



TEMA METROPOLITAN ASSEMBLY

TEMA

METRO PROFILE

**Prepared under “The Resetting – Ghana
Agenda – Creating Jobs, Ensuring
Accountability and Promoting Shared
Prosperity”**

PREPARED BY

MPCU

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CHAPTER ONE

GENERAL INTRODUCTION

1.0 Introduction

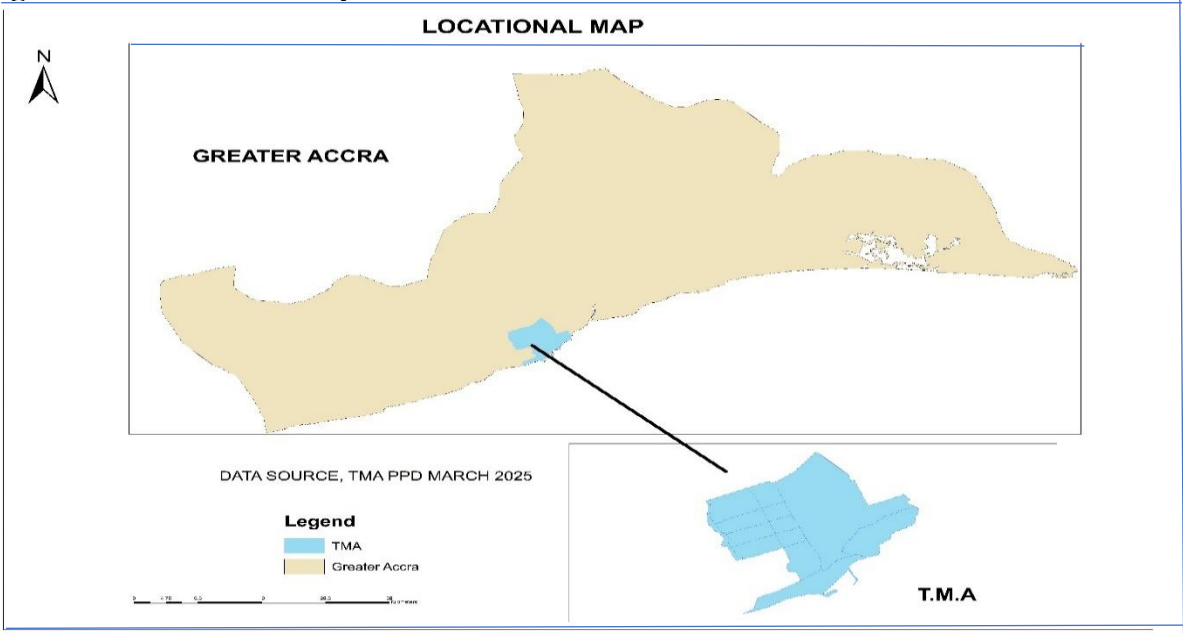
This chapter provides an overview of the Tema Metropolitan Assembly (TMA). It outlines the vision, mission, functions, mandate, core values, organizational structure, and locational map of the Tema Metropolitan Assembly. Additionally, it presents the structure of the document to guide the reader understand the flow of information in the chapters.

1.1 Metropolitan Profile

The Tema Metropolis is a coastal district situated about 30km East of Accra, the capital city of Ghana. It shares boundaries on the North-East with the Kpone Katamanso Municipality, to the West by Tema West Municipality, North by Ashaiman Municipality and the South by the Gulf of Guinea. The Metropolis covers an area of about 53.0km² and lies within the coastal savannah zone (TMA, 2020). The Greenwich Meridian (i.e., Longitude 0°) passes through the Metropolis, which meets the equator or latitude 0° in the Ghanaian waters of the Gulf of Guinea. The southern tip of the Metropolis lies on latitude 5°41” North. The Metropolis proximity to the sea with its low-lying terrain which projects into the sea makes it a natural endowment for harbour. This evidently informed the decision of the construction of the Tema Harbour in 1957, making the metropolis “the Eastern Gateway of Ghana” and the industrial hub of the country.

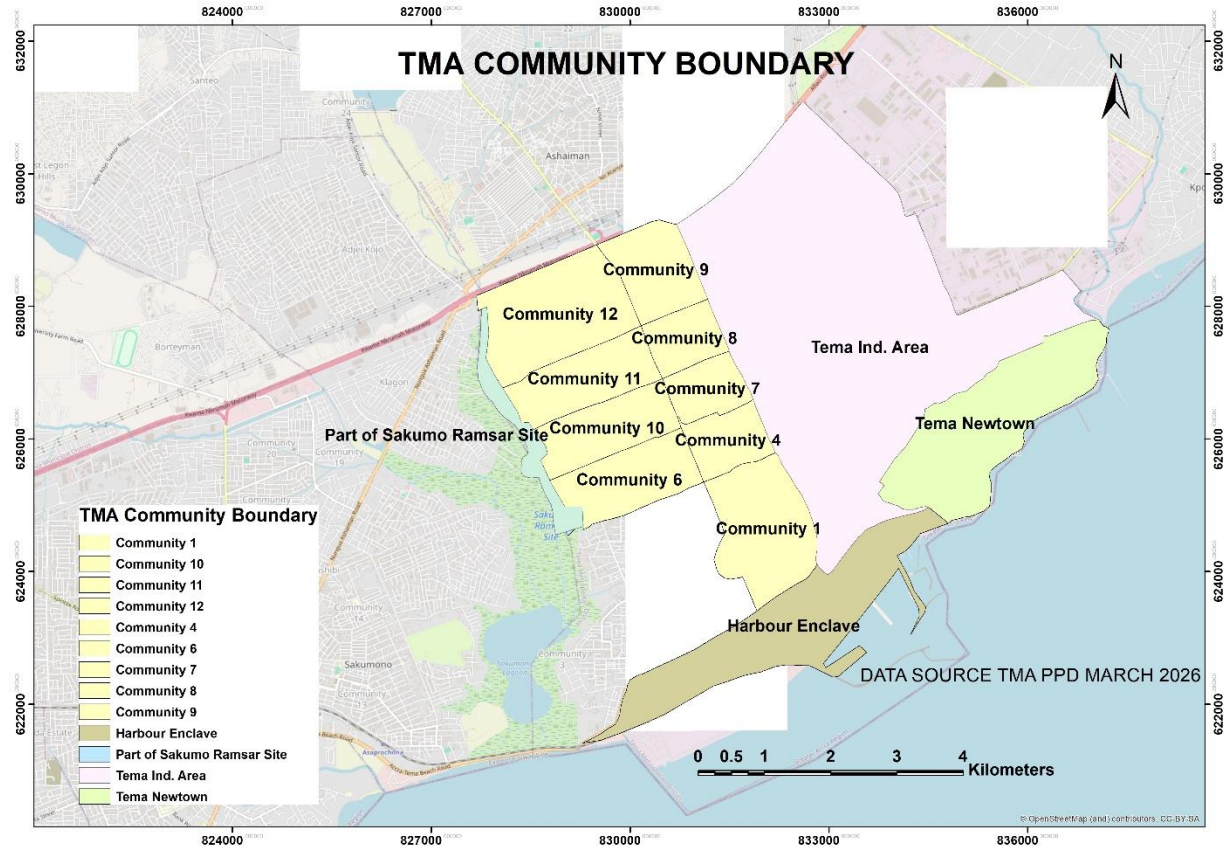
The Tema Metropolitan Assembly (TMA) was elevated to a Metropolitan status in 2008 under Legislative Instrument (LI) 1929 (2008). According to the 2021 Population and Housing Census, the provisional total population of the Tema Metropolitan Assembly is 177,924 and this consists of 49.1% males and 50.9% females. The projected population of the metropolis for the year 2026 is 205,011.

Figure 1.1: Locational Map



Source: TMA – PPD, 2025

Figure 1.2 Distribution of Communities in Tema



Source: Physical Planning Dept (TMA), 2025

1.2 Vision of Tema Metropolitan Assembly

An international standard Metropolis where its inhabitants will enjoy the full benefits of modernization and comfort on a peaceful, reliable and sustainable basis.

1.3 Mission of Tema Metropolitan Assembly

To improve the quality of life of the people in the Metropolis through the provision of essential services and the creation of enabling environment to ensure the total sustainable development of the Tema Metropolis.

1.4 Mandate and Functions of Tema Metropolitan Assembly

The Tema Metropolitan Assembly (TMA) derives its mandate from Ghana's 1992 Constitution, Local Governance Act, 2016 (Act 936) and Legislative Instrument (LI) 1929 (2008) which establishes Tema Metropolitan Assembly. The Assembly is mandated to ensure the overall development of the metropolis through the formulation and implementation of policies, programmes and strategies that promote local governance and service delivery. As the highest political and administrative authority in the Tema Metropolitan Area, its functions include:

1.4.1 Overall Development and Planning

The Tema Metropolitan Assembly bears the primary responsibility for the overall development of the Tema Metropolis. This overarching mandate involves the crucial task of formulating and executing comprehensive development plans and budgets, which must then be submitted to the central government for approval. Per the Act, TMA is responsible for strategic mobilization and efficient utilization of all available resources which include human, physical and financial to enhance the metropolis's growth and address its developmental needs to benefit the local populace. In addition to planning and resource management, the Assembly also promotes and supports productive economic activities and social development within its jurisdiction. This entails creating an enabling environment that promotes local initiatives, a significant part of this function also involves initiating programs for the development of essential basic infrastructure, such as schools, hospitals, roads, markets and lorry parks to enhance the quality of life for all residents.

1.4.2. Human Settlement and Environmental Management

The Assembly plays a pivotal and critical role in the management of the physical environment and human settlements within the Tema Metropolis. This involves stringent control over orderly physical development, a key aspect of which is the approval of planning schemes and layouts to ensure organized development. The Assembly is also responsible for issuing vital building permits, thereby regulating construction activities and ensuring compliance with urban planning regulations. A significant portion of this function also focuses on effective waste management and the promotion of public health through various sanitation initiatives.

The Assembly actively enforces regulations against unauthorized structures and developments, which is crucial for maintaining environmental integrity, preventing haphazard growth, and ensuring public safety and aesthetic appeal within the metropolitan area.

1.4.3. Security and Public Safety

In close cooperation with relevant national and local security agencies, the Tema Metropolitan Assembly is fundamentally responsible for the maintenance of security and public safety within the confines of the metropolis. This collaborative effort ensures a stable and secure environment for residents and businesses, contributing to overall peace and order.

The Assembly is also responsible for providing essential relief services during natural disasters. This critical function involves responding promptly to emergencies, such as floods or other calamitous events, by supplying necessary materials and support to affected community members to mitigate suffering and aiding recovery efforts.

1.4.4. Justice and Cultural Heritage

The foremost responsibility of the Assembly in respect to justice is to ensure that all inhabitants within its jurisdiction have ready access to courts and public tribunals. This function is crucial for the promotion of justice at the local level, ensuring that legal avenues are accessible for the resolution of disputes and the upholding of legal rights for all citizens.

Additionally, the Assembly is mandated to actively preserve and promote the cultural heritage present within the Metropolis. This includes supporting traditional practices, preserving historical sites, and promoting local arts, thereby safeguarding the unique identity and cultural legacy of the people in Tema Metropolis for current and future generations.

1.4.5. Regulatory and Legislative Functions

A key aspect of the TMA's authority lies in its regulatory and legislative powers. The Assembly exercises these powers by passing and enforcing bye-laws, which are local regulations designed to govern public behaviour and various activities within the metropolis. These bye-laws cover a wide range of areas, ensuring orderly conduct and compliance with local standards.

This regulatory scope also extends to the local economy, where the TMA is responsible for issuing business operating permits and regulating professions and trades. Furthermore, it oversees commercial vehicle operations, including licensing and ensuring the roadworthiness of vehicles, and manages birth and death registrations, providing essential local services to the community.

1.4.6. Social Services and Public Participation

The Tema Metropolitan Assembly is deeply involved in the provision of essential social services to its citizens. This includes sponsoring student education, particularly to address specific manpower needs in vital sectors such as health and education, while ensuring that sponsorship opportunities are equitably balanced between male and female students to promote inclusivity. The Assembly also plays a crucial role in facilitating access to other basic services, such as health, education, sanitation, water, electricity, etc., and generally promote sports development and other recreational activities which are fundamental to community well-being.

Moreover, the Assembly is committed to fostering public involvement and transparency. This is achieved by creating and equipping client service units, organising Social Accountability programmes and Town hall meetings to remove communication barriers and also providing accessible platforms like social media and suggestion boxes. These initiatives are designed to solicit public views and ensure transparent information dissemination.

1.4.7. Coordination and Oversight

The Assembly performs vital coordination and oversight responsibilities to ensure effective local governance and development. This includes diligently supervising its sub-structures, such as the Sub-Metropolitan District Councils, ensuring that these entities operate efficiently and in alignment with the broader developmental goals of the metropolis.

Furthermore, the Assembly is responsible for coordinating with Non-Governmental Organizations (NGOs) to prevent duplication of efforts and maximize the impact of developmental initiatives.

This involves monitoring the execution of various projects under approved development plans and rigorously assessing their impact on the district's overall progress and the national economy.

The Tema Metropolitan Assembly, as established under the Local Governance Act, 2016 (Act 936), serves as the backbone of local administration, ensuring effective service delivery, governance, and sustainable development in Tema. Its functions span legislative, administrative, developmental, and environmental roles, all aimed at improving the quality of life for residents while fostering inclusive growth.

1.5 Core values of Tema Metropolitan Assembly

The Tema Metropolitan Assembly's operations are deeply rooted in a set of foundational core values that collectively guide its governance, decision-making, and service delivery approach. These values are integral to fostering a responsive, effective, and citizen-centric local government, striving to improve the quality of life for all inhabitants within the Tema Metropolis. The following are the core values of the Assembly:

i. Accountability

Accountability is a fundamental pillar for the Tema Metropolitan Assembly. It ensures that the Assembly and its personnel are fully responsible and answerable for their actions, decisions, and the management of public resources. This commitment to transparency and responsibility is crucial for building and maintaining trust with the citizens, demonstrating that the Assembly operates with integrity and in the best interests of the community.

ii. Excellence

The pursuit of Excellence drives the Tema Metropolitan Assembly to achieve the highest standards in service delivery. This value encourages continuous improvement in planning, project execution, and the delivery of public services. Through continuously aiming for excellence, the Assembly aims to deliver effective and meaningful results that greatly advance the growth of the city and the welfare of its citizens.

iii. Innovativeness

Innovativeness reflects the Assembly's dedication to forward-thinking and problem-solving. This core value means actively seeking out new and improved methods, embracing technologies, and developing creative approaches to address municipal challenges. Fostering a culture of innovation,

the Assembly aims to enhance operational efficiency, deliver more effective solutions, and adapt to the evolving needs of the metropolis.

iv. Team Work

Team Work is paramount within the Assembly, fostering a collaborative and cohesive internal environment. This value emphasizes the importance of various departments and individuals working synergistically towards shared objectives. Promoting strong internal partnerships, the Assembly ensures integrated efforts, optimizes resource utilization, and achieves comprehensive development outcomes that benefit the entire community.

v. Client Service Oriented

The core of the Assembly's mission is to be client focused by ensuring that all programs, policies, and services are designed and delivered with the needs and expectations of the citizens as the primary focus. This citizen-centric approach underscores the Assembly's commitment to responsiveness, accessibility and proactive engagement ultimately aiming to enhance the overall satisfaction and quality of life for residents.

vi. Timeliness

Timeliness underscores the Assembly's commitment to efficiency and prompt action in service delivery. This value emphasizes the importance of delivering services and completing tasks within reasonable timeframes, recognizing that swift and effective responses are crucial for addressing public needs, resolving issues, and maintaining momentum in project execution. It demonstrates a commitment to responsive governance and consideration for the immediate needs of the people.

1.6 Organizational Structure of the Tema Metropolitan Assembly

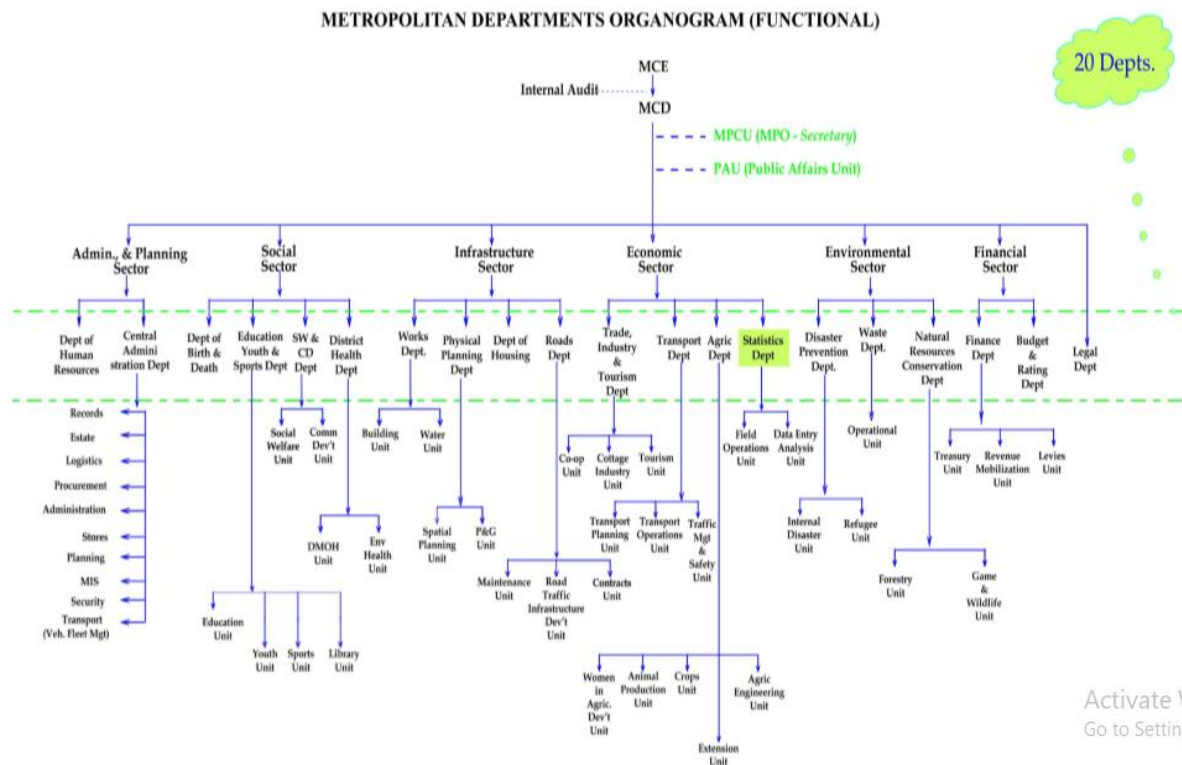
The organizational structure, or organogram, of Metropolitan Assemblies in Ghana is fundamentally shaped by the Local Government (Departments of District Assemblies) (Commencement) Instrument, 2009, L.I. 1961. This Legislative Instrument, which came into force on February 24, 2010, marked a significant step in Ghana's decentralization process by formalizing the establishment of decentralized departments as integral components of District Assemblies, including the Metropolitan Assemblies.

Under L.I. 1961, Metropolitan Assemblies are supposed to have sixteen (16) established departments, but recent administrative instructions following the passage of the Local Governance Act, 2016 (Act 936), has increased the number of departments for metropolitan Assembly's to

twenty (20). These departments are typically clustered into six functional groups: Social Sector Departments (e.g., Education, Youth and Sports; Social Welfare and Community Development; Health; Birth and Death), Infrastructure Sector Departments (e.g., Works, Physical Planning, Roads, Housing), Economic Sector Departments (e.g., Trade and Industry, Agriculture, Transport), Environmental Sector Departments, Financial Sector Departments, and Administration, Planning & Budget Sector Departments.

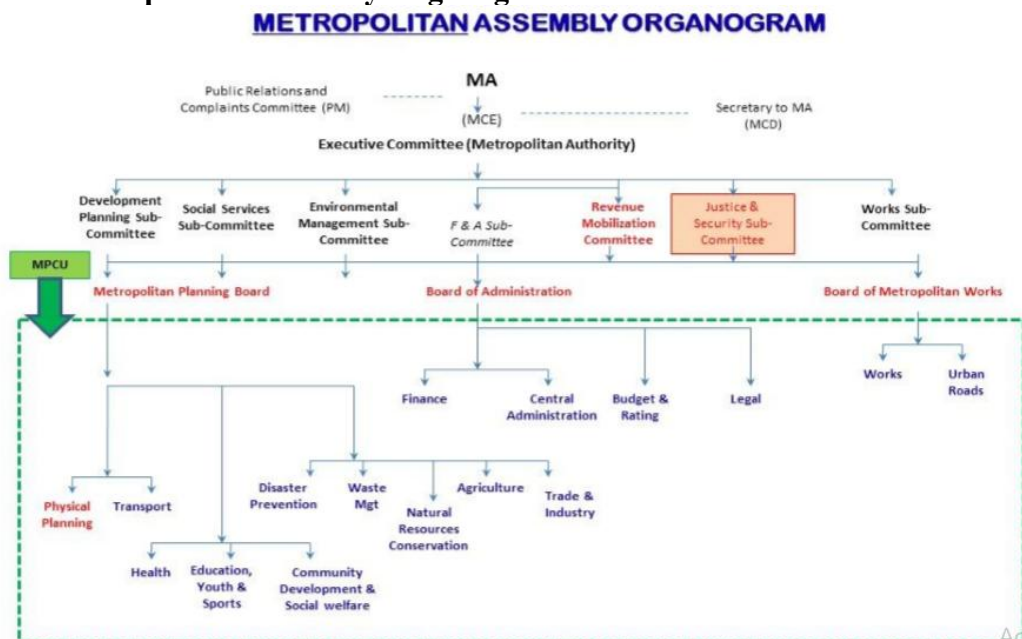
In addition to the core departments, the organogram of a Metropolitan Assembly also includes various political and administrative structures. At the apex is the General Assembly, which serves as the legislative arm and the highest decision-making body of the Assembly. The General Assembly comprises of elected members, government appointees, and non-voting Members of Parliament. Beneath the main Assembly are sub-district structures and in the case of Tema there are two main sub – district structures namely Tema Central Sub-Metropolitan District Council and Tema East Sub-Metropolitan District Council. While these sub-structures do not possess legislative or rating powers, they play a crucial role in overseeing the implementation of bye-laws, policies, and projects at the grassroots level, ensuring that local governance is brought closer to the communities it serves.

Figure 1.3: Functional Organogram of the Assembly



Source: MLGCRA, 2025

Figure 1.4: Metropolitan Assembly Organogram



Source: MLGCRA, 2025

CHAPTER TWO

SITUATIONAL ANALYSIS

2.1 Demographic Characteristics

The demographic characteristics of the Tema Metropolis concern the statistical analysis of its human population [especially] with reference to size and density, distribution, and vital statistics. This provides an indispensable source of information for planning in the Metropolis.

2.1.1 Population Size

According to the 2021 Population and Housing Census and Household Survey, the total population of the Metropolis is 177,924 with males and females forming 49 percent and 51 percent of the total population. The metropolis has a floating population of about 20,000. This number of people enter the city daily for various economic activities due to the presence of the Tema Harbour and other industries within the industrial area.

2.1.2 Age and Sex Composition and Distribution

According to the 2021 Population and Housing Census (PHC), the total population of the Tema Metropolitan Assembly was 177,924 with the male population comprising of 87,529 which is 49% and the female population comprising of 90,395 which is 51%. The total population of Tema Central sub metro according to the 2021 PHC is 66,191 with the male population comprising of 31,797 (48%) and the female population comprising of 34,394 (52%). The total population of Tema East sub metro is 111,733 with the male population comprising of 55,732 (49.9%) and the female population 56,001 (50.1%). This population is expected to grow from 194,540 in 2024 to 200,151 by 2025 based on the population growth rate of 2.9%. The table below shows the projected population of the Assembly over a 10-year period which also includes a population projection for Tema Central and Tema East Sub Metro's.

The distribution of the population in the Tema Metropolis indicates that the age group 25-29 recorded the highest population of 10.43 percent while age groups 95-99 and 100+ had the least population. In the Tema Metropolis, the total age dependency for both sexes is 50%. The male age dependency is 51.3 percent while that of the female is 48.7 percent. The Metropolis has a youthful

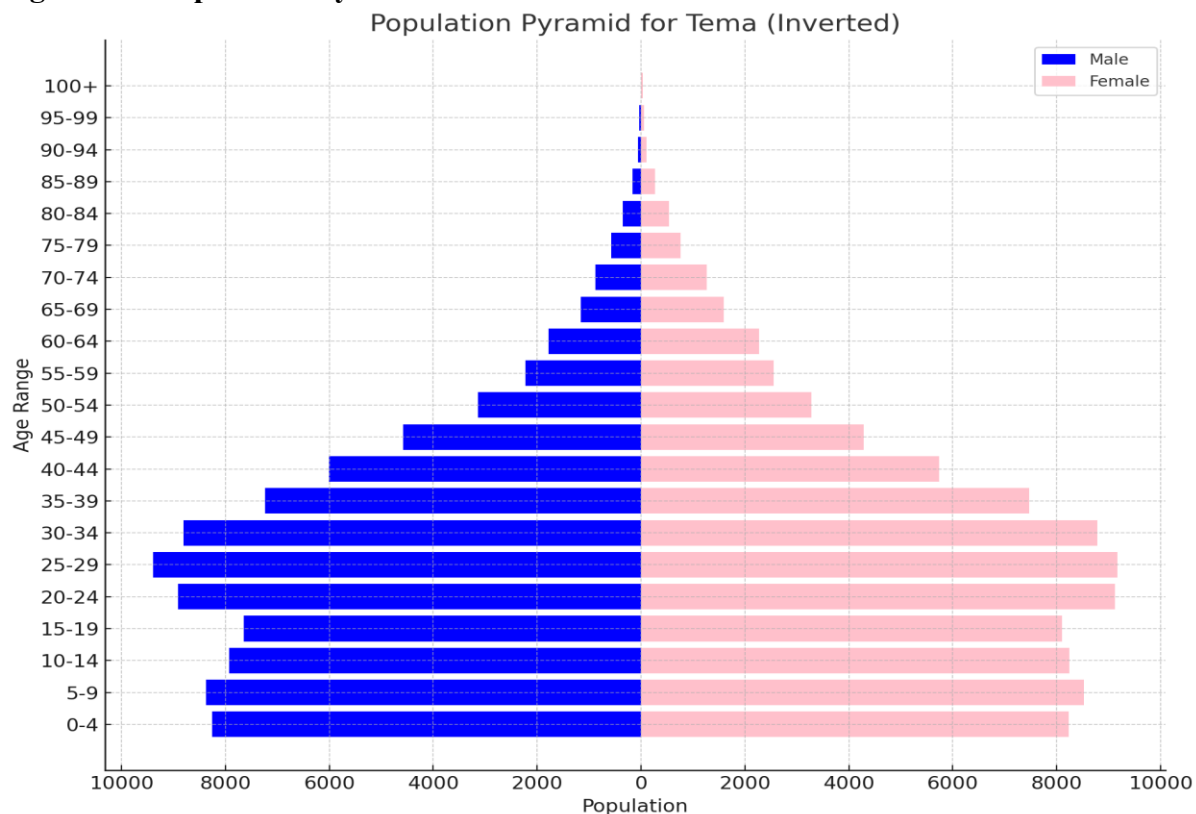
population comprising the age cohorts 20-24 and 25-29 having the highest male and female population. Figure 2.1 shows the age and sex distribution of the population of the Assembly.

Table 2.3: Projected Population of TMA from 2021 - 2029

PROJECTED POPULATION FOR TMA BY SEX									
Year	Tema Metropolitan			Tema Central			Tema East		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
2021	177,924	87,529	90,395	66,191	31,797	34,394	111,733	55,732	56,001
2022	183,394	90,063	93,331	68,226	33,505	34,721	115,168	56,558	58,610
2023	188,950	92,792	96,158	70,293	34,520	35,773	118,657	58,271	60,386
2024	194,540	95,531	99,009	72,373	35,540	36,833	122,167	59,992	62,175
2025	200,151	98,276	101,875	74,460	36,560	37,900	125,691	61,715	63,976
2026	205,011	100,648	104,363	76,268	37,443	38,825	128,743	63,205	65,538
2027	210,444	103,297	107,147	78,289	38,428	39,861	132,155	64,869	67,286
2028	215,899	105,953	109,946	80,318	39,416	40,902	135,581	66,537	69,044
2029	221,367	108,613	112,754	82,353	40,406	41,947	139,014	68,207	70,807

Source: GSS – PHC, 2021

Figure 2.1: Population Pyramid of Tema



Source: MPCU, 2025

2.1.3 Household Population and Non Household Population

The 2021 Population and Housing Census indicated that the Metropolis has a total household population of 175,688 with a male household population of 86,169 (49%) and a female household population of 89,519 (51%). The total non – household population is 2,236 with the male population at 1,360 (61%) and the female population at 875 (39%). The total household population of the Tema central sub metro is 64,879 with the male household population at 31,122 (48%) and the female household population of 33,757 (52%). The total non-household population is 1,312 with the male non-household population at 675 (51%) and the female non-household population at 637 (49%). The total household population of Tema East sub metro is 110,809 with a male household population 55,047 (49.7%) and a female household population of 55,762 (50.3%). The total non-household population of 929 with a male non-household population 685 (74%) and a female non-household population of 239 (26%). The average household size of the metropolis is 3.2.

2.1.4 Labour Force/Economically Active Population and Dependency Ratio

The 2021 PHC defines the economically active population as that part of the population 15 years and above but less than 65 years. As indicated earlier, about 68 percent of the total population of the Metropolis falls within the economically active group. An analysis of the employment/unemployment situation using the 2021 Population and Housing Census report also reveal that about 87.1 percent of the economically active population are economically engaged, while 12.9 percent are unemployed. It is estimated that majority of the unemployed segment of the population are migrants from other parts of the country that have moved to the Metropolis in search of jobs with or without skills.

2.1.5 Population Density

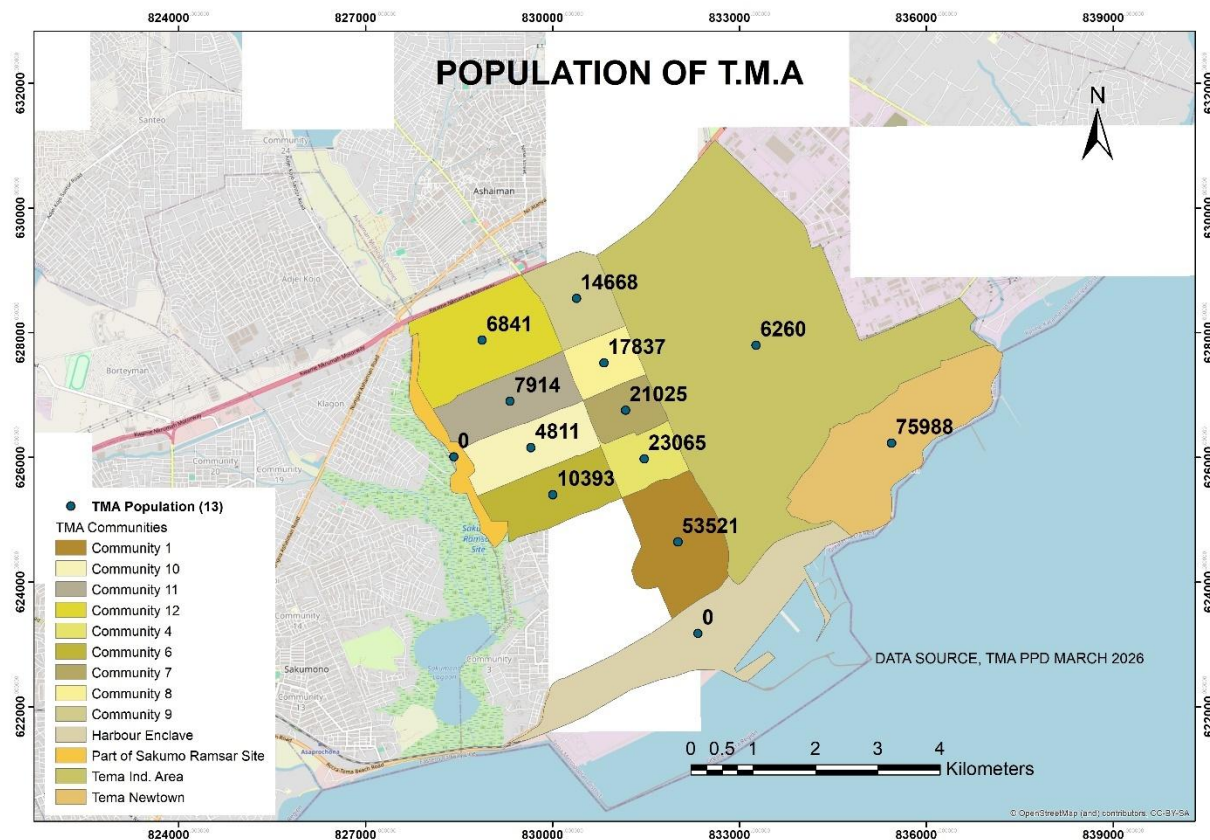
The population density (measured as the number of persons per square kilometre) of the Tema Metropolis is 3,357 p/sqkm. This figure is almost twice the population density of the greater Accra region which is 1,700 p/sqkm. The high population density in Tema can be attributed to several factors, including its role as a major industrial and commercial hub with the country's largest seaport, which attracts workers and businesses. Its proximity to Accra, well-developed infrastructure, and availability of economic opportunities also make it an attractive place to live.

Additionally, the metropolis's status as a planned city, originally designed to accommodate workers for the port and surrounding industries, has contributed to concentrated urbanization. Over time, natural population growth and migration have further intensified the density, putting pressure on housing, infrastructure, and services.

2.1.6 Spatial Distribution of Population

The spatial distribution of population is a dynamic process that takes place through natural growth, migration and urbanization. The Map below (Figure 2.2) shows the spatial distribution of the population. Table 2.2 highlights the spatial distribution of the population according to the household population, non-household population and population density.

Figure 2.2: Population Distribution Map



Source: Physical Planning Department (TMA), 2024

Table 2.4: Spatial Population Distribution

	TMA	Male	Female	Tema Central	Male	Female	Tema East	Male	Female
Population	177,924	87,529	90,395	66,191	31,797	34,394	111,733	55,732	56,001
Household population	175,688	86,169	89,519	31,122	31,122	33,757	110,809	55,047	55,762
Non-household population	2,236	1,360	875	1312	675	637	929	685	239
Population Density	3,357p/sqkm			4,487.7 p/sqkm			5,681.2 p/sqkm		

Source: MPCU, 2025

2.1.7 Occupation Distribution

The 2021 Population and Housing Census reports that the major occupation in the Metropolis is wholesale and retail, with about 24% of the working population employed in the sector. This is followed by the manufacturing industry which employs about 12.7% of workers and the transportation and haulage sector taking 7.8% of the working population. This pattern is largely due to the geographical location and the administrative role the Metropolis plays. Tema Metropolis

serves as the main gateway to the country for most goods and services. This is particularly so due to the presence of the Tema harbour and industries. Activities that are geared towards improving these sectors will, therefore, go a long way to improve the economy of the Metropolis and help reduce unemployment.

2.1.8 Ethnic Diversity

The Metropolis exhibits a rich ethnic diversity, as reflected in the data from the 2021 Population and Housing Census. The largest ethnic group in Tema is the Akan, comprising 45.11% of the population (80,256 individuals), followed by the Ga-Dangme at 26.54% (47,216 individuals) and the Ewe at 17.51% (31,155 individuals). Smaller ethnic groups, such as the Guan, Gurma, Mole-Dagbani, Grusi and Mande, collectively account for less than 10% of the population, with each group representing between 0.44% and 5.08% of the total. The presence of these diverse ethnicities highlights Tema's role as a melting pot within Ghana, attracting people from various cultural backgrounds due to its status as an industrial and commercial hub.

The data also reveals a near-balanced gender distribution across ethnic groups, with males and females representing roughly equal proportions. For instance, the Akan group has 39,319 males and 40,937 females, while the Ga-Dangme group consists of 22,921 males and 24,295 females. This balance underscores the inclusive nature of Tema's demographic structure. The ethnic composition, dominated by the Akan, Ga-Dangme, and Ewe groups, reflects broader national trends while also showcasing the city's unique cultural tapestry. The coexistence of these groups contributes to Tema's vibrant social and economic life, fostering a dynamic environment where different traditions and practices intersect. Overall, the ethnic diversity in Tema is a testament to Ghana's multicultural heritage and the city's significance as a centre of opportunity and integration.

2.1.9 Religious Groups

According to the 2021 Population and Housing Census, 86.66% of people in the Tema metropolitan identify as Christian, making it a mostly Christian city. The largest Christian denomination is Pentecostal/Charismatic, making up 46.53% of the population, followed by Protestant groups (21.47%) and Catholics (6.29%). Other Christian denominations collectively account for 12.36%, reflecting the diversity within Christianity in the region. Islam is the second-largest religion, representing 7.62% of the population, with a higher proportion of male adherents (7,377) compared to females (6,176). Traditionalist and other minority religions, including those

categorized as "Other Religion," constitute less than 3% of the population, while 3.93% of residents reported having no religious affiliation. The data also highlights variations between Tema Central and Tema East. Tema East has a larger Christian population (94,528) compared to Tema Central (59,659), with Pentecostal/Charismatic groups dominating both areas. Islam is more prevalent in Tema East (9,908 adherents) than in Tema Central (3,645). Notably, the gender distribution in religious affiliation shows that males are more likely to identify as having no religion (5,018 males vs. 1,971 females) or as Traditionalists (299 males vs. 199 females). These trends underscore the influence of urbanization and migration on religious demographics in Tema, as the city attracts a diverse workforce. Overall, Christianity dominates the religious landscape, but the presence of Islam and other faiths contributes to the area's cultural richness.

2.1.10 Rural – Urban Split

Notably, the entire population of Tema Metropolitan Assembly resides in urban areas, with no rural settlements within the metropolis. This urban-only classification aligns with Tema's development as a planned industrial and port city, which has attracted significant migration and economic activity over the decades. The metropolis's infrastructure and services are designed to support its urban population, reflecting its role as a central hub in the Greater Accra Region.

While the Tema Metropolis is officially classified as entirely urban, it's important to note that urban expansion often leads to the development of peri-urban areas at the fringes of cities. These peri-urban zones are transitional areas where urban and rural features coexist, often experiencing rapid changes due to urban sprawl. However, within the current administrative boundaries of the Tema Metropolitan Assembly, there are no officially designated peri-urban areas.

2.2 Physical Characteristics

2.2.1 Topography

The topography of the metropolis is generally flat, forming part of Ghana's coastal plains with elevations ranging from sea level (0m) in the south to about 35m in the north, with a few areas rising up to approximately 65m above sea level. This flat terrain is typical of the Coastal Savannah Zone and has supported the rapid development of residential, industrial, and transport infrastructure across the Metropolis.

While the flat landscape presents opportunities for urban expansion and ease of construction, it also poses significant challenges such as coastal erosion and flooding. Specifically, poor natural drainage combined with an erratic rainfall pattern contributes to frequent flooding. This has increased the cost and complexity of stormwater management and drainage infrastructure. As urbanization continues, careful planning and investment in resilient drainage systems will be essential to mitigate the risks associated with the Metropolis's topographical characteristics.

2.2.2 Vegetation

The Tema Metropolis lies within the coastal savannah agro-ecological zone, characterized by scattered drought-resistant shrubs, grasses and pockets of mangrove swamps near wetland areas like the Sakumo Lagoon. Rapid urbanization has significantly altered natural vegetation, with over 60% of the land now built-up for industrial, residential, and port infrastructure. Reserved green spaces consist primarily of ornamental trees, street plantations, and reclaimed coastal vegetation, while the northern periphery retains limited patches of savannah woodland.

The degradation of natural vegetation has heightened urban heat island effects and reduced biodiversity, necessitating deliberate greening strategies in the MTDP. Some of the key interventions may include protecting wetlands, expanding urban tree-planting initiatives, and enforcing green buffer zones around industrial sites to enhance ecological resilience.

2.2.3 Weather

The weather is a dry equatorial climate characteristic of Ghana's coastal savannah zone, with distinct seasonal variations. The metropolis receives between 730mm and 790mm of annual rainfall, concentrated in two main periods: the major rainy season from April to July and a minor season from September to November. Temperatures remain consistently warm throughout the year, averaging 25-30°C, but can rise to about 34-40°C during the drier minor season. Humidity levels fluctuate dramatically, from less than 30% during the Harmattan season to over 80% in the rainy months. These climatic conditions are further influenced by prevailing south westerly winds during the day and westerly winds at night, though wind speeds are generally low. The combination of high temperatures, seasonal rainfall, and coastal proximity creates a unique microclimate that has become increasingly modified by human activity.

As Ghana's primary industrial hub, Tema faces significant environmental challenges that have altered its natural climate patterns. The city's rapid urbanization and industrial expansion have led to the encroachment of greenbelt zones originally designed to regulate temperatures and air quality. This loss of vegetation, coupled with emissions from factories and the busy port, has intensified the urban heat island effect, making industrial areas noticeably warmer than surrounding regions. The absence of adequate tree covers to absorb carbon dioxide emissions has further exacerbated temperature extremes and reduced air quality.

2.2.4 Water Resources

There are three major lagoons in the metropolis which are the Sakumo lagoon, Chemu lagoon and Gao lagoon. These lagoons play vital roles in supporting biodiversity, local fisheries and ecological balance. However, these critical ecosystems are under significant environmental stress due to multiple factors. Industrial discharge from the Tema Industrial Area has led to severe pollution in the Chemu Lagoon, with heavy metals and toxic chemicals contaminating the water and sediments. Domestic waste, including untreated sewage and plastic pollution from urban settlements, further degrades water quality. The proximity of these lagoons to the Tema Harbour also exposes them to oil spills and hydrocarbon runoff, exacerbating environmental damage. Another pressing issue is the destruction of natural habitat by unauthorized encroachment for construction which has reduced wetland areas. The loss of mangrove has disrupted aquatic ecosystems and diminished natural buffers against flooding. Additionally, saltwater intrusion into freshwater zones further disrupts delicate ecosystems. These factors have contributed to a decline in biodiversity, including reduced fish stocks and dwindling populations of migratory birds and marine species, particularly in the Sakumo Lagoon.

The metropolis also has a number of Streams which flow into the major lagoons which flow into the sea. Notable among them is Gynakorgyor stream which flows into the Gao Lagoon that is located between Manhean and Kpone.

The deteriorating state of lagoons and streams within the metropolis demand urgent attention within the MTDP framework. A balanced approach that integrates ecological preservation with sustainable urban and industrial growth is essential. Strategies for interventions should include comprehensive environmental impact assessments, dedicated funding for restoration projects and climate adaptation measures to ensure the long-term resilience of these vital ecosystems.

2.2.5 Soil

The soils characteristics are composed of sand, clay, humus, gravel and stone. The sandy and humus nature of the soil support the cultivation of vegetables as onion, okro, tomatoes, pepper and some other exotic vegetables while the clayey nature though support the production of brick could also have adverse effects on general construction activities.

2.2.6 Plant and Animal life

While urban expansion has constrained agricultural land, Tema maintains active farming in its peri-urban areas where small-scale cultivation of vegetables (including tomatoes, peppers, onions, okra, cucumbers, and leafy greens like ayoyo and lettuce) and staple crops such as maize continues to support local food systems. This agricultural activity is increasingly complemented by innovative urban farming approaches, with community gardens and backyard cultivation emerging as vital contributors to both household nutrition and the city's green infrastructure.

To strengthen these food production systems, the Plant Protection and Regulatory Services Directorate (PPRSD) collaborates with partners to monitor plant health, control pest outbreaks, and enforce phytosanitary standards. Their work extends to public education initiatives and tree-planting programs that simultaneously promote urban agriculture and biodiversity conservation within Tema's developing landscape.

The metropolis' wildlife diversity has understandably diminished with industrial growth, yet various species persist in both natural and human-modified environments. Households commonly raise domesticated animals including goats, sheep, cattle, pigs, and poultry, as well as grasscutters, rabbits, and ducks - serving dual purposes of economic sustenance and property security. These integrated agricultural and animal husbandry practices demonstrate the adaptive balance between urban development and sustainable land use in Tema's evolving ecosystem

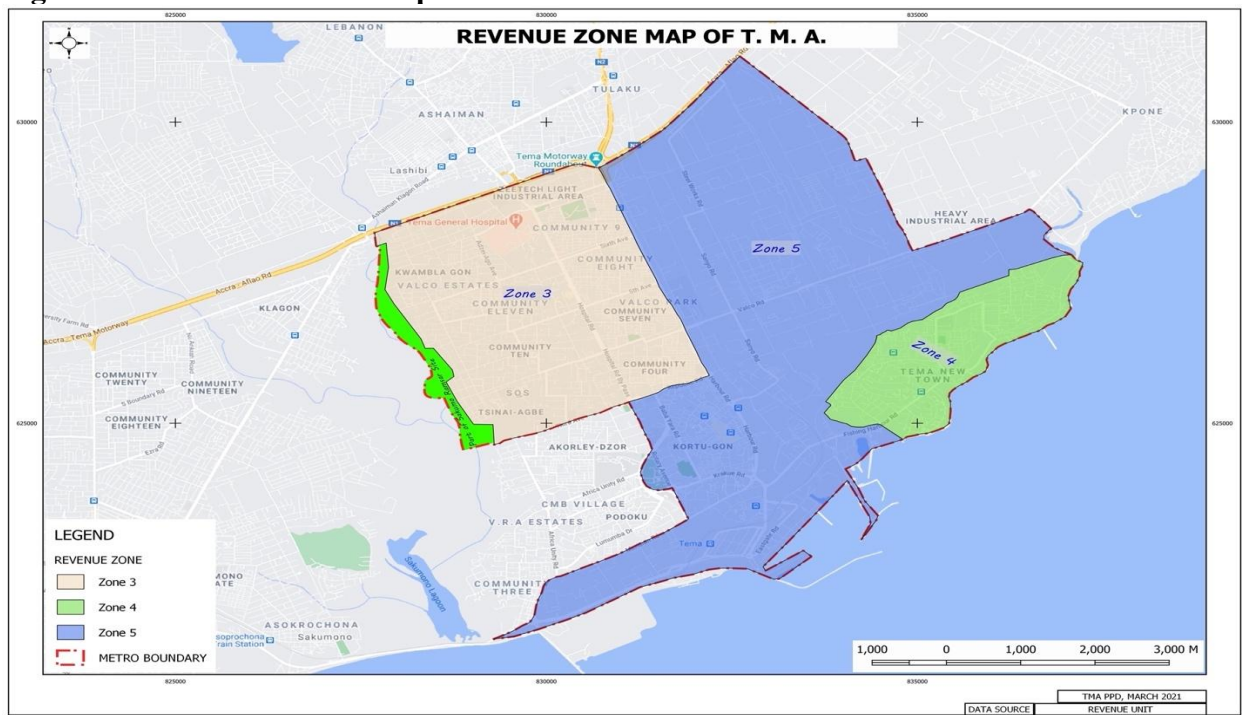
2.3 Economy of the Metropolis

2.3.1 Revenue (IGF) Status

The revenue pattern of the Assembly to a larger extent give meaning to the implementation of various programmes and projects in the plan. Table 2.3 shows the revenue pattern of the Assembly from 2022-

2024 and revenue projections for 2025. Figure 2.3 shows the revenue zones of the Assembly indicating three main zones.

Figure 2.3 : Revenue Zone Map



Source: Physical Planning Department (TMA), 2025

Table 2.5 : Revenue Pattern of TMA from 2021 - 2024

Annual Estimate					Annual Actual		
Internal Generated Fund	2022	%	2023	%	2024	%	2025 projections
Rates	13,363,061.32	98.91	6,790,163.55	60.90	16,318,676.27	98.44	17,550,000.00
Lands and royalties	2,003,739.93	99.69	3,530,612.90	159.76	5,153,702.37	112.04	4,600,000.00
Rent of land/ building	209,285.69	113.13	236,742.69	105.22	203,420.66	92.46	800,000.00
Licenses	7,230,925.53	101.04	7,785,271.20	102.03	7,826,803.54	92.19	9,757,000.00
Fees	3,529,843.82	89.16	3,907,936.89	85.45	4,411,501.53	102.19	4,895,000.00
Fines, penalties and forfeits	22,105.00	73.68	74,883.50	374.42	16,365.00	71.15	33,000.00
Miscellaneous	12,132.66	242.65	10,927.89	136.60	72,581.27	103.69	70,000.00
Sub-total –IGF	26,371,093.95	98.20	22,336,538.62	86.52	34,003,050.64	99.14	37,705,000.00
Grants	2022		2023		2024		2025 projection
Grants recurrent	13,520,276.52	87.82	18,154,494.89	97.38	22,805,800.93	110.20	21,013,902.00
Grants-capital	2,746,371.69	60.71	315,949.95	6.12	1,751,907.60	41.69	4,135,000.00
Sub-total grants	16,266,648.21	81.66	18,470,444.84	77.59	24,557,708.53	98.64	25,148,902.00
Grand total	42,637,742.16	91.15	40,806,983.46	82.24	58,560,759.17	98.93	62,853,902.00

Source: Tema Metropolitan Assembly, 2025

As indicated in Table 2.3, the Assembly's major revenue sources are rates, business licenses lands and royalties. Total receipt (IGF) between the years 2022 to 2024 depicts an unstable trend. In 2023, all MMDAs were directed to desist collection of property rates whilst an external contractor was engaged to collect on behalf of the Assemblies. As a result, the Assembly experienced a major short fall in the collection of the property rates. Consequently, the Assembly's IGF revenue reduced drastically from Gh¢26,371,093.95 in 2022 to GH¢22,336,538.62 in 2023. However, the Assembly through the implementation of the RIAP and the return of property rate collection to MMDA's, the Assembly in 2024 was able to mobilize an IGF of Gh¢34,003,050.64 and further projected to collect an IGF of about GH¢37,705,000.00 by the end of 2025.

Furthermore, grants also increased steadily from GH¢16,266,648.21 in 2022 to GH¢18,470,444.84 in 2023 and further increased to GH¢24,557,708.53 in 2024. The instability in revenue reflected in the total amount realised for both IGF and GoG for the year 2022, 2023 and 2024 where the Assembly collected GH¢42,637,742.16, GH¢40,806,983.46 and GH¢58,560,759.17 respectively. The Assembly is however projecting a total revenue of about GH¢62,853,902.00 by the end of

2025 based on the new strategies it has devised in its Revenue Improvement Action Plan to ensure full realisation of its set revenue targets.

2.3.2 Local Economic Development

The Local Economic Development (LED) sector is driven by the metropolis strategic advantages, including its industrial base, port infrastructure and proximity to Accra. The Assembly, in collaboration with stakeholders, is working to create a conducive environment for business growth, job creation, and improved livelihoods. Key sectors such as manufacturing, logistics, commerce, services and the informal economy continue to provide diverse economic opportunities. Initiatives to support LED include infrastructure development, market upgrading, support for small and medium-sized enterprises (SMEs) and skills development programs, especially for youth and women. These efforts are aimed at enhancing the competitiveness of local businesses and expanding employment opportunities across the metropolis.

Despite these efforts, several challenges remain, high levels of informality, inadequate access to finance, limited entrepreneurial support services and spatial planning issues continue to constrain economic potential. In response, the Assembly is exploring public-private partnerships and community-based approaches to LED. There is also a growing focus on improving the business environment through streamlined permitting processes, promoting innovation and digitalization, and integrating marginalized groups into the local economy. All these strategies are geared towards achieving an inclusive economic environment where both large corporations and local enterprises can thrive, thereby contributing to poverty reduction, improved livelihoods and overall economic resilience within the metropolis.

2.3.3 Agriculture

The significance of agriculture to the national and regional economies cannot be over emphasized and this is not different in the case of Tema. Although majority of the people are in the industrial and the service sector, agriculture also employs about 9.0 percent of the population. Farming activities in the Metropolis are mainly done around the Ramsar site and inner-city gardening. . Some of the crops cultivated include onion, okro, maize, tomato, leafy vegetable (Ayoyo, lettuce, gboma), cucumber, plantain and pepper (Sweet, habanero and bonnet). The total area under cultivation in 2021 was 221.83 hectares and 2022 was 150 hectares. In 2023 the total area under

cultivation was 87 hectares. 2024 had 50.55 hectares under cultivation and same for 1st quarter 2025. This can be attributed to urbanization and also the carving out of Tema West Municipality from the Metropolis.

Table 2.4 shows the trend in crop yield in the Tema Metropolis. As indicated, average crop yield has reduced significantly over the years. This can be attributed to a number of factors but prominent among them is urbanization.

Crop yield has continued to reduce over the years in the metropolis. This can be attributed to two major factors; the reduction in arable land for cultivation and also the erratic rainfall pattern. This trend has implication for food security since the metropolis is not entirely food secure. Other factors have also contributed to the decline in crop yield at least for some selected crops. Some of these reasons may include, High interest rates, inadequate storage facilities, land tenure problems, unavailability of ready markets especially for perishable foods, use of primitive farming tools and methods and lack of interest shown by the youth in farming, among others.

Table 2.6 : Crop Yields in Metric Tonnes from 2020 - 2024

No.	Crop /Year	2020	2021	2022	2023	2024
1.	Maize	20.50	19.56	47.43	26.5	11
2.	Pepper	15.26	14.60	25.92	5.2	9.3
3.	Leafy vegetable	4.32	3.25	19.52	1.60	1.5
4.	Okro	12.38	9.75	12.85	3.9	2.78
5.	Tomato	12.24	10.15	12.0	0.63	1.2
6.	Onion	48.40	47.52	52.80	24.56	35
	Total	113.1	104.83	170.52	62.39	60.78

Source: Metro. Agric. Directorate (Tema Metropolitan Assembly), 2025

Following the reduction in cultivable lands in the metropolis, yield also continues to reduce over the years as indicated in Table 2.4. Thus, from an initial yield of 569.1 metric tonnes for 2017 which subsequently reduced to 104.8 metric tonnes for 2021. This trend has implication for food security since the metropolis is not sustainable in terms of food production. However, since Tema is not an island, adjoining districts line Kpone – Katamanso, Ningo – Prampram etc. supply food items to the Tema main market for inhabitants. These traders also purchase fish from the metropolis thereby creating a balance of trade of a kind.

2.3.3.1 Access to Agriculture Extension Services

Even though the farming area in the Metropolis has been reduced, coupled with the increase in the construction of Real Estate, vegetable cultivation is still practiced around the Ramsar site. In line with this, the Metropolis has 17 Agricultural Extension Officers for advisory services. Table 2.5 shows specific functions of these officers. For effective and efficient advisory services, the metropolis is divided into four (4) zones. Each zone is further sub-divided into operational areas manned by Agricultural Extension Agents (AEAs). These AEAs serve as front line staff and are in direct contact with the farmers. The table below shows the specific functions of the officers.

Table 2.7: Schedule and Areas of Operation of Agricultural Extension Officers

S/N	Schedule	Area of Operation	No. at Post
1.	Veterinary duties	Veterinary Clinic (Community 7) GICHOC Abattoir (Tema Newtown)	Seven (7)
2.	Farm and Home Visits by AEAs	Abonkor, Acheampong village, Bankuman, GICHOC, Zinginshor, Valco area, Communities (1,4,6,7,8,9,10,11,12)	Three (3)
3.	Market Enumeration	Community One (1) and Community Nine (9) markets	NIL
4.	Monitoring and Supervision by Desk Officers	Abonkor, Acheampong village, Bankuman, GICHOC, Zinginshor, Valco area, Communities (1,4,6,7,8,9,10,11,12)	Five (5)
Total number of AEAs and Desk Officers			15

Source: Metro. Agric. Directorate, 2024

2.3.4 Business and private sector

2.3.4.1 Structure of the Local Economy

The local economy of is made up of Agriculture, Industry and Commerce/ Services. The industrial and the service sectors form the backbone of the local economy as it employs majority of the labour force. The industrial activities are mainly concentrated around community 9 light industrial area and the heavy industrial areas. Also, service activities in the metropolis are concentrated in the CBD and others doted in the township. The service activities are in the form of banking, tourism and hospitality and related activities, energy and communication. A total number of Three Hundred and Sixty-Nine (369) farmers consisting of One Hundred and Fifty-Two (152) males and Two Hundred and Seventeen (217) females in the Metropolis are engaged in agricultural activities. A significant number of the people are also engaged in agriculture especially fishing. It is worth

noting that the service sector is growing at a faster rate and employs more women than men. This can be attributed to low skills and education required before getting into the sector.

2.3.4.2 Manufacturing and Industrial Sector

There are over five hundred (500) industries in the Metropolis and thus the Metropolis serves as the industrial hub of the country. Some of the major products the manufacturing industries in Tema produce includes chemicals, clothing, consumer electronics, electrical equipment, furniture, machinery, refined petroleum products, steel and tools (Refer to Table 2.6). The country's biggest Port and Harbour facilities are situated in Tema and they contribute substantially to the revenue of the State as well as the metropolis. The total number of companies that have registered and pay their business operation permit fees to the Assembly is approximately 245. The payment of the Business Operating Fee contributes significantly to the generation of internal revenue for the Assembly. These are categorized into 8 major areas Chemical, Textiles, Food Processing, Engineering, Paints, Fish Cold Stores, Printing and Woodwork industries. In addition to the main industrial zone, there is also the Light Industrial Area which has been zoned for use by persons engaged in mechanical repairs at Community 9.

Table 2.8: List of Selected Companies in TMA

Production System	Existing	Type of Waste generated	Footprints
Metal Processing	Aluworks, VALCO, Tema Steel, Sentuo Steel, Ferro Fabrik, Special Steel, Crocodile Machetes etc.	Metal dust, Slag, metal offcuts	N ₂ O, CO ₂ etc
Fish Processing	Pioneer Food Cannery, Cosmo Seafoods, Myroc Fish Processing, African fish Gh Ltd, Ghana-China Foods, etc.	Waste water, fish waste, etc.	Green House Gas (GHG) Emissions,
Agro Chemical Production	Wienco Ltd, Chemico, Tema Chemicals	Contaminated product, chemical containers etc.	GHG Emissions
Paper Processing	Delta Paper Mill, Polykraft, Sonapack, Tema Paper Industry Soul Gh Ltd, Memon Ltd, Fine Print, Fon Ventures, etc.	Paper offcuts, Empty ink containers, substandard product	GHG Emissions
Agro/food Processing (animal and crop)	Nestle Ghana, Irani Brothers, Food Processors, Cocoa Processing, Cargil Ghana, Barry Callebaut TT Interl., Bobo Food Processing, Ghana China Foods, Silver platter	Organic waste - Animal waste, rejected raw material crop residues, cocoa shells, palm fibre, food wastes	GHG Emissions

	Gh Ltd, Wilmar, Essar Agro West Africa, Koko king, etc.		
Textile Production	TexStyles	Chemical waste, waste water, chemical containers.	GHG Emissions
Pharmaceutical Processing	Ernest Chemist, Kama Industries, Sanbao	Papers, plastics, waste water, colour, etc.	GHG Emissions
Crude Oil Refinery, Lubricants and Distribution	TOR, Platon Gas, BOST, Tema Lube Oil	Waste water, waste oil, sludge, air emissions etc.	GHG Emissions
Beverage Processing	Multipack, Distel Ghana	Plastics, bottles, paper, wastewater, etc.	GHG Emissions
Cement Production	GHACEM	dust, paper, food waste	Particulates
Construction and Real Estate	TDC, SSNIT, Manet, etc.	Wood, concrete waste, waste water, etc.	GHG Emissions, dust
Road Transport Services	Global Haulage, Rail transport, commercial Transport	Automobile Oil Waste, paper, rubber, etc.	GHG Emission

Source: TMA, 2025

Although over 500 industries operate within the metropolis, less than half are registered with the Assembly. This results in substantial losses in internally generated funds. Environmental pollution is a significant concern, with unregulated industrial waste and emissions (e.g., GHG emissions from oil refineries), impacting public health and ecosystems. Pollution from industrial clusters is not routinely monitored, which has led to health problems. This is evident in the top ten OPD diseases chart where upper respiratory tract infection is in the top three. Poor enforcement of zoning regulations has also led to the siting of mechanic workshops beyond designated industrial areas. There is therefore a need for stronger regulatory oversight, environmental monitoring, and formalization of industrial activities to protect residents and the environment while boosting local revenue.

2.3.4.3 Marketing Centres

The Metropolis was designed utilizing the Neighbourhood Concept of Town Planning and as a result of this, most of the communities have satellite markets. The largest and most vibrant is the market centre at Community 1, which serves almost all the residents in the Metropolis. There is also a Bulk Breaking Market at Community 9 where big trucks and Lorries off-load goods. Cold stores and fish markets that serve frozen and fresh fish can also be located in and around the fishing harbour. These markets serve as vital hubs for trade, providing convenient spaces for buying and

selling and creating employment opportunities for both skilled and unskilled labour. These benefits are most prominent in urban areas such as Tema Township and Manhean, where agricultural activity is relatively limited. These markets generate significant revenue for the Assembly through tolls and other fees. Despite their importance, many of the markets are in urgent need of attention. Rapid population growth and expanding commercial activities have put pressure on existing infrastructure, which is now outdated and inadequate. This has led to a rise in unauthorized commercial structures, including wooden kiosks and shipping containers, contributing to disorder in the city's commercial landscape. Poor infrastructure limits the efficiency and safety of commerce and the informal expansion of market areas undermines urban aesthetics and planning. There is therefore the need to upgrade these facilities to enhance local revenue and employment while ensuring resilience and safety.

2.6.5 Commerce, Service and Informal sectors

The Tema Metropolis being a vibrant industrial hub in Ghana, also boasts of a dynamic and multifaceted economy driven significantly by its commerce, service and informal sectors. Its strategic location, encompassing the country's largest seaport, naturally positions it as a critical centre for trade and commercial activities. This bustling environment facilitates the movement of goods, both domestically and internationally, with a wide array of businesses from large-scale importers and exporters to wholesale distributors, forms the backbone of the commercial landscape. Retail trade thrives in various forms, from modern shopping malls to traditional markets, catering to the diverse needs of its growing population and those from surrounding areas. The service sector in Tema plays an equally crucial role in supporting both the commercial and industrial activities while also meeting the demands of residents. This sector encompasses a broad spectrum of services, including logistics and shipping, financial institutions, telecommunications, healthcare, education, and hospitality. The presence of numerous industries necessitates robust logistics and freight forwarding services, while the expanding population drives demand for banking, insurance, and professional services. Additionally, hotels, restaurants, and entertainment venues contribute significantly to the local economy, serving business travellers, port visitors and the resident community alike.

Alongside the formal sectors, the informal economy is a major source of employment and livelihood in the metropolis. It includes small-scale trading, food vending, tailoring, hairdressing,

carpentry, welding and other artisanal activities. Informal workers are visible across major communities such as Community One and Manhean, contributing significantly to the local economy despite limited access to formal support systems. The informal sector fills key service gaps, especially in low-income communities, but is often characterized by precarious working conditions and limited regulation. These entrepreneurs fulfil essential daily needs, offer affordable goods and services, and absorb a significant number of job seekers who might otherwise face unemployment, contributing to household incomes and local consumption.

The interplay between these three sectors creates a complex and interdependent economic ecosystem in Tema. The formal commercial and service entities often rely on informal labour or services for supplementary needs, while the informal sector benefits from the economic activity generated by larger businesses and the urban population they support. This dynamic interaction, despite its challenges related to regulation and infrastructure, underpins the metropolis's economic resilience, offering diverse opportunities and serving as a testament to its continuous growth and evolution as a key economic engine in the country.

However, the growing nature of informal activities presents challenges related to land use, spatial planning, and service delivery. The proliferation of unauthorized structures such as makeshift shops and container kiosks often leads to congestion, sanitation issues and safety concerns. Addressing these challenges requires a coordinated approach that balances regulation with support, providing infrastructure, training and access to finance for informal operators while enforcing planning standards. There is the need to strengthen the commerce, service and informal sectors in an integrated manner to promote inclusive growth and improve the quality of life of the people in the Metropolis.

2.3.6 Employment

Employment and job creation remain central to development efforts in the Metropolis. The economic dependency ratio currently stands at 50%, indicating that every two working individuals support one dependent person. This is slightly better than the regional average of 53.4%, suggesting relatively lower pressure on the working population. However, this statistic may not fully reflect the reality on the ground, as a significant number of people within the active age group remain unemployed. The implication is a pressing need to create more sustainable employment

opportunities, especially for the youth, while improving access to basic socio-economic infrastructure that promotes LED activities to support the dependent population.

To address these concerns, the Assembly has introduced several employment and income generating initiatives targeting the youth, women and persons with disabilities. Focus areas include fish and food processing, packaging, and marketing and sectors with significant potential for job creation, particularly given the Metropolis's coastal advantage. These interventions also aim to position the local economy to benefit from the African Continental Free Trade Area (AfCFTA). Key beneficiaries include local fish processors and traders, women-led SMEs, market associations, among others.

In addition, the Business Advisory Centre (BAC) has played a pivotal role in reducing unemployment through business development services such as training, business registration, product certification and apprenticeship support. So far, over 465 businesses in the metropolis have been registered, 281 individuals have received FDA product certification and numerous SMEs have benefited from support with Ghana Standards Authority processes. Through collaboration with skilled artisans, the BAC has distributed over 297 start-up kits and supported more than 500 apprentices. Grants and loans have also been extended to over 800 individuals, with a particular focus on youth and women-led enterprises, contributing to the strengthening of the local economic base and fostering inclusive growth.

2.4 Social Service

2.4.1 Education Sector

A total of 269 educational institutions, comprising 84 kindergartens, 85 primary schools, 94 junior high schools, 5 senior high schools and one technical/vocational institute are within the Metropolis (see Table 2.7). Basic education, spanning kindergarten to junior high school is fairly accessible across the metropolis with facilities evenly distributed. However, most privately owned basic schools are concentrated in the Tema Central Sub – Metro, largely due to active economic environment and higher income and educational levels as compared to other parts of the metropolis. Additionally, several tertiary institutions such as Methodist University College, Presbyterian University College, Graduate School of Management and Data Link University have campuses in the metropolis, enhancing access to higher education for residents.

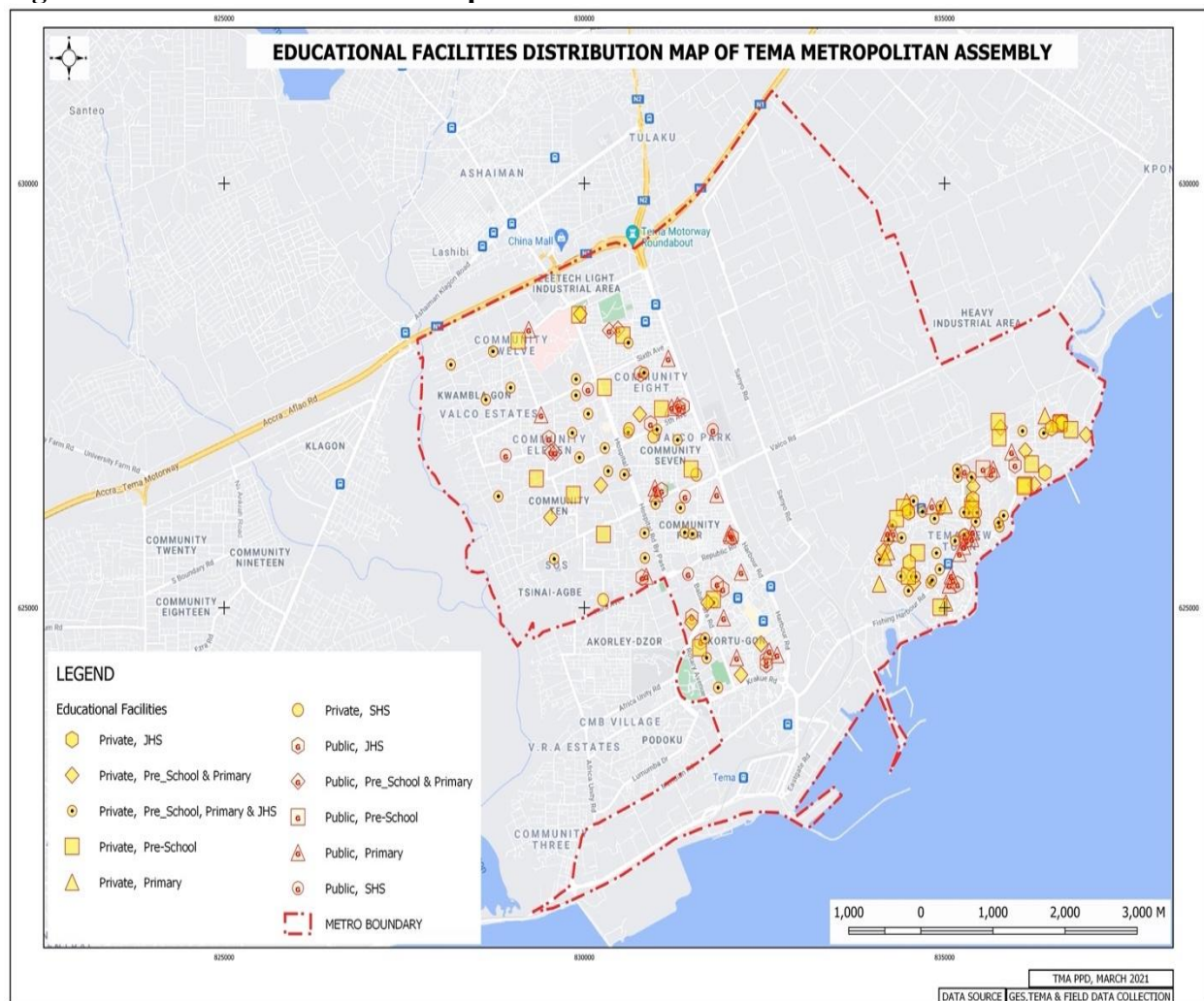
The table below shows the number of public and private educational institutions in the Metropolis (See Table 2.7). Out of a total of 269 schools, private schools constitute 67% whilst the public schools constitute 33%. These private schools complement the public schools that exist in the metropolis and thus help with the provision of quality education. Below is a table showing the number of schools in both the public and private sectors.

Table 2.9: Number of Schools in the TMA

S/N	LEVEL	No. of School		
		Public	Private	Total
1.	KG	26	58	84
2.	Primary	30	55	85
3.	JHS	28	66	94
4.	SHS	5	0	5
5.	Voc/Tech	1	0	1
TOTAL		90	179	269

Source: Metropolitan Education Directorate, 2025

Figure 2.4: School Distribution Map of TMA



Source: Physical Planning Department (TMA), 2025

Data available indicates the trend of enrolment in both public and private schools from 2022-2024 (Refer to Table 2.8). It is observed that enrolment figures in the public basic schools increased in 2022 and 2023 and this may be as a result of educational support programmes such as Capitation Grant, Ghana School Feeding Programme, Free SHS, Free Uniforms and Text Books. As shown in Table 2.8, enrolment trends in private schools from 2022 to date reveal a minimal gap between the number of boys and girls, indicating near gender parity. The data available also indicates that more girls are enrolled in all other levels of education in both public and private schools. This could be attributed to the impact of Girl Child Education programmes and the fact that the female population is more than that of male in the Metropolis.

Comparing enrolment of pupils in the public schools with that of the private schools (Refer Table 2.8), the indication is that enrolment in public schools is higher than that of the private schools and this can be attributed to high school fees charged in some of the private schools.

Table 2.10: Enrolment in Schools from 2022 - 2024

	Enrolment in Public Schools from 2022 – 2024									
No.	Level	2022			2023			2024		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1.	KG	2057	1968	4025	1108	1001	2109	907	883	1790
2.	Primary	5231	5390	10621	5299	5777	11076	4941	5217	10158
3.	JHS	1006	1202	2208	3860	3511	7371	3590	3791	7381
4.	SHS	4257	3987	8244	2747	3496	6243	2917	3691	6608
5.	Voc/Tech	1900	300	2200	2806	298	3104	2906	328	3234
	TOTAL	14,451	12,847	27,298	15820	14083	29903	15261	13910	29171
	Enrolment in Private Schools from 2022 – 2024									
No.	Level	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1.	KG	2351	1562	3913	1617	1647	3264	1942	1868	3810
2.	Primary	4782	5837	10619	6038	6162	12200	5432	4300	9732
3.	JHS	2762	1632	4394	2271	2448	4719	2105	3438	5543
4.	SHS	0	0	0	0	0	0	0	0	0
5.	Voc/Tech	0	0	0	0	0	0	0	0	0
	TOTAL	9895	9031	18926	9926	10257	20183	9479	9606	19085

Source: Metro. Education Directorate, 2024

Table 2.11: Enrolment in Public Senior High Schools for 2024

S/N	NAME OF SCHOOL	ENROLMENT											
		SHS 1			SHS 2			SHS 3			Total for SHS/ Advance		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1.	Chemu Senior High School	297	274	571	267	318	585	272	297	569	836	889	1725
2.	Manhean Senior High Tech. School	410	448	858	199	248	447	175	161	336	784	857	1641
3.	Our Lady of Mercy Snr. High School	113	254	367	201	350	551	115	239	354	429	843	1272
4.	Presbyterian Snr. High School, Tema	115	158	273	137	184	321	76	111	187	328	453	781
5.	Tema Methodist Day Snr. High. School	133	225	358	113	164	277	185	260	445	431	649	1080
6.	Tema Technical Institute	1221	117	1338	784	130	914	905	81	986	2910	328	3238
	Total	2289	1476	3765	1701	1394	3095	1728	1149	2877	5718	4019	9737

Source: Metro. Education Directorate, 2024

2.4.1.1 Staffing Situation in Schools

In the case of staffing, (See Table 2.10) it is evident that at the pre-school level, female teachers are more than the male teachers. This trend is similar to the situation in the primary and JHS levels, however, the female dominance reduces at the SHS, Technical and Vocational levels of the educational ladder.

It is also worth noting that, there are still quite a large number of untrained teachers in the private schools in the metropolis. This may have implication on teaching and learning in the metropolis. Considering the above situation, there is the urgent need for the Metro. Education Directorate to organise some in-service training for the untrained teachers to promote quality education in the metropolis.

Table 2.12: Staffing in Schools in TMA

Staffing in Public Schools													
No.	Level	Trained Teachers						Untrained Teachers					
		Male			Female			Male			Female		
		2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024
1.	KG	0	0	0	81	77	71	0	0	0	0	0	0
2.	Prim.	55	40	41	271	207	252	0	0	0	0	0	0
3.	JHS	137	127	135	351	311	217	0	0	0	0	0	0
4.	SHS	270	206	235	163	161	167	0	0	23	0	33	39
5.	Voc/Tech	99	86	62	53	58	51	0	5	15	0	0	20
Total		561	459	473	919	814	758	0	5	38	0	33	59
Staffing in Private Schools													
No.	Level	Trained Teachers						Untrained Teachers					
		Males			Females			Males			Females		
		2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024
1.	KG	0	2	3	97	86	90	0	5	5	174	200	200
2.	Prim.	253	218	200	205	164	170	366	301	300	304	264	260
3.	JHS	121	101	105	84	45	50	189	164	170	141	181	190
4.	SHS	5	0	0	0	0	0	7	0	0	0	0	0
5.	Voc/Tech	0	0	0	0	0	0	0	0	0	0	0	0
Total		379	321	308	386	297	310	562	479	475	619	648	650

Source: Metro. Education Directorate, 2024

The pupil to teacher ratio analysis as indicated in Table 2.11 shows that, pre-schools and primary schools have the ratios of 25:211 and 34:668 respectively for public schools. However, private schools have ratios of 13:183 and 10:397 respectively for pre-schools and primary schools. It is

therefore conclusive to note that private schools have better ratios that are closer to the accepted standards.

This is higher than the national average of 20:1 for pre-school and 40:1 for primary school. The higher pupil to teacher ratio in the metropolis might have contributed to poor supervision in the classrooms, congestion, inadequate teaching and learning materials in some of the public schools in the Metropolis.

That notwithstanding, the situation at the JHS level (20:236) in the Metropolis is fairly good compared to the national standard of 35:1 for JHS. It could therefore be said that the metropolis has adequate teachers at this level that would create an environment for effective teaching and learning.

Table 2.13: Pupil Teacher Ratio for 2024

S/N	Level	Public			Private		
		Enrolment	Teachers	PTR	Enrolment	Teachers	PTR
1.	KG	1790	71	25.211	3810	298	13.183
2.	Primary	10158	293	34.668	9732	936	10.397
3.	JHS	7389	352	20.991	5543	515	10.763

Source: Metro. Education Directorate, 2024

2.4.2 Health Facilities

In line with its mandate to improve the health status of residents, the Assembly has implemented various programs and projects over the years. The metropolis is served by a total of 34 health facilities, comprising 17 private, 9 public and 8 industrial institutions spread across the area according to their specialized functions and service coverage. Additionally, there are 59 outreach points to further extend healthcare access.

While private health facilities outnumber public ones, their distribution remains uneven, with most concentrated in larger settlements such as Community 1 and Community 4. Although these private facilities guarantee quality care, their associated costs can be prohibitive for some residents. To bridge this gap and improve healthcare accessibility, the Assembly has constructed several CHPS Compounds in underserved areas like Tema Newtown. These efforts aim to reduce travel time, lower mortality rates, and bring essential services closer to vulnerable communities.

In areas where physical access to health facilities remains limited, outreach points provide critical medical support. Furthermore, the Assembly actively encourages low-income residents to enrol in

the National Health Insurance Scheme (NHIS) to alleviate financial barriers and ensure equitable healthcare access for all.

2.4.2.1 Staffing Situation in the Health Institutions (Public and Private)

The current health workforce assessment reveals 52 medical officers and 222 general nurses distributed across public health facilities in the metropolis, providing comprehensive healthcare services (Table 2.12). The 2024 staffing ratios show significant progress, with doctor-patient and nurse-patient ratios standing at 1:4,221 and 1:988 respectively (Table 2.13), marking notable improvement from the 2018 ratios of 1:6,646 and 1:1,556.

While these figures demonstrate measurable advancement in healthcare professional accessibility, the metropolis still falls short of the WHO recommended standard of 1:1,000 doctor-patient ratio. This gap indicates the need for continued investment in health workforce development to achieve optimal healthcare service delivery standards.

Table 2.14: Staffing in Public Health Facilities for 2024

Facility	No. of Doctors	No. of PA	No. of General Nurses	No. of Other Health Staffs
Public Facilities	52	11	222	719
Private Facilities	-	-	-	-

Source: Metropolitan Health Directorate, 2025

Table 2.15: Doctor to Patient Ratio for 2024

Staff	2018	2019	2020	2021
Nurse Patient Ratio (Public)	1:1556	1:967	1:987	1:988
Doctor Patient Ratio (Public)	1:6646	1:4128	1:4217	1:4221

Source: Metropolitan Health Directorate, 2025

2.4.2.2 Incidence of Diseases

Analysis of disease patterns in the metropolis reveals upper respiratory tract infections as the most prevalent condition, consistently topping the list of the ten most common diseases in recent years (Table 2.14). In response, the Assembly has prioritised preventive healthcare measures, including public education campaigns focused on these top ten health issues, maternal and child healthcare services, family planning programs, and nutritional support for women, particularly pregnant and lactating mothers.

The Assembly has also intensified efforts to raise awareness about diseases of public health significance, encompassing both vaccine preventable illnesses and non-communicable diseases such as breast cancer, hypertension, and diabetes. Concurrently, the Assembly is also making sure that health facilities are adequately resourced through direct provision or stakeholder partnerships to address current system limitations. This includes supplying essential medical equipment and logistics to strengthen overall healthcare delivery.

Table 2.16: Top Ten Conditions Reported at the OPD as at 2024

2021		2022		2023		2024	
Conditions	Cases	Conditions	Cases	Conditions	Cases	Conditions	Cases
Upper Respiratory Tract Infection	9430	Upper Respiratory Tract Infection	8081	Upper Respiratory Tract Infection	5632	Upper Respiratory Tract Infection	6630
Gynae conditions	9114	Skin Diseases	4067	Other Acute Ear Infection	4795	Gynae Conditions	5965
Hypertension	5258	Malaria	3810	Skin Diseases	4368	Hypertension	5699
Skin Diseases	4571	Rheumatism & Joint Pain	3285	Gynae Conditions	3717	Urinary Tract Infection	4713
Rheumatism & Joint pains	4174	Urinary Tract Infection	3056	Hypertension	2964	Rheumatism & Joint Pain	4185
Malaria	3466	Gynae Conditions	2757	Road Traffic Accident	2590	Skin Diseases	2957
Acute Eye Infection	3034	Road Traffic Accident	2619	Urinary Tract Infection	2334	Malaria	2725
Urinary Tract Infection	2799	Hypertension	2545	Rheumatism & Joint Pain	2084	Diabetes	2647
Diabetes	2773	Home Injuries	1940	Malaria	1813	Anaemia	2328
Preg. Related Complications	2758	Diabetes	1300	Diarrhoea Disease	1800	Preg. Related Complications	2170

Sources: Health Directorate, Tema, 2024

2.4.2.3 Mortality Rates

The mortality rate, which measures the frequency of deaths relative to population size, reveals important health trends in Tema Metropolis. With 292,773 residents (7.3% of the regional population of 4,010,054), the district recorded a crude death rate of 4.4 per 1,000 deaths - slightly above the regional average of 4.3. Notably, these figures include referrals from neighbouring districts served by Tema General Hospital, meaning they may not fully reflect local mortality

patterns. The 7.5% share of total regional deaths underscores the need for continued strengthening of the health system.

2.4.2.4 National Health Insurance Scheme

Established in March 2004 as a pro-poor health initiative, the Tema Metropolitan Mutual Health Insurance Scheme creates a financial safety net to improve healthcare access. The scheme covers outpatient/inpatient care, oral health, eye care, maternity services, and emergencies for enrolled beneficiaries. As of December 2022, membership stood at 170,912 (92% of the annual target of 185,125), with the ultimate goal of achieving universal coverage. This expansion remains crucial for protecting vulnerable populations, though operational challenges persist as the scheme relies solely on premium renewals without national government subventions.

Table 2.17: NHIS Membership in TMA for 2024

Category	Formal		SSNIT contributors		SSNIT pensioners		Indigents		Under 18		70 years and above		Pregnant	Total
Gender	M	F	M	F	M	F	M	F	M	F	M	F	F	
New	6,389	5,459	1,295	412	92	39	26	22	8,553	9,024	161	193	2,464	34,129
Renewal	16,432	41,176	6,582	4,801	1,351	688	20	19	26,119	26,670	2,866	4,182	5,877	136,783
Total	22,821	46,635	7,877	5,213	1,443	727	46	41	34,672	35,694	3,027	4,375	8,341	170,912

Source: National Health Insurance Authority, Tema 2025

2.4.3 Water and Sanitation

2.4.3.1 Water Supply Services

The citizens within the Metropolis benefit from an extensive piped water network supplied by the Kpong Water Works, serving as the primary source of potable water for residents. Recent data indicates that approximately 99% of households have access to improved drinking water sources, representing one of the highest coverage rates in the region. This achievement reflects significant progress in water infrastructure development and aligns with national targets for universal water access.

However, despite this impressive coverage, the system faces operational challenges affecting service reliability. Several communities, particularly Tema Newtown and Communities 1, 4, and 12, experience inconsistent water flow due to aging distribution infrastructure, high demand pressures during peak periods, maintenance challenges and potential system overload during dry seasons. This creates a paradox where access statistics appear strong, but actual service delivery

reveals gaps in reliability especially in low-income neighbourhoods where residents often lack adequate storage alternatives during outages.

Additionally, the metropolis's heavy reliance on the Kpong Water Works as a single major source presents systemic vulnerabilities, highlighting the need for backup solutions. In addressing these challenges, the Assembly is working closely with the Ghana Water Company Limited to implement infrastructure projects such as installing booster stations to improve pressure and introducing community water storage solutions to mitigate outages in affected communities. Regular maintenance schedules are also being enforced to minimize disruptions.

Moving forward, water supply planning must extend beyond basic access metrics to ensure consistent, reliable service for all residents. Strengthening system resilience, particularly in underserved areas, remains critical to reducing the socio-economic impact of water interruptions. Enhanced monitoring systems and community feedback mechanisms will be essential in evaluating and improving water service quality across the metropolis.

2.4.3.2 Public and Household Toilets

The original housing design of Tema incorporated provisions for each household to have its own sanitary facility. This vision has been largely realized, with most residential communities including Communities 1, 4, 6, 7, 8, 9, 10, 11, and 12 benefiting from household toilets. However, exceptions remain in Tema Manhean and specific sections of Community 1 (Site 1, 2, 14, 17, and 20), where some residents still lack private toilet facilities.

The Assembly has established 47 strategically located public toilets to serve both the floating population and underserved communities to address the gaps and these facilities are primarily utilized by households without access to private toilets. Despite these efforts, inadequate coverage in certain areas has led to persistent issues of open defecation, creating significant public health risks.

Recognizing the importance of improved sanitation, the Assembly partnered with the GASSLIP project to construct four 16-seater institutional toilets for schools within the metropolis. This initiative aims to promote proper sanitation practices among students while reducing pressure on existing facilities. Moving forward, expanding household toilet coverage and maintaining public facilities remain critical priorities for ensuring comprehensive sanitation access across all communities.

2.4.3.3 Treatment and Disposal of Liquid Waste

The Assembly maintains comprehensive responsibility for ensuring proper and safe disposal of liquid waste through its dedicated Waste Management Department and Environmental Health Unit. The Assembly manages a central sewerage system which covers about 90% of the Metropolis. Communities covered by the sewerage include (12, 11, 10, 9, 8, 7, 6, 4, and 1) and through some part of Tema Newtown. To strengthen these efforts, the Assembly has established a specialized Drainage Maintenance Unit that works in collaboration with partner agencies to maintain all categories of drainage systems throughout the metropolis. However, several challenges exist in the management of liquid waste in the metropolis. Some of these include frequently choked sewers, over-aged sewer lines, negative attitude of the people toward sanitation, building of temporal and permanent structures on sewer lines etc.

The Septage in the metropolis is managed through the pumping stations of central sewer system, this is due to the shutdown of an existing septage treatment facility located at the Nungua farms. Individual septic tanks cover about 5% of the city, which covers part of Community 12 and Tema Newtown. The Assembly currently manages two treatment plants located at Community three (3) and Bankuman in Tema Newtown. The Community three (3) waste water treatment plant (WWTP) is currently out of service and is closed down. The Bankuman treatment plant has been rehabilitated and expanded to increase its catchment area and improve service delivery. This will enable more households and businesses within the Tema Newtown enclave to be connected to the central sewer system. Table 2.16 below shows how liquid waste is managed in some public institutions and industries in the Metropolis.

Table 2.18: Liquid Waste Management

1. Liquid Waste Management			
A. Household Facilities	Minimum	Comfortable	Amenity
Indigenous (Compound)	K-VIP	WC-ST, VIP	Simplified Sewerage systems
Multi – Storey (Compound)	W/C-ST	Simplified Sewerage	WC-ST
Estate	W/C-ST	Simplified Sewerage, WC-ST	Simplified Sewerage
High Cost	W/C-ST	Simplified Sewerage, WC-ST	Simplified/conventional Sewerage systems
New Developing Areas (Fringes)	KVIP, WC-ST, VIP/PL	Ecosan, WC-ST, Simplified Sewerage	WC-ST,
B. Communal (Neighbourhood)			

Public	WC – ST, KVIP	WC-ST, Small Bore sewerage	WC-ST, Simplified Sewerage			
Markets	WC – ST	WC-ST, Small Bore sewerage	WC-ST, Simplified Sewerage			
Lorry Parks	WC – ST	WC-ST, Small Bore sewerage	WC-ST, Simplified Sewerage			
C. Commercial						
Hotels, Restaurants, etc	WC-ST	WC-ST, Small Bore sewerage	WC-ST			
Slaughter house, abattoir, etc	WC-ST	WC-ST, Small Bore sewerage	WC-ST			
D. Institutional						
Schools	KVIP, Pour flush	WC-ST, Small Bore sewerage	WC-ST			
Police/Prisons Barracks	WC-ST	WC-ST, Small Bore sewerage	WC-ST			
Health facilities, offices.	WC-ST	WC-ST, Small Bore sewerage	WC-ST			
E. Industrial Premises						
Haulage and Conveyance	Mechanized dislodging and haulage (MDS)	MDS, Sewer	MDS, Sewer			
Treatment and Disposal	FSTP, WSP, Bio digester	FSTP, WSP, Bio digester	WSP, Bio digester			
2. Drainage Improvement						
Primary	Ditch	Stone pitched,	Stone pitched, concrete lining			
Secondary/Tertiary	Ditch	Stone pitched – open, concrete lined open	Covered drains			
3. Clinical/Special Hazardous Waste – Storage, Treatment and Disposal						
	Minimum		Comfortable	Amenity		
General waste	Storage/Transport	Treatment/Disposal	Storage/Transport	Treatment/Disposal	Storage/Transport	Treatment/Disposal
Infectious						
Sharps	Black plastic bag	Bury, LF	Black plastic bag	Landfill	Puncture resistant yellow bags/ container	Steam/disinfection/ incinerate
Patient/Animal	Containers	Bury/ Incinerate	Containers	Bury/ Incinerate	Puncture resistant yellow bags/ containers	Incinerate
Culture Specimen	Containers	Bury/ Incinerate	Containers	Bury/ Incinerate		

Pathological Hazardous						
Pharmaceutical	Containers	Sterilize/ Incinerate	Containers	Sterilize/ Incinerate	Puncture resistant yellow bags/ container	
Photo/ Chemical		Bury/ Incinerate	Thick Plastic Bag	Incinerate	Puncture resistant yellow bags	
Radioactive	Thick Plastic Bag	Incinerate	Containers	Incinerate	Puncture resistant yellow bags	Steam/ disinfection / Incinerate
Laboratory	Containers	Incinerate	Containers/r e-use	Incinerate	Puncture resistant yellow bags	
Incinerator Ash/Sludge	Containers		Containers/ with radioactive symbol	Decay storage and disposal	Brown containers with appropriate symbol	
		Dilute, neutralize and drain into septic tank	Containers with appropriate labels/Heavy metal label	Dilute, reused or neutralized and drain into septic tank	Brown containers with appropriate symbol	Incinerate
	Containers	Bury	Containers with appropriate labels	Landfill	Puncture resistant yellow bags/contai ners with appropriate label	Recycled, re-used and neutralized
						Dilute, reused or neutralized and drain into septic tank
	Containers					Dilute, reused or neutralized and drain into septic tank

						Inert Landfill
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2.4.3.4 Solid Waste

Solid waste in the Metropolis is collected as mixed waste with little sorting before it gets to the landfill site (Table 2.17). The Engineered Landfill Site which was constructed at Kpone under the Urban Environmental and Sanitation Programmes in 2013 has been decommissioned. The Assembly is currently using the old landfill site at Kpone for solid waste disposal.

Table 2.19: Solid Waste inflows in TMA

S/N	ITEM DESCRIPTION	TONNAGE
1.	Quantity of Waste Generated Daily	175.66
2.	Quantity of Composted Waste	20.5
3.	Quantity of Sorted and recycled waste	9.5
4.	Quantity of waste finally disposed	125.2

Source: Waste Management Department, 2025

The facility which was originally planned to serve the Metropolis was serving many other districts in the GAMA Area. As a result, it was overstretched hence reducing its planned lifespan from 15 years to just 6 years.

The decommissioning of the engineered landfill site has compelled the Assembly to move to the old abandoned dumping site which is around B5 steel. The facility receives an average of 700-800 metric tonnes of waste on a daily basis. The Assembly is therefore in need of land and resources to construct a new engineered landfill site and possibly a waste recycling plant.

With regards to refuse collection, the metropolis has an organized system for collecting solid waste which involves the private sector. Solid waste collection in communities is carried out on franchise bases where service beneficiaries pay user fees, which is determined by both the Tema Metropolitan Assembly and the private collectors. The collection, transportation and treatment of solid waste is presented in Table 2.18. Solid waste collected is finally disposed of at the dumping site at Kpone. Despite all these efforts by the Assembly to improve solid waste in the urban areas, there are still problems. Thus, most inhabitants dispose of their refuse indiscriminately irrespective of the health hazards associated with such practice. Whereas some have defined the problem as attitudinal, others have attributed it to the absence of dustbins at vantage locations where people can easily dispose of waste. In fact, some also attribute the problem to the inability of the waste

management companies to regularly convey the waste to the final disposal site when it is full. To address this problem, some unemployed youth (usually called “boola-boola boys”) have ingeniously been going from house- to -house with wheel barrows to collect refuse for an undefined fee. Under the Restoration Agenda, the Assembly has also employed and equipped some street sweepers and waste collectors known as the “Restoration Ambassadors” to clean the streets and collect refuse on a daily basis.

Table 2.20: Rates of Solid Waste Collection in TMA

S/N	Item Description	Daily Rates
1.	Collection Coverage Rate	88.3%
2.	Total Recycle Rate	17.02%
3.	Final Disposal Rate	88.3%

Source: Waste Management Department, 2025

Table 2.21: Standards for Environmental Sanitation/Waste Management Services

1. Solid Waste Management								
Facility/Service	Standard							
	Minimum		Comfort			Amenity		
A. Collection	Storage Facility	Frequency	Source Separation	Storage Facility	frequency	Source Separation	Storage Facility	Frequency
House-to-house	120 – 240Litre	2 x week	3 bins	240 x 3	1 x week	4 bins	240 Litre bins x 4	1 x weekly
Block Collection	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Communal Collection	10 – 15M3 @ bulk generating sites	Determined by Location (1 x week)	N/A	N/A	N/A	3No.waste bins	1100litre closed bin	1 x bi-monthly (Influenced by waste type/location)
B. Transport								
House-to-house	Tipper truck with tarpaulin /Net Side – loader		Compaction Truck fitted with mechanical 120 – 240 lifting system.			Compaction Truck fitted with mechanical 120 – 240 lifting system.		
Block Collection	Tipper truck with tarpaulin /Net Side – loader					Covered Articulated (Transfer station) Trucks (23-60m ³).		

Communal Collection	Skip-loader with tarpaulin/Net Side-loader		
C. Treatment and Disposal	Improved Dumping	Recycling, Composting, Incineration, Sanitary Landfill	Energy recovery (harvest gas), Carbon Credit

Source: Waste Management Department, 2025

2.4.3.5 Industrial Waste Services

EPA is mandated to ensure that all the industries in the Metropolis treat their waste before disposing them off into the environment. Available information indicates that most of the industries do not properly treat their waste before disposing them into the environment- a situation that poses threats to both the environment and the inhabitants. Field observations indicates that Chemu lagoon and Sakumono lagoon receives industrial wastewater and domestic wastewater from Tema New Town area, Tema Industrial area, Sakumono and Tema Central.

Some of these industries includes the Tema Oil Refinery (TOR) which discharges poorly treated residual petroleum oil into the Chemu Lagoon via the Industrial Drain, Pioneer Food Cannery, Sentuo steel and Tema Steel Works. Additionally, the Ghana Textile Limited (GTP) and some Paint Production Industries also discharge industrial liquid waste into the Industrial Drain.

Apart from these major industries, about 80% of Small and Medium Scale mechanic shops scattered within the Metropolis spill petroleum oil into domestic drains which normally ends up in the sea. This current situation if not addressed could result in environmental degradation and destruction of aquatic life. It is however worth noting that through the activities of EPA; most of the plastic producing industries have acquired recycling plants that recycle plastics.

The solid waste collection and disposal from the industries are carried out by private service providers and other industries also collect and dispose – off their solid waste with their own trucks as and when necessary.

Figure 2.5: Sanitation Map of TMA



Source: Physical Planning Department (TMA), 2025

2.4.4 Housing

The 2021 Population and Housing Census reveals critical insights into Tema's housing landscape, characterized by its predominantly urban nature. With a total housing stock of 36,179 units serving a population of 177,924, the metropolis demonstrates a relatively high housing density. The census recorded 70,797 households, translating to an average household size of 3.2 persons, slightly below the regional average but reflecting national urbanization trends toward smaller family units. This housing profile suggests significant pressure on existing residential infrastructure, as each dwelling unit accommodates multiple households on average.

Tema's unique place in the regional context is highlighted by an analysis of Table 2.20. The city is home to 3.2% of the Greater Accra Region's housing stock, although only making up 3.3% of the region's population, suggesting a proportionate balance. However, Tema's total urbanization which excludes any rural areas creates special difficulties, especially with regard to the rise of informal settlements and the affordability of housing. The metropolis' economic makeup as an industrial hub that draws single workers and nuclear families may be reflected in the average household size of 3.2 people, which is similar to the regional norm but lower than the national average of 3.6. In

Ghana's top industrial city, these housing dynamics highlight the need for focused policies that address urban housing shortages, quality enhancements, and fair access to shelter.

Table 2.22: Stock of Houses and Households by Type of Locality

Categories	Total country	Region	District	Urban	Rural
Total population	30,832,019	5,447,237	177,924	177,924	-
Number of houses	5,862,889	1,144,373	36,179	36,179	-
Number of households	8,345,414	1,698,009	175,688	175,688	-
Average household size	3.6	3.2	3.2	3.2	-

Source: Ghana Statistical Service, 2021 Population and Housing Census.

2.4.5 Gender

The Metropolis exhibits a relatively balanced gender distribution, with males making up 51.3% of the working-age population and females accounting for 48.7%. Despite this near parity, gender disparities persist in employment, education, and economic opportunities. Women, particularly in informal sectors (trading and small-scale food processing), often face challenges such as limited access to capital, training, and business formalization support. However, initiatives like the Business Advisory Centre's (BAC) targeted programs for women-led enterprises and skills training have helped bridge some of these gaps, empowering more women to participate actively in the local economy.

In the educational sector, gender parity has improved at the basic level, with schools evenly distributed across the metropolis. However, female enrolment in technical and vocational training remains lower than that of males, reflecting lingering societal biases toward certain professions. In order to address this, the metropolis has encouraged apprenticeship programs and STEM (Science, Technology, Engineering, and Mathematics) initiatives for girls. Additionally, tertiary institutions like the Methodist University College and Data Link University provide accessible higher education, yet more efforts are needed to ensure equitable female representation in leadership and high-income fields.

In the broader socio-economic context, women in Tema play a vital role in key industries such as fish processing, market trade, and SMEs, yet they often lack decision-making power in these sectors. The Assembly has implemented gender-sensitive policies, including grants for women entrepreneurs and advocacy for workplace inclusivity. In our bid to improve gender parity the

Assembly has introduced initiatives such as, strengthening childcare support, expanding financial inclusion programs and promoting gender-responsive urban planning.

2.4.6 Migration Patterns

The Metropolis has long been a major destination for both internal and international migrants due to its strategic position as Ghana's industrial and port city. The presence of the country's largest seaport and numerous manufacturing industries continues to attract migrants from other regions seeking employment opportunities. Additionally, the metropolis serves as a transit point for international migrants particularly from neighbouring West African countries, who come for trade or en route to other destinations. This constant influx of people has significantly contributed to Tema's rapid urbanization and cultural diversity, while also putting pressure on housing and social services.

The migration trends in the metropolis reveals distinct patterns with most internal migrants originating from the Volta, Central, and Northern Regions of Ghana. These migrants typically settle in communities like Tema Newtown and Communities 1-12, where they engage in fishing, trading, or industrial labour. While migration has boosted the local economy through labour supply and cultural exchange, it has also led to challenges such as overcrowding, increased competition for jobs, and strain on infrastructure. Seasonal migration is particularly noticeable in the fishing sector, where fishermen from coastal towns migrate temporarily during peak fishing seasons.

The Ghana Statistical Service reports indicate a significant "floating population" of about 30,000 people enter Tema daily for business and other purposes, further underscoring the dynamic nature of movement in and out of the metropolis.

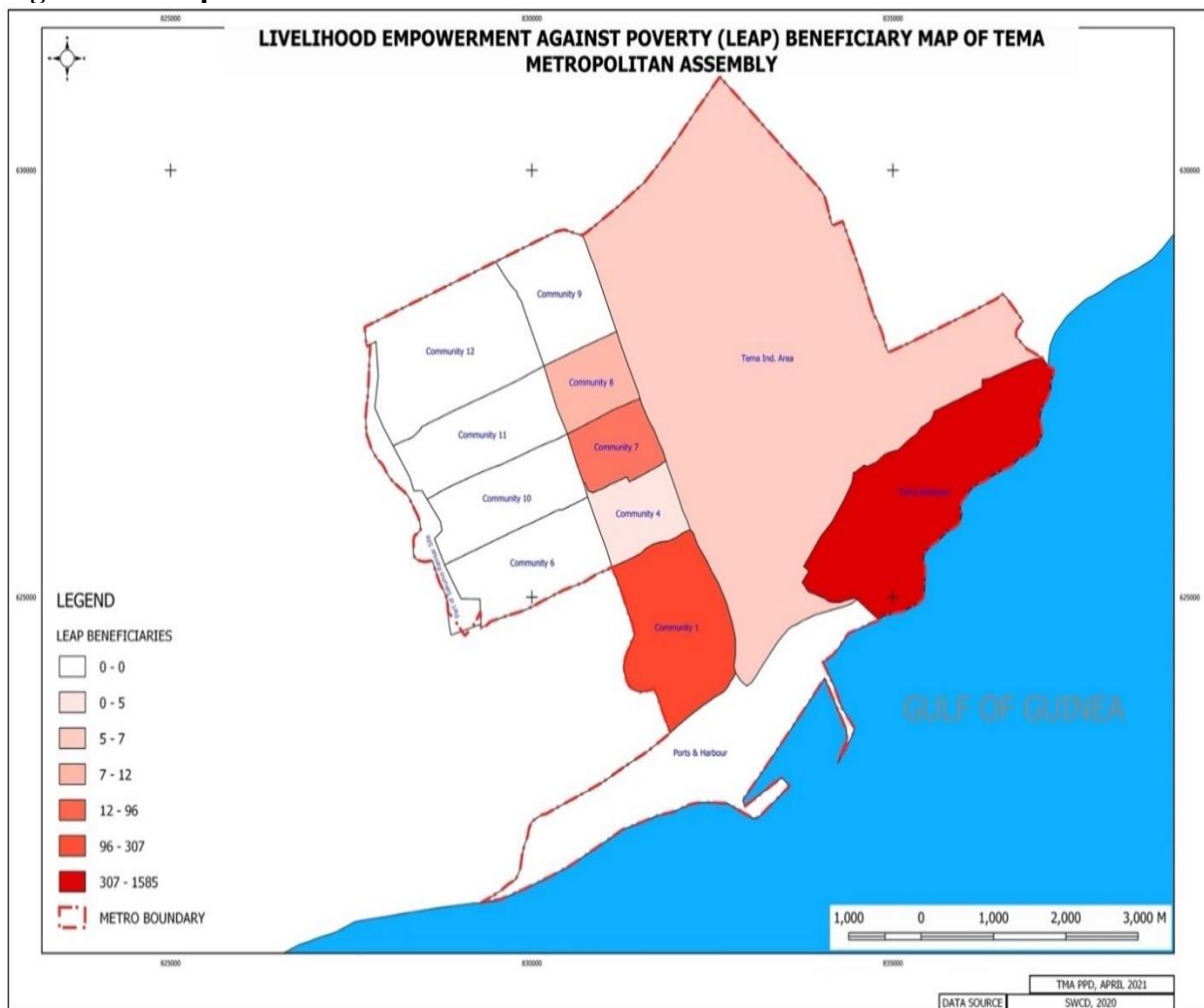
The Assembly is collaborating with national agencies to improve housing, sanitation, and social services in migrant-heavy communities. The Assembly has also organised skills training programs to help both migrants and locals access better employment opportunities in the formal sector. Implementation of inclusive policies that recognize migrants' contributions while managing urban growth can harness the benefits of migration while mitigating its negative impacts on the city's development.

2.4.7 Social and Child Protection

2.4.7.1 Livelihood Empowerment Against Poverty (LEAP)

The LEAP programme continues to feature prominently in the Metropolis to reduce hardship and improve the livelihood of the extremely poor, the vulnerable and the excluded persons in society. The target groups are the orphans, pregnant women, the aged over 65 years without support and Persons with Disabilities without productive capacity. It is conditional on households to register children below 12 months with the Birth's Registry, ensure children below 5 years periodically undergo growth monitoring and immunization, enrol and retain children of school-going age in public schools, ensure children are not engaged in worst forms of child labour and ensure national health insurance registration for all LEAP household members. LEAP promotes income security and social inclusion for poor households. In all, a total of 489 beneficiaries are benefiting from the LEAP programme in the Metropolis (381 females and 108 males). For 2024, 6 payments cycles (88th, 89th, 90th, 91st, 92nd and 93rd) have been made to the 489 households. Currently, plans are underway to carry out a reassessment of the Programme for households and also to roll out the mobile money payment to beneficiaries.

Figure 2.5: Map of LEAP Beneficiaries in TMA

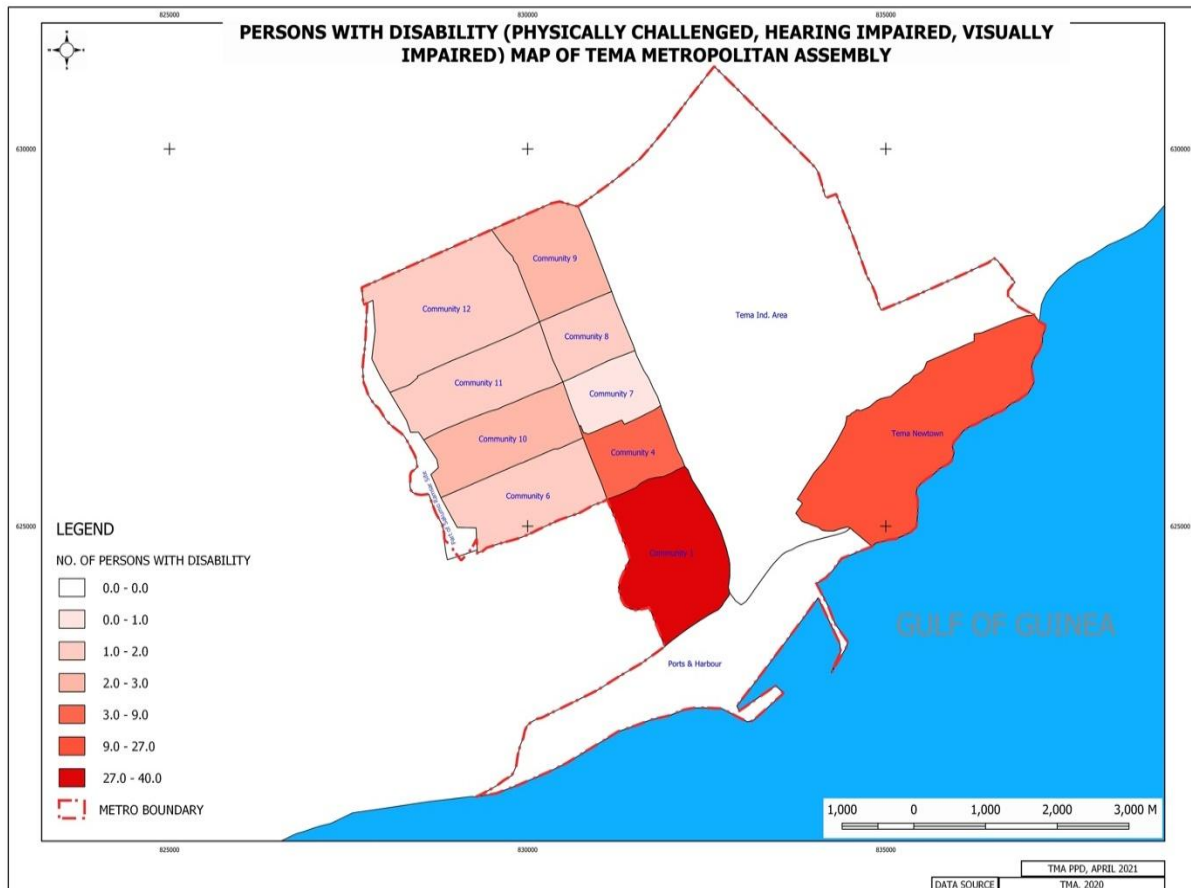


Source: Physical Planning Department (TMA), 2025

2.4.7.2 Persons with Disabilities (PWDs)

The proportion of persons with disability as at 2024 is about 0.1 percent (416 persons) out of the total population of the Tema Metropolis, the sex composition of the population with disability indicates that the proportion of males is about 38% (159 persons) and female is about 62% (257 persons). The Assembly supports persons with disability yearly with items such as fridges, sewing machines, hair dryers, etc. and cash support for income generating activities, medical and education / training. In the year 2024, twenty-four (24) PWDs were supported, out of which nineteen (19) received items for their income generating activities, two (2) received wheel chairs and three (3) had their school fees paid. Figure 2.5 shows the population distribution of persons with disability in the metropolis.

Figure 2.2: Map of Population of Persons with Disability in TMA



Source: Physical Planning Department (TMA), 2025

2.4.7.3 Child Labour

The worst forms of child labour such as child trafficking for fishing, prostitution, household services etc. are predominant in most communities. Studies have shown that communities along the coast are very much involved in these activities. It has also been observed that the vulnerability and poverty of women in the Metropolis affects children and, in most cases, leaves them in a vicious cycle of poverty where they are forced to work to help support their families. They are engaged in dangerous activities like street hawking, street begging, stealing, etc. This phenomenon endangers the youthful population as it has the potential to lead same into bigger crimes in the future. The Assembly in collaboration with NGOs are working hard to turn around this unfortunate development.

2.4.8 The Aged Care

The current state of aged care in Tema Metropolis reflects a mix of demographic pressure, systemic neglect and over-reliance on informal care systems with an estimated elderly population exceeding 17,000 individuals and as a result the Metropolis is experiencing the effects of an aging population without the necessary institutional support to meet their needs. There are very few formal care facilities that the metropolis relies on, and those that exist face serious resource constraints including limited access to essential medical equipment like wheelchairs, oxygen support and air mattresses. Many elderly residents rely on outpatient hospital services that are not age-specialized and the health workers often lack training in geriatric care, resulting in impersonal or ineffective interactions.

Secondly majority of older adults in Tema live within contexts of economic vulnerability most are without stable pension income and those who receive social security benefits often find it insufficient to cover even basic medical expenses. The decline in support and assistance from extended family's system which was once the primary means of caring for the aged has left many seniors isolated, especially those whose children or caretakers have migrated in search of work. The absence of local government-led aged-care programs or specialized policy implementation within the metropolis compounds the neglect, effectively making elder welfare a private family burden rather than a public concern.

To this end there is the need for collaboration with Faith-based and community-based organizations who are already informally supporting the aged. Raising awareness about the aging population's challenges can shift public attitudes and mobilize support for a more compassionate integrated approach to elder care in the metropolis.

2.4.9 Family Life

In 2024, the Assembly recorded 418 cases of Child and Family Welfare interventions through the Department of Social Welfare. These cases reflect a range of social challenges affecting families within the metropolis particularly in child protection and family stability. The assessment of the child and family welfare intervention are structured around key focus areas: child maintenance, custody and access, welfare support, family reconciliation and juvenile delinquency.

Over half of the recorded cases (52.4%) involved child maintenance claims, reflecting widespread financial strain on caregivers' especially single parents and guardians and lapses in parental

responsibility. Also, custody cases (19.9%) and access disputes (8.4%) highlighted familial instability including divorce and separation. Additionally, welfare cases (12.2%) signalled urgent material needs, whereas minimal family reconciliation (0.2%) and young offender cases (2.4%) pointed to gaps in preventive mediation and youth rehabilitation services.

The Assembly has prioritised three key areas which are scaling up child maintenance enforcement to protect vulnerable children, strengthening family mediation programs to reduce custody conflicts and expanding youth diversion initiatives for young offenders. Targeted welfare support including healthcare and livelihood aid has been streamlined for at-risk families (12.2% of cases) to mitigate crises. These findings underscore the need for proactive investments in family stability, combining legal safeguards, community mediation, and youth support. Addressing the root causes of disputes and financial hardship, the Assembly can foster safer and more resilient households in Tema.

2.4.10 Youth

The youth population in the Metropolis forms a significant portion of the total population and represents both a vital asset and a development priority. Based on the 2021 Population and Housing Census, individuals aged 15–35 account for over 30% of the metropolis's residents, reflecting the national trend of a youthful population. This age group is key to the city's socio-economic growth, offering potential for innovation, entrepreneurship, and labour force expansion. This demographic reality underscores the importance of investing in youth-centric programs and policies to harness their potential and integrate them effectively into the socio-economic fabric of the metropolis.

Unemployment and underemployment are the major challenges among the youth in Tema, with many young people engaged in informal sector activities such as trading, artisanal, fishing, and small-scale manufacturing. While the city's industrial background provides some job opportunities in sectors like manufacturing and port logistics, there is a growing mismatch between the skills youth possess and the demands of the modern job market.

Various initiatives have been implemented to empower Tema's youth with Business Advisory Centre (BAC) being instrumental in providing entrepreneurship training, start-up kits, and apprenticeship programs, benefiting over 500 young people in recent years. Additionally, partnerships with technical institutions and vocational training centres aim to equip youth with skills in high-demand fields like welding, electrical works, and digital technology.

The Assembly in collaboration with other stakeholders are actively implementing initiatives to empower the youth. Programs like the Tema Recruitment/Internship Program (TRIP) aim to equip young people with employable skills through attachment-based services. Events like the Youth Development Summit further demonstrate a commitment to building future leaders through education, entrepreneurship, and work-life balance, showcasing a multi-pronged approach to maximizing the potential of youth in the metropolis.

2.4.11 HIV and AIDS

The Assembly remains committed to addressing HIV and AIDS and related health concerns. In response to the growing threat, several interventions have been implemented, including Behaviour Change Communication (BCC), Prevention of Mother-to-Child Transmission (PMTCT), and support services for People Living with HIV and AIDS (PLHIV).

The most affected population falls within the 20–39 age group, representing individuals in their most reproductive and economically productive years. In 2020, the national HIV prevalence rate was 1.7%, compared to a higher district rate of 2.9% for Tema Metropolis. According to the Sentinel Survey Reports, the prevalence peaked in 2021 at 5.46% and has fluctuated in subsequent years (see Table 2.21). It's important to note that the Tema ART site also serves individuals from other districts, which may inflate the local incidence rate.

Women aged 15 – 45 years are particularly vulnerable, which poses a development concern given that this group forms a significant part of the Metropolis's active labour force. Contributing factors to the high prevalence include the large floating population both local and foreign, attracted by the port and industrial activities. Some members of this population engage in high-risk behaviours such as patronizing female sex workers (FSWs), engaging in same-sex relationships and maintaining multiple sexual partners, especially among transient workers and business visitors.

Opportunistic infections (OIs) such as candidiasis, cervical cancer, herpes, syphilis, and tuberculosis remain a concern especially for individuals unaware of their HIV status. While the availability of antiretroviral therapy (ART) has reduced the occurrence of OIs, late diagnosis remains a barrier. The Assembly has therefore intensified HIV sensitization campaigns, expanded HIV Testing Services (HTS) and promoted condom use and BCC materials across the Metropolis. Stigma and discrimination against PLHIV continue to pose serious challenges. In response, the Assembly supports five active PLHIV support groups and works closely with the Metropolitan

AIDS Committee, the Health Directorate, NGOs, CBOs and other stakeholders to promote acceptance and improve care. Efforts are aligned with the global 95-95-95 targets set by UNAIDS to end HIV and AIDS by 2030. However, challenges such as donor fatigue and delayed disbursement of the DACF HIV component have constrained effective decentralised responses.

Table 2.23: HIV and AIDS Prevalence

Years	HIV and AIDS Prevalence			
	2020	2021	2022	2023
Prevalence	2.9	5.46	3.39	3.67

Source: Metro. Health Directorate, 2024

2.4.12 Vulnerability Analysis

Rapid urbanization, migration and the emergence and expansion of informal settlements have heightened vulnerability among specific population groups in the metropolis. In order to inform inclusive and evidence-based planning, a systematic vulnerability analysis was undertaken. This analysis utilized three complementary tools, Social Vulnerability Mapping (SVM), Livelihood Vulnerability Index (LVI) and Participatory Vulnerability Assessment (PVA). These tools were used to identify and assess vulnerable groups within the metropolis. The table below summarizes each tool, its application within the metropolis and the key findings:

Table 2.24: Vulnerability Analysis

Tool	How It Was Applied	Key Findings
Social Vulnerability Mapping (SVM)	GIS-based analysis combined with socio-economic and environmental data (population density, housing quality, service access, flood exposure) to identify spatial clusters of vulnerability.	Vulnerability hotspots were identified in Tema Newtown, Communities 1&4 and parts of the industrial area are characterized by informal housing, poor sanitation, limited access to services and high exposure to flooding.
Livelihood Vulnerability Index (LVI)	Household surveys and secondary data assessed indicators like income stability, education, health and social	Groups with highest vulnerability scores included women-headed households, unemployed youth, elderly persons, persons with disability (PWD), drug addicts (junkies)

	capital to calculate vulnerability scores for different groups.	and informal workers such as street vendors, small-scale fishermen and fish smokers
Participatory Vulnerability Assessment (PVA)	Focus group discussions, interviews (online and in-person) and participatory mapping were conducted in selected communities to capture local perspectives and experiences of vulnerability.	Community members highlighted gendered burdens, social exclusion of stigmatized groups (e.g., teenage mothers, PWDs, PLHIV, etc.) income/employment, insecurity and lack of coping mechanisms in informal settlements.

Source: TMA – MPCU, 2025

The vulnerable nature of these groups is driven by a complex interplay of social, economic and environmental factors. Rapid urbanization and rural-urban migration have led to population growth that outpaces service delivery, resulting in overcrowding and strain on housing, sanitation, education and health infrastructure. Informal settlements in flood-prone zones are particularly susceptible to environmental hazards such as tidal surges and water-related diseases. Socio-economic inequality further compounds these risks, as low-income households lack the resources to invest in safer housing or secure education and healthcare. Gender norms and discriminatory practices reinforce exclusion, while weak inheritance systems and gaps in institutional support limit community resilience.

The effects of vulnerability manifest across economic, health, educational and social dimensions. Economically, vulnerable households experience recurrent asset losses during flooding and livelihood disruptions that entrench poverty cycles. Health impacts include increased rates of water-related diseases, poor maternal and child health outcomes and mental health challenges due to chronic stress. Educational disruption is also common, as children from vulnerable families often miss school for economic or safety reasons. Socially, heightened vulnerability leads to marginalization, crime exposure and weakened community cohesion.

The combined use of SVM, LVI and PVA provides a holistic understanding of vulnerability in the Metropolis. Each method highlights critical aspects of risk and resilience among various population groups. The findings from the analysis are essential for designing inclusive, equitable and effective interventions to build resilience and promote sustainable urban development.

2.5 Environment

2.5.1 Human Settlement (Built Environment)

The Metropolis presents a complex urban fabric characterized by carefully planned communities, industrial zones, and coastal developments that collectively shape its distinctive built environment. Residential areas dominate approximately 60% of the metropolitan land area, encompassing both formally planned neighbourhoods with proper infrastructure and informal settlements that have emerged organically. The remaining 40% of land is allocated to industrial and commercial uses, creating a balanced but increasingly pressured urban landscape.

Spatial analysis reveals distinct settlement patterns across the metropolis with well-designed residential zones, structured layouts and amenities contrast sharply with growing informal communities particularly in Tema Manhean, some parts of Community 1 and fringe areas near the industrial zone. These unplanned settlements typically develop in response to acute housing shortages and proximity to employment opportunities, often lacking basic services and proper infrastructure.

The Central Business District (CBD) is undergoing significant transformation through the gradual conversion of residential properties to commercial uses, a process that exemplifies the urban theory of “invasion and succession”. This evolution reflects the area's economic growth and intensifying land value pressures driven by Tema's position as Ghana's industrial and commercial hub.

The rapid population growth of the metropolis which is currently estimated at 3.2% annually, continues to fuel urban expansion with multiple consequences for the metropolitan area. The environmental impacts include diminishing green spaces and escalating pollution levels while existing infrastructure systems for water, sanitation and transportation face increasing strain. The housing sector struggles with affordability challenges that push more residents towards informal settlements and service delivery remains uneven across different neighbourhoods.

Industrial activities concentrate along coastal areas and designated zones, creating distinct land use patterns while beachfront developments increasingly combine residential and recreational functions. This spatial organization presents both economic opportunities and sustainability challenges that require careful management.

In response to these urban dynamics, the Assembly has implemented several strategic initiatives. Informal settlement upgrading programs aim to provide basic infrastructure and improve living

conditions, while strengthened land use planning and zoning regulations seek to guide more organized growth. The promotion of mixed-use development in appropriate locations and enhanced environmental management systems represent additional approaches to balancing development needs with quality-of-life considerations.

The evolving built environment of Tema reflects its dual identity as Ghana's premier industrial centre and a growing residential hub. This unique combination demands innovative approaches to urban management that can reconcile industrial needs with residential liveability. Future development strategies will need to emphasize integrated spatial planning, sustainable infrastructure investment and proactive environmental protection to ensure the metropolis remains both economically vibrant and socially equitable. The success of these efforts will largely determine the metropolis's ability to maintain its competitive edge while improving quality of life for all residents.

2.5.2 Distribution and Hierarchy of Settlements

There are approximately 13 settlements that exhibit an uneven distribution pattern, characterized by significant variations in population density and development. While some areas, such as Manhean and Community 1, are densely populated, others including Communities 6, 10, and 11 have relatively lower population concentrations. This disparity is further influenced by the clustering of heavy and light industries, particularly in parts of Community 1 and Community 9, which attract a steady influx of people from across the country for business transactions, administrative purposes, and employment opportunities.

Although Tema is predominantly urbanized, certain areas, such as Bankuman and Ziguichor, retain peri-urban characteristics and face challenges in accessing basic services like potable water and sanitation facilities. These gaps highlight the uneven distribution of infrastructure and amenities across the metropolis.

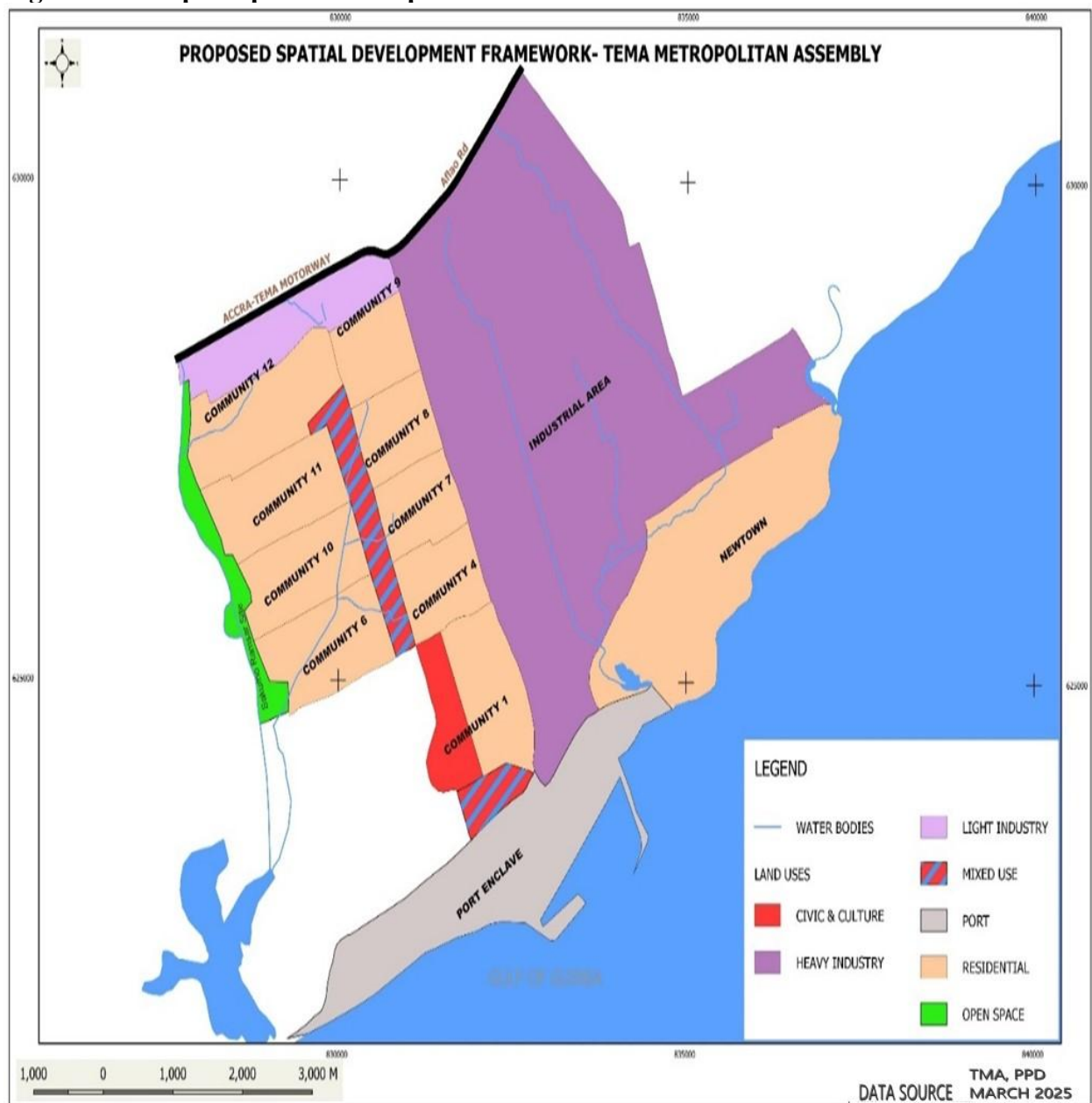
Settlements in Tema are organized into a four-tier hierarchy based on their functional significance and development levels:

1. **First – Order Settlement:** Community 1, serving as the primary commercial and administrative hub.
2. **Second – Order Settlement:** Industrial Area, functioning as a major industrial and economic node.

3. **Third – Order Settlements:** Communities 7, 9, 11 and 12 which support localized commercial and residential activities.
4. **Fourth – Order Settlements:** Tema Newtown (Bankuman and Ziguinchor), which are less developed and face service delivery challenges.

This hierarchical structure underscores the spatial inequalities in development and service provision across the metropolis. Addressing these disparities will require targeted interventions to improve infrastructure, enhance service delivery, and promote balanced urban growth in underdeveloped settlements.

Figure 2.6: Map of Spatial Development Framework of TMA



Source: Physical Planning Department (TMA), 2025

2.5.3 Climate Change

As Ghana's primary industrial hub, the metropolis faces significant environmental challenges that have altered its natural climate patterns. In recent years, the urgency for adopting a sustainable development approach has intensified in response to the growing impacts of climate change globally and locally. In Ghana and specifically within the Tema Metropolis, climatic and environmental conditions have become increasingly volatile marked by rising temperatures, erratic

rainfall patterns and extreme weather events such as flooding and tidal surges. These trends are having visible consequences for public health, infrastructure, agriculture and the natural environment.

In addressing these challenges climate change adaptation and mitigation have been mainstreamed into the national and local development planning processes and through the Strategic Sector Collaboration (SSC) with the City of Aarhus, the Assembly has also developed a Climate Adaptation and Waste Water Management Plan (CAWWMP). Efforts are being made to collect data for risk assessment and stakeholder engagement to shape informed interventions. The major drivers of climate change are largely human-induced and include:

- **Improper Waste Management system:** Waste management within the metropolis remains a significant environmental burden. The pervasive dumping of refuse into drains and waterways, coupled with inadequate collection and processing, directly contributes to severe urban flooding by blocking critical drainage infrastructure. The Chemu Lagoon is heavily silted and polluted diminishing its capacity to manage storm water and posing severe health risks to surrounding communities.
- **Coastal Erosion:** The incidence of tidal waves over the years has drastically accelerated coastal erosion. This ongoing phenomenon directly threatens coastal infrastructure including roads, homes and critical port facilities making the city increasingly vulnerable to sea-level rise and storm surges. The loss of protective natural barriers further exposes coastal communities to the destructive forces of the ocean.
- **Unsustainable Resource Use for economic activities:** The continued high reliance on fuel wood by fish processors particularly in coastal communities like Tema New Town, contributes significantly to localized deforestation and loss of critical tree cover. This practice while providing immediate energy undermines ecological resilience and exacerbates soil erosion particularly during intense rainfall events.
- **Encroachment on Protected Areas:** The ongoing and largely unchecked encroachment on environmentally sensitive protected areas most notably the Sakumo Ramsar Site is a critical concern. These wetlands serve as vital natural flood attenuators, biodiversity hotspots and carbon sinks. Their degradation through construction and waste disposal directly diminishes natural defences against flooding and contributes to the loss of unique ecological systems.

These practices are contributing to heightened vulnerability seen in the form of seasonal flooding, coastal erosion, declining biodiversity, urban heat effects and reduced agricultural productivity. In response, the Metropolitan Assembly through its Agric Department and extension services has intensified climate-smart agriculture campaigns, promoting organic farming, integrated pest management and reduced use of agrochemicals. Additionally, targeted sensitization programs are being implemented to discourage harmful environmental practices. However, the metropolis continues to face significant climate and disaster-related risks which pose implications for both development planning and service delivery. The table below indicates the list of risk, CD-DRR issues/ location and its implication on development planning.

Table 2.25: Climate Change Risk and Implication

No.	Issue	Risk	Location	Implication for Development Planning
1.	Encroachment on Ramsar Site	Flooding, biodiversity loss, destruction of natural habitat	Community 11	Strengthen development control; enforce land use regulations; sustained community education
2.	Dumping of refuse in drains; siltation of Chemu Lagoon	Urban flooding, water pollution, property damage	Tema Newtown	Accelerate storm drain construction; regular desilting; intensify public awareness campaigns
3.	Open defecation and spill over from sewer manholes	Outbreaks of cholera, dysentery, other sanitation-related diseases	Metro wide	Expand household toilet facilities; improve sewer maintenance, enforce sanitation bye-laws; behaviour change communication

Source: Metro. Development Planning Unit (TMA), 2025

2.5.4 Infrastructure

Infrastructure plays a fundamental role in the socio-economic development of the Metropolis, serving as the backbone for urban functionality, productivity and quality of life. As a strategic urban centre and the heart of Ghana's industrial and maritime activities, Tema relies heavily on robust infrastructure systems to support its growing population, expanding industries and complex urban services. The metropolis hosts a diverse range of physical infrastructure, including transport networks, energy distribution systems, water and sanitation facilities, telecommunication networks and public buildings all of which are integral to the functioning of its economy and governance structures.

The metropolis infrastructure is shaped by its status as a planned city, originally developed in the 1960s to support Ghana's industrialization agenda. This legacy is reflected in the relatively structured layout of its road networks, zoning systems and industrial areas. However, rapid urbanization, changing land-use patterns and the continuous influx of people and businesses have outpaced the capacity of many existing infrastructure systems. As a result, the metropolis is experiencing increasing pressure on roads, energy supply, drainage systems and digital connectivity leading to challenges such as traffic congestion, flooding, power fluctuations and service delivery bottlenecks.

Over the years, investments in infrastructure have focused on expanding road networks, upgrading utility services and improving access to communication technologies. Despite these efforts, infrastructure development has often lagged behind population growth and urban sprawl especially in peri-urban and informal settlements. This has led to disparities in infrastructure access and quality between well-planned areas and emerging communities. Moreover, issues related to infrastructure maintenance, financing and climate resilience remain significant barriers to sustainable urban development.

The importance of integrated, efficient and inclusive infrastructure cannot be overstated in the context of the Assembly's development aspirations. Reliable infrastructure not only facilitates the movement of goods and people but also underpins economic competitiveness, environmental sustainability and social equity. As such, strengthening infrastructure systems remains a key priority for local development planning, particularly within the framework of the Medium-Term Development Plan (MTDP).

In light of these realities, a comprehensive assessment of existing infrastructure conditions is essential to identify gaps, understand development implications and inform strategic interventions. The sections that follow provide an overview of the status of key infrastructure sectors, transportation, communication and energy and highlight their role in shaping the development trajectory of the Tema Metropolis.

2.5.4.1 Transportation and Roads Network

The total length of roads within the Metropolitan area is 960 km made up of 819 km of asphaltic concrete and surface dressed roads, and 141 km of gravel and earth roads (See Figure 2.9). Tema has an extensive road network within all the communities. Most of the surfaced dressed roads are

have outlived their useful lives and are plagued with several potholes and other pavement distresses. In general, a significant proportion of the roads (particularly untarred roads) have no drains by them. The same is true for bicycle lanes or pedestrian friendly facilities in promoting walking and cycling as an alternative and cheap means of transport. Of the few roads that have walkways, these walkways are generally in poor condition. This situation causes a lot of difficulties for travellers when commuting from one place, as pedestrians and cyclists tend to share the road carriageway space with vehicles, which tend to impact negatively on travel time, rate of accidents, and productivity within the Metropolis. That notwithstanding, the Government of Ghana has initiated the process of asphaltting major roads in the metropolis. So far, areas like community 4, 1, 2, 11, and 12 have had some of their roads asphalted under this programme.

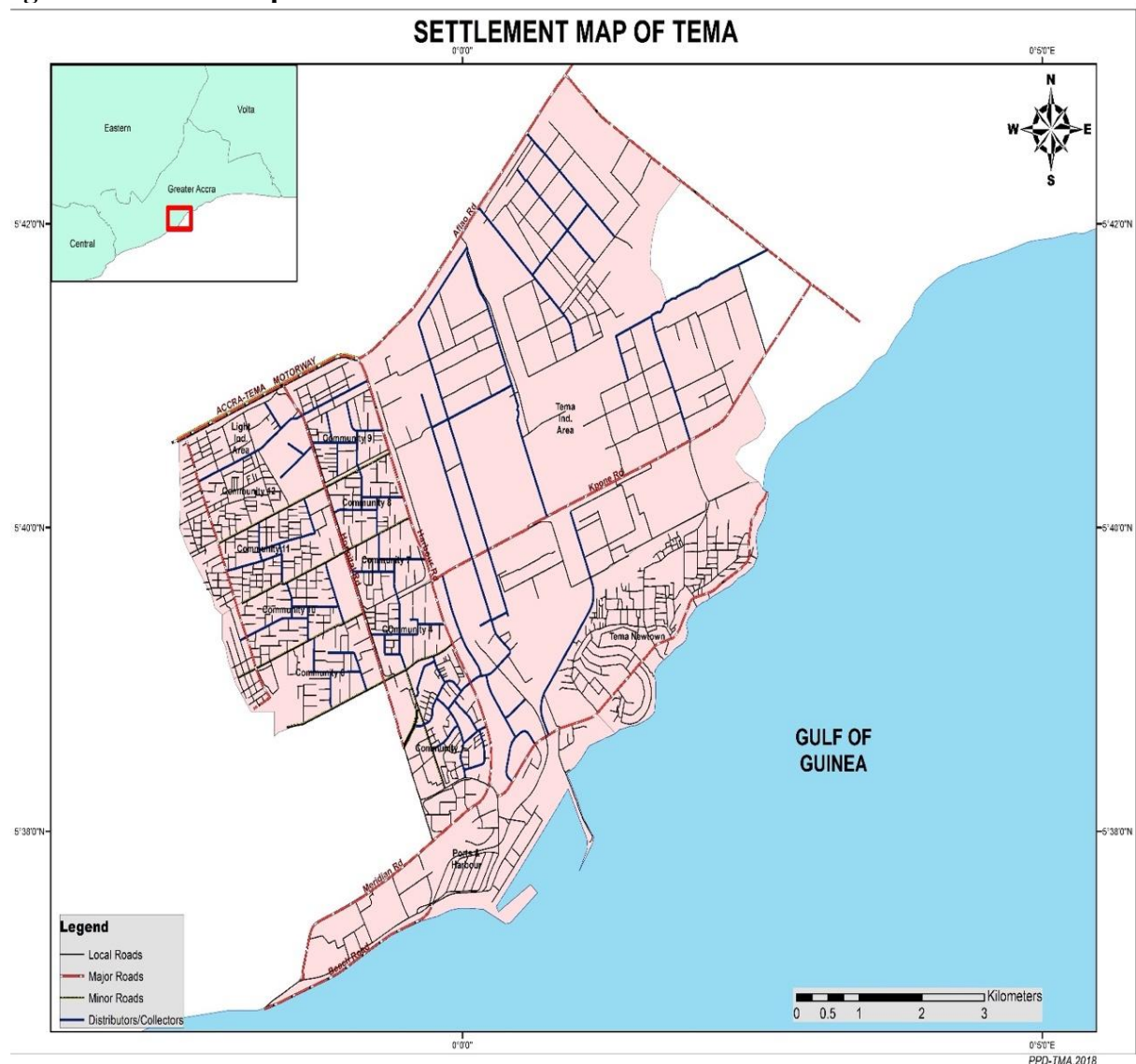
The main mode of transporting goods and services in the Metropolis is mainly by road. Currently the rail system in the Metropolis is functioning and it is hoped that this would help eventually relieve the pressure on road transport especially if expanded from the Metropolis to other major cities. This has become imperative since goods like cocoa that serves as raw materials for some of the food production companies are transported not by rail but by road from the hinterlands. This situation sometimes results in congestion on the major roads in the Metropolis. Due to the location of the harbour, a lot of shipping companies operates in the Metropolis that facilitates the export and imports of goods from other countries. There are private and commercial transport systems operating in the Metropolis including, a web of taxi services which are available on a 24 – hour basis. Heavy-duty trucks and Lorries come from all over the country carting goods to and from the harbour and the industries in Tema. Furthermore, the rail transport infrastructure, once a critical part of Tema’s transportation system, has seen some revitalization efforts recent like the recent commissioning of the Tema-Mpakadan standard-gauge railway line, which aims to supports freight and passenger services by linking the port to the Volta Lake transport network to alleviate pressure on road transport.

Table 2.26: Surface Type Split for Road Network in TMA

SN	Surface Type	Length (km)	Percentage (%)	Condition Mix (%)
1.	Paved (Asphaltic and Surfaced Dressed)	819	85	60:20:20
2.	Gravel and Earth Roads	141	15	20:40:40
3.	Total	960	100	

Source: Metro. Roads Department, 2025

Figure 2.7: Street Map of TMA



Source: Physical Planning Department (TMA), 2025

2.5.4.2 Drain construction and Maintenance

On the coverage of drains, a total length of about 605km has been inventoried as of 2024. The includes varying drain sizes such as 0.6 m, 0.9 m, box drains, pipe drains, trapezoidal sections, etc. Much as the is further coverage desired to address the challenge of draining the entire metropolis in preventing flooding around homes and in the urban spaces, it is equally important to consider sections of the existing network which require drainage repairs as the existing network has some failed or failing sections either due to overage, or misuse. It is estimated that some 80-100 km of

the existing network would require some sectional drainage repair work to improve the overall efficiency of the drainage network.

2.5.4.3 Communication and Energy

i. Communication

The communication infrastructure has seen significant improvements over the years reflecting national trends in digital expansion and mobile connectivity. The metropolis is well-served by all major telecommunications providers in Ghana, offering a range of services including voice communication, mobile internet, broadband and fibre-optic connections. These services are crucial for businesses, public institutions and residents' alike enabling access to information, digital platforms and essential services.

Mobile phone penetration in the metropolis is relatively high with many residents owning at least one mobile device. Internet accessibility has also improved, particularly in central urban areas and commercial zones where data services are more stable and faster. There are occasions where residents experience intermittent network coverage and slower data speeds which can hinder participation in the digital economy. Moreover, high data costs and limited public access points such as community ICT centres pose additional challenges, especially for youth, students and small-scale entrepreneurs.

The increasing reliance on digital tools in education, commerce and public service delivery highlights the need for more inclusive and resilient communication infrastructure. Enhancing digital literacy, expanding network coverage and promoting affordable access are key priorities to ensure that all segments of residents can benefit from the ongoing digital transformation.

ii. Energy

Energy infrastructure plays a crucial role in the development of the metropolis, given its status as an industrial and logistics hub. The metropolis is integrated into the national electricity grid and is home to major facilities including substations and transmission lines that meet the energy demands of both residential and industrial users. Electricity coverage in the metropolis is extensive, with most communities enjoying regular supply especially within the urban core and industrial enclaves.

The presence of large-scale manufacturing firms, logistics companies and port operations places considerable demand on the energy supply system. While the infrastructure generally performs well, periodic challenges such as voltage fluctuations, localized outages and aging distribution

systems are reported particularly in high-growth areas where energy infrastructure expansion has lagged behind urban development. These issues can disrupt production cycles, increase operational costs and reduce the reliability of public services.

There is also growing recognition of the need to incorporate renewable energy and energy-efficient solutions into the metropolis's development agenda. There are existing plans to promote solar energy, particularly for public buildings, schools and health facilities as a means of reducing dependency on the national grid and enhancing resilience. Improving street lighting, reducing energy losses and promoting the use of smart energy systems are additional priorities for ensuring long-term energy sustainability in the metropolis.

2.5.4.4 Educational facilities

i. State of Educational Infrastructure

An assessment of the state of educational infrastructure in the Metropolis (See Table 2.24) revealed that, there are 50 public schools with poor state of infrastructure. Out of the 50 schools, 34 have structural defects, 3 have overcrowded classrooms and 3 have no existing structures for KGs and J.H.S. Most of these schools were built in the 1960's and have since not seen any major renovation. To revert this trend, the Assembly has started constructing a number of classroom blocks with ancillary facilities aimed at improving the level of infrastructure in the schools. This situation calls for Government's attention to look at educational infrastructure especially at the public school.

Table 2.27: State Education Infrastructure in TMA

No.	Name of School	Description of Structure
1.	Nii Adjete Ansah JHS	Structural defects in school building, ceilings in the classrooms and veranda removed, washrooms not functioning well, wires stolen by thieves.
2.	Manhean Methodist Basic School	All the 12 Classrooms need re-roofing. Every Classroom has leakages.
3.	Manhean SDA Basic School	Structural defects in the building including poor ventilation, poor lighting and leakage in the roofs
4.	Naval Base JHS	Leaking roof
5.	Naval Base Kg,	Leaking roof
6.	Naval Base Prim.	Leaking roof
7.	St. Peter's R/C Basic School	Structural defects in school building, roof leakages and cracks in certain parts of the building.
8.	Manhean Tma 'B' Primary School	Structural defects in school building including a leaking roof, cracks in building, poorly laid electrical cables, faulty power sockets, structure needs painting, rotten wooden window frames and no structure for the KG

9.	Manhean Tma 'A' Prim.	Structural defects in school, cracks, roof leakages, no ceiling (making the rooms very hot).
10.	Manhean Anglican 'A & B' Primary School	There is crevice development on the floor of Block 'B' classrooms. Roof leakages of Block 'A' from Basic 2 to 6.
11.	Manhean Anglican 'D' Primary School	Rotten wooden beams and roof leakages
12.	Manhean Anglican JHS	Floor tiles broken, removed and ceiling ripped off
13.	Manhean Anglican Prim. 'C'	Crack building, Rotten wood and Roofing leakages.
14.	Manhean Community Prim.	Structural defects in school building, cracks in some parts of the building and roof leakages in the upper primary side
15.	Manhean Presby 'A' Prim.	Structural defects in old school building, cracks all over the building, rotten wooden beam and roof leakages.
16.	Manhean Presby 'B' Prim.	Structural defects in the old school building, cracks all over the building, rotten wooden beam and roof leakages.
17.	Manhean Tma 1 Jhs	Structural defect in school building, cracks in some parts of the building, rotten wooden beam and ceiling coming down
18.	Manhean Tma 2 Jhs	All Classroom doors are out of place exposing the classrooms to other hazards, leakages in roof, dark rooms and no electricity
19.	Archbishop Andoh R/C Basic School	Inadequate classrooms, lack of Science Lab and Library
20.	Community 11 Complex Prim. 'B' and Kg	Structural defect in school building, the roof has multiple leaks and the floor have developed dangerous holes and weak spots
21.	Community 11 Complex JHS	Structural defect in school building, the roof has multiple leaks and the floor have developed dangerous holes and weak spots
22.	Community 11 Complex Prim. 'A' and Kg	Structural defect in school building, the roof has multiple leaks and the floor have developed dangerous holes and weak spots
23.	Rahmaniyya Islamic Basic	Broken fence wall at the back and weak fence wall in front
24.	Redemption Valley Prim. and Kg	Structural defect in school building, cracks all over the building, damaged stair case and roof leakages and no KG block for the school
25.	Community 4/2 Prim.	Structural defect in school building, cracks all over the building, rotten wooden beam and roof leakages
26.	Community 7/1 Basic School	Structural defect in school building, cracks all over the building, rotten wooden beam and roof leakages
27.	Community 7/2 JHS	Structural roofing leakages in one classroom, teachers' cubicles and the Computing lab.
28.	Community 7/2 Prim.	Structural defect in school building, cracks all over the building, rotten wooden beam and roof leakages
29.	Naylor S.D.A JHS	No structural defects
30.	Republic Road JHS	Current toilet facility is in a bad state. There is an abandoned toilet facility and cracks are on the classroom's walls.

31.	Republic Road Prim. Sch.	Structural defects in school building, cracks all over the building, rotten wooden beam and roof leakages
32.	Community 8/1 JHS	Structural defect in school building, cracks all over the building, rotten wooden beam and roof leakages
33.	Community 8/1 Prim.	Structural defect in school building, cracks all over the building, rotten wooden beam and roof leakages
34.	Community 8/2 JHS	Structural defect in school building, cracks all over the building, rotten wooden beam and roof leakages
35.	Community 8/3 JHS	Broken WC and blocked sewage lines
36.	Community 8/3 Prim. Sch.	Toilet facility is choked, sewage problem, new manhole needed
37.	Community 8/4 JHS	Structural defect in building, roof leakages, poor ventilation and poor lighting system.
38.	Community 8/4 Primary School	Structural defect in school building, cracks all over the building, rotten wooden beam and roof leakages.
39.	Community 1 Presby Prim. School	Structural defect in school building, cracks all over the building, rotten wooden beam and roof leakages
40.	Mante-Din Drive Basic School	Drainage problem in the school which can affects the foundation of the block.
41.	Oninku Drive 1 JHS	Structural defect in building roof leakages. Windows have removed, there are cracks, and the building looks very old. No fence
42.	Oninku Drive 2 JHS	Structural defect in the foundation of the school building, rotten wooden beam, roof leakages.
43.	Oninku Drive Prim.	Structural defect in school building
44.	St. Alban Anglican Basic Sch.	Structural defect in school building and cracks in the building.
45.	Akodzo JHS	Structural defect in the school building, roof leakages cracks in the walls of some the classroom, and decay of the wood.
46.	Lorenz Wolf JHS	Unsecure doors and windows, naked electricity wires and malfunctioning lights and electric sockets and roof leakages
47.	Padmore Street Prim. School	Structural defect in school building, cracks all over the walls, blocks breaking off, leaking roof, uneven floors, poor ventilation and poor drainage system.
48.	St. Paul Methodist JHS	Structural defeat in the school. The school has drainage problems; we normally have stagnant water on the compound when it rains.
49.	Twedaase JHS	No Structural defect in the school building
50.	Twedaase Primary School	Structural defect in school building, cracks in school building, rotten wooden beam, leaking roof and flooding of the school compound whenever it rains.

Source: Metro. Education Directorate, 2025

2.5.4.5 Health Facilities

Most of the privately owned health facilities are concentrated at the southern part of the metropolis, and this is largely due to high population and vibrant economic activities of these areas. However,

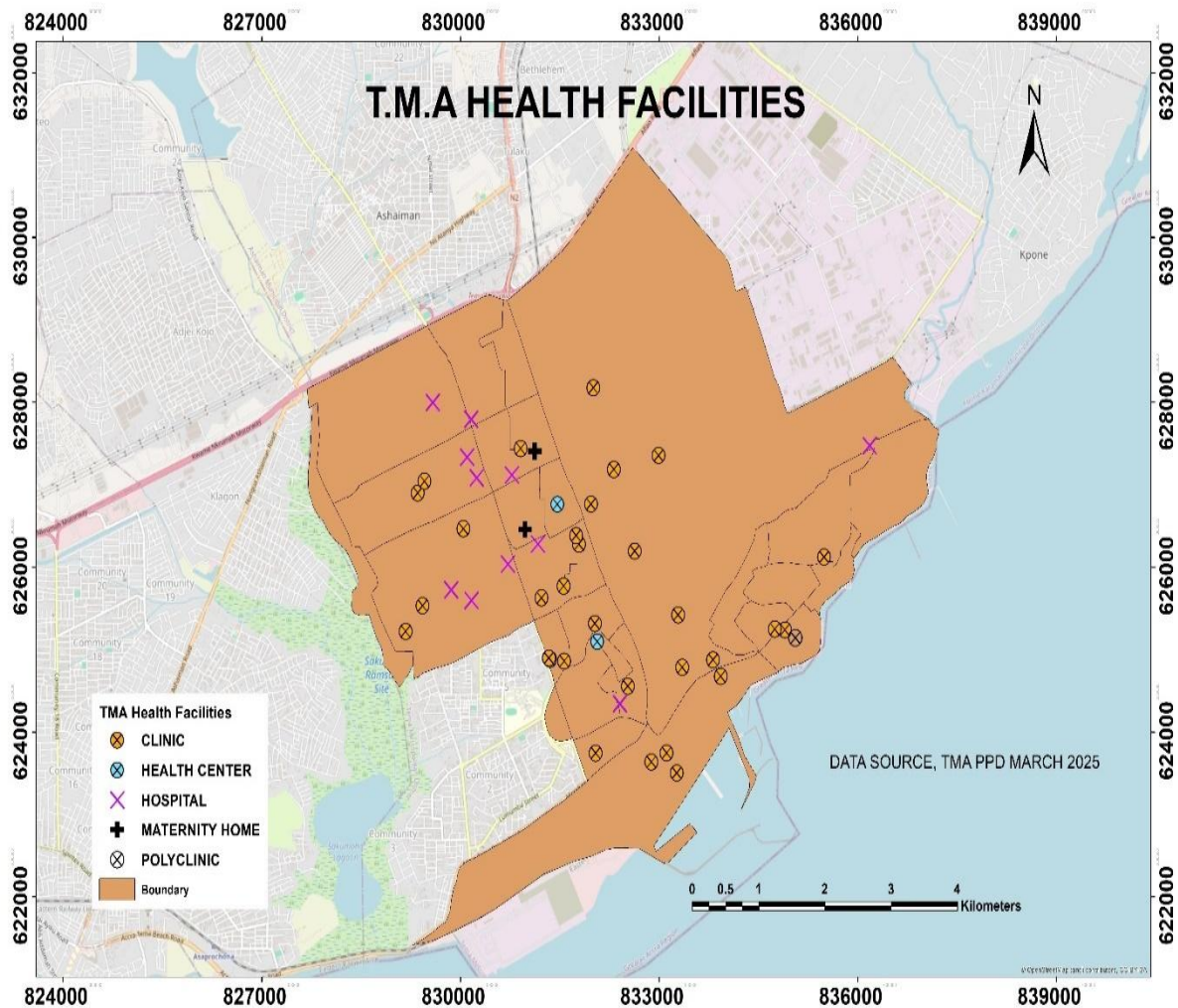
assembly is collaborating with key stakeholders to upgrade the Manhean Health Centre/ Naval Base Clinic to a Hospital status.

Table 2.28: Number of Health Facilities in TMA

Type of Facility	Public	Private	Industrial	Total
Hospital	1	10	-	11
Polyclinic	1	-	-	
Health Centre	1	-	-	
Clinic	1	6	8	15
CHPS	5	-	-	
Maternity	-	1	-	1
Totals	9	17	8	34

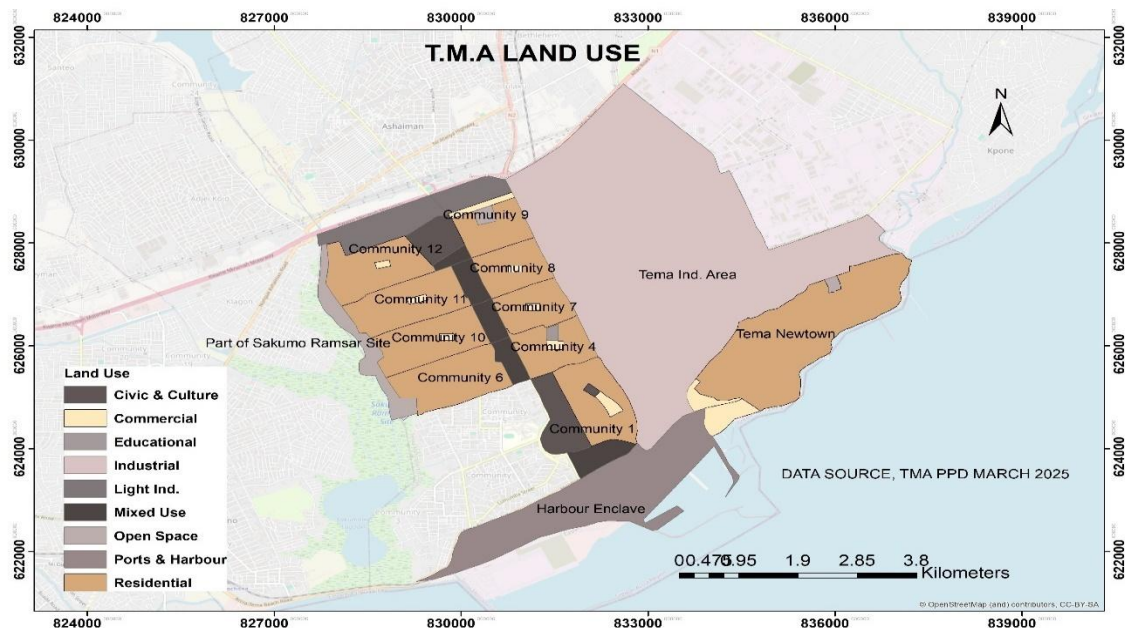
Source: Metro. Health Directorate, 2025

Figure 2.8: Map of Health Facilities in TMA



Source: Physical Planning Department (TMA), 2025

Figure 2.9: Land Use Map of TMA



Source: Physical Planning Department (TMA), 2025

2.5.5 Asset Maintenance

Asset maintenance remains a central concern for the Assembly as it works to preserve the functionality and safety of public infrastructure across the Metropolis. The Assembly’s mandate spans from roads, drainage systems, sanitation facilities, waste management infrastructure, educational and healthcare facilities etc. While notable interventions have been made, the current situation is marked by aged systems, limited financial resources and significant maintenance backlogs.

Road and drainage infrastructure in the metropolis presents a mixed picture. The Assembly has facilitated the implemented several rehabilitation projects including the resurfacing of a 300-meter stretch along the heavily trafficked Tema Harbour Road in 2025. Over 3,000 LED streetlights have been installed throughout the metropolis to improve visibility and reduce night-time accidents. Despite these advancements, many secondary and community roads remain in poor condition. A review of the 2022–2025 Medium-Term Development Plan indicated that over 40% of roads in residential areas are in “fair to poor” condition. Drainage infrastructure suffers from a lack of regular desilting and is frequently blocked due to improper waste disposal. As a result, 70% of

flood-prone areas in Tema experience seasonal flooding, particularly during the May–July rainy period.

The city's sewerage and sanitation infrastructure is outdated and severely overstretched. The main sewer system, originally built in 1963, was last rehabilitated over three decades ago, in 1994. Aged pipes, regular blockages and limited sewer coverage continue to plague neighbourhoods such as Community One, Bankuman, and Newtown. In low-income settlements, over 95% of households lack private toilet facilities, according to a recent sanitation survey. Greywater disposal practices are also problematic, with many households discharging wastewater directly into open drains or onto streets. These conditions elevate the risk of cholera and other waterborne diseases, especially in densely populated areas.

Solid waste management in Tema operates on a public-private franchising model, covering most formal settlements. The metropolis generates an estimated 170 tonnes of solid waste per day, of which approximately 125 tonnes (71%) is collected and disposed of, largely at the Kpone landfill site. While this represents a relatively high collection rate, about 28% of communities—mostly informal and peri-urban areas lack regular waste collection services. In Bankuman alone, over 50.5% of households still practice open dumping or uncontrolled burning of refuse. Recycling remains limited, and the city lacks a formal material recovery facility.

Educational infrastructure in the metropolis is extensive but unevenly maintained. The metropolis hosts 84 public basic schools, along with 5 senior high schools and 1 vocational institution. Many of these schools suffer from infrastructural deterioration, including over 65% of classroom blocks with leaking roofs or damaged floors. Sanitation facilities in schools are also inadequate only 60% of public schools have access to functioning toilet facilities, and less than half have reliable water supply. The Assembly has made efforts to renovate selected schools and distribute classroom furniture, but maintenance is mostly reactive rather than planned, and overcrowding remains a problem in urbanized areas.

Health infrastructure in the metropolis is relatively concentrated but also suffers from asset wear and under-maintenance. Public facilities include the Tema General Hospital, One polyclinic and 5 community health planning and services (CHPS) compounds. Despite recent upgrades to some facilities through national health projects, more than 40% of local health centres report infrastructure challenges such as leaky roofs, outdated plumbing, damaged ceilings and poor sanitation. The lack of routine maintenance and biomedical equipment servicing impacts the

quality of care. A health audit in 2023 found that only 52% of public health facilities in the metropolis had functional power backup systems and more than one-third lacked basic repair tools and materials for facility upkeep.

The Assembly has increased its revenue base modestly, internally Generated Funds (IGF) grew from GH¢19.7 million in 2020 to GH¢24.45 million in 2021, marking a 24% year-on-year increase. Despite this, the overall budget allocation for asset maintenance is still insufficient, given the growing infrastructure stock and urban expansion. Many departments within the Assembly face technical staff shortages, insufficient logistics and weak monitoring and evaluation systems. The adoption of digital tools for asset tracking is limited, with only a few departments piloting GIS or electronic maintenance logs. Interdepartmental coordination on maintenance planning is also weak, leading to duplication and inefficient use of resources.

Environmental sanitation campaigns have made some positive strides with Clean-up exercises, public sensitization and regulatory enforcement becoming more frequent since 2022. However, enforcement remains inconsistent across zones. The Environmental Health Unit has only one environmental officer for every 12,000 residents, which is below the national recommendation of 1:8,000. The informal areas particularly along the urban fringe, exhibit high rates of non-compliance with sanitation by-laws due to low public awareness and limited enforcement presence. Studies have shown that up to 63% of residents in urban Tema are willing to pay higher rates for improved waste services, signaling a missed opportunity for scaling up services and cost recovery.

Asset maintenance in the Metropolis reveals a complex landscape of progress and persistent challenges which urgently requires a multi-sectoral strategy that strengthens institutional capacity, secures consistent funding and leverages data-driven planning. Prioritizing preventive maintenance, expanding service coverage and enhancing community engagement are key to ensuring the long-term functionality and sustainability of Tema's public infrastructure.

2.6 Governance

2.6.1 Peace and Security

The Tema Metropolitan Security Council (METSEC) chaired by the Metropolitan Chief Executive leads the local security architecture and coordinates the efforts of the Ghana Police Service, Ghana

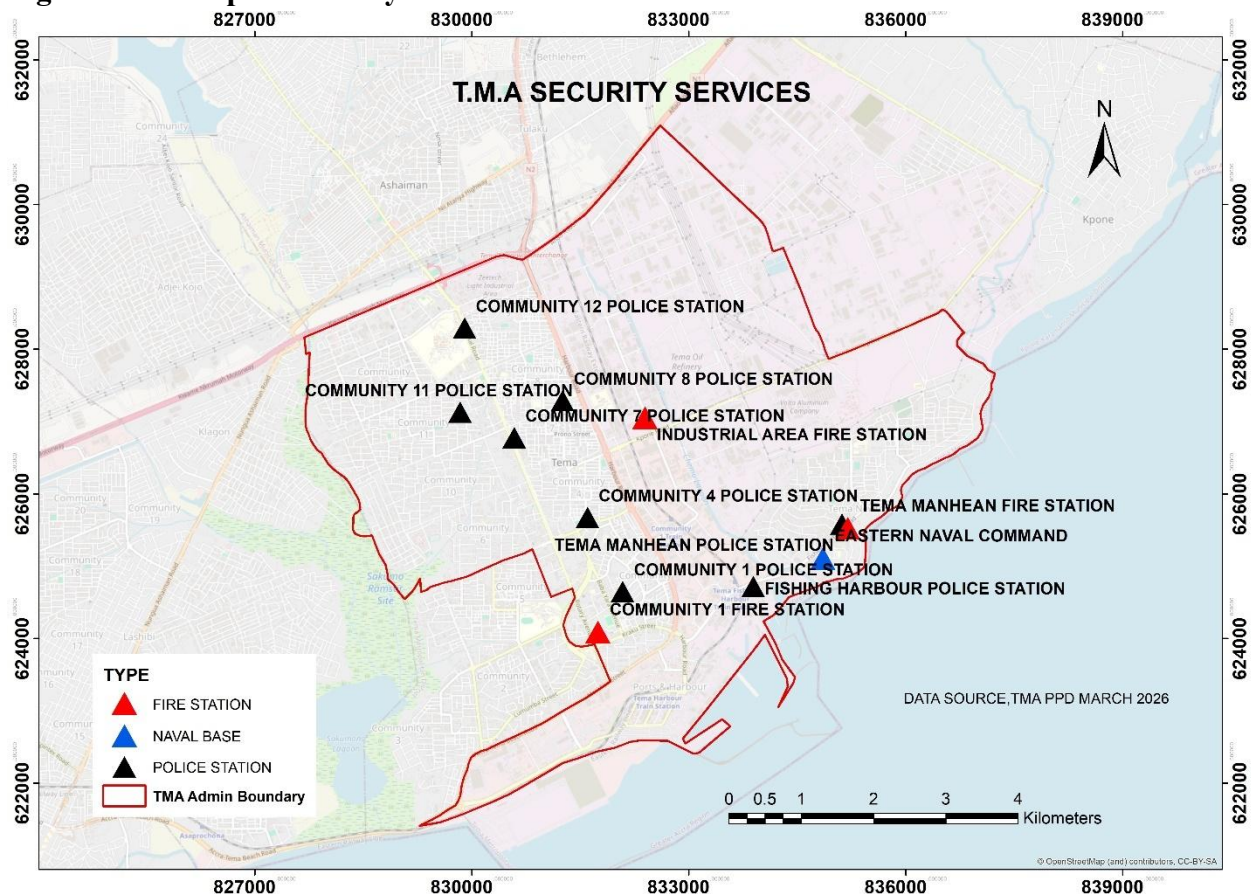
Immigration Service, Ghana National Fire Service, Customs Division of the GRA, the National Intelligence Bureau and other stakeholders. The metropolis has several police stations and posts, strategically located across communities supported by regional police headquarters. While these institutions provide basic law enforcement services, they are often constrained by inadequate logistics, limited personnel and the rising complexity of urban crime.

Key security concerns in the metropolis include theft, burglary, traffic-related offenses, substance abuse and occasional violent crimes, particularly in densely populated or poorly lit areas. The growing commercial and industrial activities also attract incidents of fraud, smuggling and labour disputes. Additionally, the expansion of informal settlements without adequate policing and urban planning has made certain areas more vulnerable to criminal activity and social disorder.

In recent years, the Assembly has worked closely with security agencies and local stakeholders to strengthen community-based policing and improve public safety. Initiatives such as neighbourhood watch committees, public education campaigns and improved street lighting in crime-prone areas have contributed to a more responsive security environment.

Despite these efforts, there is a growing need to invest in modern surveillance systems, increased police presence in rapidly growing communities and enhance inter-agency collaboration. The integration of peace and security considerations into the Assembly's development plans is crucial to addressing the root causes of crime, such as youth unemployment, inadequate housing and social exclusion. Ensuring peace and stability in the metropolis is not only a security concern but also a prerequisite for attracting investment, improving service delivery and achieving long-term development goals.

Figure 2.10: Map of Security Services In TMA



Source: Physical Planning Department (TMA), 2025

2.6.2 Community Action Planning

Community Action Planning (CAP) for the Metropolis has become a critical framework for inclusive local development and resilience-building. The Metropolis faces multiple urban challenges due to rapid industrialization and population growth. The CAP process allows community members, local authorities and development partners to collaborate in identifying problems, setting priorities and designing sustainable solutions. In TMA, this approach was adopted to ensure that development plans are community-led, context-specific and sustainable.

The planning process follows a structured participatory methodology that includes community sensitization, stakeholder mapping, situational analysis, community visioning and the development of action plans. In all a total of 15 communities across the Metropolis were actively involved in this planning cycle. Each community conducted its own situational analysis, where key issues identified were inadequate sanitation facilities, poor drainage systems, youth unemployment and limited access to quality healthcare. Data collection involved online surveys,

focus group discussions and key informant interviews with local leaders, women's groups, fisher folk, PWD's and youth associations.

One of the critical findings from the situational analysis was the high vulnerability of low-lying communities to flooding and sea-level rise which are exacerbated by poor drainage infrastructure and climate change. Some communities reported increased frequency of flash floods, coastal erosion and waste pollution. These climate-related challenges have heightened the urgency for local climate adaptation strategies within the action plans, such as tree planting, dredging of drains, construction of embankments and public education on climate resilience.

Community action planning has not only resulted in clearly defined local development priorities but has also fostered collaboration between residents and the Assembly. Through this process, projects such as the installation of streetlights, construction of sanitation blocks and youth skill development programs have been identified. Additionally, climate action has been mainstreamed into local planning with a suggestion of communities to form a climate task force to monitor and respond to environmental threats.

The community action planning process in the Metropolis has empowered residents across all communities to take charge of their development agenda. It has revealed pressing social, economic and environmental issues that form the basis of the 2026-2029 Medium Term Development Plan (MTDP) for the metropolis, while fostering stronger ties between citizens and the Assembly. Table 2.27 and 2.28 show the issues arising from the communities in the metropolis.

Table 2.29: Prioritized Problems from Tema Central Sub - Metro.

COMMUNITY FOUR (4)		
RANK	ISSUE	LOCATION
1.	Sanitation and sewage issues	Community 4
2.	Inadequate employment for the youth	Community 4
3.	Inadequate J.H.S infrastructure	Community 4
4.	Sales of hard drugs	Community 4
5.	Inconsistent flow of pipe borne water	Community 4
6.	Consistent power outage	Community 4
7.	Noise pollution from the public	Community 4
8.	Choked gutters	Community 4
9.	Low security	Community 4
10.	Stray animals on the street	Community 4

COMMUNITY SIX (6)		
RANK	ISSUE	LOCATION
1.	Over aged ECG cables to the poles.	Community 6
2.	Lack of washrooms at community 5 & 6 traffic Taxi station and at community 10 junction	Community 6
3.	Gravel filling at the location	Community 6
4.	Lack of foot bridge	Community 6
5.	Unemployment among the youth.	Community 6
6.	Delays in refuse collection	Community 6
7.	Over aged sewage pipes in the community	Community 6
8.	Poor condition of drains and gutters	Community 6

COMMUNITY SEVEN (7)		
RANK	ISSUE	LOCATION
1.	Unemployment of the youth	Community 7
2.	Increasing drug abuse and other social vices among School children (around the subin valley and shisha joint in the night, Ashawo joint in a particular house: House#AT56 chip compound)	Community 7
3.	Choked drains	Community 7
4.	Inadequate street light at community 7 mosque, Nii Tackie Tawiah street and all major streets	Community 7
5.	None functioning fire hydrants	Community 7

COMMUNITY EIGHT (8)		
RANK	ISSUE	LOCATION
1.	Poor nature of inner roads linking the communities	Community 8
2.	Sewage blocked around the Methodist (change the sewage pipes)	Community 8
3.	Poor drainage from Vienna city to TOR club	Community 8
4.	Inadequate streetlight poles in the entire community	Community 8
5.	Blocked sewage at community 8/3 basic school.	Community 8
6.	School children find it difficult to cross the high way anytime they are coming to school	Community 8

COMMUNITY NINE (9)		
RANK	ISSUE	LOCATION
1.	PA system at the market should be change/fixed to enhance communication	Community 9
2.	Lack of security at the market	Community 9
3.	Squatters at the Pentecost and the Presby Church.	Community 9
4.	Over speeding on inner roads within the electoral area	Community 9
5.	Poor maintenance of sewer lines	Community 9

COMMUNITY TEN (10)		
RANK	ISSUE	LOCATION
1.	Over aged ECG cables to the poles.	Community 10
2.	Lack of washrooms at community 5 and 6 traffic Taxi station and at community 10 junction	Community 10
3.	Gravel filling at the location	Community 10
4.	Lack of foot bridge	Community 10
5.	Unemployment among the youth.	Community 10
6.	Delays in refuse collection	Community 10
7.	Over aged sewage pipes in the community	Community 10
8.	Poor condition of drains and gutters	Community 10
COMMUNITY ELEVEN (11)		
1.	Inadequate street lights	Community 11
2.	Delay in refuse collection by service providers	Community 11
3.	Overflow of sewer lines	Community 11
4.	Low Police visibility	Community 11
5.	Irregular flow of water by Ghana water company	Community 11

COMMUNITY TWEVLE (12)		
1.	Poor condition of inner roads especially at Valco	Community 12
2.	Poor Water and sanitation problem	Community 12
3.	Delay in waste collection	Community 12
4.	Insecurity due to motorist using their bike to snatch people stuffs during the day and night	Community 12
5.	Over speeding of motorist around Adonai and some of the major roads	Community 12
6.	Poor financial support to the farmers in the community and lack of fertilizers to the farmers	Community 12
7.	Lack of employment	Community 12
8.	Lack of Recreational centres in the community for both the young and aged.	Community 12
9.	Incidence of Flooding between Adonai and Valco junction	Community 12

Table 2.30: Prioritized Problems from Tema East Sub - Metro.

ASHIBOI ELECTORAL AREA		
RANK	ISSUE	LOCATION
1.	Poor design of School building (Twedaase)	Twedaase
2.	Child advocacy and early childhood education between adolescent	Ashiboi
3.	Drug abuse among the youth	Ashiboi
4.	Deplorable state of state of concrete coverts on the main hole	Ashiboi

5.	Deplorable and weak drains	Ashiboi
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PADMORE ELECTORAL AREA		
RANK	ISSUE	LOCATION
1.	Poor state of inner roads at Site 1,12,14,15 and 16, maps school, Pentecost church, full gospel church and water works road	Padmore
2.	Damage bridge at site 16.	Site 16
3.	Weak sewer systems	Padmore
4.	Sewage overflow in communities	Padmore
5.	Theft within the area (Area boys are snatching people's items at these specific locations; padmore school wall, Lawrence wall school, padmore traffic lights, Stadium roads, Urban health roundabout, Immigration office, meridian junction, and post office traffic light)	Padmore
6.	Indiscriminate Dumping of refuse	Padmore
7.	Deplorable state of Padmore school, Old methodist (renovation)	Padmore

KWASI PLANGE ELECTORAL AREA		
RANK	ISSUE	LOCATION
1.	Deplorable state of drains and poor drainage network	Kwasi Plange
2.	Weak sewer pipes	Kwasi Plange
3.	High rate of drug abuse among teens	Kwasi Plange
4.	Poor security (Fixing of street light, CCTV and camera human body alarms)	Kwasi Plange

SEALIGHT ELECTORAL AREA		
RANK	ISSUE	LOCATION
1.	Sea erosion	Sealight
2.	Inadequate health care facilities	Sealight
3.	High rate of drug abuse among teens (Educate the youth on the effects of drug abuse).	Sealight
4.	Drainage work at Apostolic church	Sealight
5.	Lack of foot bridge (Construction of concrete foot bridge)	Sealight

DADE AGBO ELECTORAL AREA		
RANK	ISSUE	LOCATION
1.	Poor Maintenance of sewer line at Manhean school junction	Dade Agbo
2.	Poor drainage system (from the police station to Manhean school junction)	Dade Agbo
3.	We need guardrail at Chris Boliot church	Dade Agbo

4.	Inadequate E.C. G transformer	Dade Agbo
5.	Reopening of CHPS compound at Kpotome	Kpotome
6.	Unemployment among the youth in the community	Dade Agbo
7.	Lack of Good capital for businessmen/ business startup	Dade Agbo

ONINKU ELECTORAL AREA		
RANK	ISSUE	LOCATION
1.	Deplorable state (Roofing) of CHPS compound	Oninku
2.	Poor state of inner roads within Acheampong village, Mac hotel to Papa soldier road	Oninku
3.	Prostitution, teenage pregnancy, constant rise in school dropout, smoking of hard substance and theft	Oninku
4.	High Unemployment	Oninku
5.	Poor Street lighting system	Oninku
6.	Inadequate Water supply	Oninku
7.	Inadequate Toilet facility	Oninku
8.	Indiscriminate dumping of Refuse. (Manhean Valco area to Acheampong village)	Oninku
9.	Poor and lack of Drainage. (Distance between Adjetey Ansah, Apantana and plus 1 to salomey road)	Oninku

BANKUMAN ELECTORAL AREA		
RANK	ISSUE	LOCATION
1.	Poor water supply and waste management	Bankuman
2.	Poor Drainage system (sweet mother, Auntie kate, new Jerusalem and beach road	Bankuman
3.	None functioning of CHPS compound (lacks infrastructure and necessary things such as medicine are not available.)	Bankuman
4.	Lack of Public toilet	Bankuman
5.	Poor state of road and road network.	Bankuman

HOMOWOR ELECTORAL AREA		
RANK	ISSUE	LOCATION
1.	Lack entrepreneurial skill for the youth (Skills training)	Homowor
2.	Erratic Water supply	Homowor
3.	Poor waste collection within the areas	Homowor
4.	Flooding	Homowor
5.	Lack of CHPS compound at Abonkor	Abonkor
6.	Lack of Care for the aged	Homowor

HARBOUR ELECTORAL AREA		
RANK	ISSUE	LOCATION
1.	High rate of social vices (stealing, prostitution, teenage pregnancy)	Harbour

2.	Poor road network	Harbour
3.	High unemployment rate	Harbour
4.	High theft rate because of insecurity	Harbour
5.	Disposal of sewage into the Chemu lagoon	Chemu lagoon

OKLOR KOFI ELECTORAL AREA		
RANK	ISSUE	LOCATION
1.	Erratic water supply	Oklor Kofi
2.	Regular power outages	Oklor Kofi
3.	Frequent blockages in sewer lines	Oklor Kofi
4.	Frequent theft issues at the market	Oklor Kofi
5.	Drug abuse	Oklor Kofi
6.	Potholes on roads which can cause accident	Oklor Kofi
7.	Educate the market women on taxes collected and the usage for better understanding	Oklor Kofi
8.	Inadequate health facilities such as CHPS compound	Oklor Kofi
9.	Lack public dust bins.	Oklor Kofi

Source: TMA – MPCU, 2025

2.6.3 Popular Participation

Popular participation as practiced in the Metropolis is anchored in Ghana's broader decentralization agenda, particularly as outlined in the Local Governance Act, 2016 (Act 936). This legislation mandates Metropolitan, Municipal and District Assemblies (MMDAs) to actively involve citizens in the governance and development of their communities. In line with this, the Tema Metropolitan Assembly (TMA) is structured to include elected and appointed representatives. Specifically, the Assembly consists of 21 elected Assembly Members representing electoral areas, 10 appointed members by the President in consultation with local stakeholders, the Metropolitan Chief Executive (MCE) and two Members of Parliament. This structure is designed to provide a platform for citizens to influence decision-making in planning, budgeting, service delivery and infrastructure development at the local level.

The Assembly is also supported by its sub-structures which are the two Sub-Metros and Unit Committees which serve as grassroots platforms for community input. Public hearings, stakeholder consultations and participatory budgeting sessions are mechanisms through which the Assembly engages with citizens. These mechanisms are not always effectively implemented, most of the participatory exercises tend to be top-down where information is presented to the public with limited opportunity for genuine dialogue or incorporation of public views. This has led to a

situation where community engagement often lacks depth and continuity reducing the effectiveness of the Assembly's efforts at inclusive governance.

Even though there exist a legal mandate and institutional structures for Popular Participation, the implementation of participatory governance in the Metropolis faces several challenges. Among these is the low level of civic awareness among residents, many citizens are unaware of their rights and responsibilities under the Local Governance Act and as a result, only few actively participate in decision-making processes. Another challenge is the weak accountability relationship between the Assembly and the citizens.

Currently, informal and digital platforms have emerged as significant avenues for popular participation especially among youth and middle-income groups. Mobile phone ownership in the metropolis is high where approximately 76.5% of residents aged 12 and above and around 45% use the internet daily. These figures gave rise to the current digital civic engagement through platforms such as Whatsapp, Facebook, X and the Assemblies websites. Many residents now use social media to voice concerns, share development priorities and hold public officials accountable. For example, residents have created neighbourhood groups to discuss sanitation, security and local service delivery issues, sometimes prompting responses from Assembly Members or Assembly officials.

Digital engagement tends to be skewed towards younger, more educated and urbanized residents while older individuals, the less educated and low-income groups often remain excluded due to lack of access, digital skills, or resources. In order to ensure that popular participation is truly inclusive, the Assembly needs to bridge the digital divide by integrating online engagement with traditional outreach programs such as community durbars, door-to-door sensitization and town hall meetings.

2.6.4 Interaction with Traditional Authorities

Traditional authorities continue to play a vital, albeit informal role in governance within the Metropolis. As custodians of customary land and community norms, their involvement is most visible in land related issues, mediation, dispute resolution and community mobilization. The Tema Traditional Council (TTC), which represents the interests of the Ga traditional leadership, holds significant influence over peri-urban and indigenous parts of the metropolis particularly in Tema Newtown and surrounding areas.

While the Constitution of Ghana recognizes chieftaincy and traditional authority, there are no formalized mechanisms for collaboration between TMA and the traditional councils. As such, coordination tends to occur on an adhoc basis such as during community engagement, land discussions and cultural festivals rather than through institutionalized governance frameworks.

Traditional leaders are often perceived by residents as less corrupt and more accessible compared to formal government officials. However, their limited involvement in planning, budgeting and implementation of metropolitan level projects weakens the potential for inclusive development. In many instances, conflicts between TMA and traditional authorities especially regarding land use and urban development have delayed project execution or caused parallel claims to authority. Over the years, the Assembly has recognised the need to integrate traditional institutions systematically into participatory governance processes, such as community action planning, monitoring and evaluation. Currently, the TTC is represented on most of the sub – committees and are included in all major decision-making meetings of the Assembly.

2.6.5 Corruption

According to the Afrobarometer and Ghana Integrity Initiative, over 70% of Ghanaians believe that corruption has worsened over the past years and 84% believe local government officials are corrupt. In Tema, allegations and perceptions of procurement irregularities, contract mismanagement and under-reporting of internally generated funds (IGF) have been raised in community forums and media reports.

Though Ghana's National Anti-Corruption Action Plan (NACAP 2012 – 2021) was extended with updated frameworks, its local implementation is weak. Within the Assembly, internal audits and assembly oversight are often constrained by limited independence, weak sanctions and poor transparency. Audit reports sometimes reveal inconsistencies in revenue reporting, especially relating to property rate collection, building permit fees and sanitation levies.

Furthermore, citizens lack confidence in reporting mechanisms. The Ghana Anti-Corruption Coalition notes that many residents in Tema believe that whistle-blowers face retaliation and that reported cases are not acted upon. This perception discourages public participation in anti-corruption efforts and as a result, corruption continues to affect public confidence in service delivery, project costs and trust in the Assembly's administrative processes.

2.6.6 Social Accountability

Social accountability processes remain weak, though there are emerging efforts to improve citizen engagement. Legally, the Local Governance Act (Act 936) mandates public participation in planning and budgeting but implementation is uneven. The Assembly organises at least four town hall meetings a year and a number of MCE engagements with residents. While some communities benefit from town hall meetings and community hearings, others report minimal engagement beyond election periods or crisis events.

In practice, social accountability mechanisms such as suggestion boxes, public forums and complaints hotlines exist but are poorly maintained and inaccessible. The Assembly's communication with citizens is bottom up but with little feedback incorporated into project design or budget allocations. Moreover, public records such as financial statements, procurement decisions and M&E reports are consistently published on the Assembly's website and other platforms but are not accessible to all citizens due to low level of knowledge on information technology.

Recent studies show that over 63% of residents in the metropolis are willing to engage in feedback platforms if the platforms are made anonymous and linked to actual decision-making. However, civil society organizations that could support this engagement such as neighbourhood watchdog committees or Residents' Associations remain fragmented or under-resourced. Youth, women and persons with disabilities are especially underrepresented in civic participation platforms.

To enhance social accountability, the Assembly has institutionalised citizen scorecards, participatory budgeting and service satisfaction surveys. These are the tools that are used to improve feedback loops, reduce suspicion and build trust between the Assembly and its residents.

2.6.7 Implementation, Coordination, Monitoring and Evaluation (M&E)

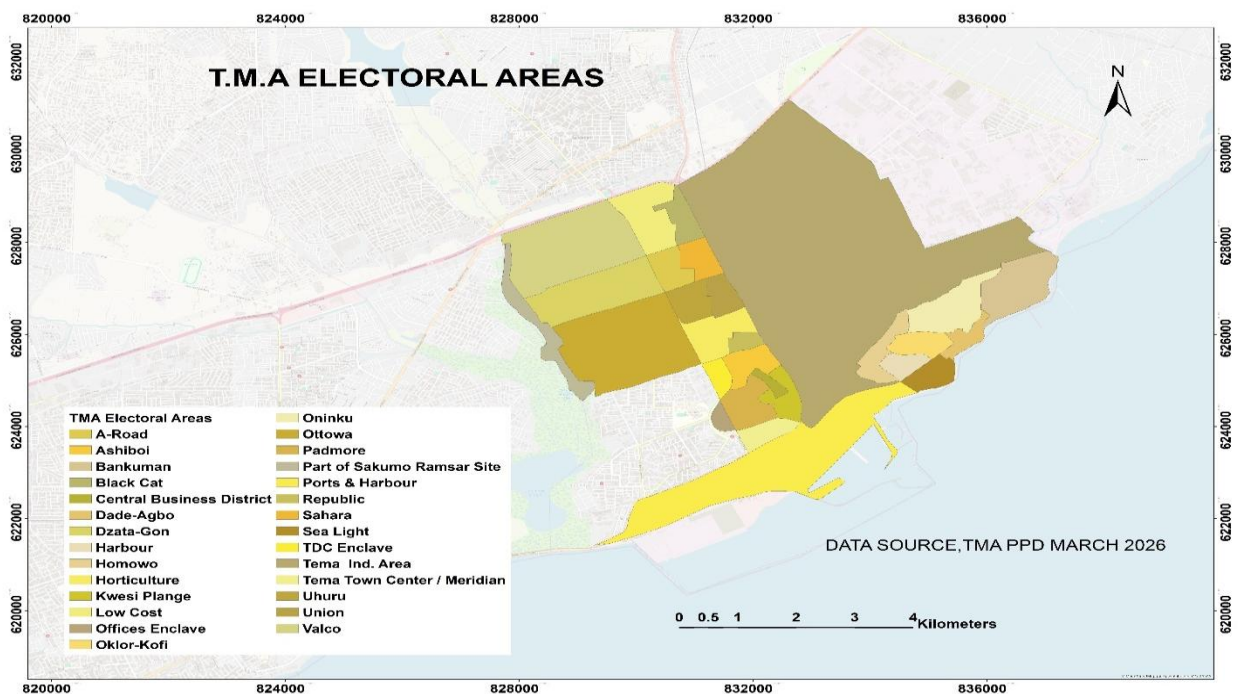
The effectiveness of implementation, coordination and M&E at the Assembly level is of a diverse approach. The Assembly has developed comprehensive plans through the Medium-Term Development Plan which aligns with Ghana's National Development Planning Commission's (NDPC) guidelines but operationalizing these plans faces several constraints. Inter-departmental coordination within the Assembly is often siloed where departments/agencies responsible for works, waste management, health, education and urban roads rarely share data or collaborate on integrated solutions.

Monitoring and evaluation processes often suffer from capacity gaps, even though the Assembly submits Annual Progress Reports (APRs) to the NDPC, these reports are often of good quality are largely descriptive in nature. Some departments face challenges with respect to provision of quality data, baseline indicators and measurable outcomes. Field officers responsible for tracking projects often rely on paper-based records and have limited access to digital tools or GIS systems. Budget constraints further limit their ability to conduct field verification and community feedback assessments. The level of plan implementation is usually above 90% with completed projects within the range of 40% to 50%.

The issue of political interference sometimes comes into play during project selection and evaluation. This sometimes contradicts prioritized projects where those identified through technical assessments or community needs maybe overlooked for electoral appeal. As a result, the link between evidence, planning, implementation and evaluation is often broken.

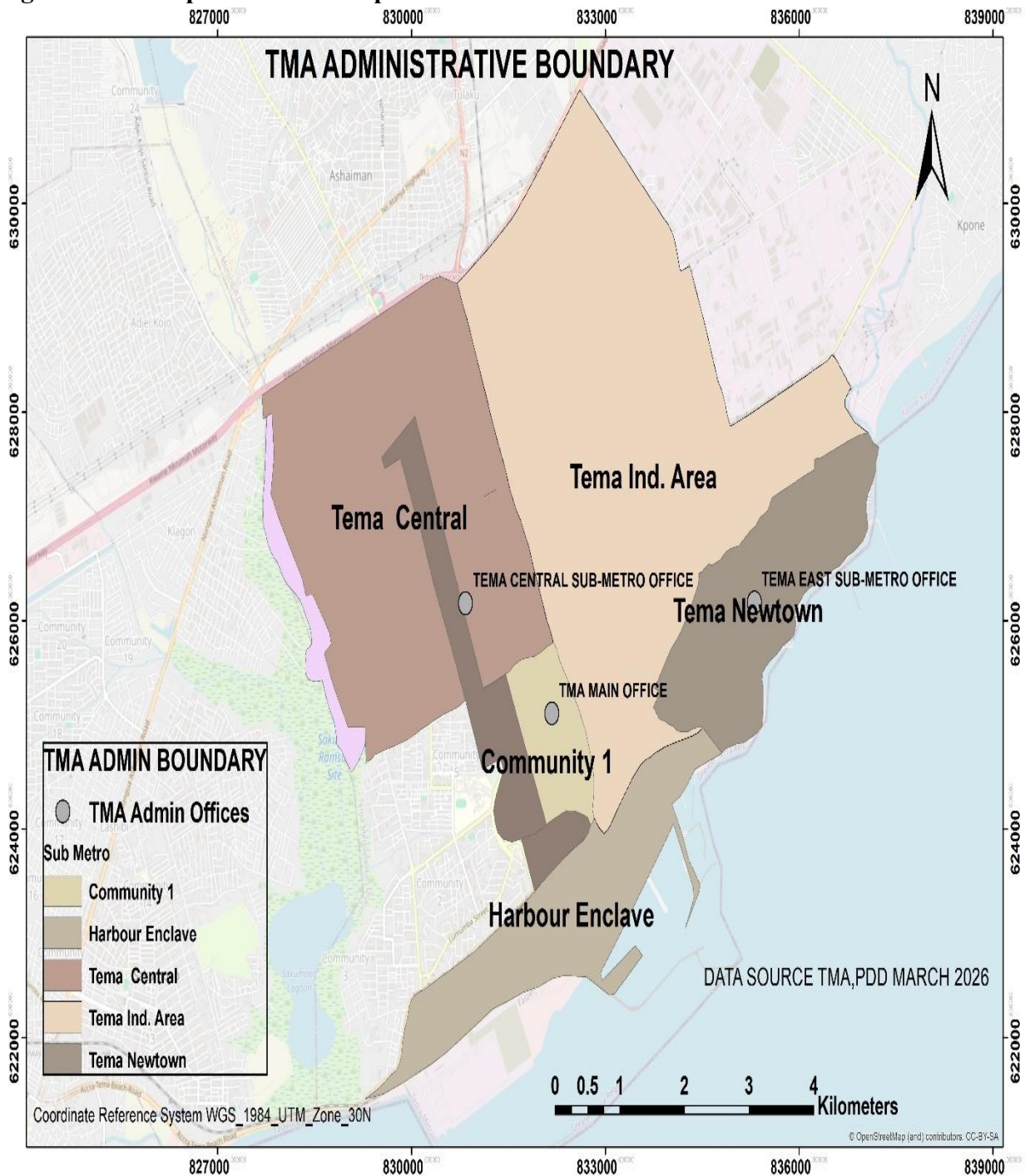
Efforts to improve M&E include plans to digitize the project monitoring database, train departmental M&E focal persons and create a central dashboard for reporting. However, these reforms are currently ongoing and require sustained funding and technical support. Figure 2.13 shows a detailed map of the various electoral areas within the Metropolis.

Figure 2.11: Map of Electoral Areas in TMA



Source: Physical Planning Department (TMA), 2025

Figure 2.12 : Map of Sub - Metropolitan Districts of TMA



Source: Physical Planning Department (TMA), 2025

2.7 Emergency Preparedness and Response

2.7.1 Disaster incidents in Tema Metropolis

1. Industrial Disasters and Fire Outbreaks

The Metropolis is home to a dense concentration of manufacturing plants, petroleum storage facilities, shipping yards and heavy-duty warehouses. This industrial concentration significantly elevates the city's exposure to man-made disasters, particularly fire outbreaks and hazardous material incidents. In the past few years, industrial fires have been recurrent with a notable case occurring in June 2025, where a major blaze gutted over 500 wooden and temporary structures in the Tema Heavy Industrial Area. Although no fatalities were reported, the scale of destruction was immense displacing dozens of informal businesses and exposing critical gaps in urban fire preparedness.

Secondly, the industrial ecosystem includes fuel depots, gas pipelines and chemical storage facilities some of which operate with minimal oversight. This raises the risk of industrial accidents involving toxic spills, gas explosions or hazardous emissions. For example, past incidents have included fuel tanker leaks near the port area and chemical waste discharge into the Chemu Lagoon, posing risks to both public health and the environment. Many of the smaller businesses within the industrial clusters do not meet national fire and safety standards and inspections are irregular due to logistical and regulatory constraints. Thus, industrial disaster preparedness remains one of the most pressing challenges in the Metropolis requiring better zoning enforcement, routine inspections and investment in fire detection and suppression infrastructure.

2. Flooding, Geological Hazards and Climate Vulnerabilities

Although Tema does not lie within an earthquake-prone zone and is geologically stable, it faces chronic hydro-meteorological hazards particularly flooding. Its coastal location and flat topography make it highly susceptible to storm water accumulation, tidal overflow and flash floods, especially during peak rainy seasons from April to July and in October during the minor season. Communities such as community one, community four, community seven and areas near the Chemu lagoon regularly experience inundation during even moderate rains. A major contributing factor is the proliferation of informal settlements and illegal structures built on waterways often with little regard for planning regulations.

Drainage infrastructure across much of Tema is outdated and undersized, and regular desilting efforts are hampered by limited funding and poor waste disposal practices that lead to clogging.

According to a 2022 National Disaster Management Organization (NADMO) report, Tema recorded more than 15 significant flooding events in the last five years, resulting in property losses exceeding GHS 4 million, displacement of residents and health complications from water related diseases. The effects of climate change (rising sea levels, erratic rainfall and heat waves) further compound these issues, making urban resilience a critical priority. While the Assembly has initiated early flood-warning communications and demolitions of structures on flood-prone land, these responses have been largely reactive rather than preventive. A long-term strategy that incorporates green infrastructure, coastal defence systems and climate-sensitive urban planning is urgently needed.

3. Biological, Environmental and Public Health Hazards

Environmental degradation and biological hazards are increasingly visible in Tema due to rapid urbanization, poor sanitation infrastructure and limited environmental regulation. One of the most serious challenges is improper waste management. The city generates about 175 tonnes of solid waste and a high volume of liquid waste daily, much of which is poorly managed leading to blocked drains, stagnant water and unhygienic conditions that facilitate the spread of diseases. The metropolis does not have adequate centralized wastewater treatment facility and some households rely on septic tanks or dispose of wastewater directly into the environment. Currently the only wastewater treatment facility in the metropolis is located at Bankuman, which serves just a fraction of the metropolis. These practices contribute to water pollution, particularly in the Chemu and Sakumo lagoons and create breeding grounds for mosquitoes and rodents.

Biological risks include frequent outbreaks of malaria, cholera and typhoid. The Greater Accra Region within which Tema lies consistently reports some of the highest malaria incidences in the country. In 2023 alone, more than 3.5 million cases were recorded in the region, with over 25% reported from urban areas like Tema. Public health infrastructure struggles to cope during outbreak periods and community health education on proper sanitation and waste disposal is limited. Although Tema has not experienced a nuclear or high-risk biohazard incident, its proximity to petroleum depots, heavy industries and port-based shipping routes that handle international goods exposes it to secondary biological risks such as contamination or cross-border disease transmission.

The city is exploring sustainable waste management options of which one of such initiative is the proposed Armech Africa Waste-to-Energy plant, which aims to convert 2,400 tonnes of daily waste into 60 MW of electricity. However, the project has experienced delays, and in the interim, landfill overuse and open dumping continue. Public education, robust sanitation policy

enforcement and enhanced disease surveillance are urgently needed to reduce the city's vulnerability to environmental and biological disasters.

2.7.2 Disaster Prone Areas within the Metropolis

In 2023, a number of disaster issues occurred in the metropolis, for instance there was an incident of a fire outbreak at Homowo electoral area in Tema East and other incidents in communities 1, 4 and 9. In total, 17 people were affected by the fire outbreaks and some relief items were distributed to them. Table 2.29 and figure 2.13 below show the areas within the metropolis that are susceptible to flood while the table 2.30 shows the safe havens within the metropolis.

Table 2.31: Flood Prone Areas within The Metropolis

Areas within Tema East Sub-Metro District Council	Areas within Tema Central Sub-Metro District Council
Chemu Lagoon, Tema Newtown	SOS Down Community 10 and 6
Valco Down, Tema Newtown	Tema joint church down, Community 7
Zinguishor, Tema Newtown	Rama Church down, Community 11
Waterland, Tema Newtown	Adonai Church down, Community 12
Bankuman, Tema Newtown	Community 7 Post Office Area
Acheampong Village Tema Newtown	Robson Pharmacy Shop Area, Community 6
GTMC Storm Drain, Industrial Area	Community 7 and 8 junctions
Abonkor, Tema Newtown	Community 8 and 9 junctions
Rana Motors roundabout to the Mechanic Area, Industrial area	Imperial Perkins to T-Havana Area, Community 9
Tema Timber Market Area, Community 1	Brobson Pharmacy Shop Area and Ship House Area, Community 6
Community 1 Market	Up Gees Restaurant Area, Community 12
Temasco Road Primary Drain, Community 1	Tema General Hospital Small roundabout, Community 12
	Ship House Area, Community 6

Source: NADMO/TMA, 2025

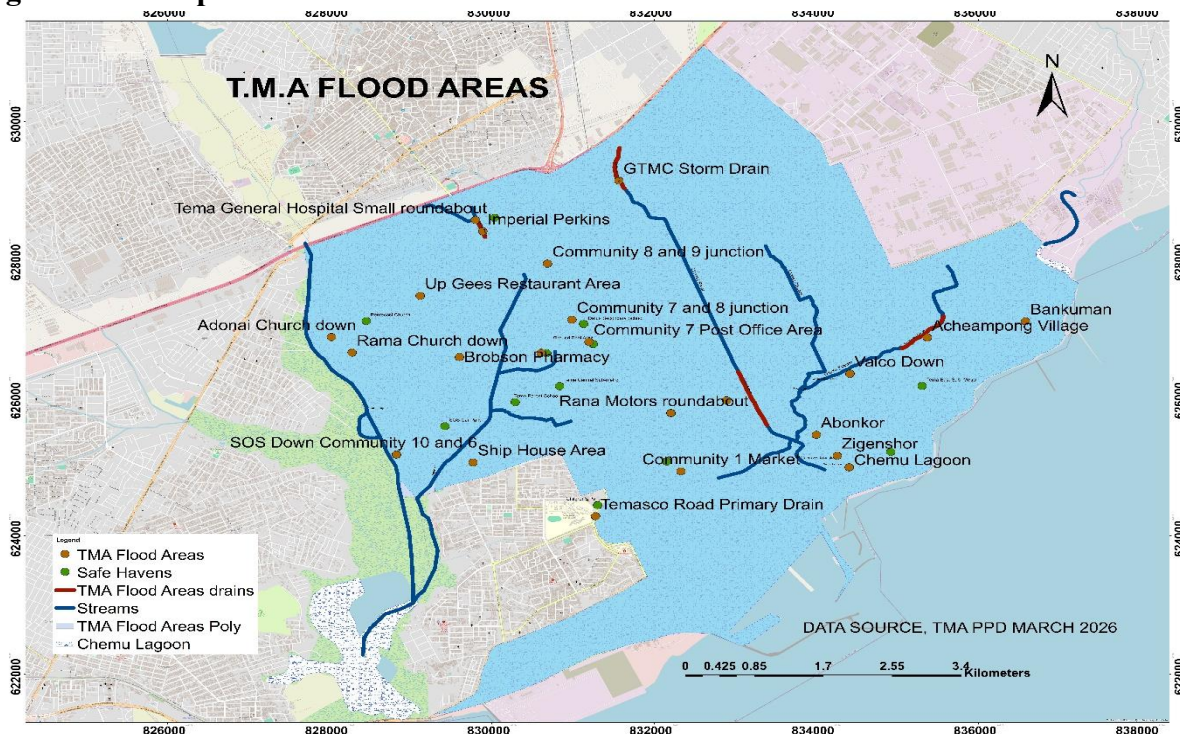
Table 2.32: Safe Havens within the Metropolis

Safe Havens in Tema East	Safe Havens in Tema Central
Naval Base, Tema Newtown	SOS Car Park, Community 6
Light House International Church, Tema Newtown	T – Havanna, Community 9

Grace Outreach Church, Tema Newtown	Tema Parent School Compound, Community 6
All the Public-School Compound within Tema East Sub-Metro	Ground Spot Area, Community 7
	Pentecost Church Compound, Community 12
	Lion Keep Fit Club Compound, Community 12
	All the Public-School Compound within Tema Central Sub Metro

Source: NADMO/TMA, 2025

Figure 2.13: Map of Flood Prone Areas in TMA



Source: Physical Planning Department (TMA), 2025

2.7.3 Disaster Risk Management

The National Disaster Management Organisation (NADMO) at the Assembly level plays a critical role in proactive disaster risk management (DRM) to safeguard its significant industrial and burgeoning residential zones. This comprehensive approach is guided by national policies and aims to mitigate a range of hazards, notably recurrent floods, both bush and structural fires and potential disease outbreaks. Key activities include the continuous review and updating of Metro disaster prevention and management plans, with an emphasis on incorporating lessons learned from past incidents. The Assembly organizes annual disaster management exercises to test response protocols and enhance coordination among various agencies. Frantic efforts are made to enforce building regulations and discourage unauthorized development in identified disaster-prone areas, aiming to reduce the physical vulnerability of structures and communities. The Assembly actively participates in joint post – disaster damage assessments and coordinates

the distribution of relief items, using insights from these events to refine future prevention strategies.

However, the effectiveness of DRM in the metropolis is often hampered by systemic challenges, mirroring those in the broader Greater Accra Metropolitan Area (GAMA). A study on flood disaster preparedness in Accra Metropolis (which shares similar characteristics with Tema) indicated that as much as 60.16% of households were unprepared for flood disasters. This highlights a significant gap in public awareness and individual preparedness behaviours, despite the clear and present danger of flooding. The issue of informal settlements, which constitute over 90% of flood-prone areas in the region, characterized by low socioeconomic conditions and physically deficient structures, further compounds the risk. These areas are particularly vulnerable due to inadequate drainage systems and building on waterways. While there are existing laws and acts governing DRM, their implementation faces institutional challenges, including limited resources, conflicting development agendas and insufficient enforcement of development control measures, ultimately increasing the overall disaster risk profile of the Metropolis.

2.7.4 Disaster Preparedness and Response

Disaster preparedness in the Metropolis is a collaborative endeavour involving the Assembly, the National Disaster Management Organisation (NADMO), the Ghana National Fire Service (GNFS) and other relevant stakeholders. This multi-agency coordination is crucial for establishing robust emergency protocols and ensuring a swift transition from preparedness to response. Key elements of preparedness include the formation of disaster management committees at the assembly level, as mandated by the NADMO Act 2016 (Act 927), which are instrumental in localizing national disaster management policies. Public sensitization campaigns are regularly conducted, particularly in high-risk areas like markets and densely populated residential zones, to educate citizens on fire safety and flood mitigation measures. For instance, following a reduction in fire outbreaks in Tema by 20.48% in the first quarter of 2023 compared to the same period in 2022, the GNFS Tema Command attributed this success to "consistent public sensitization." In the health sector, the Tema Metropolitan Health Directorate has established a Risk Communication Committee to develop Public Health Emergency Preparedness and Response Plans and conducts simulation exercises to prepare for potential outbreaks, such as cholera, especially during the rainy seasons.

Disaster response focuses on immediate coordinated efforts to save lives, provide humanitarian aid and stabilize affected areas. In the event of a significant incident such as a market fire,

agencies like the GNFS respond rapidly. While specific statistics on immediate response outcomes for individual incidents are often dynamic and not always publicly disaggregated for Tema alone, reports indicate that in the 163 fire outbreaks recorded in the first quarter of 2023 in Tema, there were no recorded deaths, though one person sustained an injury. This suggests effective initial response. The broader GAMA Flood Contingency Plan, relevant to Tema, outlines procedures for providing various forms of relief, including food, livelihood support, emergency shelters and hygiene promotion. It anticipates a requirement of approximately GH¢ 244,970,500 (USD16,331,366.70) for pay-out activities in the event of a severe flood emergency affecting 5% of GAMA's population (approximately 249,646 individuals). The effectiveness of response efforts is continuously reviewed with NADMO and other agencies stressing the importance of improving joint rapid assessments within 24 hours of an event to ensure that assistance is delivered efficiently to the most vulnerable, with a focus on collecting sex-disaggregated data and information on age, disability and household structure to tailor aid effectively.

CHAPTER THREE

DEVELOPMENT GOALS, OBJECTIVES, STRATEGIES AND PROGRAMMES

3.1 Introduction

This chapter discusses the Metropolitan Development goals, objectives, strategies and Programmes for the implementation of prioritized activities and their linkage to the national objectives. The Chapter also discusses the compatibility of formulated goals and evaluates their alignment and consistency. The envisioned future conditions have been comprehensively articulated through the Assembly's goals and objectives which were formulated to reflect the needs, priorities and aspirations of the people.

3.2 Metropolitan Goal

The goal of the Tema Metropolitan Assembly's Medium-Term Development Plan (2026-2029) is to achieve sustained and accelerated economic growth, build urban resilience and improve the overall living standards of the people. The Assembly has also formulated fifteen (15) strategic goals which were subjected to a process of compatibility analysis by various stakeholders to ensure consistency. Below is this list of strategic goals:

Goal 1: Promote youth employment and entrepreneurship, with emphasis on inclusive social development and eco-friendly businesses

Goal 2: Promote a clean, safe, healthy environment and strengthen environmental resilience

Goal 3: Promote inclusive social development, protect vulnerable populations and ensure universal access to health and social protection services

Goal 4: Improve the efficiency, safety, and sustainability of the transport system, including road infrastructure and pedestrian access

Goal 5: Enhance community development and build a resilient, modern revenue mobilization system

Goal 6: Enhance administrative efficiency, participatory governance, accountability and ensure a motivated and committed workforce to improve service delivery and customer experience

Goal 7: Promote sustainable and coordinated spatial development, ensure compliance with development control regulations and strengthen enforcement mechanisms

Goal 8: Enhance public image of the Assembly

Goal 9: Ensure equitable access to basic and secondary education

Goal 10: Prevent and manage disasters and build community capacity

Goal 11: Promote active citizenship and enhance citizen awareness across the metropolis

Goal 12: Eliminate open defecation, improve wastewater systems and expand sanitation services

Goal 13: Establish a standard, reliable records management system

Goal 14: Increase agricultural productivity and resilience

Goal 15: Optimize utilization and management of public assets

3.2.1 Assessment of goal compatibility (Goal Compatibility Matrix)

The Goal Compatibility Matrix was developed as an evaluative tool to systematically assess the alignment and consistency of the Assembly's fifteen strategic goals. Using a five-level scale (Very High, High, Medium, Low, Very Low), each goal was compared against the others to determine the degree to which they complement or potentially conflict with one another. This approach ensures that the Assembly's developmental priorities are not pursued in silos but are coordinated to avoid duplication of efforts and waste of resources. It also provides a foundation for prioritizing initiatives, identifying cross-cutting themes and strengthening institutional coherence. (See Table 3.1).

The analysis reveals several clusters of goals that exhibit very high compatibility, indicating strong mutual reinforcement. For example, Goal 6 (*Enhance administrative efficiency, participatory governance, accountability and ensure a motivated and committed workforce*) is highly compatible with almost all governance-related goals, such as Goal 5 (*Enhance community development and build a resilient, modern revenue mobilization system*) and Goal

13 (*Establish a standard, reliable records management system*). This underscores that administrative efficiency and human capacity are foundational enablers for achieving other objectives. Similarly, environmental and sanitation-focused goals, such as Goal 2 (*Promote a clean, safe, healthy environment*) and Goal 12 (*Eliminate open defecation, improve wastewater systems, and expand sanitation services*), also demonstrate very high alignment, reflecting the interdependence of environmental health and sanitation infrastructure.

The matrix also highlights several instances of medium to low compatibility, particularly between goals that compete for the same resources or operate in different domains. A typical example is where infrastructure-heavy goals such as Goal 4 (*Improve the efficiency, safety, and sustainability of the transport system*) and social welfare-oriented goals like Goal 3 (*Promote inclusive social development and protect vulnerable populations*) may require careful sequencing to avoid resource constraints and policy trade-offs. Additionally, goals with an external community focus (e.g., Goal 14: *Increase agricultural productivity*) have weaker direct alignment with internally-focused institutional goals (e.g., Goal 8: *Enhance public image of the Assembly*), and therefore deliberate linkages have to be created through communication and community engagement strategies.

The compatibility assessment serves as an early warning system and a strategic planning guide. It highlights where synergies can be leveraged for greater impact and where potential conflicts should be mitigated through policy coordination, resource planning or stakeholder engagement. Maximizing coherence will require the Assembly to prioritize initiatives with Very High and High compatibility, while developing integration strategies for medium alignment and sequencing plans for goals with Low or Very Low compatibility. This approach enables the Assembly to build a balanced portfolio of interventions that address immediate developmental needs and establish a foundation for sustainable and inclusive growth.

Table 3.1: Goal Compatibility Matrix (5 – Level)

	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6	Goal 7	Goal 8	Goal 9	Goal 10	Goal 11	Goal 12	Goal 13	Goal 14	Goal 15
Goal 1	—	High	Medium	Low	Very Low	Very High	High	Medium	Low	Very Low	Very High	High	Medium	Low	Very Low
Goal 2	High	—	Low	Very Low	Very High	High	Medium	Low	Very Low	Very High	High	Medium	Low	Very Low	Very High
Goal 3	Medium	Low	—	Very High	High	Medium	Low	Very Low	Very High	High	Medium	Low	Very Low	Very High	High
Goal 4	Low	Very Low	Very High	—	Medium	Low	Very Low	Very High	High	Medium	Low	Very Low	Very High	High	Medium
Goal 5	Very Low	Very High	High	Medium	—	Very Low	Very High	High	Medium	Low	Very Low	Very High	High	Medium	Low
Goal 6	Very High	High	Medium	Low	Very Low	—	High	Medium	Low	Very Low	Very High	High	Medium	Low	Very Low
Goal 7	High	Medium	Low	Very Low	Very High	High	—	Low	Very Low	Very High	High	Medium	Low	Very Low	Very High
Goal 8	Medium	Low	Very Low	Very High	High	Medium	Low	—	Very High	High	Medium	Low	Very Low	Very High	High
Goal 9	Low	Very Low	Very High	High	Medium	Low	Very Low	Very High	—	Medium	Low	Very Low	Very High	High	Medium
Goal 10	Very Low	Very High	High	Medium	Low	Very Low	Very High	High	Medium	—	Very Low	Very High	High	Medium	Low
Goal 11	Very High	High	Medium	Low	Very Low	Very High	High	Medium	Low	Very Low	—	High	Medium	Low	Very Low
Goal 12	High	Medium	Low	Very Low	Very High	High	Medium	Low	Very Low	Very High	High	—	Low	Very Low	Very High
Goal 13	Medium	Low	Very Low	Very High	High	Medium	Low	Very Low	Very High	High	Medium	Low	—	Very High	High
Goal 14	Low	Very Low	Very High	High	Medium	Low	Very Low	Very High	High	Medium	Low	Very Low	Very High	—	Medium
Goal 15	Very Low	Very High	High	Medium	Low	Very Low	Very High	High	Medium	Low	Very Low	Very High	High	Medium	—

Source: TMA – MPCU, 2025

3.3 Statement of development goals, objectives, strategies and Programmes linked to national objectives

3.3.1 Formulation of Objectives, Strategies and Programmes.

The formulation of objectives, strategies and programmes for the 2026 – 2029 MTDP, was a collaborative and iterative process aimed at capturing local development aspirations while ensuring alignment with national priorities. The process began with a comprehensive situational analysis using tools such as SWOT (Strengths, Weaknesses, Opportunities and Threats) and PESTLE (Political, Economic, Social, Technological, Legal and Environmental) to identify key challenges and opportunities. Stakeholder engagements were central to the process, involving consultations with community leaders, civil society organizations, local businesses, youth groups and technical experts from the Assembly. These consultations provided a platform for stakeholders to voice their priorities and propose interventions. Broad development goals were then derived and subsequently broken down into specific, measurable, achievable, relevant and time-bound (SMART) objectives that reflected both community needs and institutional capacities. Strategies were then developed as actionable pathways to achieve these objectives, ensuring they were feasible and responsive to the unique context of the Metropolis. These was then followed by formulation of programmes based on the strategies.

3.3.2 Analysis of TMA Policy Objectives

The analysis of objectives employed a cause-and-effect approach to uncover root problems and determine appropriate interventions. Using problem trees and objective trees, the MPCU identified how specific issues related to broader development challenges. A typical example is the issue of frequent flooding in parts of the Metropolis which was traced to poor drainage systems and unregulated development. This analysis led to the formulation of objectives such as “Reduce flooding incidence to 30% by 2029” and strategies such as “dredge and desilt storm drains and demolish structures blocking waterways/floodplains.” Similarly, low tax compliance was identified as a root cause of inadequate revenue mobilization, resulting in the objective “To ensure 80% of taxpayers are educated on tax laws, policies and procedures by 2029.” These relationships provided a logical framework for prioritizing actions and anticipating outcomes.

3.3.3 Basis for Strategy and Programmes Formulation

The development of strategies and programmes was grounded in a careful assessment of several critical factors. Financial considerations were examined to ensure that proposed interventions were within the Assembly’s budgetary capabilities and potential funding streams, including internally generated funds and external grants. Resource availability, such as the technical expertise of staff and availability of materials, was assessed to determine implementation feasibility. The needs of target populations, especially vulnerable groups like persons with disabilities (PWDs), were prioritized, exemplified by the objective “To ensure that 80% of public buildings are disability friendly by 2029.” Social and environmental costs were considered to avoid adverse impacts, ensuring sustainability and community acceptance. For example, strategies promoting waste management included environmental impact assessments to safeguard public health. Technological considerations were also integrated, such as the objective “Digitize 100% of legacy records by 2029” to enhance administrative efficiency and service delivery.

3.3.4 Linking TMA Objectives to National Policy Objectives

A critical step in the planning process was ensuring that the local objectives and strategies aligned with national development frameworks, particularly the Medium-Term Development Policy Framework (MTDPF) 2026 – 2029. This linkage was achieved by mapping each TMA objective against relevant MTDPF policy objectives to ensure consistency and complementarity. For example, the TMA objective “Reduce open defecation by 50% by 2028” was linked to MTDPF Objective “2.5.2 Enhance access to improved and sustainable environmental sanitation services.” Similarly, the TMA objective “To reduce youth unemployment within the metro by 15% by 2029” aligned with MTDPF Objective “2.8.2 Promote job creation and decent work.” This mapping process ensured that local development efforts contributed directly to national goals, such as poverty alleviation, environmental sustainability and inclusive economic growth. Validation workshops were organized with community members, heads of departments, unit heads, agencies and other relevant stakeholders to refine and confirm the linkages.

This detailed and inclusive approach to planning ensured that the objectives and strategies not only addressed local needs but also support the realization of national and global development goals. Table 4.4 below shows a detailed matrix of development goals, objectives and strategies, linked with national policy objectives.

Table 3.2: Matrix on Development Goals, Objectives and Strategies Linked to National Policy Objectives

No	Prioritized Issue	Goal	Objective	National Policy Objective	Strategy	Programme
	Development Dimension: Economic Development					
	High unemployment, especially among youth	Promote youth employment and entrepreneurship, with emphasis on inclusive social development and eco-friendly businesses	To reduce youth unemployment within the metro by 15% by 2029.	1.3.3 Improve support for entrepreneurship and MSME development	1. Provide Business formalization and development services.	Youth Enterprise and Employment Programme
	Lack of Green Business. Limited access to affordable capital for small businesses, youth, fisher folk and farmers		To promote the development and growth of local industries within the Metro by 30% by 2029.	1.3.1 Enhance business enabling environment 1.3.2 Improve business financing 3.5.1 Reduce Environmental Pollution	1. Train and promote eco-friendly manufacturing and products.	
	Weak private sector investment			1.3.1 Enhance business enabling environment		
	Inadequate entrepreneurship grants and employment quotas for PWDs		To improve the income levels of PWDs by 50% by 2029	2.11.1 Promote the active participation and equal inclusion of PWDs in all dimensions of social and economic development	1. Liaise with AGI to facilitate quotas for PWDs 2. Liaise with the banks to provide soft loans for the association 3. Provide training to build the capacity of PWD's	Social Inclusion and community welfare programme

		<i>Enhance community development and build a resilient, modern revenue mobilization system</i>	To improve access to public facilities by 50% by 2029	2.5.2 Enhance access to improved and sustainable environmental sanitation services	1. Construct gender-segregated public toilets 2. Establish sanitation committees	Social Inclusion and community welfare programme
	<i>Poor payment of local taxes</i>		Increase revenue mobilization by 80% by 2028 at sub-metro and the overall, internally-generated funds (IGF) by 30% by 2029	1.1.4 Ensure improved fiscal performance and sustainability	3. Community outreach on revenue mobilization 4. Improve market/station infrastructure	Fiscal Planning and Revenue Enhancement Programme
	<i>Inadequate data systems, digital tools and weak information management</i>				1. Broaden citizen participation in budgeting 2. Disseminate budget reports to stakeholders 3. Digitize property-rate and business-license collection (QR/e-payments). 4. Ensure tax compliance, robust data systems and effective information management	
	Reduction in crop yields due to rapid urbanization,	<i>Increase Agricultural Productivity and resilience.</i>	To provide 80% of farmers with knowledge on modern	1.6.2 Enhance agricultural production and agri-business for	1. Train farmers on backyard, container gardening and climate	

	soil degradation and climate change		techniques to boost crop yield/livestock production by 40% by 2029.	economic transformation	smart agricultural practices 2. Effective monitoring and supervisory visits to disseminate improve technologies 3. Train farmers on the use of improved seed varieties and Integrated Pest Management Strategies 4. Train farmers on the incorporation of organic manure to improve soil fertility.	Agricultural Development Programme
	<i>Lack of youth support in farming</i>		To create an enabling environment that will attract 20% of youth in agriculture by 2028	1.6.7 Promote agriculture as a viable business among the youth	1. Train youth in micro ruminant production (Rabbit, grasscutter, etc.)	
	Limited access to modern farm tools				2. Facilitate the collaboration between farmers and (Agricultural Mechanization Services Enterprise Centres) AMSEC to provide mechanization services to farmers.	

	Development Dimension: Social Development					
	<i>Drug abuse and social vices</i>	<i>Promote inclusive social development, protect vulnerable populations and ensure universal access to health and social protection services</i> <i>Promote inclusive social development, protect vulnerable populations and ensure universal access to health and social protection services.</i>	To reduce the incidence of drug abuse and social vices by 40% by 2029	4.8.1 Enhance public safety and security	1. Intensify community sensitization and awareness campaign on drug abuse and its effects 2. Promotion of programs for rehabilitation and the prevention of social vices 3. Partner with CBO/NGOs to provide psychosocial support vocational Skills and livelihood empowerment for sex workers	Social Inclusion and community welfare programme
	<i>Inadequate adolescent and elderly care</i>		Improve support services and advocacy for adolescent and the elderly in 70% of the communities by 2029	2.9.3 Strengthen social protection for the vulnerable 2.14.1 the wellbeing and inclusion of the aged in national development	1. Enhance case management, counselling and referral systems. 2. Media talk shows, community sensitization, School outreach programs and case conferencing	Social Inclusion and community welfare programme

					3. Increase awareness of available social intervention programs	
	<i>Inadequate disability friendly infrastructure and facilities</i>		To ensure that 80% of public buildings are disability friendly by 2029	2.11.2 Eliminate discrimination in all forms and protect the rights and entitlements of PWDs	1. Strengthen institutional capacity 2. Enforcement of bye-laws	Social Inclusion and community welfare programme
	<i>Low involvement of PWDs and other vulnerable groups in policy formulation</i>		To ensure that PWD's and other vulnerable groups are represented in 100% of all stakeholder engagements	4.2.1 Deepen Political and administration decentralisation	1. Create an enabling environment for their inclusion 2. Mainstream vulnerability issues at engagements	
	<i>Inadequate health personnel</i>		To ensure that doctor to patient ratio and nurse to patient ratio meets the required standard by 2029	2.3.8 Strengthen healthcare and health service delivery management system	1. Collaborate with the MOH for the transfer of personnel	Health Improvement Programme
	<i>Inadequate and poor state of health facilities (CHPS compounds, hospitals)</i>		To provide 6 CHPS compounds and upgrade 2 health facilities in selected	2.3.7 Provide adequate health infrastructure and institute functional health logistics	1. Lease prefab clinics with solar-power 2. Ring – fence 5% IGF for provision logistics	

			communities by 2029			Health Improvement Programme
			To ensure that Out-Patient Department waiting time reduces by 20% by 2029	2.3.7 Provide adequate health infrastructure and institute functional health logistics	1. Deploy e-queue and triage kiosks 2. Introduce two-shift doctor schedule and task-shift 30 % of routine services to physician assistants.	
			To achieve a 50% increase in preventive health programs across all communities by 2029	2.3.3 Reduce preventable disability, morbidity, and mortality	1. Sensitization programmes 2. Engage stakeholders in public forums 3. Weekly Radio Health programmes 4. Health screening 5. Capacity building programmes	
	<i>Inadequate school infrastructure</i>	<i>Ensure equitable access to safe, well-resourced basic and secondary education</i>	Provide new 6-unit classroom blocks in 20% of schools by 2029	2.6.1 Enhance equitable access to, and participation in quality education at all levels	1. Ring-fence 20% of IGF for school infrastructure. 2. Leverage on Cooperate Social Responsibility of companies for infrastructure development	Education Quality Improvement Programme

			Support 100% of public JHS with science kits and internet-enabled ICT labs by 2029	2.6.2 Strengthen competency-based skill development in technical and vocational education	Partner Telco to extend fibre to schools; provide 3-year zero-rated bandwidth	Education Quality Improvement Programme
			Rehabilitate 60% of structurally deficient public-school blocks by 2028	2.6.1 Enhance equitable access to, and participation in quality education at all levels	1. Ring-fence 20% of IGF for school infrastructure. 2. Leverage on Cooperate Social Responsibility of companies for infrastructure development	
	<i>Untrained private school teachers and understaffing in public schools</i>		Ensure that 90% of schools (public and private) achieve the standard pupil – teacher ratio by 2029	2.6.1 Enhance equitable access to, and participation in quality education at all levels	1. Train 300 teachers in STEM/ICT pedagogy; 2. Certify private-school teachers in CPD.	
			Increase the Basic Education Certificate Examination (BECE) pass rate from 68% to 80% by 2029	2.6.1 Enhance equitable access to, and participation in quality education at all levels	1. Implement Saturday remedial classes using teacher incentive grants. 2. Adopt learning-analytics software to	

					track at-risk pupils termly.	Education Quality Improvement Programme
	<i>Inadequate teaching/learning materials in public schools</i>		To support 100% of schools to have adequate teaching and learning materials by 2029	2.6.1 Enhance equitable access to, and participation in quality education at all levels	1. Ring-fence 20% of IGF for school infrastructure. 2. Leverage on Cooperate Social Responsibility of companies for infrastructure development	
	<i>Poor management of the environment (Sanitation)</i>	<i>Promote active citizenship and enhance citizen awareness across the metropolis</i>	Educate 50% of communities on proper sanitation and waste management by 2029	2.5.2 Enhance access to improved and sustainable environmental sanitation services	1. Develop and implement, community-based environmental education programs 2. Collaborate with local authorities to improve waste management	Public Health Information Programme
13.	<i>Low public awareness of civic rights and duties</i>		1. Improve civic awareness coverage to 70% of the communities by 2029 2. Establish and support civic	4.6.1 Promote civic and civil society engagement in development	1. Develop civic education programmes on democratic principles, human rights and civic responsibilities and promotes transparency, accountability and good	

			education clubs in 50% of schools and communities by 2029.		governance practices in schools and communities 2. Collaborate with civil society organization 3. Establish civic clubs in schools and communities	Good Governance and Accountability Programme
	<i>Low level of youth engagement on Child Protection issues</i>		Engage 30% of the youth in the metropolis on child protection issues by 2028		1. Develop age specific programs on child protection issues 2. Collaborate with schools, parents and communities to promote child safety and engage with identifiable groups' churches, mosques radio/TV, etc. 3. Educate children, parent and community about the dangers of bullying and its prevention and raise awareness about the worst form of child	Good Governance and Accountability Programme

					labour and promote prevention strategies.	
	Development Dimension: Environment and Human Settlement Development					
	<i>Encroachment on public lands, roads and reservations</i>	<i>Promote a clean, safe, healthy environment and strengthen environmental resilience.</i>	To restore 50% of the degraded urban spaces, increase green cover and functional outdoor environments within the metropolis by 2029.	3.7.2 Enhance climate change resilience	1. Develop and implement a Green Infrastructure Plan which includes tree planting and open space rehabilitation. 2. Design and develop parks, gardens, and recreational spaces that encourage physical activity and community interaction.	Environmental Protection and Climate Resilience Programme
	Climate change effects		To reduce climate-induced risk in communities by 40% by 2029	3.7.2 Enhance climate change resilience	1. Promote climate-smart landscaping, tree planting and awareness campaigns. 2. Engage communities in heritage conservation and adaptive reuse projects.	Environmental Protection and Climate Resilience Programme
	<i>Land degradation, biodiversity loss and urban heat island effects</i>		Increase the number of public green spaces by 20% by 2027	3.7.2 Enhance climate change resilience	1. Launch landscape literacy campaigns and school programs focused on urban ecology.	Environmental Protection and Climate Resilience Programme

					2. Promote tree planting activities	
	<i>Indiscriminate dumping of refuse, poor household and industrial waste management</i>		To ensure that 90% of communities in the metropolis attain clean, safe and healthy environments by 2029	3.7.2 Enhance climate change resilience	1. Regular inspection of premises 2. Control of stray animals 3. Pest and vector control 4. Community sensitization on important rudiments of hygiene and sanitation	Solid and Liquid Waste Management Programme
			To ensure 100% of food for public consumption is safe and wholesome by 2029.	2.4.1 Ensure access to safe and nutritious foods	1. regular screening of food vendors in the metropolis 2. Hygiene education in the metropolis	
	<i>Poor condition of roads in the metropolis (inner and major roads)</i>	<i>Improve the efficiency, safety, and sustainability of the transport system, including road infrastructure and pedestrian access</i>	Improve the road condition mix of Tema to 80:10:10 by 2029 .	3.8.1 Improve efficiency and effectiveness of road transport infrastructure and services	1. Rehabilitate at least 40km of priority arterial roads. 2. Rehabilitate at least 50km of priority local/access roads. 3. Patch at least 80% of potholes metro-wide. 4. Use DRIP machines to routinely	Urban Mobility and Transport Program

					grade/reshape unpaved roads in the metropolis 5. Protect and extend the life of existing pavements in good/fair condition through timely routine maintenance. 6. Procure contractors using performance-based maintenance contracts. 7. Prioritize roads serving schools, hospitals and markets.	
	<i>Outdated data on roads and drainage assets in the metropolis</i>		To digitize 100% of the road/ drainage asset by end of 2029.	3.8.1 Improve efficiency and effectiveness of road transport infrastructure and services	1. Collect and update data on roads and drains in the metropolis. 2. Periodically update digitized database with new developments 3. Ensure that all road maintenance activities are linked to the GIS monitoring platform	Urban Mobility and Transport Programme

	<i>Declining state of walkway infrastructure.</i>		Improve and construct 90% of walkway infrastructure by 2029 within the metropolis.	3.8.2 Enhance safety and security for all categories of road users	1. Collect and collate data on pavements with broken slabs (metro-wide) as well as areas with high pedestrian volumes/ activities 2. Provide at least 30 km of walkways and pre-cast slab covers 3. Reinstate broken slabs over existing drains	Urban Mobility and Transport Programme
	<i>High congestion within the CBD.</i>		Reduce Traffic congestion by 60% by 2029	3.8.2 Enhance safety and security for all categories of road users	1. Undertake traffic management measures to	Urban Infrastructure Development Programme
	<i>Lack of parking for haulage trucks.</i>				2. Improve mobility around the CBD and traffic prone areas 3. Identify and designate areas for truck parking	Urban Mobility and Transport Programme
	<i>Poor state of transport terminals.</i>		Upgrade 50% of transport terminal in the metropolis by 2029	3.8.1 Improve efficiency and effectiveness of road transport infrastructure and services	1. Ring-fence 50% of IGF from the transport sector for maintenance transport infrastructure	Urban Mobility and Transport Programme

	<i>Emergence of informal settlements/squatting</i>	<i>Promote sustainable and coordinated spatial development, ensure compliance with development control regulations and strengthen enforcement mechanisms</i>	Reduce infrastructure complaints by 40% by 2027	3.16.1 Promote effective maintenance culture	1. Improve construction oversight. 2. Schedule preventive maintenance	Urban Infrastructure Development Programme
			Conduct annual infrastructure Audits on 25% of public buildings	3.16.1 Promote effective maintenance culture	1. Schedule preventive maintenance	
			Improve development control to cover 100% of development by 2029	3.12.1 Promote sustainable spatially integrated development of human settlement	1. Provide refresher training and logistics 2. Demolition activities (Encroachment on public right of space).	
	<i>Poor enforcement and compliance gaps</i>		Establish a robust compliance framework by 2026	4.4.1 Strengthen the effectiveness, accountability, and efficiency of public institutions	1. Develop and regularly update legal and compliance policies 2. Ensure all department apply rules consistently, with defined consequences for non-compliance 3. Deliver onboarding and periodic refresher training	
	<i>Encroachment on public lands,</i>		Enforce 100% zoning	3.12.1 Promote sustainable spatially	1. Engage stakeholders in public forums	Urban Infrastructure Development Programme

	<i>roads, safe havens, wetlands, farmlands and protected areas</i>		regulations and bye-laws by 2028	integrated development of human settlements	2. Streamline development permit approvals 3. Adopt GIS techniques in planning processes	
	<i>Lack of urban master plan and poor enforcement of environmental and planning regulations</i>		Ensure the preparation and update master plans by 2026	3.14.1 Promote sustainable urban development	1. Adopt GIS techniques in planning processes 2. Engage stakeholders through public forums 3. Build capacity of staff and provide logistics	
	<i>Poor disaster prevention/preparedness.</i>	<i>Prevent and manage disasters and build the capacity of communities to respond effectively to disasters/emergencies</i>	To reduce disasters incidence by 60% by 2029	3.18.1 Improve national resilience to hydrological threats	1. Install digital early warning systems to forewarn in 48hrs. 2. Educate coastal residents on climate change impacts and adaptation 3. Train DVGs to monitor hazards and serve as first line responders	Environmental Protection and Climate Resilience Programme
			Increase public awareness coverage on risk	3.18.1 Improve national resilience to hydrological threats	1. Engage community through sensitization programmes	

			reduction for 70% of communities by 2029		2. Develop mobile apps and adopt digital technology for sensitization 3. Acquire public address system for sensitization.	
	<i>Coastal erosion, sea level rise flooding; Perennial flooding</i>		Reduce flooding incidence to 30% by 2029	3.18.1 Improve national resilience to hydrological threats	1. Dredge storm drains and desilt drains 2. Demolish structures blocking waterways/ floodplains	
	<i>Inadequate relief stockpile for emergency interventions</i>		Increase relief stockpile by 50% by 2029	3.7.2 Enhance climate change resilience	1. Procure and stockpile relief items 2. Leverage on CSR for relief items	Environmental Protection and Climate Resilience Programme
	<i>Encroachment on safe havens, wetlands, farmlands and protected areas</i>		To reclaim 70% of the encroached safe havens within the metropolis by 2029.	3.1.1 Safeguard Forest and protected areas	1. Demolish structures blocking safe havens.	
	Poor sewer infrastructure (damaged, blocked or overflowing systems)	<i>Eliminate open defecation and dumping, improve wastewater</i>	Reduce uncollected solid waste to 10% by 2028	2.5.3 Promote efficient and sustainable waste management	1. Lease additional waste-compactor trucks via Build-Operate-Lease scheme	Solid and Liquid Waste Management Programme

		<i>and sanitation systems, and promote a circular waste economy to reduce health risks and flooding.</i>			2. Place additional skip containers and smart bins in hotspots 3. Enforce “pay-as-you-dump” policy in selected communities 4. Establish a sanitation taskforce to prevent indiscriminate dumping 5. Provide weekly solid waste collection services for all households	
			Ensure 100% safe disposal of collected waste in line with national environmental standards by 2029	2.5.3 Promote efficient and sustainable waste management	1. Expand recycling initiatives to achieve 10% recycling of total waste generated. 2. Construct waste transfer stations 3. Modernize landfill management to accommodate increasing volumes	Solid and Liquid Waste Management Programme
	Poor sewer infrastructure (damaged, blocked or overflowing systems)		To connect 80% of households to the central sewer system by 2029	2.5.3 Promote efficient and sustainable waste management	1. Ensure 100% of liquid waste treated meets national environmental standards before disposal or reuse 2. Provide additional vacuum trucks improve service frequency of Septic tanks in unsewered areas 3. Reconstruct damaged sewer lines in CBD and	Solid and Liquid Waste Management Programme

					high-density neighbourhoods 4. Wastewater treatment capacity expanded to manage increasing daily flows 5. Rehabilitate aged sewer to prevent disease outbreaks and environmental pollution	
	Development Dimension: Government and Institutional Development					
	Bureaucracy and administrative bottlenecks	<i>Enhance administrative efficiency, participatory governance, accountability and ensure a motivated and committed workforce to improve service delivery and customer experience</i>	Improve participation in local governance 30% by 2029	4.2.1 Deepen political and administrative decentralization	1. Improve transparency and efficiency in local governance (Hold 4 Quarterly Sub-Metro Councillors Meeting annually to improve participatory governance, organize 4 Quarterly Sub-Committee Meetings per year to ensure effective decision making, Organise Implement 2 community clean-up exercises per year to enhance sanitation and civic involvement)	Good Governance and Accountability Programme

					2. Promote Citizen involvement through public education	
	Poor coordination between city authorities, environmental and community actors		Increase revenue mobilization by 80% by 2028 at sub-metro	4.2.3 Strengthen fiscal decentralization	1. Build the capacity of staff and revenue collectors through targeted trainings. (Conduct 2 Training workshops annually for staff and revenue collectors to improve service delivery capacity) 2. Establish and support Revenue Mobilization Taskforce to operate year-round 3. Develop new market shed facilities to support local economic development	Institutional Capacity and Workforce Development Programme
			Ensure that 30% of public infrastructure in the Metropolis is maintained and functional by 2029	3.16.1 Promote effective maintenance culture	1. Ensure consistent maintenance of essential infrastructure such as streetlights, footbridges, sewer systems and drainage systems	Urban Infrastructure Development Programme

	<i>High turnover of drivers, labourers and security</i>		Reduce employee turnover by 30% by 2029	4.4.1 Strengthen the effectiveness, accountability, and efficiency of public institutions	1. Implement corrective measures e.g. (pay review, working conditions) 2. Conduct exit interviews to identify roots causes 3. Set up regular team meetings 4. Act on staff feedback to build trust and morale	Institutional Capacity and Workforce Development Programme
	<i>Inadequate refresher training</i>		Provide annual training for 90% of employees annually to develop and retain a skilled, motivated workforce.	4.4.1 Strengthen the effectiveness, accountability, and efficiency of public institutions	1. Identify role-specific training needs. 2. Create tailored refresher training programs. 3. Increase training frequency and accessibility. 4. Encourage a continuous learning culture. 5. Allocate sufficient resources for training	

	<i>Low employee morale</i>		1. Increase employee satisfaction by 70% by 2027	4.4.1 Strengthen the effectiveness, accountability, and efficiency of public institutions	1. Implement performance-based reward systems 2. Improve communication and transparency 3. Recognize and reward employee contributions 4. Foster a positive work environment 5. Address workload and work-life balance concerns	Institutional Capacity and Workforce Development Programme
	<i>Slow response time and lack of customer feedback.</i> <i>Inadequate feedback mechanisms, community engagement, stakeholder meetings and Limited partnerships international</i>		Achieve 90% firsts- contact resolution rate by 2029.	4.4.1 Strengthen the effectiveness, accountability, and efficiency of public institutions	1. Implement a customer/client feedback system. 2. Conduct quarterly staff performance review	Good Governance and Accountability Programme

	<i>development actors</i>					
	Inconsistent service quality and poor client relations		Maintain 90% customer relation and satisfaction by 2029.	4.4.1 Strengthen the effectiveness, accountability, and efficiency of public institutions	1. Review existing service charter. 2. Conduct monthly performance reviews.	Good Governance and Accountability Programme
	<i>Inadequate controls</i>		Reduce recurring audit issues by 60% by 2027	4.9.1 Strengthen anti-corruption measures and enhance public integrity	1. Apply risk-based audit planning 2. Audit all units periodically	
	<i>Inadequate risk assessment and Delays of follow-up on findings</i>		Ensure 100% implementation of audit recommendations annually	4.9.1 Strengthen anti-corruption measures and enhance public integrity	1. Use audit walkthrough test and software 2. Provide professional audit training	
	<i>Bureaucracy and administrative bottlenecks Inadequate data systems, digital tools and weak information management</i>		Digitize 90% of administrative tasks to reduce processing time by 40% by 2029	4.4.1 Strengthen the effectiveness, accountability, and efficiency of public institutions	1. Introduce workflow automation tools 2. Strengthen data systems and digital tools 3. Train staff in process management 4. Provide adequate office logistics	Good Governance and Accountability Programme
	<i>Weak visibility in both the media and</i>	<i>Enhance public image of the Assembly</i>	Increase positive media coverage by 40% by 2027	4.13.1 Improve public access to development information	1. Publicize the Assembly's activities and engage the public	

	<i>international urban development platforms</i>				2. Improve on International Partnerships, promote cultural exchange, economic cooperation and collaborative development	Good Governance and Accountability Programme
			Improve community Social Accountability programmes by 100% by 2029	4.3.1 Deepen transparency and public accountability	1. Promote civic engagement and transparency in local governance	
			Reduce public sentiment by 70% by 2029	4.13.1 Improve public access to development information	1. Strengthen public trust and accountability through the creation of a structured feedback mechanism	
	<i>Loss of important documents.</i>	<i>Establish a standard, reliable and accessible records management systems.</i>	Digitize 100% of legacy records by 2029.	4.4.1 Strengthen the effectiveness, accountability, and efficiency of public institutions	1. Deploy electronic records systems. 2. Provide a stable internet access in the organization.	Digital Governance and Information Systems Programme
	Poor file organization. Delayed document retrieval.		Achieve 98% document retrieval accuracy.	4.4.1 Strengthen the effectiveness, accountability, and efficiency of public institutions	1. Build capacity of staff in the unit	

36.	<i>Inadequate data systems, digital tools and weak information management</i>		All activities in the unit to comply with ISO 15489 standards by 2029	4.4.1 Strengthen the effectiveness, accountability, and efficiency of public institutions	1. Establish retention and disposal policies. 2. Build capacity of staff in the unit 3. Provide logistics for the unit	
		<i>Optimize the utilization and management of public assets</i>	To identify, monitor and maintain all Assembly's assets for optimization by 2029	3.16.1 Promote effective maintenance culture	1. Perform physical inventory count and verification 2. Procure Asset Management Software e.g. barcode scanning, Radio Frequency Identification (RFID) 3. Create preventive maintenance schedules for equipment and assets/property 4. Implement maintenance tracking and reporting	Digital Governance and Information Systems Programme
			To put in place measures to reduce energy consumption by 15% by 2029	3.11.4 Ensure efficient utilization of energy	1. Adopt the use of solar energy 2. Leverage on smart sensors and smart sanitary ware	Environmental Protecting and Standards Enforcement

Source: TMA – MPCU, 2025

3.4 Indication of Development Proposals and their Integration into Spatial Plans

The formulation of development proposals represents a foundational step in steering the metropolis toward a more structured, inclusive and sustainable urban future. These proposals are not only instruments for spatial reorganization but are critical tools for articulating a forward-looking vision that aligns urban development with socio-economic transformation. Anchored in the Spatial Development Framework (SDF) and complemented by detailed local and sectoral plans, these proposals have been spatially translated into actionable objectives, offering a blueprint for shaping the physical and functional landscape of Metropolis over the medium to long term.

The preparation of the SDF for the Assembly was guided by a robust methodological process grounded in evidence, stakeholder engagement and spatial analysis. An extensive situational assessment was carried out to document the prevailing physical, socio-economic and environmental characteristics of the metropolis. These baseline studies covered land use patterns, infrastructure networks, natural systems, demographic trends and institutional arrangements, creating a comprehensive diagnostic profile of the city.

Engagements were held with key stakeholders, including Metro departmental heads, traditional authorities, residents and private sector actors to ensure that the emerging development vision was rooted in local priorities and aspirations. The collaborative dialogue contributed to a shared urban vision: to transform the Metropolis into a resilient, inclusive and economically competitive city, capable of balancing industrial vitality with environmental integrity and social equity.

Using Geographic Information Systems (GIS), a series of thematic maps were developed to identify critical spatial challenges and opportunities. These included maps depicting urban sprawl, traffic congestion zones, ecological stress areas and underutilized spaces. Based on this analysis, strategic spatial zones were delineated such as areas for densification and consolidation in the urban core, urban expansion zones along key growth corridors and conservation areas along rivers, green belts and coastal buffers. This spatially informed structure formed the backbone of the SDF, serving as both a guide and reference for planning.

The development proposals within the SDF are shaped by strategic spatial objectives that address the pressing needs of the metropolis while laying the groundwork for transformative change. At the core is the reorganization of land use to promote compact, mixed-use and transit-

oriented urban forms. The proposals envision high density residential and commercial districts within and around established hubs such as the Industrial Area, the Harbour Enclave and Community 1 where existing infrastructure and services can support further growth.

Furthermore, the spatial strategy places strong emphasis on environmental sustainability through the creation of interconnected green networks. These include the protection of existing green spaces and the introduction of new ecological corridors linking water bodies, recreational parks, and public open spaces across communities like Community 10 and the coastal fringe.

A hierarchical transportation framework is also proposed to enhance mobility and reduce travel times. The plan integrates arterial roads, collector roads and feeder streets, linking key economic and residential nodes. The inclusion of mass transit corridors particularly along east-west and north-south axes will facilitate transit-oriented development, reduce dependence on private vehicles, and support inclusive mobility for all socio-economic groups. These proposals are captured in spatial representations such as future land use maps, transportation network diagrams and growth management plans.

The integration of the spatial planning proposals into the MTDP ensures that the spatial vision is translated into a practical and implementable framework. The MTDP functions as the operational arm of the SDF, identifying specific programs, projects and policy interventions that advance the spatial goals of the metropolis. Each proposal within the spatial plans is linked to key priority areas in the MTDP such as infrastructure development, environmental management, transportation and socio-economic inclusion.

Concrete examples include the prioritization of road upgrades in Community 4 to improve intra-urban mobility, and the construction of stormwater drainage systems in flood-prone areas like Community 9. These projects address immediate service delivery gaps while contributing to broader spatial restructuring. Likewise, urban renewal efforts in Tema Newtown are aligned with both spatial equity and poverty alleviation objectives, offering new housing typologies and improved public facilities.

The use of spatial maps in the MTDP process also supports performance tracking and monitoring where projects can be georeferenced. The Assembly can then effectively assess spatial impacts, evaluate service coverage and identify emerging needs. Lastly this spatial lens allows for better coordination with national planning instruments, including Ghana's National Spatial Development Framework (NSDF) and facilitates alignment with global development commitments such as the Sustainable Development Goals (SDGs).

PROPOSED SPATIAL DEVELOPMENT FRAMEWORK- TEMA METROPOLITAN ASSEMBLY

ACCRA-TEMA MOTORWAY

COMMUNITY 12

COMMUNITY 9

COMMUNITY 11

COMMUNITY 10

COMMUNITY 8

COMMUNITY 7

COMMUNITY 6

COMMUNITY 4

COMMUNITY 1

INDUSTRIAL AREA

HEWTOWN

PORT ENCLAVE

LEGEND

- WATER BODIES
- LAND USES
- CIVIC & CULTURE
- HEAVY INDUSTRY
- LIGHT INDUSTRY
- MIXED USE
- PORT
- RESIDENTIAL
- OPEN SPACE

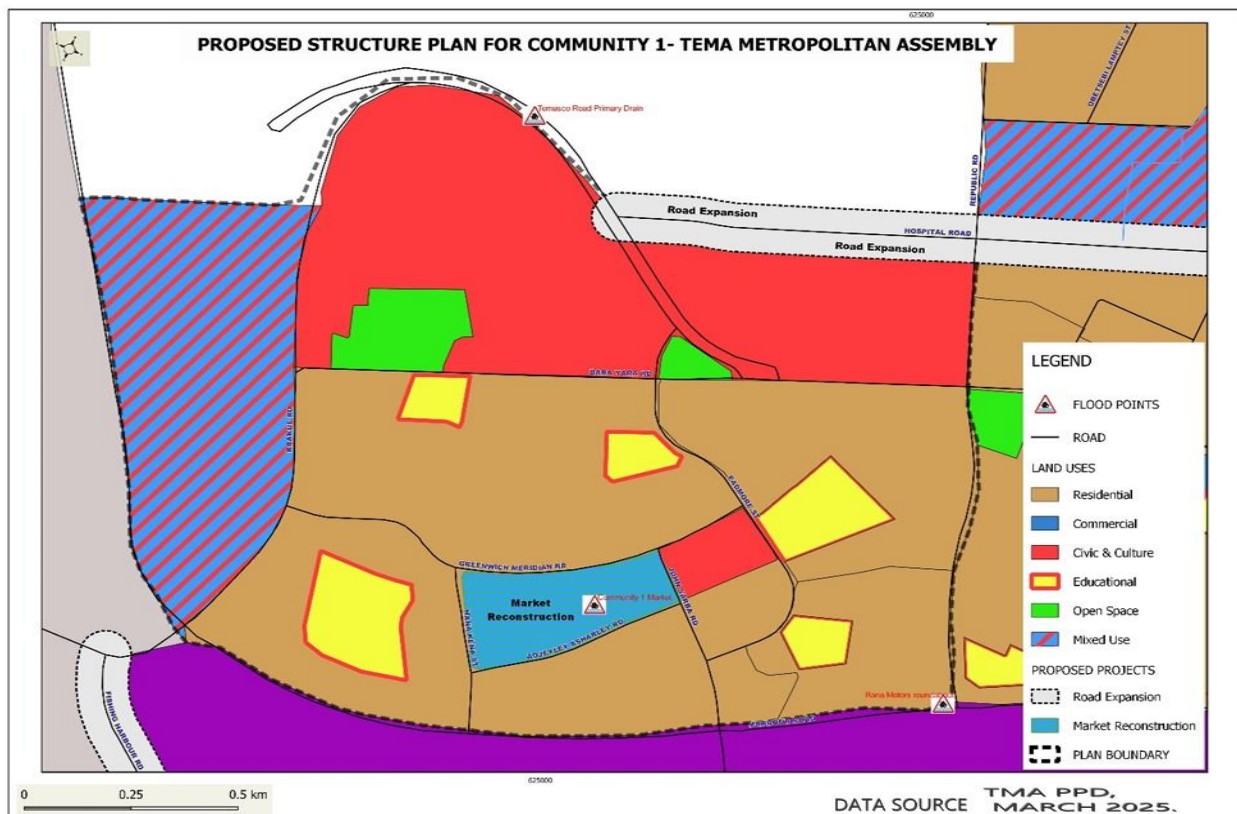
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DATA SOURCE: TMA, PPD, MARCH 2025

Figure 3.2: Proposed Structural Plan for Tema Newtown

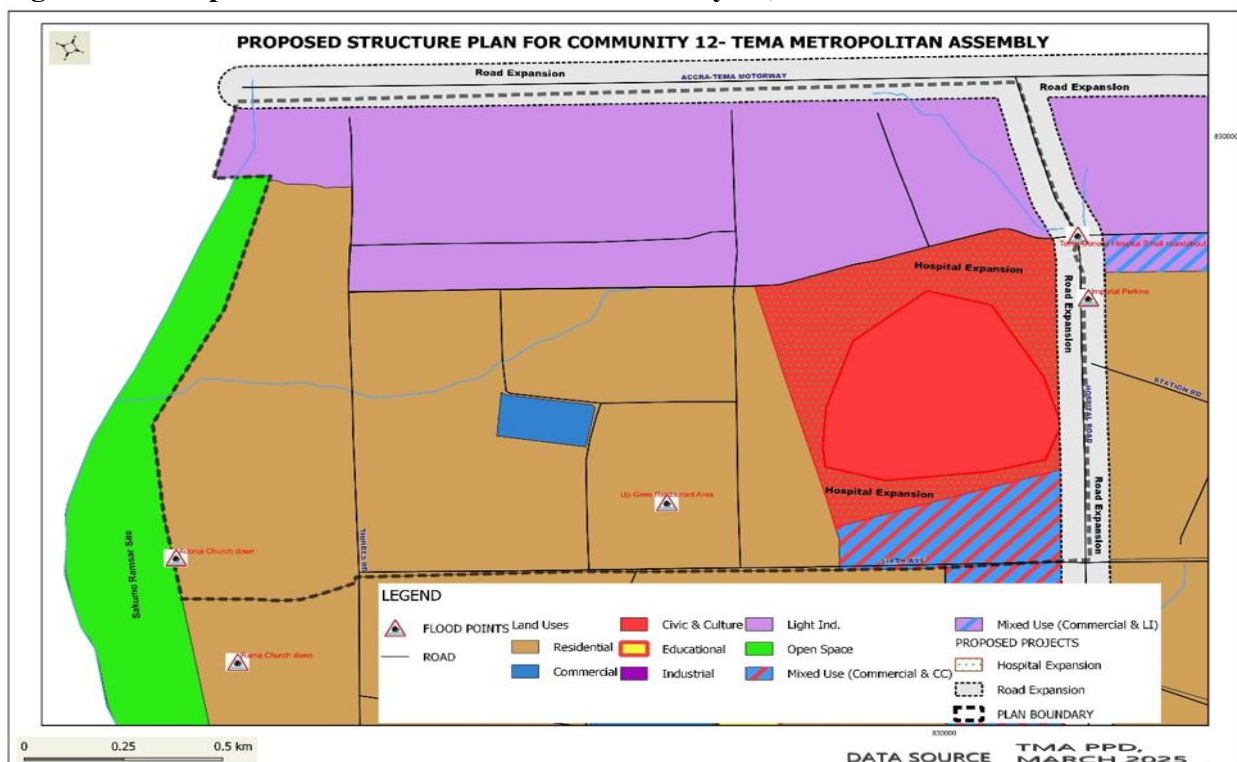


Figure 3.3: Proposed Structural Plan for Community 1, Tema



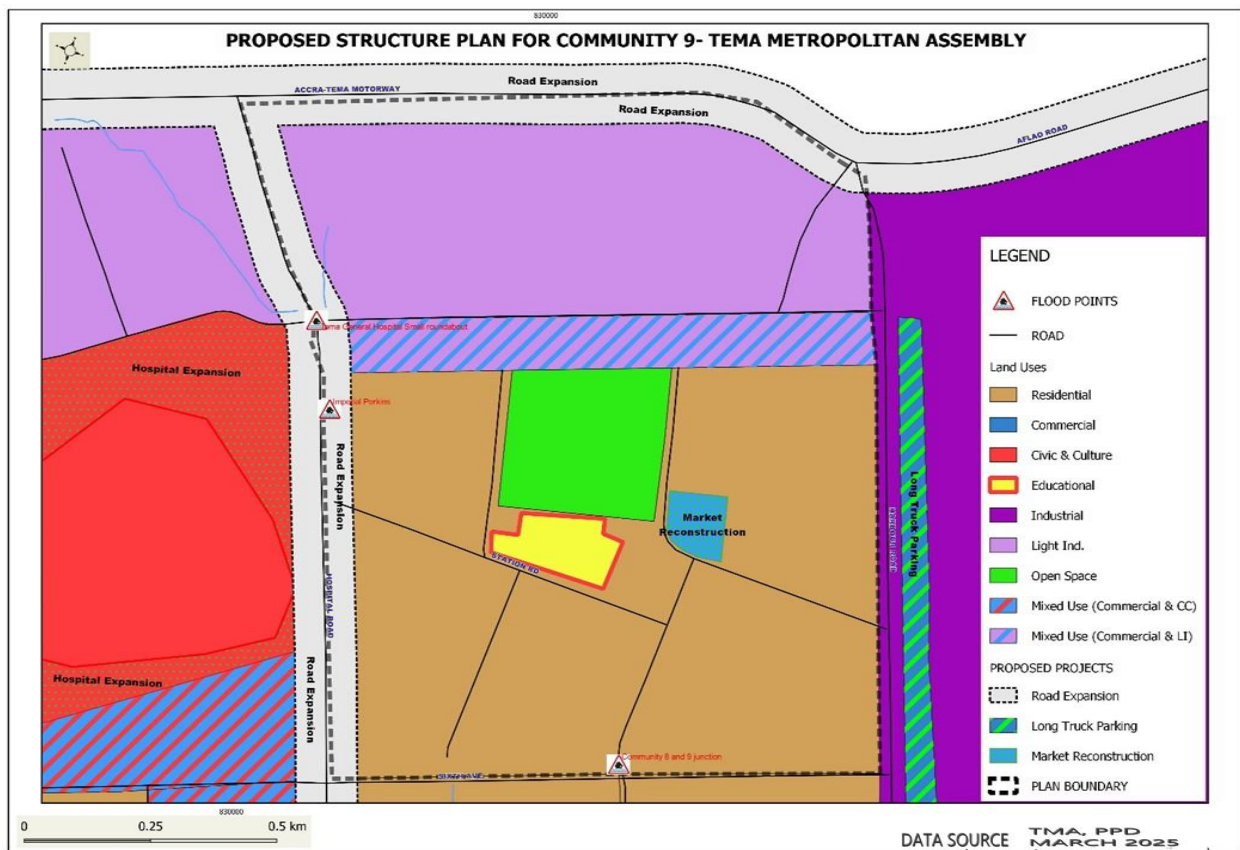
Source: Physical Planning Department (TMA), 2025

Figure 3.4: Proposed Structural Plan for Community 12, Tema



Source: Physical Planning Department (TMA), 2025

Figure 3.5: Proposed Structural Plan for Truck Parking Facility, TMA



Source: Physical Planning Department (TMA), 2025