							
12CC0616	Cyn Village Road 3	Brgy Road	7.01/4.40	0.185		0.00%			0.00%		0.18	100.00%					H							
12CC0617	Cyn Village Road 4	Brgy Road	6.46/4.48	0.22		0.00%			0.00%		0.22	100.00%					H							
12CC0618	Cyn Village Road 5	Brgy Road	6.50/4.02	0.145		0.00%			0.00%		0.14	100.00%					H							
12CC0619	Cyn Village Road 6	Brgy Road	6.92/3.74	0.144		0.00%			0.00%		0.14	100.00%					H							
12CC0620	Cyn Village Road 7	Brgy Road	6.50/3.38	0.144		0.00%			0.00%		0.14	100.00%					H							
12CC0621	Cyn Village Road 8	Brgy Road	6.19/4.31	0.158		0.00%			0.00%		0.16	100.00%					H							
12CC0622	Cyn Village Road 9	Brgy Road	7.02/4.34	0.103		0.00%			0.00%		0.1	100.00%					H							
12CC0623	Cyn Village Road 10	Brgy Road	6.15/5.01	0.109		0.00%			0.00%		0.11	100.00%					H							
12CC0624	Cyn Village Road 11	Brgy Road	6.19/3.29	0.101		0.00%			0.00%		0.1	100.00%					H							
12CC0625	Cyn Village Road 12	Brgy Road	7.05/3.15	0.092		0.00%			0.00%		0.09	100.00%					H							
12CC0626	Cyn Village Road 13	Brgy Road	7.13/3.83	0.073		0.00%			0.00%		0.07	100.00%					H							
12CC0627	Cyn Village Road 14	Brgy Road	6.52/3.52	0.098		0.00%			0.00%		0.1	100.00%					H							
SUBTOTAL				4.853	3.104	63.96%	-	-	0.00%	-	1.749	36.04%	-	-	-	-								
Tamontaka 3																								
12CC0628	Road 1	Brgy Road	10.67/7.57	1.466	1.47	100.00%			0.00%			0.00%					H							
12CC0629	Road 2	Brgy Road	7.75/5.04	1.676	1.65	98.58%			0.00%		0.024	1.42%					H							
SUBTOTAL				3.141	3.12	99.24%	-	-	0.00%	-	0.02	0.76%	-	-	-	-								
Tamontaka 4																								
12CC0630	Road 1	Brgy Road	8.07/6.58	2.404	2.23	92.68%			0.00%		0.18	7.32%					H							
SUBTOTAL				2.404	2.228	92.68%	-	-	0.00%	-	0.176	7.32%	-	-	-	-								
Tamontaka 5																								
12CC0631	Road 1	Brgy Road	8.07/6.58	14.904	0.3	2.04%			0.00%		14.6	97.96%					H							
SUBTOTAL				14.904	0.304	2.04%	-	-	0.00%	-	14.6	97.96%	-	-	-	-								

2. BRIDGES

The Cotabato City is a delta and disconnected further by different bodies of water that make up the city. The city which is also known as "the city of rivers and creeks" is composed of 35 islands in the 37 barangays within its territorial jurisdiction. In order for the city to efficiently deliver basic services and provide ease and comfort for the residents in accessing and delivering goods and services, exercise religious freedom, and better access to work and education, multiple number of bridges were constructed. Table IF-3 below shows the different bridges of Cotabato City with their corresponding location, type, length and width, capacity, and current physical condition.

There are 19 reinforced concrete bridges strewn all over the city, one pre-stressed concrete girder bridge and nine steel bridges. Nowadays, it is noticeable that two of these bridges, the Quirino Bridge and the Matampay Bridge are currently in critical condition. There is an on-going proposal to retrofit the Quirino Bridge by the Department of Public Works and Highways (DPWH). Notwithstanding the two critical bridges, the rest of the bridges are in fair physical condition and safe to cross. These bridges have propelled the economy of the city due to accessibility from settlement to production area and workplace. The two bridges of Kalanganan II, the Tarbong Bridge and the Miwaroy Bridge were still under construction. But despite of being unfinished, the Tarbong Bridge is already accessible to the public with proper safety measures to provide access to Cotabato City's tourist spots including the Timako Hill, the Baiwalk, and the Grand Mosque.

Majority of these bridges are at highly susceptible to flood and tropical cyclone. Thus, they should always be well-maintained and managed especially the Delta Bridge 1 and 2 which were assessed to be at very high susceptibility. The water level of Rio Grande de Mindanao River is always at a brink of rising lending to its susceptability. The different bridges of Kalanganan 2, namely the Kinagatan Bridge, Lagundungan Bridge, Tarbong Bridge and the Manakulil Bridge were assessed to be highly susceptible to tsunami attributed to its location facing Illana Bay.

Table IF-3
Inventory of Bridges by Location, Type, Capacity and Condition, Year 2020

Bridge Name	Barangay	Year Constructed	Type	Length (m)	Width (m)	Load Capacity (Tons)	Physical Condition	Hazard Susceptibility (H/M/L)							
								Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Quirino Bridge	Poblacion 1		Steel	162.2	9.6	10	Critical	H	H	-	-	M	-	-	-
Matampay Bridge	Poblacion 1		Concrete	65	16.7	10	Critical	H	H	-	-	M	-	-	-
Matampay Bridge II	Poblacion Mother		Pre-stressed Concrete Girder	75	7.4	10	Fair	H	H	-	-	-	-	-	-
Quirino Bridge II	Poblacion 9		Steel	210	8.56	10	Fair	H	H	-	-	-	-	-	-

Manday Bridge	Poblacion 6		Concrete	30	9.4	25	Fair	H	H	-	-	-	-	-	-
Lugay-Lugay Bridge	Bagua 3		Concrete	75	9.5	15	Fair	H	H	-	-	-	-	M	-
Kalanganan Bridge	Kalnganan Mother		Concrete	30.35	9.35	25	Fair	H	H	-	-	-	-	M	-
Tanghal Bridge	Bagua 3		Concrete	30	9	5	Poor	H	H	-	-	-	M	-	-
Kibatang Bridge	Bagua 2		Steel	55	3.4	5	Fair	H	H	-	-	-	-	-	-
Mahad Bridge	Bagua 2		Concrete	36	8.85	10	Fair	H	H	-	-	-	-	-	-
Usman Bridge	Bagua 2		Concrete	20.2	9.5	10	Fair	H	H	-	-	-	M	-	-
Bagua Bridge	Bagua 2		Concrete	20.22	9.5	10	Fair	M	H	-	-	-	-	-	-
Biniruan Bridge/ Tulay ng Pangulo	R.H. 5		Steel	31	7	5	Fair	M	H	-	-	-	-	-	-
Kalantungan Bridge	R.H. 6		Steel	40	8	5	Fair	M	H	-	-	-	-	-	-
Esteros Bridge	R.H. 9		Concrete	50	9	10	Fair	L	H	-	-	-	-	-	-

Bridge Name	**Barangay**	**Year Constructed**	**Type**	**Length (m)**	**Width (m)**	**Load Capacity (Tons)**	**Physical Condition**	**Hazard Susceptibility (H/M/L)**							
								Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Tamontaka Bridge	Tamontaka Mother		Concrete	208	7.35	15	Fair	H	H	-	-	-	M	-	-
Bubong Bridge	Kalanganan II		Concrete	60	9.3	10	Fair	H	H	-	-	-	-	-	-
Neogen Bridge	Kalanganan II		Concrete	20	10	10	Fair	H	H	-	-	-	M	-	-
Kinagatan Bridge	Kalanganan II		Concrete	14.63	9.4	10	Fair	H	H	-	-	-	-	H	-
Lagundungan Bridge	Kalanganan II		Concrete	20	8.5	8	Fair	H	H	-	-	-	-	H	-
Camasi Bridge	Poblacion 9		Steel	23	6.5	5	Poor	L	H	-	-	-	-	-	-
Pagalamatan Bridge	Tamontaka 3		Steel	42	3.4	4	Fair	H	H	-	-	-	-	-	-
Pastor Kimpo Bridge	R.H. 12		Steel	21.25	3.3	4	fair	M	H	-	-	-	-	-	-
Matampay Bridge II	Poblacion 9		Concrete	75	10.47	10	Fair	H	H	-	-	-	-	-	-
Tamontaka 2	Tamontaka 2		Concrete	210	10.57	10	Fair	H	H	-	-	-	-	-	-
Tarbong Bridge	Kalanganan II		Concrete			10	not yet completed	H	H	-	-	-	-	M	M
Delta Bridge 1	Poblacion 1		Steel					VH		-	-	-	-	-	-
Delta Bridge 2	Poblacion 1		Steel					VH		-	-	-	-	-	-
Espino Bridge	Bagua 2		Concrete					H		-	-	-	-	-	-
Kimpo Bridge								H		-	-	-	-	-	-

Miwaroy Bridge								H		-	-	-	-	-	-
Manakulil Bridge	Kalanganan II		Concrete	62	10.5	10	Fair	VH	H	-	-	-	-	H	M

Source: DPWH/PEO/LGU/(CEO)
Type: concrete, steel, wood, others
Physical Condition
Fair – acceptable/serviceable
Poor – needs improvement
Critical – for priority action

Indicate level of susceptibility for all hazards: High (H), Moderate (M), Low (L)

***Types of hazards** – Flood (Fl), Tropical cyclone (Tc), Earthquake (Eq), Volcano (Vo), Landslide (Ln), Tsunami (Ts), Storm Surge (Su), Others (e.g.coastal erosion, sea level rise, land subsidence, liquefaction, strong wind, change in temperature, change in rainfall, etc.)*

a. Ancillary Road Facilities

Road ancillary facilities are the different facilities that provide necessary support to the operation of the primary activities and operations of the road network systems. It refers to the equipments and small structures associated with the road networks to help provide ease, comfort, and safety in traversing the roads of the city as well as control, avoid or minimize accidents, traffic congestion, and other road-related problems. It includes the street lights, traffic lights, road signs, pedestrian crossing, overpass, waiting sheds, jeepney stops, and other facilities.

As of the present data shown by the table IF-4 below, there are about 2,423 street lights, 992 road signage, 34 pedestrian crossing, and 5 waiting sheds scattered all over Cotabato City. Majority of these ancillary road facilities are of good to fair condition except for some road humps. Despite its being a tourist attraction, the road leading to Timako Hill have no street lights. With the growing number of visitors, local and foreign, there is a need to install stall street lights and signagescoupled with beautification development.

Table IF-4. Inventory of Ancillary Road Facilities, Year 2020

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
POBLACION MOTHER BARANGAY			
National Road			
Jose Lim Extension	Street Lights	1	FAIR
	Road Signage	1	FAIR
AnacletoBadoy St	Street Lights	6	FAIR
	Road Signage	7	FAIR

Provincial Road			
City Road			
Don Rufino Alonzo St Extension	Street Lights	1	FAIR
SK Pendatun Ext	Street Lights	7	FAIR
	Road Signage	2	FAIR
Dona Blanco St	Street Lights	8	FAIR
	Road Humps	1	FAIR
Buliao 1	Street Lights	7	FAIR
	Road Humps	3	FAIR
Buliao 2	Street Lights	2	FAIR
	Road Humps	3	FAIR
Buliao 3	Street Lights	1	FAIR
	Road Humps	4	FAIR
Purok Kabuntalan	Street Lights	3	FAIR
	Road Humps	2	FAIR
Lumayon 1	Road Humps	2	FAIR
Lumayon 4	Street Lights	1	FAIR
	Road Signage	1	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Road Humps	2	FAIR
Purok Mantok	Street Lights	1	FAIR
	Road Signage	2	FAIR
	Road Humps	1	FAIR
Road beside J. Marquez	Street Lights	3	FAIR
	Road Signage	1	FAIR
	Road Humps	1	FAIR
Consolacion Martinez St	Street Lights	6	FAIR
	Road Signage	7	FAIR
Road 1	Street Lights	1	FAIR
	Road Signage	2	FAIR
POBLACION 1			
National Road			
Sinsuat Avenue	Street Lights	9	FAIR
	Road Signage	25	FAIR

	Pedestrian Cross	2	FAIR
AnacletoBadoy St	Street Lights	5	FAIR
	Road Signage	8	FAIR
	Road Humps	3	POOR
	Pedestrian Cross	3	FAIR
Provincial Road			
City Road			
Brgy Road			
RS Buan	Street Lights	9	FAIR
	Road Signage	3	FAIR
	Road Humps	8	POOR
Purok Lushin Khan St	Street Lights	3	FAIR
	Road Signage	7	POOR
	Road Humps	5	POOR
Turion 1	Street Lights	5	FAIR
	Road Signage	4	FAIR
	Road Humps	1	POOR
Datu Kaka St	Street Lights	7	FAIR
	Road Humps	2	POOR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
POBLACION 2			
National Road			
AnacletoBadoy St	Street Lights	3	FAIR
	Road Signage	2	POOR
Provincial Road			
City Road			
SK Pendatun Ave Extension	Street Lights	7	FAIR
	Road Signage	2	FAIR
Dona Pilar St	Street Lights	5	FAIR
	Road Signage	2	FAIR
Dona Teresa St	Street Lights	8	FAIR
	Road Signage	2	POOR

Brgy Road			
Tiburcio Chavez St	Street Lights	4	FAIR
	Road Signage	2	FAIR
Aurora Soriano St	Street Lights	3	FAIR
	Road Signage	2	FAIR
	Road Humps	2	POOR
Diocesan St	Street Lights	6	FAIR
	Road Signage	2	POOR
Atienza St	Street Lights	7	FAIR
	Road Humps	3	POOR
Charles Quintana St	Street Lights	4	FAIR
MacacuaWatamama St	-	-	-
HamsaRampak St	-	-	-
SuraikMacmod St	Street Lights	5	FAIR
Gunsang St	Street Lights	1	FAIR
POBLACION 3			
National Road			
AnacletoBadoy St	Street Lights	4	FAIR
	Road Signage	1	POOR
Provincial Road			
City Road			
Don Abelardo St	Street Lights	6	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Road Signage	1	FAIR
	Road Humps	2	POOR
Don Cesar St	Street Lights	6	FAIR
	Road Signage	5	FAIR
	Road Humps	2	POOR
Dona Teresa St	Street Lights	8	FAIR
Brgy Road			
Estrella St	Street Lights	10	FAIR
	Road Signage	2	FAIR

POBLACION 4			
National Road			
Notre Dame Avenue Extension	Street Lights	10	FAIR
	Road Signage	8	FAIR
Provincial Road			
City Road			
Faustino Tamse Road	Street Lights	8	FAIR
	Road Signage	8	FAIR
	Road Humps	1	FAIR
SK Pendatun Ave Extension	Street Lights	8	FAIR
	Road Signage	4	FAIR
Dona Blanco St	Street Lights	2	FAIR
	Road Signage	4	FAIR
	Road Humps	1	FAIR
Don Abelardo St	Street Lights	9	FAIR
	Road Signage	7	FAIR
	Road Humps	1	POOR
Don Cesar St	Street Lights	7	FAIR
	Road Signage	4	FAIR
Dona Teresa St	Street Lights	5	FAIR
	Road Signage	4	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Dona Pilar St	Street Lights	3	FAIR
	Road Signage	2	POOR
Brgy Road			
Don Jesus Vilo St	Street Lights	3	FAIR
	Road Signage	1	POOR
Road beside VES	Street Lights	1	FAIR
	Road Signage	1	FAIR
Consolacion Martinez St	-	-	-
Fatima St	Street Lights	8	FAIR
	Road Signage	4	FAIR

	Road Humps	2	FAIR
San Isidro St	Street Lights	2	FAIR
	Road Signage	1	FAIR
Don Antonio Marquez St	Street Lights	3	FAIR
	Road Signage	2	FAIR
Don Tomas Martinez St	Street Lights	4	FAIR
	Road Signage	2	FAIR
POBLACION 5			
National Road			
Sinsuat Avenue	Street Lights	21	FAIR
	Road Signage	19	FAIR
	Pedestrian Cross	5	FAIR
Quezon Avenue	Street Lights	30	FAIR
	Road Signage	27	FAIR
	Pedestrian Cross	10	FAIR
Jose Lim Sr Avenue	Street Lights	22	FAIR
	Road Signage	7	FAIR
Provincial Road			
City Road			
Rajah Tabunaway Boulevard	Street Lights	6	FAIR
	Road Signage	1	FAIR
	Road Humps	2	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
SK Pendatun Ave	Street Lights	17	FAIR
	Road Signage	23	FAIR
Don Rufino Alonzo St	Street Lights	13	FAIR
	Road Signage	15	FAIR
JapalGuiani Sr St	Street Lights	15	FAIR
	Road Signage	22	FAIR
Brgy Road			
Maguindanao Creek	Street Lights	4	FAIR
	Road Humps	1	FAIR
POBLACION 6			

National Road			
Jose Lim Sr Avenue	Street Lights	12	FAIR
	Road Signage	10	FAIR
Provincial Road			
City Road			
TV Juliano Avenue	Street Lights	8	FAIR
	Road Signage	9	FAIR
Mabini St	Street Lights	16	FAIR
	Road Signage	6	FAIR
Don Rufino Alonzo St	Street Lights	8	FAIR
	Road Signage	12	FAIR
Rajah Tabunaway Boulevard	Street Lights	3	FAIR
	Road Signage	8	POOR
	Road Humps	5	POOR
SK Pendatun Avenue	Street Lights	8	FAIR
	Road Signage	11	FAIR
Brgy Road			
DoroteoTabunaway Road	Street Lights	11	FAIR
	Road Signage	13	FAIR
Don Roman Vilo St	Street Lights	8	FAIR
	Road Signage	8	FAIR
Abdullah Piang St	Street Lights	1	FAIR
	Road Humps	1	FAIR
Abdullah Siang St	Street Lights	2	FAIR
	Road Signage	1	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Bonifacio St	Street Lights	13	FAIR
	Road Signage	11	FAIR
	Road Humps	1	POOR
Aguinaldo St	Street Lights	2	FAIR
Palma St	Street Lights	6	FAIR
Salem Bages St	Street Lights	6	FAIR
POBLACION 7			
National Road			

Provincial Road			
City Road			
Brgy Road			
Main Road Pob 7	Street Lights	17	
	Road Signage	2	
	Road Humps	12	
Road to Datu Siang Elem	Street Lights	2	
	Road Signage	1	
	Road Humps	1	
POBLACION 8			
National Road			
Provincial Road			
City Road			
Diversion Road	-	-	-
Brgy Road			
Saturn Street Extension	-	-	-
Road 1	-	-	-
Road 2	-	-	-
POBLACION 9			
National Road			
Provincial Road			
City Road			
Diversion Road	-	-	-
Rosales Street Extension	-	-	-
Brgy Road			

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Biniruan Road	-	-	-
Biniruan Road Extension	-	-	-
BAGUA MOTHER BARANGAY			
National Road			
Jose Lim Extension	Street Lights	13	FAIR

	Road Signage	11	FAIR
Provincial Road			
City Road			
SK Pendatun Ave Extension	Street Lights	3	FAIR
Brgy Road			
Datumanong St	Street Lights	20	FAIR
	Road Signage	8	FAIR
Del Pilar St	Street Lights	12	FAIR
	Road Signage	2	FAIR
Palmera St	Street Lights	1	FAIR
	Road Humps	5	FAIR
Kima Road	Street Lights	7	FAIR
	Road Signage	2	FAIR
	Road Humps	8	FAIR
Zailon Road	Street Lights	3	FAIR
	Road Signage	1	FAIR
	Road Humps	1	FAIR
Road 1	Street Lights	4	FAIR
BAGUA 1			
National Road			
Jose Lim Extension	Street Lights	7	FAIR
	Road Signage	5	FAIR
Provincial Road			
City Road			
Datu Usman Mampen Road	Street Lights	2	FAIR
Brgy Road			

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
LugayLugay Street	Street Lights	3	FAIR
	Road Signage	11	FAIR
Purok Matilak	Street Lights	9	FAIR
	Road Signage	3	FAIR
	Road Humps	6	FAIR
Sitio Pagalungan	Street Lights	9	FAIR

	Road Signage	2	FAIR
Purok Tabanga	Street Lights	7	FAIR
	Road Signage	1	FAIR
Purok Dangkalangan	Street Lights	7	FAIR
	Road Humps	1	FAIR
BAGUA 2			
National Road			
Provincial Road			
City Road			
Ramon Rabago St	Street Lights	7	FAIR
	Road Signage	2	FAIR
Pastor Kimpo St	Street Lights	6	FAIR
Datu Usman Mampen Road	Street Lights	12	FAIR
Brgy Road			
Fatima St	Street Lights	4	FAIR
Abubakar St	Street Lights	9	FAIR
1st St Tanghal Subdivision	Street Lights	4	FAIR
2nd St Tanghal Subdivision	Street Lights	3	FAIR
3rd St Tanghal Subdivision	Street Lights	4	FAIR
4th St Tanghal Subdivision	Street Lights	4	FAIR
Purok Masikap St	Street Lights	3	FAIR
Mangungan St	Street Lights	22	FAIR
	Road Signage	7	FAIR
	Road Humps	8	FAIR
	Waiting Sheds	1	FAIR
Housing 2nd Road	Street Lights	7	FAIR
Housing 3rd Road	Street Lights	5	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Shariff Maraguia St	Street Lights	5	FAIR
Sultan Kawasa St	Street Lights	5	FAIR
Amay Sanso St	Street Lights	6	FAIR
Shariff Awliya St	Street Lights	4	FAIR
Putri Tunina St	Street Lights	7	FAIR
Tabunaway Road	Street Lights	4	FAIR

Mamalo Road	Street Lights	5	FAIR
Purok Kambal St	Street Lights	4	FAIR
Itihad	Street Lights	6	FAIR
Edmark Street	Street Lights	4	FAIR
BAGUA 3			
National Road			
Provincial Road			
City Road			
TV Juliano Avenue	Street Lights	11	FAIR
	Road Signage	3	FAIR
Tulingan St	Street Lights	5	FAIR
	Road Signage	3	FAIR
Mabini St	Street Lights	16	FAIR
	Road Signage	6	FAIR
Brgy Road			
Interior Mabini Street	Street Lights	14	FAIR
Bajunaid St	Street Lights	6	FAIR
ROSARY HEIGHTS MOTHER			
National Road			
Provincial Road			
City Road			
TV Juliano Avenue			
Soledad Sousa Circuit Road	Street Lights	18	FAIR
	Road Signage	6	FAIR
	Road Humps	5	FAIR
Pascual Street	Street Lights	10	FAIR
	Road Signage	3	FAIR
Macapagal Street	Street Lights	17	FAIR
	Road Signage	7	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Road Humps	2	FAIR
Brgy Road			
Roales Subdivision Road	Street Lights	2	FAIR
Purok Mahigugmaon Road	-	-	-
Rosales Street	Street Lights	14	FAIR

	Road Signage	3	FAIR
Jose Banas Street	Street Lights	6	FAIR
	Road Signage	2	FAIR
Purok Balikatan Road	Street Lights	7	FAIR
	Road Signage	2	FAIR
Rosales Extension	Street Lights	2	FAIR
Santa Barbara Street	Street Lights	10	FAIR
	Road Signage	4	FAIR
	Road Humps	1	FAIR
Tandang Sora Street	Street Lights	4	FAIR
	Road Signage	1	FAIR
Maunawain Street	Street Lights	3	FAIR
	Road Signage	1	FAIR
	Road Humps	1	FAIR
Kalye Uno	Street Lights	8	FAIR
	Road Signage	1	FAIR
	Road Humps	1	POOR
Kalye Dos	Street Lights	3	FAIR
	Road Signage	2	FAIR
Kalye Tres	Street Lights	4	FAIR
	Road Signage	2	FAIR
KalyeKwatro	Street Lights	8	FAIR
	Road Signage	1	FAIR
KalyeSingko	Street Lights	5	FAIR
Kalye Sais	Street Lights	4	FAIR
Sibuyan B	Street Lights	11	FAIR
	Road Signage	1	FAIR
Sta Maria Street	Street Lights	12	FAIR
	Road Signage	1	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Road 3	Street Lights	6	FAIR
Road 4	Street Lights	3	FAIR
Road 5	Street Lights	4	FAIR
Road 6	Street Lights	9	FAIR

	Road Signage	1	FAIR
Road 7	Street Lights	3	FAIR
Road 8	-	-	-
Road 11	Street Lights	3	FAIR
Road 12	-	-	-
Road 13	-	-	-
ROSARY HEIGHTS 1			
National Road			
Provincial Road			
City Road			
Veterans Avenue	Street Lights	7	FAIR
	Road Signage	11	POOR
	Road Humps	3	FAIR
Brgy Road			
Road to CCPO	Road Humps	1	FAIR
Road to Coord. Com. Office	Street Lights	3	FAIR
	Road Signage	1	FAIR
Hero's Road	Street Lights	15	FAIR
	Road Signage	16	POOR
Lumibao St	Street Lights	4	FAIR
	Road Signage	5	FAIR
San Juan Extension	Street Lights	4	FAIR
Road to CMO	Street Lights	3	FAIR
ROSARY HEIGHTS 2			
National Road			
Notre Dame Avenue Extension	Street Lights	8	FAIR
	Road Signage	9	FAIR
Notre Dame Avenue	Street Lights	7	FAIR
	Road Signage	5	FAIR
Provincial Road			
City Road			

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Brgy Road			
Clemente Alino St	Street Lights	8	FAIR
	Road Signage	8	FAIR

	Road Humps	1	FAIR
Angel Bacani St	Street Lights	12	FAIR
	Road Signage	6	FAIR
	Road Humps	1	FAIR
Moreno Subdivision Road	Street Lights	4	FAIR
	Road Humps	1	FAIR
Dapdap Road	Street Lights	9	FAIR
	Road Humps	2	FAIR
Road to NDU Backgate	Street Lights	11	FAIR
	Road Signage	1	FAIR
Road 1	Street Lights	1	FAIR
	Road Signage	1	FAIR
	Road Humps	1	FAIR
Road 2	-	-	-
ROSARY HEIGHTS 3			
National Road			
Notre Dame Avenue	Street Lights	9	FAIR
	Road Signage	28	FAIR
	Pedestrian Cross	1	FAIR
De Mazenod Avenue	Street Lights	14	FAIR
	Road Signage	6	FAIR
	Pedestrian Cross	1	FAIR
Provincial Road			
City Road			
Sesame Street	Street Lights	11	FAIR
	Road Signage	2	FAIR
	Road Humps	2	POOR
Brgy Road			
DatuAlamansa Street	Street Lights	5	FAIR
	Road Signage	3	FAIR
	Road Humps	2	POOR
Datu Liwa Candao Street	Street Lights	9	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Road Signage	3	FAIR
	Road Humps	2	POOR

Purok Kalimudan Street	Street Lights	4	FAIR
	Road Humps	1	FAIR
Purok LapuLapu Street	Street Lights	3	FAIR
Sultan Maetem Avenue	Street Lights	10	FAIR
	Road Signage	4	FAIR
	Road Humps	1	POOR
Purok Talipapa Street	Street Lights	3	FAIR
	Road Humps	3	FAIR
Purok Ilangllang Street	Street Lights	3	FAIR
	Road Signage	1	FAIR
Lauban Street	Street Lights	3	FAIR
Purok Solaiman Street	Street Lights	2	FAIR
	Road Humps	1	FAIR
1st Street Urban	Street Lights	2	FAIR
	Road Humps	3	FAIR
2nd Street Urban	Street Lights	1	FAIR
	Road Humps	2	FAIR
3rd Street Urban	Street Lights	2	FAIR
4th Street Urban	Street Lights	2	FAIR
	Road Signage	1	FAIR
	Road Humps	3	FAIR
5th Street Urban	-	-	-
Road 1	Street Lights	2	FAIR
	Road Humps	1	FAIR
Road 2	Street Lights	2	FAIR
	Road Humps	4	FAIR
ROSARY HEIGHTS 4			
National Road			
De Mazenod Avenue	Street Lights	22	FAIR
	Road Signage	17	FAIR
	Pedestrian Cross	4	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Provincial Road			
City Road			

Brgy Road			
General Luna Street	Street Lights	13	FAIR
	Road Signage	3	FAIR
Delfin Reynaldo Street	Street Lights	3	FAIR
DodoyJuliano Street	Street Lights	3	FAIR
Maria Clara Street	Street Lights	6	FAIR
	Road Humps	1	FAIR
Martinez Street	Street Lights	9	FAIR
Purok Acacia 1	Street Lights	2	FAIR
	Road Signage	1	FAIR
Purok Acacia 2	Street Lights	5	FAIR
	Road Signage	1	FAIR
Ante Compound	Street Lights	4	FAIR
Arong Road	Street Lights	4	FAIR
Sesame Street	Street Lights	11	FAIR
	Road Signage	3	FAIR
Enilo Compound	Street Lights	1	FAIR
ROSARY HEIGHTS 5			
National Road			
Provincial Road			
City Road			
Don E Sero Street	Street Lights	12	FAIR
	Road Signage	12	FAIR
Brgy Road			
PinsinSero Street	Street Lights	6	FAIR
	Road Signage	3	FAIR
1st Street Don E Sero	Street Lights	10	FAIR
	Road Signage	1	FAIR
	Road Humps	2	POOR
2nd Street Don E Sero	Street Lights	8	FAIR
	Road Signage	3	FAIR
3rd Street Don E Sero	Street Lights	12	FAIR
	Road Signage	2	FAIR
4th Street Don E Sero	Street Lights	7	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD	NUMBER	CONDITION

	FACILITIES		
	Road Signage	1	FAIR
	Road Humps	1	POOR
5th Street Don E Sero	Street Lights	8	FAIR
	Road Signage	1	FAIR
6th Street Don E Sero	Street Lights	9	FAIR
	Road Signage	3	FAIR
7th Street Don E Sero	Street Lights	4	FAIR
	Road Signage	3	FAIR
	Road Humps	1	FAIR
8th Street Don E Sero	Street Lights	4	FAIR
	Road Signage	3	FAIR
9th Street Don E Sero	Street Lights	6	FAIR
	Road Signage	1	FAIR
	Road Humps	1	FAIR
10th Street Don E Sero	Street Lights	4	FAIR
	Road Signage	1	FAIR
11th Street Don E Sero	Street Lights	5	FAIR
Pinhoy Street	Street Lights	9	FAIR
	Road Signage	8	FAIR
Road 3	Street Lights	1	FAIR
Road 4	Street Lights	3	FAIR
Road 5	Street Lights	3	FAIR
ROSARY HEIGHTS 6			
National Road			
Provincial Road			
City Road			
Rosales Street	Street Lights	19	FAIR
	Road Signage	2	FAIR
Santos Street	Street Lights	22	FAIR
	Road Signage	5	FAIR
	Pedestrian Crossing	1	FAIR
Oblate Drive	Street Lights	18	FAIR
Ilang-ilang Street	Street Lights	21	FAIR
	Road Signage	2	FAIR

ROAD NAME PER ROAD	ANCILLARY	NUMBER	CONDITION

CLASSIFICATION	ROAD FACILITIES		
Jasmin Street	Street Lights	16	FAIR
	Road Signage	1	FAIR
Rosal Street	Street Lights	22	FAIR
	Road Signage	2	FAIR
Brgy Road			
Ortouste Street	Street Lights	6	FAIR
	Road Signage	1	FAIR
Sulayla Street	Street Lights	5	FAIR
Upper Purok Pinen	Street Lights	3	FAIR
Lower Purok Pinen	Street Lights	3	FAIR
Krislamville	Street Lights	5	FAIR
	Road Signage	1	FAIR
	Road Humps	1	FAIR
Road 1	Street Lights	4	FAIR
Road 2	-	-	-
Road 3	-	-	-
Road 4	Street Lights	10	FAIR
Road 5	-	-	-
Road 6	-	-	-
Road 7	-	-	-
Road 8	-	-	-
Road 9	-	-	-
Road 10	-	-	-
Road 11	-	-	-
Road 12	-	-	-
Road 13	Street Lights	4	FAIR
Road 14	-	-	-
ROSARY HEIGHTS 7			
National Road			
Provincial Road			
City Road			
Gonzalo Javier Street	Street Lights	23	FAIR
	Road Signage	22	FAIR
	Road Humps	1	POOR
Dona Avelina Gutierrez Street	Street Lights	5	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Road Signage	5	FAIR
Brgy Road			
Albert Einstein Road	Street Lights	6	FAIR
	Road Signage	4	FAIR
R. Garcia Street	Street Lights	12	FAIR
Talitay Street	Street Lights	6	FAIR
	Road Humps	1	POOR
Santan Street	Street Lights	4	FAIR
	Road Signage	2	FAIR
Bouganvilla Street	Street Lights	3	FAIR
	Road Signage	11	FAIR
Ugalingan Street	Street Lights	1	FAIR
	Road Signage	1	FAIR
	Road Humps	1	FAIR
Mercury Street	Street Lights	5	FAIR
Road 1	Street Lights	11	FAIR
	Road Signage	1	FAIR
	Road Humps	1	POOR
Road 2	Street Lights	3	FAIR
Road 3	Street Lights	1	FAIR
	Road Humps	1	FAIR
Road 4	Street Lights	4	FAIR
Road 5	Street Lights	5	FAIR
Road 6	Street Lights	2	FAIR
Road 7	Street Lights	5	FAIR
	Road Signage	2	FAIR
	Pedestrian Cross	1	FAIR
Road 8	Street Lights	4	FAIR
Road 9	Street Lights	2	FAIR
ROSARY HEIGHTS 9			
National Road			
Provincial Road			
City Road			
Governor Gutierez Avenue	Street Lights	25	FAIR
	Road Signage	13	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Pedestrian Cross	1	FAIR
Bishop Gerard Mongeau Avenue	Street Lights	11	FAIR
	Road Signage	7	FAIR
Circumferencial Road	Street Lights	13	FAIR
	Road Signage	9	FAIR
	Road Humps	1	POOR
	Road Blocks	2	FAIR
Brgy Road			
1st Road Urban Poor	Street Lights	17	FAIR
	Road Humps	2	FAIR
2nd Road Urban Poor	Street Lights	12	FAIR
St. Benedict Road	Street Lights	2	FAIR
	Road Signage	6	FAIR
	Road Humps	1	FAIR
Jupiter Street	Street Lights	5	FAIR
	Road Signage	2	FAIR
Road 1	-	-	-
Road 2	Street Lights	1	FAIR
Road 3	Street Lights	1	FAIR
Road 4	-	-	-
Road 5	Road Humps	1	FAIR
Road 6	-	-	-
Road 7	-	-	-
Road 8	-	-	-
Road 9	Street Lights	9	FAIR
Road 10	Street Lights	3	FAIR
Road 11	Street Lights	2	FAIR
Road 12	Road Signage	2	FAIR
Road 13	Street Lights	4	FAIR
	Road Signage	1	FAIR
Road 14	Street Lights	6	FAIR
	Road Signage	3	FAIR
	Road Humps	1	FAIR
Road 15	Street Lights	7	FAIR

	Road Signage	3	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Road 16	-	-	-
Road 17	Road Signage	2	FAIR
Road 18	Street Lights	1	FAIR
ROSARY HEIGHTS 10			
National Road			
Provicial Road			
City Road			
M. Jarabelo Street	Street Lights	10	FAIR
	Road Signage	1	FAIR
LR Sebastian Road	Street Lights	11	FAIR
	Road Signage	3	FAIR
San Isidro Avenue	Street Lights	16	FAIR
	Road Signage	4	FAIR
Brgy Road			
Amado Papa Street	Street Lights	13	FAIR
	Road Signage	1	FAIR
	Road Humps	4	FAIR
Concepcion Street	Street Lights	3	FAIR
	Road Signage	1	FAIR
Catalina Austria Street	Street Lights	14	FAIR
	Road Signage	3	FAIR
	Road Humps	3	FAIR
Gavina Gonzales Street	Street Lights	3	FAIR
Pansacala Street	Street Lights	12	FAIR
	Road Signage	2	FAIR
Purok Bitara	Street Lights	3	FAIR
	Road Humps	3	FAIR
Soledad Street	Street Lights	2	FAIR
	Road Signage	1	FAIR
Delcano Street	Street Lights	7	FAIR
	Road Signage	5	FAIR
Road 1	Street Lights	7	FAIR
	Road Signage	1	FAIR

Road 2	Street Lights	9	FAIR
Road 3	Street Lights	5	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Road 4	Street Lights	1	FAIR
Road 5	Street Lights	4	FAIR
Road 6	Street Lights	4	FAIR
	Road Humps	1	FAIR
Road 7	Street Lights	3	FAIR
Road 8	Street Lights	4	FAIR
Road 9	Street Lights	3	FAIR
Road 10	Street Lights	7	FAIR
Road 11	Street Lights	4	FAIR
Road 12	Street Lights	3	FAIR
Road 13	Street Lights	2	FAIR
Road 14	Street Lights	1	FAIR
Road 15	Street Lights	2	FAIR
Road 16	-	-	-
Road 17	Street Lights	2	FAIR
ROSARY HEIGHTS 11			
National Road			
Provincial Road			
City Road			
DatuUdtogMatalam Road	Street Lights	19	FAIR
	Road Signage	1	FAIR
LR Sebastian Road	Street Lights	30	FAIR
	Road Signage	6	FAIR
	Road Humps	1	FAIR
Andres Alonzo Street	Street Lights	10	FAIR
	Road Signage	5	FAIR
San Isidro Avenue	Street Lights	1	FAIR
	Road Signage	1	FAIR
RufoManara Street	Street Lights	17	FAIR
	Road Signage	3	FAIR
Federville Subdivision Main Road	Street Lights	18	FAIR

	Road Signage	7	FAIR
	Road Humps	2	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Brgy Road			
San Antonio 1st Road	Street Lights	4	FAIR
San Antonio 2nd Road	Street Lights	3	FAIR
San Antonio 3rd Road	Street Lights	3	FAIR
San Antonio 4th Road	-	-	-
San Pablo Village Main Road	Street Lights	4	FAIR
San Pablo Phase 3 Road 1	-	-	-
San Pablo Phase 3 Road 2	-	-	-
San Pablo Phase 3 Road 3	-	-	-
San Pablo Phase 2 Road 1	-	-	-
San Pablo Phase 2 Road 2	Street Lights	2	FAIR
San Pablo Phase 2 Road 3	-	-	-
San Pablo Phase 2 Road 4	Street Lights	1	FAIR
San Pablo Phase 2 Road 5	Street Lights	2	FAIR
San Pablo Phase 2 Road 6	Street Lights	2	FAIR
Acacia Street	Street Lights	9	FAIR
	Road Signage	1	FAIR
Urban Poor 1st Street	Street Lights	4	FAIR
Urban Poor 2nd Street	Street Lights	3	FAIR
Urban Poor 3rd Street	-	-	
Urban Poor 4th Street	Street Lights	1	FAIR
Apitong Street	Street Lights	5	FAIR
	Road Signage	1	FAIR
Narra Street	Street Lights	6	FAIR
Sunga Street	Street Lights	2	FAIR
Molave Street	Street Lights	2	FAIR
	Road Signage	1	FAIR
Mentors Subdivision 1st Street	Street Lights	3	FAIR
Mentors Subdivision 2nd Street	Street Lights	5	FAIR
Mentors Subdivision 3rd Street	-	-	-

Mentors Subdivision 4th Street	-	-	-
Mentors Subdivision 5th Street	-	-	-
Mahogany Street	Street Lights	10	FAIR
	Road Signage	2	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Aguila Street	Street Lights	5	FAIR
Lawin Street	Street Lights	5	FAIR
Falcon Street	Street Lights	4	FAIR
Kalaw Street	Street Lights	5	FAIR
Loro Street	Street Lights	3	FAIR
Maya Street	Street Lights	3	FAIR
Pelican Street	Street Lights	5	FAIR
Penafrancia 1st Road	Street Lights	10	FAIR
	Road Humps	3	FAIR
Penafrancia 2nd Road	Street Lights	3	FAIR
Penafrancia 3rd Road	Street Lights	7	FAIR
	Road Signage	3	FAIR
Penafrancia 4th Road	Street Lights	4	FAIR
	Road Signage	1	FAIR
St. Gabriel Street	Street Lights	9	FAIR
	Road Signage	1	FAIR
Purveyors 1st Road	Street Lights	2	FAIR
	Road Humps	2	FAIR
Purveyors 2nd Road	Street Lights	2	FAIR
	Road Humps	1	FAIR
Purveyors 3rd Road	Street Lights	2	FAIR
	Road Humps	1	FAIR
Purveyors 4th Road	Street Lights	3	FAIR
	Road Humps	3	FAIR
Purok Mamarinta Street	Street Lights	4	FAIR
	Road Signage	1	FAIR
Road 1	Street Lights	1	FAIR
Road 2	-	-	-
Road 3	-	-	-

Road 4	Street Lights	4	FAIR
Road 5	-	-	-
Road 6	Street Lights	5	FAIR
	Road Signage	1	FAIR
Road 7	Street Lights	6	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
Road 8	Street Lights	5	FAIR
Road 9	Street Lights	2	FAIR
	Road Humps	1	FAIR
Road 10	-	-	-
Road 11	-	-	-
Road 12	-	-	-
Road 13	-	-	-
Road 14	-	-	-
Road 15	-	-	-
Road 16	-	-	-
Road 17	Street Lights	2	FAIR
ROSARY HEIGHTS 12			
National Road			
Provincial Road			
City Road			
Brgy Road			
Fernandez Subdivision Road	Street Lights	3	FAIR
Quiambao Subdivision Road	Street Lights	7	FAIR
	Road Humps	1	POOR
1st Street AR Pacheco	Street Lights	6	FAIR
	Road Humps	1	POOR
2nd Street AR Pacheco	Street Lights	3	FAIR
3rd Street AR Pacheco	Street Lights	3	FAIR
	Road Signage	2	FAIR
4th Street AR Pacheco	Street Lights	3	FAIR
5th Street AR Pacheco	Street Lights	6	FAIR
Teofilo Rojas Street	Street Lights	6	FAIR
	Road Signage	2	FAIR

	Road Humps	1	FAIR
Rosario Rojas Street	Street Lights	4	FAIR
Road 1	Street Lights	4	FAIR
Road 2	Street Lights	2	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
ROSARY HEIGHTS 13			
National Road			
Provincial Road			
City Road			
TV Juliano Avenue	Street Lights	11	FAIR
	Road Signage	4	FAIR
Sousa Avenue	Street Lights	17	FAIR
	Road Signage	9	FAIR
Ramon Rabago Street	Street Lights	24	FAIR
	Road Signage	10	FAIR
Brgy Road			
Soledad Sousa Street	Street Lights	15	FAIR
	Road Signage	9	FAIR
San Juan Street	Street Lights	10	FAIR
	Road Signage	9	FAIR
	Waiting Shed	1	FAIR
San Jose Street	Street Lights	5	FAIR
	Road Signage	2	FAIR
San Gregorio Street	Street Lights	20	FAIR
	Road Signage	2	FAIR
San Isidro Street	Street Lights	3	FAIR
	Road Signage	1	FAIR
San Roque Street	Street Lights	3	FAIR
	Road Signage	1	FAIR
Pastor Kimpo Street	Street Lights	14	FAIR
	Road Signage	8	FAIR
	Road Humps	1	FAIR
San Pedro Street	Street Lights	6	FAIR
	Road Signage	1	FAIR

Felicitas Millan Street	Street Lights	7	FAIR
	Road Signage	1	FAIR
San Lorenzo Ruiz Street	Street Lights	1	FAIR
	Road Signage	1	FAIR
JP Garcia Street	Street Lights	3	FAIR
	Road Signage	1	FAIR
Rosales Street	Street Lights	2	FAIR

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
	Road Signage	6	FAIR
Sta Ana Street	Street Lights	3	FAIR
	Road Signage	2	FAIR
San Miguel Street	Street Lights	4	FAIR
	Road Signage	1	FAIR
	Road Humps	2	FAIR
Road 1	Street Lights	5	FAIR
Road 2	Street Lights	2	FAIR
	Road Signage	2	FAIR
Road 3	Street Lights	3	FAIR
TAMONTAKA MOTHER BARANGAY			
National Road			
Provincial Road			
City Road			
Tamontaka-Bubong Road	Street Lights	4	FAIR
	Road Signage	9	FAIR
	Road Blocks	4	FAIR
Tamontaka Old Road	Street Lights	8	FAIR
	Road Signage	1	FAIR
	Road Humps	4	FAIR
Concepcion Street	Street Lights	11	FAIR
	Road Signage	2	FAIR
	Road Humps	2	FAIR
San Juan Street	Street Lights	13	FAIR
	Road Signage	4	FAIR
	Road Humps	3	FAIR
Brgy Road			

Road 1	Street Lights	4	FAIR
Road 2	Street Lights	2	FAIR
	Road Signage	1	FAIR
Road 3	-	-	-
Road 4	-	-	-

ROAD NAME PER ROAD CLASSIFICATION	ANCILLARY ROAD FACILITIES	NUMBER	CONDITION
KALANGANAN 2			
National Road			
Provincial Road			
City Road			
Bubong Road	Street Lights	25	FAIR
	Road Signage	50	FAIR
	Road Humps	3	FAIR
	Road Blocks	2	FAIR
	Pedestrian Cross	5	FAIR
	Waiting Shed	3	FAIR
Brgy Road.			
Road to Seaport	-	-	-
Road to Timako Hill	Road Signage	43	FAIR
	Road Blocks	1	FAIR
Upper Bubong	Road Signage	8	FAIR
	Road Humps	8	FAIR
Road 1	Road Signage	5	FAIR
Road 2	Road Signage	2	FAIR
	Road Humps	4	FAIR
Road 3	-	-	-

Source: LGU/Engineering Office, DPWH

b. Public Land Transport Vehicles

To cater the needs of the citizen on movement of people, goods, and services to areas outside its jurisdiction, the city of Cotabato has provided its citizen with different terminals on land transportation. The city has tallied eight transportation terminals intended for bus, van, and public utility vehicles which were all functional up to date. The city has two major bus terminals at present. These are the Mindanao Star bus terminal bound to north (up to Davao City) and the Husky terminal bound to south (up to General Santos City). Both of these terminals contain enough facilities for passenger use including waiting areas, ticketing booth, and separate comfort rooms for male and female travelers. However, these terminals are at poor condition and needs improvement and maintenance. There are also five existing terminals intended for van bound for north and south cities and provinces all of which are containing facilities like comfort rooms and waiting areas to support operation.

The table IF-7 shows the different transportation terminals and their corresponding description. Owing to its location, these transportation terminals are assessed to be at medium susceptibility in terms of tsunami. The Husky terminal is assessed to be at medium risk to flood while the other terminals with low susceptibility to the same.

Table IF-7: Transportation Terminals by Location and Condition, Year 2020

Name of Terminal	Area Occupied (ha)	Barangay	Year Constructed	Physical Condition	Owner/ Operator	Type of Terminal	Terminal Facilities	Hazard Susceptibility (H/M/L)							
								Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Mindanao Star Bus	2	Poblacion 5	1980	poor		bus	passengers waiting area, ticketing booth and toilet	L					M		
Husky Terminal	0.0974	R.H. 10	1995	poor		bus	passengers waiting area, ticketing booth, Public Toilet: 1- Male; 1-Female; 1-PWD, 2- Storey Office Bldg, Driver's quarter, canteen, 8 units camera	M					M		
A2Z Van Terminal	0.12	Poblacion 5		poor		van	Passenger waiting area (benches) and separate comfort room for men and women	L					M		
Kutoco Terminal		Poblacion 5		poor		van	passenger waiting area (benches with backrests) and separate restrooms for male and female	L					M		
KGS SouthWest Terminal		Rosary Heights 9		poor		van		L					M		
AVA Terminal South Bound		Rosary Heights 9		Poor		van		L					M		
Bangsamoro Terminal and Transport Services		Rosary Heights 9		poor		van	benches with backrests for waiting passengers and separate restrooms for male and female	L					M		
Colido Transport Terminal		Poblacion 5				van and puv	separate restrooms for men and women	L					M		
Unregistered Van Terminal		Rosary Heights 10		poor		van	Alongside the road outside Husky Terminal	M					M		

Water Transport															
Kalanganan Port															
Poblacion 6 Port															
Poblacion 5 Port															
Poblacion MB Port															

Public transport is a system of transport intended for individual or group transport for use of the general public. These public transports are of designated scheduling and route. Cotabato City's public land transport is composed of tricycles for the downtown areas, PUJs for traversing the national roads, taxis, motorcycles, cars and trucks. Table IF-8 shows the data on the city's inventory on public transport.

Table IF-8: Inventory of Public Land Transportation Vehicles by Type and Service Routes, Year 2020

Type of Public Utility Vehicle	Total No.	Registered In City / Municipality				From Other City /Municipality	
		Route/Destination					
		Within Barangay	Barangay to Barangay	Barangay to City/ Municipal/Center	City/ Municipal/ Center	Total No.	Route/ Destination
Buses	*247*	*0*	*0*	*0*	*247*	*No Data*	*No Data*
SUVs	*511*	*0*	*0*	*0*	*511*	*No Data*	*No Data*
Cars	1348	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
PUJ's	3688	*0*	*0*	*3299*	*389*	*No Data*	*No Data*
Truck/Trailer	551	*0*	*0*	*0*	*551*	*No Data*	*No Data*
Tricycles/Motorcycles	3585	*0*	3585	*0*	*0*	*No Data*	*No Data*

Source: Land Transportation Franchising Regulatory Board

As for the record of the Land Transportation Franchising Regulatory Board, there are 152 buses from Cotabato City to Davao (and vice versa), 22 buses from Cotabato City to General Santos City via Surallah (and vice versa), 55 buses from Cotabato City to Makilala via Midsayap-Kabacan (and vice versa), and 18 from General Santos City to Cotabato City via Polloc, Tupi, Koronadal City, Tacurong City, and Isulan City (and vice versa).

For the SUVs, there are 33 vehicles going from Cotabato City to Tacurong via DatuPiang, Shariff Aguak, and Isulan, 6 vehicles from Cotabato City to Arakan Valley, 34 vehicles from Cotabato City to General Santos City via Tacurong City, 45 vehicles from Cotabato City to Kidapawan, 55 vehicles from Cotabato City to Koronadal, 44 vehicles from Cotabato City to Lebak, 131 vehicles from Cotabato City to Makilala, 33 vehicles from Cotabato City to Kalamansig, 98 vehicles from Cotabato City to Davao City, 35 vehicles from Cotabato City to Malabang, 12 vehicles from Cotabato City to Marawi, 62 vehicles from Cotabato City to Midsayap, and 32 vehicles from Cotabato City to Parang.

For the public utility jeepneys, there are a total of 5 PUJs from Cotabato City to Kabuntalan, 35 PUJs from Cotabato City to Kidapawan, 4 PUJs from Cotabato City to Pikit, 12 PUJs from Cotabato City to Sultan Gumander, 30 PUJs from Cotabato City to Tacurong City via DatuPiang, 22 PUJs from Cotabato City to Tapian, 8 PUJs from Cotabato City to Wao, 18 PUJs from Cotabato City to North Upi, 12 PUJs from Cotabato City to South Upi, 46 PUJs from Cotabato City to Tacurong City via Datu Odin Sinsuat, 151 PUJs from Cotabato City to Makilala via Midsayap and Kabacan, and 46 PUJs from Cotabato City to General Santos City via Kidapawan City and Tacurong City. There are also 551 registered trucks and trailers, 3,585 registered tricycles and motorcycles, and 1,348 cars with a total of 6,798 total registered public vehicles.
Source OCM TMU

c. Road Accidents

As shown below, majority of the national and city roads inside the City have narrow width and are difficult to expand due to some issues such as Road Right of Ways (RROW). In effect, traffic (people and vehicle) congestion arises on the busiest of roads especially during peak hours. This lends also to road accidents. For the past four (4) years, 100% of the road accidents were due to human error specifically careless and reckless driving. Majority of these accidents take place on the national roads. 46.296% happened on Sinsuat Avenue, 18.209% on Jose Lim Street, 9.722% on Don Rufino Alonzo Street, 9.413% on Gonzalo Javier Street and the remaining 16.310% road accidents are from different roads of the City. See Table IF-4 for the data on different road accidents of Cotabato City.

Table IF-4. Road Accidents by Location, Nature and Frequency for the Past 5 Years

Name of Road	Barangay	Nature	No. of Accidents					Total
			Year 1 (2015)	Year 2 (2016)	Year 3 (2017)	Year 4 (2018)	Year 5 (2019)	
Campo Muslim	Bagua MB	Human Error	1	1	3			5
	Kalanganan MB		1					1
Jose Lim Street	Poblacion MB	Human Error	2	4	3			9
Sinsuat Avenue	Rosary Heights MB	Human Error	17	25	15	4	1	62
Sinsuat Avenue	Tamontaka MB	Human Error	2	14	15	2	2	35
Lugay-Lugay Road	Bagua I	Human Error		1		1		2
TanghalSubd.	Bagua II	Human Error	1		2			3
Mabini Street	Bagua III	Human Error	2	4			1	7
	Kalanganan I							
Bubong Road	Kalanganan II	Human Error	1		1		1	3
Matampay Bridge	Poblacion I	Human Error	5	8	1			14
Quezon Avenue	Poblacion II	Human Error	3		4			7
De Mazenod Avenue	Poblacion III	Human Error	1	1				2
Don Ceacar	Poblacion IV	Human Error	3	9	4			16
Jose Lim Street	Poblacion V	Human Error	23	58	21	4	3	109

Don Rufino Alonzo St.	Poblacion VI	Human Error	17	38	7	1		63
Sinsuat Avenue	Poblacion VII	Human Error	1	1	1			3
	Poblacion VIII							
	Poblacion IX							
Sinsuat Avenue	Rosary Heights I	Human Error	8	11	12	2	1	34
Sinsuat Avenue	Rosary Heights II	Human Error	7	15	8		1	31
De Mazenod Avenue	Rosary Heights III	Human Error	2	6	4			12
Sinsuat Avenue	Rosary Heights IV	Human Error	2	9	8	2	1	22
De Mazenod Avenue	Rosary Heights V	Human Error		1	5			6
Sinsuat Avenue	Rosary Heights VI	Human Error	8	10	5	2		25
Gonzalo Javier Street	Rosary Heights VII	Human Error	15	33	6	6	1	61

Name of Road	**Barangay**	**Nature**	**No. of Accidents**					**Total**
			Year 1 (2015)	Year 2 (2016)	Year 3 (2017)	Year 4 (2018)	Year 5 (2019)	
Bishop Mongue Street	Rosary Heights VIII	Human Error		1	4			5
Sinsuat Avenue	Rosary Heights IX	Human Error	5	7	7	1		20
Sinsuat Avenue	Rosary Heights X	Human Error	17	27	18	1	5	68
TV Juliano Avenue	Rosary Heights XI	Human Error		3	2	2		7
Don Ramon Rabago St.	Rosary Heights XII	Human Error		1				1
Pastor Kimpo Street	Rosary Heights XIII	Human Error	1	6	6			13
Bubong Road	Tamontaka I	Human Error		1				1
Cynthia Guiani Village	Tamontaka II	Human Error					1	1
	Tamontaka III							
	Tamontaka IV							
	Tamontaka V							
All Location			**145**	**295**	**162**	**28**	**18**	**648**

Source of Data: TMU

III. **CURRENT & PROJECTED NEEDS**

Succeeding table III-1 and III-2 below shows the current development needs of Urban and Rural areas of the city in terms of road and its relationship to current land use and socio-economic activities. Based on the Philippine Statistics Authority the urban areas are Mother Bagua, Bagua 1, Bagua 2, Bagua 3, Kalanganan Mother, Kalanganan 1, Kalanganan 2, Kalanganan 3, Mother Poblacion, Poblacion 1, Poblacion 2, Poblacion 3, Poblacion 4, Poblacion 5, Poblacion 6, Poblacion 7, Poblacion 8, Poblacion 9, Rosary Heights Mother, Rosary Heights 1, Rosary Heights 2, Rosary Heights 3, Rosary Heights 4, Rosary Heights 5,

Rosary Heights 6, Rosary Heights 7, Rosary Heights 8, Rosary Heights 9, Rosary Heights 10, Rosary Heights 11, Rosary Heights 12, and Rosary Heights 13, Tamontaka Mother, Tamontaka 1, and Tamontaka 2 with the total number of 328,342 population. The DHSUD standard for road projection is road/population ratio or 2.4 km per 1000 population, thus, an existing urban road length of 157.63858 km would be 630.38222 km for the planning period.

Rural barangays are Tamontaka Mother, Tamontaka 3, Tamontaka 4, and Tamontaka 5 with a 7,564.555814 arable land area and an estimated existing rural road length of 36.57314 km. Per DHSUD standard of projection, 1.5 km per 100 hecatres road-area ratio or a projection of 76.8952 km of rural road requirements, as shown in the table below.

III.1 - Current Urban Road Requirements:

Urban Population	328,342
Standard Road/Population Ratio	2.4 km per 1000 population
Existing Urban Road Length	157.63858 km
Current Urban Road Requirement	**630.38222 km**

III.2 - Current Rural Road Requirements:

Arable land Area	7,564.555814 hectares
Existing rural road length	36.57314 km
Standard road-area ratio	1.5 km per 100 ha
Current Rural Road Requirement	**76.8952 km**

Table III.3 and III.4 shows the future development needs of the transportation sub-sector of both urban and rural road requirements in the city in terms of road and its relationship to current land use.. The projected urban road requirement shows the total number of populations for past two years 2021 and 2022, the current population of CY 2023. It also display the projected population for the next seven years 2024, 2025, 2026, 2027, 2028, 2029, and 2030.

The projected rural road requirements expose the total area of 8,620.824 hectares intended for agriculture, a standard road-area ratio of 1.5 km per 100 hectares, an existing rural length of 36.57314 km, additional current rural road requirements of 76.8952 km, and 15.84402 km projected rural road requirements. Those projections help to determine where roads are or shall be needed depends foremost on the projects'economic viability accompanied by social, technological and physical aspects.

III.3 –Projected Urban Road Requirements:

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Population	**325,987**	**332,050**	**338,226**	**344,517**	**350,839**	**357,452**	**364,101**	**370,873**	**377,772**	**384,798**
Projected Urban	**(5.652 km)**	**8.8992 km**	**23.7216 km**	**38.82 km**	**53.064 km**	**69.864 km**	**85.8216 km**	**102.0744 km**	**118.632 km**	**135.4944 km**

Road Requirement										

III. 4 – Projected Rural Road Requirements:

Total Area intended for Agriculture	8,620.824 hectares
Standard road-area ratio	1.5 km per 100 ha
Existing Rural Length	36.57314 km
Additional Current Rural Road Requirement	76.8952 km
Projected Rural Road Requirement	**15.84402 km**

Table III.5: below shows the prevailing situation/ condition of transportation services such as roads and bridges as well as its ancillary facilities such such as drainage and sewerage in the city. If the identified condition is not addressing the soonest time, same may result to adverse implication as shown below. Possible interventions is also suggested to mitigate if not to eradicate the perceived effects.

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Table III.5: Transportation Analysis Matrix

Technical Findings/ Observations	Implications (Effects)	Recommended Interventions
Insufficient road circulation, lack of road continuity, and some existing roads needs rehabilitation or overburden due to usage and exposure to adverse environmental conditions such as flooding, high temperature, and heavy moving loads (e.g. trucks passing through)	Heavy traffic, damage to structure or road accident. Surface deformation, cracks, potholes and dilapidation.	To formulate a Transport Development Plan taking into comnsideration road hierarchy and formuation of Road Network Development Plan Strengthen the existing roads (*that includes the rehabilitation of roads in "bad conditions", reconstruction of dilapidated roads, upgrading of road surface from earth/gravel to concrete)* Completion of the Cotabato City West Circumferential Road.

Poor state of transport ancillary facilities	Leading cause of road accidents	Installation of solar powered street lights, provision of other ancillary road facilities (e.g., reflectorized pedestrian crossings, PUV stops, etc.), and rehabilitation/replacement of dilapidated ancillary facilities
Outdated routes of public transport vehicles	Worsening traffic congestion especially during peak hours leading to increased travel time due to absence of loop public transport routes Air pollution Unserve areas due to absence of public transport resulting to proliferation of informal and unregulated transport service	Formulation of Transport and Traffic Plan showing a loop route for public transport Opening of roads to provide alternate routes for vehicles
Increasing number of vehicles plying the city roads	Overburden roads due to exceeded carrying capacity resuting to damage road surface.	Opening of alternate traffic routes Establishment of modern traffic management systems (traffic lights)
Clogged drainage facilities	Flooding, unpassable roads during heavy rains Interrrupted storm water flow	Formulation of a Comprehensive Drainage Masterplan and construction of flood control drainage systems on all roads and rehabilitation of damaged drainages.
	Water-borne diseases	Community participation in drainage maintenance activities

d. Transport Related Projects

In its desire to provide service in the form of land use and circulation, the city has identified transport related projects as shown in Table III-6 below. The data includes the lists of implemented and proposed project and its location, type of road work (Widening, Concreting, Construction of Concrete Roads, Repair of Intersection/Junction/Chaflan, Flood Control Drainage, and other Infrastructure Projects), the implementing office, and the estimated starting and completion date.

Table III-6. Transport Related Projects, Approved/ Funded for Implementation, Year 2020

Name/ Location of Project	Barangay	Type	Proponent (Government, Private, Other)	Estimated Start Date	Estimated Date of Completion
I. Bicycle Lane Eastern & Western Diversion Road	Pob. 8,9 &Kal 2				
II. Road Widening/ Rehabilitation:					
1. Oblate Drive	RH. 6 & RH. 7	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
2. Road Street	RH. 6 & RH. 7	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
3. Ilang-Ilang	RH. 6 & RH. 7	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
4. Fatima Street	Pob. 4	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
5. Doña Theresa Street	Pob. 4	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
6. Lutganda Blanco Street	Pob. 4	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
7. Doña Pilar Street	Pob. 2 &Pob. 4	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
8. Rosales Street Leading to Krislamville Subdivision	Rosary Heights 6	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
9. Road Leading Triple an Apartment	Rosary Heights 2	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
10. Fatima Street	Pob. 4	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
11. SK Pendatun Extn. Front of Mega Market Leading to Delta Bridge Junction	Pob. Mother	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
12. Don. Abelardo Street	Pob. 2 &Pob. 4	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
13. Pansacala Street	RH. 10 & RH. Mother	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
14. Sesame Street	RH. 3 & (Rehab)	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
15. Datu Liwa Candao Leading to Telecom	RH. 3	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
16. Macapagal Street	RH. 10 & RH. Mother	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
17. Junction ORG and Bishop Mongeau Street Leading to by Pass Road	RH. 8 & RH. 9	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
18. Del Pilar Street	Bag. Mother-L W	Road Widening/ Rehabilitation:	GOVERNMENT (CEO)	January 2022	December 2022
III. Concreting of Road					
1, Road Leading to Triple an Apartment Junction San Isidro	RH. 10	Concreting of Road	GOVERNMENT (CEO)	January 2021	December 2021
2. San Isidro Street	Pob. 4	Concreting of Road	GOVERNMENT (CEO)	January 2021	December 2021
3. Antonion Marquez Street	Pob. 4	Concreting of Road	GOVERNMENT (CEO)	January 2021	December 2021
4. Catalina Austria Street	Pob. 4	Concreting of Road	GOVERNMENT (CEO)	January 2021	December 2021
5. Amado Papa Extension	RH. 10	Concreting of Road	GOVERNMENT (CEO)	January 2021	December 2021
6. Al-Itihad	Bag. 2	Concreting of Road	GOVERNMENT (CEO)	January 2021	December 2021
7. Concreting of Road – Cotabato City East Diversion Road, Cotabato City	Poblacion 8 and 9, Cotabato City	Concreting of Road	GOVERNMENT (DPWH)	January 2021	December 2021
8. Access Road leading to Old City Hall-Cotabato City Information Center,	Poblacion 6, Cotabato City	Concreting of Road	GOVERNMENT (DPWH)	January 2021	December 2021

Cotabato City					
9. Road from Datu Balabaran Bonsain Footbridge, Tamontaka Mother near the Special Economic Zone Passing to the Proposed Septage Treatment Plant Facility to Left Side of City Hall (People's Palace) and Children's Park, Barangay Rosary Heights 10 leading to Junction of Cotabato-Ala Valley-Marbel Road (Sinsuat Avenue), Cotabato City	Tamontaka Mother, Cotabato City	Opening of Road	GOVERNMENT (DPWH)	January 2021	December 2021
10. Road from the Junction of Kalanganan Mother Main Road Passing thru the City Government Resettlement Project and Shared Service Facilities (SSF) leading to the West Circumferential Road at Barangay Kalanganan 2, Cotabato City, Maguindanao	Kalanganan Mother and Kalanganan 2, Cotabato City	Opening of Road	GOVERNMENT (DPWH)	January 2021	December 2021
11. Concreting of Road with line canal and concrete box culvert, Macapagal Street, Brgy. Rosary Heights, Cotabato City,	Rosary Heights Mother, Cotabato City	Concreting of Road	GOVERNMENT (DPWH)	January 2021	December 2021
12. Concreting of Road with line canal and concrete box culvert, Brgy. Rosary Heights II, Cotabato City,	Rosary Heights 2, Cotabato City	Concreting of Road	GOVERNMENT (DPWH)	January 2021	December 2021
13. Concreting of Access Road from Junction of Kalanganan Mother to the West Circumferential, Cotabato City	Kalanganan Mother, Cotabato City	Concreting of Road	GOVERNMENT (DPWH)	January 2021	December 2021
14. Concreting of Datu Udtog Matalam Bypass Rd, Cotabato City	Rosary Heights 10, Cotabato City	Concreting of Road and ROW Acquisition	GOVERNMENT (DPWH)	January 2020	December 2020
15. Concreting of Road, Brgy. RH VII, Cotabato City	Rosary Heights 7, Cotabato City	Concreting of Road	GOVERNMENT (DPWH)	January 2020	December 2020
16. Road Construction/Concreting of Barangay Kalanganan 1, Cotabato City	Kalanganan 1, Cotabato City	Concreting of Road	GOVERNMENT (DPWH)	January 2020	December 2020
17. Road Construction/Concreting of Barangay Poblacion 2, Cotabato City	Poblacion 2, Cotabato City	Concreting of Road	GOVERNMENT (DPWH)	January 2020	December 2020
18. Road Construction/Concreting of Barangay Poblacion 4, (Doña Lutgarda Blanco Street leading to SK Pendatun), Cotabato City	Poblacion 4, Cotabato City	Concreting of Road	GOVERNMENT (DPWH)	January 2020	December 2020
19. Cotabato City East Diversion Road, Cotabato City	Poblacion 8 and 9, Cotabato City	Concreting of Road	GOVERNMENT (DPWH)	January 2022	December 2022
20. Concreting of Road, Barangay Rosary Heights 6 (Krislamville), Cotabato City	Rosary Heights 6, Cotabato City	Concreting of Road	GOVERNMENT (DPWH)	January 2022	December 2022
21.Concreting of Road, Barangay Rosary Heights 13, Cotabato City	Rosary Heights 13, Cotabato City	Concreting of Road	GOVERNMENT (DPWH)	January 2022	December 2022
22. Concreting of Road, Barangay Poblacion 2 (Purok Mabuhay), Cotabato City	Poblacion 2, Cotabato City	Concreting of Road	GOVERNMENT (DPWH)	January 2022	December 2022
23. Concreting of Road with line canal and	Rosary Heights	Concreting of Road	GOVERNMENT (DPWH)	January 2022	December 2022

concrete box culvert, Macapagal Street, Brgy. Rosary Heights, Cotabato City	Mother, Cotabato City				
24Concreting of Road with line canal and concrete box culvert, Brgy. Rosary Heights II, Cotabato City,	Rosary Heights 2, Cotabato City	Concreting of Road	GOVERNMENT (DPWH)	January 2022	December 2022
IV. Repair of Intersection/ Junctio/ Chaflan					
1. Tamse Road Street Junction ND Avenue	Poblacion 4	Repair of Intersection/ Junction/ Chaflan	GOVERNMENT (CEO)	January 2022	December 2022
2. Junction SK Pendatun &Tamse Road	Poblacion Mother Barangay	Repair of Intersection/ Junction/ Chaflan	GOVERNMENT (CEO)	January 2022	December 2022
3. Junction San Isidro & TV Juliano Avenue	Rosary Heights 10	Repair of Intersection/ Junction/ Chaflan	GOVERNMENT (CEO)	January 2022	December 2022
4. Junction TV Juliano& Catalina Austria	Rosary Heights 10	Repair of Intersection/ Junction/ Chaflan	GOVERNMENT (CEO)	January 2022	December 2022
5. Junction San Isidro &Delcano Street	Rosary Heights 10	Repair of Intersection/ Junction/ Chaflan	GOVERNMENT (CEO)	January 2022	December 2022
V. Flood Control and Drainage System					
1. Villo Creek Protection & Widening	Pob. 2, Pob. 3, Pob. 4	Flood Control and Drainage System	GOVERNMENT (CEO)	January 2022	December 2022
2. Lutganda Blanco Street	Pob. 4	Flood Control and Drainage System	GOVERNMENT (CEO)	January 2022	December 2022
3. Doña Theresa Street	Pob. 4	Flood Control and Drainage System	GOVERNMENT (CEO)	January 2022	December 2022
4. Cesar Villo Street	Pob. 4	Flood Control and Drainage System	GOVERNMENT (CEO)	January 2022	December 2022
5. Don Abilardo Street	Pob. 2, Pob. 3, Pob. 4	Flood Control and Drainage System	GOVERNMENT (CEO)	January 2022	December 2022
6. Sesame Street	RH. 3	Flood Control and Drainage System	GOVERNMENT (CEO)	January 2022	December 2022
7. Al-Itihad Street	Bag. 2	Flood Control and Drainage System	GOVERNMENT (CEO)	January 2022	December 2022
8. Del Pilar Street (From San Roque Church)	Bag. Mother	Flood Control and Drainage System	GOVERNMENT (CEO)	January 2022	December 2022
VI. Others:					
1. Construction of Sidewalk Beside People's Palace Leading to Children's Playground	RH. 10, Cotabato City	Construction of sidewalk	GOVERNMENT (CEO)	January 2022	December 2022
Name/ Location of Project	Barangay	**Type**	**Proponent (Government, Private, Other)**	**Estimated Start Date**	**Estimated Date of Completion**
1. Construction/Rehabilitation/Clearinf of FCD at Cotabato City Streets & draianage outlets	Cotabato City Streets	Flood Control and Drainage System	LGU-COTABATO-CEO	January 2023	December 2023
2. Construction of FCD at SK Pendatun Ext,	SK Pendatun Ext,	Flood Control and Drainage	BARMM-MPW	January 2023	December 2023

Pob Mo - 406 lin.m	Pob Mo - 406 lin.m	System			
3. onstruction of FCD at Doña Teresa Pob 3; L= 46 lin.m	Doña Teresa Pob 3; L= 46 lin.m	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
4. Construction of FCD at Doña Estrella, Pob 3; L= 104 lin.m	Doña Estrella, Pob 3; L= 104 lin.m	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
5. Construction of FCD at Don Jesus St., Pob 3; L= 178 lin.m	Don Jesus St., Pob 3; L= 178 lin.m	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
6. Construction of FCD at Doton St, Pob 3; L= 13 lin.m	Doton St, Pob 3; L= 13 lin.m	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
7. Construction of FCD at Sibuyan B, back of CEO Motorpool RH Mother	Sibuyan B, back of CEO Motorpool RH Mother	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
8. Construction of FCD at Sesame St. Left Side going to Vilo Creek, Rosary Heights 3	Sesame St. Left Side going to Vilo Creek, Rosary Heights 3	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
9. Construction of FCD along Datu Liwa Candao R/s, Rh 3	Datu Liwa Candao R/s, Rh 3	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
10. onstruction of FCD along Datu Liwa Candao L/s, Rh 3	Datu Liwa Candao L/s, Rh 3	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
11. Construction of FCD at Sultan Maetem, Purok Urban Poor, RH 3 L/S	Sultan Maetem, Purok Urban Poor, RH 3 L/S	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
12. Construction of FCD at Sultan Maetem, Purok Urban Poor, RH 3 R/S	Sultan Maetem, Purok Urban Poor, RH 3 R/S	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
13. Construction of FCD at Purok Kalimudan, Rosary Heigh2ts 3 L/s	Purok Kalimudan, Rosary Heigh2ts 3 L/s	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
14. Construction of FCD at Purok Kalimudan, Rosary Heights 3 R/S	Purok Kalimudan, Rosary Heights 3 R/S	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
15. Construction of FCD at Guadalupe St. Rosary Heights 8	Guadalupe St. Rosary Heights 8	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
16. Construction of FCD at Catalina Austria St. to Amado Papa St.	Catalina Austria St. to Amado Papa St.	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
17. Construction of FCD beside People's Palace going to Children's Playground beside OSWD Multi -Purpose Building at Barangay Rosary Heights 10	Rosary Heights 10	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
18. Construction of FCD System at People's Palace at Barangay Rosary Heights 10	Rosary Heights 10	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
19. Rehabilitation of FCD at Pansacala St. L/S	Pansacala St. L/S	Flood Control and Drainage	BARMM-MPW	January 2023	December 2023

		System			
20. Rehabilitation of FCD at Pansacala St. R/S	Pansacala St. L/S	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
21. Rehabilitation of FCD at Kimpo St. L/S	Kimpo St. L/S	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
22. Rehabilitation of FCD at Kimpo St. R/S	Kimpo St. L/S	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
23. Construction of FCD at Krislamville at Rosary Heights 6, Cotabato City	Rosary Heights 6, Cotabato City	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
24. Construction of FCD at Fañega st. Poblacion 4, Cotabato City	Fañega st. Poblacion 4, Cotabato City	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
25. Conduct of elevation survey for the proposed Master Drainage Master Plan		Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
26. Construction of FCD at Doña Teresa St, Pob 4; L= 245 lin.m	Doña Teresa St, Pob 4; L= 245 lin.m	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
27. Construction of FCD at Don Tomas Martinez St. Connecting SK Pendatun going to Bagsakan, Pob 4; L= 398 lin.m	Don Tomas Martinez St. Connecting SK Pendatun going to Bagsakan, Pob 4;	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
28. Construction of FCD at SK Pendatun Ext junction to Anecleto Badoy towards Matampay Kakar River, Pob 4 L= 470 lin.m	SK Pendatun Ext junction to Anecleto Badoy towards Matampay Kakar River, Pob 4	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
29. Rehabilitation of FCD at Don Rufino Alonzo St, Pob 5; L= 500 lin.m	Don Rufino Alonzo St, Pob 5;	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
30. Rehabilitation of FCD at SK Pendatun Ave, Pob 5; L= 500 lin.m	SK Pendatun Ave, Pob 5	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
31. Construction of FCD at Palma St, (Both Sides) Pob 6; L= 241 lin.m	Palma St, (Both Sides) Pob 6	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
32. Rehabilitation of FCD along Don Roman Vilo St. Pob.6, L=75Lin.m	Don Roman Vilo St. Pob.6	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
33. Rehabilitation of FCD at Aguinaldo St, (Both sides) Pob 6; L= 120 lin.m	Aguinaldo St, (Both sides) Pob 6	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
34. Construction of FCD at Rosales Ext - Diversion Road Transition going Camasi Dumpsite, Pob 8; L= 50 lin.m	Rosales Ext - Diversion Road Transition going Camasi Dumpsite, Pob 8	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
35. Construction of FCD at KITFI / Sansaluna St, Pob 8; L= 1005 lin.m	Sansaluna St, Pob 8	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023

36. Construction of FCD at Purok Ibrahim 1 going to Purok Ibrahim 2, Pob 8; L= 210 lin.m	Purok Ibrahim 1 going to Purok Ibrahim 2, Pob 8	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
37. Construction of FCD at Gonzalo Javier leading to Diversion Road, Pob 8	Gonzalo Javier leading to Diversion Road, Pob 8	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
38. Construction of FCD at Boundary Pob 8 and Pob 9 (1 and 2.5km) going Camasi Dumpsite	Boundary Pob 8 and Pob 9 (1 and 2.5km	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
39. Construction of FCD at Datu Kadir Datumanong St, Bagua Mo; L= 608 lin.m	Datu Kadir Datumanong St, Bagua Mo	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
40. Concreting of Road at Kema St, Bagua Mo; L= 175 lin.m	Kema St, Bagua Mo	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
41. Construction of FCD at Banati Rd, Bagua Mo; L= 171 lin.m	Banati Rd, Bagua Mo	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
42. Construction of FCD at Zailon St, Bagua Mo; L= 65 lin.m	Zailon St, Bagua Mo;	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
43. Construction of FCD at Purok Palmonera St, Bagua Mo; L= 74 lin.m	Purok Palmonera St, Bagua Mo;	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
44. Construction of FCD at Mangongan St from Datu Usman Mampen St to Espino, Bagua II; L= 42 lin.m	Mangongan St from Datu Usman Mampen St to Espino, Bagua II	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
45. Construction of FCD at Tanghal 1st St, Bagua II; L= 235 lin.m	Tanghal 1st St, Bagua II	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
46. Construction of FCD at Tanghal 2nd St, Bagua II; L= 25 lin.m	Tanghal 2nd St, Bagua II	Flood Control and Drainage System	BARMM-MPW	January 2023	December 2023
Name/ Location of Project	Barangay	**Type**	**Proponent (Government, Private, Other)**	**Estimated Start Date**	**Estimated Date of Completion**
1. Construction of FCD at Tanghal 3rd st., Bagua II; L= 237 lin.m	Tanghal 3rd st., Bagua II;	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024
2. Construction of FCD at Pastor Kimpo, Bagua II; L= 165 lin.m	Pastor Kimpo, Bagua II;	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024
3. Construction of FCD at Espino, Bagua II; L= 233 lin.m	Espino, Bagua II	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024
4. Construction of FCD at Kalye Uno Macapagal, RH Mother; L= 315 lin.m	Kalye Uno Macapagal, RH Mother	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024
5. Construction of FCD at Kalye Dos Macapagal, RH Mother; L= 125 lin.m	Kalye Dos Macapagal, RH	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024

	Mother				
6. Construction of FCD at Kalye Dos Macapagal, RH Mother; L= 125 lin.m	Kalye Dos Macapagal, RH Mother	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024
7. Construction of FCD at Kalye Kwatro Macapagal, RH Mother; L= 348 lin.m	Kalye Kwatro Macapagal, RH Mother	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024
8. Construction of FCD at Kalye Singko Macapagal, RH Mother; L= 205 lin.m	Kalye Singko Macapagal, RH Mother	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024
9. Construction of FCD at Kalye SAis Macapagal, RH Mother; L= 241 lin.m	Kalye SAis Macapagal, RH Mother	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024
10. Construction of FCD at Purok Balikatan, RH Mother, L = 430 lin.m	Purok Balikatan, RH Mother	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024
11. Construction of FCD at Purok Maunawain connecting Sinsuat Avenue (infront of Mercury Drug Store) to Sta Barbara st, RH Mo; L= 280 lin.m	Purok Maunawain connecting Sinsuat Avenue	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024
12. Construction of FCD connecting Ramon Rabago St going to Espino Bridge; Rosary Heights Mother; L/s= 307 lin.m, R/s= 47 li.m	Rosary Heights Mother	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024
13. Construction of FCD at Macapagal St, Roasry Heights Mother, L/s L= 340 lin.m	Macapagal St, Roasry Heights Mother	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024
14. Construction of FCD at Rosales St, (Purok Balikatan) going TV Juliano Roasry Heights Mother, L/s L= 320 lin.m	Rosales St, (Purok Balikatan) going TV Juliano Roasry Heights Mother	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024
15. Construction of FCD at Purok Bañas St, Rosary heights Mother; L/s L= 320 lin.m	Purok Bañas St, Rosary heights Mother	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024
16. Rehabilitation of FCD at Sousa St, RH 1, R/s; L= 310 lin.m	Sousa St, RH 1, R/s	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024
17. Construction of FCD going to barangay hall, Rosary Heights 2; L= 56 lin.m	Rosary Heights 2	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024
18. Construction/Upgrading of FCD at	Tamse road,	Flood Control and Drainage	BARMM-MPW		

Tamse road, connecting ND Avenue to SK Pendtun Extn.	connecting ND Avenue to SK Pendtun Extn	System		January 2024	December 2024
19. Rehabilitation of FCD along Quezon Avenue going to SK Pendatun Extn. (Matampay bridge)	Quezon Avenue going to SK Pendatun Extn	Flood Control and Drainage System	BARMM-MPW	January 2024	December 2024
20. Maintenance/Earth Filling of various city street/roads in Cotabato City	Cotabato City	Other Infrastructure Projects	BARMM-MPW	January 2024	December 2024
21. Construction of Motor Pool Building and Bay (facilities, garage)	Cotabato City	Other Infrastructure Projects	BARMM-MPW	January 2024	December 2024
22. Pedestrian lane along schools and Installation of Street Names in all 37 barangays	all 37 barangays	Other Infrastructure Projects	BARMM-MPW	January 2024	December 2024
23. Construction of steel barriers at school's zone areas	Cotabato City	Other Infrastructure Projects	BARMM-MPW	January 2024	December 2024
24. nstallation of Traffic lights and CCTV (Modernization of Command Center System) in strategic areas	Cotabato City	Other Infrastructure Projects	BARMM-MPW	January 2024	December 2024
25. Concreting of Road at SK Pendatun Ext, Pob Mo - 406 lin.m	SK Pendatun Ext, Pob Mo	Concreting of road	BARMM-MPW	January 2024	December 2024
26. Concreting of Road at Turion 1 Pob I - 585 lin.m	Turion 1 Pob I	Concreting of road	BARMM-MPW	January 2024	December 2024
27. Concreting of Road at RS Buan Pob I - 266 lin.m	RS Buan Pob I	Concreting of road	BARMM-MPW	January 2024	December 2024
28. Concreting of Road at Fañega St Pob 2, L=262 lin.m	Fañega St Pob 2	Concreting of road	BARMM-MPW	January 2024	December 2024
29. Concreting of Road at Deocesan St, Pob 2, L= 167 lin.m	Deocesan St, Pob 2	Concreting of road	BARMM-MPW	January 2024	December 2024
30. Concreting of Road at Chavez St, Pob 2 L= 262l in.m	Chavez St, Pob 2	Concreting of road	BARMM-MPW	January 2024	December 2024
31. Concreting of Road at Soriano St, Pob 2 L= 92 lin.m	Soriano St, Pob 2	Concreting of road	BARMM-MPW	January 2024	December 2024

32. Concreting of Road at Doña Pilar St Pob 2; L= 95 lin.m	Doña Pilar St Pob 2	Concreting of road	BARMM-MPW	January 2024	December 2024
33. Concreting of Road at Doña Teresa St., Pob 2, L= 44 lin.m	Doña Teresa St., Pob 2,	Concreting of road	BARMM-MPW	January 2024	December 2024
34. Concreting of Road at Gunsang St., Pob 2, L= 12 lin.m	Gunsang St., Pob 2	Concreting of road	BARMM-MPW	January 2024	December 2024
35. Concreting of Road at Suraik Modnok, Pob 2; L= 20 lin m	Suraik Modnok, Pob 2	Concreting of road	BARMM-MPW	January 2024	December 2024
36. Concreting of Road at Kamsa Rampak, Pob 2, L= 115lin.m	Kamsa Rampak, Pob 2	Concreting of road	BARMM-MPW	January 2024	December 2024
37. Concreting of Road at Makakua Watamanot, Pob 2; L= 60 lin.m	Makakua Watamanot, Pob 2	Concreting of road	BARMM-MPW	January 2024	December 2024
38. Concreting of Road at Doña Teresa Pob 3; L= 46 lin.m	Doña Teresa Pob 3;	Concreting of road	BARMM-MPW	January 2024	December 2024
39. Concreting of Road at Doña Estrella, Pob 3; L= 104 lin.m	Doña Estrella, Pob 3	Concreting of road	BARMM-MPW	January 2024	December 2024
40. Concreting of Road at Don Jesus St., Pob 3; L= 178 lin.m	Don Jesus St., Pob 3	Concreting of road	BARMM-MPW	January 2024	December 2024
41. Concreting of Doña Pilar St, Pb 4 & Pob 2; ; L = 437 lin.m.	Doña Pilar St, Pb 4 & Pob 2	Concreting of road	BARMM-MPW	January 2024	December 2024
42. Concreting of Fañega St., ext from Anecleto Badoy junction SK Pendatun Ext; Pob 4; L= 168 lin.m (Phase 2)	SK Pendatun Ext; Pob 4	Concreting of road	BARMM-MPW	January 2024	December 2024
43. Concreting of Road at Don Jesus Vilo St., Pob 4; L= 50 lin.m	Don Jesus Vilo St., Pob 4	Concreting of road	BARMM-MPW	January 2024	December 2024
44. Concreting of Road at Don Antonio Marquez St., Pob 4; L= 50 lin.m	Don Antonio Marquez St., Pob 4	Concreting of road	BARMM-MPW	January 2024	December 2024
45. Concreting of Road at Doña Pilar St., Pob 4; L= 167 lin.m	Doña Pilar St., Pob 4	Concreting of road	BARMM-MPW	January 2024	December 2024
46. Concreting of Road at Doña Consolacion, Pob 4, L= 32 lin.m	Doña Consolacion, Pob 4	Concreting of road	BARMM-MPW	January 2024	December 2024
47. Concreting of Road at Deocesan St., Pob 4; L= 170 lin.m	Deocesan St., Pob 4	Concreting of road	BARMM-MPW	January 2024	December 2024
48. Concreting of Road at Tomas Martinez	at Tomas	Concreting of road	BARMM-MPW	January	December 2024

St., Pob 4, L= 56 lin.m	Martinez St., Pob 4			2024	
49. Concreting of Road in front of NDU Main Gate to Vilo Elementary School/ Don Abelardo St. Pob 4, L= 50 lin.m	NDU Main Gate to Vilo Elementary School/ Don Abelardo St. Pob 4	Concreting of road	BARMM-MPW	January 2024	December 2024
50. Concreting of Road at San Isisdro St., Pob 4; L=160 lin.m	San Isisdro St., Pob 4	Concreting of roads	BARMM-MPW	January 2024	December 2024
Name/ Location of Project	Barangay	**Type**	**Proponent (Government, Private, Other)**	**Estimated Start Date**	**Estimated Date of Completion**
1. Concreting of Road at Purok Manisan, Bagua I; L= 30 lin.m	Purok Manisan, Bagua I	Concreting of road	BARMM-MPW	January 2025	December 2025
2. Concreting of Road at Dangkalangan, Bagua I; L= 83 lin.m	Dangkalangan, Bagua I	Concreting of road	BARMM-MPW	January 2025	December 2025
3. Concreting of Road at Purok Tabanga, Bagua I; L= 358 lin.m	Purok Tabanga, Bagua I	Concreting of road	BARMM-MPW	January 2025	December 2025
4. Concreting of Road at Chio St., Bagua I; L= 42 lin.m	Chio St., Bagua I	Concreting of road	BARMM-MPW	January 2025	December 2025
5. Concreting of Road at Sultan Kawasa, Bagua II; L= 119 lin.m	Sultan Kawasa, Bagua II	Concreting of road	BARMM-MPW	January 2025	December 2025
6. Concreting of Road at Shariff Awliya, Bagua II; L= 30 lin.m	Shariff Awliya, Bagua II	Concreting of road	BARMM-MPW	January 2025	December 2025
7. Concreting of Road at Fatima St., Bagua II; L= 185 lin.m	Fatima St., Bagua II	Concreting of road	BARMM-MPW	January 2025	December 2025
8. Concreting of Road at Abubakar St., Bagua II; L= 110 lin.m	Abubakar St., Bagua II	Concreting of road	BARMM-MPW	January 2025	December 2025
9. Concreting of Road at Mahad St., Bagua II; L=81 lin.m	Mahad St., Bagua II	Concreting of road	BARMM-MPW	January 2025	December 2025
10. Concreting of Road at Al Itihad St, Bagua II; L= 42 lin.m	Al Itihad St, Bagua II	Concreting of road	BARMM-MPW	January 2025	December 2025
11. Concreting of Road at Tanghal 1st St, Bagua II; L= 235 lin.m	Tanghal 1st St, Bagua II	Concreting of road	BARMM-MPW	January 2025	December 2025
12. Concreting of Road at Tanghal 2nd St, Bagua II; L= 25 lin.m	Tanghal 2nd St, Bagua II	Concreting of road	BARMM-MPW	January 2025	December 2025
13. Concreting of Road at Tanghal 3rd st., Bagua II; L= 237 lin.m	Tanghal 3rd st., Bagua II	Concreting of road	BARMM-MPW	January 2025	December 2025
14. Concreting of Road at Pastor Kimpo,	Pastor Kimpo,	Concreting of road	BARMM-MPW	January	December 2025

Bagua II; L= 165 lin.m	Bagua II			2025	
15. Concreting of Road at Dangkalangan, Bagua I; L= 83 lin.m	Dangkalangan, Bagua I	Concreting of road	BARMM-MPW	January 2025	December 2025
16. Concreting of Road at Purok Tabanga, Bagua I; L= 358 lin.m	Purok Tabanga, Bagua I	Concreting of road	BARMM-MPW	January 2025	December 2025
17. Concreting of Road at Chio St., Bagua I; L= 42 lin.m	Chio St., Bagua I	Concreting of road	BARMM-MPW	January 2025	December 2025
18. Concreting of Road at Sultan Kawasa, Bagua II; L= 119 lin.m	Sultan Kawasa, Bagua II	Concreting of road	BARMM-MPW	January 2025	December 2025
19. Concreting of Road at Sultan Kawasa, Bagua II; L= 119 lin.m	Sultan Kawasa, Bagua II	Concreting of road	BARMM-MPW	January 2025	December 2025
20. Concreting of Road at Fatima St., Bagua II; L= 185 lin.m	Fatima St., Bagua II	Concreting of road	BARMM-MPW	January 2025	December 2025
21. Concreting of Road at Abubakar St., Bagua II; L= 110 lin.m	at Abubakar St., Bagua II	Concreting of road	BARMM-MPW	January 2025	December 2025
22. Concreting of Road at Mahad St., Bagua II; L=81 lin.m	Mahad St., Bagua II	Concreting of road	BARMM-MPW	January 2025	December 2025
23. Concreting of Road at Al Itihad St, Bagua II; L= 42 lin.m	Al Itihad St, Bagua II	Concreting of road	BARMM-MPW	January 2025	December 2025
24. Concreting of Road at Pastor Kimpo, Bagua II; L= 165 lin.m	Pastor Kimpo, Bagua II	Concreting of road	BARMM-MPW	January 2025	December 2025
25. Concreting of Road at Pastor Kimpo, Bagua II; L= 165 lin.m	Pastor Kimpo, Bagua II	Concreting of road	BARMM-MPW	January 2025	December 2025
26. Concreting of Macapagal Extension, located at Barangay RH Mother, Cotabato City, L= 100lin.m	RH Mother, Cotabato City	Concreting of road	BARMM-MPW	January 2025	December 2025
27. Cotabato -Ala Valley -Marbel road	Cotabato City	Concreting of road	BARMM-MPW	January 2025	December 2025
28. Construction of road at Purok Bonsain, Barangay Tamontaka Mother, Cotabato City	Tamontaka Mother, Cotabato City	Concreting of road	BARMM-MPW	January 2025	December 2025
29. Construction of road at Kalanganan 2 leading to Bubong National School, Cotabato City	Kalanganan 2 leading to Bubong National School, Cotabato City	Concreting of road	BARMM-MPW	January 2025	December 2025
30. Construction of new Camasi Bridge at Barangay Poblacion 9, Cotabato City	Poblacion 9, Cotabato City	Concreting of road	BARMM-MPW	January 2025	December 2025
31. New Roads and Bridges at the Western portion of the City to connect with	Cotabato City, Sultan Kudarat,	Concreting of road	BARMM-MPW	January 2025	December 2025

Tapian-Lebak Coastal Road, Datu Odin Sinsuat in the South and the proposed New Bangsamoro Government Center in the Parang, Maguindanao. (JICA's proposed project to promote economic integration of Cotabato City, Sultan Kudarat, Kabuntalan, and Pigcawayan	Kabuntalan, and Pigcawayan				
32. Construction of bridge at purok bonsain barangay tamontaka mother connecting to barangay rosary heights 10 (near Children's park, People's palace) going to Datu Udtong Matalam street, Cotabato City	Datu Udtong Matalam street, Cotabato City	Concreting of road	BARMM-MPW	January 2025	December 2025
33. Construction of bridge at Sousa Extn. Leading to Datu Usman School Barangay Rosary Heights 12, Cotabato City	Sousa Extn. Leading to Datu Usman School Barangay Rosary Heights 12, Cotabato City	Concreting of road	BARMM-MPW	January 2025	December 2025
34. Construction of bridge at Poblacion Mother leading to Poblacion 9 with road component	Poblacion Mother leading to Poblacion 9	Concreting of road	BARMM-MPW	January 2025	December 2025
35. Construction of bridge at Kalangnan Mother leading to Dureolo State connecting to Kalanganan 2 Cotabato City	Kalangnan Mother leading to Dureolo State connecting to Kalanganan 2 Cotabato City	Concreting of road	BARMM-MPW	January 2025	December 2025
36. Formulation of Road Network Development Plan	Cotabato City	Concreting of road	BARMM-MPW	January 2025	December 2025
37. Improved Traffic Management Plan	Cotabato City	Concreting of road	BARMM-MPW	January 2025	December 2025
38. Formulation of Public Transport Plan	Cotabato City	Concreting of road	BARMM-MPW	January 2025	December 2025

Source: Dept. of Public Works and Highway, City / City Engineering Office, Concerned National Government AgencyEngineering office

6.2 Power Sector

The city's main power source comes from Cotabato Light and Power Company (CLPC), wholly owned electric distribution by the Aboitiz Company. CLPC's source of power comes from the National Power Corporation (NPC) delivered through the transmission operator, the National Grid Corporation of the Philippines (NGCP). By 2018, all of the 37 barangays already have access to electricity. However, in some occasions, there are still power shortages especially in rural areas. CLPC also has a backup diesel facility that provides power during interruptions and power outages. As of December 2018, Cotabato Light is serving 27,339 households.

a. Household Served and Unserved with Electricity for the Past Three Years

CLPC has covered almost all parts of the city. However, in the urban areas of Barangay Poblacion 1, almost 23% were still not served, in Poblacion 8, 13.78% were unserved, in Poblacion 9, 28.82% were unserved and in Kalanganan Mother, 7.88% were unserved (see Table IF-13). In the rural areas, only Tamontaka 2 and Tamontaka 3 are the barangays that have 100% access to electricity.

Table IF-13 Household Served and Unserved with Electricity for the Past Three Years

Barangay	2016					2017					2018				
	Total No. of HH	Served		Unserved		Total No. of HH	Served		Unserved		Total No. of HH	Served		Unserved	
		No.	%	No.	%		No.	%	No.	%		No.	%	No.	%
URBAN															
Pob. MB	1195	1195	100.00		0.00	1195	1195	100.00		0.00	1195	1195	100.00		0.00
Pob. 1	402	372	92.54	30	7.46	402	402	100.00		0.00	522	402	77.01	120	22.99
Pob. 2	581	581	100.00		0.00	581	581	100.00		0.00	581	581	100.00		0.00
Pob. 3	324	324	100.00		0.00	324	324	100.00		0.00	324	324	100.00		0.00
Pob. 4	573	573	100.00		0.00	573	573	100.00		0.00	573	573	100.00		0.00
Pob. 5	721	721	100.00		0.00	721	721	100.00		0.00	721	721	100.00		0.00
Pob. 6	780	780	100.00		0.00	780	780	100.00		0.00	780	780	100.00		0.00
Pob. 7	901	901	100.00		0.00	901	901	100.00		0.00	901	901	100.00		0.00
Pob. 8	219		0.00		0.00	219	219	100.00		0.00	254	219	86.22	35	13.78
Pob. 9	331	306	92.45	25	7.55	331	331	100.00		0.00	465	331	71.18	134	28.82
Bag MB	1126	1126	100.00		0.00	1125	1125	100.00		0.00	1125	1125	100.00		0.00
Bag 1	648	648	100.00		0.00	596	596	100.00		0.00	596	596	100.00		0.00
Bag 2	1005	980	97.51	25	2.49	1340	1339	99.93	1	0.07	1340	1340	100.00		0.00
Bag 3	543	543	100.00		0.00	519	519	100.00		0.00	519	519	100.00		0.00
Kal MB	1005	1005	100.00		0.00	1005	1000	99.50	5	0.50	1091	1005	92.12	86	7.88
RH MB	842	842	100.00		0.00	1520	1520	100.00		0.00	1520	1520	100.00		0.00
RH 1	816	816	100.00		0.00	816	816	100.00		0.00	816	816	100.00		0.00
RH 2	766	766	100.00		0.00	766	766	100.00		0.00	766	766	100.00		0.00
RH 3	1158	1158	100.00		0.00	1158	1158	100.00		0.00	1158	1158	100.00		0.00
RH 4	779	779	100.00		100.00	779	779	100.00		0.00	779	779	100.00		0.00
RH 5	764	764	100.00		100.00	764	764	100.00		0.00	764	764	100.00		0.00

RH 6	1003	1003	100.00		100.00	1003	1003	100.00		0.00	1003	1003	100.00		0.00
RH 7	1168	1168	100.00		100.00	1168	1168	100.00		0.00	1168	1168	100.00		0.00
RH 8	1152	1152	100.00		0.00	1152	1152	100.00		0.00	1152	1152	100.00		0.00
RH 9	1048	1048	100.00		0.00	1048	1048	100.00		0.00	1048	1048	100.00		0.00
RH 10	1766	1766	100.00		0.00	1766	1766	100.00		0.00	1766	1766	100.00		0.00
RH 11	1431	1431	100.00		0.00	1431	1431	100.00		0.00	1431	1431	100.00		0.00
RH 12	498	498	100.00		0.00	498	498	100.00		0.00	498	498	100.00		0.00
RH 13	640	640	100.00		0.00	640	640	100.00		0.00	640	640	100.00		0.00
Tam MB	847	817	96.46	30	3.54	847	824	97.28	23	2.72	847	847	100.00		0.00

Barangay	2016					2017					2018				
	Total No. of HH	Served		Unserved		Total No. of HH	Served		Unserved		Total No. of HH	Served		Unserved	
		No.	%	No.	%		No.	%	No.	%		No.	%	No.	%
RURAL															
Kal 1	111	80	72.07	31	27.93	111	83	74.77	28	25.23	111	94	84.68	17	15.32
Kal 2	379	344	90.77	35	9.23	379	305	80.47	74	19.53	379	321	84.70	58	15.30
Tam 1	234	234	100.00		0.00	234	234	100.00		0.00	234	225	96.15	9	3.85
Tam 2	59	59	100.00		0.00	59	56	94.92	3	5.08	59	59	100.00		0.00
Tam 3	42	42	100.00		0.00	42	34	80.95	8	19.05	42	42	100.00		0.00
Tam 4	83	71	85.54	12	14.46	83	83	100.00		0.00	83	22	26.51	61	73.49
Tam 5	23	23	100.00		0.00	23	23	100.00		0.00	88	23	26.14	65	73.86
TOTAL	25,963	25,556		188		26,899	26,757		0		27,339	26,754		585	

Source: Cotabato Light and Power Company

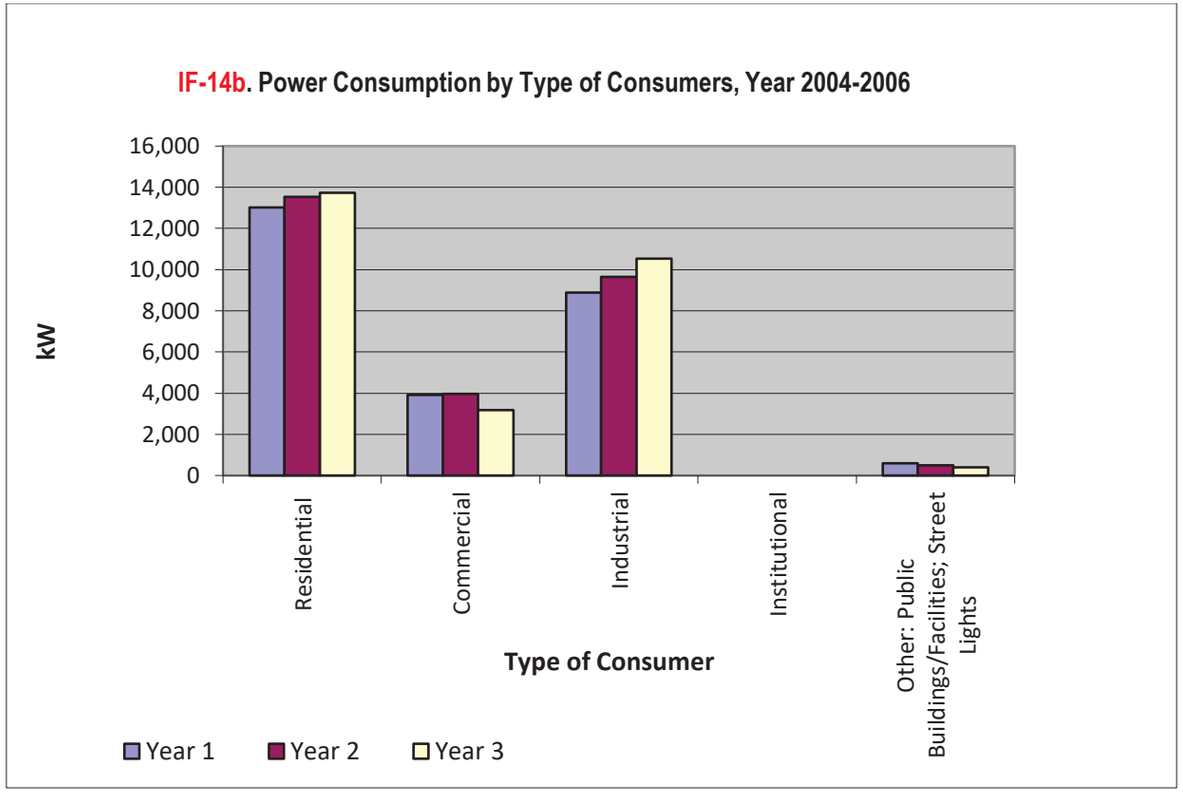
b. Number of Connections by Type of Users and Average Consumption (KWH/Mo.) for the Past Three Years

Residential areas are the biggest consumers of electricity in the city with 40,143 connections consuming 13,723 kilowatt-hours per month or 49.3% of the total electric supply (see Table 1F-14 and Figure IF-14b). On the other hand, among the least consumers of electricity are some public buildings and facilities, and street lights with just 1.5% of the total consumption of the city. The probability of an increase in the number of households served by the CLCP is high because of the continuing expansion of the coverage area to the different puroks in every barangay and most especially in rural areas. To date, there are 562 power posts with 19,596 KW.

Table IF-14 Number of Connections by Type of Users and Average Consumption (KWH/Mo.) for the Past Three Years

TYPE OF CONSUMERS	2016			2017			2018		
	No. of connections	KW	%	No. of connections	KW	%	No. of connections	KW	%
Residential	35,473	13,029	49.3	37,420	13,532	48.9	40,143	13,723	49.3
Commercial	3,037	3,915	14.8	3,261	3,975	14.4	3,237	3,174	11.4
Industrial	393	8,882	33.6	401	9,642	34.9	420	10,533	37.8
Institutional		0	0.0			0.0			0.0
Other: Public Buildings/Facilities; Street Lights	21	593	2.2	20	498	1.8	16	406	1.5
TOTAL		26,419	100.0		27,647	100.0		27,836	100.0

Source: Cotabato Light and Power Company



c. Projected Number of Connections by Type of Users and Average Consumption (KWH/Month)

In the coming years energy consumption will continue to increase due to economic activities as shown below in table IF-15. It is expected to increase from 30,488 kilowatt-hour per month in the year 2020 to 40,629 kilowatt-hour per month in the year 2028. To address future power deficiency, CLPC have proposed another power sub-station in order to provide 100% power supply in all 37 barangays. An additional new type of energy generation technology is also proposed in cooperation with the city government agencies and private sectors.

Table 1F-15: Projected Number of Connections by Type of Users and Average Consumption (KWH/Month)

TYPE OF CONSUMERS	2020		2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
	KW	%	KW	%	KW	%	KW	%	KW	%	KW	%	KW	%	KW	%	KW	%	KW	%	KW	%
Residential	14482	48%	15005	47%	15528	47%	16081	47%	16574	47%	17097	46%	17620	46%	18143	46%	18666	46%	19,189	46%	19,712	45%
Commercial	3328	11%	3411	11%	3493	11%	3576	10%	3658	10%	3741	10%	3823	10%	3906	10%	3988	10%	4,070	10%	4,152	10%
Industrial	12260	40%	12909	41%	13560	41%	14214	41%	14869	42%	15525	42%	16181	42%	16838	43%	17497	43%	18,156	43%	18,815	44%
Institutional	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	400	1%	0	0%	0	0%	0	0%	0	0%
Other: Public Buildings/Facilities; Street Lights	418	1%	425	1%	433	1%	440	1%	448	1%	455	1%	463	1%	471	1%	478	1%	485	1%	492	1%
TOTAL	**30488**	**100%**	**31750**	**100%**	**33014**	**100%**	**34311**	**100%**	**35549**	**100%**	**36818**	**100%**	**38487**	**100%**	**39358**	**100%**	**40629**	**100%**	**41,900**	**100%**	**43,171**	**100%**

Source: Cotabato Light and Power Company

d. Power Transmission/Distribution Line

Table IF-16 shows the city's power transmission line with its corresponding description. It also shows the projected susceptibility to the different hazards. As shown in table 1F-16, the transmission line of the Cotabato Light and Power Company is assessed at low risk to flood attributed to its location, medium susceptibility to earthquake, and medium susceptibility to landslide.

Table IF-16: Power Transmission/Distribution Line

Name of Line Owner	Year Constructed/ Developed	Area Occupied (ha)	Length (m)	Width (m)	Voltage (kV)	Hazard Susceptibility (H/M/L)							
						Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Cotabato Light & Power Company	1939	19120	30000	6373	69kV/13.8kV	L		M		M			

Power substations are part of electric system (generation, distribution and transmission) that transforms high voltage to lower voltage or vice versa and perform other important functions. Before traveling to the consumers, electricity from the source or generating stations travel to the different substations each with different voltage levels and provide constituents with just enough energy. The Cotabato Light and Power Company have three substations namely the Sinsuat Substation, Malagapas Substation, and the Salimbao Substation (see table IF-17). The Salimbao Substation is located at Salimbao, Sultan Kudarat just outside the city of Cotabato. The Sinsuat Substation at Rosary Heights 1 which is assessed to be at low in susceptablity in terms of to and has medium susceptibility to earthquake and landslide. The Malagapas Substation at Rosary Heights 10 is also at low risk to flood and medium risk to tsunami.

Table IF-17: Power Substations

Name of Substation	Barangay	Area Occupied (ha)	Year Constructed	Voltage	Hazard Susceptibility (H/M/L)							
				(kV)	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Sinsuat Substation	RH-1	0.029	1984	69kV/13.8kV	L		M		M			
Malagapas Substation	RH-10	0.068	2011	69kV/13.8kV	L					M		
Salimbao Substation	Salimbao, Sultan Kudarat	0.088	1999	69kV/13.8kV								

Source: Cotabato Light and Power Company

There is one power plant within the city located at Rosary Heights 1 and is owned by the Cotabato Light and Power Company. It is an oil-based type of power plant with over 9 Megawatts capacity. As shown in the table IF- 18, the power plant is seen to be at low risk to flood and at medium risk to earthquake and land slide. See table below for the description and hazard susceptibility of the power plant.

Table IF-18: Power Plant by Location and Condition

Name of Power Plant	Barangay	Ownership	Area Occupied (ha)	Year Constructed	Capacity (MW)	Type of Plant	Date of Commission/ Operation	Hazard Susceptibility (H/M/L)							
								Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
CLPC Diesel Power Plant	RH-1	Cotabato Light and Power Company	0.15	1963-1971	9.927	Oil-Based	1963-1971	L		M		M			

Source: Cotabato Light and Power Company

III. CURRENT AND PROJECTED NEEDS

The following table shows the future development needs of the power sub-sector in terms of provision of electric power supply and its relationship to current land uses and other socio-economic activities. It shows the “Projected Number of Connections by Type of Users and Average Consumption (KWH/Month)” of the following electric power consumers such as Residential, Commercial, Industrial, Institutional, and other Public Buildings/Facilities; Street Lights for past 3 years and predicted power consumptions for the year 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, and 2030. Determination of future power requirement is as follows:

Future Power Requirements =	(No. of Projected establishments)	(Average consumption rate/year)

Projected Number of Connections by Type of Users and Average Consumption (KWH/Month)

TYPE OF CONSUMERS	2020		2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
	KW	%	KW	%	KW	%	KW	%	KW	%	KW	%	KW	%	KW	%	KW	%	KW	%	KW	%
Residential	14482	48%	15005	47%	15528	47%	16081	47%	16574	47%	17097	46%	17620	46%	18143	46%	18666	46%	19,189	46%	19,712	45%
Commercial	3328	11%	3411	11%	3493	11%	3576	10%	3658	10%	3741	10%	3823	10%	3906	10%	3988	10%	4,070	10%	4,152	10%
Industrial	12260	40%	12909	41%	13560	41%	14214	41%	14869	42%	15525	42%	16181	42%	16838	43%	17497	43%	18,156	43%	18,815	44%
Institutional	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	400	1%	0	0%	0	0%	0	0%	0	0%
Other: Public Buildings/Facilities; Street Lights	418	1%	425	1%	433	1%	440	1%	448	1%	455	1%	463	1%	471	1%	478	1%	485	1%	492	1%
TOTAL	**30488**	**100%**	**31750**	**100%**	**33014**	**100%**	**34311**	**100%**	**35549**	**100%**	**36818**	**100%**	**38487**	**100%**	**39358**	**100%**	**40629**	**100%**	**41,900**	**100%**	**43,171**	**100%**

Below shows the "Power Sub-Sector Related Projects/Programs/Activities" in Cotabato City. The data includes the lists of Project, its type of work (Maintenance, Rehabilitated, Replacement, Street Light Installation, New Substation, and Upgrading), the assigned government sector or implementing office, and the estimated starting, and projected completion dates.

Power Sub-Sector Related Projects/Programs/Acrtivities

Name/ Location of Project	Barangay	Type	Proponent (Government, Private, Other)	Estimated Start Date	Estimated Date of Completion
1. Primaryy Line Works-replacement, repair, 13.8KV Line Maintenance		Maintenance and repaired/ replacement of Primaryy Line Works	Private Sector CoLight	CY 2023	CY 2025
2. DPWH Pole Relocations, primary line works		Reliability to the grid	Private Sector CoLight	CY 2023	CY 2025
3. Distribution facilities: replacement and		Rehabilitated and	Private Sector CoLight	CY 2023	CY 2025

rehabilitation; EMC Installation (100 frames)		replaced			
4. EMC Structures Maintenance (14 frames)		maintenance and repaired/ replacement of Primaryy Line Works	Private Sector CoLight	CY 2023	CY 2025
5. Primary Line works; Tree wire installation		Maintenance and repaired/ replacement of Primaryy Line Works	Private Sector CoLight	CY 2023	CY 2025
6. New Streetlight Installation		Street Lights installed	Private Sector CoLight	CY 2023	CY 2025
7. 13.8KV Lateral Upgrading, 5 KM #6ACSR to 2/0 ACSR Phase 1		Maintenance and repaired/ replacement/upgrading of Primaryy Line Works	Private Sector CoLight	CY 2023	CY 2025
8. 13.8 KV Line New, 336.4 MCM-3.32 km at Tamontaka Crossing to Sea Port-Phase 2		13.8 KV Line New, 336.4 MCM-3.32 km installed at Tamontaka Crossing to Sea Port-Phase 2	Private Sector CoLight	CY 2023	CY 2025
9. Power Conditioning equipment, replacement, repair, maintenance and refurbishment-capacitor maintenance (3 banks of 3x 100 KVA)		Maintenance and repaired/ replacement of Primaryy Line Works	Private Sector CoLight	CY 2023	CY 2025
10. KWH Meter Maintenance-EMC New Meters (100frames)		Maintenance and repaired/ replacement of Primaryy Line Works	Private Sector CoLight	CY 2023	CY 2025
11. New-Substation-25/33MVA New Tamontaka S/S & 69KV Tamontaka Switching Sta.		New Substation	Private Sector CoLight	CY 2023	CY 2025
12. 13.8KV SIN-3,336.4 0.692 KM Line Upgrade, at Hotel Fil-Tams Bakery		Improve/upgrading capacity and reliability	Private Sector CoLight	CY 2023	CY 2025
13. Substransmission Line Wokrs-replacement, repair, maintenance - 69KV Line, Exisitng Line Upgrading, 3.1km 336 MCM to 795 ACSR (Phase 1)		Reliability to the grid	Private Sector CoLight	CY 2023	CY 2025
14. Power Conditioning equipment, replacement, repair, maintenance and refurbishment-capacitor maintenance (3 banks of 3x 100 KVA)		Reliability to the grid	Private Sector CoLight	CY 2023	CY 2025

Table IF-12: Power Sector Analysis Matrix

Technical Findings/ Observations	Implications (Effects)	Recommended Interventions
Limited power supply in rural barangays	Shortage of power supply on some rural barangays	Provisions of additional Power Substations particulary at Brgy. Tamontaka, Kalanganan Area and Introduction of new Power Generating Technology in accordance and cooperation with concerned government agency/ private organizations.
There are still households unserved by the Cotabato Light and Power Company	Low socio-economic activities (investment/income opportunities) for the households unserved	Installation of Solar Lights in all 37 barangays

6.3 Water

A substantial amount of water supply of Cotabato City is collected and treated at Dimapatoy River, Datu Odin Sinsuat Maguindanao by the Metro Cotabato Water District (MCWD). MCWD was created by the city government of Cotabato in 1976. The ownership and the management of the water utility was all transferred to what then was called Cotabato City Water District (CCWD) by virtue of Sangguniang Panlungsod Resolution No. 35, dated March 9, 1976. The later was renamed as Metro Cotabato Water District (MCWD) pursuant to CCWD Board Resolution No. 030B-03, dated August 8, 2003, and in accordance with LWUA Board of Trustees Resolution No. 186, series of 1997.

a. Local Waterworks System by Type and Number of Consumers and Average Water Consumption, Year 2018

MCWD served a total of 27,840 concessionaires in the city with a Level III supply facility. Among the 37 barangays, only Kalanganan 1 (Darping) does not have access to the services provided by the MCWD. Table IF-24 below shows the number of concessionaires per barangay and land use. Domestic or residential concessionaires are the biggest consumers with Barangay Rosary Heights 10 having the most number of connections and Barangay Tamontaka 5 having the lowest. Among the commercial users, Barangay Poblacion 5 has the most connections while Barangays Tamontaka 5 and Kalanganan Mother have no connection for commercial use.

There is also an existing possible source of water in the form of an undeveloped spring located at the Barangay Bagua 3, Cotabato City. However, this body of water is not guaranteed to be a potable water source.

Table IF-24: Level III – Local Waterworks System by Type and Number of Consumers and Average Water Consumption, Year 2018

	Type of Consumer							
	Domestic/ Residential		Commercial		Industrial		Others	
	No. of Connections	Ave. Water Consumption	No. of Connections	Ave. Water Consumption	No. of Connections	Ave. Water Consumption	No. of Connections	Ave. Water Consumption
Pob MB	859		154		-		6	
Pob 1	434		14		-		4	
Pob 2	493		11		-		-	
Pob 3	204		13		-		2	
Pob 4	721		110		-		5	
Pob 5	214		343		-		14	
Pob 6	201		276		-		28	
Pob 7	917		10		-		5	
Pob 8	221		3		-		4	

Name of Barangays Served	Type of Consumer							
	Domestic/ Residential		Commercial		Industrial		Others	
	No. of Connections	Ave. Water Consumption	No. of Connections	Ave. Water Consumption	No. of Connections	Ave. Water Consumption	No. of Connections	Ave. Water Consumption
Pob 9	296		1		-		4	
Tam MB	920		54		-		9	
Tam 1	334		4		-		1	
Tam 2	167		1		-		2	
Tam 3	92		-		-		2	
Tam 4	67		1		-		2	
Tam 5	10		-		-		-	
RH MB	1,672		99		-		13	
RH 1	816		34		2		33	
RH 2	455		79		-		3	

RH 3	1,208		37		-		1	
RH 4	643		100		-		8	
RH 5	697		41		-		6	
RH 6	932		52		-		9	
RH 7	738		109		-		69	
RH 8	1,347		48		-		11	
RH 9	1,120		123		-		7	
RH 10	1,912		180		-		14	
RH 11	1,446		47		-		6	
RH 12	484		39		-		2	
RH 13	522		101		-		9	
Bag MB	1,137		22		-		3	
Bag 1	698		4		-		3	
Bag 2	1,489		15		-		2	
Bag 3	582		54		-		2	
Kal MB	896		-		-		12	
Kal 2	401		5		-		8	
TOTAL	25,345	0	2,184	0	2	0	309	0

Source: Metro Cotabato Water District

b. Communal Faucet

While most households are served by individual faucets, Table IF-23 shows that in some areas of Barangays Tamontaka 2, Tamontaka 3, Poblacion 8, Poblacion 9, Kalanganan Mother, Rosary Heights 7 and Rosary Heights 5 water supply is distributed through a communal faucet. These barangays have smaller number of households compared to those served with a Level III facility. The barangays not mentioned below are also served or have full access to the services provided by the MCWD.

Table IF-23 Communal Faucet (Level II)

Name of Barangays Served	Type of Consumer	Name of Barangays Served
036-12-1000	Tamontaka II	3
036-12-2700	Tamontaka II	4
036-12-2750	Tamontaka II	3

036-12-4000	Tamontaka II	5
036-12-4200	Tamontaka II	6
036-12-5000	Tamontaka II	8
036-12-5300	Tamontaka II	10
036-12-6100	Tamontaka II	10
036-12-6500	Tamontaka II	3
036-12-6900	Tamontaka II	2
036-12-7200	Tamontaka II	3
037-12-0200	Tamontaka III	7
037 12-0400	Tamontaka III	2
061-22-0072	Rosary Heights VII	10
061-22-0408	Rosary Heights VII	10
068-22-0880	Pobblacion VIII	6
069-22-2003	Poblacion IX	4
069-22-2015	Poblacion IX	3
069-22-2300	Poblacion IX	Disconnected
071-22-5105	Rosary Heights V	4
071-22-6230	Rosary Heigths V	Disconnected
183-22-4540	Kalanganan MB	4
183-22-4820	Kalanganan MB	Disconnected
183-22-5740	Kalanganan MB	3
183-22-6450	Kalanganan MB	(DatuAyunan HS)
183-22-7480	Kalanganan MB	4

Name of Barangays Served	Type of Consumer	Name of Barangays Served
183-22-7980	Kalanganan MB	2
183-12-8160	Kalanganan MB	Disconnected
183-22-8940	Kalanganan MB	Disconnected
183-22-9530	Kalanganan MB	2
183-22-0585	Kalanganan MB	Disconnected
183-22-8844	Kalanganan MB	Disconnected
183-22-9053	Kalanganan MB	2
183-12-0950	Kalanganan MB	Disconnected

183-12-1360	Kalanganan MB	10
183-12-2600	Kalanganan MB	8
183-12-3420	Kalanganan MB	6
183-12-4140	Kalanganan MB	10
183-12-5500	Kalanganan MB	8
183-12-7670	Kalanganan MB	10
183-12-9065	Kalanganan MB	2
183-12-9250	Kalanganan MB	Disconnected
183-12-9590	Kalanganan MB	Disconnected

Source: Metro Cotabato Water District

c. Water Requirement by Barangay Population, Year 2018.

MCWD has set a minimum requirement of 150L/person. Different volume of water is distributed to different barangays founded upon their respective population. From the table below, MCWD has enough supply of water to cover the barangays. Water interruptions are most often caused by low water level at headwater or low pressure brought about by less precipitation or dry season. Other causes are maintenance of water facility/pumping station or high geographical elevation of barangay affected especially during dry spell.

Table IF-25: Water Requirement by Barangay Population, Year 2018.

Barangay	Current Year				PROJECTED (Year 9)	
	Population	Water Supply (L/month)	Water Requirement	Deficit/Surplus	Population/ Number of Establishments in Year 10*	Projected Water Requirement*
Bagua	5,785	1,157	150 L/ person			
Kalanganan	4,290	858	150L/ person			
Poblacion	5,060	1,012	150L/ person			
Rosary Heights	8,855	1,771	150L/ person			
Tamontaka	4,725	945	150 L/ person			
Bagua I	5,390	678	150L/ person			
Bagua II	7,315	1,463	150L/ person			

Bagua III	3,115	623	150L/ person			
Kalanganan II	1,915	383	150 L/ person			
Poblacion I	2,180	436	150L/ person			
Poblacion II	2,505	501	150L/ person			
Poblacion III	1,055	211	150L/ person			
Poblacion IV	4,130	826	150L/ person			
Poblacion V	2,895	579	150L/ person			
Poblacion VI	2,510	502	150L/ person			
Poblacion VII	4,615	923	150 L/ person			
Poblacion VIII	1,045	209	150L/ person			
Poblacion IX	1,440	288	150L/ person			
Rosary Heightsl	4,365	873	150L/ person			
Rosary Heights II	2,650	530	150 L/ person			
Rosary Heights III	6,060	1,212	150L/ person			
Rosary Heights IV	3,765	753	150L/ person			
Rosary Heights V	3,580	716	150L/ person			
Rosary Heights VI	4950	990	150L/ person			
Rosary Heights VII	4,425	885	150L/ person			
Rosary Heights VIII	6,825	1,365	150L/ person			
Rosary Heights IX	6,055	1,211	150 L/ person			
Rosary Heights X	10,220	2,044	150L/ person			
Rosary Heights XI	7,380	1,476	150L/ person			
Rosary Heights XII	2,495	499	150L/ person			
Rosary Heights XIII	3,125		150 L/ person			

Barangay	**Current Year**				**PROJECTED (Year 9)**	
	Population	**Water Supply (L/month)**	**Water Requirement**	**Deficit/Surplus**	**Population/ Number of Establishments in Year 10***	**Projected Water Requirement***
Tamontaka I	1,610	322	150L/ person			
Tamontaka II	775	155	150L/ person			
Tamontaka III	455	91	150L/ person			
Tamontaka IV	305	61	150L/ person			
Tamontaka V	30	6	150L/ person			

Source: Metro Cotabato Water District

MCWD continues to expand and improve their services through proper maintenance and repair of leaks and damaged pipes. They regularly coordinate with the Local Government Unit of Cotabato City in terms of plans of expansion within the city and in preservation of pipes especially during proposed road clearings or improvements which may damage pipes and lead to water contamination. Currently, the MCWD is in search of other potable water sources within and outside the city. Table IF-19 below shows the Water Analysis Matrix for Cotabato City.

III. Current and Projected Needs

Below show the levels of existing water supply services, facilities, and resources in Cotabato City. The data also shows the projected in level III with 100-110 liters per capita per day (lpcd) of existing water supply services which is the Metro Cotabato Water District (MCWD). The MCWD categorized its type of consumer by Domestic/Residential, Commercial, Industrial, and other water uses with corresponding total number of lcpd individual connections respectively.

Type of Consumer	Level III (100-110 lcpd connection) liters/person (capita)per day
Domestic/Residential	230.0409 lcpd
Commercial	19.8545 lcpd
Industrial	0.01818 lcpd
Others	2.80909 lcpd

Table below shows the "Water Sector Related Projects/Programs/Activities" of the City private sectors/MCWD partnership. The data include the lists of projects, its type, the assigned government sector or implementing office, the starting date of water piping, and its projected completion.

Water Sector Related Projects/Programs/Activities

Name/ Location of Project	Barangay	Type	Proponent (Government, Private, Other)	Estimated Start Date	Estimated Date of Completion
"8" diameter Upvc Pipe Replacement/Improvement at TV Juliano Avenue	TV Juliano Avenue		Private Sector -MCWD	CY 2023	CY 2025
"8" diameter Upvc Pipe Replacement/Improvement at Rosales St.	Rosales St.		Private Sector -MCWD	CY 2023	CY 2025
"8" diameter Upvc Pipe Replacement/Improvement at Gov. Gutierrez Avenue	Gov. Gutierrez Avenue		Private Sector -MCWD	CY 2023	CY 2025
"4" diameter Upvc Pipe Replacement/Improvement at Austria St.	Austria St.		Private Sector -MCWD	CY 2023	CY 2025
"4" diameter Upvc Pipe Replacement/Improvement at Concepcion Mendoza St.	Concepcion Mendoza St		Private Sector -MCWD	CY 2023	CY 2025
"4" diameter Upvc Pipe Replacement/Improvement at	Tomas Martinez St		Private Sector -MCWD	CY 2023	CY 2025

Tomas Martinez St.					
“2" diameter Upvc Pipe Replacement at San Pablo Village (Phase 2) Barangay Rosary Heights XI	San Pablo Village (Phase 2) Barangay Rosary Heights XI		Private Sector -MCWD	CY 2023	CY 2025
“8" diameter Upvc Pipe Replacement/Improvement at Tomas Martinez St	Tomas Martinez St		Private Sector -MCWD	CY 2023	CY 2025
'2" diameter Upvc Pipe Replacement at Tomas Martinez St. (Phase 2)	Martinez St. (Phase 2)		Private Sector -MCWD	CY 2023	CY 2025
“4" diameter Upvc Pipe Replacement at Tulingan St.	Tulingan St.		Private Sector -MCWD	CY 2023	CY 2025
“8" diameter Upvc Pipe Replacement at LR Sebastian St.	LR Sebastian St.		Private Sector -MCWD	CY 2023	CY 2025
“4" diameter Upvc Pipe Replacement at Tamse Road	Tamse Road		Private Sector -MCWD	CY 2023	CY 2025
“4" diameter Upvc Pipe Replacement/Improvement at Campo Muslim St.	Campo Muslim St.		Private Sector -MCWD	CY 2023	CY 2025
“16" diameter steel to Ductile Pipe at National Highway	National Highway		Private Sector -MCWD	CY 2023	CY 2025
“6" diameter Upvc Pipe Replacement/Improvement at ND Avenue St.	ND Avenue St		Private Sector -MCWD	CY 2023	CY 2025
“6" diameter Upvc Pipe Replacement/Improvement at Mabini St.	Mabini St.		Private Sector -MCWD	CY 2023	CY 2025
Construct of Water facilities/Bulk Water supply	Cotabato City		Private Sector -MCWD	CY 2023	CY 2025

Table IF-19 below shows water analysis matrix as of year 2020 in terms of existing facilities at different location in the city. Most of the findings relate to pipes condition and distribution. A large part of the city is now supplied with potable water by MCWD, however, providing water to fringe areas and corners of the city remains a challenge.

Table IF-19: Water Analysis Matrix, Year 2020

Technical Findings/ Observations	Implications (Effects)	Policy Options/ Recommendations
Barangay Kalanganan 1 still has no access to the services provided by the Metro Cotabato Water District	The households living within the area has to rely on water from the river, dug well, pumps, or even purchasing bottled drinking water from water suppliers to support for their basic necessities No guarantee that water is fit for human consumption	Expansion of MCWD’s service area Establish pumping station proximity to the area to utilize the surface water/river or groundwater

Barangay Tamontaka 5 has the least number of connections to the Metro Cotabato Water District. Most residents situated at the fringe of the barangay have no access not is serve with water lines	Only few households have water connection to potable drinking water within the barangay. Some of them rely on deep wells to support their water requirement. Deep well water may be contaminated and not fit for human consumption	City Government or barangay through partnership with MCWD set up a strategically located level 2 water system.
10 communal faucets (1 – Pob. IX, 1- R.H.V, 8-KAL. MB) were disconnected by the Metro Cotabato Water District	Consessionaires depending on the communal faucet will look for another source of potable water in the area or will rely on the deep wells which may not be safe	MCWD to conduct reevaluation for reconnection of disconnected communal faucets
Leaks along old water lines/pipe	Low water supply due to leaks. If unattended, pipes may burst and altogher cut water supply to service areas Public inconvenience Loss of income	Immediate repair of the leaks. Immediate report of the leaks by the concessionaires to the MCWD. Replace old pipes with new pipes
Increasing number of concessionaires may reduce water supply in some areas	Shortage of water supply (low to no water pressure).	MCWD to upgrade or add potable water supply or machine/ equipment. Establish additional source of water supply in the city.

Source: Metro Cotabato Water District

6.4 Communication Sector

Telecommunication sector consist of outfits responsible for transmitting or exchanging data and information through different platforms. In the city, there is only one (1) Local Postal Service, the Philippine Postal Service that accepts or process postal (snail) mails.

There are five (5) telephone service provider namely; Globe Telecom Inc., Smart Communications/Broadband, Maguindanao Skycable Inc., Cotabato Cable TV Network Corporation and Philippine Long-Distance Telephone (PLDT). Not only do these companies provide telecommunication services to the city but also some portions of nearby municipalities. These companies also provide cell sites/ towers, of which ten (10) cell towers were set up by Globe Telecom, Inc and ten (10) cell towers were mounted by Smart Communications purposely to enhanced connectivity. Although there is limitation in terms of signal coverage they continue expand and upgrade their system.

Cotabato City have nine (9) Broadcast and Television Network (Radio, Television, Cable) namely; ABS-CBN Broadcasting System Corp., Consolidated Broadcasting System, Inc. Manila Broadcasting Company, Notre Dame Broadcasting Corporation, Radio Mindanao Network, Inc., Philippine Broadcasting Corporation, Baycomms Broadcasting Corporation, Bandera News Philippines and Nation Broadcasting Corporation.
The city has seven (7) radio stations, three (3) Amplitude Modulation (AM) Stations and four (4) Frequency Modulation (FM) Stations to provide real time information to listeners.

a. Information Technocolgy and Communication Service Facilities

Due to location of these facilities, a few are at risk to different calamities. Among the facilities at risk are Globe Telecom at Bagua 1, Rosary Heights 1, 10, as well as Tamontaka Mother Barangay which are highly susceptible to flood and are medium category in terms of susceptibility to tsunami. The Smart Communications at Rosary Heights Mother and 13 were assessed to be low in terms of susceptibility to flood and medium in terms of susceptibility to tsunami. Due to location at the coast, the Parola Signal Site of Kalanganan Mother Barangay was assessed to be at highly susceptibility to tsunami and storm surge.

Table IF-30: Communication Service Facilities, 2018

Type	Year Constructed	Area Occupied (ha)	Barangay	Ownership			Hazard Susceptibility (H/M/L)						
				Public	Private	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
Postal Services													
Post Office			Poblacion 6	✓									
Telephone Service Provider													
Globe Broadband			Cotabato City		✓								
Smart Bro			Cotabato City		✓								
Maguindanao Skycable Inc.			Cotabato City		✓								
Cotabato Cable TV Network Corporation			Cotabato City		✓								
PLDT			Cotabato City		✓								
Cell Sites Network					✓								
GLOBE TELECOM		0.011163	Bagua I		✓	H					M		
GLOBE TELECOM			Bagua II		✓								
GLOBE TELECOM		0.00154	Rosary heights 1		✓					M			
GLOBE TELECOM			Rufino Alonzo st.		✓								
GLOBE TELECOM			RabagoSt.		✓								
GLOBE TELECOM		0.002089	DelcanoSt.		✓	L							
GLOBE TELECOM		0.012506	Conception St.		✓	H					M		
GLOBE TELECOM			Moon St., RH 8		✓								

GLOBE TELECOM			South seas complex		✓								
GLOBE TELECOM, INC.			32 doñaTeresita St.		✓								
SMART BROADBAND,			Don E Sero cor. 4th St.		✓								
SMART BROADBAND, INC		.035381	Rosales Subd., RH 6		✓	L					M		
SMART COMMUNICATIONS, INC.			Don ESero cor. 4th St. RH 5		✓								
SMART			San Sebastian road RH 11		✓								
SMART			Bagua		✓								
SMART COMMUNICATIONS		.027616	F. Milan st. RH 13		✓	L					M		
SMART		.034819	#11 Don E. SeroSt. RH 5		✓	L							
SMART			San Sebastian road RH 11		✓								
SMART			PinhoySeroSt.RH 5		✓								
SMART			SkPendatunAve.		✓								

Type	Year Constructed	Area Occupied (ha)	Barangay	Ownership			Hazard Susceptibility (H/M/L)						
				Public	Private	Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
DICT TOWER			Rosary heights 5										
Parola Signal Site		0.018407	KalanganonMother barangay		✓						H	H	
Broadcast and Television Network (radio, television, cable)					✓								
ABS-CBN Broadcasting System, Corp.			Don Sero Cor. Kabunsuan St., Cotabato City		✓								
Consolidated Broadcasting System, Inc.			5th St., Don Sero, R.H. 5, Cotabato City		✓								
Manila Broadcasting Company			PC Hill, Rosary Heights I, Cotabato City		✓								
Notre Dame Broadcasting Corporation			Corner Sinsuat& Quezon Ave, Cotabato City		✓								
Radio Mindanao Network, Inc.			Sinsuat Ave., Rosary Heights 10, Cotabato City		✓								
Philippine Broad casting Corpration			Dep. Ed ARMM ORG Compound, Cotabato City		✓								
Baycomms Broadcasting Corporation			Sinsuat Ave., Cotabato City		✓								

Bandera News Philippines			Rosary Heights 5, Cotabato City		✓								
Nation Broadcasting Corporation			Almonte St., Cotabato City		✓								
TV Station					✓								
ABS-CBN Broadcasting Corp.			Don Sero Cor. Kabunsuan St.		✓								
GMA Network, Inc.			ARMM Compound, Cotabato City		✓								
Republic Broadcasting System			Cotabato City		✓								
Amcara Broadcasting Network, Inc. (Studio 23)			Don Sero Cor. Kabunsuan St.		✓								
People's TV Network			Cotabato City		✓								
AM Station					✓								
Notre Dame Broadcasting Corporation			Corner Sinsuat& Quezon Avenue, Cotabato City		✓								
Pacific Broadcasting System, Inc.			Krislamville, Santos Extn., R.H. Cotabato City		✓								
Radio Mindanao Network, Inc.			Sinsuat Ave. Rosary Heights 10, Cotabato City		✓								

Source: DICT Region XII

b. Type of Print Media available

Cotabatenos nowadays are convenient on using social media thru the aid of Internet Services Providers, but printed newspaper cannot be disregarded altogether. There are two existing print media in the city. It continues to operate and prints weekly local newspaper. Table IF-31 shows the print media operating in the city. These local new spapersis being circulated in the entire area of city and its neighboring towns and provinces.

Table IF-31: Type of Print Media available, 2018

Type of Print Media	Location	Area Coverage	Circulation		
			Number	Type	Frequency
The Mindanao Cross	ND. Avenue	City wide and nearby towns		Printing Establishment	once a week
Mindanao News Star	Don Rufino Alonzo St.	City wide and nearby towns		Printing Establishment	once a week

Source: DICT Region XII

c. Cell Site Network

The table IF-32 below shows the inventory of cell sites in the city. Most of the date requested are not available in field/sales offices. If ever available, informations on the same are kept at their central offices or by their respective contractors.

There are 23 cell sites owned by the two service providers Globe Telecommunications and Smart Communications. In terms of hazard, the tower of Globe Telecommunications at Barangay Rosary Heights 10 has low susceptibility to flood and its tower at Barangay Tamontaka Mother and Bagua 1 are highly susceptible to flood. Three towers owned by SMART located at Barangay Rosary Heights Mother, Rosary Heights 5, and Rosary Heights 8 has low susceptibility to flood. The tower of Parola Cignal Site at Barangay Kalaganan Mother is the only cell site which is highly susceptible to tsunami or storm surge. The three towers of Globe Telecommunications are moderately susceptible to tsunami at Barangay Tamontaka Mother and Bagua 1. Smart Telecommunication towers at Barangays Rosary Heights Mother and Rosary Heights 13. The tower of Globe Telecommunications at Barangay Rosary Heights 1 is the only tower susceptible to landslide.

Table IF-32: Cell Site Network

Location (Barangay, building)	Owner	Area Occupied (ha)	Antenna Height	Date Installed	Catchment Area (km)	Hazard Susceptibility (H/M/L)							
						Fl	Tc	Eq	Vo	Ln	Ts	Su	Others
BAGUA II - GLOBE TELECOM	Gobe Telecom	*No Date*	*No Date*	*No Date*	*No Date*								
POBLACION MB - GLOBE TELECOM	Gobe Telecom	*No Date*	*No Date*	*No Date*	*No Date*								
POBLACION III - GLOBE TELECOM	Gobe Telecom	*No Date*	*No Date*	*No Date*	*No Date*								
RH II - GLOBE TELECOM	Gobe Telecom	*No Date*	*No Date*	*No Date*	*No Date*								
ROSARY HEIGHTS X - GLOBE TELECOM	Gobe Telecom	0.002089	*No Date*	*No Date*	*No Date*	L							
TAMONTAKA MB - GLOBE TELECOM	Gobe Telecom	0.012506	*No Date*	*No Date*	*No Date*	H					M		
TAMONTAKA MB - GLOBE TELECOM	Gobe Telecom	*No Date*	*No Date*	*No Date*	*No Date*								
GLOBE TELECOM	Gobe Telecom	*No Date*	*No Date*	*No Date*	*No Date*								
POBLACION III - GLOBE TELECOM, INC.	Gobe Telecom	*No Date*	*No Date*	*No Date*	*No Date*								
TAMONTAKA MB - GLOBE TELECOM, INC.	Gobe Telecom	*No Date*	*No Date*	*No Date*	*No Date*								
BAGUA I - GLOBE TELECOM	Gobe Telecom	0.011163	*No Date*	*No Date*	*No Date*	H					M		
ROSARY HEIGHTS MB - SMART BROADBAND,	Smart Telecom	0.035381	*No Date*	*No Date*	*No Date*	L					M		
ROSARY HEIGHTS MB - SMART BROADBAND, INC.	Smart Telecom	*No Date*	*No Date*	*No Date*	*No Date*								
ROSARY HEIGHTS MB - SMART TELECOM	Smart Telecom	*No Date*	*No Date*	*No Date*	*No Date*								
SMART	Smart Telecom	*No Date*	*No Date*	*No Date*	*No Date*								
ROSARY HEIGHTS MB - SMART	Smart Telecom	*No Date*	*No Date*	*No Date*	*No Date*								
ROSARY HEIGHTS XIII - SMART COMMUNICATIONS,	Smart Telecom	0.027616	*No Date*	*No Date*	*No Date*	L					M		

ROSARY HEIGHTS V - SMART	Smart Telecom	0.034819	*No Date*	*No Date*	*No Date*	L							
ROSARY HEIGHTS X - SMART	Smart Telecom		*No Date*	*No Date*	*No Date*								
TAMONTAKA III - SMART	Smart Telecom		*No Date*	*No Date*	*No Date*								
SMART	Smart Telecom		*No Date*	*No Date*	*No Date*								
KALANGANAN MB - PAROLA CIGNAL SITE	Parola Cignal	0.018407	*No Date*	*No Date*	*No Date*						H	H	
ROSARY HEIGHTS I - GLOBE TELECOM	Gobe Telecom	0.00154	*No Date*	*No Date*	*No Date*					M			

Data source: DICT Region XII

Table below shows the information and communication facilities/services in Cotabato City. It similarly shows the needs of ICT sub-sector. The data includes the list of proposed projects at different barangays, the implementing office, and the starting date and the target completion date. Further below is the analysis matrix showing the ICT situation and effect (if unattended) and recommendations to resolve the situation.

Information and Communication Technology Progam/Project/Activities

Name/ Location of Project	Barangay	Type	Proponent (Government, Private, Other)	Estimated Start Date	Estimated Date of Completion
Construction of Two (2) new cellular sites/towers	Poblacion 2,		Private – Sector -DICT	CY 2023	CY 2025
Construction of Two (2) new cellular sites/towers	Kalanganan 2,		Private – Sector -DICT	CY 2023	CY 2025
Construction of Two (2) new cellular sites/towers	Tamontaka Mother		Private – Sector -DICT	CY 2023	CY 2025
Construction of Two (2) new cellular sites/towers	Bagua Mother		Private – Sector -DICT	CY 2023	CY 2025
Construction of Two (2) new cellular sites/towers	Bagua 1		Private – Sector -DICT	CY 2023	CY 2025
Construction of Two (2) new cellular sites/towers	Rosary Heights 8		Private – Sector -DICT	CY 2023	CY 2025
Construction of Two (2) new cellular sites/towers	Rosary Heights 6		Private – Sector -DICT	CY 2023	CY 2025

Information Technology and Communication Analysis Matrix

Technical Findings/Observations	Implications (Effect)	Policy Options /Recommendations
• Apprehension on the presence of cell sites nearby due to assumed adverse effects on their heatlh causeb by radiation	• Fewer cell sites resulting to saturated/congested communication processing	• Conduct awareness on the radiation effect (if any) emitted by cell towers
• Lack of stable, fast/ high speed internet.	• Poor and unstable internet connection on some areas • Computer lagging	• Facilitate installation of high speed internet currently available in the market.
• No telephone lines available in some rural areas.	• Residents deprived of fast, modern and efficient telecommunication services.	• Representation/coordination with telephone companies to extend services in the area.

Table IF-33 below shows the collective issues from different infrastructure sub-sectors such as transportation, power, water, and Information Communication Technology at various areas in city. It also display the implication and suggested interventions in the form of policies, programs or projects to resolve the issue.

Table IF-33: Integrated Infrastructure Analytical Matrix

Technical Findings/ Observations	Implications (Effects)	Recommended Interventions
Transportation • Poor road continuity and some road are in bad shape • Poor and non functional drainage • Increasing number of public and private vehicles • Limited routes for public transport vehicles.	• Traffic congestion • Risk of road accidents • Flooding, unpassable roads due to its bad condition	• Improved the existing roads (e,g, rehabilitation of roads in bad conditions, reconstruction of dilapilated roads) • Improvement of ancillary facilities: Installation of solar street lights; Enhance traffic management system Formulation of Drainage Masterplan for the city
Power • Limited area supplied with electricity in rural barangays	**Power** • Less socio-economic activities (investment/ income opportunities) for the households unserved by power	**Power** • Setting up of additional substations and introduction of new type of electricity generation technology in cooperation with government agencies/private organizations.
Water • There are still households unserved by the • There are communal faucets disconnected • The increasing population of the city may result to reduce water supply	**Water** • Water from other source can lead to diseases/ illness • Households dependent on communal faucet will look for another source of potable water or will rely on the deep well which may be unsafe. • Shortage of water supply (*low to no water*	**Water** • Establishment of new water source or pumping station • Conduct technical assessment on water pipes condition; • Reconnection of communal faucets or settle issues with community that have cause the disconnection • Upgrading/adding potable water-generating

	pressure)	machine/equipment.
ICT • Lack of stable, fast/high speed internet connection • Limited telephone coverage in the city	**ICT** • Online meetings, classes, business and official transactions are affected • Computer lags	**ICT** • Internet providers to install latest high speed internet. • Construct more cell sites