Sekondi-Takoradi Metropolitan Assembly

Open Government Partnership

6-YEAR WASH STRATEGIC PLAN

(2024 – 2030)

FOR IMPROVING WATER, SANITATION AND HYGIENE SERVICES DELIVERY IN LOW-INCOME COMMUNITIES IN SEKONDI-TAKORADI

Facilitated By:

TREND
TRAINING RESEARCH AND NETWORKING FOR DEVELOPMENT

Consultant contact:

Training, Research and Networking for Development Group

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June, 2024

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PROCUREMENT OF CONSULTANT TO CO-CREATE A 6-YEAR STRATEGIC PLAN FOR IMPROVING WATER AND SANITATION IN LOW-INCOME COMMUNITIES IN SEKONDI-TAKORADI, AND CONDUCT CAPACITY BUILDING AND TRAINING FOR IDENTIFIED STAKEHOLDERS ON INTEGRATED PLANNING OF SANITATION SERVICES

Reference No: OGP-MDTF/STMA/MSF/2024/01

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June, 2024

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LIST OF ABBREVIATIONS

BCC	Behaviour Change Communication/Campaign
BCT	Behaviour Change Technique
CSO	Civil Society Organisation
DESSAP	District Environmental Sanitation Strategy and Action Plan
EHO	Environmental Health Officer
FGD	Focus Group Discussions
GAMA SWP	Greater Accra Metropolitan Area Sanitation and Water Project
KII	Key Informant Interviews
LIUC	Low-Income Urban Community
M&E	Monitoring and Evaluation
MEHO	Metro Environmental Health Officer
MPCU	Metro Planning Coordinating Unit
MSF	Multi-Stakeholder Forum
NDPC	National Development Planning Commission
OGP	Open Government Partnership
SBCC	Social and Behaviour Change Communication
SDG	Sustainable Development Goal
SHEP	School Health Education Programme
STMA	Sekondi-Takoradi Metropolitan Assembly
SWOT	Strengths, Weaknesses, Opportunities, and Threats
TNA	Training Needs Assessment
TOR	Terms of Reference
TREND	Training, Research and Networking for Development
WASH	Water, Sanitation and Hygiene

1. INTRODUCTION

1.1 Background

Rapid urbanisation in low and middle-income countries has significantly strained existing water and sanitation systems, leading to inadequate service coverage in urban informal settlements. Studies highlight that urban informal settlements face unique drivers and barriers affecting WASH services delivery, including economic, spatial, social, institutional, political, and informational challenges (Sinharoy, Pittluck, & Clasen, 2019)[1]. Additionally, climate change exacerbates these challenges, particularly in coastal cities like Sekondi-Takoradi, by affecting availability and quality of WASH services, leading to increased vulnerability to WASH-related diseases in these already stressed communities (Abrams, Carden, Teta, & Wågsæther, 2021)[2]. The relevance of improving WASH infrastructure for sustainable development and growth in STMA cannot be overstated. Effective WASH interventions have the potential to reduce the prevalence of waterborne diseases, improve school attendance by reducing illness-related absences, and enhance the overall quality of life. Moreover, integrating climate resilience into WASH strategies is essential for ensuring sustainable water and sanitation services in the face of changing environmental conditions.

The Sekondi-Takoradi Metropolitan Assembly (STMA) is committed to co-creating and co-implementing initiatives that specifically address climate change; water, sanitation, and hygiene challenges; improve municipal services; and the overall enhancement of local governance. In response to the numerous challenges in the STMA, the Open Government Partnership (OGP) Support Unit, in collaboration with the Sekondi-Takoradi Metropolitan Assembly (STMA), is collaborating in the process of implementing a Water, Sanitation, and Hygiene (WASH) project in the Sekondi-Takoradi Metropolis, with a special focus on the low-income communities and informal settlements. This initiative is made possible through grant funding from the OGP Multi-Donor Trust Fund by the World Bank. In alignment with its OGP commitment, STMA aims to:

- *establish synergies that positively impact WASH outcomes.*
- *reinforce consensus building for compliance with sanitation byelaws.*
- *expand access to improved household sanitation facilities through innovative financing mechanisms.*

The above will be achieved through a strategic approach driven by a long-term vision (6-Year Strategic Plan)[3] to formulate and implement local policy interventions founded on trust-building with citizens and enduring partnerships with civil society and other stakeholders towards the creation of a safe and equitable city for all. In the development of this 6-Year Water, Sanitation, and Hygiene (WASH) Strategic Plan for Low-Income Communities and Informal Settlements within the Sekondi-Takoradi Metropolis, understanding the interplay

[1] Sinharoy SS, Pittluck R, Clasen T. Review of drivers and barriers of water and sanitation policies for urban informal settlements in low-income and middle-income countries. Util Policy. 2019 Oct;60:100957. doi: 10.1016/j.jup.2019.100957. PMID: 32214692; PMCID: PMC7067261.

[2] Abrams, A.L.; Carden, K.; Teta, C.; Wågsæther, K. Water, Sanitation, and Hygiene Vulnerability among Rural Areas and Small Towns in South Africa: Exploring the Role of Climate Change, Marginalization, and Inequality. *Water* **2021**, *13*, 2810. https://doi.org/10.3390/w13202810

[3] The Strategic Plan was originally conceived as a 5-Year WASH Strategic Plan. However, upon stakeholders' reflection in line with the SDGs target year of 2030, the duration was been altered to 6 Years.

between rapid urbanisation, climate change, and the current state of WASH infrastructure is crucial. The plan seeks to address the disparities and challenges faced by these communities in accessing clean water, adequate sanitation, and hygiene facilities, which are fundamental to public health and socio-economic development. The WASH Strategic Plan aims to leverage interdisciplinary collaborations and adopt both top-down and bottom-up approaches to create resilient, inclusive, and sustainable WASH services tailored to the needs of low-income and informal communities within the Sekondi-Takoradi Metropolis.

1.2 Broader WASH Context in STMA

The target area for the Proposed WASH Strategic Plan is the Sekondi-Takoradi Metropolis, the regional capital of the Western Region of Ghana. The Sekondi-Takoradi Metropolitan Assembly (STMA) under the Local Governance Act 936, is mandated to enforce by-laws for landlords/ property owners to provide household toilets. To address the sanitation crisis in the city, STMA updated its Sanitation Byelaw in 2016, aiming at behavioural change and hygiene education. However, successful implementation has been hindered by the limited involvement of key stakeholders in designing interventions, leading to numerous arrests and non-compliance with the provision of household toilets by landlords and property owners. Despite these efforts, sanitation outcomes in poor and informal settlements persistently remain unimproved.

The poor state of sanitation service delivery is illustrated by the following data:

- *The STMA recorded an annual average of 88,000 people, mostly in underserved communities, suffering from sanitation-related illnesses in (year).*
- *In schools, 24% of the 348 basic schools within the Metropolis lack proper sanitation facilities, contributing to truancy and poor academic performance, particularly among female students.*
- *In the 2022 District League Table (DLT)[4], STMA ranked 56th out of 261 districts on environmental sanitation, representing a modest progress from the 2021 position of 81st. However, there is a considerable prevalence of open defecation, particularly in low-income and informal communities.*
- *The 2021 Population and Housing Census data revealed that about 40% (29,837) of total households (73,876) in STMA rely on undignified means to access toilets; with 85% (25,234) of the 29,837 households heavily dependent on poorly maintained public toilets, contributing to the practice of open defecation and the spread of diseases.*

Solid waste generation within STMA is estimated at 614 tons/day, while the collection rate is 360 tons/day. This results in 224,110 tons/year generation and 131,400 tons/year collection, respectively. This collection rate clearly shows that over 41% of the solid waste generated is not collected and therefore improperly handled. These uncollected wastes find themselves in drains and open spaces, impacting climatic conditions in the Metropolis. The final disposal system is controlled tipping at the engineered landfill site for solid waste and an oxidation system for liquid waste disposal. Broadly, across STMA, a mix of door-to-door refuse collection and communal container lifting systems of waste collection mechanisms is being operated in the Metropolis. Newly developed areas and largely low-income areas in the Metropolis are poorly served with services such as water, electricity, telecommunication, and other ancillary services.

[4] NDPC (2023), 2022 District League Table Report Published by: National Development Planning Commission, No.13 Switchback Road, Cantonments, Accra.

The water needs for domestic, industrial, institutional, and commercial purposes within the Metropolis are largely supplied by Ghana Water Limited (GWL). The Community Water and Sanitation Agency (CWSA) provides boreholes to communities with lower populations within the Metropolis. There are also scattered cases of self-supply through hand-dug wells and boreholes. Ghana Water Limited (GWL) water supply to the Twin City is from two headworks at Inchaban and Daboasi. According to GWL, while the current water demand for STMA stands at 93,000 m^3/d, the two are only able to supply 10,000 m^3/d and 20,000 m^3/d, respectively, in the wet season, and reduce by 50% in the dry season. The main water pipelines have been laid to presently serve more than 70% of the city. GWCL estimates that 160 km of additional pipelines are required to be able to reach the remaining areas of the city.

Generally, compliance with WASH practices and standards faces barriers which include financial constraints, lack of technical support, limited awareness of by-laws, multiple absentee landlords, and low prioritization of sanitary facilities by tenants. On the other hand, local authorities face challenges like limited funding, lack of incentives for Environmental Health Officers (EHOs), logistical constraints, and legal enforcement delays. By addressing these critical issues through the WASH Strategic Plan, STMA can make significant strides towards achieving the SDGs, particularly SDG 6, which calls for clean water and sanitation for all, and SDG 11, which aims for sustainable cities and communities. This plan represents a commitment to enhancing the health, well-being, and economic prospects of its most vulnerable populations, laying the foundation for a more resilient and prosperous future for all residents of Secondi-Takoradi. Detailed WASH context specifically for low-income and informal communities has been discussed under section three of this document.

1.3 Objectives of the 6-Year WASH Strategic Plan

The STMA aims to use the WASH Strategic Plan to enhance the delivery of WASH services and scale up behavioural change campaigns within informal and low-income communities across the Sekondi-Takoradi Metropolis, employing a participatory multi-stakeholder approach.

The STMA has primarily co-created this 6-year WASH Strategic Plan for strengthening collaboration in local water, sanitation, and hygiene policy formulation and implementation, through a Multistakeholder engagement process that aligns with national policies, local sanitation byelaws, and the OGP tenets that:

- *Enhances consensus building and stakeholder involvement in the implementation of sanitation byelaws.*
- *Identifies and develops sustainable strategies to enhance behavioural change and hygiene education to impact health outcomes.*
- *Develop sustainable and innovative funding solutions for expanding access to improved household sanitation facilities.*

This Strategic Plan provides the framework for WASH interventions to be co-implemented in about 31 informal and low-income communities over six years (2024-2030) for improved health outcomes and wellbeing.

1.4 Scope of the 6-Year WASH Strategic Plan

The strategic plan addresses the following thematic issues:

- ***Water service improvements*** – ensuring adequate access to safe water services by addressing availability, quality, and accessibility challenges in the informal low-income communities at the household and institutional levels.
- ***Sanitation Service improvements*** – supporting the provision of access to safe sanitation services for households and institutions in informal and low-income communities within STMA by implementing innovative financing and technology options, and intensive community mobilisation interventions.
- ***Hygiene service improvements*** – focusing on behaviour change education and awareness campaigns to promote proper handwashing practice and general personal and environmental hygiene.
- ***Policy and governance system improvements*** – addressing challenges related to legislation and enforcement of sanitation bylaws, as well as the WASH funding mechanism, and building synergies for multi-stakeholder collaboration to impact health outcomes.
- ***Solid waste management improvements*** – supporting solid waste management arrangement that considers waste as a resource and promotes safe capture/storage, transportation, treatment, recycling, and disposal of human waste in households.
- ***Stakeholder/community organisation and mobilisation*** – build the capacity of all sub-district actors, raising awareness, and generating trust among citizens and stakeholders to facilitate buy-in and co-ownership of the development process.
- ***Climate resilience, Gender and inclusion*** – mainstream climate resilience, gender and social inclusivity in intervention planning, design, and implementation.

1.5 Implementation Process of the 5-Year WASH Strategic Plan

The strategic plan preparation process was hinged on the co-creation principles and aligned with the planning guidelines provided by the National Development Planning Commission of Ghana. The process took four months, beginning from March 2024 and ending in June 2024, contrary to the initial effort to complete it in May 2024. The co-creation process allowed full participation of all stakeholders at all levels to contribute to the process to engender strong buy-in and ensure alignment with the WASH development agenda of the Metropolis and national policies. The main scope of this subcomponent is summarized as follows:

1.5.1 Inception Activities

The inception phase was used to establish a good working relationship between facilitators, the STMA-OGP Team, key institutions, and stakeholders. It was used to develop a common understanding of the assignment, assess stakeholder expectations, and clarify the implementation process. The outcome of the interactions with stakeholders helped to reassess the key components and fine-tune the approach for positive results. The Inception Phase commenced immediately after Contract signing and spanned two weeks.

1.5.2 Situational Assessment

Gathered and conducted a comprehensive review of all existing data related to water, sanitation, and hygiene (WASH) in the Sekondi-Takoradi Metropolis. This process helped to establish a clear understanding of the current state of WASH services, identify gaps, and inform evidence-based decision-making. It also encompassed the review and analysis of the existing policy and regulatory frameworks related to water and sanitation in the Sekondi-

Takoradi Metropolis. The goal is to identify the legal, regulatory, and institutional framework and context within which WASH initiatives operate.

The Situational Analysis served as a crucial foundation to ensure that the strategic planning process is well-informed, contextually relevant, and aligned with the specific challenges and opportunities, particularly the vision of STMA in general. The insights gained guided the subsequent phases of the assignment, ensuring targeted and effective stakeholder engagement.

1.5.3 Multi-Stakeholder Engagement and Co-Creation

This stage of the assignment aimed to facilitate a robust and inclusive multi-stakeholder engagement process to co-create the 6-Year Strategic Plan. The objective was to ensure that the perspectives, expertise, and needs of diverse stakeholders were considered, fostering a collaborative approach to addressing WASH challenges in low-income and informal communities in the Sekondi-Takoradi Metropolis. The co-creation process involved collaborative decision-making and joint planning sessions to develop the 6-Year Strategic Plan.

The process involved the application of various forms of participatory methods, and communication techniques including face-to-face interviews, meetings, focus group discussions, and workshops to engage stakeholders (STMA level, non-state actors, community level) throughout all stages of the assignment. The stakeholder consultations and engagements were used to emphasize collective responsibility and shared benefits of improved WASH in STMA. In conducting this process, all stakeholders were guided to reimagine their existing context and situation by thinking of how to maximize their 'Strengths' to offset their 'Weaknesses', and how to leverage their 'Opportunities' to limit the 'Threats' to improving WASH Services delivery.

1.5.4 Preparation of WASH Strategic Plan

Based on the evidence gathered from the engagements, surveys, and interviews, the WASH Strategic Plan was prepared. The Plan aligns with the vision of STMA and has thematic goals and targets, as well as strategic interventions to ensure the realisation of the vision of improved WASH services for low-income and informal communities in STMA. The goals and strategic interventions were formulated, ensuring a reflection on the City-Wide Inclusive Sanitation (CWIS) core principles of responsibility, accountability, resource planning and management, equity, safety, and sustainability. These CWIS principles are also in alignment with the OGP tenets that have been adopted to shape the commitments of STMA towards transparency, accountability, citizen participation, and improvement in municipal service delivery.

The Strategic Plan was originally conceived as a 5-year plan (2024-2029). A multi-stakeholder validation meeting, however, agreed to plan for 6 years (2024-2030) to align with the SDG timeline of 2030 and the Medium–Term planning cycle of Ghana. In addition to the Plan, a strategy for sustaining behaviour change campaigns and a monitoring and evaluation framework were developed as appendages to the strategy. To strengthen the actors to roll out the Plan, capacity capacity-building plan was developed and implemented as part of the strategic planning process.

1.5.5 Dissemination of the WASH Strategic Plan

Effective dissemination of the co-created WASH Strategic Plan was the final stage of the plan preparation process and was designed to foster a sense of ownership, encourage stakeholder participation, and ensure the sustainability of WASH interventions. Final rounds of Stakeholder Consultations through multi-stakeholder workshops were organised to share the proposals in the plan and provide guidance on rolling out the strategy. 50 copies of the final

strategic plan document were made and distributed to all relevant stakeholders to serve as a reference guide for their WASH programmes within the low-income and informal communities within STMA.

1.6 Structure of the Document

Chapter One. This introductory chapter has set the context for the preparation of the Strategic Plan by providing background to the preparation of the plan, the purpose of the plan, and the implementation process. Seven additional chapters focus on the following:

Chapter Two presents the profile of STMA with a focus on population characteristics and the WASH profile of STMA.

Chapter Three describes the baseline situation in the low-income and informal communities in STMA, concerning access to sanitation services, water supply services, hygiene practices, community governance issues, gender and inclusiveness, and climate resilience.

Chapter Four elucidates on the population dynamics over the plan period and defines strategic goals in line with the vision of STMA, targets, and strategic actions for the improvement of the well-being of the population in the low-income communities.

Chapter Five elaborates on broad strategies, key partnership arrangements, and networking necessary for the effective implementation of the WASH Strategic Plan.

Chapter Six defines the communication and advocacy strategies to canvass for greater ownership and support for the implementation of the WASH Strategic Plan.

Chapter Seven sets out the WASH Strategic Plan's monitoring, evaluation, and learning framework.

Chapter Eight presents the cost estimates for the implementation of the WASH Strategic Plan.

2. PROFILE OF SEKONDI-TAKORADI METROPOLIS

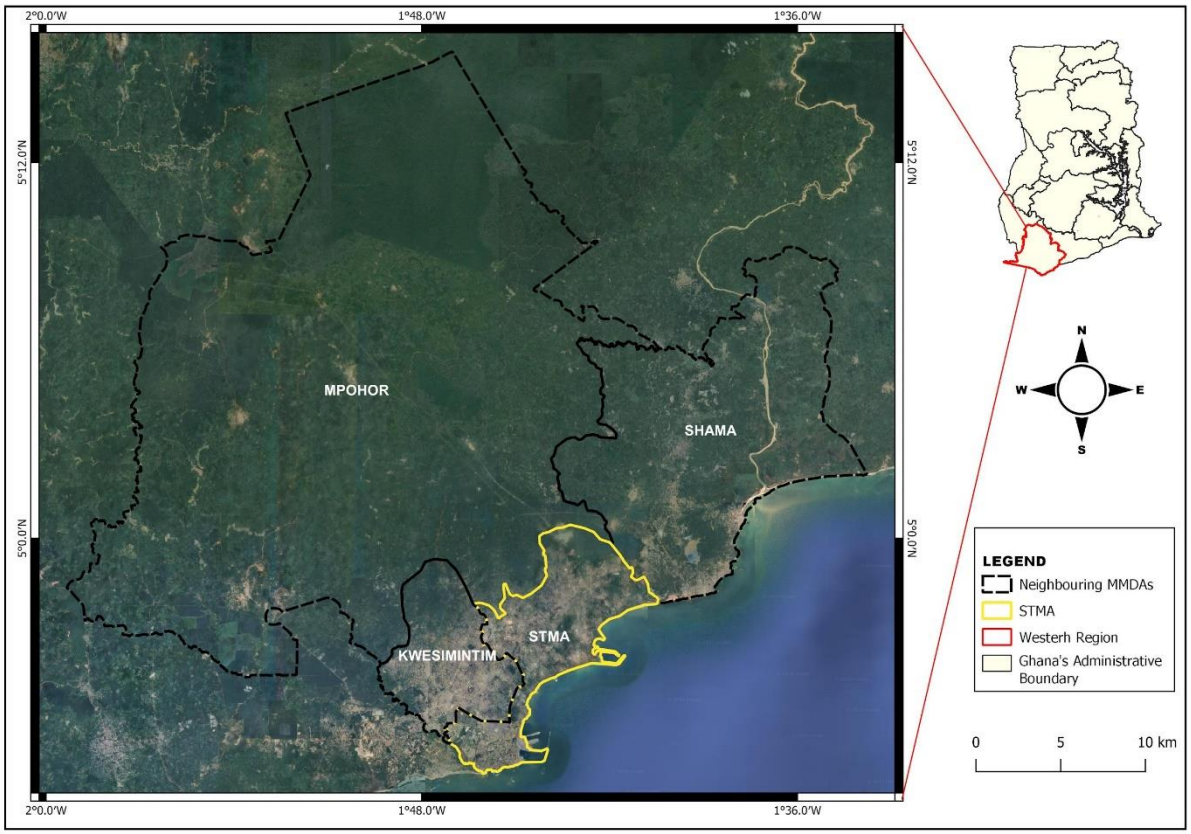
2.1 Introduction

This section highlights the profile of the Sekondi-Takoradi Metropolis (STMA) describing the geography and physical characteristics, demographic and built environment characteristics, socio-political and cultural context, economic context and WASH related development priorities in the Sekondi-Takoradi Metropolitan Assembly, as captured in its Medium-Term Development Plan 2022 – 2025 (MTDP).

2.2 Geography and Physical Characteristics

2.2.1 Location and Size

The Sekondi Takoradi Metropolitan Assembly is located in the southern part of the Western Region, with Sekondi as the administrative capital. It is about 280 Km from Accra and 130km from La Côte d'Ivoire. It is bordered to the North by Mpohor District, Shama District to the East, and Effia-Kwesimintsim Municipal to the West, and South by the Gulf of Guinea. The position of STMA along the proposed Abidjan-Lagos corridor highway is strategic and can serve as a transportation hub and a haulage truck terminal with all its advantages. STMA is one of the fourteen (14) districts in the Western Region and has a total land area of 66.44 square kilometres. Though it is the smallest in terms of land size as a result of the creation of EKMA, it is the most urbanized and densely populated local government area in the Region. Rapid urbanisation has put a greater burden on the Metropolis in terms of the provision of urban infrastructure and services, especially WASH infrastructure and services.



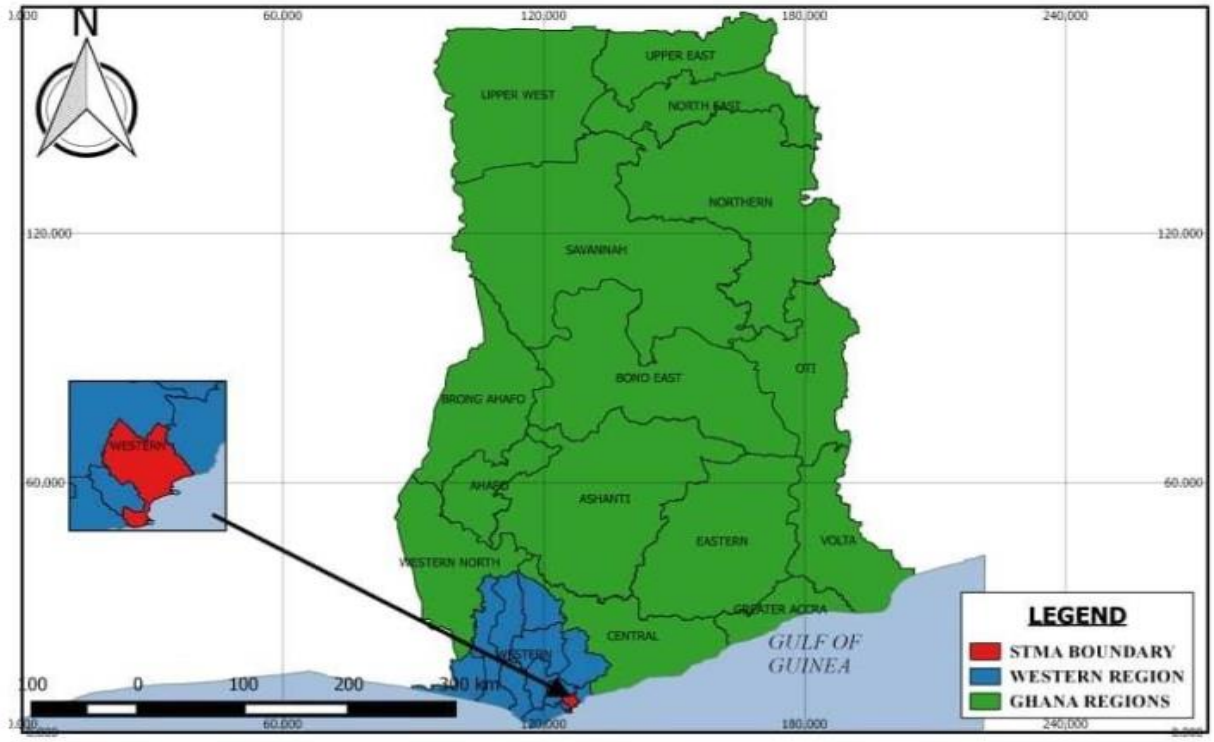


Figure 1: STMA in the National Context – Source: STMA MTDP, 2021

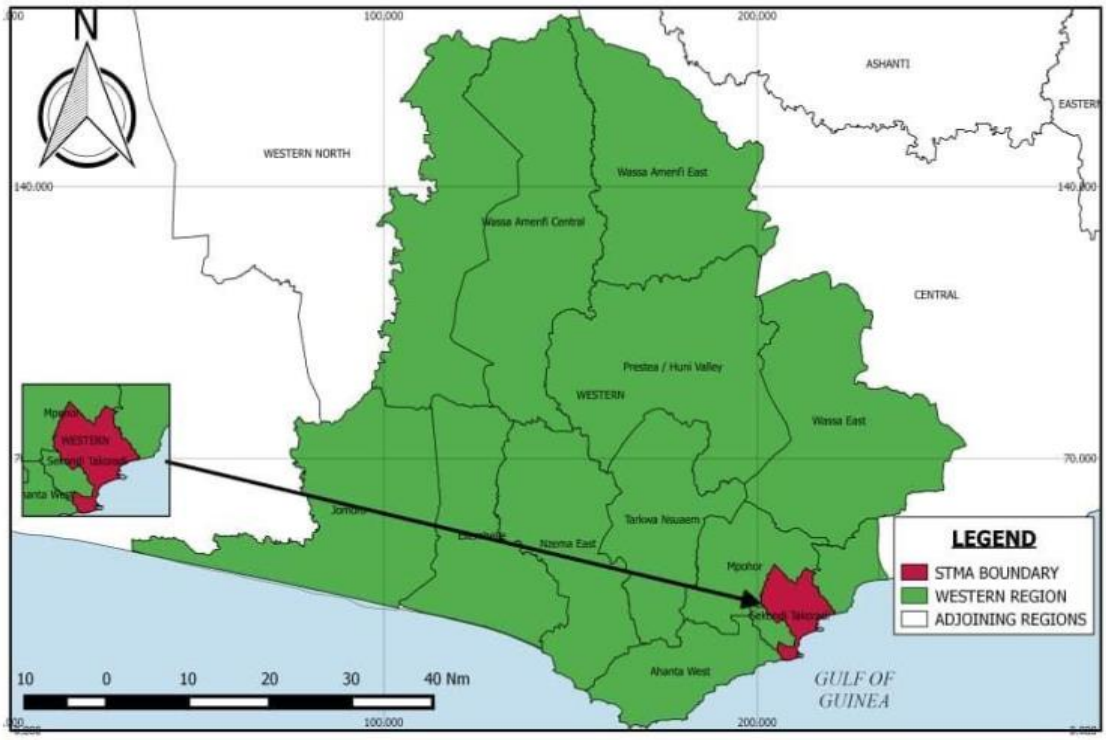


Figure 2: STMA in the Regional Context – Source: STMA MTDP, 2021

2.2.2 Climate Conditions

The average annual temperature of the Metropolis is27.08^{0}C. The mean annual rainfall is about 1,171mm and covers an average of 122 rainy days. There are two rainy seasons, namely the major and the minor. 70% of the rainfall occurs in the major rainy season, which is the month of April to July. These rains are sometimes accompanied by storms and slight

thunderous activities. The minor rainy season in the metropolis is from September to October. It is short and severe, and this leads to flooding most communities in the Metropolis. Thus, there is an issue of severe rainfall in STMA, and coupled with it low-lying coastal area, which is below sea level, results in annual flooding events and coastal erosion. Also, the dry seasons are short and occur from August to September, and a more extended one from November to March, which ends as the Harmattan. Again, the weather conditions provide a favourable environment for aquaculture and crop production in the Metropolis. As a result of the serene atmosphere and climate conditions, it affords the Metropolis a unique place as a preferred tourist attraction.

2.2.3 Vegetation

The Metropolis has three main vegetation types, namely, mangrove, coastal scrub, and savannah Woodland. The Mangrove and coastal scrub are found in the southern and middle parts, whilst the savannah woodland is found in the northern part. In addition, the Metropolis is recognized for its Forest Resources, although the Metropolis is not noted for having a high forest resource since it is an urban setting and most of its land area has been built up. The only forest in the Metropolis is the Monkey Hill Conservation Forest, which is reserved for eco-tourism. Apart from that, the mangroves located around the Essei and Butua lagoons and the Whin Estuary also help in controlling coastline erosion. The STMA will lose its forest resources if the deforestation and encroachment of the Monkey Hill Conservation Forest continue.

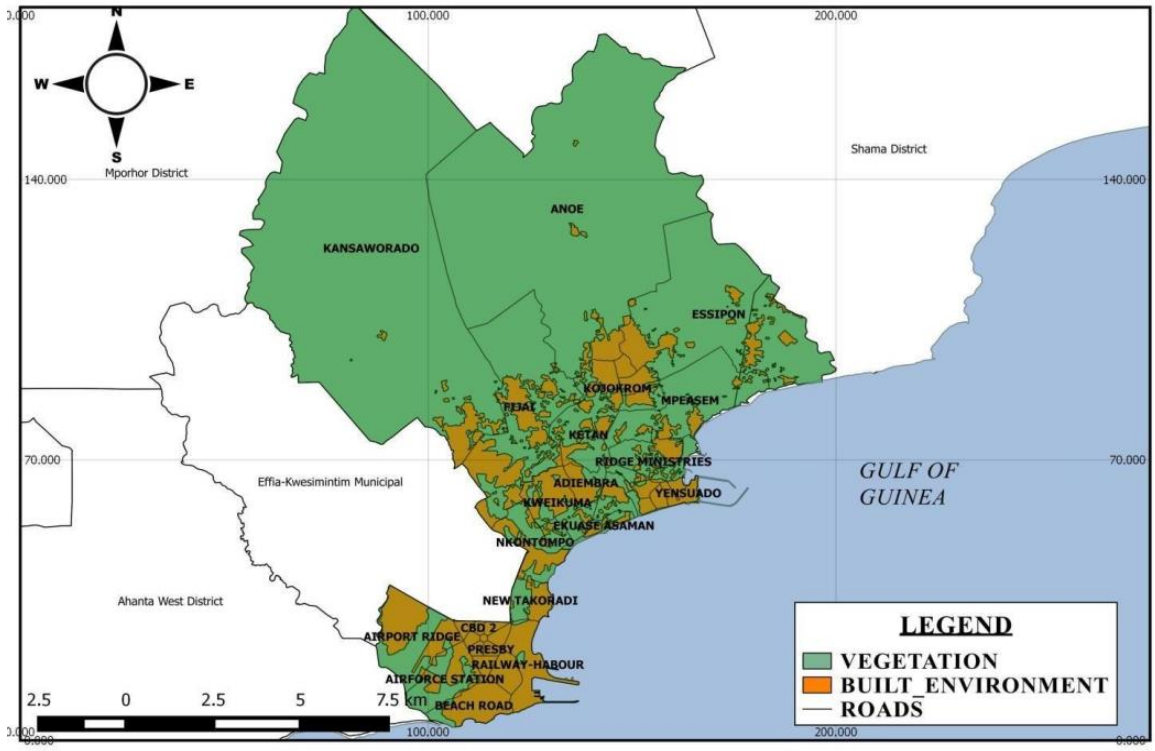


Figure 3: Vegetation Cover and Buil-Up Areas in the STMA - Source: STMA MTDP, 2021

2.2.4 Geology and Mineral Deposits

In terms of geology, the Sekondi-Takoradi Metropolitan Assembly (STMA) is predominantly composed of shales and sandstones, which rest on a hard basement of granites, gneiss, and schists. The coastline's landform is shaped by a faulting system, contributing to a high-water table and elevated salt content in the groundwater. This necessitates thorough soil investigation before undertaking major infrastructure projects, especially water and sanitation

infrastructure. Significant stone deposits are mainly located in areas such as Diabenekrom, Essipon, Kojokrom, and Butumajebu. However, these sites have been heavily encroached upon by private residential developments, posing safety risks for mining activities and driving up the cost of quarry materials, consequently increasing construction costs. The General Assembly and STMA Management need to work with the Physical Planning Department to designate undeveloped areas and establish buffer zones to prevent residential and industrial development near stone mining sites.

2.2.5 Relief and Drainage System

The central area of STMA sits at an elevation of 6 meters above sea level, characterized by its low-lying terrain. This area is interspersed with ridges and hills that range from 30 to 60 meters in height, with the highest points offering panoramic views of the Metropolis. There are five major drainage basins in the Sekondi-Takoradi Metropolis: Pokuantra, Kansawura, Buwen, Anankwari, and Whin, along with a smaller river basin at Ngyiresia. The Anankwari River, located to the east of the Metropolis, flows through the village of Eshiem. In 2010, the Butre lagoon covered an estimated area of 86,404 square meters, while the Essei lagoon spanned 110,902 square meters. The Whin estuary covered an area of 652,202 square meters. The predominantly low-lying topography, especially in coastal regions, poses significant challenges, as heavy rains frequently lead to flooding, putting additional strain on the storm drain infrastructure needed to prevent flooding in critical areas of the Metropolis.

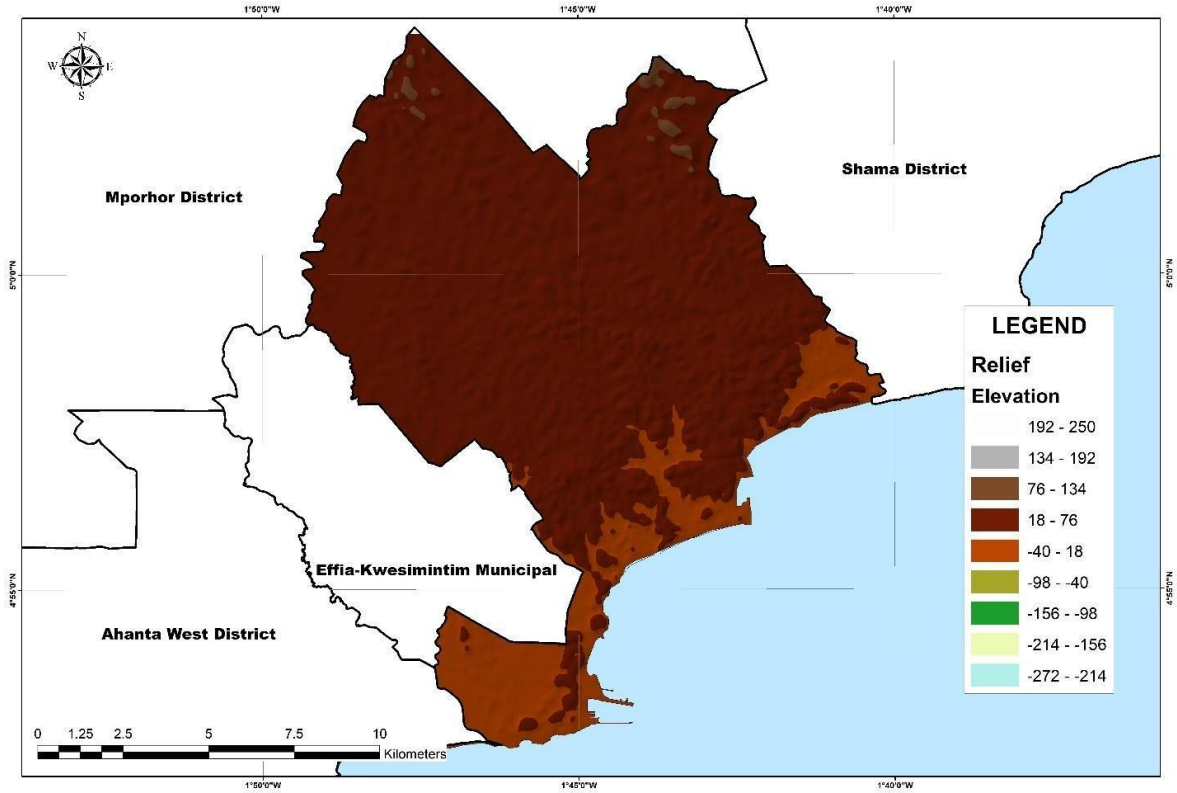


Figure 4: Elevation Map of the STMA – Source: STMA MTDP, 2021

2.2.6 Natural Resource Utilisation

Land use pressures are substantial in the Sekondi-Takoradi Metropolis, particularly in the densely populated areas of the Metropolis. The demand for converting vegetation to agriculture, harvesting mangroves and other forest species at Monkey Hill, and especially urban expansion,

pose significant threats to the existing vegetation cover. Much of the land in the Metropolis, apart from reserved and protected areas, has been deforested and encroached upon. There is an urgent need to improve livelihoods and manage lands outside these reserves effectively. Successful implementation of these efforts will lead to increased employment, improved livelihoods, better management of existing natural resources, enhanced soil fertility, and increased carbon stocks. Moreover, improved land management will reduce pressure on forest reserve areas, protecting their biodiversity, creating opportunities for ecotourism, and enhancing the value of other ecosystem services within the local communities' value chains.

2.2.7 Climate Change, Risks and Hazards

Aside from pressures from human activities, rising temperatures and climate change are linked to stream fluctuations, leading to irregular, more extreme, and unusual weather patterns. These changes in rainfall patterns can result in droughts in some areas and floods in others. The STMA faces potential adverse impacts from climate change, including changing phenology, coastal erosion, and rising sea levels. Additionally, urbanized areas are particularly vulnerable to severe flooding, which has been observed to worsen each year. To mitigate drainage and flooding issues in the existing basins, the STMA and other relevant authorities recognize the need for an integrated approach with neighbouring municipalities.

2.3 Demographic and Built Environment Characteristics

2.3.1 Population Size and Growth Trends

According to the 2021 Population and Housing Census (PHC) Report, the Sekondi-Takoradi Metropolitan Assembly (STMA) has a total population of 245,382, accounting for 11.9 percent of the Western Region's population. The gender distribution is such that females comprise 51.4% (126,038) of the population, while males account for 48.6% (119,344). The Sub-Metro breakdown from the 2021 census indicates that Takoradi Sub-Metro has a population of 50,065, Sekondi Sub-Metro has 54,772, and Essikado-Ketan has 140,545. An analysis of the population distribution shows that the entire population (100.0%) of the STMA, as at the 2021 Census, lived in urban areas. However, it is worth noting that while the population criterion may reflect this, largely on the ground, a large proportion of the communities reflect rural and peri-urban characteristics and do not pass as urban communities. Almost 12% of the urban population in the Western Region is concentrated in the Sekondi-Takoradi Metropolis. The 2010 PHC Report revealed a total age dependency ratio of 58.2%. In terms of age demographics, the children (those under 15) and the elderly (those 65 and older) make up 32.6% and 6.1% of the population, respectively, while the working-age population (15-64 years) comprises 61.3%. Based on the 2021 PHC estimated population, and with an annual growth rate of 3.2%, the population of STMA is projected to reach 294,312 by 2030 (*see details table below*).

Table 1: Population projections for STMA from 2024 - 2030

Year	2024	2025	2026	2027	2028	2029	2030
Population	262,001	267,614	272,475	277,909	283,366	288,836	294,312

Source: 2021 PHC-Pop. Projections 2021- 2050

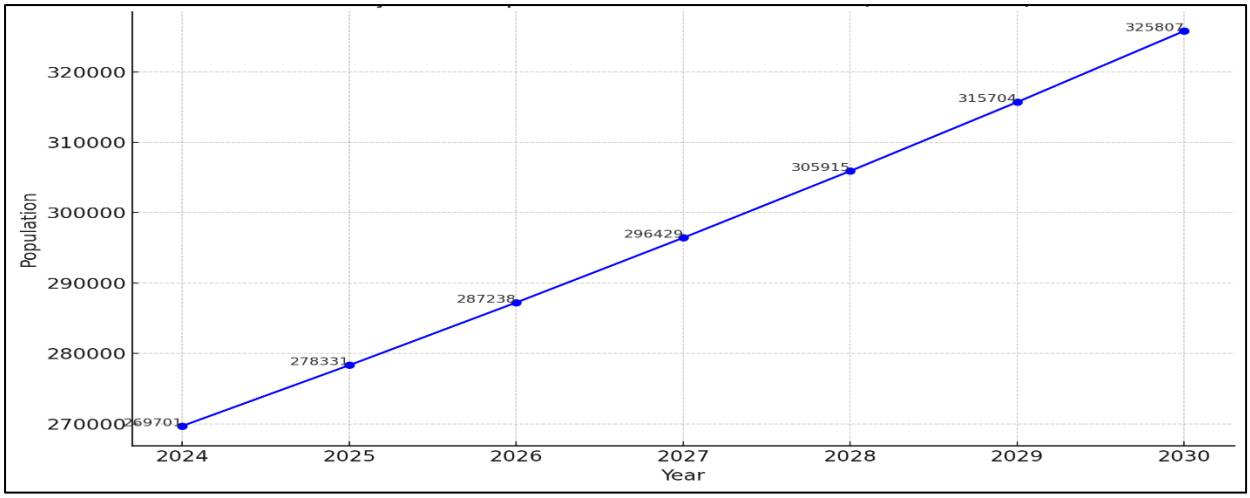


Figure 5: Projected Population Growth of STMA – 2024 – 2030

Rapid urbanization has led to congestion in built-up areas, resulting in the development of slum conditions and the expansion of informal settlements in the Metropolis. The projected increase in population necessitates proactive urban planning to accommodate the growing population, ensuring adequate housing, infrastructure, and services. With the rising population, there is a need to address sustainability concerns, including waste management, water supply, and environmental conservation, to maintain a high quality of life.

2.4 Socio-Political and Cultural Context

2.4.1 Administrative Context and Local Governance

The General Assembly of the Sekondi-Takoradi Metropolitan Assembly (STMA) serves as the highest decision-making body within the Metropolis. Comprising 57 members, the General Assembly includes three Members of Parliament, one Metropolitan Chief Executive (MCE), 36 Electoral Area Assembly Members, and 17 Government-appointed members. The Assembly operates through two main committees: The Executive Committee, known as the Metropolitan Authority, and the Public Relations and Complaints Committee (PRCC). Additionally, there are seven sub-committees of the Executive Committee: Development Planning, Works, Finance and Administration, Social Services, Revenue Mobilization, Education, and Environment and Sanitation. These sub-committees address various issues about the metropolis's growth and development, subsequently making recommendations to the Executive Committee. Security matters fall under the jurisdiction of the Metropolitan Security Council (METSEC).

The Metropolitan Assembly is divided into three Sub-Metropolitan District Councils, which are crucial for community participation and the efficient distribution of infrastructural services. These councils are in Takoradi (Takoradi Sub-Metro), Sekondi (Sekondi Sub-Metro), and Essikado (Essikado-Ketan Sub-Metro). The establishment and proper resourcing of Urban, Town, and Area Councils are essential for enhancing public policy management, participation, decentralization, transparency, accountability, public expenditure, and asset management. Therefore, there is a pressing need to strengthen these sub-structures within the STMA.

2.4.2 Culture and Tourism

The Sekondi-Takoradi Metropolitan Assembly (STMA) is traditionally divided into three paramount areas: Sekondi, Essikadu, and Takoradi. Nana Kobina Nketsiah V serves as the Paramount Chief for the Essikadu paramountcy. Nana Whinney has been the caretaker

Paramount Chief of Sekondi since 2013, while Osahene Katekyi Busumakura III is the Paramount Chief of the Takoradi Traditional Area. The paramountcy, composed of various sub-chiefs, regularly convenes to discuss issues related to the development of their respective areas at the Traditional Council meetings. The communal spirit is notably low in most communities, especially the low-income urban communities. There is a pressing need to foster communalism to aid the development of the Metropolis.

Ethnic distribution within the Sekondi-Takoradi Metropolis is diverse, with Fante making up 46.5%, Ahanta 12.2%, Asante 12.2%, Nzema 3.8%, and Wassa 3.0%. Other ethnic groups each constitute less than 3% of the population. While Fante is the predominant language spoken, Ahanta, Nzema, and Wassa are also common. The residents of Sekondi-Takoradi are known for their friendliness and hospitality. Religious affiliation in the Metropolis is primarily Pentecostal or Charismatic (34.7%), followed by Protestant (25.6%) and Catholic (14.3%).

The Metropolis boasts several tourism sites with the potential to become major destinations in Ghana. Key heritage sites include Fort Orange and the Old High Court Building in Sekondi. The region also hosts rich cultural festivals such as the Kundum and Masquerading Festival. Natural attractions include the Whin River Estuary, Essei Lagoon/Wetlands, and various beaches that offer beach sports and boat cruises. Additionally, conservation and ecology areas such as the Monkey Hill ecotourism site in Takoradi provide opportunities for bird viewing and exploring the Monkey Walk Bay Botanical Garden.

2.4.3 Health

The Sekondi-Takoradi Metropolitan Assembly (STMA) is served by 64 health facilities, comprising 7 hospitals, 5 health centres, 23 clinics, 2 maternity homes, and 27 functional Community-based Health Planning and Services (CHPS) centers. Despite this, the available health facilities and personnel are insufficient to meet the needs of the growing population. Moreover, there is inadequate education on sexually transmitted infections (STIs), such as HIV and AIDS, contributing to an increase in cases over the years.

Table 2: Health facility by Ownership and Type

Category	Government	Private	Quasi	CHAG	Total
Hospital	3	1	1	1	7
Health Centres	5	0	0	0	5
Clinics	2	18	2	1	23
Maternity Homes	0	2	0	0	2
CHPS	27	0	0	0	27
Total	**35**	**21**	**5**	**3**	**64**

Source: MTDP 2022 – 2025

2.4.4 Education

The Sekondi-Takoradi Metropolitan Assembly (STMA) is home to approximately 248 educational facilities, encompassing both public and private institutions. Specifically, there are 155 public schools and 93 registered private schools that offer educational services ranging from the basic education level to senior high school/TVET. This diverse array of educational institutions plays a crucial role in providing comprehensive education to the youth within the Metropolis, ensuring access to quality learning opportunities across different educational stages.

Table 3: Schools in the metropolis

Type or Categories	Public Schools	Registered Private Schools
Kindergarten	94	93
Primary Schools	100	93
Junior High Schools	95	57
Senior High Schools	10	0
Special Schools	2	0
TVET	3	0
Total	**304**	**243**

2.4.5 Social Protection

The Department of Social Welfare and Community Development spearheads the Sekondi-Takoradi Metropolitan Assembly's initiatives in social protection, focusing on reducing poverty and ensuring income security for vulnerable, marginalized, and disadvantaged groups. The Department collaborates with various social service agencies, including the Ghana Health Service, Ghana Education Service, DOVVSU, Prison Service, Legal Aid, CHRAJ, NGOs, media, and the public. Key activities undertaken by the Metropolitan Assembly include child maintenance, child custody, paternity resolution, family reconciliation, supervision of day-care centres, NGO registration, income generation for rural women, community-based rehabilitation, hospital welfare services, out-of-school youth programs, and LEAP for the aged, among others.

The Assembly's social protection efforts are categorized into four main programs: Child Rights Promotion and Protection, Justice Administration, Community Care, and the Livelihood Empowerment Against Poverty (LEAP) program. The Assembly aims to contribute to achieving the objectives of the Ghana National Household Registry (GNHR) initiative, which seeks to create a comprehensive national household register and database of poor and vulnerable households. This initiative will facilitate the targeting of beneficiaries for social protection programs and enhance transparency and accountability. Additionally, the Assembly plans to strengthen the capacity of the Metro Social Protection Committee (MSPC). The MSPC will support needs identification related to social protection, collect data on all social protection interventions in the localities (including those by NGOs, CSOs, traditional authorities, private sectors, and social groups), and generate a holistic picture of local social protection efforts. This comprehensive approach ensures effective targeting and support for the most vulnerable populations within the Metropolis.

2.5 Economic Context

2.5.1 Primary Sectors of the Economy of the Metropolis

The economy of the Sekondi-Takoradi Metropolis is driven by activities in agriculture (21%), services (19.1%), and industry (59.9%) sectors, as shown below. The expansion of infrastructure in communication, energy, transportation, water, and sanitation has attracted migrants seeking better opportunities, leading to increased population density. This high population density creates a substantial market for business activities, which in turn attracts a skilled workforce. This facilitates the transfer of knowledge and skills in specialized sectors such as the oil and gas industry.

The significant proportion of the population engaged in service and sales sectors underscores the commercial nature of the Metropolis, characterized by retail and wholesale activities predominantly within the informal sector. While economic activities enhance livelihoods and improve living standards through various industries, any adverse events can impact a large segment of the population. For instance, the decline of the railway and wood-processing industries led to worker retrenchments and a subsequent reduction in economic activities.

However, the discovery of oil and gas in the region has spurred an economic resurgence, particularly in infrastructural development related to real estate and downstream oil and ancillary services. The Metropolis now has substantial growth opportunities if the Assembly collaborates effectively with agencies such as the Sekondi-Takoradi Chamber of Commerce and Industry (STCCI), the Ghana Chamber of Commerce and Industry (GCCI), and the Association of Ghana Industries (AGI). Promoting direct investment from domestic and foreign investors through investor forums can further stimulate economic growth and development.

Table 4: Major Economic Activities across the various sectors of the economy:

Industry (19.1%)	Agriculture (21%)	Services (59.9%)
• Cement and flour manufacturing • Cocoa and Timber processing • Metal fabrication • Micro enterprises • Real estate development • Quarry extraction/mining	• Fishing and fish processing • Food Production • Palm Oil cultivation and processing • Aquaculture • Animal Husbandry	• Hotel/Hostel/Restaurant • Bulk Oil Storage and Distribution • Transport and Logistics Services • Freight Forwarding, Harbour and Port Services • Commerce • General Trading

2.5.2 Employment and Job Creation

2.5.2.1 Employment:

It is widely acknowledged that the private sector is the engine of economic growth. However, an economy heavily dominated by the private informal sector can hinder accelerated economic development. This is primarily because taxing self-employed individuals, who largely constitute the private informal sector (such as market women and street vendors), is challenging. Consequently, with a limited tax revenue base, the Metropolitan Assembly may struggle to generate substantial revenue from the Internally Generated Fund (IGF). The employment statistics reveal a significant gender disparity in sector participation. A substantial majority of females (81.7%) are engaged in the private informal sector, compared to 56% of their male counterparts in the same sector. This highlights the need to focus on women when developing strategic policies for the private informal sector, such as revenue collection and market construction. Conversely, a higher proportion of males are employed in the private formal (23.0%) and public (government) sectors (18.7%), compared to females, who represent 8.0% in the private formal sector and 9.7% in the public sector. These statistics underscore the importance of tailored policy interventions that address the distinct employment dynamics of both genders within the Metropolis.

2.5.2.2 Job Creation:

Agriculture: Agriculture remains a vital part of the Metropolis's economy, providing full-time and part-time employment for about 21% of the population. Approximately 85,000 people are engaged in agriculture, with 6% involved in fishing. Over 70% of the near-rural population

depends directly and indirectly on agriculture and related activities for their livelihood. About 35% of the Metropolis's land area is cultivable, with an average farm size of 2 acres. Most farmers practice subsistence farming, although there are some commercial farms. Farming systems include mixed farming, mixed cropping, and mono-cropping of tree crops such as coconut, oil palm, citrus, and cocoa. Fishing is a common occupation, but state-of-the-art processing facilities and resources are lacking to acquire outboard motors, highlighting the need for support to enable more people to enter the fishing industry more productively and sustainably.

Food Production: Major crops grown include cassava, plantain, maize, rice, yam, and cocoyam. Vegetables, particularly exotic varieties, are also widely cultivated. Commonly reared animals include poultry, sheep, and goats, with cattle reared by a few farmers. There is an increasing trend in the rearing of rabbits, grass cutters, and snails. The Metropolis also has gari, oil palm, and palm kernel processors, with products purchased by soap manufacturers and fish processors in the area. The sector faces several challenges, including poor storage and marketing leading to post-harvest losses, loss of farmlands to human settlement, reliance on natural rainfall, use of simple farm tools, inadequate agricultural extension workers, insufficient funding for agricultural programs, and lack of logistics for field activities. To address these challenges, there is a need to develop irrigation facilities, especially for vegetable production, expand access roads to food production centres, and recruit more field staff (AEAs) to support farmers' extension services delivery.

Industries: As farmland diminishes, there is a need to create an enabling environment for private investors to establish manufacturing industries. The Metropolis's industrial sector includes manufacturing, wood processing, and agro-processing, with manufacturing being the most prominent. Industries specialize in oil palm and rubber products, with wood processing industries primarily located between Sekondi and Takoradi. However, many of these industries operate below capacity or are non-functional. The Ghana Free Zones Authority (GFZA) has proposed an industrial site to facilitate an export processing zone in Sekondi.

Takoradi Port and Albert Bosomtwi-Sam Fishing Harbour: Built in 1928, the Takoradi Port is a vital gateway to the middle and northern parts of Ghana and the Sahelian countries of Burkina Faso, Niger, and Mali. The port handles over 600 vessels annually, representing 37% of national seaborne traffic, 62% of national exports, and 20% of total national imports. Also, constructed in 1999, the Albert Bosomtwi-Sam Fishing Harbour in Sekondi is managed as part of Takoradi Port. It includes the Inner Fishing Harbour, the Canoe Basin, and the Outer Fishing Harbour, and is strategically located approximately 25 km west of Takoradi Port, north of Sekondi Naval Base.

Other Job Creation Initiatives: The Nation Builders Corps (NABCO) has employed 1,075 young graduates, significantly reducing the unemployment rate in the Metropolis. This initiative aligns with the Government's efforts to achieve SDG Goal 8, Target 8.6, which aims to substantially reduce the proportion of youth not in employment, education, or training by 2030.

2.5.3 Informal Economy

Retail Business: The retail landscape of Sekondi-Takoradi is predominantly composed of informal traders. These traders are distributed throughout the city, offering a wide range of products and services. They are primarily concentrated along the main roads and enjoy substantial support from residents. The existing retail facilities can be categorized as follows:

- *Street vendors (hawkers):* These vendors carry goods in their hands or on their heads.
- *Vendors with minor facilities:* These traders use tables to display their goods.

- *Makeshift structures/sheds:* Often found on the sides of roads.
- *Lockable containers or prefabricated structures:* Used for secure storage and display.
- *Purpose-built retail buildings:* These can be single or double story, built individually, or arranged in a linear or clustered market format.

Mechanics and Local Artisans: The Kokompe No. 1 and No. 2 areas host a significant number of mechanics and local artisans, including wood furnishers, welders, hairdressers, and barbers. Most of these artisans are middle-aged and have little to no formal education, serving primarily local customers from the Sekondi-Takoradi area. The Kokompe areas have access to social services such as electricity, pipe-borne water, toilet facilities, and waste collection, though these facilities are not only inadequate but also require upgrades.

Market Activities: There are two major markets in the Metropolis, including the Takoradi Central Market and Sekondi Market. Each market primarily serves its surrounding communities, with the Takoradi Central Market being the largest and most vibrant. The Takoradi Central Market was initially built to serve the workers involved in the construction of the Takoradi harbour. It was designed as the central trading hub for STMA. Its strategic location makes it the most accessible market in the Metropolis. Covering one square kilometre, it is the largest market in the Western Region in terms of size, number of traders, and sphere of influence. It lies at the heart of the Central Business District (CBD), surrounded by ancillary services such as banks, transport services, and insurance companies. Currently, the market is undergoing reconstruction to better serve its commercial role. The Sekondi Market is the second most vibrant commercial centre in the Metropolis, following the Takoradi Central Market. However, it is not in optimal condition, as it faces challenges such as weak physical structures, clogged drains, and inadequate space for traders. Efforts are needed to address these issues to improve the market's functionality and support the local economy.

3. WASH SITUATION IN THE LOW-INCOME COMMUNITIES

3.1 Introduction

This section highlights the current wash situational conditions in the Sekondi-Takoradi Metropolis Assembly (STMA), reporting on the wash service delivery models, their coverage and service levels, and gives a summary of the main water supply challenges and gaps. In addition, it highlights the key strengths, weaknesses, opportunities, and threats of these wash delivery services.

3.2 Access to Toilet

3.2.1 Type of Toilets Used

It was discovered from the field that there is heavy dependence on public toilets by the residents within the communities, and they pay 50 pesewas to 80 pesewas per visit. Household toilets are generally not common, and it was reported to be generally about 30% or below in terms of coverage. It was only in one community, one electoral area (Asamansudu), that the coverage was rather higher, around 60% to 70%, because the assembly member managed to attract some NGOs to support household toilet improvements in communities within the electoral area. The low level of household toilet coverage was confirmed among participants of community engagements, and the results showed an average of 20% of them responding that they had household toilets.

3.2.2 Sanitation Service Levels

The results of the household survey conducted as part of the development of the WASH registry for low-income communities in STMA shows a very low level of sanitation services in the various low-income communities as shown in the Figure below:

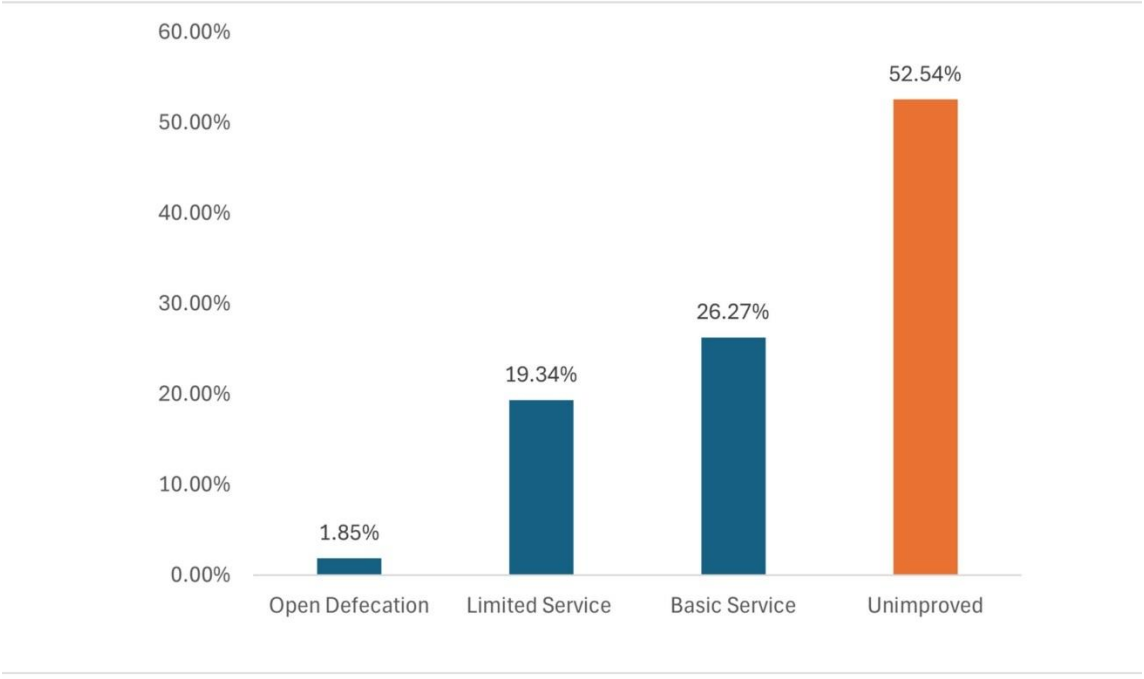


Figure: Sanitation Service Levels in Low-Income Communities in STMA

- Over half (52.54%) of households rely on unimproved sanitation services, which are mostly the poorly managed communal toilets in communities, such as latrines with broken slabs, bucket latrines, or non-functional latrines. Unimproved sanitation facilities are associated with health risks due to the potential for contamination and lack of hygiene standards. The high percentage here signifies a pressing need for interventions to ensure households obtain access to their sanitation facilities in the various communities.
-
- All the communities admitted that open defecation is ongoing. Community members practice that by defecating either at the beach or within some forests or bush somewhere, and others do "wrap and throw". However, only a small percentage of households (1.85%) reported that they practice open defecation, which indicates that most households that reported that they depend on unimproved facilities or dilapidated facilities usually end up practicing open defecation at some point in time. Open defecation still poses health and environmental risks and highlights the need for community-wide sanitation awareness and intervention. Approximately 19.34% of households rely on limited sanitation services. Limited service in such low-income communities includes shared facilities among multiple households or household facilities that do not meet all sanitation standards, such as accessibility, hygiene, or privacy. This indicates that a significant portion of the population has only partial access to safe and private sanitation facilities, which may impact hygiene and overall well-being.
- Again, only 26.27% of households have access to basic sanitation services. Basic service refers to the use of improved sanitation facilities that are not shared with other households, ensuring better privacy and hygiene standards. However, this still suggests that only about a quarter of households have access to adequate household sanitation facilities.

The data shows a high dependency on unimproved sanitation facilities, indicating substantial room for improvement in sanitation infrastructure. With only about a quarter of the population (26.27%) having access to basic sanitation services, there's a significant gap in adequate sanitation coverage. Prevalence of open defecation, especially along the beaches of the Metropolis, and the large reliance on unimproved services (communal toilets) suggest that STMA faces a sanitation challenge that requires immediate attention for better health outcomes and environmental protection.

3.2.3 Toilet Technologies, Conditions, and Management

In terms of the type of facilities, their conditions, and management arrangements, most of the public toilets that were found in the communities were either the water closet or pour-flush, and a good number of them were aqua privy technology (aqua privies have never functioned the way they should because of inappropriate management). Largely, all the public toilets were observed to be in very bad condition, with very strong odour, unhygienic seats and floors, and receptacles for cleansing materials were awful. The toilet structures themselves were not found to be in good condition. Regardless, some of the public toilet construction designs were inclusive in the sense that one room is provided with a seat for the aged and people with disabilities, even though the facility is a squat toilet. Unfortunately, the seats were found to be unsafe with visible stains of faeces. In two communities, Nkontompo and Kojokrom, there

have been recent public-private partnership arrangements that have led to the construction of relatively new public toilets, but due to higher usage fees, not many community members patronise them.

3.2.4 Public Toilet Management Arrangements

The management of the public toilets owned by STMA has all been given under franchise management, and community members reported that they are uncomfortable with partisan influence in the franchise management. Some community members think that assembly members should take up the management of the public toilets irrespective of political considerations. Even though in a few cases, assembly members hold the franchise, in many cases, the franchise is in the hands of political party appointees.

Community members think that the revenues they generate from the facility are not properly used or properly accounted for. They are helpless because of the franchise arrangement. Unfortunately, there is no clear operational monitoring arrangement from STMA. The franchise holders manage the facilities the way they want, and that is why the facility is so bad, but nobody can do anything about it. The engagements with community stakeholders showed members' preference for household toilets, and they were positive about accepting a financial mechanism and technical support that would create opportunities for them to acquire household toilets.

3.2.5 Institutional Latrines

Most schools that were visited had sanitation facilities. Not all of them were in good shape, and some had been closed. All the schools visited with sanitation facilities were not up to the WASH in school standards. Some had fewer drop-holes serving the population of the school. Most of the sanitation structures in the school were dilapidated. Some community members confirmed that school children also practice open defecation during school contact hours or visit the public toilet if they have money to pay for that service. One school had an international donor constructing a toilet facility for them. The team visited one health facility at Kojokrom. This facility is newly funded by the ongoing Twin Cities Partnership Project in STMA. The facility had access to sanitation facilities. Also, there are specific disaggregated data on sanitation facilities for schools and health facilities on the STMA WASH Registry (see https://washregistry.stma.gov.gh/).

3.3 Water Services

3.3.1 Water coverage and service levels

Water Service Levels

The analysis of the water service levels in the STMA is captured by Figure 6. The analysis from the 2021 PHC data shows that, on average, half of the population in STMA has access to potentially safely managed water, which is a positive indicator but requires further enhancement to meet the SDG targets (largely in terms of quality measures). Also, about one-third of the population relies on basic water services, which meet basic needs but may not be as reliable or safe as safely managed services, showing a need for improvement in water

infrastructure. The overall low reliance on unimproved water sources in STMA indicates relatively good access to basic water services, though the goal should be zero dependence.

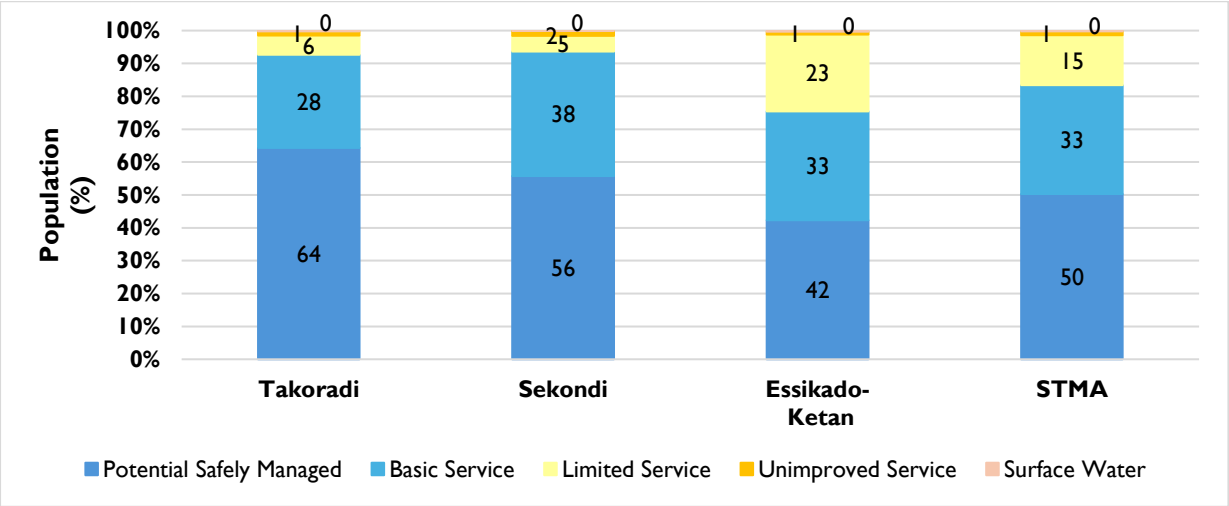


Figure 6: Water Service Levels in STMA

There are significant disparities between the different sub-metro areas within STMA, particularly between Takoradi, Sekondi, and Essikado-Ketan. Essikado-Ketan sub-metro lags in terms of safely managed water and has a higher reliance on limited services. The data highlights the need for continued investment in water infrastructure to increase the proportion of safely managed water services and reduce reliance on basic, limited, and unimproved services. Efforts should focus on upgrading water facilities, improving water quality, and ensuring a consistent supply, especially in areas like Essikado-Ketan, where service levels are lower. Meeting the SDG 6 target of ensuring availability and sustainable management of water for all requires addressing these disparities and improving service levels across all categories.

3.3.2 Water Infrastructure

Sources of Water for Domestic Use in Low-Income Communities

Most of the communities are supposed to be dependent on water supply from the Public Standpipes of the Ghana Water Limited (GWL). However, the flow is reported to be very unreliable. More than 50% of the time, community members do not have water. There are times when the water does not flow for about two weeks. There are a few places that, in a week, can have water in three days, but not a 24-hour flow. The communities are largely served by public or private standpipes, which are primarily supplied by GWL.

Households that have direct connections were reported to be about 20% or less during focus group discussions. Due to the erratic flow of water from GWL, most community members store water for domestic use. In times of no flow from GWL, they also rely on hand-dug wells, tanker supplies (standpipes), and informal suppliers who fetch in gallons elsewhere to sell. Some communities are privileged to have their Members of Parliament donate mechanized boreholes for them.

Aside from irregularity of water from GWL, the community commonly reported poor-quality water they get from GWL. They complained of instances when the tap is opened and the water that flows is brownish or reddish. Even when the flow is clear, sediments settle at the bottom when it is left for a day or more. Households have resorted to using water from public taps for cooking and washing.

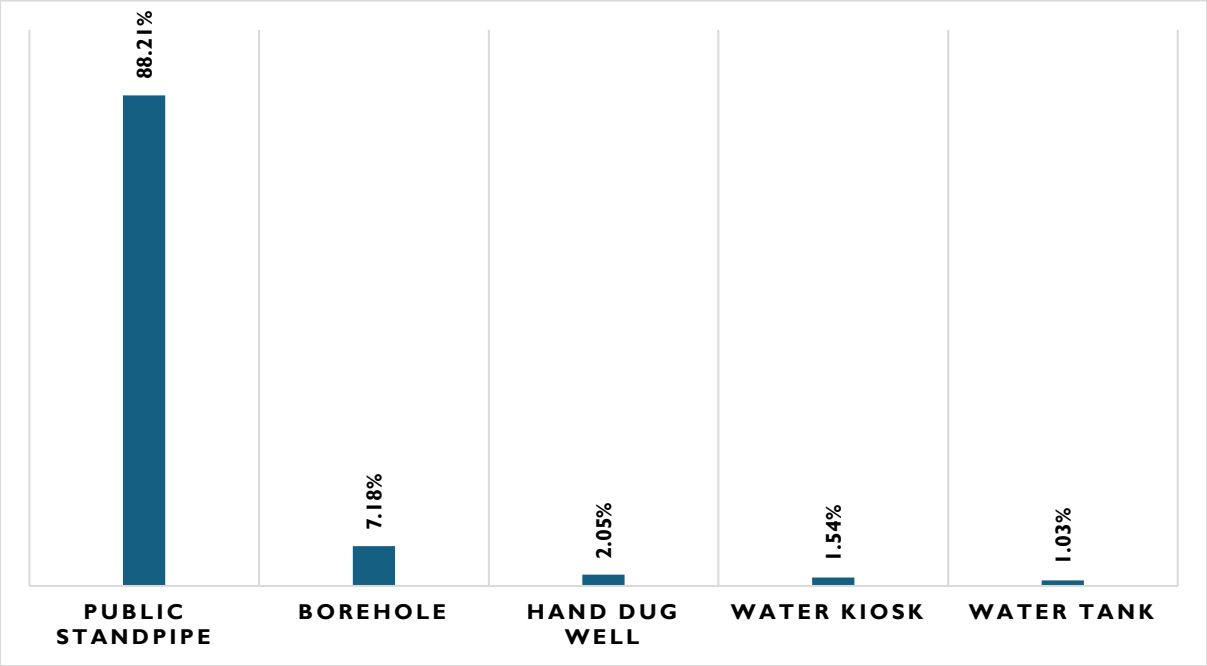


Figure 7: Source of Water Available to Low-income Communities for Domestic use

Main Drinking Water Sources

The main sources of drinking water for low-income households in the STMA show significant reliance on sachet water, with other sources like standpipes, dug wells, and boreholes also contributing to the water supply. The majority (81.54%) of households depend on sachet water as their primary drinking water source. This high percentage indicates a substantial market for sachet water, likely due to its perceived convenience and affordability, but also raises concerns about environmental sustainability due to the potential for plastic waste and affordability issues for the low-income communities.

Unfortunately, the proportion of LIC households (3.96%) who have access to piped water inside their dwellings suggests that a relatively small proportion has direct access to piped water within their homes, reflecting limited access to private external water connections. The minimal use of boreholes (0.77%) and dug wells (1.55%) in STMA is largely due to the salty nature of groundwater sources in the city. However, this also suggests that there may be untapped potential for utilizing groundwater resources. Investment in drilling innovations and maintaining boreholes could provide more sustainable water sources for most low-income communities.

Table 5: Main Source of Drinking Water for Low Income Communities

Main Source of Drinking Water for LICs	Proportion of Population (%)
Sachet water	81.54%
Piped water to neighbour	5.59%
Public Standpipe	5.48%
Piped water inside premises	3.96%
Dug Well	1.55%
Borehole	0.77%
Bottled water	0.66%
Tanker Truck	0.15%
Others/Water Kiosk/ Rainwater)	0.15%
Surface water	0.14%

Based on the findings above, expanding access to reliable piped water could reduce dependence on less reliable and potentially unsafe sources for low-income households in STMA. Also, the analysis revealed that public/ communal standpipes and shared water connections are crucial for many households and are still an important resource in the local community fabric of STMA. Improving and maintaining these communal water points can ensure safer and more reliable access to water. Again, the small but notable reliance on surface water and other non-improved sources highlights the risk of waterborne diseases. Ensuring that all households have access to safe drinking water is essential for public health.

Water Quality Concerns

The survey conducted did not include formal quality tests on the various water sources used by low-income households in the Sekondi-Takoradi Metropolitan Assembly (STMA). However, household surveys, community focus group discussions, and interactions with stakeholders revealed several reports of water quality issues. These issues included the presence of impurities and dust, with some reports of water from the piped system appearing brownish at standpipe points. Despite these concerns, a significant majority (96.78%) of households indicated that they do not treat their water before use. Among the households that acknowledged the need to treat their water before use (26.63%), common treatment methods included the use of additives such as aqua tabs, filters, alum, or chlorine. However, the most prevalent method, used by 64.75% of households, was to "let it stand and settle" before usage. This practice is a direct response to the reported presence of impurities and dust in the water, allowing particulate matter to settle at the bottom before consumption. The preference for letting water stand and settle before use is a low-cost, albeit less effective, method of addressing visible impurities. This method does not eliminate microbial contaminants, which pose a significant health risk.

The absence of formal water quality testing in the survey highlights a significant gap in understanding the true quality of water sources used by low-income households. This gap underscores the need for comprehensive water quality monitoring to ensure the safety and health of the population. The discrepancy between the reported water quality issues and the high percentage of households that do not treat their water suggests a potential underestimation of waterborne health risks. The perception that water does not need treatment could be due to a lack of awareness or access to affordable and effective water treatment options. The frequent reports of brownish or discoloured water from the piped system indicate potential issues with the water supply infrastructure, such as aging pipes,

contamination, or insufficient treatment processes, which was corroborated by the Regional Ghana Water Limited Office. These issues need to be addressed to improve the overall quality of water supplied to households. The use of additives like aqua tabs, alum, and chlorine by a smaller percentage of households highlights a need for increased access to and education about effective water treatment methods.

3.3.3 Water service delivery models

Water Infrastructure Management Models

Water supply services in STMA are provided through a mix of service delivery models. Firstly, the city is extensively supplied by the GWCL Pipe-borne water supply systems, with a mix of household connections and public standpipes in most communities within the STMA. Also, depending on the leadership dynamics of a community, the public standpipes may be managed and operated by a selected team or individuals appointed by the community. However, we found that in some instances, individual private businesses can also be given a public standpipe to operate and manage. In some cases, these individuals erect big water storage tanks and sell water to communities from the standpipes connected to these water tanks. It was found that overall, about 88% of households in the low-income communities depended on the public standpipes in STMA.

Boreholes also represent a significant type of water supply for the various households (7%) in low-income communities in the STMA. These boreholes are usually constructed by the STMA, the Member of Parliament (present and past), Corporate Institutions, donors/NGOs or in some cases through the benevolence of businessmen, opinion leaders, traditional leaders or local activists within the STMA. Some private individuals also have boreholes constructed in their houses, which they store in a storage tank to resell to households in the communities. During the time of the assessments, some of these boreholes were non-functional due to improper management regimes and accountability, and communities are unable to repair the non-functional boreholes. The boreholes were managed by the communities, where on some occasions they practice pay-as-you-fetch, and in other instances, households do not pay for the water. In several places, the study revealed that the management structure for the operations and management of the borehole facility was non-existent or ineffective.

Again, the low-income communities also depend on hand-dug wells. It was observed that some communities also depended on a Water Tanker to supply water to various points in their communities. In some hard-to-reach communities, 'Aboboyaa' (Tricycles) was used to cart water to various households at a fee, using 'Kuffuor' gallons (25 litres). Generally, it was observed that the limitation to the use of boreholes and hand-dug wells was largely due to the salty nature of most of these types of water facilities in the communities. In some instances, these facilities have been abandoned due to the salty nature of the water received from them.

Mode of payment to water service providers

The data provides insights into the different modes of payment utilized by households in STMA for accessing their main water sources. Understanding these payment modes is crucial for evaluating the affordability, accessibility, and sustainability of water services in the city, especially for low-income households. The data shows that 49% of households use the Pay-As-You-Fetch (PAYF) method, making it the most common payment mode. This approach allows households to pay for water as they need it, which can be advantageous for managing

limited financial resources. However, the high reliance on PAYF indicates that many poor households may not have consistent access to water or stable financial means to afford monthly payments.

Also, about 19% of households report not making any payment for their main water source. This could include households relying on natural sources, communal sources, informal arrangements, or those benefiting from subsidized or free water services. While no payment can be beneficial for low-income households, it raises questions about the sustainability of the water supply and the ability of service providers to maintain infrastructure without revenue. The proportion of households (0.3%) that use pre-paid water services is almost negligible. This is where they pay in advance for a set amount of water. Pre-paid systems can help manage water usage and ensure payment, but this is not widely implemented in the STMA. The low adoption of pre-paid systems suggests a potential area for expansion, particularly in areas with unreliable payment collection.

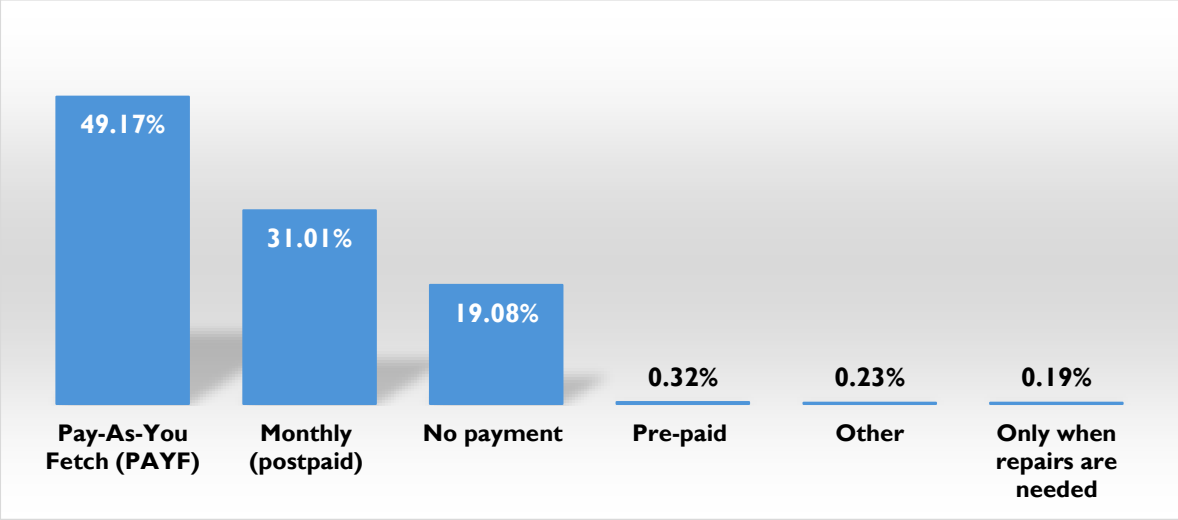


Figure 8: Mode of Payment for Main water Source

Cost of Water

The data on the cost of water in STMA reveals significant variability depending on the source and availability of water. This variability has important implications for water affordability, accessibility, and sustainability for low-income households in the city. Community members typically pay GHC 1 to GHC 2 for 25 liters of water when purchasing from informal suppliers during regular supply periods. During periods of prolonged interruption in water supply from Ghana Water Limited (GWL), the cost increases to GHC 3 to GHC 4 for the same 25 liters. This significant price hike during supply interruptions highlights the vulnerability of the community to water scarcity and the increased financial burden during these times.

The cost of water for those using PAYF systems varies widely, ranging from as low as GHp 0.2 (2 pesewas) to as high as GHC 700, depending on the size of the container. This wide range suggests a flexible pricing system that can accommodate different economic levels and consumption needs. The PAYF system offers flexibility in pricing, which can be beneficial for low-income households as it allows them to purchase water in quantities they can afford. Also, the increase in water costs during supply interruptions underscores the need for a reliable and consistent water supply. Strengthening the infrastructure and resilience of the water supply system is crucial to prevent these interruptions and protect the community from sudden price surges.

3.3.4 Summary of main water supply challenges and gaps

Household Perspectives

According to household reports, the biggest challenge in water supply is reliability (26.43%), followed by concerns about water quality and safety (19.53%), availability (13.67%), and affordability (10.79%). Notably, only 15.56% of households reported no challenges with their current water supply, indicating widespread issues across the Metropolis.

- *Reliability of Water Supply:* Most communities within the Sekondi-Takoradi Metropolitan Assembly (STMA) are reliant on water supplied by Ghana Water Limited (GWL). However, this supply is reported to be highly unreliable. Community members experience water shortages more than 50% of the time, with instances where water flow is absent for up to two weeks. In some areas, water is available only three days a week, and even then, not continuously for 24 hours. This irregularity poses a significant challenge for household water needs.
- *Accessibility and Inclusivity:* Public standpipes in the communities are not designed to be accessible for individuals with disabilities, creating an additional barrier to equitable water access. Ensuring that water facilities are inclusive and accessible is crucial for meeting the needs of all community members.
- *Water Quality:* The quality of water supplied by GWL is frequently reported as poor. Community members have complained about instances of brownish or reddish water flowing from taps, indicating potential contamination and safety issues. This raises concerns about the health implications of using such water for drinking and household purposes.

Main Challenges Identified

The key challenges related to water supply in STMA that were expressed by all other stakeholders can be summarized as follows:

- Coverage of Basic Services: Esikado-Ketan Sub-Metro exhibits low coverage of at least basic water services. A quarter (25%) of the population in these areas depends on other unimproved sources, highlighting a critical gap in service provision.
- Coverage of Safely Managed Services: Only about 20% of households in low-income communities have direct connections to safely managed water services. This limited coverage significantly hampers access to reliable and safe water supplies.
- Water Availability and Reliability: The availability and reliability of water supply in low-income communities are major issues. Frequent interruptions and inconsistent supply schedules prevent households from accessing a continuous and dependable water source.
- Water Quality Issues: Poor water quality from the piped system, characterized by discoloured and potentially contaminated water, poses significant health risks and discourages reliance on the public water supply.
- Data for Performance Monitoring: There is a lack of comprehensive data required for effective performance monitoring of the piped water supply system. This data gap hinders the ability to assess and improve the water service delivery efficiently.
- Management and Financial Arrangements: The absence of clear management and financial structures necessary for sustainable water service provision, especially at the community level, poses a significant challenge. Effective governance and financial planning are essential for ensuring long-term water service sustainability.

3.4 Hygiene Knowledge and Practices

3.4.1 Knowledge, Attitude, and Practices

There is a good sense of understanding of what hygiene practices are, especially hand washing. This is largely due to the COVID-19 campaigns in the past. People generally understand what they must do, but in terms of attitude and practice, it is very low and inconsistent. This can be linked to the toilet access and defecation practices.

During the community engagement at Ketan, participants shared their practices and experiences with hand washing.

> *"When I go to the public toilet and return home, I mostly continue my chores without washing my hands."*
>
> *"Also, in my house, we usually fetch water down in the house in readiness for hand washing, so that when we return from the public toilet, we can use it to wash our hands."*
> ***Women Participants from the FDG in Ketan Electoral Area***

There is a very inconsistent practice of hygiene amongst the residents, mostly because of the irregular flow and quality of water, and unimproved toilet practices, as the most critical issue.

3.4.2 Hand-Washing Facilities

Approximately 27.3% of households in low-income communities in STMA have access to basic hygiene services, which typically include facilities for handwashing with soap and water. At the household level, there are few designated hand-washing facilities, which could be due to a lack of access to household toilets. Public toilets commonly have some sort of hand-washing facility with water and soap, but they are in very bad condition. The water used for handwashing is usually bad, and the containers that hold the water are unkempt. The majority of households (68.6%) have no hygiene service, which means they lack basic handwashing facilities. This is a significant concern as it indicates that over two-thirds of the population cannot practice proper hand hygiene. This lack of access poses severe health risks, particularly in preventing the spread of communicable diseases. There is generally a huge room for improvement when it comes to hygiene knowledge and hygiene practice.

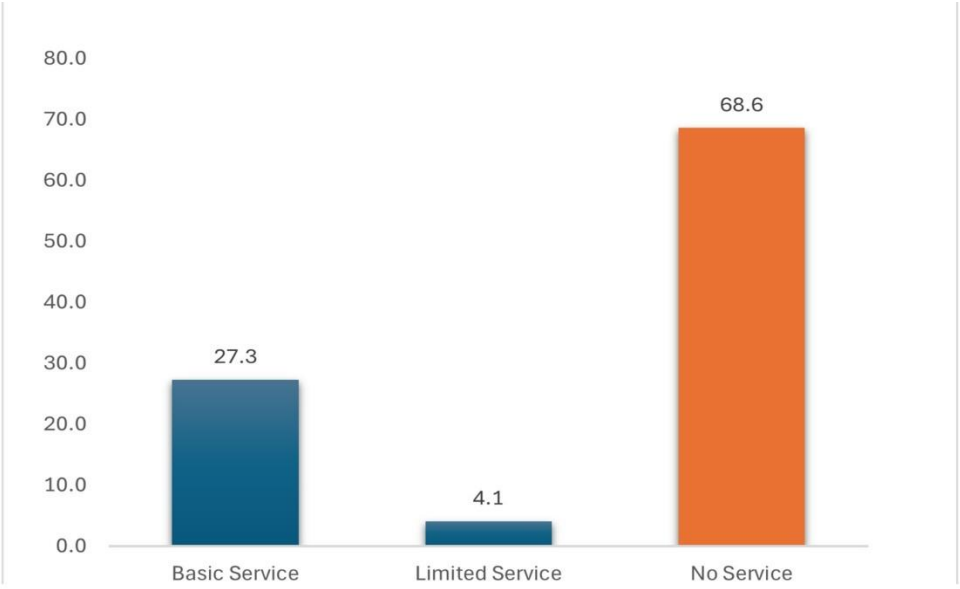


Figure: Hygiene Service Levels in Low-Income Communities in STMA

3.4.3 Hand Washing at the Institutional Level

At the school level, some days in the classroom timetables have been designated for hygiene education and promotion. Some school administrations also use the Wednesday worship period for such education. Students are conscious of handwashing at critical times. The Environmental Health Department and the NADMO visit schools and educate them on climate change issues. At the health facility, there was no Veronica bucket[5] at the entrance of the facility, but the manager of the facility indicated that the facility is still being set up. The Metropolitan Health Directorate is aware of the situation, and plans are in place to provide handwashing facilities. Also, there are specific disaggregated data on handwashing facilities and practices for schools and health facilities on the STMA WASH Registry (see https://washregistry.stma.gov.gh/).

3.4.4 Hygiene Education

The Assembly uses the traditional media (information centres) for hygiene education and promotion in the communities. Community information centres are given jingles to be played every morning and evening at the various communities. Environmental Health Officers are sent to the mass media (the radio stations) to educate community members. The officers address call-in questions.

3.4.5 Menstrual Hygiene

In Ghana, the government and its development partners provide structured menstrual hygiene education and services to young girls within basic and second cycle educational institutions. However, in the basic schools that were accessed during the rapid engagements in the communities within STMA, there was no evidence of any menstrual hygiene facilities (change room) at the schools. Menstrual education at the school was reported to be very inconsistent and schools lack the capacity to provide support to young girls in school when they are in their menses.

3.5 Solid Waste Management

3.5.1 Solid Waste Services and Practices

Community members depend heavily on skip container services under the SIP agreement or arrangements. Few communities do not have containers, so they practice illegal or open dumping. Communities that do illegal dumping claim that they are filling valleys in the community because of the topography of the land. The containers are largely inadequate for the growing communities. There are some communities where there are one or two containers, and they are located far away from a section of the community. Community members from such areas struggle to send their waste to the skip containers, and therefore, every other available space is used as a dumping site. This illegal dumping within the communities causes the drains to choke when it rains. No house-to-house refuse collection was observed within the communities. In communities where there were reports of house-to-house waste collection practice, e.g., at Amanful West, the operations have been halted by the service provider (Zoomlion) due to the failure by households to pay service fees and

[5] A plastic bucket fitted with a tap to provide running water for hand washing particularly at public facilities such as schools and health facilities.

failure on the part Zoomlion to pick the refuse from the houses on time. The challenge of house-to-house collection in the low-income communities in STMA was confirmed at the Waste Management Department, indicating that two service providers are withdrawing their services. Affordability and willingness to pay for a high level of service were reported as critical to sustaining any sustainable house-to-house collection, aside from the challenge of physical accessibility within the communities. A means testing study needs to be conducted to ascertain the feasibility of the waste collection system.

3.5.2 User Fees

Community members pay fees when they dump in the skip containers, and the fee is subjectively determined by the attendant at the container site. The pay-as-you-dump arrangement was agreed by the general assembly to raise funds to manage the container sites. Community members always perceive the price charged as expensive and that they are being cheated. Since the skip containers are not covered, some community members decide to dump their solid waste free of charge at odd hours when the attendant is not available at the site. This causes early fill-up of the skip containers. It was observed that the environment around the skip containers visited was quite clean due to the cleaning work by the attendants.

3.5.3 Management of Skip Containers

The management of the skip containers is largely handled by assembly members, with very few in the hands of political actors. The management has all been given under a franchise. Proceeds from the dumping fees are used to facilitate the timely lifting of the containers when they are full. Any excess revenue is used to motivate community members during communal labour. Trucks that lift the containers are not many, it is either STMA's or Zoomlion's truck. However, the assembly members had a way of motivating the operators to respond to their calls when their containers were full to lift them to the landfills. But when there are breakdowns, there are delays that lead to overspills, which can cause dirt around the skip containers.

3.5.4 Solid Waste Management at the Institutional Level

At schools, the MSHEP confirmed that some of the schools practice waste segregation, but it was observed that most schools practice waste burning. This was not different at the health facility. Currently, the Kojokrom CHPS compound practices burning, which poses a high risk to health due to dioxin contamination.

3.6 Community Governance and Mobilisation

3.6.1 Community Leadership

There is the existence of community leadership in each of the 21 communities visited. The assembly members, however, tend to be the fulcrum around whom all community development actions revolve. It was observed that community members see the Assembly member as the focal point for all community development issues and discussions. Besides the community leaders and assembly members, some of the communities have some youth groups, and women's groups (seamstresses and hairdressers), but their activities do not focus specifically on WASH issues. These groups, however, have the potential that we can be tapped when mobilising the community for WASH interventions. They have a good rapport with their respective assembly members. There was only one case at Nkroful in the Fijai electoral

area, where they have a ten-member youth task force checking people who are dumping indiscriminately, and culprits are made to pay GHC 500, an initiative that is worth scaling up or replicating in other communities. There is no structured arrangement for engaging religious leaders, even though they are strategically positioned to contribute greatly to community mobilisation and sensitisation.

3.6.2 Community Mobilisation and Communal Labour

When there are communal problems, community members consult the assembly members, and they put together all the other stakeholders for discussions. Community members also rely on their MPs for support to address community needs. The support from the MPs can be politicised, where people who align with the same political affiliation tend to want to be prioritised for service access. There are traces of facilities within the communities that are financed by MPs, whether through their common fund or personal resources.

When there are WASH issues (choked drains and weedy surroundings), the assembly members organise the youth to do communal labour to clean the drains and the environment. Not all community members show up for communal labour, but it was reported that the numbers that come are usually encouraging enough for the planned activity. Generally, communal labour is considered a monthly activity, but communities can consistently organise it partly due to resource constraints.

3.7 Information Dissemination at the Community Level

Different channels of communication are used for the dissemination of information in the communities. The most common of them are the Community Information Centres (CICs), and the emerging medium is the WhatsApp platform. The assembly members have established WhatsApp platforms, especially amongst the youth groups, that are used to exchange information about their respective communities. Other communities use megaphones to pass on information. The traditional radio, TV, and newspapers are hardly used because of the proliferation of the space. For example, given that there are over 20 FM stations in STMA, communities cannot engage one and hope all community members will be listening in, nor do they have the resources to engage all the stations. Thus, CICs are the traditional means of disseminating information, which most of the communities rely on.

3.8 Gender, Disability, Inclusion, and Climate Resilience

3.8.1 Gender

Generally, at the local level, Community leaders, by default, are perceived to be only males. When there is a call for community leaders' meetings, there is almost a 100% likelihood that all would be males. Females are not consciously part of community leadership. For gender balance issues in decision-making and developmental processes, women are to be incorporated, and this should be prioritised in the strategic plan. However, it is worth noting that the STMA has taken steps to ensure Gender mainstreaming in its activities, which is marked by the emergence of female Assembly members, and the active position of queen mothers and women in strategic leadership positions in the Metropolis, such as Sub-Metro Heads and Unit heads.

3.8.2 Disability

WASH facilities are largely not disability friendly. In public toilet facilities where provisions had been made for the aged and people with disability, the seats were so bad and unhygienic for the aged and people with disability to use such facilities. The entrance to most facilities poses a challenge for disabled persons. It is, however, worth mentioning that STMA has supported the social welfare office to be disability friendly. The main STMA office is yet to be disability friendly.

3.8.3 Inclusion

Decision-making is weak in terms of inclusivity. The youth and women are not consciously put at the forefront of decision-making. Mostly, they manage to get their grievances across through the assembly members.

3.8.4 Climate Issues

The indiscriminate throwing away of solid waste creates a very poor environmental status within the communities. The gutters get choked, causing flooding issues when it rains. There is also the prevalence of open defecation, especially around the beaches. The beaches can be used to create very loadable climate actions and economically positive initiatives that can provide livelihoods and incomes to the youth.

3.9 Analysis of Key Strengths, Weaknesses, Opportunities, and Threats (Swot) in Wash Delivery in Low-Income Communities in STMA

This section presents a comprehensive SWOT analysis as a strategic planning tool to evaluate internal factors (strengths and weaknesses) and external factors (opportunities and threats) impacting the delivery of Water, Sanitation, and Hygiene (WASH) services in the low-income and informal communities within the Sekondi-Takoradi Metropolitan Assembly (STMA). The analysis is based on findings from field engagements and validated by a multi-stakeholder group, serving as a foundation for strategic decision-making to capitalize on strengths, mitigate weaknesses, leverage opportunities, and navigate potential threats effectively.

3.9.1 Strengths for Improvement in WASH Services Delivery

a. Internal Capacity and Collaboration for WASH Services Delivery in STMA

STMA's human resources are equipped with the necessary skills and expertise to implement comprehensive WASH strategies, ensuring successful program execution and sustainability. The dedicated Environmental Health Unit plays a critical role in maintaining and improving environmental health standards, essential for preventing waterborne diseases and promoting hygiene. The assembly's strong Public Relations (PR) Unit is pivotal in raising awareness and mobilizing support for WASH initiatives from a wide range of stakeholders, including the community, government agencies, NGOs, donors, and the media. Effective communication by the PR Unit ensures that WASH projects are well-publicized and receive the necessary resources and attention. Furthermore, STMA excels in fostering inter-departmental and organizational collaboration, which promotes a holistic approach to addressing WASH challenges. By coordinating efforts and avoiding duplication, STMA maximizes the impact of its interventions, leading to more sustainable outcomes. This collaborative environment leverages the strengths of various stakeholders, integrating diverse perspectives and expertise to enhance the efficacy of WASH programs.

b. Legal and Regulatory Framework, Institutional Capacity, and Enforcement in WASH Services Delivery

The legal mandate of STMA provides a comprehensive foundation for establishing water quality standards, sanitation practices, waste management regulations, and community hygiene standards. The revision of bylaws in 2016 has strengthened this framework, offering clear guidelines that support the Assembly's WASH mandate and align with broader national and international objectives. STMA's institutional capacity, supported by legal frameworks, empowers local authorities to regulate and support community-driven WASH initiatives. This capacity includes the requisite human resources, organizational structures, and technical expertise necessary for the successful implementation and monitoring of WASH strategies. Through coordinated efforts across various departments and collaboration with external stakeholders, STMA adopts a holistic approach to addressing WASH challenges.

Enforcement of behavioural change communication (BCC) through by-laws is a critical component of STMA's strategy. These by-laws enable the regulation and promotion of positive WASH behaviours within communities, ensuring compliance with established standards and practices. By effectively enforcing these regulations, STMA fosters a sustainable environment for WASH improvements, promoting hygiene, proper sanitation, and efficient waste management.

c. Community Leadership, Cohesion, and Local Initiatives in WASH Services Delivery

Robust local leadership, including Assemblymen, Unit Committee members, and traditional authorities, is deeply committed to advancing WASH programs. Their leadership is crucial for mobilizing resources, guiding projects, and ensuring the successful implementation of WASH strategies. Community cohesion is a defining feature of STMA, with effective collaboration between local leaders and the broader community. This unified approach facilitates coordinated efforts and resource sharing, ensuring that WASH initiatives are aligned with community needs and priorities. The synergy between Assemblymen, Unit Committee members, and traditional authorities enhances the overall impact of WASH interventions, promoting sustainable outcomes.

The communities within STMA are notably enthusiastic about improving WASH conditions and are eager to participate in development projects. This enthusiasm ensures strong community engagement and buy-in, which are critical for the adoption and sustainability of improved WASH practices. Engaged and motivated communities are essential for the long-term success of WASH initiatives. Furthermore, community-driven initiatives for maintaining water facilities demonstrate a strong sense of ownership and responsibility among community members. By proactively managing the maintenance of water infrastructure, communities ensure the functionality and sustainability of their water supply systems. This local initiative is vital for sustaining improved WASH conditions and contributes to the overall resilience of WASH services in STMA.

d. Existing WASH Infrastructure and Access to Local Resources for WASH Services Delivery in STMA

There is significant potential to enhance and expand these facilities to meet the growing demands of the community, ensuring sustainable and reliable WASH services. Communities within STMA have access to valuable financial and material resources that can be utilized to support WASH initiatives. These local resources are instrumental in the implementation and maintenance of WASH projects. By leveraging community funds and locally available materials,

STMA can reduce dependency on external funding sources and foster a sense of ownership and responsibility among community members. This approach not only enhances the sustainability of WASH services but also strengthens community commitment to maintaining and improving these essential facilities.

Furthermore, STMA has established effective communication channels that are crucial for the dissemination of information related to WASH initiatives. Community information centres, public address systems, and WhatsApp groups ensure that vital information reaches all community members. These communication platforms facilitate community engagement, promote awareness of hygiene practices, and encourage active participation in WASH activities. Through these channels, STMA can effectively mobilize community support, enhance public understanding of WASH issues, and drive behaviour change.

e. Shared Willingness among Communities to Support Improved WASH Services Delivery

Communities in STMA are keen to acquire WASH-relevant knowledge, driving demand for interventions and facilitating necessary behaviour changes. This eagerness to learn fosters a culture of continuous adaptation and innovation, essential for effectively addressing the dynamic challenges associated with WASH services. Also, the strong willingness of community members to participate in training programs demonstrates their dedication to enhancing WASH practices. Through training, community members gain the skills and knowledge needed to implement and sustain effective WASH practices, significantly contributing to public health and hygiene.

Again, community-led measures to regulate and maintain hygiene in toilet facilities highlight a proactive approach to sanitation management. These initiatives are crucial for promoting cleanliness, preventing disease spread, and ensuring a healthy living environment. The community's commitment to these measures underscores its dedication to improving sanitation standards. The willingness of communities to pay for improved WASH services indicates a high level of commitment to securing safe and reliable water and sanitation facilities. This readiness to invest in safer, cleaner, and more private toilet facilities demonstrates the value placed on access to quality WASH services. Such financial support is pivotal for the sustainability and enhancement of WASH infrastructure, ensuring that facilities meet the needs of all community members, including vulnerable groups such as children and the elderly.

f. Increasing Awareness and Sensitization on WASH Issues

Improving education levels within low-income communities significantly boosts the effectiveness of WASH interventions. Education empowers community members to understand and act upon educational materials, instructions, and health messages related to water, sanitation, and hygiene. This increased awareness facilitates the adoption of best practices and essential behaviour changes necessary for sustainable WASH outcomes. By equipping individuals with knowledge, STMA fosters a proactive approach towards addressing WASH needs, leading to healthier and more resilient communities.

Effective sensitization on solid waste management is paramount for promoting environmental stewardship and reducing pollution. Educating communities on proper waste disposal and management practices mitigates the adverse impacts of waste on the environment and public health. Such practices are crucial for maintaining clean water sources and preventing the spread of diseases. Through targeted sensitization programs, STMA encourages the development of sustainable waste management habits, thereby enhancing overall WASH

outcomes. These efforts contribute to a cleaner environment and support the broader objectives of WASH initiatives. Prioritizing education and sensitization, STMA can significantly advance its WASH agenda, ensuring the availability and sustainable management of water and sanitation for all residents.

3.9.2 Weaknesses in WASH Delivery in STMA

a. Limited financial resources, low capacity, and expertise to leverage alternative financing for WASH Delivery

The inadequate allocation of funding for WASH activities significantly restricts STMA's capacity to address urgent sanitation and hygiene needs. This financial shortfall limits the ability to undertake essential infrastructure projects and maintain existing facilities, ultimately compromising the quality and sustainability of WASH services. Enhanced funding mechanisms are necessary to support the comprehensive delivery of WASH services across the Metropolis.

A key weakness in STMA's WASH delivery is the limited capacity to secure and effectively utilize donor and grant funding. The lack of expertise and experience in navigating the complex donor landscape restricts access to significant external financial resources, essential for scaling up WASH interventions. Building the necessary skills and knowledge to engage with international donors and grant-making organizations is crucial for maximizing funding opportunities. The challenge of inadequate resource mobilization further compounds STMA's financial constraints. The limited effectiveness in mobilizing funds from government budgets, grants, and private sector partnerships significantly constrains the scale and impact of WASH programs. Developing robust resource mobilization strategies is vital for ensuring a consistent flow of financial resources to support WASH initiatives.

Financial limitations also extend to community members who lack the resources to invest significantly in improving WASH infrastructure and services. This financial constraint impedes the community's ability to actively contribute to and sustain local WASH initiatives, affecting the overall success and longevity of WASH projects. Addressing these financial and capacity-related weaknesses is essential for enhancing the delivery of WASH services within STMA. By improving funding mechanisms, building capacity to leverage donor and grant funding, and developing effective resource mobilization strategies.

b. Poor coordination and local expertise/skills at the community level to support WASH delivery

Strengthening coordination mechanisms is essential to ensure that all stakeholders work collaboratively and synergistically towards achieving common WASH goals. The communities within STMA frequently lack the technical expertise and skills necessary for successful WASH planning, facility management, community mobilization, resource mobilization, and social accountability. This deficiency in local expertise compromises the development, implementation, and sustainability of WASH projects. Implementing targeted training and capacity-building programs is vital to equip community members with the knowledge and skills needed to manage WASH facilities effectively and ensure their long-term viability.

Internal conflicts within community groups or committees responsible for maintaining WASH facilities present a significant challenge. These conflicts can disrupt maintenance activities and undermine the sustainability of infrastructure investments. Addressing and resolving these conflicts through effective conflict resolution strategies and fostering a spirit of collaboration

are critical for maintaining functional and reliable WASH infrastructure. Addressing these weaknesses is crucial for enhancing the delivery of WASH services in STMA. Improving coordination among stakeholders, building local expertise and skills, and resolving internal conflicts, STMA can significantly advance its WASH agenda.

c. Limited capacity, staffing and required expertise for WASH delivery

A major weakness in STMA's WASH delivery framework is the absence of a dedicated department for environmental health. Currently managed as a unit, environmental health does not receive the focused attention and resources necessary for comprehensive WASH service delivery. This structural limitation results in fragmented efforts and limited coordination, significantly hindering the ability to address WASH challenges effectively. Establishing a full-fledged department dedicated to environmental health would ensure more robust and coordinated efforts in tackling sanitation and hygiene issues. The Metro Environment Sanitation Unit is constrained by a shortage of qualified technical staff, which impedes the planning, design, and implementation of effective WASH solutions. This lack of expertise compromises the development and maintenance of essential WASH infrastructure and services. Addressing this staffing gap through targeted recruitment and capacity-building initiatives is critical for enhancing the unit's ability to manage and sustain WASH projects effectively.

The inadequate availability of solid waste management service providers is another significant weakness affecting WASH delivery in STMA. This limitation leads to improper waste disposal, causing environmental pollution and posing substantial public health risks, especially in low-income communities. Enhancing access to solid waste management services is vital for maintaining clean and hygienic environments, which are fundamental to effective WASH delivery. Addressing these weaknesses by restructuring the environmental health unit into a dedicated department, recruiting and training qualified technical staff, and improving access to solid waste management services will significantly strengthen WASH delivery in STMA.

d. *Limited community engagement and mobilisation for WASH delivery*

One of the primary weaknesses in WASH delivery is the inadequate effort by STMA to engage and educate community members about the importance of WASH practices. This lack of community engagement and sensitization results in low awareness and poor compliance with hygiene standards. To overcome this challenge, STMA needs to implement comprehensive community education and involvement programs that emphasize the benefits of improved sanitation and hygiene practices, fostering a culture of hygiene that supports the success of WASH initiatives. Another significant weakness is the lack of active involvement and participation from community members in decision-making processes, project planning, and implementation. This disengagement often leads to WASH projects that do not meet the actual needs of the community, resulting in less effective outcomes. Promoting active citizen engagement ensures that WASH initiatives are tailored to the specific needs and preferences of the community, enhancing their relevance, acceptance, and sustainability.

The insufficient engagement and mobilization of youth in WASH initiatives represent a missed opportunity for leveraging their energy, creativity, and potential contributions to community development efforts. Youth are a critical demographic for driving innovative and sustainable WASH solutions. Developing targeted programs to actively involve and mobilize youth can lead to more dynamic and impactful WASH initiatives, fostering a new generation of community leaders committed to improving sanitation and hygiene. Addressing these

weaknesses by enhancing community engagement, promoting active citizen participation, and effectively mobilizing youth will significantly strengthen WASH delivery in STMA.

e. *Politicization of Community Issues, Apathy, and Entrenched Practices*

The politicization of community issues, marked by undertones of tribalism, religious separations, and political divisions, creates substantial barriers to unified efforts and equitable resource distribution. These divisions undermine collaborative initiatives and result in fragmented community engagement, reducing the overall effectiveness of WASH programs. Addressing this challenge requires fostering inclusive community dialogues and ensuring that WASH initiatives are implemented based on need rather than political affiliations. Political agendas and affiliations often skew the prioritization and implementation of WASH initiatives, leading to an unequal distribution of resources and services. This partisan influence favours certain communities based on political considerations, undermining the principle of equitable access to WASH services and exacerbating disparities. Ensuring that WASH initiatives are guided by objective assessments of community needs is essential for promoting fairness and effectiveness in resource allocation.

Apathy among community members, often resulting from past unfulfilled project promises, presents a significant barrier to effective WASH delivery. This lack of trust and decreased participation hampers the success of new initiatives. To combat community apathy, it is crucial to rebuild trust through consistent, transparent communication and by ensuring the timely and effective delivery of promised WASH services. Engaging communities in the planning and decision-making processes can also enhance their sense of ownership and commitment.

Entrenched cultural beliefs and practices are resistant to changes in WASH-related behaviours, posing a significant challenge to promoting sustainable hygiene practices. These cultural barriers require culturally sensitive approaches and community-driven strategies to encourage behaviour change. Implementing education and sensitization programs that respect and incorporate local customs can facilitate the acceptance of improved WASH practices and enhance public health outcomes. Addressing these weaknesses is essential for enhancing WASH delivery in STMA. By overcoming the politicization of community issues, reducing community apathy, and addressing entrenched cultural barriers, STMA can significantly advance its WASH agenda.

f. *Inadequate Supervision of Ongoing WASH Activities by STMA*

A major challenge in WASH delivery is the insufficient supervision and regular involvement of STMA staff in community activities. This lack of oversight leads to substandard implementation of WASH projects and reduces accountability and responsiveness to community needs. Ensuring that municipal staff are actively engaged in overseeing WASH initiatives is vital for maintaining high standards of project execution and for addressing the specific needs and concerns of the community effectively. Enhanced supervision will facilitate timely interventions and adjustments, ensuring that WASH projects are delivered efficiently and sustainably.

The weak enforcement of sanitation and hygiene regulations and bylaws poses a significant threat to the success of WASH initiatives. Non-compliance with WASH standards due to lax enforcement undermines public health efforts and environmental sanitation. Strengthening the enforcement of these regulations is essential to promote adherence to WASH standards and ensure the effectiveness of sanitation and hygiene practices. Robust enforcement mechanisms will encourage compliance, improve public health outcomes, and support sustainable

environmental management. Addressing these weaknesses by enhancing supervision and engagement by STMA staff and strengthening the enforcement of WASH by-laws will significantly improve the delivery of WASH services in the Metropolis.

g. Inadequate Monitoring and Evaluation, and Priority-Based Planning for WASH Services

A major challenge in WASH delivery is the lack of systematic monitoring and evaluation (M&E) mechanisms. This gap prevents the identification of deficiencies and weaknesses in WASH infrastructure and services, particularly in low-income communities. Without robust M&E systems, it is difficult to track progress towards WASH targets and objectives, hindering the ability to implement necessary improvements. Establishing comprehensive M&E frameworks is essential for assessing the effectiveness of WASH interventions, ensuring accountability, and guiding data-driven decision-making to enhance service delivery.

Inadequate planning and prioritization mechanisms for WASH services represent another significant weakness. The lack of strategic, priority-based planning leads to uneven distribution of WASH facilities, resulting in disparities in access to essential services across different communities. Some areas face greater challenges in obtaining reliable water and sanitation services due to this uneven distribution. Implementing comprehensive and strategic planning frameworks that prioritize equitable access is critical for addressing these disparities and ensuring that all communities benefit from improved WASH services. Addressing these weaknesses by developing robust monitoring and evaluation systems and implementing strategic, priority-based planning will significantly strengthen WASH delivery in STMA.

h. Inadequate Provision of Disabled-Friendly and Gender-Inclusive WASH Services

One of the primary challenges in WASH delivery is the insufficient provision of facilities and services that cater to the needs of people with disabilities. This lack of disability-friendly infrastructure leads to the exclusion and marginalization of individuals with disabilities, hindering their access to essential WASH services and infrastructure. To address this issue, it is imperative to design and implement inclusive WASH facilities that accommodate the needs of people with disabilities, ensuring that they have equal access to safe and reliable water and sanitation services. This approach promotes equity and enhances the overall health and well-being of all community members.

Another significant weakness in WASH delivery is the inadequate inclusion of women in decision-making processes within the communities. Women's limited involvement in planning and implementing WASH initiatives results in services that may not fully address their specific needs and concerns. To improve gender inclusion, it is essential to actively engage women in all aspects of WASH decision-making, ensuring that their perspectives are considered and that services are designed to meet the needs of women and girls. This inclusive approach not only enhances the effectiveness of WASH interventions but also empowers women and promotes gender equality within the community. Addressing these weaknesses through the provision of disability-friendly facilities and the promotion of gender-inclusive decision-making processes, STMA can significantly improve the delivery of WASH services.

3.9.3 Opportunities for WASH Delivery in STMA

a. Innovative Funding Mechanisms and Sustainable Fundraising for WASH Delivery

Innovative funding mechanisms, such as microfinance schemes and community savings groups, provide significant opportunities for households to access the necessary financing for WASH infrastructure investments. By facilitating access to capital, these mechanisms empower communities to enhance their water and sanitation facilities, promoting overall health and well-being. Implementing government subsidies and incentive programs is a key strategy to make sanitation facilities more affordable for low-income households. This financial support reduces the burden on families and improves access to essential sanitation services. Such programs are critical for achieving widespread improvements in public health and ensuring that all community members benefit from basic sanitation facilities.

Sustainable fundraising efforts, including leveraging community resources and seeking grants for WASH capital investments, are vital for ongoing improvements in WASH services. Engaging local companies and organizations in supporting WASH initiatives, such as school facilities improvements, can generate substantial financial backing. These efforts ensure a continuous flow of resources, enabling the consistent enhancement and maintenance of WASH infrastructure. Government programs and policies, along with NGO initiatives, provide extensive resources and support for WASH interventions. These initiatives can offer subsidies for sanitation facilities, establish regulations to ensure water quality, and provide additional resources to enhance WASH service delivery. Aligning with these programs allows STMA to leverage a wealth of support and expertise, driving significant progress in its WASH agenda.

By exploring these innovative funding mechanisms and sustainable fundraising strategies, STMA can significantly improve the delivery of WASH services.

b. Partnerships and Collaborations for WASH delivery

Collaborating with a diverse array of stakeholders, including governments, NGOs, businesses, and community-based groups, is fundamental for fostering collective action in WASH delivery. Such partnerships mobilize resources and expertise, enabling comprehensive and effective WASH interventions. By pooling resources and knowledge, these collaborations address WASH challenges more efficiently and sustainably. Engaging local NGOs, government agencies, and the private sector ensures a holistic approach to WASH service delivery, leveraging the unique strengths of each stakeholder to achieve common objectives.

Public-private partnerships (PPPs) offer a significant opportunity to enhance the provision of WASH services, particularly public toilets. By leveraging the strengths of both the public and private sectors, PPPs can combine public accountability with private sector efficiency and innovation. These partnerships facilitate the development, maintenance, and operation of WASH facilities, ensuring high standards of service delivery and sustainability. Encouraging the formation of more PPPs in the WASH sector can lead to improved infrastructure and increased access to essential sanitation services.

Training unemployed youth as artisans for household toilet construction presents a dual opportunity for job creation and WASH improvement. Programs like the EU Project have demonstrated the effectiveness of such initiatives in providing skilled employment while addressing sanitation needs. By equipping young people with the skills to construct and

maintain household toilets, these programs enhance WASH infrastructure and contribute to economic development and social stability. Integrating job creation into WASH delivery strategies not only improves sanitation services but also supports broader socio-economic goals.

c. *Mainstreaming Appropriate WASH Technologies into Local Planning Standards and Requirements*

STMA has the authority to integrate suitable WASH technologies into local planning processes. This integration is vital for enhancing the resilience and sustainability of water and sanitation infrastructure. By mainstreaming advanced technologies into planning standards, STMA ensures that both new and existing infrastructure benefit from the latest innovations, thereby improving the overall efficiency and effectiveness of WASH services. This approach aligns local planning with global best practices in WASH technology, fostering a more robust and sustainable infrastructure system that can better serve the community's needs. Technological advancements offer numerous opportunities to improve WASH services within STMA. Innovative water treatment methods and advanced sanitation solutions can greatly enhance the efficiency and accessibility of WASH infrastructure. By exploring and adopting these technological advancements, STMA can address current challenges in water quality and sanitation, ensuring that all community members have access to safe and reliable WASH services. The integration of cutting-edge technologies not only improves service delivery but also positions STMA as a forward-thinking leader in the application of modern WASH solutions.

d. *Inclusive Engagement and Participation of all Stakeholders in WASH Delivery*

Active community engagement and participation in all WASH-related activities by STMA are vital for the success of these initiatives. Involving community members in decision-making processes enhances their sense of ownership and accountability, which is crucial for the sustainability of WASH projects. Empowering residents to take charge of these projects fosters a sense of stewardship, ensuring that interventions are well-aligned with the community's needs and priorities. This participatory approach not only improves the effectiveness of WASH services but also strengthens the community's commitment to maintaining and enhancing these services over the long term.

Empowering marginalized groups, particularly women and persons with disabilities, in decision-making processes is essential for inclusive and effective WASH service delivery. Ensuring that these groups are actively involved in planning and implementing WASH projects addresses their specific needs and challenges, making the services more equitable. This inclusive approach promotes social equity and improves the overall well-being of the community. By integrating the perspectives of all community members, STMA can develop more comprehensive and effective WASH interventions that benefit everyone.

e. *Availability of Vibrant Civil Society/Media to Support BCC Campaigns*

STMA can utilize the robust media landscape to drive widespread awareness of WASH practices. Mass media channels, such as radio, are effective for conducting large-scale awareness campaigns that reach a wide audience. These campaigns can educate the public on the importance of WASH practices, promoting better hygiene and sanitation behaviors across the Metropolis.

Informal media channels, including community information centres and new media platforms like WhatsApp, provide valuable opportunities for targeted messaging and community engagement. These platforms allow for the dissemination of tailored information to specific communities, ensuring that messages are relevant and accessible. Additionally, they facilitate a two-way communication process, enabling STMA to gather feedback from residents and respond to their needs more effectively.

Civil society organizations and media outlets play a crucial role in supporting BCC campaigns. These entities are instrumental in disseminating information, fostering community dialogue, and promoting active participation in WASH initiatives. The involvement of CSOs and media ensures that BCC campaigns are well-coordinated and culturally sensitive, enhancing their impact and effectiveness. In working with these organizations, STMA can ensure that WASH messages reach the intended audience and drive the desired behavioural changes.

3.9.4 Threats to WASH Delivery in STMA

a. STMA as a Poor Model in WASH Delivery

A major threat to WASH delivery is the limited access to well-managed WASH facilities at STMA offices. The current state of these facilities is often unclean and unhygienic, which undermines STMA's position as a model for WASH improvements. This situation signals a lack of commitment to maintaining high WASH standards, creating a negative impression and hindering efforts to promote WASH practices across the community.

The construction of communal facilities by STMA, such as the Nkontonpo Community Centre, without adequate WASH provisions further exacerbates the problem. This lack of comprehensive planning and execution reflects poorly on STMA's ability to deliver holistic WASH solutions. Ensuring that all new facilities include appropriate WASH services is essential for demonstrating a commitment to WASH standards and improving public health.

STMA's focus on constructing public toilets for community use, rather than promoting household toilets, complicates the agenda for enhancing household sanitation. This approach can lead to an over-reliance on communal facilities and impede efforts to develop more private and sustainable sanitation solutions within households. Aligning strategies to prioritize household toilets is critical for achieving long-term improvements in sanitation and hygiene.

b. Low Profile of WASH in STMA and Most Low-Income Households

A major threat to the effective delivery of WASH services is the low priority assigned to WASH improvements by community members. Many households in STMA prioritize urgent needs such as healthcare and education over investments in sanitation and hygiene. This competing prioritization creates challenges in securing community buy-in and active participation in WASH initiatives. Without community engagement, efforts to promote essential WASH practices and implement necessary improvements are significantly hindered, compromising public health and well-being.

The limited support from government agencies further exacerbates the challenges in WASH delivery. Inadequate funding and resource allocation for WASH programs impede the implementation of crucial improvement initiatives within the community. This lack of governmental backing makes it difficult to sustain long-term WASH projects and effectively address the sanitation needs of low-income households. Securing increased government

support and funding is essential for the successful implementation and sustainability of WASH initiatives.

c. Poor Economic Conditions and the Penchant for Free Services

A major threat to WASH delivery is the poor economic condition of many households within STMA. Financial constraints prevent numerous families from affording access to adequate toilet facilities and other essential WASH infrastructure. This economic hardship leads to suboptimal sanitation and hygiene conditions, which can have severe public health implications. To improve WASH service delivery, it is essential to develop affordable solutions and provide financial support mechanisms that enable low-income households to invest in necessary sanitation facilities.

The historical reliance on free services within the community presents another significant challenge to WASH delivery. Prior experiences with free water, waste disposal (Borla), and toilets have fostered a mindset of expecting services at no cost. This entrenched expectation of free services undermines efforts to promote self-sustaining WASH initiatives. Additionally, the incompletion of similar projects in the past has further diminished trust in new WASH programs. To address this, it is vital to shift the community's mindset towards valuing and investing in WASH services, while ensuring transparency and completion of projects to build trust and demonstrate the benefits of sustainable WASH solutions.

d. Rapid Population Growth, Inadequate Infrastructure, and Climate Variability on WASH Delivery

The rising population density in urban areas within STMA places considerable strain on existing WASH infrastructure and services. As the population grows, the demand for WASH facilities often exceeds their capacity, leading to overcrowding and increased challenges in maintaining hygiene standards. This strain on infrastructure can result in suboptimal sanitation conditions and heightened public health risks. To mitigate these effects, it is essential to expand and upgrade WASH infrastructure to meet the needs of the growing population effectively.

The lack of adequate infrastructure, particularly in solid waste management, significantly hinders WASH delivery. Poor infrastructure limits the ability to maintain environmental cleanliness and manage waste effectively, which are critical for good hygiene practices. Inadequate waste management facilities lead to improper disposal practices, increasing health risks and undermining efforts to improve sanitation. Investing in robust infrastructure is vital for supporting sustainable WASH services and ensuring environmental health.

Climate variability and extreme weather events pose additional threats to WASH delivery in STMA. Coastal erosion, floods, and droughts can cause severe damage to water sources and sanitation facilities, disrupting access to clean water and proper hygiene. These climate-related challenges necessitate the development of resilient WASH infrastructure that can withstand environmental stresses and ensure the continuous provision of essential services. Implementing climate-adaptive strategies and infrastructure improvements is critical for safeguarding WASH services against the impacts of climate change.

e. Political Interference in Community Initiatives

Political interference in the implementation of community WASH initiatives poses a major threat to effective service delivery. Such interference can result in the misallocation of resources, favouritism, or the neglect of marginalized communities. These actions undermine

the sustainability and impact of WASH interventions by preventing equitable and efficient resource distribution. To mitigate this threat, it is essential to establish transparent and accountable processes for resource allocation and to ensure that political considerations do not compromise the effectiveness of WASH initiatives.

Conflicts over the ownership or control of WASH facilities, often based on group or religious affiliations, create significant barriers to accessing and utilizing these services. These disputes can disrupt service delivery and complicate the management and maintenance of WASH infrastructure. Addressing these conflicts requires fostering inclusive and collaborative approaches to facility management, ensuring that all groups have equitable access and that disputes are resolved through dialogue and cooperation.

4 POPULATION DYNAMICS, KEY TARGETS AND STRATEGIC ACTIONS

This section of the document focuses broadly on defining the targets and strategic initiatives to achieve them over the plan period. In this context, it projects the population of the low-income communities based on the current growth rate and benchmarks to estimate WASH service requirements over the plan period of six (6) years. Based on the projected population, strategic goals, objectives, and targets to be achieved have been formulated. Strategic actions have been outlined under different thematic areas for implementation to realise the goals, objectives, and set targets.

4.1 Population Projections

Existing population figures do not disaggregate population figures between the different income cohorts. As part of the initiative leading to the preparation of this Strategic Plan, baseline information was collected from the 31 low-income communities. The data collected showed a total population of 151,915, comprising 54% females and 46% Males. The total number of households is 34,090, implying an average household size of close to 4.6. The number of households surveyed was 8635, and therefore the average number of households per household is approximately 4. According to the 2021 Population and Housing Census, the annual intercensal growth rate for the Western Region is 2%. Given the urbanized nature of the metropolis and its potential to attract more people, the population growth rate for STMA would be higher than the regional average. The Medium-Term Development Planning (MTDP) for 2022-2025 indicates a growth rate of 3.2% for STMA. Using this for the projection, the population of 31 low-income communities in the STMA is estimated at 166,971 in the medium-term (by 2027) and 183,518 in the long-term (by 2030) within the plan period.

Based on the population projections and the existing WASH service delivery situation, medium-term (2024-2027) and long-term (2024-2030) targets have been set to provide the drive for STMA in its effort to improve WASH service delivery in the low-income communities.

4.2 Thematic Areas

The strategy identifies seven thematic areas for intervention over the next six years, with long-term (2030) and medium-term (2027) goals and targets. The thematic areas are as follows:

Table 6: Thematic Issues for the WASH Strategic Plan

1	Sanitation Service Improvements	Access to safe sanitation services for households and institutions in informal and low-income communities through innovative financing and technology options, and intensive community mobilisation interventions.
2	Water Service Improvements	Adequate access to safe water services by addressing availability, quality, and accessibility challenges in the informal low-income communities at the household and institutional levels.

3	Hygiene Service Improvements	Behaviour changes, education, and awareness campaigns to promote proper handwashing practice and general personal and environmental hygiene.
4	Solid Waste Management Improvements	Solid waste management arrangement that considers waste as a resource and promotes safe capture/storage, transport, treatment, recycling, and disposal of human waste in households.
5	Policy and Governance System Improvements	Legislation and enforcement of sanitation bylaws, as well as WASH funding mechanisms, and building synergies for multi-stakeholder collaboration to impact health outcomes.
6	Stakeholder/Community Organization and Mobilization	Capacity for all sub-district actors, raising awareness, and generating trust among citizens and stakeholders to facilitate buy-in and co-ownership of the WASH improvement process.
7	Climate Resilience and Inclusion	Mainstream climate resilience, gender, and inclusivity in intervention planning and implementation.

4.2.1 Sanitation Services Improvement

Sanitation services in the target communities of the STMA are very challenged, with as many as 43.19% of households depending on public toilet facilities, which are often old, unhygienic, and in a poor state of disrepair. The goal for sanitation is to improve the health status of the communities through the promotion of safe sanitation access at the household and institutional level. This is a significant shift from communal facilities to promoting household toilets, in line with the national agenda.

The long-term target for sanitation is to achieve 60% access to safely managed sanitation (toilets) at the household level by 2030. All health facilities have access to toilet facilities for patients (out-patient and in-patient) and staff. All learners and staff of pre-tertiary schools have access to toilet facilities in school. Reduce the practice of open defecation by 90%.

The medium-term target is to achieve 40% access to safely managed sanitation (toilets) at the household level by 2027. By the end of 2027, 60% of pre-tertiary schools and health facilities will have access to toilet facilities. All institutional toilet facilities are girl-friendly, disability-friendly, and climate-responsive.

The strategic actions for achieving sanitation services improvements include:

- Household toilet promotion using a sanitation marketing approach
- Build capacity in the construction of appropriate and suitable household toilet technologies within STMA
- Construct household toilets using subsidy schemes to accelerate household toilet uptake
- Provide institutional toilets for all pre-tertiary education institutions and healthcare facilities in the low-income communities

- Pursue strategic partnerships with WASH NGOs and corporate institutions for resource mobilization for household and institutional WASH improvements
- Consistently prioritize household toilets and institutional latrines in the allocation of IGF
- Building capacity for WASH services planning, implementation, and management
- Facilitate the preparation and use of sanitation safety plans in the low-income communities

4.2.2 *Water Services Improvements*

Water supply services in the STMA are checkered with quality and frequency of flow being some of the main challenges with the piped water supply. The goal for water services improvements is to expand access to safe water services to households and institutions using the parameters of closeness, reliability, affordability, and quality.

The long-term targets for water services improvements are that all households have access to a safely managed water source, either by direct connection or through a safely managed communal or private standpipe or borehole, with not less than 70% of households having access to house connections by 2030. All health facilities and pre-tertiary education institutions have access to safe water on their premises.

The medium-term targets for water services are to achieve 50% coverage for pre-tertiary education institutions and health facilities by 2027. At least 50% of households have access to safe water connections either by direct connection or through a safely managed communal or private standpipe or borehole.

The strategic actions for achieving sanitation services improvements include:

- Expand pipe networks in the low-income communities
- Institute a new connection subsidy scheme to facilitate households and institutional access to direct pipe connections in collaboration with GWL (LICSD)
- Conduct community mobilisation and water user education in all communities
- Explore on-site sources (mechanized boreholes and point sources) in feasible areas
- Train and equip Environmental Health Assistants (EHAs) to conduct quarterly water quality monitoring at communal standpipes and vending points with hand-held devices
- Procure 10 hand-held devices for water quality monitoring
- Facilitate the preparation and implementation of water safety plans in the low-income communities

4.2.3 *Hygiene Services Improvements*

The provision of physical facilities without a corresponding behaviour and attitude change will not deliver the full benefits of any intervention. The strategy emphasizes a significant shift from the enforcement approach, which has driven compliance in the past. The goal for hygiene services improvements is to promote the adoption of hygienic practices to achieve a healthy and clean environment through the implementation of social and behavioural change interventions.

For the long-term, hygiene services improvements will target all households regularly practicing hand washing with soap and water at least at two critical times; all institutional facilities have adequate hand washing facilities on premises; and all learners and teachers practice handwashing with soap and water at least at three critical times whilst in school. For

the medium term, the targets are a wide variety of Information, Education and Communication (IE&C) materials that exist to support behaviour change initiatives; capacity building for EHAs and schoolteachers to support behaviour change initiatives.

The strategic actions for achieving hygiene services improvements are:

- Undertake education and awareness at the household and institutional levels on
  - Safe transportation of water to the home
  - Household water treatment and safe storage
  - Safe use and management of household toilets
  - Source separation of solid waste, especially in institutions
  - Hand washing with soap practice
  - Menstrual Hygiene Management for learners
- Build capacity of actors for collaboration and WASH planning and implementation
- Develop IEC materials to support community education and awareness creation
- Conduct various behaviour change initiatives and campaigns

4.2.4 Solid Waste Management Improvements

Effective solid waste management is one of the challenging areas for Metropolitan, Municipal, and District Assemblies (MMDAs) across the country. Approximately, generates a substantial total of 614 tons of waste per day, equating to approximately 224,724 tons annually. However, the waste collection efficiency stands at only 59%, which is collected and transported to the engineered landfill, with 360 tons of the 614 tons collected daily. Consequently, 254 tons of waste remain uncollected each day, often ending up in informal disposal sites. The strategic goal for solid waste improvements is to promote clean communities by strengthening the solid waste value chain performance.

The long-term targets for solid waste improvements are that all communities have access to a service provider system; all households have adequate access to either a skip container or door-to-door service (informal or formal); all pre-tertiary educational institutions separate waste into two streams and are linked with an off-taker. In the medium term, at least 40% of households separate waste into two streams and are linked with off-takers; 60% of public basic schools separate waste into two streams and are linked with off-takers; manned central collection points for plastic waste are set up in at least 10 communities.

The strategic actions for achieving solid waste management improvements are:

- Conduct a feasibility study on door-to-door waste collection in the low-income urban communities.
- Introduce appropriate door-to-door (formal or informal) waste collection in the sections of the low-income communities where it is feasible in collaboration with the private sector (formal and informal).
- Procure and install 20 skip containers to make waste collection services convenient to users in areas where door-to-door is not feasible
- Sensitize communities on the effects of indiscriminate waste disposal
- Set up environmental clubs in pre-tertiary educational institutions
- Identify and facilitate the plastic waste recycling value chain

4.2.5 Policy and Governance Systems Improvements

Ghana's Local Governance Act of 2016, Act 936, enjoins all local governments, including the STMA, to plan, initiate, coordinate, manage, and execute policies relating to the development of their geographical area to the benefit of the people living there. To deepen its commitment towards the citizenry, the STMA joined the OGP to advance transparent and accountable governance. The goal of policy and governance improvements is to strengthen capacity for WASH implementation at the STMA level and the sub-metro level.

The long-term strategic targets for policy and governance improvements are that WASH is highly prioritized by STMA in terms of resource allocation: Sub-district level structures are effectively leading WASH services delivery in STMA. The medium-term target is for byelaws to adequately respond to WASH needs:

The strategic actions for policy and governance systems improvements are:

- Set up and strengthened all substructures in the low-income communities.
- Provide training for Assembly representatives, community leaders, and local-level actors (service providers) on the WASH issues and the strategic plan.
- Advocate for increased IGF allocation for liquid waste and hygiene interventions.
- Review sanitation bylaws to make them more effective in supporting behaviour change efforts.
- Conduct a detailed capacity needs assessment of all stakeholders at the STMA level, community level, and implementing partners.
- Develop and implement a capacity-building plan based on the needs assessment.
- Adopt and implement public-private partnerships to leverage resources and expertise for the implementation of the WASH Plan.
- Set up a strategic plan implementation team at the STMA to oversee the roll-out and reporting on strategic interventions.

4.2.6 Stakeholder/Community Organization and Mobilization

Stakeholder engagement, community organization, and mobilization are key tenets of the STMAs' approach to prosecuting its development agenda. The STMA has leveraged its multi-stakeholder forum to indicate its openness to stakeholder engagement and collaboration. The strategy will build on this to draw stakeholders closer to the table. The goal for the stakeholder/community organization and mobilization is that communities and non-state actors are motivated and championing the WASH services delivery agenda. The long-term target for stakeholder engagement and community participation is to mainstream it into WASH initiatives in STMAs at all levels. The medium-term targets are to create an active platform of stakeholders for WASH services planning, implementation, and funding: regular information flow between STMA and other Stakeholders on WASH services delivery performance.

The strategic actions for achieving stakeholder/community organization and mobilization are:

- Provide training for community leaders and local-level actors (service providers) on the WASH issues and the strategic plan.
- Establish community WASH committees to oversee local WASH initiatives and ensure community involvement.

- Capacity building in leadership and community mobilization, especially for women and the youth.
- Implement collaborative monitoring and evaluation systems to track the progress and impact of WASH service delivery.
- Ensure the active participation of marginalized groups such as women, youth, and people with disabilities in WASH planning and implementation.
- Set up a learning and information dissemination channel/platform to regularly update target communities and WASH stakeholders on implementation progress

4.2.7 Climate Resilience and Inclusion

Climate resilience considerations are crucial in WASH services delivery from the availability of water, through health risks, damage to infrastructure, and service continuity. It is critical that the STMA can mitigate or quickly recover from any climate-related shocks that can arise. From the rising sea levels to significant variations in rainfall patterns to changes in temperature patterns, the STMA is vulnerable to climate shocks. These can negatively impact gains in WASH service delivery. Inclusivity in service delivery is also a key element in this thematic area.

The goal for climate resilience and inclusion is to integrate climate resilience measures into all WASH initiatives and ensure that WASH Service delivery is responsive and inclusive. The long-term targets for climate resilience and inclusion are to ensure that all WASH projects incorporate climate resilience measures to withstand the impacts of climate change by 2029: mainstream gender and social inclusion in all WASH initiatives, ensuring that the needs of vulnerable groups are addressed by 2029. The medium-term targets are developing generic designs for institutional WASH facilities that are climate resilient, gender and disability friendly, and supporting the activities of environmental clubs in pre-tertiary institutions.

The strategic actions for climate resilience and inclusion are:

- Educate and create awareness in communities on the impacts of climate change on WASH to promote adaptive practices.
- Conduct annual environmental competitions among pre-tertiary institutions
- Design and construct WASH infrastructure that can withstand extreme weather events and climate-related impacts.
- Implement flood mitigation measures such as drainage systems improvements and flood barriers in vulnerable areas.
- Capture the needs of vulnerable groups, such as the elderly and disabled, in the WASH planning and implementation

4.2.8 Implementation Coordination Management

The strategy implementation needs to be carefully administered and coordinated to bring the strategy to life. The several critical activities involved in the process have to be managed at the highest level to ensure alignment of the strategy with STMAs' various departments and units, as well as optimization of available resources to ensure success. The goal of Implementation Coordination Management is to successfully execute the strategic plan and achieve STMAs' long-term objectives for sanitation development in the Low-Income Urban Communities of the Sekondi-Takoradi Metropolis. The long-term target is to document best practices for strategic plan implementation using a stakeholder participation process. The

medium-term target is to have a robust Strategy Implementation Team in place, fully resourced to oversee strategy implementation.

The implementation arrangements and strategies for Implementation Coordination Management are:

- Set up a Strategy Implementation Team within the STMA
- Adopt annual action planning as an approach to rolling out the Strategy
- Put in place stringent risk management procedures to mitigate potential risks to strategy implementation
- Institute annual WASH fora within STMA as a mechanism to review progress of implementation, share lessons learnt, and review implementation approaches
- Participation in local and international conferences to share lessons learned and to attract partnerships
- Pursue sister-city relationships to draw technical support and funding for the implementation of the WASH Strategic plan
- Undertake a learning trip to and adopt strategic alliances with sector projects, institutions, and strategic partners/funders (e.g., GAMA SWP, GWL, WSUP, WHO)
- Implement an effective monitoring and evaluation system to guide the implementation of the strategic plan
- Dissemination of 5-Year WASH Strategic Plan to STMA staff, community leaders, women and youth groups, and health and school workers on effective communication and advocacy techniques.

5. PARTNERSHIPS AND BROAD IMPLEMENTATION MANAGEMENT STRATEGIES

The success of the implementation of the WASH Strategic Plan will be pursued through the adoption of strategies, partnerships, and networking that will augment the existing institutional arrangement within STMA.

5.1 Partnership for Implementation

This sub-section describes the different institutions and bodies that will play a role in the implementation of the strategic plan.

The Sekondi-Takoradi Metropolitan Assembly (STMA): The Metropolis commissioned the preparation of the WASH Strategic Plan for the low-income and informal communities within its jurisdiction. It is the owner of the plan and holds the responsibility to supervise its effectivity implementation. In its leadership role, it oversees the overall coordination of the implementation and will put in place the appropriate mechanisms for the strategic collaboration with stakeholders and actors within the metropolis and beyond, including resource mobilisation. The leadership role also includes ensuring that the implementation of the strategy aligns with local and national policy and legislation. To provide the necessary traction for implementation of the plan, STMA must constitute an Implementation Team, with the approval of the General Assembly. The Implementation Team would function as a facilitative and coordinating body, acting on behalf of STMA, to manage the implementation process.

Multi-Stakeholder Forum (MSF): This is an existing platform of stakeholders (governmental, NGOs, and private sector actors) working in the STMA space to support interventions that contribute to the improvement in the well-being of the people. Beyond STMA's formal internal processes, this group provides strategic support to STMA in delivering its development mandate through review of action plans, validation of implementation activities, provision of technical direction and advocacy support, and support with resources and community mobilisation.

Community Level Stakeholders: Community Level Stakeholders are critical for the successful implementation of the Strategic Plan. They are indeed the ultimate beneficiaries of the facilities and services to be provided through the implementation of the Strategic Plan. The key stakeholders at the community level include traditional leadership, religious, as well as youth and women groups. Community leaders, for example, are the custodians of land and will be key to making land available for project interventions. These stakeholders would support community mobilization, collaborate on enforcing bylaws, and advocate for behaviour change.

Private Sector Actors: They have a variety of roles in the implementation of the strategy. These included direct provision of goods and services, operation and maintenance of facilities, and financial resources. These include financial institutions, mining and oil companies, businesses, waste management businesses (formal and informal operators, waste pickers and recyclers), and water vendors (mobile and standpipe operators).

Civil Society Organisations: These include local and international Non-Governmental Organisations (NGOs) and Community-Based Organizations (CBOs) working within the jurisdiction of STMA. They have a greater potential to support the implementation of the WASH Strategic Plan with community mobilisation, capacity building, and provision of resources for service provision.

Regional and National Level Governmental Actors and Projects: STMA would recognise the oversight responsibility, resource mobilisation, and the technical support role of national and regional level institutions. An appropriate consultative and collaborative relationship would be pursued to facilitate alignment and harmonisation with policy, advocacy, and policy influence, and increased resource allocation. These institutions include:

- Western Regional Coordinating Council
- Regional Environmental Health Unit
- Ghana Water Limited – Regional Office
- Ministry of Sanitation and Water Resources
- Ministry of Local Government, Decentralisation and Rural Development
- Ministry of Health
- Ministry of Education
- Ministry of Finance
- Office of the Head of Local Government Service
- Ghana Water Limited – Low-Income Customer Support Department
- Greater Accra Metropolitan Area Sanitation and Water Project

5.2 Implementation Management Strategies

The success of the implementation of the plan requires STMA to adopt proactive and strategic approaches in engaging all stakeholders and planning all project activities to ensure coherence in the implementation processes, stakeholder ownership, adequate resources mobilisation, and sustainable learning. The following are key strategies to be adopted to enhance the implementation process for the achievement of the goals of the plan.

- ***Set up a Strategy Implementation Team within STMA:*** STMA would constitute a team of experts carefully selected from its staff. STMA may also co-opt some key persons from its partners to be part of the Implementation Team. The team's main responsibilities include playing the implementation oversight role on behalf of STMA, undertaking implementation planning, leading resources mobilisation, coordinating the roles of respective STMA departments/units and STMA partners, and facilitating learning and documentation on the implementation process. The constitution of the Implementation Team would be led by the STMA management and subject to the approval of the General Assembly

- ***Use of Annual Action Planning as a Tool:*** The implementation progress of the strategy should be guided by annual action planning to ensure systematic progress in achieving the goal of the strategy. The action planning process would be participatory and would be led by the Implementation Team. The annual action plan would be reviewed by the

Metropolitan Planning Coordinating Unit and submitted for approval by the General Assembly before implementation.

- ***Organise Annual Dissemination and Learning Events at STMA Level:*** STMA would institute Annual WASH Forum within STMA as a mechanism to review progress of implementation of the strategic plan, to share lessons learned, and review implementation approaches with the broader stakeholders at the STMA level. The annual event would be used to bring on board strategic partners to support the implementation process through technical support and resource mobilisation.

- ***Sharing of Implementation Progress and Lessons Learnt with wider populace:*** STMA would explore opportunities to participate in relevant local and international conferences to share lessons learned from the implementation of the strategy and learn from best practices implemented elsewhere. Participants would document feedback from these events and feed it back into the implementation of the strategy.

- ***Pursuit of Sister-City Relations:*** STMA would pursue sister-city relations to draw technical support and funding for the implementation of the WASH Strategic Plan.

- ***Seek Strategic Alliances with Strategic Institutions and Projects:*** STMA would explore strategic partnerships with institutions and sector projects through learning visits. The purpose of these learning visits would be to sell the strategic plan to attract resources and knowledge transfer in support of the implementation of the strategy. Some suggested projects and organisations are GAMA-SWP (for household and institutional sanitation), GWCL (for water supply improvements), WSUP (liquid and solid waste management), and WHO (for institutional latrines). The Implementation Team would continuously explore and pursue strategic alliances to support the implementation of the strategic plan.

- ***Private sector participation:*** The private sector participation is recognised as a key strategy for the implementation of the strategic plan. The engagement with the private sector would focus on resource mobilisation, capacity building, and technical support in the construction and operation, and maintenance of facilities.

- ***Collaboration with the Media:*** Publicization of the strategy implementation activities is considered crucial for building momentum for implementation and informing intervention beneficiaries on progress, successes, and challenges. STMA would integrate in its sensitisation and engagement programmes both traditional and social media channels. STMA would also use community-level communication channels such as the Community Information Centres to target messages for a specific audience.

6. COMMUNICATION AND ADVOCACY

The communication and advocacy approach in the implementation of the strategy would focus on ensuring that all stakeholders actively participate and are informed about the progress with implementation of the strategy, and facilitate stakeholder buy-in to build trust. The communication and advocacy efforts would be geared towards effecting behaviour change and leveraging more resources to support the implementation of the strategy. An elaborate behaviour change campaign strategy has been developed as a separate document (Volume II) to complement the provision of WASH services to improve public health outcomes.

6.1 Target Audience

Two main target audiences have been identified. These include the following:

Primary Audience

The primary audience refers to the stakeholders who are the key focus for the communication activities, and the communication messages are crafted to influence their actions and behaviours towards the achievement of the goals of the strategic plan.

- Sekondi-Takoradi Metropolitan Assembly
- Community leaders in the selected low-income and informal communities
- Women and youth groups in the selected low-income and informal communities
- Local media
- Private sector stakeholders
- NGOs/CBOs in WASH within STMA
- Development Partners

Secondary Audience

These would include stakeholders that are not directly targeted by the communication and advocacy activities but have a critical role in influencing the primary target and help spread the message more widely to people who may not have been targeted. These include:

- Ministry of Sanitation and Water Resources
- Ministry of Finance
- Ministry of Local Government, Decentralisation, and Rural Development
- Ghana Education Service
- Ghana Health Service
- Western Regional Coordinating Council
- National Development Planning Commission
- Office of the Head of Local Government Services
- Ghana Water Limited
- Multi-Stakeholder Forum
- Open Government Partnership

6.2 Channels of Communication

Current channels of communication are varied, including traditional media, social media, and local media. During implementation of the strategic plan, STMA would rely on a variety of

communication channels, and each of them would be appropriately targeted. The channels are:

- Face-to-face
- Radio
- Television
- Video
- Social media (WhatsApp, Facebook, etc.)
- Community durbar

6.3 Key Communication Messages

The communication messages would be developed to achieve different objectives, including creating awareness, informing, educating, providing feedback, motivating, or promoting the strategic plan's implementation. The focus on each objective would depend on the target audience. Broadly, the messages would be designed to address the following thematic issues:

- Funding for WASH improvement
- Community participation
- Open defecation-free
- Law compliance
- Toilet access and use
- O&M of facilities
- Payment of tariff for WASH services
- Community resources mobilisation

7. MONITORING, EVALUATION, AND LEARNING

Monitoring, evaluation, and learning (MEL) would be prioritised in the implementation of the strategic plan. Essentially, the goal of incorporating effective MEL during the implementation of the strategic plan is to ensure the following:

- Ongoing and systematic collection of both quantitative and qualitative data on project indicators during implementation to identify successes and challenges and use the key lessons to appropriately guide the implementation course towards the achievement of the objectives of the strategic plan.
- At the end of the implementation period (2030) of the strategic plan, a systematic and objective assessment is conducted to measure the relevance, effectiveness, impacts, efficiency, and sustainability of interventions and the achievement of other cross-cutting issues such as inclusiveness, climate resilience, and gender mainstreaming.
- Use of the data generated from monitoring and evaluation to improve on current and future interventions by conducting an in-depth analysis of what works or does not work and digging for the reason. Learning ensures the culture of knowledge generation and sharing, and adaptation to ensure improvements.

7.1 Objectives of the MEL in the Strategic Plan Implementation

The M&E framework is designed to guide the systematic collection, analysis, and utilization of data to inform evidence-based decision-making and performance of STMA and its stakeholders in the implementation of the WASH Strategic Plan. The specific objectives of the M&E Framework include the following:

i. To monitor progress towards the achievement of the strategic goals and objectives of the WASH Strategic Plan, through tracking key performance indicators (KPIs) related to WASH coverage, behaviour change, governance arrangements, and health outcomes.
ii. To identify implementation gaps, challenges, and bottlenecks that may hinder the success of the WASH Strategic Plan, through regular monitoring of activities and outputs.
iii. To enhance accountability and transparency in Plan implementation, effective reporting mechanisms and disseminating findings to stakeholders at all levels.
iv. To promote learning and knowledge sharing within STMA and among stakeholders, through effective documenting of lessons and best practices for scale-up and continuous improvement.

As part of the preparation of this strategic plan, a household registry on WASH has been established and sets the baseline situation for progress to be measured against. The plan is that the baseline values would be aligned with the WASH indicators under SDG 6. Annually and ongoing basis, monitoring data collected would be aligned to these indicators to measure the project's contribution to the achievement of SDG 6. STMA would also align its MEL data to national and local level data systems (Sector Information System- SIS, Basic Sanitation Information System- BaSIS, Education Management Information System- EMIS, and District Health Information Management System- DHIMS). A detailed Monitoring and Evaluation Framework has been prepared as a separate document (Attachment I).

7.2 Key Indicators to Measure

The table below shows the objectives and the corresponding indicators to be measured under each of the defined thematic areas. These have been elaborated further in the M&E Framework.

Table 7: Summary of Strategic Goals, Targets, and Indicators

Thematic Area	Goal	Targets	Key Indicators
Sanitation Service Improvements	Improve the health status of the communities through the promotion of safe sanitation access at the household and institutional levels	70% of households have access to safely managed sanitation (toilets) at the household level by 2030	Proportion of households that have access to a safely managed toilet
		All health facilities have toilet facilities that are gender-friendly, disability-friendly, and climate-resilient, providing adequate access to patients (out-patient and in-patient) and staff.	Proportion of health facilities that have access to a safely managed toilet
		All learners and staff of pre-tertiary schools have access to toilet facilities in schools that are gender-friendly, disability-friendly, and climate-resilient.	Proportion of pre-tertiary schools that have access to a safely managed toilet
Water Service Improvements	Expand access to safe water services to households and institutions using the parameters of closeness, reliability, affordability, and quality	All households have access to water connections either by direct connection or through a safely managed communal or private standpipe or borehole	Proportion of households and institutions with access to safely managed water within a reasonable distance, emphasizing equity in distribution and service reliability.
Hygiene Service Improvements	Promote the adoption of hygienic practices to achieve a healthy and clean environment through the implementation of social and behavioural change interventions.	All households and school children receive awareness campaigns and education on hygienic practices	Proportion of population adopting key hygiene behaviours, such as handwashing with soap at critical times, safe waste handling practices, and menstrual hygiene management

Thematic Area	Goal	Targets	Key Indicators
Solid Waste Management Improvements	Promote clean communities by strengthening the solid waste value chain performance	All households have adequate access to either a skip container or door-to-door service (informal or formal)	Proportion of households with access to door-to-door service or skip container services
Policy and Governance System Improvements	Strengthen capacity for WASH implementation at the STMA level and at the sub-metro levels	STMA, community, and private sector actors collaboratively deliver WASH services in the low-income communities	Proportion of increment in the allocation of resources for liquid waste, solid waste, and hygiene services improvement by STMA
		WASH is highly prioritized by STMA in terms of resource allocation	The level of involvement in WASH service delivery by the private sector and community actors
Stakeholder/Community Organization and Mobilization	Incentivise communities and non-state actors to champion the WASH services delivery agenda in low-income communities	Stakeholder engagement and community participation are mainstreamed into STMAs' WASH initiatives at all levels	The level of community involvement and stakeholder participation in participatory planning, implementation oversight, and feedback mechanisms for WASH services delivery
Climate Resilience and Inclusion	Integrate climate resilience measures into all WASH initiatives and ensure that WASH service delivery is responsive and inclusive	All WASH projects are climate resilient, gender responsive, socially inclusive, and friendly to the needs of vulnerable groups	Proportion of communities with climate-resilient, gender-sensitive, and inclusive WASH infrastructure
Implementation Coordination Management	Ensure the successful execution of the strategic plan to achieve its long-term objectives	All planned activities are implemented timely manner and properly documented	Number of planned activities implemented timeously and reported on

8. COST OF THE 6-YEAR WASH STRATEGIC PLAN

The section highlights the cost estimates for covering investments in WASH services delivery to achieve the goal and target set in the Strategic Plan. The cost covers a range of items, including the cost of infrastructure for WASH services for households, schools, and healthcare facilities, capacity building, behaviour change and awareness campaigns, and general system strengthening. The cost of the interventions has been determined based on market rates, experiences, and best practices. The costs have been determined for the medium-term (2027) and long-term (2030 – total budget). The total budget for the implementation of proposed interventions is Thirteen Million Seven Hundred and Eighty-Three Thousand Six Hundred and Fifty-Eight United States Dollars (USD13,783,658). Out of this total amount, a little over half (USD7,218,743) is required to achieve the medium-term targets. The aggregate costs for each thematic area have been presented in Table 8, and additional details and explanations have been presented in Annex 1.

Table 8: Summary of Costs of Interventions in the Strategic Plan

Intervention	Estimated Budget (USD)	
	Total by End-Term (2030)	**By Medium-Term (2027)**
Sanitation Service Improvements	7,982,000	3,753,000
Water Service Improvements	3,334,450	1,982,900
Hygiene Service Improvements	442,008	215,243
Solid Waste Management Improvements	661,000	558,000
Policy and Governance System Improvements	208,000	124,000
Stakeholder/Community Organization and Mobilization	515,200	287,600
Climate Resilience and Inclusion	328,000	124,000
Implementation Coordination and Management	313,000	174,000
OVERALL TOTAL COST	**13,783,658**	**7,218,743**

ANNEX 1. DETAILED COST ESTIMATES OF THE 6-YEAR WASH STRATEGIC PLAN

The estimated budget for the proposed strategic interventions under the various Thematic Issues under the 6-Year WASH Strategic Plan for the low-income and informal communities of STMA has been presented in two phases – mid-term (2007) and end-of-term (2030) of the plan. This is to allow the STMA Implementation Team to innovate within the period of the phase towards the achievement of the strategic objectives. The estimates have been presented under the different Thematic Areas.

A. Cost Estimates of Interventions under Sanitation Services Improvements

Intervention	Description	Duration	Number	Unit Cost (USD)	Total Amount (USD)	Mid-Term Requirement
Household toilet promotion using a sanitation marketing approach	Two months of rapid consultancy to prepare technology options and a feasibility document	2 months to be completed by the 3rd quarter of 1st year	1	12,000	12,000	12,000
	Toilet promotion and marketing campaigns by STMA (EHSU & Community Development Unit)	Quarterly from the 4th quarter of year 1 to the end of year 6	21	3,000	63,000	27,000
Build capacity in the construction of appropriate and suitable household toilet technologies within STMA	Youth (50) training on toilet construction of safely managed toilet technology and marketing based on feasible toilet technology options	By the end of year one	50	650	32,500	32,500
Construct household toilets using subsidy schemes to accelerate household toilet uptake	Provision of biodigester household toilets that meet safely managed requirements for households of an average size of 10 persons each	Throughout the project life	7973	500	3,986,500	1,820,500

Intervention	Description	Duration	Number	Unit Cost (USD)	Total Amount (USD)	Mid-Term Requirement
Provide institutional toilets for all pre-tertiary education institutions	Conduct of feasibility studies, construction design, preparation of bid documents, and construction supervision	By the end of year one	1	280,000	280,000	280,000
	Construction of 60 No. 11-seater safely managed institutional latrines in schools based on the feasibility studies results	Through the project life	60	50,000	3,000,000	1,250,000
Provide institutional toilets in healthcare facilities in the low-income communities	Conduct of feasibility studies, construction design, preparation of bid documents, and construction supervision	By the end of year one	1	100,000	100,000	100,000
	Construction of 15 No. 5-seater safely managed institutional latrines in healthcare facilities based on the feasibility studies results	Through the project life	15	25,000	375,000	125,000
Pursue strategic partnerships with WASH NGOs and corporate institutions for resource mobilization for household and institutional WASH improvements	Undertake strategic meetings and engagements (including learning visits, participation in conferences, and writing of proposals) to attract resources to support the implementation of the plan	Through the project life	6	7,000	42,000	28,000

Intervention	Description	Duration	Number	Unit Cost (USD)	Total Amount (USD)	Mid-Term Requirement
Consistently prioritize household toilets and institutional latrines in the allocation of IGF	Organise advocacy activities to push for more allocation from internally generated funds to liquid waste	Through the project life	6	1,000	6,000	3,000
Building capacity for WASH services planning, implementation, and management	Training for the Implementation Team and other key staff of STMA, and selected members of the general assembly	Two 3-day trainings (2nd quarter of year 1 and 1st quarter of year 4)	2	10,000	20,000	10,000
Facilitate the preparation and use of sanitation safety plans in the low-income communities	7 months of consultancy to facilitate the preparation SSF for all 32 low-income and informal communities	Within year 2	1	65,000	65,000	65,000
TOTAL ESTIMATES FOR SANITATION SERVICES IMPROVEMENTS					**7,982,000**	**3,753,000**

B. Cost Estimates of Interventions under Water Services Improvements

Intervention	Description	Duration	Number	Unit Cost (USD)	Total Amount (USD)	Mid-Term Requirement
Expand pipe networks in the low-income communities	Rapid assessment of water pipeline availability and supply capacity to establish feasible areas for water extension	By the end of the 3rd quarter of the 1st year	1	15,000	15,000	15,000
	Extend the distribution pipelines (32km) within low-income communities to facilitate new service connections	Through the project period	32	50,000	1,600,000	1,000,000
Institute a new connection subsidy scheme to facilitate household and institutional access to direct pipe connections in collaboration with GWL (LICSD)	Facilitation of about 9870 new service connections to households and institutions in low-income communities	Through the project period	9870	135	1,332,450	720,900
Conduct community mobilization and water user education in all communities	Sensitization and mobilization of community members and institutions to subscribe to the new service connection	Throughout the project life	6	10,000	60,000	30,000
Explore on-site sources (mechanized boreholes and point sources) in feasible areas	Conduct a study of feasibility using mechanized boreholes	By the end of year one	1	30,000	30,000	30,000
	Construction of 10 No. Mechanized boreholes to augment the supply	Years 2 to 6	10	20,000	200,000	100,000

Intervention	Description	Duration	Number	Unit Cost (USD)	Total Amount (USD)	Mid-Term Requirement
Train and equip Environmental Health Assistants (EHAs) to conduct quarterly water quality monitoring at communal standpipes and vending points with hand-held devices	Building capacity of EHSU in equipment handling and operation, data collection and analysis, M&E, advocacy, and communication for change in two separate trainings	By the end of year one and the end of year 3	2	10,000	20,000	10,000
Procure 10 hand-held devices for water quality monitoring	Buying and shipping of 10 pieces of CBT EC+TC MPN Kit 100-Pack, mainly to check E. coli at public and private vending points	By the end of the 3rd quarter of the 1st year	10	1,050	10,500	10,500
Facilitate the preparation and implementation of water safety plans in the low-income communities	7 months of consultancy to facilitate the preparation of WSPs for all 32 low-income and informal communities	Within year 2	1	65,000	65,000	65,000
TOTAL ESTIMATES FOR WATER SERVICES IMPROVEMENTS					**3,334,450**	**1,982,900**

C. Cost Estimates of Interventions under Hygiene Services Improvements

Intervention	Description	Duration	Number	Unit Cost (USD)	Total Amount (USD)	Mid-Term Requirement
Undertake education and awareness at the household and institutional levels on ○ Safe transportation of water to the home ○ Household water treatment & safe storage ○ Safe use & management of household toilets ○ Source separation of solid waste, especially in institutions ○ Hand washing with soap practice ○ Menstrual Hygiene Management for learners	Refer to the SBCC Strategy	Refer to the SBCC Strategy	1	353,008	353,008	165,243
Build the capacity of actors for collaboration and WASH planning and implementation	Training of STMA level and Community Actors (Assembly Members, community leaders) on co-creation, WASH planning and implementation tools, and skills	By the end of year one and year 4	2	15,000	30,000	15,000

Intervention	Description	Duration	Number	Unit Cost (USD)	Total Amount (USD)	Mid-Term Requirement
Develop IEC materials to support community education and awareness creation	Toolkit to support general education and sensitization	By the end of year one	1	15,000	15,000	15,000
Conduct various behaviour change initiatives and campaigns	Implement a general behaviour change campaign using the IEC Toolkit quarterly	Throughout the project life	22	2,000	44,000	20,000
TOTAL ESTIMATES FOR HYGIENE SERVICES IMPROVEMENTS					**442,008**	**215,243**

D. Cost Estimates of Interventions under Solid Waste Management Improvements

Intervention	Description	Duration	Number	Unit Cost (USD)	Total Amount (USD)	Mid-Term Requirement
Conduct a feasibility study on door-to-door waste collection in the low-income urban communities.	Rapid assessment in the low-income communities to establish models for door-to-door solid waste collection	By the end of the 4th quarter of 1st year	1	15,000	15,000	15,000
Introduce appropriate door-to-door waste collaboration in the sections of the low-income communities where it is feasible to collaborate with the private sector (formal and informal).	Implementation of proposals from the rapid assessment by zoning the areas, contract formalization, client education, and establishing monitoring and reporting systems	From year 2 throughout the project life	5	10,000	50,000	25,000
Procure and install 20 skip containers to make waste collection services convenient to users in areas where door-to-door is not feasible	Acquire and install the skip containers (including preparation of aprons across all low-income communities at vantage positions to complement the door-to-door service	End of year 3	20	5,000	100,000	70,000
Procure a Skip container Truck for the assembly of solid waste collection services	Acquire a Skip container Truck for the assembly to retain some level of waste collection services	Second year of implementation	1	350,000	350,000	350,000
Sensitize communities on the effects of indiscriminate waste disposal	Conduct bi-annual sensitization campaigns against indiscriminate dumping and littering in the low-income communities	Throughout the project's life	12	3,000	36,000	18,000

Intervention	Description	Duration	Number	Unit Cost (USD)	Total Amount (USD)	Mid-Term Requirement
Set up environmental clubs in pre-tertiary educational institutions	Form clubs in all basic schools and organize competitions among them yearly	Throughout the project's life	6	5,000	30,000	20,000
Institute source separation into two streams in all pre-tertiary educational institutions and create a link with off-takers.	Procurement and distribution of labelled waste bins, orientation of students and teachers on source separation, and monitoring	Throughout the project's life	1 (Lump Sum)	40,000	40,000	30,000
Identify and facilitate the plastic waste recycling value chain	Conduct a value analysis and strengthen the actors	End of year 1 for value chain analysis and implement in subsequent years	1 (Lump Sum)	40,000	40,000	30,000
TOTAL ESTIMATES FOR SOLID WASTE MANAGEMENT IMPROVEMENTS					**661,000**	**558,000**

E. Cost Estimates of Interventions under Policy and Governance Systems Improvements

Intervention	Description	Duration	Number	Unit Cost (USD)	Total Amount (USD)	Mid-Term Requirement
Set up and strengthened all substructures in the low-income communities	Evaluate, constitute, and provide orientation to urban/town/area councils and unit committees in the low-income communities to support implementation of the strategy	By the end of year 3	3	20,000	60,000	30,000
Provide training for Assembly representatives, community leaders, and local-level actors (service providers) on the WASH issues and the strategic plan	Mobilize and build capacity in community mobilization, teamwork, effective communication, conflict management, inclusion, climate resilience, and advocacy	Yearly throughout the project life	6	10,000	60,000	30,000
Advocate for increased IGF allocation for liquid waste and hygiene interventions	Continuous strategic engagement with STMA management and the general assembly	Yearly throughout the project life	6	3,000	18,000	9,000
Review sanitation bylaws to make them more effective in supporting behaviour change efforts	Update STMA by-laws and gazette them to create an enabling environment for behaviour change enforcement	By the end of year 1	1	5,000	5,000	5,000

Intervention	Description	Duration	Number	Unit Cost (USD)	Total Amount (USD)	Mid-Term Requirement
Conduct a detailed capacity needs assessment of all stakeholders at the STMA level, the community level, and the implementing partners	An analysis of governance capacity at the STMA level and its implications for effective implementation of the WASH Strategic Plan	By the end of year 1	1	20,000	20,000	20,000
Develop and implement capacity capacity-building plan based on the needs assessment	Plan and roll out capacity-building interventions to ensure effective WASH governance within STMA	From year 2 to the end of the project life	5	5,000	25,000	10,000
Adopt and implement public-private partnerships to leverage resources and expertise for the implementation of the WASH Plan	Consultancy service to develop and facilitate feasible PPP models based on proposed interventions	Within years 2 and 3	1	20,000	20,000	20,000
Set up a strategic plan implementation team at the STMA to oversee the roll-out and reporting on strategic interventions	Constitution, technical orientation on the WASH Strategic Plan, commissioning, and outdooring the TEAM lead all implementation activities	*Refer to the 1st intervention under the "Implementation Coordination and Management" table below*				
TOTAL ESTIMATES FOR POLICY AND GOVERNANCE SYSTEMS IMPROVEMENT					**208,000**	**124,000**

F. Cost Estimates of Interventions under Stakeholder/Community Organization and Mobilization Improvements

Intervention	Description	Duration	Number	Unit Cost (USD)	Total Amount (USD)	Mid-Term Requirement
Provide training for community leaders and local-level actors (service providers) on the WASH issues and the strategic plan	Refer to '2nd intervention under the cost estimate table for "Policy and Governance Systems Improvements"					
Establish community WASH committees to oversee local WASH initiatives and ensure community involvement	Refer to '1st intervention under cost estimate table for "Policy and Governance Systems Improvements"					
Capacity building in leadership and community mobilization, especially for women and the youth	Develop and implement a tailored training for women and the youth, and vulnerable groups	By the end of year 2 and year 4	2	15,000	30,000	15,000
Ensure the active participation of marginalized groups such as women, youth, and people with disabilities in WASH planning and implementation	Special engagements with women, the youth, people with disabilities, and other marginalised groups on the planning and implementation of WASH interventions	Throughout the project life	6	3,200	19,200	9,600

Intervention	Description	Duration	Number	Unit Cost (USD)	Total Amount (USD)	Mid-Term Requirement
Implement collaborative monitoring and evaluation systems to track the progress and impact of WASH service delivery	Design and implement community-level data collection and sharing to augment general M&E during implementation	Throughout the project life	Refer to the Monitoring and Evaluation Framework		384,000	227,000
	Conduct mid-term and end-term evaluations	End of year 3 and end of year 6	2	35,000	70,000	30,000
Set up a learning and information dissemination channel/platform to regularly update target communities and WASH stakeholders on implementation progress	Establish an arrangement with community information centres to run community-specific quarterly WASH update programmes	Throughout the project life	24	500	12,000	6,000
TOTAL ESTIMATES FOR STAKEHOLDER/COMMUNITY ORGANIZATION AND MOBILIZATION IMPROVEMENTS					**515,200**	**287,600**

G. Cost Estimates of Interventions under Climate Resilience and Inclusion Improvements

Intervention	Description	Duration	Number	Unit Cost (USD)	Total Amount (USD)	Mid-Term Requirement
Educate and create awareness in communities on the impacts of climate change on WASH to promote adaptive practices	Quarterly sensitisation on climate change and green growth issues including causes, impacts and adaptation	Throughout the life of the project	24	2000	48,000	24,000
Conduct annual environmental competitions among pre-tertiary institutions	Separate competitions for SHS and JHS on yearly basis	Throughout the life of the project	6	10,000	60,000	30,000
Design and construct WASH infrastructure that can withstand extreme weather events and climate-related impacts	Develop a checklist of climate compliance and inclusion issues and use it to guide implementation of interventions and ensure compliance	Throughout the life of the project	1 (Lump sum)	20,000	20,000	20,000
Implement flood mitigation measures such as drainage systems improvements and flood barriers in vulnerable areas	Identify hotspots and implement appropriate interventions such as storm drain construction and other nature-based solutions	Throughout project life	1 (Lump sum)	200,000	200,000	50,000
Capture the needs of vulnerable groups, such as the elderly and disabled, in the WASH planning and implementation	Review every intervention to ensure it is not leaving anyone behind	*Refer to 3rd intervention on this table*	6	N/A	N/A	N/A
TOTAL ESTIMATES FOR CLIMATE RESILIENCE AND INCLUSION IMPROVEMENTS					**328,000**	**124,000**

H. Cost Estimates of Interventions under Implementation Coordination and Management

Intervention	Description	Duration	Number	Unit Cost (USD)	Total Amount (USD)	Mid-Term Requirement
Set up a Strategy Implementation Team within the STMA to oversee the roll-out and reporting on strategic interventions	Constitution, technical orientation on the WASH Strategic Plan, commissioning and outdooring the TEAM lead all implementation activities	By end of 1st quarter of year 1	1	15,000	15,000	15,000
Adopt annual action planning as an approach to rolling out the Strategy	Prepare comprehensive and inclusive action plans for every implementing year	Yearly throughout the project life	6	4,000	24,000	12,000
Put in place stringent risk management procedures to mitigate potential risks to strategy implementation	Include risk analysis as part of annual action planning	Yearly throughout the project life	6	N/A	N/A	N/A
Institute annual WASH fora within STMA as a mechanism to review progress of implementation, share lessons learnt and review implementation approaches	Organisation of annual stakeholder forum to discuss progress and way forward	Yearly throughout the project life	6	4,000	24,000	12,000
Participation in local and international conferences to share lessons learned and to attract partnerships	3-5 persons participate in at least one local conference and one international conference to share on implementation lessons	Yearly throughout the project life	6	25,000	150,000	75,000

Intervention	Description	Duration	Number	Unit Cost (USD)	Total Amount (USD)	Mid-Term Requirement
Pursue sister-city relationships to draw technical support and funding for implementation of WASH Strategic plan	Set up STMA Implementation Team to regularly identify WASH financing opportunities and to mobilize resources to implement plan through developing proposals for partnerships	Yearly throughout the project life	1 (Lump sum)	20,000	20,000	20,000
Undertake learning trip to and adopt strategic alliances with sector projects, institutions and strategic partners/funders (e.g. GAMA SWP, GWL, WSUP, WHO)	Intentional engagement with potential institutions/organisation and projects to market the plan and draw resources for implementation of the WASH Strategic Plan	Yearly throughout the project life	1 (Lump sum)	20,000	20,000	10,000
Dissemination of 5-Year WASH Strategic Plan to STMA staff, community leaders, women and youth groups, and health and school workers on effective communication and advocacy techniques	The implementation team leads engagements with all stakeholders to share the strategic plan and canvass for support with implementation	Yearly throughout the project life	6	10,000	60,000	30,000
TOTAL ESTIMATES FOR IMPLEMENTATION COORDINATION AND MANAGEMENT					**313,000**	**174,000**

Annex 2: Detailed Action Plan for Strategic Interventions

THEME 1: Sanitation Services Improvement

Objective 1: 60% Access to Safely Managed Sanitation (Toilets) Services at the Household Level by 2030

Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Responsibility	Assumptions	Approach to Implementation	Existing Opportunity
			Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q1	Q2	Q3	Q4				
Promote household toilet adoption using Sanitation Marketing Approach		On-going																									Implementation Team	Internal capacity exists	Media campaign/Community activation	Marketing models exist to reference
Build capacity in the construction of appropriate and suitable toilet technologies within the STMA		1 month																									MEHO	Expert input available	Training workshops	Experienced Artisnas are available
Construct household toilets using subsidy schemes to accelerate household toilet technologies within the STMA		On-going																									MEHO	Demand exists	Media campaign/Community activation	Tested models available for reference
Provide institutional toilets for all pre-tertiary education institutions and healthcare facilities in low-income communities		O-going																									Metro Coordinating Director	Funding will be available	Procurement/Construction Supervision	Procurement process for contractors available
Pursue strategic partnership with WASH NGOs and corporate institutions for resource mobilization for institutional and household WASH improvements		On-going																									Metro Coordinating Director	WASH NGOs & corporate institutions exist	Executive Breakfast & PR events	Leverage on CSR
Consistently prioritize household toilet and institutional latrines in the allocation of IGF		Annually																									Metro Coordinating Director	Has oversight of budgeting process	Annual Budgeting process	Budget lines exist for infrastructure development
Building capacity for WASH services planning, implementation and management		1 Week																									Implementation team	Expert input available	Training Workshop	
Facilitate the preparation and use of sanitation safety plans in the low-income communities		Annually																									MEHO	Internal capacity exists	Community engagements	

THEME 2: Water Services Improvements

Objective 1: All households have access to safely managed water source either by direct connection or through safely managed communal or private standpipe or borehole with not less than 70% of households having access to house connections by 2030

Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Responsibility	Assumptions	Approach to Implementation	Existing Opportunity
			Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q1	Q2	Q3	Q4				
Expand pipe networks in the low-income communities		On-going																									Metro Engineer	Consonance with GWC expansion plans	Construction	GWC expansion plans
Facilitate households and institutional access to direct pipe connections in collaboration with GWL (LICSD) through the institution of new water connection subsidy scheme		On-going																									Metro Coordinating Director	Consonance with GWC LICSD approach	Consultative meetings	GWC has LICSD
Conduct community mobilisation and water user education in all communities.		On-going																									Community Development Officer	Internal Capacity Exists	Community Engagement	Community Information Centres
Explore on-site sources (mechanized boreholes and point sources) in feasible areas.		On-going																									Metro Engineer	Adequate quantity of ground water	Geotech investigations	Existing Aquifers
Train and equip Environmental Health Assistants (EHAs) to conduct quarterly water quality monitoring at communal standpipes and vending points with hand-held devices.		1 Week																									Metro Engineer	Expert input available	Training Workshop	Adequate number of EHAs available
Procure 10 hand-held devices for water quality monitoring.		3 Month																									Metro Coordinating Coordinator	Availability of Funds	Procurement	IGF
Facilitate the preparation and implementation of water safety plans in the low-income communities.		1o days Annually																									Metro Planning Officer	Internal Capacity Exists	Community Engagements	

	THEME 3: Hygiene Services Improvements																														
Objective 2 Use long arm ladle to retrieve stored water																															
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Responsibility	Assumptions	Approach to Implementation	Existing Opportunity
			Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q1	Q2	Q3	Q4				
Undertake education and awareness at the household and institutional levels		On-going																									PRO	Internal capacity exists	Media campaign/School Education	Community Information Centres available
Build capacity of actors for collaboration and WASH planning and implementation		2 Weeks																									PRO	Internal capacity exists	Workshop	Multistakeholder Forum is active
Develop IEC materials to support community education and awareness creation		1 Year																									PRO	Local expertise exists	Materials Development Workshop	
Conduct various behaviour change initiatives and campaigns		On-going																									PRO	IEC Materials Developed	Media campaign & events	Community Information Centres available
	THEME 4: Solid Waste Management Improvements																														
	Objective 1: All households have adequate access to either a skip container or door-to-door service (informal or formal)																														
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
			Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q1	Q2	Q3	Q4				
Conduct feasibility study on and implement appropriate door-to-door waste collection system in the low-income urban communities.		2 Months																									Metro Planning Officer	Internal capacity exists	Research	Baseline Documents Available
Sensitize communities on the effect of indiscriminate waste disposal		On-going																									MEHO	Internal capacity exists	Media campaign/Community Engagement	
Procure and install 20 skip containers to make waste collection services convenient to users in areas where door-to-door is not feasible		Years 2 & 3																									Municipal Coordination Director	Funding is available	Procurement	IGF
	Objective 2: All pre-tertiary educational institutions separate waste into two streams and are linked with off-taker																														
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
			Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q1	Q2	Q3	Q4				
Institute source separation into two streams in all pre-tertiary educational institutions and link with off-taker.		On-going																									Metro Director of Education	Alignment with GES Policy	Education	SHEP
Set up environmental clubs in pre-tertiary educational institutions		On-going																									Metro Director of Education	Alignment with GES Policy	School Club Formation	SHEP Guidelines
Identify and facilitate the plastic waste recycling value chain		On-going																									Strategy Implementation Team	Plastic waste businesses exist		
	THEME 5: Policy and Governance Systems Improvements																														
	Objective 1 WASH is highly prioritized by STMA in terms of resources allocation																														
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
			Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q1	Q2	Q3	Q4				
Advocate for increased IGF allocation for liquid waste and hygiene interventions		2 Weeks																									Metro Coordinating Director	Key actors have knowledge of the Strategy	In-house Consultations	
Adopt and implement public-private partnerships to leverage resources and expertise for implementation of the WASH Plan.		On-going																									Strategy Implementation Team		Implementation Team resolution	
Conduct detailed capacity needs assessment of all stakeholders at STMA level, community level, and external partners.		1 Month																									Strategy Implementation Team		Needs Assessment	
Develop and implement capacity building plan based on the needs assessment.		Spread over 5 years																											Workshops	Stakeholder Forum active

Review sanitation by-laws to make it more effective in supporting behaviour change efforts.		9 Months																							MEHO	Internal capacity exists	Seek expert input	
Objective 2 Sub-district level structures are effectively leading WASH services delivery in STMA																											
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
			Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q1	Q2	Q3	Q4				
Set-up and strengthened all sub structures in the low-income communities		30 Months																									Presiding Member	General Assembly fully constituted		Guidelines exist
Provide training for Assembly representatives, community leaders and local level actors (service providers) on the WASH issues and the strategic plan.		1 month																									Strategy Implementation Team		Training workshops	Local capacity exists
THEME 6: Stakeholder/Community Organization and Mobilization																											
Objective 1 stakeholder engagement and community participation mainstreamed into STMAs WASH initiatives at all levels																											
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
			Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q1	Q2	Q3	Q4				
Provide training for community leaders and local level actors (service providers) on the WASH issues and the strategic plan																											Strategy Implementation Team	Internal capacity exists	Training workshop	
Establish community WASH committees to oversee local WASH initiatives and ensure community involvement.																											Strategy Implementation Team		Community mobilization	Co-creation & community participation ideologies of STMA
Capacity building in leadership and community mobilization especially for women and the youth		12 Months																									Community Development Officer	Enthusiastic individuals can be identified	Training workshop	Existings youth groups in some communities
Implement collaborative monitoring and evaluation systems and track the progress and impact of WASH services delivery		On-going																									Strategy Implementation Team	STMA commitment	M&E Team to be set up, routine M&E, Mid-Term & End-Term	
Ensure the active participation of marginalized groups such as women, youth, and people with disabilities in WASH planning and implementation		On-going																									Strategy Implementation Team	Data exists on marginalized & vulnerable groups	Mainstreaming	
Set-up a learning and information dissemination channel/platform to regularly update target communities and WASH stakeholders on implementation progress		On-going																									Strategy Implementation Team	Good internet connectivity	Use of mass, micro and social media channels	Active Client Services unit
THEME 7: Climate Resilience and Inclusion																											
Objective 1 All WASH projects incorporate climate resilience measures to withstand the impacts of climate change by 2029																											
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
			Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q1	Q2	Q3	Q4				
Educate and create awareness in communities on the impacts of climate change on WASH to promote adaptive practices		On-going																									PRO	Internal capacity exists	Use of mass, micro and social media channels	Community Information Centres
Conduct annual environmental competitions among pre-tertiary institutions		Annually																									Metro Director of Education	Co-curricula activities will be promoted	School competitions	SHEP
Design and construct WASH infrastructure that can withstand extreme weather events and climate-related impacts		On-going																									Metro Engineer		Seek expert input	
Implement flood mitigation measures such as drainage systems improvements and flood barriers in vulnerable areas		On-going																									Metro Engineer		Design & Construction	

	Objective 2 Mainstream gender and social inclusion in all WASH initiatives, ensuring that the needs of vulnerable groups are addressed by 2029																												
Strategic Initiatives		Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
				Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q1	Q2	Q3	Q4				
Capture the needs of vulnerable groups, such as the elderly and disabled, in the WASH planning and implementation			On-going																									Strategy Implementation Team		Mainstreaming	Co-creation and community participation ideology of STMA
	THEME 8: Implementation Coordination Management																												
	Objective 1 Work closely with identified stakeholders to plan and implement WASH SBCC interventions.																												
Strategic Initiatives		Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
				Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q1	Q2	Q3	Q4				
Set up a Strategy Implementation Team within the STMA to oversee the roll-out and reporting on the strategic interventions			1 Month																									Metro Coordinating Director	Key actors have knowledge of the Strategy	In-house Consultations	
Adopt annual action planning as an approach to rolling out the Strategy			Annually																									Strategy Implementation Team		Mainstreaming	
Put in place stringent risk management procedures to mitigate potential risks to strategy implementation			Annually																									Strategy Implementation Team		Brainstorming Session	
Institute annual WASH fora within STMA as a mechanism to review progress of implementation, share lessons learnt and review implementation approaches			Annually																									Strategy Implementation Team	Funding will be available	2 Day Review meeting	Stakeholder Forum
Participation in local and international conferences to share lessons learned and to attract partnerships			On-going																									Metro Coordinating Director	Sponsorship will be available	Participating in conferences & events	IGF
Pursue sister-city relationships to draw technical support and funding for implementation of WASH Strategic plan			On-going																									Strategy Implementation Team		Proposals	On-going initiatives to learn from.
Undertake learning trip to and adopt strategic alliances with sector projects, institutions and strategic partners/funders (e.g. GAMA SWP, GWL, WSUP, WHO)			On-going																									Strategy Implementation Team	Sponsorship will be available	Working Visits	IGF
Dissemination of 5-Year WASH Strategic Plan to STMA staff, community leaders, women and youth groups, and health and school workers on effective communication and			On-going																									Strategy Implementation Team		General assembly resolution	

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ATTACHMENTS

Attachment I: 'Full' Monitoring and Evaluation Framework for STMA 6-Year WASH Strategic Plan

Attachment II: 'Full' Strategy for Sustainable Behaviour Change Campaign for STMA 6-Year WASH Strategic Plan

ATTACHMENT I

'FULL' MONITORING AND EVALUATION FRAMEWORK FOR STMA 6-YEAR WASH STRATEGIC PLAN

Sekondi-Takoradi Metropolitan Assembly

Open Government Partnership

MONITORING AND EVALUATION FRAMEWORK FOR STMA 6-YEAR WASH STRATEGIC PLAN

PROCUREMENT OF CONSULTANT TO CO-CREATE A 6-YEAR STRATEGIC PLAN FOR IMPROVING WATER AND SANITATION IN LOW-INCOME COMMUNITIES IN SEKONDI-TAKORADI, AND CONDUCT CAPACITY BUILDING AND TRAINING FOR IDENTIFIED STAKEHOLDERS ON INTEGRATED PLANNING OF SANITATION SERVICES

Reference No: OGP-MDTF/STMA/MSF/2024/01

(LOT 1)

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LIST OF ABBREVIATIONS

BCC	Behaviour Change Communication/Campaign
CSO	Civil Society Organisation
EHO	Environmental Health Officer
FGD	Focus Group Discussions
GAMA SWP	Greater Accra Metropolitan Area Sanitation and Water Project
KII	Key Informant Interviews
LIUCs	Low-Income Urban Communities
M&E	Monitoring and Evaluation
MEHO	Metro Environmental Health Officer
MPCU	Metro Planning Coordinating Unit
OGP	Open Government Partnership
SBCC	Social and Behaviour Change Communication
SDG	Sustainable Development Goal
SHEP	School Health Education Programme
STMA	Sekondi-Tarkoradi Metropolitan Assembly
SWOT	Strengths, Weaknesses, Opportunities, and Threats
TOR	Terms of Reference
TREND	Training, Research and Networking for Development
WASH	Water, Sanitation and Hygiene

1.0 INTRODUCTION

1.1 Background and Context

The Sekondi-Takoradi Metropolitan Assembly (STMA), in partnership with the Open Government Partnership (OGP) Support Unit and the World Bank, is currently implementing a WASH project aimed at improving access to clean water, sanitation facilities, and hygiene practices in underserved urban communities. This initiative responds to the urgent need to address persistent challenges such as inadequate WASH infrastructure, sanitation-related illnesses, and low coverage of sanitation facilities in the target areas. Rapid urbanization, coupled with climate change impacts, has exacerbated these challenges, posing significant threats to public health and socio-economic development. The STMA's commitment to enhancing WASH services is aligned with global agendas such as the Sustainable Development Goals (SDGs), particularly SDG 6 (Clean Water and Sanitation) and SDG 11 (Sustainable Cities and Communities).

In recent years, despite efforts to improve sanitation through policy reforms and stakeholder engagements, implementation gaps persist, hindering desired outcomes. Limited stakeholder involvement, financial constraints, and enforcement issues have impeded the effectiveness of previous interventions. Through the OGP collaboration, the STMA is co-creating a 6-Year WASH Strategic Plan to provide the needed guidance and focus on improving WASH infrastructure and services delivery to low-income urban communities (LIUCs) and informal settlements in STMA. This Monitoring and Evaluation (M&E) Framework is one of the key components of the WASH Strategic Plan. M&E plays a pivotal role in ensuring the effectiveness, efficiency, and impact of development plans and programs by systematically tracking progress, assessing performance, and learning from experiences. Also, M&E enables informed decision-making and facilitates continuous improvement in project implementation.

This M&E Framework is designed to guide the implementation of the WASH Strategic Plan, focusing on activities and interventions related to water, sanitation, and hygiene (WASH) in LIUCs and informal settlements within the Sekondi-Takoradi Metropolis. This report outlines the key components of the M&E Framework, including indicators, data collection methods, reporting mechanisms, and stakeholder engagement strategies. It emphasizes transparency, accountability, and learning throughout the Strategic Plan, ultimately aiming to achieve sustainable WASH outcomes and improve the quality of life for residents of LIUCs in STMA.

1.2 Defining Monitoring and Evaluation

Monitoring involves a systematic process of gathering, analyzing, and applying information to gauge how well activities and projects are progressing and to inform decision-making. It is underpinned by a foundational plan, serving as a benchmark to identify any deviations from set goals or plans. High-caliber monitoring reports play a crucial role in the assessment and auditing of projects. The process of monitoring is vital for deriving lessons from past actions, as well as ensuring accountability for the resources utilized, both within the organization and to external stakeholders.

Evaluation, on the other hand, is the process of critically examining ongoing or finished activities or projects concerning their design, execution, and outcomes. It focuses on the quality of performance, addressing factors such as the efficiency, effectiveness, relevance, and lasting impact of the project's aims. Conducted at specific stages –before implementation, during, or after completion– evaluation is key to enhancing an organization's operations. Typically, this is undertaken by impartial external experts to ensure an objective and unbiased perspective.

1.3 Objectives of the M&E Framework

The M&E framework is designed to guide the systematic collection, analysis, and utilization of data to inform evidence-based decision-making and performance of STMA and its stakeholders in the implementation of the WASH Strategic Plan. The specific objectives of the M&E Framework include the following:

v. To monitor progress towards the achievement of the strategic goals and objectives of the WASH Strategic Plan, through tracking key performance indicators (KPIs) related to WASH coverage, behavior change, governance arrangements, and health outcomes.
vi. To identify implementation gaps, challenges, and bottlenecks that may hinder the success of the WASH Strategic Plan, through regular monitoring of activities and outputs.
vii. To enhance accountability and transparency in Plan implementation, effective reporting mechanisms and disseminating findings to stakeholders at all levels.
viii. To promote learning and knowledge sharing within STMA and among stakeholders, through effective documenting of lessons and best practices for scale-up and continuous improvement.

1.4 Principles of the M&E Framework

The following principles will serve as guiding notes that shape the design, implementation, and utilization of the M&E framework for the WASH Strategic Plan. They include:

- **Relevance:** The framework is designed to be relevant, ensuring that data collected directly contributes to assessing progress and informing decision-making.
- **Participation:** It emphasizes active participation of community members, local authorities, and other stakeholders in data collection, analysis, and interpretation to promote ownership and inclusivity.
- **Transparency:** The framework prioritizes transparent data collection, clear reporting of findings, and open communication with stakeholders to build trust and accountability.
- **Reliability and Validity:** The framework upholds the principles of reliability and validity in data collection and analysis. It utilizes rigorous methods to ensure the accuracy, consistency, and credibility of findings.
- **Utilization:** We emphasize the utilization of M&E findings for decision-making and continuous improvement. Data collected through monitoring and evaluation activities are actively used to adapt strategies, address challenges, and optimize project impact.
- **Ethical Considerations:** The framework upholds ethical considerations, ensuring that data collection respects the rights, privacy, and dignity of individuals and communities.
- **Adaptability:** The framework is designed to be adaptable and responsive to changing contexts and stakeholder needs, regular reviews, and adjustments to the approach based on feedback and lessons learned.

2.0 KEY WASH THEMES FOR THE M&E FRAMEWORK

The 6-Year WASH Strategic Plan for Low-Income Communities in Sekondi-Takoradi has been developed based on the key themes of Water, Sanitation, Hygiene, and Governance. Thus, the M&E framework is guided by the thematic areas of the Strategic Plan, and this forms the basis of the design and implementation of activities spelt out in this framework. In addition to these themes, the framework has adopted crosscutting issues that relate to the delivery of WASH infrastructure and services within the LIUCs of STMA. These include Equity and Inclusion, Sustainability, and Climate Resilience and Adaptation. This section of the report presents an overview of the key issues that are the focus of measurement under each WASH theme in the Framework.

2.1 Water

Access to safe and reliable water is fundamental to achieving improved public health and well-being in low-income communities. The monitoring of water availability, quality, and access aims to ensure that all community members have equitable access to a safe and sufficient water supply. Monitoring and evaluation under the water theme will focus on assessing the availability, quality, and accessibility of water sources within communities, for both households and institutions. Key indicators will include:

- Water Access: Measuring the proportion of households (and institutions) with access to improved water sources within a reasonable distance, emphasizing equity in distribution and service reliability.
- Water Availability: Monitoring the reliability and sufficiency of water supply to meet community needs, considering factors such as coverage, distribution, and service interruptions.
- Water Quality: Regular assessment of water quality to ensure compliance with national standards for potable water, addressing parameters such as turbidity, microbial contamination, and chemical pollutants.

2.2 Sanitation

Sanitation services, including access to improved toilet facilities and proper waste management, are crucial for reducing the spread of diseases and improving overall hygiene. The monitoring and evaluation under the sanitation theme will evaluate the provision, utilization, and sustainability of sanitation facilities and services. Key indicators will include:

- Sanitation Coverage: Monitoring the percentage of households (and institutions) with access to improved sanitation facilities, such as toilets or latrines, and assessing the functionality and cleanliness of these facilities.
- Sanitation Behavior: Tracking changes in sanitation practices, including open defecation rates, safe waste disposal behaviors, and usage of sanitation facilities among community members.
- Waste Management: Assessing the effectiveness of waste management systems, including solid waste collection, disposal, and recycling initiatives, to mitigate environmental and health risks.

2.3 Hygiene and Behavior Change

Behavior change is critical for sustainable improvements in sanitation and hygiene practices. The M&E under this theme will focus on the adoption of key hygiene behaviors, such as handwashing with soap and safe waste disposal, through targeted awareness campaigns and community engagement activities.

Indicators will track changes in behavior and knowledge levels related to hygiene practices. This will include the following indicators:

- Hygiene Practices: Monitoring the adoption of key hygiene behaviors, such as handwashing with soap at critical times, safe waste handling practices, and menstrual hygiene management.
- Behavior Change Communication (BCC): Evaluating the effectiveness of BCC strategies in promoting behavior change, including community awareness campaigns, peer-to-peer education, and targeted messaging.

2.4 Community Engagement and WASH Governance

The effectiveness of WASH governance structures and institutional capacities will be monitored to ensure accountable and transparent management of WASH services. The involvement of stakeholders in decision-making and enhancing governance structures is crucial in strengthening ownership and accountability, ultimately contributing to sustainable WASH services. This includes evaluating stakeholder engagement, regulatory compliance, and coordination mechanisms at the community and city levels. The key indicators will include:

- Stakeholder Participation: Evaluating the level of community involvement in decision-making processes related to WASH interventions, including participatory planning, implementation oversight, and feedback mechanisms.
- Governance Structures: Assessing the effectiveness of local (STMA level) WASH governance structures, including coordination among stakeholders, adherence to regulations, and transparency in resource allocation, revenue collection, and mobilisation.

2.5 Equity and Inclusion

This theme focuses on ensuring equitable access to safe water and sanitation services for all community members, with particular attention to marginalized and vulnerable populations, including women, children, the aged, and persons with disabilities. Key indicators will measure the extent of coverage across socio-economic segments and assess progress towards addressing disparities in WASH access. This will include:

- Inclusivity: Monitoring access to WASH services among vulnerable and marginalized groups, including women, children, the elderly, and persons with disabilities.
- Gender Equity: Assessing gender disparities in decision-making, resource allocation, and participation in WASH-related activities to promote gender-sensitive approaches.

2.6 Sustainability

Assessing the sustainability of WASH interventions is essential for long-term impact. This theme will focus on building STMA and community capacity for infrastructure maintenance, exploring innovative financing mechanisms, and integrating climate-resilient approaches to address environmental challenges and ensure the continuity of services. This will include:

- Infrastructure Maintenance: Tracking the functionality and maintenance of WASH infrastructure over time to ensure long-term service continuity.
- Financial Viability: Assessing the financial sustainability of WASH initiatives, including household toilet savings/loans, revenue generation, cost recovery mechanisms, and investment in future infrastructure needs.

2.7 Climate Resilience and Adaptation

Building resilience to climate change impacts and adapting to evolving challenges are critical for ensuring the long-term success of WASH interventions. Climate resilience measures and adaptive management strategies will be integrated into the M&E activities to enhance the effectiveness of WASH solutions in the face of climate change. This will involve:

- Climate Resilience: Evaluating the resilience of WASH systems to climate change impacts, including extreme weather events, water scarcity, and flooding.
- Adaptive Management: Incorporating adaptive management strategies to respond to the challenges posed by climate change impacts on WASH systems.
- Climate Risk Assessment: Proportion of WASH projects with climate risk assessments (e.g., percentage of projects incorporating climate risk assessments as per UNFCCC guidelines).
- Climate Responsive WASH Planning: Integration of climate adaptation strategies into WASH planning (e.g., degree to which climate adaptation strategies are integrated into WASH planning, following IPCC recommendations).
- Climate Responsive Water Safety Plans: Proportion of water safety plans incorporating climate resilience measures (e.g., percentage of water safety plans that include measures to address climate resilience as outlined by WHO).
- Climate Responsive WASH Infrastructure: Proportion of communities with climate-resilient WASH infrastructure (e.g., percentage of communities with WASH infrastructure designed to withstand climate-related impacts, as suggested by GWP).
- Community Climate Awareness: Community awareness and preparedness for climate impacts on WASH (e.g., proportion of community members aware of and prepared for climate impacts on WASH services.
- Climate Responsive Funding: Funding allocation for climate-resilient WASH projects (e.g., percentage of WASH budget allocated for climate-resilient projects

3.0 KEY INDICATORS AND ALIGNMENT WITH SDGS

The Monitoring and Evaluation (M&E) framework for the STMA WASH Strategic Plan encompasses the selection and alignment of key indicators with the Sustainable Development Goals (SDGs). In the context of the M&E framework, this section highlights the significance of defining key indicators and their alignment with SDGs. The key indicators serve as measurable benchmarks to assess the Plan's progress and performance in achieving its strategic goals and objectives. They provide quantifiable data to track improvements over time and identify areas for further intervention or continuous improvement.

By defining relevant indicators, we can quantify the success and impact of the proposed interventions and activities in the Strategic Plan. This enables stakeholders to understand the effectiveness of WASH initiatives and make informed decisions for future planning and resource allocation. Also, the key indicators enhance accountability by providing clear metrics to evaluate the outcomes of projects and interventions that will be implemented within the Plan. The indicators also facilitate transparent reporting and accountability to stakeholders, donors, and the community regarding the project's achievements and challenges.

3.1 Alignment with Sustainable Development Goals:

Globally, the SDGs provide a universally recognized framework for sustainable development. Thus, the M&E framework aligns its indicators with specific SDGs related to WASH (e.g., SDG 6 (WASH); SDG 3 (Health), SDG 4 (Education), and SDG 5 (Gender), etc.). First, this helps to establish a link between the WASH Strategic Plan and the global goals (*which are also aligned to Ghana's National Priorities*), and second, to demonstrate its contribution towards broader global development priorities. It showcases STMA's commitment to addressing the SDGs and contributes to a collective effort towards achieving global targets for WASH services.

Additionally, the SDG alignment fosters knowledge sharing and collaboration – it will enable STMA's WASH project to leverage global networks, best practices, and resources focused on similar development goals (like reference indicators from JMP by WHO/UNICEF, GLASS by WHO, and Sphere by Red Cross), leading to more effective and sustainable interventions. In line with this, the framework has drawn indicators from all these additional references to ensure that the framework is comprehensive.

The main indicators adopted for each of the thematic areas being considered for the M&E Framework have been presented in Table 1. These key indicators have been matched against the appropriate SDGs, which align with them. The table also presents the definitions and measurements for these indicators and the source of data for tracking the various indicators. It is, however, worth noting that these indicators have been drawn from the different reference sources mentioned above. Also, the indicators will require further integration into the overall Logical Framework of the Strategic Plan.

3.2 Integration into the Logical Framework of STMA's WASH Strategic Plan

The key indicators aligned with SDGs must further be integrated into the STMA's WASH Strategic Plan's Logical framework to guide data collection, analysis, and reporting processes. This integration ensures that monitoring and evaluation activities are directly linked to the Strategic Plan's objectives and key activities and contribute to evidence-based decision-making. Figure 1 below shows a schematic of the Logical Framework of the STMA WASH Strategic Plan.

The Logical Framework is an essential element of an M&E framework that ensures plans/ projects are designed and implemented in a structured way, with clear benchmarks for success and avenues for tracking and assessing progress and impact. It provides a structure to help specify the components of a plan/ project and its activities, and to facilitate systematic monitoring and evaluation. The LogFrame will serve as a reference document that details what needs to be measured and tracked over the life of the WASH Strategic Plan.

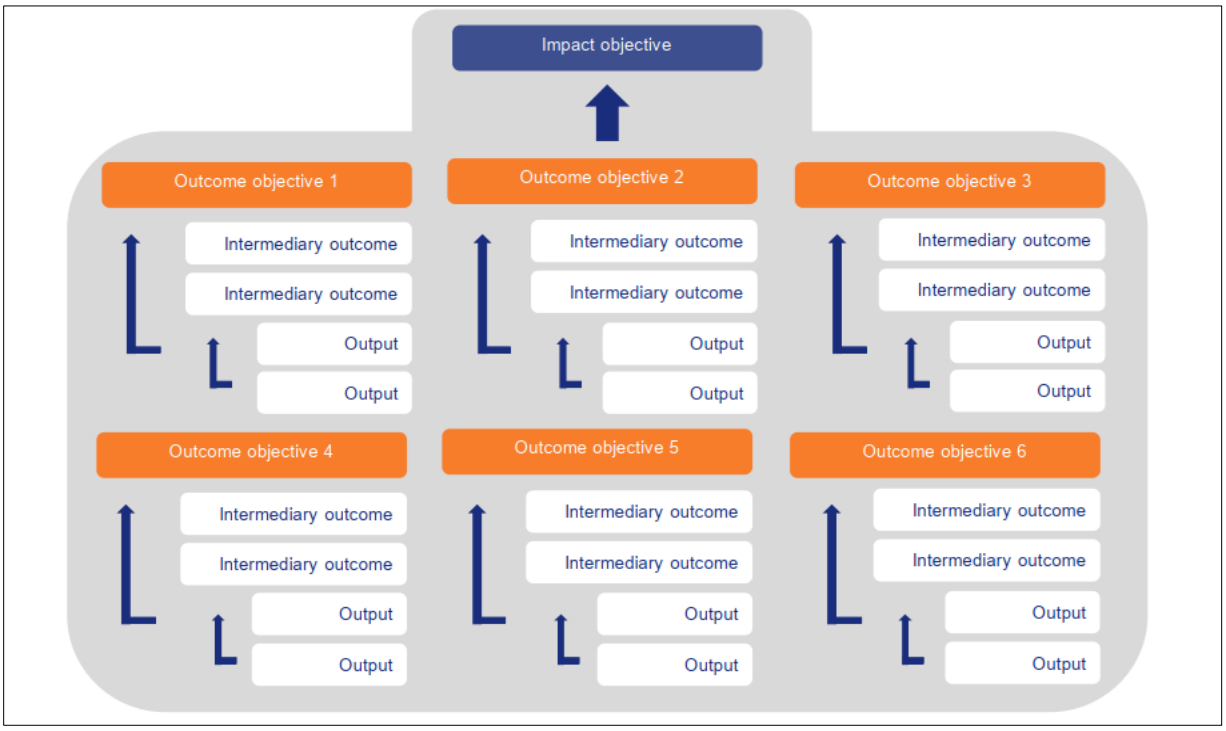

Figure 1: A Schematic of the WASH Strategic Plan Logical Framework (Source: GNWSP)

Figure 1 illustrates a schematic of a Logical Framework (LogFrame) for the WASH Strategic Plan, focusing on how various elements such as outcome objectives, intermediary outcomes, and outputs align to achieve an overarching impact objective. The LogFrame is structured with an "Impact Objective" at the top, which represents the ultimate goal of the WASH Strategic Plan. This impact is supported by multiple "Outcome Objectives," which are more specific targets that contribute towards achieving the impact. Each outcome objective is further broken down into "Intermediary Outcomes" and "Outputs". Outcome Objectives are specific, measurable objectives that the plan intends to achieve, which together will lead to the achievement of the impact objective. Intermediary Outcomes are the results expected to occur between the outputs and the achievement of outcome objectives. Outputs are the tangible products or services resulting from the project activities.

The schematic provides a clear path for developing an M&E framework by identifying specific points of measurement and evaluation, as shown in Table 1.

- *Impact Monitoring*: The impact objective is the highest level of achievement expected from the 6-Year WASH Strategic Plan, and it would typically be evaluated at the end of the plan's implementation to determine overall success. It requires high-level indicators that reflect significant changes in WASH services and impacts on community health and well-being.

- *Outcome Monitoring:* Each outcome objective has specific indicators that measure progress towards the stated goals. These should be regularly monitored to assess whether the strategy is on track. Monitoring at this level helps in understanding the effectiveness of the interventions and their direct benefits.

- *Intermediary Outcome Monitoring:* Monitoring these outcomes involves tracking smaller, yet critical changes that lead to achieving the outcome objectives. This level of monitoring helps in identifying the strengths and weaknesses in the plan's implementation processes.

- *Output Monitoring:* Outputs are the most immediate results of planned activities and are generally the easiest to measure. Indicators at this level are very concrete and often quantitative, such as the number of sanitation facilities constructed or the number of people trained.

The detailed M&E framework includes the timelines for periodic evaluation at different levels (output, intermediary outcome, outcome, and impact). This helps in assessing the effectiveness, efficiency, and sustainability of the proposed interventions in the Strategic Plan. Thus, it is crucial to establish what data needs to be collected, how often, and by whom. The schematic supports setting up a data collection system that aligns with the outputs and outcomes defined in the framework. Consequently, this should not just be about the collection and analysis of data but should also inform the ongoing implementation of the plan.

Regular reporting would be prepared based on the data collected from monitoring the various components of the LogFrame. These reports are expected to be shared with all stakeholders to ensure transparency and maintain engagement. Engaging different stakeholders in the monitoring and evaluation processes to ensure that diverse perspectives are considered and to enhance the credibility of the findings. Also, feedback mechanisms would be established to adapt and refine strategies based on M&E findings. Overall, the M&E framework should be dynamic, allowing for adjustments to the Strategic Plan based on the findings from the M&E activities.

In summary, the schematic of the WASH Strategic Plan LogFrame provides a comprehensive roadmap for setting up an M&E framework by outlining clear objectives, expected results, and the relationships between them. This structured approach facilitates systematic monitoring, enables effective evaluation, and supports the adaptive management of the WASH Strategic Plan.

Table 1: Alignment of Adopted Indicators to the SDGs

Indicator	Category	SDG Goal	Definition	Measurement	Data Source
WATER					
Percentage of households with access to safe and reliable water sources	Service Use	SDG 6	Proportion of households in target communities with access to water sources that are safely managed, reliable, and within a 30-minute round trip.	Number of households with access to safely managed drinking water services/ Total number of households in target communities.	Household Surveys, Water Quality Testing Reports
Proportion of Schools with access to safe and reliable water sources	Service use	SDG 4	The proportion of schools with access to an improved water source within school premises.	Number of schools with safely managed drinking water source/ Total number of schools in target communities.	School Surveys, Educational Institutions Reports
The quantity of water available per capita	Outcome	SDG 6	Measurement of the amount of water available per person in the target communities.	Total water quantity (*50 liters/ person/ day*) available per capita/ Population of target communities	Water utility reports, Water quality test reports/ Household surveys
Quality of drinking water available to households	Outcome	SDG 6	The proportion of households who are drinking water that meets the national quality standards	Percentage of households with access to drinking water that meets national or WHO water quality standards for chemical and biological parameters	WHO/JMP Reports, Household Surveys, Utility Reports, Water quality testing reports
Number of water-related diseases reported in the community	Outcome	SDG 3	Incidence rate of water-borne diseases (*e.g., cholera, diarrhea*) reported within communities.	Number of reported cases of water-related diseases / Total population in target communities	Health facility records, Community surveys
Proportion of healthcare facilities (HCF) with access to safe and reliable water sources	Service use	SDG 3	The proportion of healthcare facilities with access to an improved water source within premises.	Number of HCFs with safely managed drinking water source/ Total number of HCFs in target communities.	Community Surveys, Health Facility Reports
SANITATION					
Percentage of households with access to improved sanitation facilities	Service Use	SDG 6	Proportion of households in target communities with access to sanitation facilities that are safe and hygienic.	Number of households with access to safely managed sanitation services / Total number of households in target communities.	Household surveys, sanitation facility inspections

Coverage of waste management services in the community	Service Use	SDG 11	Percentage of waste collection and disposal services available to households and businesses in target communities.	Number of households/businesses with waste management services / Total number of households/ businesses in target communities	Municipal waste management reports, Project data
Reduction in open defecation practices	Outcome	SDG 6	A decrease in the proportion of individuals practicing open defecation in target communities.	Number of individuals practicing open defecation / Total population in target communities	Community surveys, Project monitoring data, Observational studies
Proportion of Schools with access to safely managed sanitation	Service use	SDG 4	The proportion of schools with access to safely managed and hygienic toilet facilities within school premises.	Number of schools with safely managed toilets/ Total number of schools in target communities.	School Surveys, Educational Institutions Reports
Proportion of healthcare facilities (HCF) with access to safely managed toilet facilities	Service use	SDG 3	The proportion of healthcare facilities with access to safely managed and hygienic toilets within premises.	Number of HCFs with safely managed toilet facilities/ Total number of HCFs in target communities.	Community Surveys, Health Facility Reports
HYGIENE					
Proportion of Households with Access to Basic Hygiene Facilities	Services	SDG 6	Availability of handwashing facilities with soap and water for use by households	Number of households with access to handwashing facilities with soap and water / Total number of households in target communities.	Household surveys, observational studies.
Percentage increase in handwashing with soap at critical times	Outcome	SDG 3	Increase in the proportion of individuals practicing handwashing with soap before eating and after using a toilet	Number of individuals practicing handwashing with soap at critical times pre/ post-intervention / Total population in communities	Household surveys, Observational studies
Improved menstrual hygiene management practices in communities and schools	Outcome	SDG	Increase in the proportion of women and girls with access to and use of a safe and hygienic menstrual material, and dispose of it properly.	Percentage of women and girls (ages 15-49) who use a safe and hygienic menstrual material and dispose of it properly, with access to a private and clean facility for changing and washing	Household surveys, Observational studies
Awareness and compliance with hygiene promotion messages	Outcome	SDG 3	Level of knowledge and adherence to hygiene promotion messages (e.g., posters, radio broadcasts) in target communities.	Percentage of individuals aware of and following hygiene promotion messages / Total population in target communities	Surveys, Focus group discussions

Proportion of Schools with Access to Handwashing Facilities	Services	SD4 4	Availability of handwashing facilities with soap and water for use by school children	Number of schools with basic handwashing facilities/ Total number of schools in target communities.	School Surveys, Educational Institutions Reports
Proportion of Health Care Facilities with Access to Basic WASH Services	Services	SDG 3	Availability of WASH services in healthcare facilities	Number of health care facilities with basic WASH services / Total number of health care facilities in target communities.	Health facility assessments, WASH FIT evaluations
COMMUNITY ENGAGEMENT AND GOVERNANCE					
Level of community participation in decision-making related to WASH interventions	Impact	SDG 16	Degree of community involvement and influence in decisions regarding WASH projects and policies.	Percentage of community members engaged in WASH decision-making processes / Total population in target communities	Community meeting records, Project reports
Strength of local governance structures for WASH management	Outcome	SDG 16	Assessment of the effectiveness/ accountability of local governance in managing WASH services.	Score based on governance indicators (e.g., transparency, responsiveness)	Stakeholder interviews
Existence of community-led WASH initiatives and committees	Impact	SDG 6, 11	Presence and functionality of community-led initiatives and committees focused on WASH improvement.	Number of active community-led WASH initiatives and committees / Total number of communities in target areas	Community reports, Project documentation
EQUITY AND INCLUSION					
Proportion of vulnerable groups benefiting from WASH services	Equity	SDG 5, 6	Percentage of vulnerable populations (e.g., women, children, persons with disabilities) benefiting from WASH services.	Number of vulnerable individuals benefiting from WASH services / Total number of vulnerable individuals in target communities	Household surveys, Vulnerability assessments
Reduction in disparities in WASH access among different population groups	Equity	SDG 10	Degree of reduction in inequalities in access to WASH services among various population groups.	Index measuring disparities in WASH access among population groups	Socioeconomic surveys, Equity assessments
Affordability of WASH services to households	Equity	SDG 1, 6	Proportion of households whose WASH expenditure is less than 3% of household income	Number of households with WASH expenditure being less than 3% of Household incomes	Socioeconomic surveys, Equity assessments
Existence of policies and practices promoting equitable WASH services	Governance	SDG 6, 11	Evaluation of policies and practices that promote equitable access to WASH services across target communities.	Score based on policy analysis and stakeholder feedback/ Policy assessments	Policy reviews, Stakeholder consultations

SUSTAINABILITY					
Percentage of WASH infrastructure projects that are functional and well-maintained	Sustainability	SDG 6, 11	Proportion of completed WASH infrastructure projects that remain functional and well-maintained over time.	Number of functional and well-maintained WASH infrastructure projects / Total number of completed projects	Project monitoring data, Infrastructure assessments
Availability of financial mechanisms for the ongoing maintenance of WASH facilities	Sustainability	SDG 11	Existence of sustainable financing mechanisms to support O and M of WASH facilities. Proportion of Budget Allocated to Operation and Maintenance	The percentage of the WASH budget allocated to operation and maintenance for the sustainability of the infrastructure.	Financial reports, Project reports National Financial reports, budget analysis.
CLIMATE RESILIENCE AND ADAPTATION					
Integration of climate-resilient measures into WASH planning	Resilience	SDG 13	The degree to which climate-resilient strategies are integrated into WASH planning.	Score based on climate adaptation measures integrated into WASH Plans	Climate resilience assessments, Project evaluations
Integration of climate risk assessment and adaptation measures into all WASH projects	Adaptations	SDG 13	Proportion of WASH Projects with Climate Risk Assessments	Percentage of WASH projects that include an assessment of climate-related risks and vulnerabilities.	Climate resilience assessments, Project evaluations
Climate-Responsive water and sanitation safety plans	Resilience	SDG 13	Proportion of Water Safety Plans/Sanitation Safety Plans Incorporating Climate Resilience Measures	Percentage of water safety plans /sanitation safety plans that include specific measures to address climate resilience.	Climate resilience assessments, Project evaluations
Level of community awareness and preparedness for climate impacts	Resilience	SDG 13	proportion of community members aware of and prepared for climate impacts on WASH services.	Percentage of the population that is aware of climate impacts on WASH	Community reports, Project documentation

4.0 DATA MANAGEMENT AND REPORTING

The M&E framework is aligned with the objectives and timeline of the 6-Year WASH Strategic Plan. Likewise, the key indicators and objectives of the M&E framework are established to match those outlined in the WASH Strategic Plan. To monitor the effectiveness of the WASH Strategic Plan, a collection of selected indicators will be utilized. These indicators have been chosen with careful attention to the accessibility of data required for their measurement. The indicators, along with their baseline values and intended targets, are detailed in Annex 1. The M&E framework will be inclusive and participatory, using joint reporting, monitoring, and evaluation mechanisms, which are consistent with the ideals of co-production of evidence.

Data Capture, Management, and Analysis are critical components of any monitoring and evaluation framework. Efficient data processes ensure that all relevant stakeholders can track progress, identify challenges, and make informed decisions to improve outcomes. Also, Reporting and the use of findings are crucial components of any monitoring and evaluation (M&E) framework. The purpose of reporting is to communicate project progress, outcomes, and insights to various stakeholders in a clear and meaningful way. The subsection of this section discusses the arrangements for data management and reporting for the M&E.

4.1 Arrangement for Data Capture

a. Methods of Data Collection: Identifying suitable methods for collecting WASH-related data, such as surveys, interviews, focus group discussions, and direct observations, is essential for consistent data capture for the M&E. The use of technology, where possible, including mobile data collection apps, to streamline data capture and minimize errors, must be considered. A combination of routine data collection through field monitoring and community meetings, as well as household surveys or service availability surveys and mapping, will be conducted (using e.g., mobile data collection apps, GIS mapping tools). This will provide valuable information to determine the accessibility of the WASH services and will be used to provide up-to-date and representative data for key indicators of the WASH Plan.

b. Establishing Baseline Data: One foundational step for ensuring an effective M and E is determining the baseline situation data before the plan implementation to establish starting points for the measurement of all key indicators. The baseline data must be representative and comprehensive across all the core Thematic areas and target groups of the WASH Strategic Plan. The STMA, through the Household WASH registry, has been able to establish a comprehensive baseline, which serves as the starting point for all the WASH improvements that would be implemented through the WASH Plan.

c. Regular Monitoring: Regular monitoring is a means to ensure the continuity of measuring and maintaining the quality of WASH data for continuous improvement in the implementation of the WASH Plan. But data gathering needs to be pooled, quality-controlled, and archived. These archives then need to be maintained, updated, and should ideally be made accessible to relevant actors for continuous update. The STMA M and E Team would be set up to implement systems for continuous data collection and monitoring during plan implementation, to track progress and identify trends. It will set up periodic monitoring schedules to capture changes over time and assess the effectiveness of interventions being implemented under the plan.

4.2 Data Management:

a. Database Development: The need is to introduce ICT in data collection, uploading, updating, and dissemination, so that the STMA can maintain an effective and cost-efficient WASH M&E system. Developing a structured database system to store project data securely and efficiently is essential. The use of appropriate software tools for database management, ensuring data integrity and accessibility, is commonplace in M and E now. Here, STMA can leverage the ongoing Household and Institutional WASH Infrastructure and Services Registry being developed to establish a strong database management system for WASH M and E.

b. Data Quality Assurance: Protocols for data validation, cleaning, and verification to maintain high data quality are fundamental for any M & E system. Data quality assurance processes will include periodic Data Quality Audits (DQA) of recorded data, regular training of staff and provision of routine feedback to staff at all levels on completeness, reliability, and validity of data. STMA can leverage the presence of its MIS Unit to conduct regular checks to identify and rectify errors or inconsistencies in collected data, with support from relevant WASH units.

c. Data Security and Privacy: It is important to adhere to data protection regulations and ensure that sensitive information is handled securely. The M and E Team will establish protocols for data access and permissions to protect confidentiality and privacy. Simply, the Team will agree and implement guidelines on who can access the data, which level of the data must be public, which aspects can be shared, in which form they can be shared, all to ensure that the principles of privacy, data protection, and anonymity of beneficiaries are always protected.

4.3 Data Analysis:

a. Defining Analytical Framework: It is imperative to develop an analytical framework that aligns with objectives and key performance indicators (KPIs). There is a need to determine appropriate statistical methods and tools for analyzing different types of data (quantitative, qualitative). The results obtained from the database must be analyzed and summarized into a consistent assessment of the WASH situation and trends, using core indicators and targets to assess progress and performance.

b. Interpreting Results: Based on the above, the M and E Team will conduct a rigorous analysis of collected data to generate insights and actionable findings. The interpretation of the results should be within the context of the Plan's strategic objectives. The focus of analysis will be on comparing planned results with actual ones, understanding the reasons for divergences, and comparing the performance at different levels (Quarterly and annual progress reports, mid and end-term evaluations).

c. Data Communication and Visualization: Data that has been analyzed needs to be translated into information that is easy to understand and relevant for decision-making. Thus, comprehensive reports will be prepared to present the findings, trends, and recommendations based on data analysis. The use of data visualization techniques (charts, graphs, maps) to communicate results effectively to diverse audiences. Various communication channels will be used to ensure access to data and reports. Quantitative and qualitative data will be made accessible through various channels, e.g., media, newsletters, brochures, websites, etc.

4.4 Reporting, Dissemination, and Use of Findings

a. Structure and Content of Reporting: As much as possible, the M & E Framework will adopt the normal reporting arrangements for STMA on its existing activities. However, to enhance effective

monitoring of the WASH Plan's performance, the Framework establishes a schedule for regular reporting, outlining specific timelines and milestones for reporting cycles – *Monthly Activity Reporting, Quarterly Progress Reporting, Annual Performance Reporting*. The M & E Team will define reporting templates and guidelines specifying the required contents, including key performance indicators, achievements, challenges, lessons learned, and recommendations.

It is expected that, at a minimum:

- The Monthly Report will provide updates on activities completed, milestones achieved, and any deviations from the planned timeline.
- The Quarterly Report and Annual Report will provide updates on implementation progress and, in addition, present findings related to project outcomes and impacts, demonstrating the effectiveness of interventions in improving WASH access.
- The Annual Reports should specifically include financial data to show budget allocation, expenditure, and financial performance against planned activities.
- All reports must incorporate qualitative insights, such as success stories, case studies, and beneficiary testimonials, to illustrate impact beyond quantitative data.
- All reports must be tailored to the different audiences (*e.g., donors, government agencies, community members*) by highlighting relevant information and using appropriate language and formats.

b. Dissemination and Engagement: Engage stakeholders in discussions around M & E findings to solicit feedback, validate findings, and co-create actionable recommendations. Their contribution to the actionable recommendations is very crucial in integrating adaptive Plan Management approaches. This will make the WASH Plan a living document. It is, however, essential to use data visualization techniques (e.g., charts, graphs, infographics) to present findings in an accessible and compelling manner, facilitating the understanding and engagement of all the different stakeholders. Also, there is a need to foster knowledge sharing within the STMA team, across its partner organizations, and with the broader WASH Sector community to promote collective learning and innovation.

c. Use of Findings: The M & E findings must be used to inform strategic decisions, identify areas for improvement, and prioritize resource allocation based on the evidence-based insights. Here, the M & E findings can be leveraged to refine project strategies, optimize interventions, and strengthen partnerships with stakeholders for sustained impact. The M & E findings also allow STMA to encourage organizational learning by reflecting on the findings to identify best practices and implementing adaptive management strategies to enhance WASH improvements and service delivery effectiveness across the entire city. Also, the M & E findings can be used to demonstrate accountability to stakeholders by sharing findings openly and transparently, including both successes and challenges encountered.

5.0 STAKEHOLDER ENGAGEMENT

In keeping with the co-creation approach, which has been comprehensively adopted to develop the STMA WASH Strategic Plan, a key component of the adopted M&E approach is stakeholder participation. To guarantee ownership, align goals, and improve involvement in decision-making processes, it is important to ensure that every component of the implementation, including the monitoring and evaluation aspects, cultivates a meaningful involvement and engagement of all relevant stakeholders. This is essential to ensure that all stakeholders feel responsible for the achievement of the key performance indicators, the processes involved in monitoring the achievement of such performance, and the co-production of evidence to support the tracking of the KPIs.

5.1 Strategies for Stakeholder participation within the M&E framework

Incorporating stakeholder participation into the M&E framework of the WASH Strategic Plan is crucial for ensuring the plan's effectiveness, relevance, and sustainability. Below are the strategies that will be employed to facilitate active stakeholder engagement:

- ***Feedback Integration:*** Develop robust feedback loops for stakeholders to contribute at every stage of data collection, management, and analysis, ensuring data quality and relevance. This will not only improve the quality of the data but also ensure it accurately reflects the realities and needs on the ground.
- ***Solicitation of Stakeholder Insights:*** Actively solicit feedback from beneficiaries, partners, and staff to enhance data accuracy and comprehensiveness. This feedback will be instrumental in enhancing the precision and pertinence of the data gathered, ensuring it provides a comprehensive picture of the project's impact.
- ***Responsive Reporting Mechanisms:*** Establish transparent feedback mechanisms for reporting procedures to ensure formats and content remain relevant and adaptive to stakeholders' needs, thereby enhancing the utility and readability of reports.
- ***Results-Driven Adaptation:*** Use insights from stakeholder reports to refine project strategies, performance indicators, and the overall M&E framework, fostering continuous improvement and effectiveness. This will ensure that the M&E framework stays dynamic and effective in guiding the WASH Strategic Plan towards achieving its goals.

5.2 Crucial Steps for Engaging Stakeholders

- Identify and list all the stakeholders involved in the Plan preparation and implementation. Analyze their interests, biases, and requirements of the stakeholders concerning the implementation of the WASH Strategic Plan.
- Involve stakeholders through workshops and consultations to share updates and get feedback on how the Strategic Plan is being implemented. Make sure marginalized groups are represented and the process for engagement is inclusive.
- Keep lines of communication open with stakeholders regularly and give them clear, concise updates on the progress, problems, and successes of the Plan implementation. Adapt communication strategies to the diverse stakeholders.
- Encourage collective ownership, cultivate mutual understanding and trust among stakeholders, and ensure that stakeholders are partly responsible for providing input for the M & E framework, as shown in Table 2.

Table 2: Stakeholders and information input into the M & E Framework

No.	Stakeholders	Information Needs	Communication Mechanisms
1.	Sekondi-Takoradi Metropolitan Assembly (STMA)	Budget allocation for WASH projects, progress on sanitation byelaws implementation, community engagements, and infrastructure development updates.	Regular reporting and internal meetings, community forums, and infrastructure progress updates, General Assembly meetings
2.	Local Community Leaders (Assemblymen, Chiefs, Unit Committee Members)	Community participation levels, feedback on WASH initiatives, challenges faced by community members, and behavior change progress.	Town hall meetings, direct consultations with communities, and participatory monitoring with community leaders
3.	Environmental Health and Sanitation Unit - EHSU	Monitoring data on WASH, Sanitation facilities inspections, and Waste management statistics.	Field inspection reports, regular briefings, and coordination meetings with the EHSU
4.	Public Relations Office/ Unit (PRO)	Public awareness campaigns, media coverage of WASH initiatives, stakeholder perceptions, and feedback.	Media briefings, press releases, public feedback surveys, and social media engagement campaigns.
5.	NGOs and Development Partners	Project funding updates, program impact assessments, collaboration opportunities, and best practices in WASH.	Partnership meetings, joint progress reports, collaborative workshops, and regular updates.
6.	Private Sector Companies (water suppliers, sanitation service providers)	Market insights, feasibility studies for private-sector partnerships, and investment opportunities in WASH infrastructure.	Business forums, partnership proposals, market research reports, and investment roundtable engagement with the private sector
7.	Local Schools and Educational Institutions	Access to WASH facilities in schools, hygiene education curriculum, and student participation in WASH programs.	School inspections, curriculum development meetings, student feedback sessions, and educational workshops.
8.	Civil Society Organizations (CSOs	Community feedback on WASH services, advocacy initiatives, and coordination of community engagement.	Advocacy meetings, community forums, joint monitoring visits, and newsletters from CSOs
9.	Health Sector (Hospitals, Clinics)	Disease surveillance data related to WASH and health impact assessments of WASH interventions.	Health data systems, inter-sectoral meetings, health impact reports, and emergency response meetings
10.	Youth and Women's Groups	Youth engagement strategies, gender-specific WASH challenges and solutions, and empowerment initiatives.	Youth forums, women's group meetings, and participatory action research
11.	Academic and Research Institutions	WASH research findings, data analysis support, and evaluation of innovative technologies for WASH.	Research conferences, academic journals, data sharing meetings, and collaborative research projects
12.	Media Outlets (Radio Stations, Newspapers)	Coverage of WASH issues, dissemination of awareness campaigns, and public perception of WASH initiatives.	Press conferences, media briefings, public service announcements, and community radio programs.
13.	Ministry of Sanitation and Water Resources)	Policy updates, regulatory frameworks, national WASH targets, and progress reports.	Policy briefings, regulatory updates, national WASH conferences, & inter-ministerial coordination meetings
14.	Community-Based Organizations (CBOs)	Grassroots feedback, community mobilization strategies, local WASH challenges, and solutions.	Community meetings, grassroots surveys, participatory planning sessions, and local advocacy

15.	Monitoring and Evaluation (M&E) Team	Data collection tools and methods, progress reports on indicators, and impact assessment findings.	Regular M&E meetings, progress reports, training sessions, and impact assessment workshops

Effective stakeholder engagement and communication are crucial for the success of the M&E of the Strategic Plan Implementation. The Strategic Plan has been developed with inputs from the Multi-Stakeholder Platform of STMA, and thus it will be crucial to ensure the M&E arrangements for tracking the implementation of the plan consider the involvement and role of the different actors on the Multi-Stakeholder Platform. Table 2 outlines various stakeholders and their information needs, which illustrates the complex web of relationships necessary to maintain a robust M&E framework.

Here is a detailed explanation of how these stakeholders interact and the existing communication mechanisms in place. The relationships between these stakeholders are interconnected and rely on a variety of communication mechanisms to ensure effective coordination, information sharing, and feedback. Each stakeholder group plays a vital role in the success of the WASH Strategic Plan, contributing unique perspectives and expertise that collectively drive the plan's objectives towards impactful outcomes.

6.0 CAPACITY BUILDING AND TRAINING

Capacity building and training are essential components of the M&E framework to strengthen stakeholders' skills, knowledge, and competencies for effective implementation and sustainability of the M&E System.

The following strategies will be employed:

a. Training Needs Assessment: Conduct a comprehensive assessment of stakeholders' training needs related to WASH interventions, governance, and monitoring. Customize training programs to address identified gaps.

b. Skill Development: Provide training and capacity-building sessions for STMA staff and stakeholders on data-related skills and techniques. Deliver targeted training sessions, workshops, and skill-building activities to enhance stakeholders' technical expertise in water management, sanitation practices, hygiene promotion, and community engagement.

c. Institutional Strengthening: Build institutional capacity within partner organizations, government agencies, and community groups to assume leadership roles in WASH governance, project management, and resource mobilization.

d. Continuous Learning: Promote a culture of continuous learning and knowledge sharing through mentorship, peer-to-peer exchanges, and access to relevant resources and tools. Foster a culture of data-driven decision-making and continuous improvement throughout the Plan lifecycle.

7.0 BUDGET AND RESOURCES

Effective budgeting and resource management are crucial for the successful implementation of the M and E Framework. The M and E Framework gives an estimated cost for all the categories of M & E Activities as presented in Table 3, which constitute the cost of infrastructure and logistics for the M & E system set-up, capacity building and staff training, conducting monthly monitoring of the KPIs, quarterly and annually reviews, Mid Term and End Term Evaluations, learning exchange and documentation activities and cost of external audits. Important to note that the costings are estimates that may change over the years due to fluctuations, matters arising, and/or other external factors. However, more detailed annual work plans shall be developed each year, stating activities and budget requirements for each quarter.

The following aspects are considered:

- Resource Allocation: A detailed budget outlining financial allocations for monitoring and evaluation activities, including infrastructure and logistics required, and capacity building.
- Resource Mobilization: Explore diverse funding sources, including government budgets, donor grants, corporate partnerships, and community contributions to ensure a consistent source of funding for M and E activities.
- Financial Management: Implementing robust financial management practices to track expenditures, monitor budget performance, and ensure accountability and transparency in resource utilization for Plan Implementation.

Table 3: Costed M and E Activities

S/N	Category of M & E Activity	Mid-Line Indicative Budget (in USD)	Total Indicative Budget (in USD)
1	**Infrastructure and Logistics related Cost**	$25,000	$50,000
2	**Capacity Building and Training related Cost**	$15,000	$30,000
3	**Monthly Activity Monitoring Visits and Implementation Review Meetings**	$36,000	$72,000
4	**Quarterly Review Meetings and Progress Reporting**	$24,000	$48,000
5	**Annual Progress Review and Action Planning Meetings**	$30,000	$60,000
6	**Mid-Term Evaluation Activity**	$30,000	$30,000
7	**End-Term and Impact Evaluation Activity**	$40,000	$40,000
8	**Learning Exchange and Participation in WASH Sector Events**	$15,000	$30,000
9	**External Auditing Activity**	$12,000	$24,000
	OVERALL TOTAL BUDGET	**$227,000**	**$384,000**

ANNEXES

Annex 1: Performance Framework for WASH Strategic Plan

Performance Indicator	Baseline (Year 2024)	Mid-Term Target (Year 2027)	Endline Target (Year 2030)	Data Source	Frequency of Measurement	Responsible Party
Theme 1: Sanitation Services Improvement **Strategic Objective:** Achieve 60% access to safely managed sanitation (toilets) services at the household level by 2030.						
Percentage of households with access to safely managed sanitation facilities.	20% (2024)	40% (2027)	60% (2030)	Household Surveys, Municipal Records	Annually	STMA Public Health Department
Number of household toilets constructed through subsidy schemes.	NA (2024)	3,641 (2027)	7,973 (2030)	STMA Reports, Contractor Records	Quarterly	STMA Works Department
Number of institutional toilets constructed in pre-tertiary education and healthcare facilities.	NA (2024)	30 (2027)	75 (2030)	Education and Healthcare Facility Reports	Annually	STMA Education and Health Directorates
Number of community members reached through sanitation marketing campaigns.	NA (2024)	50,000 (2027)	100,000 (2030)	Campaign Reports, Community Surveys	Semi-annually	STMA PR Unit, Local NGOs
Number of capacity-building workshops conducted for local artisans and construction teams.	0 (2024)	3 (2027)	3 (2030)	Training Reports	Annually	Local NGOs, Training Providers
Number of capacity-building on WASH services planning, implementation, and management.	0 (2024)	1 (2027)	2 (2030)	Training Reports	Annually	Local NGOs, Training Providers
Number of low-income communities having sanitation safety plans with climate integration.	0 (2024)	32 (2027)	32 (2030)	Sanitation Safety Plans (SSPs)	Annually	STMA Development Planning Units
Number of strategic partnerships formed with WASH NGOs/ corporate institutions for institutional and household toilets	0 (2024)	5 (2027)	10 (2030)	MOUs, Partnership Agreements, Contracts	Annually	STMA Central Administration Unit
Theme 2: Water Services Improvement **Strategic Objective:** Ensure all households have access to safely managed water sources, with at least 70% connected directly by 2030.						
Percentage of households with direct pipe water connections.	55% (2024)	50% (2027)	70% (2030)	Household Surveys, Utility Company Records	Bi-annually	STMA Ghana Water Limited

Number of new water connections provided under the subsidy scheme.	NA (2024)	5,340 (2027)	9,870 (2030)	Utility Company Reports	Quarterly	STMA Finance Department, & Ghana Water Limited
Number of water safety plans developed and implemented in communities.	5 (2024)	32 (2027)	32 (2030)	Community Reports, Water Safety Plan Documents	Annually	STMA Ghana Water Limited
Frequency of water quality monitoring activities conducted at the community level.	NA (2024)	Quarterly (2030)	Quarterly (2030)	Water Quality Monitoring Reports	Monthly	STMA Ghana Water Limited
Number of mechanized boreholes or alternative water sources established.	NA (2024)	5 (2027)	10 (2030)	Project Reports, Community Records	Annually	STMA Works Department, & Development Planning Unit
Theme 3: Hygiene Services Improvement **Strategic Objective:** Improve hygiene practices at the household and institutional levels.						
Percentage of schools and households with access to handwashing facilities with soap and water.	NA% (2024)	50 (2027)	100% (2030)	School Reports, Household Surveys	Annually	STMA Health & Education Directorate
Number of hygiene awareness campaigns conducted.	0 (2024)	20 (2027)	50 (2030)	Campaign Reports	Quarterly	STMA EHS and Public Relations Unit, NGOs
Number of behavior change initiatives implemented and their reach.	0 (2024)	10 (2027)	22 (2030)	Initiative Reports, Community Feedback	Semi-annually	STMA Environmental Health Unit, NGOs
Number of IEC (Information, Education, Communication) materials developed and distributed.	0 (2024)	4000 (2027)	10,000 (2030)	Distribution Records	Quarterly	STMA Environmental Health & PR Unit, NGOs
Number of hygiene education sessions conducted in schools.	0 (2024)	40 (2027)	100 (2030)	School Activity Reports	Semi-annually	STMA Education Directorate & Environmental Health Unit
Theme 4: Solid Waste Management Improvements **Strategic Objective:** Ensure adequate solid waste management services for all households and pre-tertiary institutions.						
Percentage of households with access to formal or informal waste collection services.	0% (2024)	20% (2027)	50% (2030)	Waste Mgt. Reports, Household Surveys	Annually	STMA Waste Management Unit
Number of skip containers installed or distributed.	30 (2024)	40 (2027)	60 (2030)	Reports, Community Feedback	Quarterly	STMA Waste Management Unit
Number of pre-tertiary institutions implementing waste separation practices.	NA (2024)	20 (2027)	50 (2030)	School Reports, Inspection Records	Annually	STMA Education Department
Number of community sensitization events on waste management.	0 (2024)	15 (2027)	30 (2030)	Event Reports, Community Surveys	Semi-annually	STMA Environmental Health & Community Development Unit, NGOs
Number of new solid waste management partnerships formed.	0 (2024)	5 (2027)	10 (2030)	Partnership Agreements,	Annually	STMA Waste Management Unit, Private Sector
Theme 5: Policy and Governance Systems Improvements						

Strategic Objective: Strengthen WASH policy and governance at all levels.						
Number of policy revisions or new policies adopted to support WASH initiatives.	1 (2024)	2 (2027)	5 (2030)	Policy Documents, Meeting Minutes	Annually	STMA Central Administration Unit
Increase the proportion of budget allocation towards WASH in annual budgets.	0% (2024)	5% (2027)	15% (2030)	Budget Reports	Annually	STMA Finance Department & Budget Unit
Number of capacity-building sessions conducted for local governance bodies.	0 (2024)	7 (2027)	15 (2030)	Training Reports	Semi-annually	STMA Central Administration Unit
Existence and functionality of sub-district level structures supporting WASH delivery.	0 (2024)	35 (2027)	35 (2030)		Annually	STMA Central Administration Unit
Number of public-private partnerships established.	NA (2024)	10 (2027)	10 (2030)	Partnership Agreements	Annually	STMA Central Administration Unit
Theme 6: Stakeholder/Community Organization and Mobilization **Strategic Objective:** Mainstream stakeholder engagement and community participation in WASH initiatives.						
Number of community WASH committees established and functioning.	0 (2024)	32 (2027)	32 (2030)	Committee Records, Meeting Reports	Quarterly	STMA Environmental Health, Community Dev. Units, Local NGOs
Percentage of stakeholders participating in WASH planning and decision-making processes.	NA (2024)	50% (2027)	80% (2030)	Stakeholder Surveys, Meeting Records	Annually	STMA Development Planning, Environmental Health, Community Dev. Units
Number of training sessions conducted for community leaders and local actors.	NA (2024)	10 (2027)	20 (2030)	Training Reports	Quarterly	STMA EHSU & Community Devt. Unit, NGOs
Number of marginalized groups actively involved in WASH activities.	NA (2024)	10 (2027)	20 (2030)	Inclusion Reports, Community Surveys	Annually	STMA Social Welfare Unit
Number of collaborative monitoring and evaluation activities conducted.	0 (2024)	12 (2027)	12 (2030)	M&E Reports, System Audits	Annually	STMA Monitoring/ Evaluation Team & Planning Unit
Theme 7: Climate Resilience and Inclusion **Strategic Objectives:** Integrate climate resilience measures into all WASH projects.						
Percentage of WASH projects incorporating climate resilience measures.	0% (2024)	40% (2027)	100% (2030)	Project Reports, Climate Assessment Reports	Annually	STMA Environmental Health Unit
Number of communities educated on the impacts of climate change on WASH.	0 (2024)	15 (2027)	32 (2030)	Education Reports, Community Feedback	Semi-annually	STMA Environmental Health & Sanitation Unit
Number of WASH infrastructure projects designed to withstand extreme weather events.	NA (2024)	10 (2027)	30 (2030)	Project Reports, Infrastructure Audits	Annually	STMA Works Department
Frequency of environmental competitions conducted among educational institutions.	0 (2024)	3 (2027)	6 (2030)	Event Reports, School Feedback	Annually	STMA Education Directorate

Theme 8: Implementation Coordination Management **Strategic Objectives:** Enhance coordination and management of WASH strategy implementation.						
Number of annual action plans prepared and approved for the roll out of the WASH Strategic Plan and integrated into the STMA Plan	0 (2024)	3 (2027)	6 (2030)	Annual WASH Improvement Action Plan	Annually	STMA Development Planning Unit, Environmental Health Unit, Other Allied Units
Number of strategic implementation team meetings held.	0 (2024)	12 (2027)	24 (2030)	Meeting Minutes, Attendance Records	Quarterly	STMA Coordination Unit
Number of monitoring and evaluation assessments conducted as part of the implementation of the strategic plan	0 (2024)	12 (2027)	24 (2030)	Meeting Minutes, Attendance Records	Quarterly	STMA MEL Team and Development Planning Unit
Number of annual WASH fora organised within STMA to review progress of implementation, and share lessons	0 (2024)	3 (2027)	6 (2030)	Forum Reports		
Number of stakeholders involved in the annual WASH forum.	NA (2024)	180 (2027)	360 (2030)	Forum Reports, Attendance Records	Annually	STMA Community Development and PR Unit
Number of local and international conferences attended by STMA to share lessons and attract partnerships	0 (2024)	3 (2027)	6 (2030)	Forum Reports	Annually	
Number of risk management procedures established and operationalized.	NA (2024)	6 (2027)	10 (2030)	Risk Management Reports	Annually	STMA Risk Management Unit & NADMO Office
Increase in the level of funding secured for WASH initiatives through sister-city relationships and partnerships.	0 (2024)	30% (2027)	100% (2030)	Financial Reports, Partnership Agreements	Annually	STMA Finance Department and Budget Unit
Number of staff and stakeholders trained on effective communication and advocacy.	0 (2024)	50 (2027)	120 (2030)	Training Reports	Semi-annually	STMA Community Development and PR Unit

ATTACHMENT II:

'FULL' STRATEGY FOR SUSTAINABLE BEHAVIOUR CHANGE CAMPAIGN FOR STMA 6-YEAR WASH STRATEGIC PLAN

Sekondi-Takoradi Metropolitan Assembly

Open Government Partnership

STRATEGY FOR SUSTAINABLE BEHAVIOUR CHANGE CAMPAIGN

PROCUREMENT OF CONSULTANT TO CO-CREATE A 6-YEAR STRATEGIC PLAN FOR IMPROVING WATER AND SANITATION IN LOW-INCOME COMMUNITIES IN SEKONDI-TAKORADI, AND CONDUCT CAPACITY BUILDING AND TRAINING FOR IDENTIFIED STAKEHOLDERS ON INTEGRATED PLANNING OF SANITATION SERVICES

Reference No: OGP-MDTF/STMA/MSF/2024/01

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LIST OF ABBREVIATIONS

DOI	-	Diffusion of Innovation
LIUC	-	Low Income Urban Communities
NGOs	-	Non-Governmental Organizations
OGP	-	Open Government Partnership
SBCC	-	Social Behaviour Change Communication
STMA	-	Sekondi-Takoradi Metropolitan Assembly
SWOT	-	Strengths, Weaknesses, Opportunities, and Threats
WASH	-	Water, Sanitation, and Hygiene

DEFINITIONS

Sanitation
Sanitation in the context refers to toilets. All forms of toilet facilities, including household and institutional toilets, fall within this definition.

Safe Sanitation
Any system that safely separates human excreta from human contact at all stages, from toilets and containment to treatment and disposal.

Safe water
Water that will not harm you when you come into contact with it or use it.

Hygiene
Conditions and practices to help maintain health and prevent disease, especially through cleanliness.

Solid waste
In the context of this strategy, solid waste refers to refuse or any type of discarded material from the home or institution. Solid waste is solid and typically consists of paper, cloth, food particles, and polythene.

Critical Times
The concept of critical times is related to handwashing practice. Critical times connote those periods when it is essential that handwashing is practised. Though critical times for washing hands may differ from one group of people to another, two universal critical times exist for everybody. These are handwashing with soap under running water after toilet use and before eating.

Open Defecation
This refers to the practice of defecating in open spaces. Such spaces include fields, drains, and the beach, amongst others. The practice of defecating in a polythene bag and disposing of it in the open is also recognised as open defecation. Houseflies have easy access to the excreta.

Kuffour Gallon
This describes a popular 25-litre plastic container commonly used for transporting and storing water at the household level. The container, originally used to package cooking oil, is thoroughly washed and dried after the oil is used. This container has gained popularity because of the convenience and ease it provides for water transportation and storage.

1 INTRODUCTION

1.1 Purpose and Importance of the SBCC Strategy.

The need for a sustainable strategy for Social Behaviour Change Communication (SBCC) is emanating from a desire of the Sekondi-Takoradi Metropolitan Assembly (STMA) to develop a 6-Year Strategic Plan for improving Water, Sanitation, and Hygiene (WASH) services delivery to Low-Income Urban Communities (LIUC) in the Assembly. The STMA, over the past 9 years, has been collaborating with the Open Government Partnership (OGP) to improve its openness, accountability, and responsiveness to the citizens it represents. The development of the STMA's 6-Year Strategic Plan for WASH, using a co-creation approach, is being done under the auspices of the collaboration with the OGP.

The SBCC Strategy has been developed to complement the 6-Year WASH Strategic Plan. The key guiding principles are that sustained improvements in hygiene and sanitation must be based on an awareness of the complex interaction between behavioural and technological elements. The provision of physical facilities alone or the enforcement of laws will not necessarily translate into the desired programme objectives. The SBCC approach uses communication and persuasion as the primary triggers for effecting change by addressing the individual, social, and structural elements that have an impact on the targeted behaviour. For example, an individual will not stop the practice of Open Defecation simply because they know the negative impact of the practice or because they have a toilet facility. Whatever communication aimed at changing the behaviour of Open Defecation should also consider any social norms related to toilet ownership and use, as well as other factors such as economic conditions, among others. The SBCC Strategy thus offers a well-thought-out and strategic approach to triggering the desired behaviour changes necessary to complement the interventions proposed in the 6-Year WASH Strategic Plan.

1.2 SBCC Strategy Development Process

The methodology for developing this strategy is based on the co-creation approach. Co-creation in its most basic sense "is the act of involving both internal and external stakeholders in the ideation process to create value" (Vocean 2023). Co-creation serves as a bridge that connects decision makers and innovators to allow diverse perspectives from various sources to come together to provide ideas and solutions that otherwise would remain undiscovered. Two separate stakeholder engagements were held by the Consultant with the STMA's Multistakeholder Forum and the Assembly's Management Team, in which issues relevant to the development of the SBCC strategy were discussed. Consultations with a cross-section of community members across the selected LIUCs were conducted as part of field visits to the 21 selected LIUCs. Focus Group Discussions (FGDs) were conducted with various groups, including the youth, women, community leaders, and influencers. These FDGs probed the media environment and consumption of different communication channels within the communities, amongst others. The current levels of engagement between the communities and STMA, and the community level leadership and the general community membership were also inquired about.

A desk review of relevant literature, including project and activity reports, Action Plans, among others, was conducted in conjunction with the FGDs and field observations to create a profile

and a situational analysis of WASH in the LIUCs. The literature review explored the interconnections amongst the three key elements of WASH and the STMA's focus areas for service delivery. Important Key Informant Interviews were also conducted with the people's representatives at the Assembly as well as technocrats at the Assembly level, and some service providers to get better insights into the challenges related to behaviour change communication. The WASH Behaviour Change Communication Strategy for the Urban Sub-sector (2011), a document of the Environmental Health and Sanitation Directorate, provided a lot of valuable guidance in the development of this strategy.

1.3 Scope of SBCC activities

The SBCC Strategy document has been developed to guide the STMA in sustainably implementing structured behaviour change activities that will complement planned Water and Sanitation interventions proposed in the 6-Year WASH Strategic Plan. The scope of activities for this SBCC Strategy encompasses a variety of interventions and approaches to address the different identified WASH behaviours that have been targeted to improve the health status and general wellbeing of citizens resident primarily in the low-income communities of the STMA. The scope of activities proposed to drive SBCC interventions is:

Awareness Campaigns

This involves using multimedia channels, including radio, social media, and print materials, to educate the public about safe WASH practices, emphasising the desired behaviours. Appropriate messaging and educational materials, in language and format that best suit the various target groups, will be developed.

Community Mobilisation and Competitions

This range of activities will involve community and group meetings to engage local leaders, influencers, youth, and community members in discussions about WASH practices.

School-based interventions

This will involve implementing WASH education programmes in schools, including integrating lessons on hygiene and sanitation into the school timetable. School clubs will be used to promote targeted WASH behaviours.

Home visits

This will involve undertaking home visits by health workers and Environmental Health Workers to provide personalised guidance on WASH practices to householders and offer counselling and support (linkages) to households (e.g., People with Disabilities) facing challenges in adopting safe WASH behaviours.

Behaviour Change Communication Materials

This will involve the development of a variety of visual materials that promote the targeted WASH behaviours for various target groups.

1.4 Strategy Outline

The SBCC strategy document is divided into nine chapters. Chapter One, which is the Introduction, presents the purpose of the document and the importance of the SBCC strategy,

as well as the development process for the strategy. The chapter also highlights the scope of activities proposed by the strategy. Chapter Two discusses the theoretical and conceptual basis for the strategy. Chapter Three presents a brief profile of the STMA and an analysis of the current WASH situation in the LIUCs of the STMA. A stakeholder analysis, as well as a SWOT analysis of the STMA's capacity to implement an SBCC intervention, are also presented as part of Chapter Three.

Chapter Four of the strategy discussed the target audience for the strategy. Chapter Five presents the goal, objectives & thematic areas for the strategy. Chapter Six presents the strategic approach for achieving the behaviour change objectives. It discusses the various intervention areas and presents the behaviour change plan, the various actions that must be undertaken. Chapter Seven presents the Implementation Plan for the strategy. Chapter Eight is the budget for the strategy. Chapter Nine is the Management Plan for the strategy.

2 THEORETICAL CONTEXT

2.1 Theoretical Framework for the Strategy

Human behaviour is varied, complex, and often not so easy to understand. However, various theories have been propounded to guide people involved in behaviour change initiatives as they seek to positively influence behaviours. Generally, behaviours are driven by individual preferences, social cues, and or contextual conditions. Social and behavioural science theories often provide a good theoretical base for SBCC programmes to be nested on. This SBCC Strategy draws on three main strategies: the Socio-Ecological model, the Diffusion of Innovations (DOI) theory, and the Behavioural Insights approach. These complementary theories recognise the significant role of social and structural factors in promoting desired behaviours.

2.1.1 Socio-Ecological model

The socio-ecological model has been used as a framework to understand the complexities of how an individual's social, economic, cultural, and environmental contexts influence their decision-making processes and actions. In its simplest sense, the Socio-ecological model emphasises that "changing behaviours is not just a matter of personal choice". An individual's decision to change behaviour is strongly influenced not only by their immediate setting, their community, and their general societal setting, but also by an interaction between two or more of these settings, which are not his/her immediate setting. For example, a person's decision to acquire and use a household toilet can be influenced by social norms, their economic situation, the physical environment, and policy environment, amongst others. If these factors are favourable, the likelihood that the new behaviour will be adopted and sustained by the individual is high.
The Socio-ecological model recognises four levels of hierarchy of influence, namely: the individual level, which is characterised by the existing knowledge, attitudes, skills, beliefs, and values of the individual. These are mainly predisposing factors to behaviour change. The interpersonal level: which is the social networks, including family, partner, social networks, friends, work groups, amongst others. The community level, which encompasses the relationship among institutions which includes access to resources, shared ownership, participation, social capital, and leadership. Finally, the societal level, which includes leadership from the national level, policies, laws, religious and cultural values, income levels, etcetera.

In line with the socio-ecological model, this strategy recognises that individual change that is supported or facilitated by change at the various levels, especially the Societal level, has a very high chance of being self-sustaining. The interaction between individual change and social change shows that when an individual attempts a change that is not supported by the social norms of their environment, their effort will face many challenges, and they might be pushed to give up, no matter how highly committed they might have been to the change effort.

2.1.2 Diffusion of Innovations

The Diffusion of Innovations (DOI) theory tries to explain how a population takes up an innovation. An innovation in this context could be an idea, behaviour, product, or technology that the population identifies as new. The DOI recognises five adopter categories according to the willingness and speed at which they adopt innovations: innovators, early adopters, early majority, late majority, and laggards. Innovators are usually the first few people to accept an innovation. They are people who are willing to take a risk and adopt an innovation even when they do not fully understand the innovation. Early Adopters are mostly opinion leaders in society. They have a high social standing in the population and are mostly educated and economically stable. Early Adopters typically adopt an innovation at its early stages. The Early Majority form a big part of the population; they adopt innovations over time, which is usually after the Innovators and Early Adopters have taken it up. The Late Majority, who also constitute a chunk of the population, adopt innovations late, typically after the average person has adopted the innovation. Individuals who fall within the Late Majority are usually of low social status with little financial resources and have very little say in opinion leadership in the society. Late Majority individuals often face innovation with scepticism and are slow to see the benefits of innovations. Their adoption of innovation is usually out of increased social pressure. Laggards are the last to adopt an innovation. They are at the lowest level of the social ladder and usually have very poor social networks and have little financial liquidity to invest in innovations.

An important insight to be gleaned from the DOI theory is the role of peer-to-peer conversations in facilitating adoption. Adopting an innovation involves managing risks and uncertainties, and individuals mainly base a significant part of their final decision to adopt on the recommendations from their peers, which serve as social proof. This often carries more weight than the messages about the innovation gained from the marketing activities, as people build trust and acceptability for the innovation based on the testimony of their peers, who have used the innovation.

This strategy will draw heavily on two aspects of the DOI. Innovators and early adopters within communities will be used to drive the various behaviours being promoted, and secondly, peer-to-peer conversations will be used extensively to reinforce positive attitudes towards the behaviours being promoted. Testimonies of Innovators and Early Adopters will be used to reduce any uncertainties or negative impressions of the innovation, thus facilitating adoption or behaviour change.

2.1.3 Behavioural Insights (BI)

Behaviour Insights (BI) refers to the study and understanding of why people act the way they do. It's about observing how individuals make decisions, interact with others, and respond to different situations. It is based on empirical evidence gathered from behavioural sciences to understand the factors that affect our behaviour and decision-making processes. This knowledge can be useful for improving communication, designing better products, or creating effective policies to encourage positive changes in society. By analysing these behaviours, experts can uncover patterns and influences that guide people's actions. BI aims to influence individual behaviour change by making minor adjustments to the decision-making contexts that people encounter.

BI is closely related to the 'Nudge' concept. A nudge is defined as a part of the choice architecture that predictably modifies people's behaviour. Nudges make it easy for people to make a particular choice, or behaviour in a particular way, simply by modifying the environment so that, automatically, a choice is made to favour the desired outcome. Nudges are not mandatory, and the intervention must be easy and an inexpensive adjustment. This strategy recognises that most people have knowledge of what is good behaviour, but are constrained by environmental factors. Nudges will be used within the context of this strategy to tip the target group towards a desired behaviour by slightly altering the context in which they practice the behaviour.

2.2 Faeco-oral Transmission

Recognising the faeco-oral transmission routes is important to this strategy, as most of the actions proposed by the strategy are aimed towards blocking faeco-oral transmission. Faeco-oral transmission describes the well-documented routes through which faecal matter, left in the environment, gets ingested through the mouth, leading to incidences of diseases such as hepatitis A, norovirus, and a variety of gastrointestinal infections attributable to bacteria like E. coli and Salmonella, commonly spread through these routes. The pathway of disease transmission involves various interconnected elements as follows:

- Fingers: - fingers come into contact with faeces during anal cleansings, when a mother or care giver cleans a baby's bottom or some other way. When the contaminated fingers get in contact with the mouth, the faeces get ingested into the body.
- Fluids: - faeces enter water sources, especially unprotected sources, through runoff. Microbes enter the body when water is drunk.
- Flies: - houseflies land on faeces and then carry particles of the faeces to food, when they land on it. Microbes are ingested when the food is eaten.
- Fields: - faeces left in the open contaminate food items, including fruits and vegetables.
- Food: - food can be contaminated by houseflies, the utensils used in preparing it, or even by the preparation area itself.

The adoption of both physical and behavioural barriers can be used to block the different transmission routes. Barriers, like a hygienic toilet facility, that prevent faeces from getting into the living environment, provide the best options for blocking the routes. Good hygiene practices, such as hand washing with soap and ensuring a safe water chain from source to consumption all provide primary barriers. Maintaining a clean environment and protecting food from flies are key secondary barriers to blocking the routes.

3 SITUATIONAL ANALYSIS

3.1 Overview

The Sekondi-Takoradi Metropolis is one of Ghana's 261 Metropolitan, Municipal, and District Assemblies. The STMA was established by Local Government Establishment Instrument 2017 (LI 2262) in November 2017. The STMA covers the twin-city of Sekondi-Takoradi in the Western region of Ghana with a land mass of 119 square kilometres. Located on the western coast of Ghana, about 230km from Accra, the national capital, the metropolis is of critical economic importance to the country because of the harbour. The western region is also the hub of Ghana's oil and gas industry. The STMA is the most urbanised and most populated local government area in the Western region. Takoradi is the regional capital of the Western region.

According to the provisional results of the 2021 census, the STMA has a population of 245,382, of which 119,344 (48.6%) are males, whilst 126,038 (51.4%) are female. The growth of the oil and gas industry in the area has brought with it an attendant growth in the number of people moving to the metropolis in search of jobs. This has put significant stress on the provision of public services as more people demand improved services for solid waste disposal, water supply, and sanitation from the Metropolitan Assembly. The allure of potential jobs, which have not always manifested, has also pushed a significant number of people into the poverty bracket. Slum conditions have also developed following the congestion in built-up areas of the metropolis. The working class constitutes 61.3% of the population, whilst the youth constitute 32.6% and the aged 6.1% (PHC 2010). More than one out of every two persons living in the urban locality in the Western Region was found in the Sekondi-Takoradi Metropolis.

The metropolis has five main drainage basins, namely, Pokuantra, Kansawura, Buwen, Anankwari, and Whin. The Anankwari River runs to the east of the metropolis. The metropolis has a lot of low-lying areas, and these are interspersed with ridges as high as 60m. The metropolis is still prone to flooding, especially in the low-lying areas around the coast.

3.2 The WASH Challenge (situation) in STMA's LIUCs

Access to Safe Water

The Ghana Water Limited (GWL), the state service provider, officially has the responsibility to supply water to all locations of the metropolis, including the low-income areas. This is the primary source of water for the majority of the residents. In the LIUC targeted for intervention, very few house connections exist. The majority of the people in the low-income areas source water from public standpipes in their communities. However, the inconsistent nature of the supply from the GWL has made many people resort to existing boreholes and wells for their water requirements. In many of the communities, the taps remain shut for days before they get a few hours of supply. Under these circumstances, people are forced to store water at the household level to guarantee a few days' supply. The poor distribution of boreholes and other alternative sources of water means that some residents have to walk long distances to source water.

Apart from the irregular supply from the GWL, residents across all the localities complained of the poor quality of the water. They complained of the water having sediments when it is left to settle for about a day, and sometimes being coloured. Schools and health facilities within the communities also suffer from the same erratic water supply. Schools sometimes have to rely on wells and boreholes in their neighbourhoods or purchase water from vendors in extreme conditions. Across the board, all the residents in the target areas use 'sachet' water for drinking, whilst they use the GWL supply for other domestic chores.

Access to Safe Sanitation

According to the STMA's Medium Term Development Plan (MTDP, 2022-2025), approximately 78% of households, mostly living in the LIUCs, do not have access to improved toilet facilities at home. Only 17% of households have private water closet toilets at home. The STMA has over a hundred public toilet facilities spread across the metropolis, which mostly serve the population who do not have toilets at home. However, the conditions in these public toilets are very bad, leading to a significant practice of Open defecation in many communities like New Takoradi, Nkotompo, Ngyiresia, and Kojokrom. The practice is rife in the coastal communities, with many residents using the coastline as their toilet. The situation in public basic schools is not different. The majority of public schools in the LIUCs have a type of toilet facility on their compound. However, almost all these facilities are in a very poor state of disrepair, and they do not have adequate privy rooms to match the number of users. In schools without toilet facilities, pupils use nearby public toilets or resort to Open defecation.

Solid Waste Management

The STMA bears the primary responsibility for waste management. Although some waste management service providers have been contracted by the Assembly to support waste collection, only 360 tons of the 614 tons of waste generated daily are collected. This means that most designated solid waste disposal sites are often inundated with refuse. Crude dumping is practised across all the LIUCs to varying degrees. In places, householders who live far from the designated dump sites dispose of their waste in open spaces, drains, and bushy areas. It is not uncommon to see plastic waste in the general environment in the LIUCs.

In schools, waste is often burned at the end of each week. Almost all schools have a designated place on the compound for waste disposal. These dumpsites are poorly managed. In a few schools, source separation of plastics is practised. Plastic waste is subsequently sold for recycling.

Hygiene Practices

Awareness of good hygiene practices, especially hand washing with soap, is high amongst the general citizenry. However, since the downscaling of COVID-19 from pandemic status, key practices like hand washing with soap at critical times have reduced drastically. The absence of handwashing facilities at key points has also contributed to the low practice of handwashing. Residents of LIUCs are hardly engaged by Environmental Health Officers with public education on hygiene issues. The officers sometimes visit radio stations to educate and inform the general public on various WASH issues. Community leaders, including Assemblymen/women, occasionally organise clean-up exercises in their areas to keep their communities clean. These

clean-up exercises often do not receive high patronage. In schools, there is an effort to integrate hygiene education into the school's daily activities. However, this effort is not coordinated across the schools as the activities are not planned to achieve specific behavioural or knowledge targets.

3.3 Communication Channels & Technology Use

The STMA has over thirty radio stations operating on the Frequency Modulation (FM) band (World Radio Map). All of these FM stations broadcast across the whole metropolis and are accessible to anybody with a radio set. In the different suburbs, the use of Community Information Centres for public address is quite common. The setup of these Community Information Centres consists of an amplifier, a microphone, and an external horn speaker, positioned at the central part of the community. They are set up mainly to broadcast announcements and public interest information to community members. Their range is kept strictly within the community they operate in. The STMA provides guidelines for their use. In most of the target communities, this is the primary source of information and announcements on developmental issues within the community. Handheld megaphones are also used in some of the communities for announcements. The announcer has to walk the length and breadth of the community to make the announcement. Communication in Ghana is traditionally based on oracy. Despite modernity, word of mouth is still a very important channel for message dissemination across the board. Whichever channel is used for communicating a message, word of mouth plays a big role in confirming and corroborating the message.

The relatively high use of smartphones has also facilitated the use of new media forms like the WhatsApp platform for messaging at the community level. This is normally used by community-level groups like youth groups. Group members who have smartphones are put on the group's WhatsApp platform, and they are able to receive updates on the group's planned activities, announcements, and public interest information.

STMA traditionally utilises radio, Community Information Centres, and word of mouth mainly to communicate WASH messages to the citizenry living in the target communities. The integration of these communication channels ensures effective message dissemination throughout the target communities. However, communication cannot be said to be very effective as feedback mechanisms have not been properly integrated into the communication processes. This strategy leans strongly towards Berlo's model of communication as well as Kincaid's Convergence model. Both models see communication as a sharing process in which both sender and receiver benefit from feedback on the message sent. Kincaid's model stresses mutual understanding of the message leading to mutual agreement (Ongkiko, I.V. & Flor, A.G., 1988).

3.4 Stakeholder Analysis

The STMA, as part of its commitment to the OGP process to 'strengthen inclusiveness, accountability and trust building', is very keen on stakeholder participation. It currently has an active Multistakeholder Forum, which is a collection of STMA's key stakeholders, who are consulted regularly on various issues.

3.4.1 Stakeholder Identification

The following stakeholders have been identified as being important to the SBCC intervention. Table 1 shows the key stakeholders relevant to the SBCC strategy.

Table 9: Relevant Stakeholders for the SBCC Strategy

Stakeholder	Classification	Description
Citizens	Primary	These cover the ordinary people living in the target community. This includes men, women, and children. School pupils are also considered here.
Community Groups	Primary	Members of various organised groups at the community level.
Elected officials	Secondary	This group covers Assemblymen/women who represent the citizens at the Assembly.
Community Leaders	Secondary	This includes all people who play a kind of leadership role at the community level, including traditional leaders, opinion leaders, and Influencers.
Faith-based Leaders	Secondary	Christian, Muslim, and other spiritual/religious leaders.
Government Officials	Tertiary	This covers health workers, teachers, environmental officers, and social workers.
Media	Tertiary	This includes media houses as well as social media platforms.
NGOs & CSOs	Tertiary	This covers non-state actors who undertake development work at the community level.
WASH Service Providers	Tertiary	Service providers are involved in providing water and sanitation services to community members.

3.4.2 Analysis of Level of Stakeholder Influence

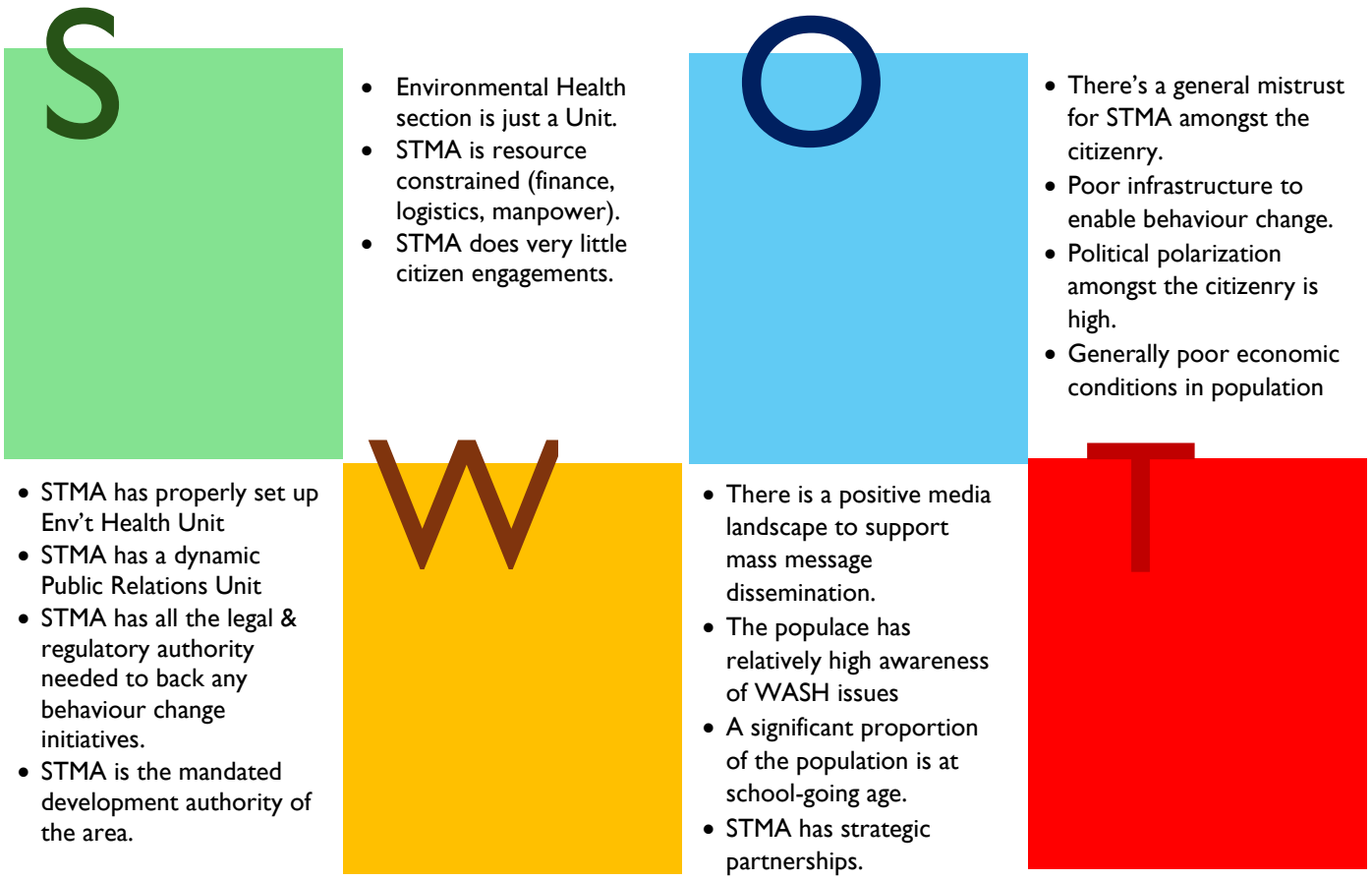
Table 2 presents the outcome of the analysis of STMA's key stakeholders.

Table 10: Analysis of Influence of Key Stakeholders for the SBCC

Stakeholder	Level of Concern	Level of Influence	How can they contribute	How can they block	Strategy for Engagement
Community members	High	High	• Participate in all activities. • Adopt new behaviours.	• Resist change	• Durbars • Home visits • Mass media • Audio-visuals
Community Groups	Medium	High	• Support and participate in all activities.	• Apathy towards implementation	• Meetings • Social events
Elected officials	High	High	• Mobilise community support. • Lobby for resource allocation.	• Partisanship • Mismanagement • Corruption	• Workshops • Seminars
Community Leaders	High	High	• Mobilise community support	• Resist change	• Meetings • workshops
Faith-based Leaders	Medium	Medium	• Include key messages in sermons.	• Moral and ethical arguments	• Meetings • Workshop • seminars
Government Officials	High	High	• Support and participate in all activities.	• Refuse to participate in logistics and motivation. • Go on Strike	• Workshops • Meetings
Media	High	High	• Ensure dissemination of messages and information	• Refusing to disseminate messages. • Engage in disinformation	• Provide facts & figures. • Interview opportunities. • Fact sheets • Invitation to events • Media briefs
NGOs & CSOs	Medium	Medium	• Capacity building • Resource mobilisation	• Priorities & Biases • Poor planning & coordination	• Meetings • Workshops • Seminars
WASH Service Providers	Medium	High	• Ensure high-quality service	• Poor logistical support	• Meetings • workshops

3.5 SWOT Analysis

The following SWOT analysis presents the Strengths, Weaknesses, Opportunities, and Threats within the STMA that are leveraged in the creation of this strategy.



4 AUDIENCE SEGMENTATION

This SBCC strategy is targeted at the general population living in the selected LIUCs of the STMA. It is estimated that the population directly affected by the WASH problems is almost 74,000, made up of both adult males and females as well as children of both sexes. However, the targeted behaviours have different effects on various segments of the whole. Following the outcome of the situational analysis, several potential audiences were identified. Segmentation of the potential audiences was done based on their socio-demographic, psychographic, and behavioural differences. Geographical factors were not considered, as all the potential audiences are located within one metropolitan assembly and are all living in LIUCs.

4.1 Primary Target Group

The primary target group was identified based on their likelihood to positively receive a communication message on a particular behaviour. This includes people who, with a little bit of nudging, will move to the next behaviour change stage. Primary targets were identified for the key macro behaviours and their ideal sub-behaviours. Table 3 presents the primary target group and their linkage to the behavioural areas.

Table 11: Primary Target Group and its Linkage to Behaviour Areas

Component	Macro-behaviours	Primary Targe
Water	Safe transportation of water to the home	• Women, children, and men in homes without a piped connection. • Private water vendors. • Standpipe Attendants.
	Household water treatment and safe storage	• Women, men, children.
Sanitation	Use of household toilets	• Men, women, children • Landlords, family heads.
		• Youth (male/female) • School children
Solid Waste	Proper disposal of household waste	• Children, women, men
	Source separation of plastic waste	• School pupils, teachers, and school food vendors.
Hygiene	Handwashing with soap practice	• Men, women, children. • Guardians of children less than 5 years.
		• School pupils, teachers, and school food vendors.

4.2 Secondary Target Group

The secondary target group is people in the primary target group's sphere of influence or social network. This group of people influences the primary target group in their health decision-making processes. They influence the primary target group in several ways, including influencing their decision to try certain healthy behaviours, try new products, or even decisions to continue or not to healthy practices. The strategy will consider these secondary target audiences to provide BCC messages targeted at them to help them positively influence the primary target group to adopt the desired behaviours.

4.3 Tertiary Target Group

The tertiary target group is people who will lead the implementation of the behaviour change activities. They include government officials, WASH service providers and NGOs, and CSOs. Their actions will impact the secondary and primary target groups. The strategy will only target them for capacity building to strengthen their competence to implement the strategy.

5 PROGRAMME GOAL, OBJECTIVES AND THEMATIC AREAS

5.1 Goal

The goal of this SBCC strategy is *"To promote access to safe sanitation and water as well as promote the adoption of hygienic practices to achieve a healthy and clean environment within the LIUCs in the STMA through the implementation of behavioural change campaigns"*. This goal is in alignment with the vision of the STMA.

5.2 Objectives

The strategy seeks to achieve the following broad objectives over the next five years:

- Strengthen STMA's capacity in fostering healthy behaviours related to WASH across all segments of the population living in LIUCs through targeted support in Behaviour Change action planning and implementation.
- To increase public knowledge, attitudes, and practices of WASH through targeted education and communication campaigns.
- Reduce non-compliance with environmental sanitation byelaws through adherence to sanitation and solid waste regulations amongst landlords and individuals.
- Enhance the quality of life of people living in LIUCs by promoting access to safe WASH infrastructure and adoption of safe hygienic practices.
- Strengthen STMA's partnership and collaboration with NGOs, community groups, and other stakeholders to advance WASH initiatives in LIUCs through joint planning and implementation.

5.3 Priority Thematic Areas

As a direct outcome of the interactions and observations made during engagements in the target LIUCs, the following thematic areas have been identified and prioritised for the SBCC strategy. The thematic areas cover all the focal areas of Water, Sanitation, and Hygiene as well as Solid Waste Disposal. The nine thematic areas for the strategy are:

- Water Quality Monitoring
- Safe transportation of water to the home
- Household water treatment and safe storage
- Use of household toilets
- Proper disposal of household waste
- Source separation of plastic waste
- Handwashing with soap practice
- Menstrual Hygiene Management
- Capacity for collaboration and WASH Planning and Implementation

5.4 Priority Behaviours

Using a variation of the Impact Likelihood Matrix (ILM) tool, key behaviours related to the thematic areas were prioritised. In selecting key behaviours, the general principle that the easier it is for a behaviour to be practised, the easier it is to be adopted was applied. Out of the tall list of possible behaviours associated with each thematic area, six macro behaviours associated with the primary audience were selected for analysis. The capacity building needs to strengthen collaboration, and WASH planning and implementation were also analysed as part of the process.

Table 12: Analysis of Ideal Behaviour and Feasible Behaviour for each Thematic Area

Ideal Behaviour	Current Reported & Observed Behaviours	Barriers to Ideal Behaviours	Facilitators or Motivators to Ideal Behaviour	Feasible Behaviour or Practice
Water Quality Monitoring				
Always collect safe water	• Water quality is only checked by the visible appearance of the water. • Water vendors don't provide technical information to consumers on water quality.	• Both water vendors and customers have low knowledge of water quality testing options • No facilities to test water quality at vending points	• Customers have a desire to know the quality of water they are collecting.	• GWL tests water quality routinely. • EHAs randomly test water quality at vending points and in households.
Safe Transportation of Water to the Home.				
Water is always transported in clean and covered containers	• Kuffour gallons commonly used to transport water have covers. • Buckets and basins used to transport don't have covers.	• Convenience of using basins for fetching water • Basins with fitting covers are not available on the market. • A Kuffour gallon has to be bought.	• A Kuffour gallon is convenient for transporting water. • Householders know the importance of clean water.	• Use receptacles that can be hygienically covered during transportation.
Household Water Treatment and Safe Storage				
Use safe water for all purposes	• Water is not treated in any way at the household level. • Water is sometimes stored in receptacles without lids. • Hand contact with water happens often during retrieval.	• Water receptacles at home are not cleaned regularly. • Household water treatment takes time. • Most people use inappropriate vessels to retrieve stored water. • The mindset that only drinking water must be treated.	• A variety of household-level treatment options are available.	• Treat stored water with water purification tablets. • Use a long arm ladle to retrieve stored water. • Wash water storage containers before refilling.

Ideal Behaviour	Current Reported & Observed Behaviours	Barriers to Ideal Behaviours	Facilitators or Motivators to Ideal Behaviour	Feasible Behaviour or Practice
Use of Household Toilets				
Always use a hygienic household toilet	• Many people use public toilets as their main facility. • Some landlords have converted toilet rooms to residential spaces. • Only a few houses have household toilets.	• Household toilets are expensive to build. • Household toilets are sometimes not user-friendly for People with Disability. • Most homes don't have space to construct toilets.	• Financing options for household toilets are available. • Improved technologies for household toilets are available. • Appropriate laws exist to enforce toilet ownership. • Citizens are ready to contribute financially to their toilets.	• Landlords acquire toilets for their houses. • Householders take proper care of household toilets. • Citizens must demand that their landlords construct household toilets.
Stop all forms of Open Defecation	• Many people defecate in the open, including along the shore, in bushes, and drains. • Some people defecate in polytene bags and dispose inappropriately.	• Conditions in public toilets very appalling. • Many houses don't have toilets. • High cost of toilet construction.	• STMA enforces appropriate bylaws • STMA is rolling out subsidised household toilets. • STMA facilitates funding mechanisms for household toilet construction.	• Always defecate in a toilet. • STMA enforces bylaws against the practice of Open defecation.

Ideal Behaviour	Current Reported & Observed Behaviours	Barriers to Ideal Behaviours	Facilitators or Motivators to Ideal Behaviour	Feasible Behaviour or Practice
Proper disposal of household waste				
Dump refuse properly	• Most people dump refuse at the communal dump site. • Indiscriminate dumping occurs within communities. • Household refuse containers don't have lids. • Collection from dumpsites is very irregular.	• Subjective charges at dump sites. • Public dump sites are not evenly distributed within the community.	• STMA bears responsibility for waste collection. • STMA has contracts with waste service providers. • Informal waste collectors are available in the metropolis.	• Use containers with a fitting lid for storage of household waste. • Dispose of all household waste properly in containers at the designated dumpsites.
Source separation of plastic waste				
Separate waste at the school level	• Every school has a refuse dump. • Few schools practice source separation. • Waste is burnt on the school compound at intervals.	• No bins exist in schools to support source separation. • Indiscipline amongst learners.	• Learners can be guided to separate waste at source. • Off-takers are available to receive plastic waste from schools. • School Environmental Clubs.	• Separate plastics from other waste at school. • School club to support a clean environment.

Ideal Behaviour	Current Reported & Observed Behaviours	Barriers to Ideal Behaviours	Facilitators or Motivators to Ideal Behaviour	Feasible Behaviour or Practice
Handwashing with soap practice				
Wash your hands with soap and water at all times.	• Handwashing at critical times is not practised often by many people. • Some handwashing facilities are present at public toilet facilities, but their condition is poor. •	• Citizens do not prioritise handwashing with soap. • Inadequate supply of water. • Feeling that after COVID-19, handwashing is not very critical.	• High knowledge level about the importance of handwashing with soap. • Peer pressure.	• Wash hands with soap always after using the toilet, before eating, after social events, and before cooking.
Wash your hands with soap and water at all times whilst in school.	• Handwashing facilities exist in most schools. • In many cases, handwashing facilities are not functioning properly. •	• Challenges in getting a regular water supply. • Availability of soap. • Location of handwashing facilities.	• Regular hygiene education to reinforce knowledge and attitude. • School Health club to promote active handwashing.	• Wash hands after play, before eating, after using the toilet, and after grounds work. • Use a personal handkerchief to dry hands after washing.

Ideal Behaviour	Current Reported & Observed Behaviours	Barriers to Ideal Behaviours	Facilitators or Motivators to Ideal Behaviour	Feasible Behaviour or Practice
Menstrual Hygiene Management				
• Girls use only acceptable and hygienic menstrual hygiene materials and properly dispose of same.	• Girls sometimes use unacceptable and unhygienic menstrual hygiene materials. • Girls have cultural and superstitious beliefs related to the disposal of menstrual waste.	• Girls have inadequate knowledge of menstrual hygiene materials. • Inadequate safe spaces in school to experience menstruation, including disposal of menstrual waste. • Boys and male teachers are sometimes not very supportive of girls during their menses.	• Minimum standards require school toilets to have Girls' Changing Rooms. • GES encourages menstrual hygiene education and commemoration of Menstrual Hygiene Day.	• Girls will use only acceptable and hygienic materials to manage their menses. • Girls will always be adequately prepared to manage their menses. • Girls will confidently dispose of their menstrual waste in school.
Capacity for Collaboration and WASH Planning and Implementation				
Work closely with identified stakeholders to plan and implement WASH SBCC interventions.	• STMA has constituted a Multi-Stakeholder Platform to foster stakeholder engagement. • STMA has embraced the co-creation principles. • STMA regularly organises meetings to get stakeholder opinions and feedback on issues.	• Busy schedules of STMA staff and stakeholders. • Stakeholders' lack of interest in specific issues. • Poor communication and information sharing. • Weak capacity within STMA for SBCC implementation. • STMA is poorly resourced to support full implementation.	• Existence of Multi-Stakeholder Platform within STMA • Joint work planning and coordination sessions. • Open communication and Information sharing. • Investing in team-building sessions and activities. • Resource pooling.	• Stakeholders attend and actively participate in all SBCC planning and collaborative activities. • Resource pooling to support SBCC activities.

5.5 Behaviour Change Objectives

This section of the strategy presents the level of change the strategy will drive over the five-year duration of implementation. The behaviour change objectives are based on the selected priority macro behaviours and their associated sub-behaviours drawn from the various thematic areas. Specific change objectives and their relevant indicators for each macro behaviour are indicated in Table 5.

Table 13: Behaviour Change Objectives and their Indicators

Ideal Behaviour	Feasible Behaviour or Practice	Specific Objectives	Indicators
Water Quality Monitoring			
Always collect safe water.	• GWL tests water quality routinely. • EHAs randomly test water quality at vending points and in households.	• By the end of 2026, EHAs will conduct monthly random tests of water quality at various vending points and selected households.	• Report of the most current test result available.
Safe Transportation of Water to the Home			
Water is always transported in clean and covered containers	• Use receptacles that can be hygienically covered during transportation.	• Within 2 years, 100% of the water that is carted to the home is done in vessels that are fully covered.	• 100% of the water that is carted is fully covered.
Household Water Treatment and Safe Storage			
Use safe water for all purposes	• Treat stored water with water purification tablets. • Use a long-arm ladle to retrieve stored water. • Wash water storage containers before refilling.	• Within 4 years, increase the proportion of households practicing household water treatment from 3.22% to 50% • By the end of 2028, 90% of households will practice safe water storage and retrieval.	• Proportion of households indicating they practiced household water treatment in the past month. • The proportion of householders who store water in containers with big necks indicates they use a long-handled scoop to fetch water.
Use of Household Toilets			
Always use a hygienic household toilet	• Landlords acquire toilets for their houses. • Householders take proper care of household toilets. • Citizens must demand that their landlords construct household toilets.	• Within 5 years, increase the number of households with a toilet from 53% to 90%	• An 8% annual increment in the number of households that have acquired a toilet within the year.
Stop all forms of Open Defecation	• Always defecate in a toilet.	• Within 5 years 90% decrease in the practice of Open Defecation.	• 80% of popular Open Defecation sites are free of faeces annually.

	• Enforce laws against the practice of Open defecation.		
Proper disposal of household waste			
Dump Refuse properly	• Use containers with a fitting lid for storage of household waste. • Dispose of all household waste properly in containers at the designated dumpsites.	• Within 4 years, 90% of households will use containers with appropriate covers for household waste collection.	• Number of houses using containers with fitted covers for waste collection.

Ideal Behaviour	Feasible Behaviour or Practice	Specific Objectives	Indicators
Source separation of plastic waste			
Separate waste at the school level	• Separate plastics from other waste at school. • School club to support a clean environment.	• Within 3 years, 80% of public basic schools practice source separation.	• Number of public basic schools practicing source separation. • Number of school environmental clubs set up.
Handwashing with soap practice			
Wash your hands with soap and water at all times.	• Wash hands with soap always after using the toilet, before eating, after social events, and before cooking.	• 90% of householders voluntarily practice active handwashing with soap after toilet use.	• A 10% annual increment in the number of households that have a functional handwashing facility near their toilet.
Wash your hands with soap and water at all times whilst in school.	• Wash hands after play, before eating, after using the toilet, and after grounds work. • Use a personal handkerchief to dry hands after washing.	• 90% of learners in basic schools voluntarily practice active handwashing at critical times whilst in school, in the first 4 years.	• Number of functional handwashing facilities with soap and water placed at vantage points.
Menstrual Hygiene Management			
Girls use only acceptable and hygienic menstrual hygiene materials and properly dispose of same.	• Girls will use only acceptable and hygienic materials to manage their menses. • Girls will always be adequately prepared to manage their menses. • Girls will confidently dispose of their menstrual waste in school.	• By the end of 2028, all girls in pre-tertiary educational institutions experience their menses in a safe and hygienic way whilst in school.	• Presence of a fit-for-purpose changing room in girls' toilet blocks in schools. • Emergency menstrual hygiene materials available in the school's first aid box.

			• Number of menstrual hygiene educational sessions conducted in a school term.
Capacity for Collaboration in WASH Planning and Implementation			
Work closely with identified stakeholders to plan and implement WASH SBCC interventions.	• Stakeholders attend and actively participate in all SBCC planning and collaborative activities. • Resource pooling to support SBCC activities.	• Key officers of stakeholder groups attend all SBCC planning and collaboration sessions. • Various stakeholders support STMA with resources to implement planned SBCC activities.	• Stakeholders register their participation in SBCC planning and collaborative sessions. • Number of planned SBCC activities successfully conducted with the full complement of resources.

6 STRATEGIC INTERVENTIONS

6.1 Introduction

Based on thematic areas and feasible behaviours targeted by this strategy, this section discusses the broad range of interventions and communication activities needed to achieve the behaviour change objectives. All behaviour change is predicated on three key elements: predisposing factors, enabling factors, and reinforcing factors. These three elements are critical in any comprehensive approach to preventing the spread of WASH-related diseases (EHP/USAID et al, 2004). This strategy captures these three elements as intervention areas. The three intervention areas are as follows:

Access to Hardware - the necessary hardware or technologies needed to support the behaviours being promoted.

Hygiene Promotion - activities that promote healthy behaviours, including communication, BCC initiatives, and social mobilization.

Enabling Environment - policies and advocacy activities, sustained financing schemes, and private sector involvement needed to reinforce and sustain behaviours.

Though this strategy focuses on delivering behaviour change through hygiene promotion, it is important that the other two elements are considered as they are collectively required to achieve maximum impact.

6.2 Behaviour Change Interventions

As indicated earlier, the behaviour change interventions proposed focus on using a range of BCC initiatives and social mobilization engagements to foster the desired behaviour changes. The planned interventions target the identified primary audience with a variety of change activities covering thematic areas and macro behaviours.

Table 14: SBCC Intervention Framework

Thematic Area	Feasible Behaviours	Strategic Initiatives/Activities	Outputs	Outcomes
Water Quality Monitoring	• GWL tests water quality routinely. • EHAs randomly test water quality at vending points and in households.	• Train EHAs on the use of the test kit for rapid water quality testing. • Conduct half-yearly orientation sessions on water quality monitoring for water vendors. • Conduct 2no. Meet your Officials sessions on water Quality Monitoring at vending points and households.	• EHAs trained in the use of rapid water quality testing. • 2 orientation sessions on water quality testing were conducted for water vendors. • 2 Meet your Officials sessions to discuss the water quality testing conducted.	• 15 EHAs trained to conduct rapid water quality testing. • Water vendors know how to appreciate the essence of water quality testing. • The general population appreciates the need for water quality testing, including enquiring about test results when available.
Safe Transportation of water to the home	• Use receptacles that can be hygienically covered during transportation.	• Develop a social media skit showing options for covering different types of containers used for transporting water. • Community women facilitators lead discussions with women on the importance of transporting water with covered containers using door-to-door visits.	• 2 Social media skits on the benefits of using water purification tablets developed and shared. • 2 in-person discussions held with women at the household level on the benefits of using water purification tablets.	• Water for domestic use is always transported using covered containers.

Household Water Treatment and Safe Storage	• Treat stored water with water purification tablets. • Use a long-arm ladle to retrieve stored water. • Wash water storage containers before refilling.	• Develop a Social media skit on the benefits of using water purification tablets. • Develop a poster on the use of water purification tablets. • Community women facilitators lead discussions with women on the benefits of using water purification tablets, using door-to-door visits. • Develop 2 episodes of a Radio Drama series to address the cleaning of water storage containers and the retrieval of stored water using long-arm ladles.	• 2 Social media skits on the benefits of using water purification tablets developed and shared. • 2 Posters on the use of water purification tablets developed and displayed in communities. • 3 in-person discussions held with women at the household level on the benefits of using water purification tablets. • 2no. 15 min episode, Radio drama on cleaning water storage containers at home and retrieval of water using a long-arm ladle, recorded and aired through the Community Information Centre.	• Households practice safe storage and retrieval of water. • Households use safe water for all purposes.

Thematic Area	Feasible Behaviours	Strategic Initiatives/Activities	Outputs	Outcomes
Use of Household Toilets	• Landlords acquire toilets for their houses. • Householders take proper care of household toilets. • Householders must demand that their landlords construct household toilets. • Always defecate in a toilet. • Enforce laws against the practice of Open defecation.	• Develop 3no. social media skits showing the benefits of having a toilet at home. • Compose a jingle explaining the process for household toilet ownership. • Compose a jingle on stopping the practice of open defecation. • Conduct 8no. Meet your Officials sessions covering household toilet promotion and stopping the practice of open defecation. • Develop 3 episodes of a Radio Drama series to address household toilet ownership and stopping open defecation. • Conduct 4no. Meet your Officials sessions on the enforcement of laws related to toilet ownership and open defecation.	• 3 social media skits showing the benefits of having a toilet at home, developed and shared. • Jingle explaining the process for household toilet ownership composed and run on all media platforms, including Community Information Centres. • Jingle on stopping the practice of open defecation composed and run on all media platforms, including Community Information Centres. • 8 Meet your Officials sessions covering household toilet promotion and the stop practice of open defecation are conducted. • 3no. 15-minute episodes of the Radio Drama series to address household toilet ownership and stopping open defecation recorded and aired. • 4 Meet your Officials sessions on the enforcement of laws related to toilet ownership and open defecation conducted.	• The majority of community members use household toilets for defecation. • Practice of open defecation reduced to the barest minimum in communities. •

Thematic Area	Feasible Behaviours	Strategic Initiatives/Activities	Outputs	Outcomes
Proper disposal of household waste	• Use containers with a fitting lid for storage of household waste. • Dispose of all household waste properly in containers at the designated dumpsites.	• Develop 1no. A social media skit on the proper disposal of solid waste at the dump site. • Develop the inter-community Keep Your Environment Clean Competition. • Conduct 2no. Meet your Officials sessions to discuss dump site management and the collection of solid waste. • Develop 2 episodes of a Radio Drama series to address proper solid waste disposal. • Conduct communal clean-up exercises in various localities every quarter.	• 1 social media skit on proper disposal of solid waste at the dump site developed and shared. • Annual inter-community Keep Your Environment Clean Competition developed and rolled out. • 2 Meet your Officials sessions to discuss dump site management and the collection of solid waste conducted. • 2no. 15-minute episodes of a Radio Drama series to address proper solid waste disposal recorded and aired. • Quarterly Clean-up exercises conducted in various localities.	• Solid waste is stored properly in bins with covers at the household level. • Solid waste is always properly dumped in the provided containers at the dump site. • The environment in the community is kept free of waste.
Source separation of plastic waste	• School club to support clean environment. • Separate plastics from other waste at school.	• Form School Environmental Clubs. • Develop jingle on source separation of plastics from other wastes. • Conduct 3no. in-person discussion sessions with staff and pupils at the school level on modalities of source separation. • Develop 2no. posters on source separation of plastics.	• School Environmental Clubs formed in all schools. • Jingle on source separation of plastics from other wastes composed and taught to school pupils. • 3 in-person discussion sessions with staff and pupils at the school level on modalities of source separation conducted. • 2 posters on source separation of plastics in schools developed.	• Active school environmental health clubs operating in all basic schools. • Basic school pupils actively practice source separation of plastics. • School compounds free of plastic wastes.

Thematic Area	Feasible Behaviours	Strategic Initiatives/Activities	Outputs	Outcomes
Handwashing with soap practice	• Wash hands with soap always after using the toilet, before eating, after social events, before cooking. • Wash hands after play, before eating, after using the toilet, after grounds work. • Use personal handkerchief to dry hands after washing.	• Develop 4no. handwashing with soap posters encouraging handwashing with soap at different times. • Develop 2 social media skits on handwashing with soap. • Develop 4no. handwashing with soap posters encouraging handwashing at different times in the school. • Develop jingle on handwashing with soap at different critical times. • Develop 2 episodes of Radio Drama series on active handwashing with soap at critical times. • Conduct hand washing with soap intervention to commemorate Global Hand washing day.	• 4 handwashing with soap posters encouraging handwashing with soap at different times developed and posted in communities. • 2 social media skits on handwashing with soap developed and shared. • 3 handwashing with soap posters encouraging handwashing at different times in the school developed and posted in schools. • Jingle on handwashing with soap at critical times composed and taught to school pupils. • 2no. 15 min. episode of Radio Drama series to address handwashing with soap at critical times. • Global Hand washing Day commemorated annually in schools.	• Community members practice active handwashing with soap at critical times. • School pupils practice active handwashing with soap at critical times. • School pupils use personal handkerchief for drying hands after washing.

Thematic Area	Feasible Behaviours	Strategic Initiatives/Activities	Outputs	Outcomes
Menstrual Hygiene Management	• Girls will use only acceptable and hygienic materials to manage their menses. • Girls will always be adequately prepared to manage their menses. • Girls will confidently dispose of their menstrual waste in school.	• Structured MHM education integrated into School Health Club activities. • Pre-tertiary schools stock emergency menstrual hygiene materials in their first aid kits. • Annual commemoration of Menstrual Hygiene Day with a variety of activities. • Resource mobilization to acquire reserve stocks of sanitary pads for distribution to schools.	• MHM educational materials and activities designed for School Health Clubs. • Menstrual Hygiene Day commemorated in schools annually. • A variety of resource mobilization activities to acquire sanitary pads designed and implemented.	• Learners' knowledge, appreciation, and skills to manage menstrual hygiene updated. • Emergency Sanitary Pads available in schools' first aid boxes.
Capacity for Collaboration in WASH Planning and Implementation	• Stakeholders attend and actively participate in all SBCC planning and collaborative activities. • Resource pooling to support SBCC activities.	• Develop and adopt a planned schedule for WASH SBCC planning meetings and collaboration engagements. • Agree on activity-specific implementation work plans indicating clear roles and responsibilities of all players.	• Schedule for WASH SBCC stakeholder meetings established. • Quarterly WASH SBCC workplans developed, indicating key roles and responsibilities and resource requirements.	• Key representatives of stakeholders actively participate in all planned WASH SBCC planning meetings and collaboration activities. • All planned SBCC activities successfully implemented with a full complement of needed resources.

7 IMPLEMENTATION PLAN

THEME 1: Water Quality Monitoring																										
Objective 1: Water Vendors test water quality regularly																										
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Responsibility	Assumptions	Approach to Implementation	Existing Opportunity
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Develop content for water quality testing and monitoring training for EHAs		1 day																					MEHO	Content material exists	Desk work	Local expertise exists
Conduct 1 1-day training for EHAs in water quality testing and monitoring		1 day																					MEHO	EHAs will be available	Workshop	Local expertise exists
Monitor EHA's water quality testing activities		2 days quarterly																					MEHO	MEHO will be resourced	Field monitoring	Local expertise exists
Objective 2: Encouraging customers to request water quality testing results																										
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Responsibility	Assumptions	Approach to Implementation	Existing Opportunity
			Q1	Q2	Q3	Q4	Q1	Q1	Q2	Q3	Q4	Q1	Q1	Q2	Q3	Q4	Q1	Q1	Q2	Q3	Q4	Q1				
Develop a framework for Meet Your Officials engagement		2 days																					PRO	Internal capacity exists	Desk work	Local expertise exists
Conduct 2 no Meet Your Officials engagements		days																					PRO	Resource persons are available	Radio Discussion	Information centres
THEME 2: Safe Transportation of water to the home																										
Objective 1: Use receptacles that can be hygienically covered during transportation																										
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Responsibility	Assumptions	Approach to Implementation	Existing Opportunity
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Develop concepts for Skit		10 days																					PRO	Internal capacity exists	Brainstorm session	Local expertise exists
Shoot, edit, and master Skits		10 days																					PRO		Studio Sessions	WASH TV
Share Skits on Social Media Platforms		On-going																					PRO	Internet connectivity	Social media Posting	Active Social media Channels
Develop a framework for door-to-door engagements		2 days																					MEHO	Internal capacity exists	Brainstorm session	Premises Inspection
Orientation for Community Women Facilitators		2 days																					MEHO	Community level facilitators exists	Orientation	Adult learning techniques
Roll out door-to-door discussions with women		10 days quarterly																					MEHO	Adequate no. of EHAs available	Home visits	Premises Inspection
THEME 3: Household Water Treatment and Safe Storage																										
Objective 1: Treat stored water with water purification tablets																										
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Responsibility	Assumptions	Approach to Implementation	Existing Opportunity
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Develop concepts for Skit, Radio Drama, and Posters		10 days																					PRO	Internal capacity exists	Materials Dev. Workshop	Local expertise exists
Shoot, record, edit, and master Skit and Radio Drama		10 days																					PRO	Local expertise exists	Studio sessions	WASH TV
Print and distribute Posters		10 days																					PRO	Local expertise exists	Seek expert input	
Broadcast Radio Drama Episode		2 days																					PRO	Internal capacity exists	Seek expert input	Information centres
Develop a framework for door-to-door engagements		2 days																					MEHO	Internal capacity exists	Brainstorm session	Premises Inspection
Share Skits of Social Media Platforms		On-going																					PRO	Good internet connectivity	Social media Posting	Active Social Media Channels
Orientation for Community Women Facilitators		2 days																					MEHO	Community level facilitators exist	Orientation	Adut learning techniques
Roll out door-to-door discussions with women		10 days quarterly																					MEHO	Adequate no. of EHAs available	Home visits	Premises Inspection
Objective 2: Use a long arm ladle to retrieve stored water																										
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Responsibility	Assumptions	Approach to Implementation	Existing Opportunity
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Develop a concept for a Radio Drama Episode		10 days																					PRO	Internal capacity exists	Material Dev. Workshop	Local expertise exists
Record and broadcast a Radio Drama Episode		5 days																					PRO	Internal capacity exists	Studio sessions	Information Centres

Develop a framework for door-to-door engagements		2 days																					MEHO	Internal capacity exists	Brainstorm session	Premises Inspection
Roll out a door-to-door discussion with women		10 days quarterly																					MEHO	Internal capacity exists	Home visits	Premises Inspection
Broadcast Radio Drama		2 days																					PRO		Radio Discussions	Information Centres
THEME 4: Use of Household Toilets																										
Objective 1: Landlords acquire toilets for their houses																										
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Develop a concept for Skit, Radio Drama		10 days																					PRO	Internal capacity exists	Materials Dev. Workshop	WASH TV
Compose Jingles		3 days																					PRO	Internal capacity exists	Brainstorm session	Local capacity exists
Develop a framework for Meet Your Officials		2 days																					MEHO	Internal capacity exists	Brainstorm session	On-going Media Interviews
Shoot, record, edit, and master Skit and Radio Drama		10 days																					PRO		Studio sessions	Information centres
Roll out Jingles		On-going																					PRO		Seek expert input	Social media channels
Share Skits on Social Media Platforms		On-going																					PRO	Good internet connectivity	Social media Posting	Social Media Channels
Broadcast Radio Drama Series		6 days																					PRO		Seek expert input	Information Centres
Roll out Meet Your Officials initiatives		10 days quarterly																					MEHO		Radio Discussion	Information Centres
Objective 2: Stop All Forms of Open Defecation																										
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Develop a concept for Radio Drama		10 days																					PRO	Internal capacity exists	Materials Dev workshop	
Compose Jingles		3 days																					PRO	Internal capacity exists	Brainstorm sessions	Local capacity exists
Develop a framework for Meet Your Officials		2 days																					PRO	Internal capacity exists	Brainstorm Session	Premises Inspection
Record Radio Drama Episodes		5 days																					PRO		Studio Sessions	WASH TV
Roll out Jingles		On-going																					PRO		Seek expert input	Social Media Channels
Broadcast Radio Drama Series		10 days quarterly																					PRO		Seek expert input	Information Centres
Roll out Meet Your Officials		6 days																					MEHO	Internal capacity exists	Radio Discussion	Information centres
THEME 5: Proper Disposal of Household Waste																										
Objective 1: Dump Refuse Properly																										
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Develop a concept for Skit, Radio Drama		10 days																					PRO	Internal capacity exists	Materials Dev workshop	
Develop a concept for the Inter-Community Clean-up Competition		5 days																					PRO	Internal capacity exists	Brainstorm sessions	
Develop a framework for Meet Your Officials		2 days																					PRO	Internal capacity exists	Brainstorm sessions	Premises Inspection
Shoot, record, edit, and master Skit and Radio Drama		10 days																					PRO		Studio Sessions	WASH TV
Broadcast Radio Drama Series		On-going																					PRO		Seek expert input	Information Centres
Roll out Meet Your Officials initiatives		3 days																					MEHO		Seek expert input	Information Centres
Share Skits on Social Media Platforms		On-going																					PRO	Good internet connectivity	Social Media Posting	Social Media Channels
Conduct Competitive Clean-up Exercises in localities, culminating in annual awards		Quarterly																					MEHO	Environmental Health Unit to lead	Communal labour	Regular activity of Environmental Health Unit
Objective 2: Separate Waste at the School Level																										
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Form School Environmental Clubs		60 days																					GES-SHEP	Adequate staff exist	School engagements	Guidelines exist
Compose Jingles		5 days																					PRO		Brainstorm sessions	Local capacity exists

Develop a framework for School Visits		2 days																					GES-SHEP	Schools will be in session	Brainstorm sessions	Protocols exists
Design Posters		4 days																					PRO		Materials Dev. Workshop	
Roll out jingles		On-going																					PRO		Sang during school activities	
Conduct School Visits		90 days																					GES-SHEP	Schools will be in session	Discussions during School visits	Protocols exist
Print and Distribute Posters		10 days																					PRO		Seek expert input	
Support the School Environmental Club activities		On-going																					GES-SHEP	Schools will be in session	Co-curricular activity	Guidelines exists
Commemorate Global Handwashing Day with school-based activities		Yearly																					GHS	SHEP to collaborate	Durbar and Demonstrations	National celebrations planned annually
Theme 6: Source Separation of Plastic Waste																										
Objective 1: School Club supports a Clean Environment																										
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Form Environmental Clubs in schools		30 days																					GES-SHEP	Internal capacity exists	Co-curricular activity	Guidelines exists
Compose and record a jingle on source separation		10 days																					PRO	Local expertise exists	Seek expert input	
Design and print 2 no. posters on source separation		10 days																					PRO	Local expertise exists	Seek expert input	
Objective 2: Separate plastics from other wastes in school																										
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Activate the source separation of plastics led by the Environmental clubs		On-going																					GES-SHEP	Schools will be in session	Co-curricular activity	
Link schools with plastic off-takers		90 days																					PRO	Active off takers exist	Co-curricular	SMC function
THEME 7: Handwashing with Soap Practice																										
Objective 1: Wash hands with soap always after using the toilet, before eating, after social events, before cooking																										
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Design Posters (one for each critical time)		10 days																					PRO	Internal capacity exists	Materials Dev. Workshop	
Develop a Concept for Skit and Radio Drama		10 days																					PRO	Internal capacity exists	Materials Dev. Workshop	
Print and Distribute Posters		10 days																					PRO		Seek expert input	
Shoot, record, edit, and master Skit and Radio Drama		10 days																					PRO		Seek expert input	WASH TV
Broadcast Radio Drama Series		10 days quarterly																					PRO		Seek expert input	Information Centres
Roll out Skit		On-going																					PRO	Good internet connectivity	Social media Posting	Social Media Channels
Objective 2: Wash hands with soap after play, before eating, after using the toilet, after grounds work																										
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Design Posters (one for each critical time)		10 days																					PRO	Internal capacity exists	Materials Dev. Workshop	
Compose Jingle		5 days																					PRO	Internal capacity exists	Seek expert input	Local capacity exists
Roll out Jingles		On-going																					GES-SHEP	Schools will be in session	Seek expert input	
Print and Distribute Posters		10 days																					PRO	Internal capacity exists	Seek expert input	
Commemorate Global Handwashing Day (Metro level)		1 day Annually																					PRO		Metro level celebration	National celebration
THEME 8: Menstrual Hygiene Management																										
Objective 1: Girls will use only hygienic materials to manage their menses																										
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Conduct resource mobilization to build up a stock of Sanitary Pads		On-going																					PRO		Appeal for donations	Stakeholder support

Introduce girls to sewing and the use of reusable pads		Termly																				GES-SHEP	School Health Clubs are active		
Objective 2: Girls will always be adequately prepared to manage their menses																									
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Develop structured menstrual hygiene education activities for girls to be delivered through the School Health Club		5 days																					GES-SHEP		Desk work	Existing content material
Roll out Menstrual Hygiene Activities		Termly																					GES-SHEP		Co-curricular activities	
Commemorate Menstrual Hygiene Day		1 day Annually																					PRO		Metro-level Celebration	National Celebration
THEME 9: Capacity for Collaboration in WASH Planning and Implementation																										
Objective 1: Work closely with identified stakeholders to plan and implement WASH SBCC interventions.																										
Strategic Initiatives	Expected Output	Duration	Year 1				Year 2				Year 3				Year 4				Year 5				Responsibility	Assumptions	Approach to Implementation	Existing Opportunities
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Conduct a working session with stakeholders to draft a schedule for WASH SBCC engagements.		Yearly																					MCD		Workshop	Co-creation procedures exist
Conduct a working session to agree on the implementation work plan with resource allocation.		Yearly																					MCD		Workshop	Co-creation procedures exist

8 BUDGET

The following indicative budget is presented to cover the cost of implementing the proposed SBCC activities over the 6-year period. The total cost for implementing the strategy stands at three hundred and thirty-five thousand, six hundred and eleven United States dollars (USD 352,611). The breakdown per year is presented in the budget table below.

Proposed Activities	**Cost Estimate (USD)**				
	Y1	Y2	Y3	Y4	Y5
Conduct a 4-day residential Materials Development Workshop	5,800				
Script, shoot, edit and master 12 Skits for social media (various issues)	1,248		1,248		
Script, record 9 Episodes (15 mins) of Radio Drama addressing various issues	1,400				
Compose and record 3 Jingles on various themes	5,000				
Print 12 no. Posters on various issues (300 copies each)	2,850				
Train 15 EHAs to conduct rapid water quality testing	397				
Conduct Door-to-Door engagements	15,900	15,900	15,900	15,900	
Conduct Meet Your Officials Activity	6,000	4,500	6,000	1,500	
Conduct School Activities (School Clubs)	16,800	16,800	16,800	16,800	16,800
Roll out Radio Drama	918	918	918	918	
Community Activities (Competition)		29,855	29,855		
Global Handwashing Day commemoration	7,900	7,900	7,900	7,900	7,900
World Toilet Day commemoration	7,900	7,900	7,900	7,900	7,900
Menstrual Hygiene Day commemoration	7,900	7,900	7,900	7,900	7,900
Capacity for collaboration for SBCC implementation	757	757	757	757	757
Total	**80,013**	**85,230**	**87,230**	**59,278**	**41,257**

9 MANAGEMENT PLAN

9.1 Risk Management

The risk management approach for this strategy considers potential risks that could negatively impact the implementation of the strategy. Steps to mitigate such risks and ensure the achievement of the objectives of the strategy are presented in the risk management statement.

The following risks could potentially impact the SBCC strategy:

- *Resource Constraints:* Financing is the most essential resource required for the full and effective implementation of this strategy. Inadequate funding may limit or delay the implementation of planned activities.

- *Limited Stakeholder Engagement:* Stakeholder participation is key to the effective implementation of the strategy. STMA's stakeholders have important roles to play in the rollout of the strategy. Their limited participation will hinder the strategy's effectiveness.

- *Disinformation and Misinformation:* Disinformation is intentionally putting out false information, whilst misinformation is putting out false or inaccurate information. In this age of plurality of media outlets, both disinformation and misinformation have become threats to various aspects of our lives, especially public health issues. Both disinformation and misinformation could lead to mistrust of the STMA as it rolls out this SBCC strategy.

- *Absence of Enabling Elements:* The proposed SBCC initiatives will predispose the target group to practising the key behaviours; however, without the necessary physical facilities like toilets and handwashing stations, to enable them to practice the behaviours, no change will take place. The necessary polices and regulations must also be in place to reinforce the behaviours after they have been adopted.

To address the identified risks, the following mitigation measures are recommended.

- *Resource Planning:* A detailed resource plan indicating funding sources should be developed. Considering that continuity is essential in effecting behaviour change, funding should be secured in advance to support the strategy's activities.

- *Stakeholder Engagement:* Stakeholder engagement should be a key feature of the strategy's roll-out. Relevant stakeholders should be fully engaged right from the beginning and continuously throughout the implementation. Stakeholder engagement should not just be in name. Stakeholders must feel that they are contributing meaningfully throughout implementation.

- *Disinformation and misinformation:* To combat any form of disinformation and misinformation, the STMA must ensure that a reliable source of information on all ongoing SBCC activities is available to the general populace. Up-to-date information

on all SBCC-related initiatives should be available at the Client Services Unit of the Assembly. All staff directly involved in implementation should be abreast with the scope of activities for SBCC and the expected outcomes. Stakeholders should be equally abreast with all SBCC activities, especially those which require their direct input.

- *Absence of Enabling Elements:* Various schemes, including financing options, should be put in place to enable the target population to access affordable household toilet facilities. The presence of physical facilities is key to the practice of the proposed behaviours. Similarly, the Assembly has to put in place relevant policies and laws to enable the enforcement of proposed behaviours when necessary.

9.2 Sustainability

Sustainability is an essential part of this strategy's implementation. The sustainability plan is to ensure the long-term impact and success of the strategy by instituting processes and practices that help progressively sustain and build up achievements during implementation.

Strengthening Partnerships

Partnerships provide a lot of opportunities for leveraging resources external to the organisation. STMA must strengthen existing partnerships and forge new ones to sustain the gains from implementing the SBCC strategy. Partnerships at three levels can be pursued and strengthened:

- Local Partnerships - collaborate with local organisations, government agencies, and stakeholders to leverage resources and expertise for sustained impact.
- Private Sector Engagement - explore partnerships with private sector entities to provide support, resources, and potential funding for WASH initiatives.
- NGO and International Agency Collaboration - build relationships with NGOs and international agencies for technical support and potential funding opportunities. Partnership opportunities through decentralised cooperation and twin cities initiatives can be harnessed to attract funding and technical assistance support.

Integrating SBCC initiatives with other Programmes

Behaviour change initiatives cut across almost all everyday activities. The applicability of behaviour change to diverse issues means SBCC initiatives can be seamlessly integrated into other ongoing programmes of the Assembly. Cross-sector collaborations like working with Ghana Health Service, who also run school health programmes, will go a long way not only to sustain the planned school health initiatives of the SBCC but also maximise their impact.

Funding and Resource Management

Reliable funding is the backbone of the SBCC implementation. To sustain the impacts of the SBCC initiatives, the STMA must seek diverse sources of funding, such as grants, internal funds, and project funds, among others, to ensure continuity of financial flows for the implementation of the various SBCC activities. This should be accompanied by financial

accountability. Implementing financial reporting systems that show transparency and accountability in the use of funds will increase STMA's ability to attract additional funds for SBCC implementation. Various measures should be put in place to ensure resources assigned to the implementation of SBCC activities are applied efficiently and cost-effectively.

Community Involvement

Active community participation and ownership of programmes have proven to be a sure way of achieving sustainability in programme implementation. Community-level stakeholders are key in achieving success and longevity in project implementation. STMA must encourage active community participation and ownership of SBCC initiatives by promoting local leadership and responsibility in the planning and implementation of community-level SBCC initiatives. Capacity building of community leaders and members in aspects of the SBCC strategy will enable them to take up some of the activities independently. Establishing community feedback mechanisms to improve and adjust SBCC initiatives to align with local needs and experiences will also contribute significantly to the sustainability of implementation.

Monitoring and Adaptation

Continuously monitoring the impact and effectiveness of planned SBCC activities will help identify areas for improvement and adaptation. Timely adjustments to ensure better impact will encourage sustained interest in activities, as community members will see direct relevance of the SBCC initiatives to improvements in their everyday lives.

Integrity

Integrity is an essential pillar in attaining sustainability. The involvement of all stakeholders is crucial for the success of the strategy. STMA must be seen as a trustworthy, transparent and accountable institution before stakeholders will commit to supporting the strategy implementation. Intentional steps must be taken to foster trust amongst stakeholders; all communication related to the strategy implementation should be clear, as transparency promotes active participation. Prudent resource management and ethical conduct by officials are important elements that should be reflected in all aspects of implementation. Integrity as a pillar of the strategy's significant implementation increases the chances of achieving sustainable improvements in WASH behaviours.

The sustainability plan ensures that the WASH SBCC strategy continues to have a meaningful and lasting impact over time. By building partnerships, efficient resource management, engaging the community, and monitoring progress, the strategy's objectives can be easily achieved and maintain its positive influence for years to come.

9.3 Monitoring and Evaluation

Monitoring and Evaluation (M&E) are an essential component of any project implementation. It enables continuous assessment of the effectiveness and impact of the project implementation. The M&E component of this SBCC Strategy is directly linked with the broad M&E Framework established in the STMA's 6-Year WASH Strategic Plan for improving WASH Services in Low-Income Urban Communities in the Sekondi-Takoradi Metropolis. Key Performance Indicators for SBCC, specifying both output and outcome indicators, are set out

in the 6-Year WASH Strategic Plan document. Key roles and responsibilities for M&E are also set out clearly. Broadly, a variety of data collection methods will be used to collect relevant data to get insights into the effectiveness of implementation driven by data. The feedback from M&E will be used to adjust planned SBCC activities to continually improve outcomes.

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