Freshwater Action Network South Asia

Freshwater Action Network South Asia-Bangladesh

Rising for Rights for Strengthening Civil Society Network in South Asia to Achieve SDG 6

FANSA-Bangladesh

CWIS Action Plan

Gaibandha Municipality, Gaibandha, Bangladesh

Study Led by: Dr. Md. Mujibur Rahman

SKS

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Rising for Rights for Strengthening Civil Society Network in South Asia to Achieve SDG 6

(Rising for the Rights Project, FANSA-Bangladesh)

CWIS Action Plan

Gaibandha Municipality, Gaibandha, Bangladesh

CSIRS Center for Smart Infrastructure Resilience and Sustainability

UNITED INTERNATIONAL UNIVERSITY

Center for Smart Infrastructure Resilience and Sustainability (CSIRS)
United International University (UIU)
Dhaka

September 2024

Foreword

Urbanization is growing rapidly in Bangladesh. The style and nature of urbanization in Bangladesh are not similar to other countries. As a consequence of urbanization, city dwellers face multi-faceted problems. The population living in low-income communities in urban settings has increased, leading to poor sanitation conditions and a higher risk of water-borne diseases. The quality of drinking water is often contaminated due to poor supply and/or facilities. To combat these problems, the government and development organizations are emphasizing the promotion of safely managed sanitation services (SMSS) following the city-wide inclusive sanitation (CWIS) approach.

SKS Foundation, the FANSA-Bangladesh Secretariat, has been implementing the project *Rising for Rights for Strengthening Civil Society Networks in South Asia to Achieve SDG 6* alongside other members of this advocacy network. The Project covers the cities/towns under 3 geophysical locations namely Barishal City Corporation, Barishal; Sreemangal Municipality, Moulvibazar; and Gaibandha Municipality & Muktinagar Union, Gaibandha.

Focusing on the sanitation situation assessed through a comprehensive study to frame a Shit Flow Diagram (SFD) covering Gaibandha Municipality, FANSA-Bangladesh realizes that there is no alternative to a CWIS planning to effectively promote SMSS through the duty-bearers in Gaibandha district town. Concerning this, SKS Foundation has developed a CWIS Action Plan for Gaibandha Municipality. The CWIS Action Plan has been developed as a pragmatic & practical one with the active participation of the duty-bearers, professionals, relevant stakeholders and the community people from different tiers in consultations, FGDs & KIIs and field observation.

I express my heartfelt thanks & gratitude to Dr. Md. Mujibur Rahman, Professor, Department of Civil Engineering & Director, CSIRS-UIU, and his team members for leading the study for the development of the CWIS Action Plan for Gaibandha Municipality professionally.

I appreciate my colleagues at SKS Foundation for their efforts in organizing & supporting the conduction of the study for developing the CWIS Action Plan. I believe, the CWIS Action Plan will be used as a ready reference by Gaibandha Municipality and other service providers in promoting safely managed sanitation services inclusively in Gaibandha district town.

Rasel Ahmed Liton
Chief Executive
SKS Foundation

Preface

Sanitation is a fundamental human right, and ensuring that every individual has access to safe, adequate, and inclusive sanitation services is crucial for the overall well-being of the citizens of a municipality. The City-wide Inclusive Sanitation (CWIS) Plan for Gaibandha Paurashava (Municipality) in Gaibandha, Bangladesh, represents a significant step towards achieving sustainable and equitable sanitation for all its residents. This Plan is a testament to our commitment to improving public health, environmental sustainability, and social equity within Gaibandha community.

The CWIS approach emphasizes the importance of inclusivity, recognizing the diverse needs of the population, including the poor, marginalized, and vulnerable groups. By adopting this approach, we aim to create a sanitation system that is not only efficient and effective but also equitable and just.

This report outlines the strategic framework and actionable steps required to implement the CWIS Plan in Gaibandha Municipality. It includes a comprehensive analysis of the current sanitation landscape, identifies gaps and key challenges, and proposes short-, medium- and long-term actions to address these issues. The plan also highlights the importance of community engagement, stakeholder collaboration, and capacity building to ensure the successful implementation and sustainability of the proposed initiatives.

We extend our gratitude to all the stakeholders, including local government officials, community leaders, non-governmental organizations (NGOs), and international partners, who have contributed to the development of this plan. As we embark on this journey towards improved sanitation, we call upon every member of the Gaibandha community to join hands in making this vision a reality.

Together, we can build a future where everyone has access to safe and dignified sanitation services, thereby enhancing the quality of life for all residents of the municipality, and thus support shaping a vision for a cleaner, healthier, resilient and inclusive Gaibandha.

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Director of ITN-BUET

Rising for Rights for Strengthening Civil Society Network in South Asia to Achieve SDG 6

City-wide Inclusive Sanitation (CWIS) Action Plan

Gaibandha Municipality, Gaibandha, Bangladesh

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Syeda Aniqa Anjum, *Research Officer, CSIRS-UIU*

Abbreviations

CSDA	City Sanitation Service Delivery Assessment
CSIRS	Center for Smart Infrastructure Resilience and Sustainability
CWIS	City Wide Inclusive Sanitation
DPHE	Department of Public Health Engineering
FANSA	Freshwater Action Network South Asia
FGD	Focus Group Discussion
FS	Fecal Sludge
FSM	Fecal Sludge Management
FSTP	Fecal Sludge Treatment Plant
IRF-FSM	Institutional and Regulatory Framework for Faecal Sludge Management
KII	Key Informant Interviews
LGED	Local Government Engineering Department
NGO	Non-Government Organization
SDG	Sustainable Development Goals
SFD	Shit Flow Diagram
SMSS	Safely Managed Sanitation Systems
SuSanA	Sustainable Sanitation Alliance
UIU	United International University
WASH	Water, Sanitation and Hygiene
WLCC	Ward Level Coordination Committee

Table of Contents

List of Tables

List of Figures

Background

In Bangladesh, people are moving to urban areas at a significant rate. According to the Population and Housing Census of 2022, 31.5% of the population is dwelling in an urban setting which increased more than 50% in the last 10 years. However, the country lacks proper city planning and is not equipped to overcome the sanitation challenges that come with population surge. Although sanitation and hygiene practices have significantly improved over the years, only 32% of the rural sanitation facilities are safely managed. In the urban areas, the situation is worse as approximately 71% of the sanitation facilities are not safely managed (JMP, 2023).

As Bangladesh aims to reach the Sustainable Development Goals (SDG) by 2030, it is imperative to prioritize the current state of sanitation, which falls within the scope of SDG 6 (Clean Water and Sanitation). The government and development partners are promoting Safely Managed Sanitation Systems (SMSS), through a City-wide Inclusive Sanitation (CWIS) approach in urban areas. To enhance CWIS promotion, there's a need to advocate for better policy implementation and address gaps with a clear focus on climate resilience and equity issues.

As part of the advocacy network covering the South-Asian countries, FANSA-Bangladesh focuses on SMSS in the city areas with the promotion of City-wide Inclusive Sanitation (CWIS) by the service providers under the project ***Rising for Rights for Strengthening Civil Society Networks in South Asia to Achieve SDG 6 Project (hereinafter Rising for the Rights Project).*** The Project includes services for creating Shit (Fecal waste) Flow Diagrams (SFD) and CWIS Action plans for targeted areas that include one City Corporation- Barishal, two municipalities- Gaibandha & Sreemangal, and one union- Muktinagar, Gaibandha. The Project also includes developing an Implementation Guideline for FANSA-Bangladesh to effectively promote CWIS, and an evidence-based Advocacy Strategy for FANSA-Bangladesh. Successful implementation of the *Rising for the Rights Project* will contribute to strengthening civil society networks in South Asia to achieve SDG 6.

SKS Foundation (FANSA-BD Secretariat) entered into an agreement with the ***Center for Smart Infrastructure Resilience and Sustainability (CSIRS)*** *of the* ***United International University (UIU)*** for conducting the above-mentioned studies under **Rising for the Rights Project.**

Objective

The primary objective of this CWIS Action Plan is to ensure equitable, sustainable, and safe sanitation services for all residents of Gaibandha Municipality, in alignment with the Sustainable Development Goals (SDG), particularly SDG 6 (Clean Water and Sanitation). This plan aims to improve public health, environmental sustainability, and social equity by providing access to safely managed sanitation services and addressing gaps in the existing sanitation service chain.

City-wide Inclusive Sanitation

Citywide Inclusive Sanitation (CWIS) is an all-encompassing approach to urban sanitation that focuses on meeting the needs and upholding the rights of every resident, irrespective of their socioeconomic background, gender, or abilities. CWIS aims to ensure that everyone has access to safe, accessible, and sustainable sanitation services, while also enhancing public health, environmental sustainability, and social equity. CWIS stands on the following ***seven principles:***

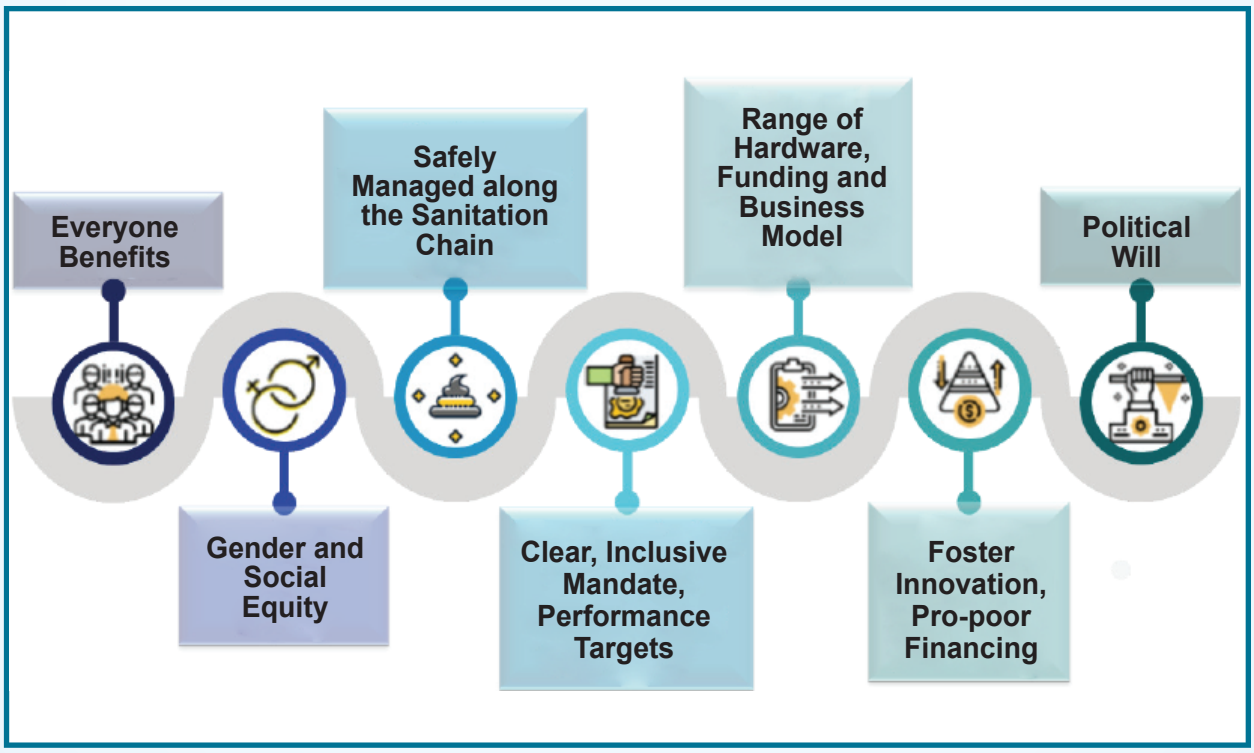

Figure 1: CWIS Principles

These principles emphasize:

1. Equitable Access for All: Sanitation services should be inclusive, ensuring that everyone, including the urban poor and transient populations, has access to safe sanitation. Service pricing should reflect service levels and affordability, with subsidies for the poorest.

2. Gender and Social Equity: Planning and management should prioritize the needs of marginalized groups, including women and those without formal land tenure, while protecting workers' health and rights.

3. Safe Management of Human Waste: Sanitation systems should ensure safety at every stage, from waste containment to disposal or reuse, safeguarding groundwater and the environment.

4. Clear Mandates and Accountability: Authorities should have clear mandates, performance targets, and accountability mechanisms to ensure effective urban sanitation services, especially for the poor.

5. Diverse Approaches to Funding and Technology: Authorities should use a variety of funding models and both sewered and non-sewered solutions to meet sanitation goals, engaging the private sector when appropriate.

6. Comprehensive, Long-term Planning: Planning should be informed by an analysis of needs, resources and constraints, including climate change and water constraints, and coordinated with other urban services.

7. Political Will and Accountability: Governments should demonstrate commitment to inclusive sanitation through transparent budgets, institutional reforms, and accountability systems that empower marginalized communities.

The ***CWIS Service Framework*** has been designed to implement all the principles of CWIS in a planned and programmatic way. Successful implementation of the CWIS framework will provide inclusive sanitation services, prioritizing marginalized and vulnerable populations, ensuring that human waste is safely managed throughout the sanitation service chain, and promoting long-term sustainability through resource recovery and efficient service delivery. The safely managed sanitation service chain includes the stages of capture (in a hygienic toilet), safe containment (and treatment in situ if appropriate), emptying, transport, treatment and safe disposal/reuse as shown in the figure below:

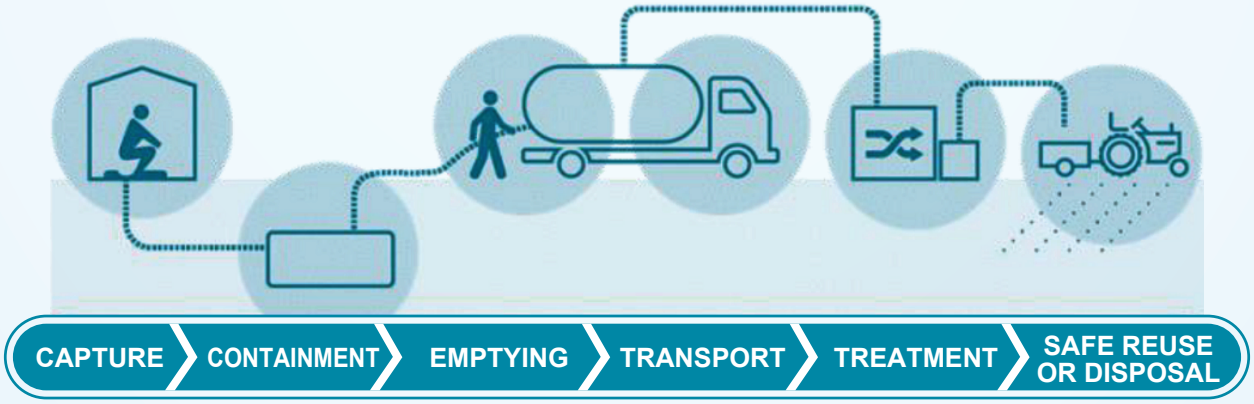

Figure 2: Safely Managed Sanitation Service Chain

To obtain expected CWIS outcomes, clear roles and responsibilities at municipal and national levels are vital, along with data-driven accountability mechanisms that track performance and ensure compliance through regulatory incentives or penalties. The framework also emphasizes effective resource management, incorporating innovative technologies and business models to maintain financial, environmental, and social sustainability. Ultimately, CWIS seeks to improve public health, promote social and gender equity, and foster economic and environmental benefits across urban areas.

The CWIS Service Framework is illustrated below:

CORE CWIS OUTCOMES	**EQUITY**	**SAFETY**	**SUSTAINABILITY**
	Services reflect fairness in distribution and prioritization of service quality, prices, deployment of public finance/ subsidies	Services safeguard customers, workers and communities from safety and health risks by reaching *everyone* with safe sanitation	Services are reliably and continually delivered based on effective management of human, financial and natural resources
CORE CWIS FUNCTIONS	**RESPONSIBILITY**	**ACCOUNTABILITY**	**RESOURCE PLANNING AND MANAGEMENT**
	Authority(s) execute a clear public mandate to ensure safe, equitable and sustainable, sanitation services for all	Authority's performance against its mandate is monitored and managed with data, transparency, and incentives	Resources–human, financial, natural, assets–are effectively managed to support execution of mandate across time/ space

Figure 3: CWIS Service Framework

The responsibility for implementing CWIS in municipalities rests with the municipal authority, with policy support provided by the Local Government Division. ***Municipalities should form a CWIS Unit (or Cell)*** which will work in coordination with DPHE, NGOs, Town/Ward level coordination committees and the existing standing committee on health, water & sanitation. The typical institutional arrangement for providing CWIS at Municipality level is shown in the following figure:

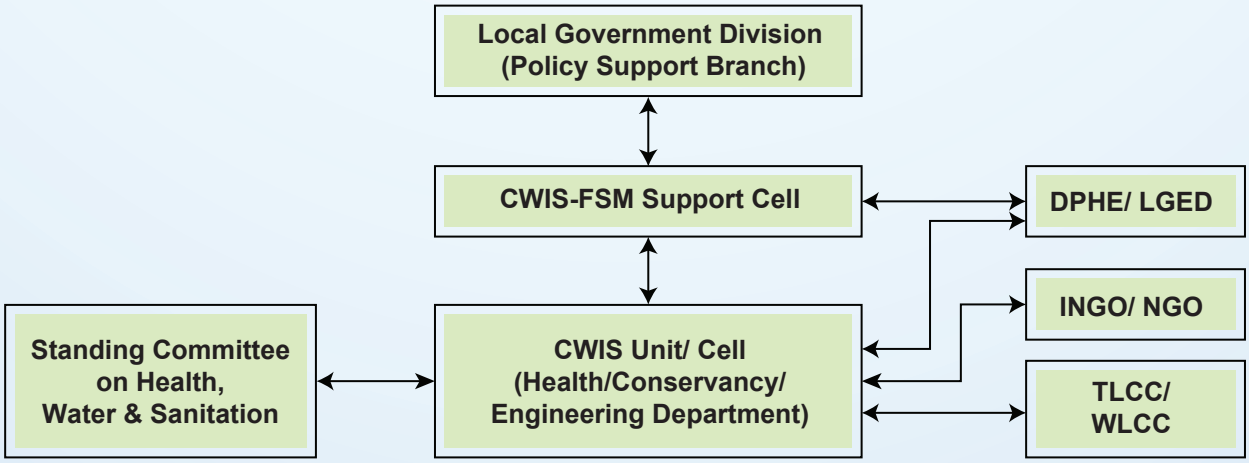

Figure 4: CWIS Institutional Structure at Paurashava Level

Review of Relevant Policies, Strategies and Acts

The success of Citywide Inclusive Sanitation (CWIS) planning hinges on a thorough understanding of relevant national and local policies, acts, and strategic frameworks governing water, sanitation, and hygiene (WASH) services in Bangladesh.

These documents provide the legal and institutional bases for implementing Citywide Inclusive Sanitation (CWIS) and fecal sludge management (FSM). Notable policies include the *Local Government (Paurashava) Act 2009*, which defines municipal responsibilities, the *National Sanitation Strategy 2005,* and the *Institutional and Regulatory Framework for FSM (2017)*, which provides specific guidelines for safe sanitation practices. Other important documents include the *Bangladesh National Building Code (2020)* and *Pro-Poor Strategy for Water and Sanitation (2020),* which provide design standards and standards for ensuring sanitation access for all, especially low-income communities respectively.

The following table summarises the related documents that were reviewed for preparing the CWIS Action Plan:

Table 1: List of Policies, Strategies, Acts

Local Government (Paurashava) Act, 2009	Defines the overall role of Municipalities
Institutional and Regulatory Framework for Faecal Sludge Management (IRF-FSM) for Paurashavas, 2017	The *Local Govt Act 2009* defines the roles and responsibilities of municipalities and other concerned institutions in ensuring safe and adequate sanitation
Implementation of Institutional and Regulatory Framework for Faecal Sludge Management National Action Plan (Paurashavas), 2020	Recommended specific actions at national and Paurashava levels to implement FSM
National Sanitation Strategy, 2005	Provides guidelines for safe, hygienic sanitation, faecal sludge management & strategies for improved urban sanitation
National water supply and sanitation strategy, 2014 (revised and updated 2021)	Provides uniform strategic guidelines to sector stakeholders, including the government, semi-government and local government institutions, private sectors and NGOs.
The Bangladesh Environmental Conservation Rules (2023)	Provides standards for domestic sewage and industrial discharges
Bangladesh National Building Code (BNBC), 2020	Provides standards for sanitation facilities in buildings
Pro-Poor Strategy for Water and Sanitation Sector in Bangladesh, 2005 (revised 2020)	Recommends sanitation standards for low-income communities

Profile of Gaibandha Municipality

Gaibandha is a municipality town and district headquarters in the Rangpur Division of Bangladesh. Situated 267.2 kilometers north of the capital city, Dhaka, Gaibandha is a rapidly growing city with historical significance, being one of the oldest towns in the Indian subcontinent. The town was officially declared a municipality in 1923, marking its importance in the region. It is strategically located beside the Ghaghot River and is well-connected by road, water, and railway networks, making it accessible and vital for trade and transportation. Gaibandha is one of the 53 district-level municipalities in Bangladesh, reflecting its administrative significance.

The total population of Gaibandha Municipality is 1, 27,468 with a population growth rate of 1.06% and a female-to-male ratio of 1.2 (BBS, 2022). Around 30% of the population is living in low-income communities (LIC). The urban area is characterized by varying population densities, with some informal housing arrangements, especially in low-income areas. The city's topography is predominantly flat, which, along with its location near the Ghaghot River, makes it susceptible to seasonal flooding. The river is a significant geographic feature that influences the local economy and sanitation services.

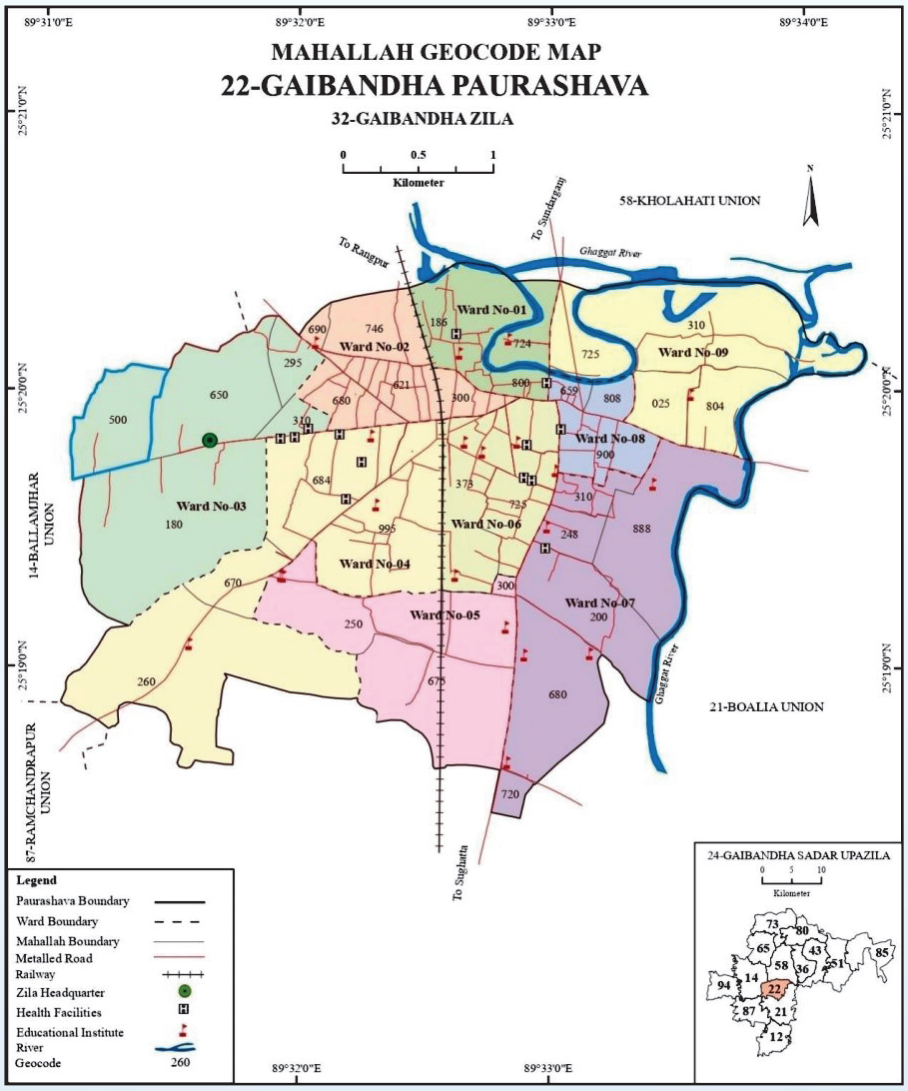

Figure 5: Gaibandha Municipality

Gaibandha is located in the sub-tropical monsoon climate with a hot wet summer from May to September and cool dry winter months. The nearest BMD station is at Rangpur. The mean annual rainfall in Rangpur is about 2153 mm which is slightly lower than the national average of 2300 mm. Annual rainfall, however, shows considerable variability from year to year. The rainfall also varies considerably within a year, with 85.83% of rainfall occurring in the five months from May to September (IWFM & BRTC, 2021).

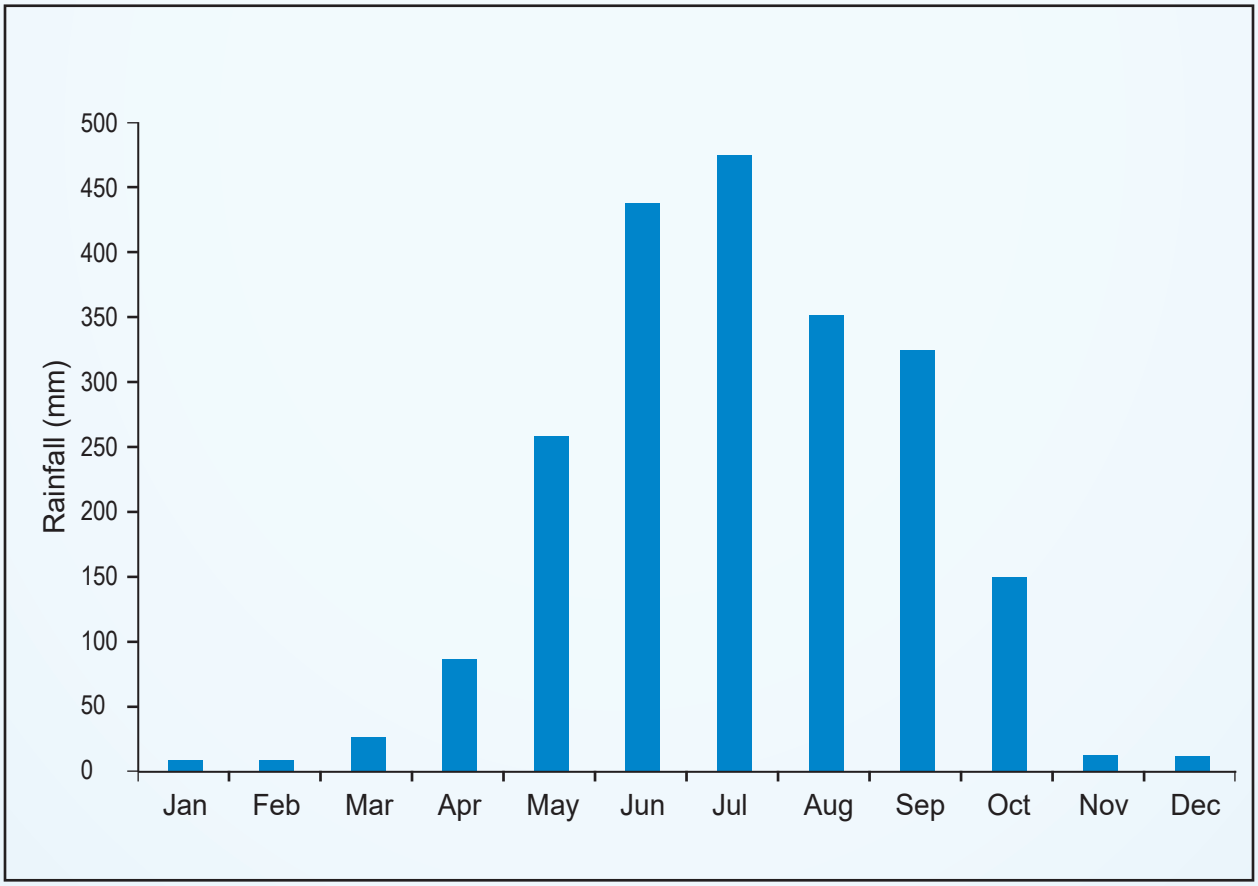

Figure 6: Variation of monthly rainfall (IWFM & BRTC, 2021)

The municipality covers a defined urban area that includes a mix of residential neighbourhoods, commercial zones, and peripheral rural areas. The urban boundaries are marked by a gradual transition from densely populated areas to more sparsely populated rural regions. The city's infrastructure, while developed, faces challenges related to flooding and seasonal access issues, especially in low-lying areas.

Overall, Gaibandha ’s historical significance, strategic location, and growing population make it a key urban center in northern Bangladesh. However, the city also faces challenges related to rapid urbanization, infrastructure development, and environmental management, particularly in the context of its sanitation services.

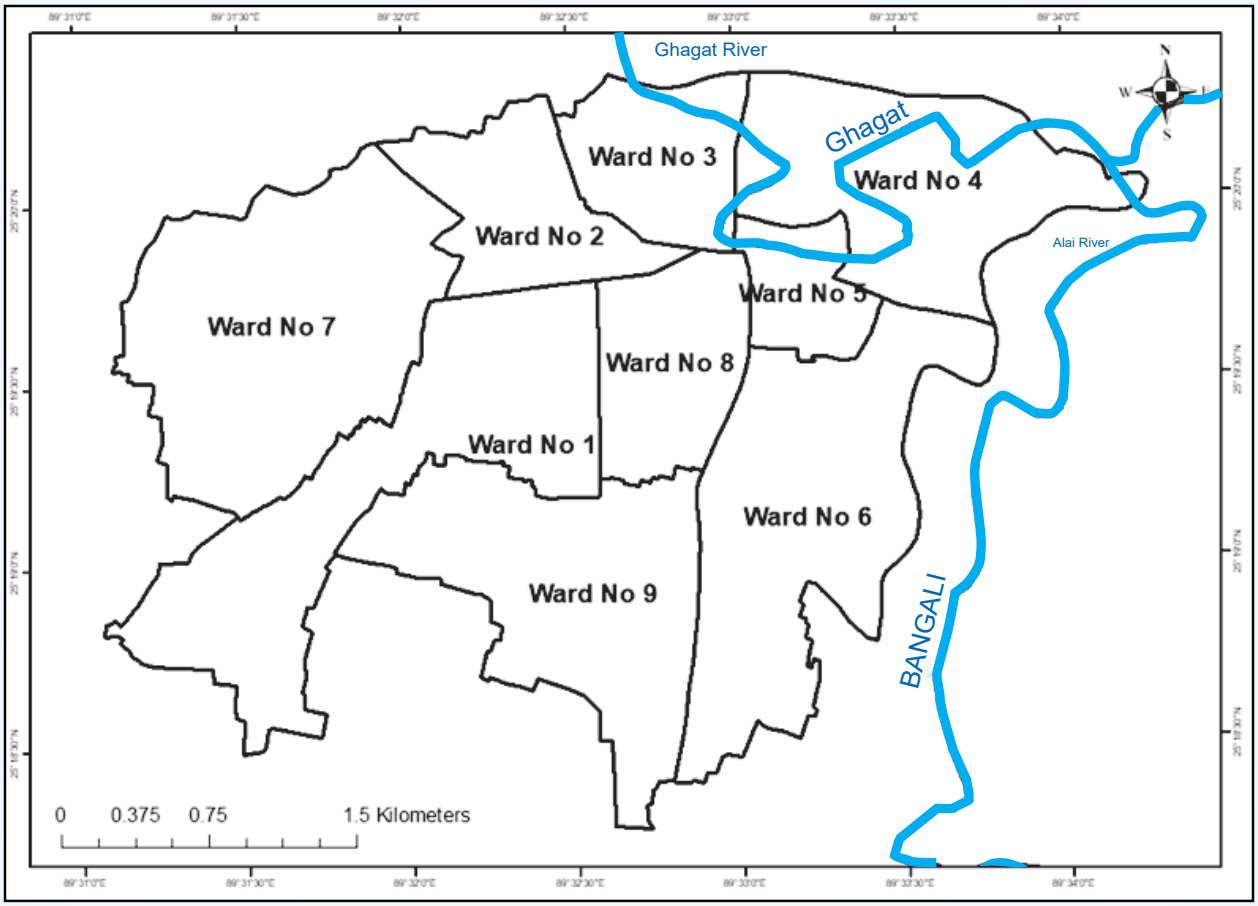

Figure 7: Gaibandha Municipality Wards

Assessment of Existing Sanitation Situation

Evaluating the current sanitation conditions is an essential component of CWIS planning. Using primary and secondary sources all relevant data were collected. For Gaibandha Municipality, a field survey was conducted, forming the basis for preparing an intermediate-level SFD Report. Throughout the process, stakeholders were actively involved through consultations, focus group discussions (FGDs), and key informant interviews (KIIs), ensuring a participatory approach to understanding the local sanitation challenges.

Field Survey

A questionnaire survey was carried out to gain a comprehensive understanding of the on-ground sanitation practices and infrastructure within Gaibandha Municipality. The survey involved approximately 400 households, ensuring a confidence level of at least 95% with a 5% margin of error. To ensure the field data quality, the data collection team (8-10 enumerators) were properly trained. The survey covered various aspects of the entire sanitation value chain. Few of the relevant questions on sanitation were: 1) User interface of the toilet, 2) Type of containment, 3) Outlets from the containments, 4) Desludging of septic tanks and latrine pits, 5) Desludging frequency, 6) Responsibility of desludging, 7) Desludging process, 8) Location of sludge disposal, 9) Water supply source and risk of contamination and 10) Transportation, treatment and reuse of faecal sludge.

Figure 8: Sanitation Scenario of Gaibandha Municipality

In Gaibandha Municipality there is a significant amount of variation in containment types. The household survey data shows that more than 60% of the population uses pit latrines with varying degrees of safety based on the construction and maintenance of the pits. Approximately 20% of the population have either septic tanks or fully lined tanks which provides better containment.

Around 15% of the population uses public and shared toilets combined. Open defecation is a concerning issue in Gaibandha Municipality. Household survey reflects that 9% of the population does not have any toilet facilities at all. The KIIs revealed that open defecation is still prevalent in the *Harizan Polli* (Sweeper Colony) in Ward 6, and also in the Hindu localities of Ward 7 & 8. The use of septic tanks is limited in Gaibandha Municipality. Only 7% of the people have septic tanks that are connected to soak pits. Various types of pit latrines, including direct pit (55%), twin pit (14%), and offset pit (3.5%) were observed during the household survey. Around 19% of the containment systems were found to be connected to open drains or water bodies.

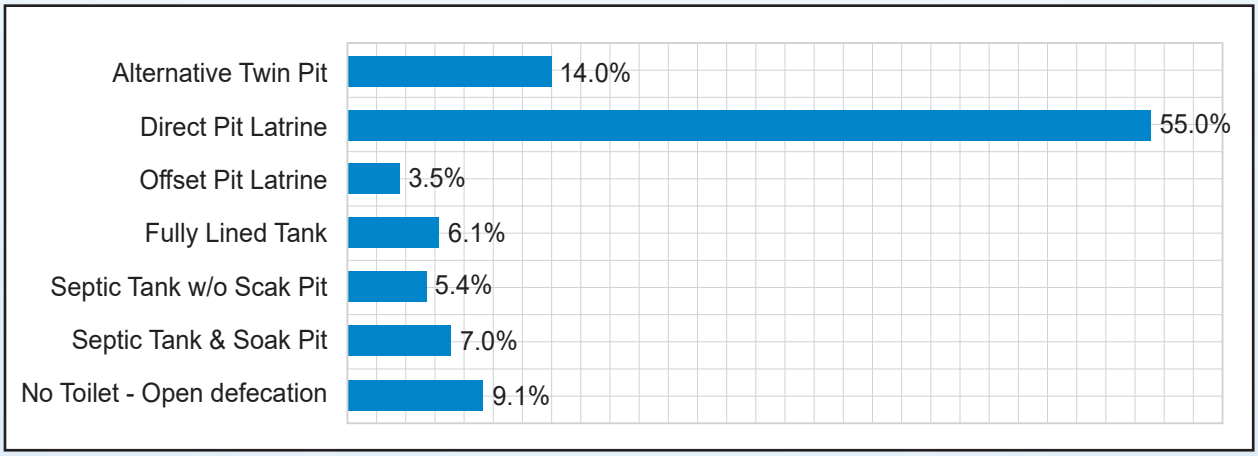

Figure 9: Containment type in Gaibandha Municipality

The survey found that 61% of the containments had been emptied in its service time. Approximately 98% of the emptying is being done manually which is not only a severe health risk but also occasionally leads to casualties. There is only 1 vacu-tug that can mechanically empty FS which is inadequate for the total population (2%).

Currently, there is no treatment plant in Gaibandha Municipality. There is an open dumping ground provided by the municipality where only 5.7% of the emptied faecal sludge is disposed of there and poses significant environmental risks. The majority of the faecal sludge is disposed of in pits later covered with soil (57%).

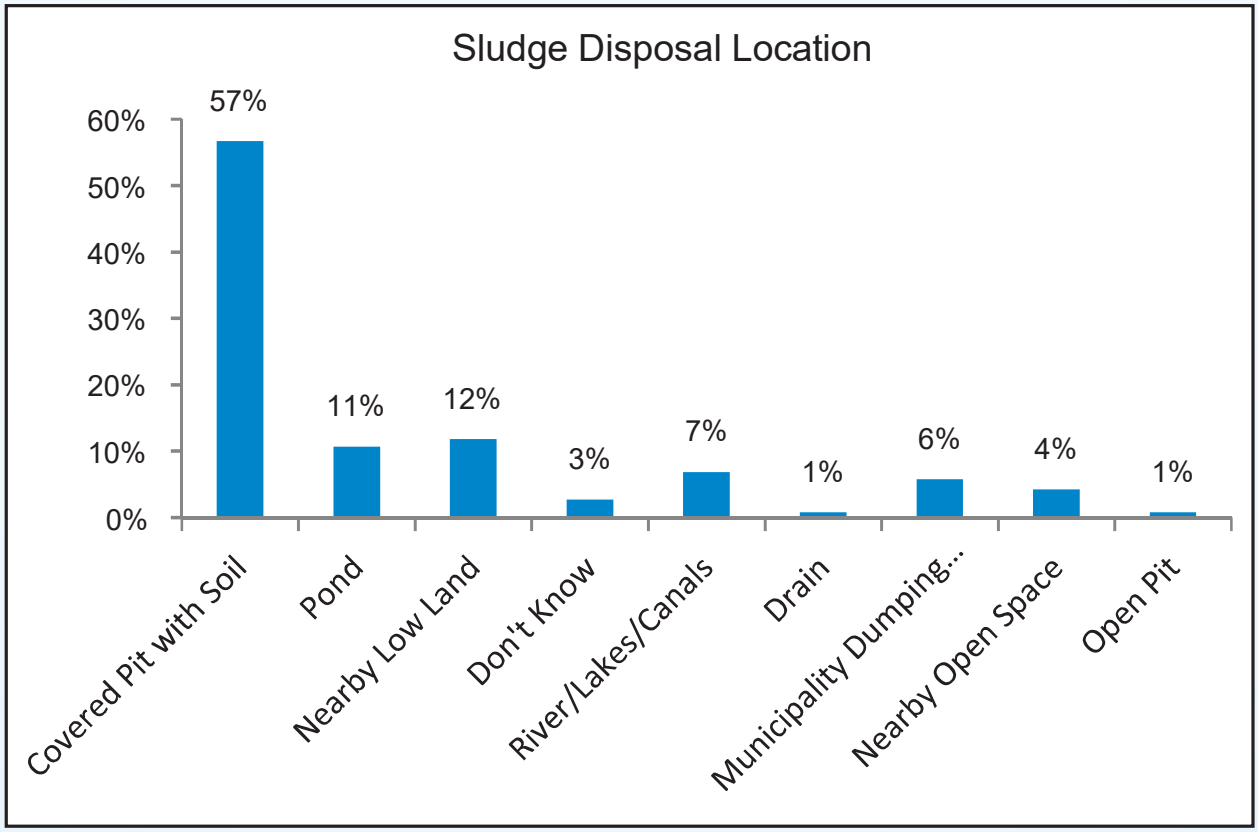

Figure 10: Sludge disposal location

Shit Flow Diagram (SFD)

SFD is a diagnostic tool that presents a clear overview of the pathways taken by excreta from defecation to disposal along the sanitation service chain in urban areas. The model provided by the Sustainable Sanitation Alliance (SuSanA) was followed to create the SFD for Gaibandhal Municipality. The complete SFD (Intermediate level) Report for Gaibandha Municipality has been submitted to SKS Foundation earlier.

The use of the SFD enables a standardized assessment of excreta flows in urban areas. Excreta which are safely managed and move along the sanitation service chain are represented by green arrows moving from left to right in the graphic, while excreta which are unsafely managed are represented by red arrows. The width of each arrow is proportional to the percentage of the population whose excreta contributes to that flow (SFD Manual,2018).

The SFD graphic shows that only ten percent (10%) of the excreta flow is classified as safely managed, and the remaining ninety percent (90%) is classified as unsafely managed. It should be noted that the proportion of safely managed excreta mostly originates from pits that have never been emptied, which might pose groundwater risk in the future. A significant portion of waste is unsafely managed due to improper use and management of onsite facilities and the absence of formal treatment facilities. Key issues affecting sanitation service delivery include the lack FSTP, frequent flooding impacting onsite systems, and the limited capacity of existing waste management infrastructure. The unsafely managed excreta originate from the following sources:

- Faecal Sludge(FS) not delivered to treatment 57% (both contained & not contained)
- FS not contained- not emptied 20%
- Open Defecation 9%
- FS contained-emptied & transported but not treated 3%
- Supernatant not delivered to treatment 2%

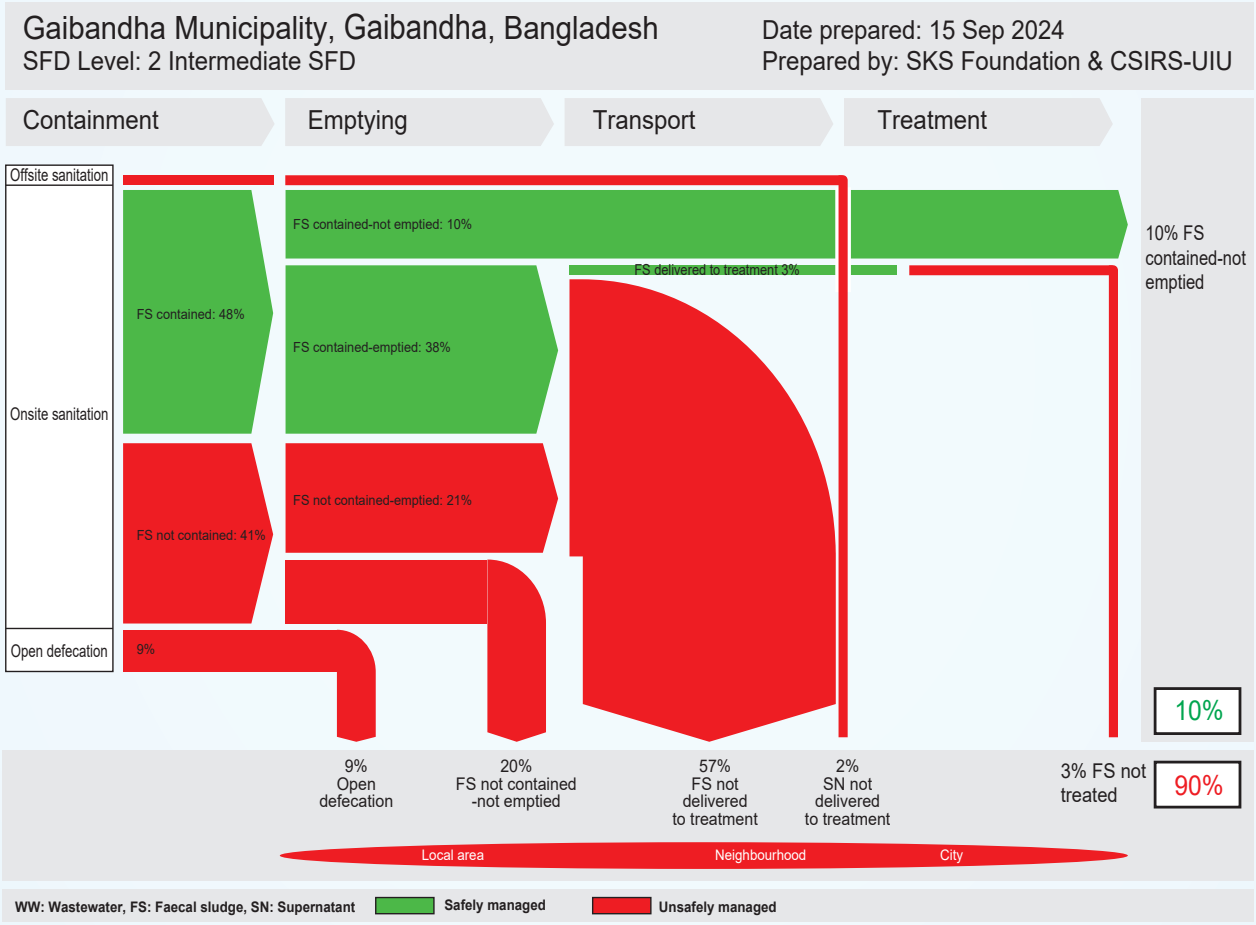

Figure 11: SFD of Gaibandha Municipality

Previous reports show that, in 2021 only 11% of total FS was safely managed (Gaibandha Municipality SFD Lite Report, 2022). It reflects that the sanitation situation has not improved in the past few years.

Stakeholder Engagement

The stakeholder engagement in Gaibandha Municipality involved several methods to gather insights into local sanitation challenges. These included Key Informant Interviews (KIIs), Focus Group Discussions (FGDs), and consultation.

Key Informant Interviews (KIIs): The KIIs with stakeholders from local government, non-governmental organizations, and engineering departments provided critical insights into the sanitation challenges in Gaibandha Municipality. One of the primary concerns raised by the Assistant Coordinator from the SKS Foundation was the lack of a faecal sludge treatment plant. Also, there is widespread open defecation, particularly in vulnerable areas such as Ward 6 (*Harizan Polli*) and the *Hindu* localities in Wards 7 & 8. The Communication Officer from SKS Foundation informed that there was a Faecal Sludge Treatment facility in Ward 8 which is no longer operational. The Sub Assistant Engineer from the Department of Public Health Engineering (DPHE) stressed the negative environmental impact caused by improper waste disposal and untreated faecal sludge. His insights reinforced the need for immediate investment in a faecal sludge treatment facility and improvements in sanitation practices.

Figure 12: Stakeholders' Engagement

Focus Group Discussions (FGDs): The Focus Group Discussions (FGDs), involving municipal Ward Councilors, community leaders, and sanitation workers, revealed additional challenges faced by the municipality in managing its sanitation services. Councilors from several Wards (Wards 3, 5, 7 & 9) reported that the Municipality had only one sludge truck to serve the entire city, which was insufficient to meet the growing demand. They also pointed out that the narrow road networks in some Wards hindered the truck's ability to access septic tanks, forcing residents to dispose of faecal sludge in unsafe ways, such as dumping it into local ponds and lakes. Community leaders and sanitation workers echoed these concerns, describing how improper waste disposal practices, such as open dumping and the burning of waste, were contributing to environmental degradation and causing health problems in densely populated areas. They agreed that there was a pressing need for more resources and public awareness campaigns to improve waste collection, sanitation services, and hygiene practices across the municipality.

Stakeholder Consultation: Municipal officials, private sector workers, representatives from women's organizations, and NGOs participated in a stakeholder consultation focused on the concept of city-wide inclusive sanitation (CWIS). During the meeting, attendees were familiarized with the foundational principles of CWIS and its potential to enhance sanitation outcomes within the community. To ensure participant engagement they were given a set of questionnaires concerning the sanitation scenario and their perception about city-wide inclusive sanitation. A recurring theme in the answers was the lack of trained human resources, budgetary constraints and accountability issues contribute to the substandard quality of sanitation

service in Gaibandha. The consultation underscored the need for increased community education and the exploration of innovative solutions to address the constraints in the implementation of necessary sanitation infrastructure.

Overall, the stakeholder engagement process highlighted significant gaps in infrastructure, inadequate waste management services, and the health risks posed by poor sanitation practices. The need for immediate investments in sanitation infrastructure and more robust public health education was clear throughout the discussions.

City Sanitation Service Delivery Assessment (CSDA)

The CSDA is a complementary tool that assesses why the sanitation situation is as it is. CSDA separately addresses both sewered and non-sewered sanitation.

The Full CSDA is structured around three pillars: enabling, delivering, and sustaining. There are 48 questions in full CSDA, 24 of which are set for sewered system and the rest are for non-sewered system. Each question can be scored with 0 (poor), 0.5 (developing), or 1 (good) on those questions. Each question is scored along the whole service chain. The scores are based on document review and information obtained by interaction with stakeholders.

The CSDA graphic indicates that non-sewered sanitation services in Gaibandha Municipality are overall poor. Although appropriate policies and acts exist, but without proper legal force these policies only exist on paper. Gaibandha Municipality has a small budget for sanitation. Investment in sanitation infrastructure and services is inadequate. Only 3% of the total municipal budget is allocated for sanitation, which is insufficient to address the city's growing needs. The limited budget restricts the municipality's ability to invest in much-needed facilities, such as additional faecal sludge treatment plants, expanded drainage systems, and improved waste collection services. Currently, there are only 280 sanitation workers employed by the municipality, but their efforts are hampered by a lack of proper equipment and support. In addition, the revenue generated from the sanitation sector is not solely utilized for sanitation development. The urban poor in Gaibandha face significant sanitation challenges. Many areas, especially the Harizan Polli in Ward 6 and certain Hindu localities in Wards 7 & 8, lack basic sanitation infrastructure. Open defecation is common in these areas due to a lack of access to toilets, and the municipality’s sanitation services often fail to reach them due to logistical challenges, such as narrow roads and limited resources. In addition, Gaibandha Municipality does not have any specialized toilet facilities for individuals with disabilities, pregnant women, or elderly people. While some efforts have been made by non-governmental organizations such as SKS Foundation to raise awareness and promote hygiene, there are no comprehensive plans at the municipal level to address the sanitation needs of the people with special needs.

CSDA Full Assessment

City name	Gaibandha Municipality, Bangladesh
Date	September 2024

Non-sewered sanitation

	Toilet, pit or septic tank	Emptying & transport	Sludge treat-ment & reuse
Enabling			
Policy, legislation	0.5	0.5	0.5
Planning, budgeting	0.5	0.5	0.5
Inclusion	0.0	0.0	
Delivering			
Funding	0.3	0.3	0.3
Capacity, outreach	0.3	0.3	0.3
Inclusion	0.0	0.0	
Sustaining			
Regulation, cost recovery	0.2	0.2	0.2
Institutions, service providers	0.1	0.1	0.1
Inclusion	0.0	0.0	

Figure 13: CSDA Graphic

Gaps in Sanitation Service Chain

Open defecation & Limited Sanitation Coverage in Low-Income Areas: A significant proportion of the population in Gaibandha Municipality lacks access to proper sanitation facilities. Approximately 9% of residents engage in open defecation due to the absence of toilets within their premises. This is particularly prevalent in the *Harizan Polli* (Ward 6), highlighting a critical gap in sanitation services. Wards with high concentrations of low-income populations, such as Wards 6, 7, and 8, lack adequate sanitation infrastructure. The narrow roads in these areas make access difficult for waste collection services.

Inadequate Waste Management: The existing faecal waste management system is insufficient, as there are no designated facilities for the transport and treatment of faecal sludge. The town only has one truck for faecal sludge transport, which is insufficient for the population's needs. There is a dumping ground that is not designed to handle the faecal waste. More than 40% of the septic tanks are connected to open drains, leading to environmental contamination and health risks. Regular emptying of on-site systems is inadequate, with only about 36% having been emptied in the past year, indicating a lack of infrastructure for proper maintenance.

Inadequate Manpower & Budget: The municipality is severely understaffed and underfunded. Only 3% of the municipal budget is allocated to sanitation, which is inadequate to meet the city's growing needs. They have an organogram for non-sewered sanitation services but they have yet to hire someone.

Lack of Sanitation Facilities in Public Spaces: Although the municipality maintains some public toilets, there is no separate facility for women and disabled people.

CWIS Action Plan for Gaibandha Municipality

The CWIS Action Plan has been developed considering the prevailing sanitation challenges and gaps in Gaibandha Municipality. Aligning with the target of the Bangladesh Government to achieve SDG 6 by 2030, this CWIS plan also aims to provide access to adequate and equitable sanitation and hygiene for all and end open defecation in Gaibandha Municipality by 2030.

The Action Plan is developed for implementation in three phases – (i) Short-term (2024-2026), (ii) Medium-term (2027-2030), and (iii) Long-term (2031 and beyond). Details of activities under each phase are given in the following table that are self-explanatory:

Table 2: CWIS Action Plan for Gaibandha Municipality

Improved and Safe Containment System	*Capacity Enhancement*	*Mechanical Emptying and Safe Transportation of Faecal Sludge*	Treatment and Safe Disposal and/ or Re-use of Treated Faecal Sludge
Short-term: By 2024-2026, 65% *population of Gaibandha Paurashava* will gain sustainable access to and use safely managed sanitation services through public engagement and awareness raising, institutional reform and technological solutions, and private sector engagement to reduce the health risks and minimize environmental pollution.			
1. Upgrade/ Retrofit 80% of unsafe containments (From field survey: 9% open defecation, 55% single pit latrines, 3.5% offset pit) of Gaibandha Paurashava into safe ones by increasing containment capacity: building new pits or converting single pits into twin offset pits and connecting septic tanks to soak pits by following technical guideline through motivation/enforcement.	**1. Paurashava will** conduct Public hearing events to gain insight on the various aspects of CWIS. 2. Form/activate the **Water & Sanitation standing Committee** to oversee FSM activities	**1. Implement mechanical emptying and safe transportation** of 65% containments (From field survey: 2% are emptied mechanically). **2. Promote scheduled desludging** of 65% containments.	**1. Treat/safe disposal** of fecal sludge of 65% containments of all Wards in Gaibandha Municipality (SFD intermediate report reveals that only 10% of FS in safely managed) through engaging private sector. **2. Conduct feasibility study** on technological solutions focusing minimal land intensive options for regional FSTPs covering 2 or more adjacent Paurashavas.

Improved and Safe Containment System	Capacity Enhancement	Mechanical Emptying and Safe Transportation of Faecal Sludge	Treatment and Safe Disposal and/ or Re-use of Treated Faecal Sludge
2. Paurashava will conduct an on-site sanitation compliance assessment to develop a database and prepare an updated **Fecal Waste Flow Diagram (SFD)** including **Sanitation Roadmap** 3. Gaibandha Paurashava with assistance from DPHE/LGED will **develop technical (design, operational & monitoring) guidelines** **4. Paurashava will facilitate and conduct coordination meetings with DoE, DPHE** and other concerned agencies to review progress, technical advice and suggestions. 5. Gaibandha Paurashava will **construct public toilets** in densely populated areas and public spaces, with a focus on making these facilities accessible, inclusive, and safe for women, children, and people with disabilities.	**3. Develop communication and campaign strategy to make people understand the meaning** of 'City-wide Inclusive Sanitation' at the Paurashava level. **4. Enhance Capacity** building of the Municipality in terms of manpower, resources and training for CWIS implementation with support from DPHE/ LGED. Gaibandha Municipality has an organogram for the health and sanitation sector but they don't have a designated responsible person. **5. Sharing best practices** through exchange visits.	**3. Review and revise sanitation** tax considering desludging charges. **4. Develop and design Apps/ hotlines** based services for ensuring scheduled desludging. **5. Develop and design appropriate** transportation equipment for the HtR areas including narrow access areas (Slums/LICs). **6. Procure equipment (e.g. vacu-tug of 500L, 1000L, 2000L capacity)** to ensure 65% mechanical emptying and transportation in Gaibandha Paurashava. Currently, Gaibandha Municipality has only 1 vacu-tug which is inadequate for the area.	**3. Secure land for FSTPs** construction. Gaibandha Municipality will require approximately 2.5 Acre of land. The municipality is suggested to go for 3/4 decentralised treatment plants preferably located in less densely populated Wards (Ward 1, 4, 6, 7). The size, number and location of FSTPs are subjected to change based on detailed study. Typical components of the FSTPs will be drying beds, storage sheds & other facilities. **4. Develop guidelines/protocol/ business** model to involve the private sector for scaling up sustainable and inclusive sanitation services. **5. Inclusion of FSM in the Paurashava Annual Development Plan** with a separate budget line with adequate fund allocation. 6. Conduct a feasibility study on **co-composting, compost use and demand, incentives, standardization, branding and certification, etc.** 7. Work with the **Ministry of Agriculture** to ensure compost quality and promote the use of compost in agriculture.

Medium-term: By 2027-2030, 100% population of Gaibandha Paurashavas will gain sustainable access to safely managed sanitation services through public engagement and awareness raising, institutional reform and technological solution, and private sector engagement to reduce the health risks and minimize environmental pollution.			
Improved and Safe Containment System	***Capacity Enhancement***	***Mechanical Emptying and Safe Transportation of Faecal Sludge***	**Treatment and Safe Disposal and/ or Re-use of Treated Faecal Sludge**
1. Upgrade / Retrofit *100% containments of all Paurashavas* into safe ones by increasing containment capacity: constructing septic tanks and soak pits where applicable, building new pits or converting single pits into twin offset pits by following technical guidelines and ensuring enforcement. **2. Gaibandha Paurashava** will facilitate and conduct coordination meetings with DoE, DPHE and other concerned agencies to review progress, technical advice and suggestions.	**1. The Paurashava will continue to conduct Public hearing events** to gain insight on the various aspects of CWIS. **2. Review and revise** communication and campaign strategy to under-stand and practice 'City-wide Inclusive Sanitation' at the Paurashava level. 3. Continue capacity **building/ refresher training on CWIS** implementation with the support of DPHE/LGED. **4. Impact study** on the Capacity building and campaign program including revision, recommendation and way forward. 5. Continue sharing **best practices through exchange visits.**	**1. Promote mechanical emptying** and safe transportation of 100% containments. **2. Ensure scheduled desludging of** 100% containments using Apps/ hotlines-based services. **3. Review and revise sanitation** tax considering desludging charges. **4. Procure additional equipment** to promote 100% mechanical emptying and transportation.	**1. Treat/safe disposal of faecal** sludge of 100% containments at designated FSTPs. 2. Design and implement **regional integrated FSTPs** where applicable. **3. Construct and operate FSTP** and Secure land for extension as required. 4. Inclusion of FSM in the Paurashava Annual Development Plan with a separate budget line with adequate fund allocation. 5. Encourage the Private sector to implement co-composting technologies. 6. Build linkages between private sectors and the Ministry of Agriculture for market expansion of compost. 7. Enhance demand and marketing of compost including standardization, branding and certification.

Long-term: By 2031 and beyond, Gaibandha Municipality will take the lead to ensure city-wide inclusive sanitation services through public engagement and awareness raising, sector coordination and collaboration, ***to develop a clean, green and smart Paurashava.***			
1. Transform/upgrade all containment systems into safe and sustainable systems employing new/emerging technologies that may be available. **2. Continue standard design checks** of the containment system and enforce changes if required. **3. Private sectors** provide quality and sustainable services maintaining high standards of containment system.	**1. Continue implementation of campaign strategies** focusing on the continued use of safe sanitation services and the application of advanced technologies for maximum resource recovery. **2. Evaluation** of the capacity building and campaign program. **3. Continue capacity/ refresher** training program for the relevant stakeholders.	**1. Consumers** use apps/ hotlines-based services for emptying of containment. **2. Use of advanced, smart mechanical equipment for safe** emptying and transportation to designated disposal and /or treatment locations.	**1. Private sectors** manage individual or regional FSTPs. **2. Create a Private sector-led compost** hub/network for compost demand and supply chain.

CWIS Plan Implementation Monitoring:

It would be crucially important to develop an appropriate system to monitor fecal sludge safe containment regularly and monitor all other activities along the entire sanitation chain to ensure the progress of safely managed sanitation services. For effective monitoring, however, the Gaibandha municipal authority must identify relevant monitoring indicators, and devise mechanisms that can be adopted locally. The monitoring data would then be analyzed and evaluated to assess progress, inclusivity and continual improvement.

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Annexes:

Annex I: Additional Photos of Engagement with Stakeholders and Field Survey

Annex II: List of Stakeholders

Name	Designation
1. Md. Shafiqul Islam	Assistant Coordinator Advocacy & Communication – SKS Foundation
2. Prodip Roy	Communication Officer - SKS Foundation
3. Arif Billa	Sub Assistant Engineer - DPHE
4. Mohammed Abu Bakar Siddique	Councilor - Ward 7
5. Abdul Samad Rukon	Councilor - Ward 5
6. Md Kamal Hossain	Councilor - Ward 3
7. Kazi humaiyun Kabir	Councilor - Ward 9
8. Md. Jewel Mia	Assistant officer
9. Abrar Ahmed	Community Leader
10. Md Samin	Sanitary Inspector

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