

**A Study on**

**WASH integrity implementation status,  
governance mechanism, challenges and  
opportunity of the existing policy and practices  
at Khulna and Rajshahi City Corporation.**

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## List of Acronyms

**KWASA** - Khulna Water Supply and Sewerage Authorities

**RWASA** - Rajshahi Water Supply and Sewerage Authorities

**WASA** - Water Supply and Sewerage Authorities

**CBO** - Community-based organizations

**NGO** - Non-governmental organizations

**SMART**- Specific, Measurable, Achievable, Relevant, Time-bound

**CSO** - Civil Society Organizations

**NWMP** - The National Water Management Plan

**SWTP** - Surface Water Treatment Plant

**KCC** - Rajshahi City Corporation

**DPHE**- Department of Public Health Engineering

**WATSAN** - Water and sanitation

RCC – Rajshahi City Corporation

FGD- Focus Group Discussion

BMDA - Barind Multipurpose Development Authority

BWDB -Bangladesh Water Development Board

DPHE - Department of Public Health Engineering

LGED-Local Government Engineering Department

WMI-Water management institutions

DPHE- Department of Public Health Engineering

BCCSAP-Bangladesh Climate Change Strategy and Action Plan

FAP - Review of past performances

CEIP - Coastal Embankment Improvement Project

ADP - Annual Development Program

LGI- Local Government Institutions

TAPA - Transparency, Accountability, and Public Access

CC- City Corporations

KII- Key Informant Interviews

RTI-Right to Information

WMI- water management institutions

CSO-Civil society organizations

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## Executive Summary

The water and sanitation sector in Bangladesh is grappling with a pronounced integrity crisis characterized by allegations of corruption and procedural irregularities. This study delves into the implementation status of integrity measures within the WASH (Water, Sanitation, and Hygiene) domain, focusing on Khulna and Rajshahi City Corporation. Its primary objective is to assess transparency, accountability, participation, and anti-corruption initiatives within the water supply and sanitation sector. By scrutinizing the existing legal framework, policies, and operational strategies, the study aims to furnish policymakers and stakeholders with a comprehensive understanding of the governance landscape.

Key areas of investigation include an in-depth analysis of integrity dynamics within the water and sanitation sector, with specific attention to KWASA (Khulna Water Supply and Sewerage Authority) and RWASA (Rajshahi Water Supply and Sewerage Authority). The study methodically examines legislative and policy frameworks, evaluates the current level of transparency and accountability, and undertakes a thorough assessment of strengths and weaknesses. Moreover, it endeavors to identify exemplary practices conducive to enhancing the performance of water and sanitation services.

Ultimately, the study generates a set of recommendations tailored to pertinent stakeholders, aiming to fortify governance structures and bolster integrity. Emphasis is placed on fostering gender equity and social inclusion as integral components of the proposed measures.

The mixed-method study employed a diverse array of data collection tools to examine water and sanitation services in Khulna and Rajshahi WASA (Water Supply and Sewerage Authority) and City Corporations. These tools encompassed: A comprehensive literature review and policy analysis, A mini survey targeting city dwellers, Key informant interviews, Focus group discussions involving water service recipients, Annotated water integrity scanning workshop with key stakeholders.

By utilizing these tools, the study sought to capture a broad spectrum of views and opinions regarding the governance issues and challenges confronting the sector. Furthermore, these methods facilitated the identification of potential solutions to enhance governance and address existing concerns within the water and sanitation domain.

### Key Findings:

**Policy and Legislative Framework:** The study highlights deficiencies in WASA's policy framework, emphasizing the need for updates and the implementation of specific, measurable, achievable, relevant, and time-bound (SMART) policies to enhance effectiveness. Legislative reforms are deemed essential to strengthen governance mechanisms.

**Service Delivery and Accountability:** Service delivery shortcomings coupled with accountability deficits are identified as major concerns. The absence of dedicated legislation for service providers calls for robust regulatory measures to address these issues effectively.

**Regulatory Challenges:** Outdated regulations and weak frameworks impede regulatory effectiveness, necessitating urgent action to establish tailored rules conducive to improved oversight.

**Transparency and Anticorruption Measures:** The study reveals a lack of transparency and accountability within WASA, with opaque budgeting facilitating corruption among staff. Transparent monitoring systems are recommended to promote accountability and curb corrupt practices.





**Public Engagement and Participation:** Limited public involvement in WASA programs underscores the need for enhanced communication and engagement strategies to foster greater community participation and ownership.

**Inclusion and Gender Equality:** The study identifies a lack of comprehensive inclusion strategies within WASA, hindering community engagement. Specific initiatives promoting gender equality and inclusion are recommended to address these disparities.

**Citizen Satisfaction and Governance Integrity:** Significant dissatisfaction among citizens regarding transparency, accountability, and anticorruption measures underscores governance integrity concerns. There exists a notable disparity between official claims and public experiences, necessitating improved governance mechanisms.

**Accountability Mechanisms and Grievance Redressal:** The study highlights a lack of awareness regarding existing accountability mechanisms, calling for improved communication and trust-building initiatives to bridge this gap.

**Public Participation and Awareness:** Low levels of public engagement in water management processes underscore the need for targeted communication strategies to raise awareness and encourage participation.

**Anti-corruption Efforts:** Current anti-corruption measures are deemed inadequate, necessitating more effective strategies to combat corruption and enhance transparency within the water sector.

**Right to Information:** The study reveals low awareness levels regarding the right to information, emphasizing the need for increased accessibility and awareness initiatives to empower citizens and promote transparency.

The study findings unveil that Bangladesh boasts a well-established policy and regulation framework for managing its water supply and sanitation resources. Rajshahi and Khulna WASA and City Corporation no separate policy or strategy for water and sanitation services management. These two city corporations implementing their WASA services following national policy framework. However, there are evident areas for enhancement, notably in performance monitoring, implementing corrective measures, incentivizing positive behaviors, and enforcing sanctions where necessary. Oversight and regulation require refinement, particularly in addressing complaints and setting standards for water access and sanitation facilities.

The water and sanitation sector in Bangladesh confronts numerous integrity challenges. These include a deficiency in community participation during project design and implementation phases, insufficient anticorruption measures, a dearth of accountability and transparency in service provision, as well as a lack of proactive disclosure of information. Additionally, the absence of a comprehensive whole-of-governance mechanism further exacerbates the situation.

#### **Key Recommendations:**

Addressing these challenges necessitates concerted efforts from stakeholders across the board, including government bodies, civil society organizations, and the private sector. Implementing robust advocacy, campaign and communications program to facilitate anticorruption measures, fostering transparency in decision-making processes, enhancing community engagement, and establishing mechanisms for proactive information disclosure are crucial steps toward ensuring integrity and accountability within the water and sanitation sector.

**a. Strengthening Policy Advocacy:** Advocacy efforts should be grounded in empirical knowledge and documented evidence to foster informed decision-making and societal change. Utilizing research, data,

and evidence enhances credibility and legitimacy, leading to increased support for proposed policy solutions. Employing various mediums such as research reports and infographics enables tailored communication to different audiences, increasing the likelihood of policy uptake and positive social change.

**b. Robust Campaigns and Community-Based Awareness Programs:** Designing robust campaigns and community-based programs is essential for addressing social, environmental, and public health issues. By utilizing traditional and digital communication channels, these initiatives can effectively educate and engage communities, fostering behavioral change and collective action. Tailoring messages to local contexts and forging partnerships amplifies outreach and drives sustainable change at the grassroots level.

**c. Integrity Promotion through State-of-the-Art Communication:** Organizations committed to integrity should develop and distribute promotional messages through cutting-edge materials and channels. By crafting messages that uphold ethical values and principles and leveraging innovative technologies, organizations can reinforce their dedication to integrity, strengthen their reputation, and build lasting relationships with stakeholders.

**d. Building Collaborations and Networks:** Fostering collaborations among sectoral actors maximizes opportunities for innovation, resource mobilization, and comprehensive solutions to challenges. Networking facilitates knowledge sharing and fosters a culture of continuous learning, driving sustainable growth and progress within industries or fields.

**e. Increasing Coordination in Water and Sanitation:** Enhanced coordination among agencies within the water and sanitation sector is vital for addressing global water challenges effectively. By fostering collaboration and communication, opportunities for synergies and resource optimization are maximized, leading to improved outcomes in public health, environmental sustainability, and socioeconomic development.

**f. Strengthening Civil Society Organizations and Community Engagement:** Civil society organizations and community engagement are critical for promoting social justice and sustainable development. By working collaboratively with communities and stakeholders, CSOs can drive positive change and create more inclusive and resilient societies.

**g. Regularizing Citizen Consultations and Demand Generation Activities:** Institutionalizing citizen consultations and demand generation activities promotes inclusive governance, transparency, and accountability. These processes empower citizens, improve service delivery, and strengthen democratic institutions.

**h. Encouraging Public Accountability Mechanisms:** Encouraging public participation in planning and public opinion sharing at regular intervals fosters transparency, responsiveness, and trust in governance. By institutionalizing these practices, governments can strengthen democracy, enhance transparency and accountability, and foster citizen empowerment.

Additional Recommendations for Water Integrity at Rajshahi and Khulna City Corporations:

1. **Strengthen Outreach and Communication:** Implement comprehensive outreach strategies utilizing various channels to increase awareness about participation opportunities, such as public hearings.
2. **Enhance Transparency and Accountability:** Establish transparent mechanisms for citizen feedback and engagement to address public concerns and incorporate them into decision-making processes.

3. **Foster Collaborative Partnerships:** Collaborate with civil society organizations and local communities to enhance citizen participation in water and sanitation programs, leveraging local knowledge and resources for inclusive governance practices.

In conclusion, the recommendations outlined for government agencies and civil society organizations offer a holistic approach to addressing water and sanitation challenges. Key actions like reinforcing enforcement and streamlining project approvals combat corruption and safeguard water resources. Measures such as regulating sand extraction and engaging communities in project planning promote sustainable water management. Integrating vulnerability-based approaches and climate resilience strategies improves project efficiency. Establishing a robust governance framework enhances coordination and transparency. CSOs play a vital role in policy enhancement and community engagement. Collaborative implementation of these measures will advance equitable access to water and sanitation, environmental protection, and sustainable development.

## 1. Background and objectives

### 1.1 Introduction and Background

Water governance in Bangladesh is a crucial aspect for the sustainable management of water resources in the country. The demand for water has increased due to demographic change and industrialization, leading to over-exploitation and cross-sectoral competition among water, energy, food, and the environment (Karim, 2022)<sup>1</sup>. Good water governance is essential for the health and well-being of urban communities, and stakeholders understand its value (Hossain & Haque, 2023)<sup>2</sup>. Role of Responsible Institution in Urban Water Governance and Sanitation Management focus on Metropolitan Areas of Bangladesh in discusses the role of responsible institutions and good water governance in urban water and sanitation management in metropolitan areas of Bangladesh. It emphasizes the need for stakeholder involvement, integrated water resource management, regulatory frameworks, institutional capacity building, and financial sustainability. However, it does not specifically mention water integrity or introduce water governance in Bangladesh. Moreover, the existing water management institutions in Bangladesh neglect governance issues, and there is a need for stronger regulatory frameworks, stakeholder involvement, and institutional capacity building (Md. R. Islam et al., 2020)<sup>3</sup>. The community management model has been used in rural Bangladesh for shared drinking water systems, but limitations such as low community participation, lack of management rules, and absence of financial incentives hinder its effectiveness (Badrul Hasan, 2022)<sup>4</sup>. Overall, water governance in Bangladesh requires integration of the nexus perspective, stakeholder involvement, and addressing governance issues to ensure sustainable water management.

A community-based approach to sustainable trans-boundary water resources management and governance in the South-West Coastal region of Bangladesh discusses the lack of community participation and good governance in decision-making on trans-boundary water issues in the coastal region.

KWASA is steadfast in its commitment to ensuring universal access to essential services, pledging to provide clean drinking water and efficient sewerage solutions to all its customers. Achieving this objective hinges on the implementation of streamlined operations and maintenance practices, continuous research initiatives, robust strategic planning, and the cultivation of human resources.

Situated in the southwest region of Bangladesh, the city of Khulna grapples with the profound impacts of climate change attributable to its geographical positioning. Nestled within a deltaic plain, Khulna's topography is characterized by its flatness and poor drainage. With an elevation of merely 2.5 meters above Mean Sea Level (MSL), the city is significantly influenced by the rivers Bhairab and Rupsha. Rapid urbanization and burgeoning economic activities further strain the already burdened infrastructure.

Khulna experiences a pronounced uptick in both population growth and economic endeavors, exacerbating the strain on existing infrastructure. The city's climatic conditions are marked by an

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<sup>1</sup> Karim, S. (2022). A Critical Appraisal of the Sustainability of Bangladesh's Water Governance from Nexus Perspectives. *Bangladesh Political Science Review*, 15(1), 227–253. <https://doi.org/10.57074/WPMU4745>

<sup>2</sup> Hossain, I., & Haque, A. M. (2023a). Role of Responsible Institution in Urban Water Governance and Sanitation Management: A Focus on Metropolitan Areas of Bangladesh. <https://doi.org/10.21203/rs.3.rs-3064713/v1>

<sup>3</sup> Islam, Md. R., Jahan, C. S., Rahaman, Md. F., & Mazumder, Q. H. (2020). Governance status in water management institutions in Barind Tract, Northwest Bangladesh: An assessment based on stakeholder's perception. *Sustainable Water Resources Management*, 6(2), 21. <https://doi.org/10.1007/s40899-020-00371-1>

<sup>4</sup> Badrul Hasan, M. (2022). Constraints related to the Community Management Model for Shared Drinking Water Systems Governance in Coastal Bangladesh. *Bangladesh Political Science Review*, 15(1), 174–196. <https://doi.org/10.57074/OLNU3609>

average annual rainfall ranging from 1900 to 2000 mm, with peak temperatures soaring to 38 degrees Celsius between March and May in 2024. Moreover, saline intrusion in surface and groundwater sources poses an additional challenge, heightening the urgency for improved water supply, sewerage, and drainage facilities to meet escalating demands and ensure sustainable development.

The mission of KHULNA WASA is to provide exemplary services through modern planning methodologies, streamlined management and maintenance approaches, continuous human resource development, and the reinforcement of organizational capabilities. These endeavors aim to foster transparency and accountability in delivering safe water supply and environmentally sustainable sewerage systems to the community.

Situated along the banks of the Padma River in the northwestern region of Bangladesh, Rajshahi city stands as a prominent divisional headquarters. As one of the largest cities in the country, it holds the distinction of being among the 11 municipal corporations in Bangladesh.

The roots of Rajshahi water supply system trace back to 1937, when the municipality took its first steps toward establishing the system with support from the water supply branch of the then Ministry of Works in Calcutta, India. Subsequent decades witnessed collaborative efforts between the Bangladesh government, the Department of Public Health Engineering, and the Netherlands Government, culminating in the implementation of the Rajshahi Water Supply Grand Plan during the 1980s and 1990s. Despite endeavors such as the construction of elevated reservoirs, the Dutch-sponsored initiative proved inadequate to meet the growing water demands of the city. In response, the City Corporation independently embarked on projects, including the installation of deep tube wells and pipelines, albeit falling short of fulfilling the escalating water needs.

A significant milestone occurred on August 1, 2010, with the establishment of the Water Supply and Sewerage Branch as a distinct entity separate from the Rajshahi City Corporation, leading to the formation of Rajshahi WASA. Official operations commenced on March 10, 2011, starting from the pivotal water treatment facility located at Shalbaghan, ensuring the delivery of clean water to the municipal area's residents. As part of its organizational evolution, Rajshahi WASA's headquarters transitioned to Shalbaghan, with its current address situated at House No-284, Sector No-02, Housing Estate, Surbahar, Rajshahi-6202. Additionally, plans are underway for the construction of a modern 10-storey building at Shalbaghan, poised to serve as the focal point for Rajshahi WASA's administrative and operational endeavors, heralding a new era of progress and efficiency for the organization.

The proposed study aimed to investigate transparency, accountability, participation, and anti-corruption measures in water resource management, water supply, and sanitation within KWASA and RWASA. The study was conducted in two phases. Initially, a desk review of water resource management, water delivery systems, and sanitation was undertaken, focusing on existing laws, policies, strategies, and legal frameworks to identify gaps and challenges within the systems. Subsequently, specific measures were proposed to address these gaps and overcome the challenges.

A robust methodology was developed to collect, analyze, and reflect on data across various contexts within the water and sanitation sector. This study methodology aims to stimulate discussions and initiatives aimed at improving governance and service provision within the water and sanitation sector.

The study's findings will serve to raise awareness among policymakers and stakeholders about the strengths and weaknesses of the existing water governance system in the Khulna and Rajshahi city corporation areas of Bangladesh, as well as integrity risks. Additionally, these findings may be pertinent to other countries grappling with similar challenges in addressing integrity issues within the water supply and sanitation sector.

## 1.2 Contextual background:

### 1.2.1. Water and Sanitation Sector Integrity Context of Bangladesh

Given Bangladesh's unique location, climate, and socio-economic conditions, the water and sanitation sector assume paramount importance. A primary objective of this study was to conduct an in-depth analysis of Bangladesh's water and sanitation sector governance. This analysis offers valuable insights into the current state of integrity issues within the sector, facilitating the identification of significant challenges and opportunities for advancement.

A robust regulatory framework and policies is essential for monitoring and ensuring integrity in water and sanitation services. Bangladesh's Water Act of 2013 and National Water Policy of 1999 establish legal frameworks aimed at managing and safeguarding water resources. The Bangladesh Water Development Board oversees water resource administration and sets guidelines for their sustainable use, contributing to overall governance of water-related activities. The nation has gained global recognition for its disaster preparedness and reliance on indigenous knowledge-based adaptation strategies, showcasing a commitment to improving access to safe water and sanitation services.

The National Water Management Plan (NWMP) of 2001 provides a comprehensive framework for managing water resources during natural disasters. Measures outlined in the NWMP include water conservation, demand management, promoting drought-tolerant crop development, and prioritizing drought management projects. These proactive measures underscore Bangladesh's commitment to mitigating the adverse effects of natural disasters on water resources.

Public awareness regarding the importance of safe water and sanitation practices is on the rise, signaling a positive shift in societal attitudes towards water resource management and conservation efforts. Non-governmental organizations (NGOs) and civil society organizations play a crucial role in supporting marginalized communities and improving water and sanitation services across different regions. Collaboration between government agencies, NGOs, and civil society organizations reflects a multi-stakeholder approach to addressing water-related challenges and fostering sustainable development.

However, challenges persist within Bangladesh's water and sanitation sector. Inconsistent implementation of regulations due to vague role definitions among institutions, impunity towards corruption, and a lack of transparency in decision-making processes hinder sectoral integrity. Subpar performance in disclosing information on integrity status and inadequate capacity within government agencies further compound these issues. Additionally, reluctance among the populace to act against corruption due to a lack of faith in enforcement mechanisms poses significant barriers to progress.

To overcome these challenges, there is a need for comprehensive strategies that integrate advanced technology and innovative solutions into water and sanitation infrastructure. Climate change adaptation strategies, green technologies, and decentralized management approaches can enhance operational efficiency and service delivery. Increased collaboration with international partners and exploring public-private partnerships are crucial for accessing financing and technical support.

The introduction of the integrity management toolbox by the Water Integrity Network (WIN) presents a valuable resource for identifying and effectively managing integrity risks within water organizations. This framework, as highlighted by Schmidt et al. (2022), holds significant potential for enhancing service delivery, customer satisfaction, and the financial stability of water organizations. By pinpointing shortcomings in water resources planning and development, legislative frameworks, institutional structures, and water administration and governance in Bangladesh, the toolbox serves as a catalyst for designing and implementing actions aimed at fostering corruption-free, transparent, and accountable water service delivery processes.

The toolbox underscores the critical need for improved coordination and information sharing among water-related organizations, emphasizing the legal avenues necessary to achieve this objective. Furthermore, it advocates for the meaningful involvement of local communities, including women, in project design and decision-making processes, recognizing the importance of their perspectives. Highlighting deficiencies in gender policies, civil society participation, and anti-corruption measures within existing laws and regulations, the toolbox offers practical insights for addressing challenges in water integrity and governance in Bangladesh.

In essence, the practical implications outlined in the toolbox emphasize the urgency of enhancing coordination, transparency, accountability, and stakeholder participation within the water sector. By implementing these recommendations, water organizations in Bangladesh can strive towards more effective and inclusive governance, ultimately ensuring the sustainable and equitable provision of water services to all segments of society.

The COVID-19 pandemic has underscored the importance of hygiene, water, and sanitation in disease prevention, highlighting the need for resilient water and sanitation systems. Efforts must be made to prioritize equitable access to safe water and sanitation, particularly in marginalized communities, to ensure sustainable development and public health outcomes.

In summary, while Bangladesh's water and sanitation sector faces significant challenges, holistic approaches that address governance deficiencies, enhance financing mechanisms, and prioritize equitable access to safe water and sanitation are essential for sustainable development and public health.

### 1.2.2. Integrity Context of Khulna WASA.

The Khulna water supply system traces its roots back to 1921 when it was initially established, featuring a Surface Water Treatment Plant (SWTP) with a capacity of 900 cubic meters per day. In the 1960s, the Department of Public Health Engineering (DPHE) embarked on constructing deep production tube wells to bolster Khulna city's water supply system. By 1990, the DPHE transferred responsibility for the Water Supply System to the Khulna City Corporation (KCC). In a significant move to expand and enhance water supply services for Khulna, the Government of Bangladesh established the Khulna Water Supply and Sewerage Authority on March 2, 2008, in alignment with Article 3 of the WASA Act 1996. The vision of KHULNA WASA is to emerge as a leading organization in Bangladesh's water and sanitation sector, committed to achieving customer satisfaction through the provision of safe water supply and environmentally sustainable sewerage systems.



The experience of the Khulna Water Supply and Sewerage Authority (KWASA) in implementing an Integrity Management process has resulted in improved performance and strengthened integrity. Key to the success of KWASA's integrity management initiative are factors such as visionary and committed leadership, support from local political leaders, and the autonomy to implement reforms. Sustained dialogue and detailed explanations from partners with local knowledge were essential in navigating the complexity of engaging public sector organizations in anti-corruption efforts. Leadership continuity emerged as critical, as changes in leadership could negatively impact the implementation process.

The visionary and committed leadership of KWASA's Managing Director played a pivotal role in driving the culture of change and leading the integrity management project to success. Despite initial pressure and skepticism, the Managing Director succeeded in garnering mutual understanding and buy-in from local political figures, facilitating the implementation process. KWASA's autonomy to implement reforms proved instrumental, ensuring the project's success. Moreover, embedding integrity elements within the organizational structure ensured a sustained effort to address integrity challenges even after project completion.

This embedding of integrity elements within the organizational structure enhanced KWASA's capability to deliver services effectively and efficiently. It also made the organization's workings more transparent, building trust among customers and stakeholders. Regular interaction and public hearings with customers further bolstered trust and transparency, ultimately contributing to the project's success. Overall, KWASA's experience highlights the importance of visionary leadership, autonomy in reform implementation, and embedding integrity within the organizational structure for successful integrity management initiatives in the water sector.

### 1.2.3. Integrity Context of Rajshahi WASA.

Rajshahi Municipality, with its origins dating back to 1876, holds a distinguished status as one of the pioneering municipalities in intact India. Evolving over time, in 1987, Rajshahi Municipality transitioned into a City Corporation, encompassing an initial area of 48.47 sq. km, which has since expanded to 93.47 sq km. Despite limited industrial development, the region boasts numerous higher educational institutions and is renowned for its extensive sericulture, earning it the moniker 'city of silk and education'. With a current population of approximately 9 lakhs, inclusive of slum dwellers and transient residents, the city spans 12 km in length and 8 km in width.

A significant stride towards effective integrity management within Rajshahi WASA was marked by a public hearing and community interaction session organized by RWASA, Water Integrity Network (WIN), and NGO Forum for Public Health. Chaired by the Managing Director of Rajshahi WASA and attended by high-level officials and 20 consumers, the session served as a platform for stakeholders to voice concerns and provide suggestions. Issues raised encompassed high iron content in WASA water affecting rice color, the necessity to curtail the installation rate of submersible pumps, awareness programs to mitigate water wastage, challenges in obtaining new water connections, non-metering leading to inflated bills, and the imperative for a more responsive complaint handling system.

Highlighted solutions included the establishment of a surface water-based purification plant and the restoration of aging pipelines and hydrants within Rajshahi City Corporation and its periphery. The session underscored the vital role of community engagement and feedback in ensuring effective integrity management within Rajshahi WASA, while also addressing specific concerns and suggestions raised by stakeholders. Notable among these concerns were issues related to water quality,



infrastructure maintenance, customer service, and access to water connections, emphasizing the imperative for ongoing collaboration between the water authority and the community to ensure sustainable and reliable water services.

### 1.3 General Objectives of the study:

The proposed study aims to undertake a comprehensive assessment of the integrity landscape within the water and sanitation sectors of Rajshahi and Khulna City. This assessment will specifically focus on identifying the current governance framework, strengths, weaknesses, and limitations of existing policies, laws, and rules governing these sectors. Additionally, the study will evaluate the effectiveness of current governance mechanisms within the broader context of Bangladesh and the respective cities.

This study will contribute to the development of robust, transparent, and accountable governance frameworks in the water and sanitation sectors of Rajshahi and Khulna City. By addressing existing weaknesses and limitations, the study seeks to enhance the overall performance and effectiveness of KWSA and RWASA in providing sustainable and reliable water and sanitation services to the residents of these cities.

### 1.4 Specific Objectives:

The study aims to achieve the following specific objectives:

- a. To determine the present condition of WASH integrity policies and practices in practical implementation.
- b. To evaluate the current governance frameworks and mechanisms at the grassroots level.
- c. To pinpoint both obstacles and prospects associated with WASH integrity.

## 2. Study Methodology

A comprehensive methodology or framework has been developed to systematically gather, analyze, and assess data from various contexts within the water and sanitation domain of KWSA and RWASA. This framework aims to promote discussions and initiatives aimed at enhancing governance and service delivery in the water and sanitation sector of the respective cities. The assessment highlights the crucial role of governance in shaping the sector's effectiveness. It advocates for an approach centered around governance in managing water and sanitation (WATSAN) operations, which involves establishing and implementing institutional mechanisms to promote accountability, transparency, participation, and inclusivity. It suggests that robust governance practices can facilitate fair resource allocation and ensure that decisions are guided by inclusive participatory processes.

### 2.1 Study Design

This study represents a preliminary assessment aimed at establishing a foundational evidence base for the subsequent evaluation of project activities and outcomes. Employing a mixed-method study design, it integrates both qualitative and quantitative methodologies to comprehensively gather the requisite data and information. Furthermore, a participatory consultative approach was employed to delve into the nuanced insights pertaining to the study theme.

## 2.2. Study Sites

The study was carried out in two city corporation area where WASA is responsible for Water Supply, Sewerage management and providing service related to Water and Sanitations. Though, both city Corporations area responsible for Sewerage and sanitation management. The Rajshahi City Corporation area and the Khulna City Corporation area were included in this study.

Rajshahi City Corporation (RCC) area is situated in the northern part of Bangladesh, within the Rajshahi Division. Geographically, it lies between the Ganges and the Padma rivers, making it a strategic location in the region. The RCC area is predominantly urban, with a mix of residential, commercial, and industrial zones. The cityscape is characterized by high-rise buildings, bustling markets, and arterial roads. Rajshahi is home to several educational institutions, including Rajshahi University, making it a hub for higher education in the region. The university campus, spread over a vast area, adds to the city's vibrant academic atmosphere. The Rajshahi City Corporation area is a dynamic urban center with a rich cultural heritage, strategic geographical location, and diverse economic activities. Its significance extends beyond its administrative boundaries, influencing the socio-economic landscape of the broader region.

Khulna City Corporation (KCC) area is in the southwestern region of Bangladesh, within the Khulna Division. It is situated along the banks of the Rupsha River, a distributary of the Ganges-Brahmaputra-Meghna Delta. Khulna is a major transportation hub, with the Port of Mongla being the country's second-largest seaport. The port facilitates trade and commerce, serving as a gateway for exports and imports. The Khulna City Corporation plays a vital role in urban governance and local administration. The Khulna City Corporation area is a dynamic urban center with a strategic geographical location, diverse economic activities, and ecological significance. Its role as an industrial, commercial, and educational hub makes it a key player in the socio-economic landscape of southwestern Bangladesh.

## 2.3. Study population

The study population was drawn from the permanent residents residing within the jurisdiction of the Khulna and Rajshahi city corporations. Both male and female demographics were encompassed in the study. Additionally, stakeholders representing various facets of the water and sanitation sector, including governmental authorities, civil society representatives, NGO officials, academics, and journalists, were incorporated into the study population.

Quantitative methodologies were employed to gather numerical data from beneficiaries within the water and sanitation sector, while qualitative methods were utilized to collect insights from key government officials and other stakeholders engaged in water sector governance.

## 2.4. Sampling

A purposive simple non-probability sampling method was employed to select respondents for this study, ensuring a balanced representation of perspectives. A total of 200 respondents were interviewed, with 100 individuals chosen from the Rajshahi City Corporation area and another 100 from the Khulna City Corporation area. These selections were made randomly and purposively, with support from the project implementing NGO and WIN partners.

The decision to opt for a sample size of 100 is a common practice rooted in the need for statistical reliability and cost-effectiveness. In survey research, it is often impractical to survey the entire

population due to constraints in time and budget. Instead, researchers aim for sample percentages that approximate population percentages, recognizing that smaller sample sizes can still yield valuable insights<sup>5</sup>. This practice aligns with standards such as ISO 28590, which demonstrate that smaller sample sizes can provide meaningful data.

While random sampling is ideal for ensuring representativeness, it can also be costly and challenging to execute. As a result, researchers may resort to non-probability sampling methods, which are simpler and more cost-effective. Therefore, a sample size of 100 strikes a balance between statistical reliability, cost-efficiency, and practicality in diverse research contexts.

## 2.5. Data collection

Both primary and secondary data were collected from a diverse array of sources using multiple methodologies. Primary data collection involved interviews, focus group discussions, and consultative processes with relevant stakeholders. These interactions provided firsthand insights and perspectives on the water and sanitation sector.

Additionally, secondary data were obtained through comprehensive literature reviews and policy analyses. These sources offered valuable context and background information, enriching the understanding of the sector's complexities and dynamics.

By integrating both primary and secondary data, this study ensured a comprehensive and robust analysis of the water and sanitation landscape, allowing for informed decision-making and policy recommendations.

## 2.6. Tools Used for Primary and Secondary Data Collection

The primary tools employed for data collection in this assessment are delineated below:

### Tool 1: Desk Review

The study commenced with a meticulous examination of existing literature, delving into a comprehensive array of sources including prevalent laws, regulations, policies, strategies, and data pertinent to water and sanitation services in Bangladesh. This thorough review encompassed governmental reports, scholarly studies, and relevant publications, serving as the bedrock for subsequent assessments by elucidating fundamental issues and challenges.

The initial phase of the study was characterized by a desk review, which played a pivotal role in elucidating the extant water governance framework in Bangladesh. Through this process, critical insights were gleaned into the legal infrastructure governing water resource management, the policies and strategies guiding water supply and sanitation, and the prevailing mechanisms for water delivery. This phase was instrumental in pinpointing gaps and obstacles within the existing system, thereby laying the groundwork for the subsequent phases of the study.

Moreover, a stakeholder mapping exercise was conducted within the water and sanitation sector, leveraging insights from the secondary literature review. This exercise facilitated the integration of

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<sup>5</sup> The Law of Large Numbers and the Central Limit Theorem, [Richard L. Scheaffer](#)<sup>1</sup>, [Ann Watkins](#)<sup>2</sup>, [Mrudulla Gnanadesikan](#)<sup>3</sup>, [Jeffrey A. Witmer](#)<sup>4</sup>•

stakeholders into both the online questionnaire and key informant interviews, thereby enriching the study's depth and breadth of analysis.

### Tool 2: Key Informant Interviews

Sixteen key informants representing various stakeholder levels were interviewed as part of this study, spanning two city corporations. These key informants included government officials, service providers, academics, water sector experts, NGO representatives, investigative journalists specializing in water integrity, community leaders, and other relevant stakeholders.

This approach was chosen to ensure a comprehensive understanding of the challenges confronting the water and sanitation sector. By soliciting insights from a diverse array of perspectives, the study aimed to uncover nuanced issues and potential solutions. Through these interviews, supplementary viewpoints were gathered, enriching the analysis and informing the development of recommendations for addressing the sector's complexities.

### Tool 3: Focus Group Discussions

Water and sanitation service recipients residing in both city corporation areas were invited to contribute their perspectives, drawing from their firsthand experiences. These insights aimed to shed light on critical aspects including transparency, accountability, participation scope for service recipients, and the strengths, weaknesses, opportunities, and threats associated with institutions involved in water supply and water resources management.

To facilitate this, focus group discussions (FGDs) were conducted in two distinct locales within each city corporation area. The FGDs served as a platform for participants to share their views openly and collaboratively, generating valuable insights for the study.

The discussions adhered to a standard guideline and checklist to ensure consistency and thoroughness across various locales. These tools provided a structured framework for exploring key themes and eliciting pertinent information from participants, thereby enhancing the reliability and validity of the findings.

### Tool 4: Workshop on Annotated Water Integrity Scan(AWIS) tools

This tool serves a dual purpose: firstly, to elevate awareness surrounding water integrity by fostering discourse on the subject, and secondly, to swiftly evaluate integrity risks within the water sector. In a previous study it's estimated that approximately 10% of the total funds allocated to the WASH (Water, Sanitation, and Hygiene) sector are lost due to corruption, with a potentially larger percentage lost due to deficient management and inadequate accountability. Addressing these integrity concerns is imperative to mitigate associated risks.

The Annotated Water Integrity Scan approach is grounded in a participatory workshop format, wherein stakeholders collaboratively assess identified risk areas based on Transparency, Accountability, and Participation levels. During these workshops, participants engage in open discussions and rationale-sharing to justify their assigned scores, irrespective of their affiliations. This inclusive dialogue serves to highlight risks and prioritize interventions, ensuring targeted actions are undertaken.

Importantly, this approach facilitates the integration of integrity considerations into ongoing water sector initiatives without causing friction among stakeholders. It fosters an environment of awareness regarding diverse perspectives and unforeseen risks. Rather than establishing definitive conclusions, it encourages a gradual cultivation of shared understanding regarding potential issues. As such, it is designed to be seamlessly integrated into existing projects within the water sector, rather than functioning as an isolated activity.

## 2.7. Data validation, management and analysis:

Data management and ethical considerations were meticulously addressed throughout the research process, ensuring the integrity and validity of the study.

Initially, a proficient data processing team was tasked with processing and cleansing the data files. Qualitative data, originally scripted in Bengali, underwent translation into English by qualified translators to maintain accuracy and consistency.

During the analysis phase, both qualitative and quantitative analyses were conducted separately, adhering to the methodology outlined. Individual-level analysis was conducted, with results aggregated by area. Furthermore, comparative analyses between areas were conducted to glean insights into regional disparities.

The qualitative data analysis followed a structured approach, including documenting the data and collection process, organizing and categorizing data into conceptual frameworks, establishing connections between concepts to elucidate their interplay, corroborating findings by assessing alternative explanations and disconfirming evidence, and finally, reporting the findings comprehensively.

Ethical considerations were paramount throughout the study, particularly in the handling of interview data and document reviews. Prior to interviews, the questionnaire was shared with respondents, and verbal consent was sought to respect sensitivities towards signing written documents, ensuring transparency and accountability. Confidentiality and anonymity were maintained for key informant interviewees, with only explicitly permitted names cited. Rigorous data security measures were implemented due to shared access to computers and online resources within the research team.

Furthermore, potential recall bias in interviews about past events was acknowledged, and efforts were made to mitigate it by cross-referencing information with other interviewees' accounts or documentary sources, enhancing the reliability of the study's findings.

## 3. Concepts of Integrity in Water Sector

The notion of water integrity is closely linked to the values of openness, responsibility, engagement, and the deterrence of misconduct within institutions responsible for delivering equitable and sustainable water and sanitation services to the populace, while also effectively managing water resources (WIN, 2023). Therefore, when evaluating the water sector governance in Bangladesh, it is imperative to scrutinize how water-related bodies are implementing these values. Are they transparent in their proceedings, actively engaging citizens in decision-making processes, and holding themselves accountable for their actions? Ensuring that these institutions operate with integrity will lead to the provision of superior and enduring water and sanitation services for all citizens, particularly those in the most marginalized communities who often lack access to such facilities.

Integrity is a crucial aspect of water governance in Bangladesh. The adherence to integrity principles by water stakeholders and institutions is essential for improving water governance and sustainable water development (Md. R. Islam et al., 2020)<sup>6</sup>. Corruption is a major challenge in the water sector, and combating it requires the implementation of institutional integrity (Tropp et al., 2017)<sup>7</sup>. The government of Bangladesh has recognized the importance of institutional integrity in curbing corruption and has taken initiatives to address this issue (Rashid & Johara, 2018)<sup>8</sup>. Corruption and institutional integrity: the case of Bangladesh focuses on corruption, institutional integrity, and initiatives of the Government of Bangladesh to curb corruption. The assessment of water governance status in Bangladesh has revealed varying levels of performance among different government organizations and NGOs, with some showing good performance in terms of transparency, accountability, and social equity (Das Gupta et al., 2005)<sup>9</sup> (R. Islam et al., 2019)<sup>10</sup>. Nevertheless, there exists a requirement for enhancement in governance aspects such as coordination, technical proficiency, and the transparency of project selection and execution. In general, fostering integrity within the water sector is paramount for sustainable water resource management in Bangladesh. The incorporation of integrity principles with fundamental indicators of good governance, such as transparency, accountability, participation, and inclusion, has been explored in this study, which analyzes water integrity concepts.

### 3.1. Transparency

Transparency refers to the degree to which external parties can access information enabling informed assessments of decisions made by those in positions of authority or the evaluation of the decision-making process itself (Florini, 2007). Within the realm of water and sanitation, transparency plays a pivotal role in ensuring stakeholders can access and comprehend information pertaining to water and sanitation services, policies, and procedures. This encompasses details concerning the availability and quality of such services, resource allocation, and the decision-making processes shaping their delivery.

In the water and sanitation sector, transparency holds particular significance as access to safe and clean water and sanitation is deemed a fundamental human right. Upholding transparency in this sector serves to thwart corruption, ensure accountability, and foster trust among stakeholders. By providing stakeholders with access to information regarding water and sanitation services and policies, they can actively engage in decision-making processes and hold service providers and policymakers accountable for their actions.

Integrity in the water sector, particularly in the context of transparency, involves using powers and resources ethically and honestly for the provision of sustainable and equitable water and sanitation services<sup>11</sup>. It is built through transparency, accountability, participation, and the proactive

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<sup>6</sup> Islam, Md. R., Jahan, C. S., Rahaman, Md. F., & Mazumder, Q. H. (2020). Governance status in water management institutions in Barind Tract, Northwest Bangladesh: An assessment based on stakeholder's perception. *Sustainable Water Resources Management*, 6(2), 21. <https://doi.org/10.1007/s40899-020-00371-1>

<sup>7</sup> Tropp, H., Jiménez, A., & Le Deunff, H. (2017a). Water Integrity: From Concept to Practice. In E. Karar (Ed.), *Freshwater Governance for the 21st Century* (Vol. 6, pp. 187–204). Springer International Publishing. [https://doi.org/10.1007/978-3-319-43350-9\\_10](https://doi.org/10.1007/978-3-319-43350-9_10)

<sup>8</sup> Rashid, M. M., & Johara, F. (2018). Corruption And Institutional Integrity: The Case Of Bangladesh. <https://doi.org/10.5281/ZENODO.1185086>

<sup>9</sup> Das Gupta, A., Singh Babel, M., Albert, X., & Mark, O. (2005). Water Sector of Bangladesh in the Context of Integrated Water Resources Management: A Review. *International Journal of Water Resources Development*, 21(2), 385–398. <https://doi.org/10.1080/07900620500037818>

<sup>10</sup> Islam, R., Jahan, C. S., Mazumder, Q. H., Miah, S., & Rahaman, F. (2019). Water Footprint and Governance Assessment for Sustainable Water Resource Management in Drought-Prone Barind Area, NW Bangladesh. In H. I. Chaminé, M. Barbieri, O. Kisi, M. Chen, & B. J. Merkel (Eds.), *Advances in Sustainable and Environmental Hydrology, Hydrogeology, Hydrochemistry and Water Resources* (pp. 371–373). Springer International Publishing. [https://doi.org/10.1007/978-3-030-01572-5\\_87](https://doi.org/10.1007/978-3-030-01572-5_87)

<sup>11</sup> Good Groundwater Management: Justice in Achieving Sustainable Development Goal (SDG), 7 February 2019, [Publication: Groundwater and Sustainable Development Goals: Analysis of Interlinkages]

implementation of strong anti-corruption measures<sup>12</sup>. To ensure transparency, water utilities can implement measures such as improving customer complaint mechanisms through digital systems. The Integrity Concepts and Tools Bangladesh context-, discusses the concept of water integrity in Bangladesh, focusing on the disarray in water resources planning and development, inefficiency in legislative framework and institutional makeup, and gaps in water administration and governance. It aims to ensure a corruption-free, transparent, and accountable water services delivery process.

Country Baseline Assessment WATER SECTOR INTEGRITY IN BANGLADESH- does not specifically discuss the concepts of integrity in the water sector in the context of transparency. It primarily focuses on the need for equitable and sustainable water management practices in Bangladesh. By implementing these measures, water utilities can enhance transparency and integrity in the water sector.

Transparency in the water sector of Bangladesh can be improved by implementing best practices such as ensuring good governance, promoting accountability, and enhancing citizen participation<sup>13 14</sup>. The assessment of water governance status in Bangladesh revealed that government organizations like BMDA, BWDB, DPHE, and LGED need to improve their transparency and accountability<sup>15 16</sup>.

Transparency in the water sector of Bangladesh faces several challenges. The lack of implementation of laws and regulations is a significant problem, hindering efforts to control water pollution<sup>17</sup>. Legal loopholes, institutional weaknesses, and the lack of enforcement of Environment Impact Assessment (EIA) also contribute to the obstacles in preventing and controlling water pollution<sup>18</sup>. In addition, there are governance issues in water management institutions (WMIs) that affect water governance in the country<sup>19</sup>. These issues include transparency, accountability, participation, and social equity, which need to be addressed for effective water resource management<sup>20</sup>. Overall, the water sector in Bangladesh requires stricter implementation of laws and regulations, improved governance in WMIs, and enhanced transparency to overcome the challenges to transparency in the water sector.

### 3.2. Accountability

Accountability entails the responsibility to ensure that individuals and organizations are held answerable for their performance, assessed using the most objective criteria available (UNCHR, n.d.). It encompasses the duty of individuals or institutions to acknowledge and take ownership of their actions and decisions, being transparent and answerable for the outcomes that ensue. In the realm of water and sanitation, accountability assumes a pivotal role in ensuring equitable and efficient distribution of resources, policies, and services related to water and sanitation, while safeguarding the rights and needs

<sup>12</sup> Appah-Sampong, E. (n.d.-a). Public hearing within the environmental impact assessment review process.

<sup>13</sup> Islam, Md. R., Jahan, C. S., Rahaman, Md. F., & Mazumder, Q. H. (2020). Governance status in water management institutions in Barind Tract, Northwest Bangladesh: An assessment based on stakeholder's perception. *Sustainable Water Resources Management*, 6(2), 21. <https://doi.org/10.1007/s40899-020-00371-1>

<sup>14</sup> Islam, R., Jahan, C. S., Mazumder, Q. H., Miah, S., & Rahaman, F. (2019). Water Footprint and Governance Assessment for Sustainable Water Resource Management in Drought-Prone Barind Area, NW Bangladesh. In H. I. Chaminé, M. Barbieri, O. Kisi, M. Chen, & B. J. Merkel (Eds.), *Advances in Sustainable and Environmental Hydrology, Hydrogeology, Hydrochemistry and Water Resources* (pp. 371–373). Springer International Publishing. [https://doi.org/10.1007/978-3-030-01572-5\\_87](https://doi.org/10.1007/978-3-030-01572-5_87)

<sup>15</sup> Lydon, S. (2023a). Survey Reveals Water Sector Challenges, Best Practices. *Opflow*, 49(1), 14–17. <https://doi.org/10.1002/opfl.1774>

<sup>16</sup> Anjal Prakash, Singh, S., Goodrich, C. G., & Janakarajan, E. (Eds.). (2020a). *Water resources policies in South Asia*. Routledge India.

<sup>17</sup> Iskander, S. Md. (2023). Industrial Water Demand and Wastewater Generation: Challenges for Bangladesh's Water Industry. *ACS ES&T Water*, 3(6), 1515–1526. <https://doi.org/10.1021/acsestwater.3c00023>

<sup>18</sup> Legal institutional inefficiency and water pollution problem in Bangladesh

<sup>19</sup> Shamsudduha, M. (n.d.). Groundwater-fed Irrigation and Drinking Water Supply in Bangladesh: Challenges and Opportunities.

<sup>20</sup> Islam, Md. R., Jahan, C. S., Rahaman, Md. F., & Mazumder, Q. H. (2020). Governance status in water management institutions in Barind Tract, Northwest Bangladesh: An assessment based on stakeholder's perception. *Sustainable Water Resources Management*, 6(2), 21. <https://doi.org/10.1007/s40899-020-00371-1>



of all stakeholders. This necessitates holding those entrusted with managing and implementing water and sanitation initiatives accountable for their actions and decisions.

Accountability is a crucial aspect of integrity in the water sector as it ensures that those responsible for managing water resources are held answerable for their actions and decisions. By promoting accountability, the sector can reduce the risks of corruption and mismanagement and improve the delivery of water services to all stakeholders. The implementation of integrity management practices and tools in water utilities in Bangladesh. The concept of accountability emphasizes the need for transparency in budgets, plans, procurement, and service, as well as the establishment of complaint mechanisms and oversight to ensure that water resources are managed in a responsible and accountable manner<sup>21</sup>.

Water governance in Bangladesh faces challenges in terms of accountability in the sector. The government agencies, such as BMDA, BWDB, DPHE, and LGED, need to address governance issues seriously and take rigorous action plans for scaling up<sup>22</sup>. Transparency, accountability, participation, and social equity are indicators that need to be carefully considered by these agencies. According to The National Water Management Plan and its objectives, best practices for accountability in the water sector of Bangladesh include improving coordination, technical capacity, and transparency in project selection, implementation, and citizen participation<sup>23</sup>.

The challenges to accountability in the water sector of Bangladesh include legal loopholes, institutional weaknesses, and lack of enforcement of Environment Impact Assessment (EIA)<sup>24</sup>. Additionally, there are issues with governance in water management institutions (WMI), such as transparency, accountability, and citizen's participation<sup>25</sup>. The lack of implementation of laws and regulations for water pollution control is also a significant problem<sup>26</sup>. These challenges hinder the prevention and control of water pollution in Bangladesh, leading to severe damage to the environment and negative impacts on human health<sup>27</sup>. To address these challenges, stricter laws and regulations, technical workforce development, stakeholder training, and improved governance in WMI are necessary<sup>28</sup>.

To make the water sector in Bangladesh more accountable, it is crucial to integrate the nexus perspective into every aspect of water governance and harmonize water policies with other sectors,

<sup>21</sup> Khulna Sewerage System Development Project. (2021).

Aaron, K. J., & Sanders, P. W. (2013). Role of Dietary Salt and Potassium Intake in Cardiovascular Health and Disease: A Review of the Evidence. *Mayo Clinic Proceedings*, 88(9), 987–995. <https://doi.org/10.1016/j.mayocp.2013.06.005>

<sup>22</sup> Islam, Md. R., Jahan, C. S., Rahaman, Md. F., & Mazumder, Q. H. (2020). Governance status in water management institutions in Barind Tract, Northwest Bangladesh: An assessment based on stakeholder's perception. *Sustainable Water Resources Management*, 6(2), 21. <https://doi.org/10.1007/s40899-020-00371-1>

<sup>23</sup> Islam, R., Jahan, C. S., Mazumder, Q. H., Miah, S., & Rahaman, F. (2019). Water Footprint and Governance Assessment for Sustainable Water Resource Management in Drought-Prone Barind Area, NW Bangladesh. In H. I. Chaminé, M. Barbieri, O. Kisi, M. Chen, & B. J. Merkel (Eds.), *Advances in Sustainable and Environmental Hydrology, Hydrogeology, Hydrochemistry and Water Resources* (pp. 371–373). Springer International Publishing. [https://doi.org/10.1007/978-3-030-01572-5\\_87](https://doi.org/10.1007/978-3-030-01572-5_87)

<sup>24</sup> Iskander, S. Md. (2023). Industrial Water Demand and Wastewater Generation: Challenges for Bangladesh's Water Industry. *ACS ES&T Water*, 3(6), 1515–1526. <https://doi.org/10.1021/acsestwater.3c00023>

<sup>25</sup> Wang, S., & Islam, Md. Z. (2022). Legal institutional inefficiency and water pollution problem in Bangladesh. *Resources and Environmental Economics*, 4(2), 372–375. <https://doi.org/10.25082/REE.2022.02.004>

<sup>26</sup> Multi-hazard Groundwater Risks to Water Supply from Shallow Depths: Challenges to Achieving the Sustainable Development Goals in Bangladesh. *Exposure and Health*, 12(4), 657–670. <https://doi.org/10.1007/s12403-019-00325-9>

<sup>27</sup> Bradley, D. (2020). Risky responsibilities for rural drinking water institutions: The case of unregulated self-supply in Bangladesh. *Global Environmental Change*, 65, 102152. <https://doi.org/10.1016/j.gloenvcha.2020.102152>

<sup>28</sup> Islam, Md. R., Jahan, C. S., Rahaman, Md. F., & Mazumder, Q. H. (2020). Governance status in water management institutions in Barind Tract, Northwest Bangladesh: An assessment based on stakeholder's perception. *Sustainable Water Resources Management*, 6(2), 21. <https://doi.org/10.1007/s40899-020-00371-1>



considering their interdependency<sup>29</sup>. Additionally, addressing legal loopholes, institutional weaknesses, and enforcing Environment Impact Assessment (EIA) can help prevent and control water pollution<sup>30</sup>. Monitoring and regulating informal private water providers can improve sectoral coordination and increase the efficiency of service delivery<sup>31</sup>. Furthermore, good governance issues in water management institutions (WMIs) should be addressed, including transparency, accountability, participation, and social equity<sup>32</sup>. Lastly, involving the local community in decision-making processes and implementing community-based approaches to water resources management can lead to more effective and equitable solutions for water stress issues<sup>33</sup>.

### 3.3. Participation

Participation empowers individuals to voice their opinions through formal organizations or representatives, while also recognizing the universal right to freedom of association and expression (UCLG-ASPAC, 2021). It involves the active engagement of stakeholders in decision-making processes concerning a specific issue, encompassing their involvement in decision-making, planning, and policy implementation that directly or indirectly impacts them.

In the water sector, participation is indispensable for ensuring that all stakeholders—communities, government bodies, NGOs, and the private sector—are engaged in the planning, management, and decision-making processes related to water resources. This fosters a greater sense of ownership and accountability among stakeholders. When individuals are involved in decision-making, they are more inclined to take responsibility for the outcomes and collaborate towards achieving them. Moreover, participation promotes the sustainability of water management decisions by integrating diverse perspectives, knowledge, and experiences, thus paving the way for more effective and sustainable solutions.

The existing policy and practices in Bangladesh regarding WASHA integrity implementation status and governance mechanism have been assessed from a participation perspective. The study found that the government has enacted laws to ensure people's participation in the development process, with a focus on decision-making and service delivery. However, in the water sector, governance issues in water management institutions (WMIs) have been neglected, leading to a moderate governance status overall<sup>34</sup>. In the healthcare sector, institutions, laws, and policies governing healthcare provision remain weak, with limited accountability and transparency, creating barriers for patients. In the context of the COVID-19 pandemic, a community-based intervention implemented by a government-NGO partnership showed positive results in increasing community resilience and prevention measures but faced challenges such as insufficient training and coordination among stakeholders. Overall, there is a need for further regulatory and institutional reforms to promote participation, accountability, and persistent rights in the WASHA sector in Bangladesh.

<sup>29</sup> Karim, S. (2022). A Critical Appraisal of the Sustainability of Bangladesh's Water Governance from Nexus Perspectives. *Bangladesh Political Science Review*, 15(1), 227–253. <https://doi.org/10.57074/WPMU4745>

<sup>30</sup> Wang, S., & Islam, Md. Z. (2022). Legal institutional inefficiency and water pollution problem in Bangladesh. *Resources and Environmental Economics*, 4(2), 372–375. <https://doi.org/10.25082/REE.2022.02.004>

<sup>31</sup> Socio-spatial and seasonal dynamics of small, private water service providers in Khulna district, Bangladesh

<sup>32</sup> Governance status in water management institutions in Barind Tract, Northwest Bangladesh: an assessment based on stakeholder's perception

<sup>33</sup> Saha, P., Ashraf, A., Oyshi, J. T., Khanum, R., & Nishat, A. (2021). A community-based approach to sustainable transboundary water resources management and governance in the South-West Coastal region of Bangladesh. *Sustainable Water Resources Management*, 7(5), 79. <https://doi.org/10.1007/s40899-021-00562-4>

<sup>34</sup> Islam, Md. R., Jahan, C. S., Rahaman, Md. F., & Mazumder, Q. H. (2020). Governance status in water management institutions in Barind Tract, Northwest Bangladesh: An assessment based on stakeholder's perception. *Sustainable Water Resources Management*, 6(2), 21. <https://doi.org/10.1007/s40899-020-00371-1>

The challenges to participate in the water sector of Bangladesh include the lack of implementation of laws and regulations for water pollution control, inadequate wastewater treatment facilities, and the contamination of water resources. Bangladesh has experienced massive industrial growth, leading to a high demand for water and the generation of wastewater. Textile and leather industries are major consumers of freshwater and contribute to severe water pollution due to the lack of effluent treatment plants<sup>35</sup>. Furthermore, groundwater in Bangladesh is contaminated with elevated levels of arsenic, pathogens, and agrochemicals, posing health risks to millions of consumers<sup>36</sup>. These challenges highlight the need for stricter regulations, improved wastewater treatment, and better management of water resources in Bangladesh.

To make the water sector in Bangladesh more participatory, it is crucial to integrate the nexus perspective into every aspect of the country's water governance and harmonize water policies with other sectors, considering their interdependency<sup>37</sup>. Furthermore, there should be a focus on stakeholder participation, social learning, and multi-stakeholder partnerships within the water management system to enable effective participation, successful social learning, and ultimately, sustainable delta management. Addressing governance issues such as transparency, accountability, participation, and social equity is crucial for improving the overall governance status of water management institutions in Bangladesh<sup>38</sup>.

### 3.4. Anti-Corruption and Integrity

Anti-corruption measures encompass a range of actions aimed at preventing and combating corrupt practices including bribery, embezzlement, nepotism, fraud, and abuse of power. These efforts are geared towards promoting transparency, accountability, and integrity across both public and private sectors, playing a pivotal role in sustainable development and good governance. Corruption within the water and sanitation sector involves actions that hinder the fair and effective enforcement of laws and regulations, divert funds earmarked for water-related purposes, disrupt equitable resource allocation processes, and artificially inflate costs (WIN, 2016). Such conducts contravene ethical, moral, traditional, legal, and civic norms.

Integrity, as defined by Transparency International, pertains to actions and behaviors that align with a set of ethical and moral principles embraced by individuals and institutions, serving as a deterrent to corruption. The UNDP underscores integrity as a critical component that complements transparency and accountability. Various elements contribute to integrity, including social accountability, participatory and pro-poor budgeting, pro-poor policymaking, alternative budgets, engaged governance, best practices, innovation, e-government, and e-democracy.

Enhanced legislative frameworks and institutional structures to rectify inefficiencies and deficiencies in water administration and governance can be accomplished through the adoption of anti-corruption measures and the advancement of transparency and accountability in decision-making processes. As well as by encouraging participatory decision-making by engaging individuals and diverse stakeholders

<sup>35</sup> Iskander, S. Md. (2023). Industrial Water Demand and Wastewater Generation: Challenges for Bangladesh's Water Industry. *ACS ES&T Water*, 3(6), 1515–1526. <https://doi.org/10.1021/acsestwater.3c00023>

<sup>36</sup>Bradley, D. (2020). Risky responsibilities for rural drinking water institutions: The case of unregulated self-supply in Bangladesh. *Global Environmental Change*, 65, 102152. <https://doi.org/10.1016/j.gloenvcha.2020.102152>

<sup>37</sup> Karim, S. (2022). A Critical Appraisal of the Sustainability of Bangladesh's Water Governance from Nexus Perspectives. *Bangladesh Political Science Review*, 15(1), 227–253. <https://doi.org/10.57074/WPMU4745>

<sup>38</sup>Islam, Md. R., Jahan, C. S., Rahaman, Md. F., & Mazumder, Q. H. (2020). Governance status in water management institutions in Barind Tract, Northwest Bangladesh: An assessment based on stakeholder's perception. *Sustainable Water Resources Management*, 6(2), 21. <https://doi.org/10.1007/s40899-020-00371-1>

in the delivery of water services. This can be facilitated by establishing avenues for involvement, such as organizing meetings and initiatives where individuals can interact with agencies and offer input. Ensure the enforcement of environmental laws and regulations pertaining to water resources management.

A study on water integrity recommended developing concrete indicators for monitoring progress and development of evidence-based strategies to address corruption risks in the water sector. The study also suggested the implementation of time-bound anti-corruption action plans, with specific indicators to monitor progress and effectiveness. Effective institutionalization and implementation of the Right to Information Act allows public access to data and information related to budgets and expenditure in the water sector. Strengthening the role of the National Water Resources Council as a watchdog for the sector, ensuring its functionality and effectiveness in addressing corruption issues.

The delayed implementation of anti-corruption action plans within the water sector can perpetuate corrupt practices, impeding progress towards transparent and accountable water service delivery processes. This delay can sustain inefficiencies in legislative frameworks, institutional structures, and water administration and governance, allowing corruption to persist. Moreover, it undermines public trust and confidence in the water sector by perpetuating a lack of transparency and accountability in the utilization of water resources.

Failure to implement anti-corruption action plans in a timely manner can also diminish the effectiveness of collaborative efforts with municipalities and civil society in addressing water integrity aspects and combating corruption. Additionally, delayed implementation jeopardizes the achievement of sustainable coastal management goals, as it may hinder the enforcement of environmental laws and regulations, creating loopholes for unchecked corrupt practices. Thus, swift and decisive action is essential to mitigate these risks and uphold the integrity of the water sector.

Timely implementation ensures that anti-corruption action plans in the water sector are put into effect promptly, reducing the window of opportunity for corrupt practices to persist. It allows for the establishment of transparent and accountable water service delivery processes, as delays can hinder the implementation of necessary policies and guidelines. Timely implementation enables the timely collection, auditing, and reporting of data, making information more accessible to the public and enhancing transparency in the water sector. It facilitates the enforcement of regulations and standards, such as environmental impact assessments and sector monitoring systems, which are essential for ensuring transparency in the use of water resources. Prompt implementation facilitates the enforcement of regulations and standards, such as comprehensive audits and open procurement processes, which promote transparency and prevent corruption. It enables the timely identification and resolution of gaps in water administration and governance, fostering a corruption-free environment in water service delivery.

### 3.5. Gender, Social Inclusion

Promoting gender equality and inclusivity in water-related projects and policies. This includes involving women in the decision-making process and considering their perspectives and needs. Women are universally acknowledged as the primary managers of domestic water, responsible for both its provision and usage. This multifaceted role, especially prevalent in rural areas, has raised considerable global concern due to constraints such as the inaccessibility and unreliability of water sources, primarily stemming from issues related to quantity and quality. Recognizing the universality of these constraints, the strategic water-related requirement for women has been identified as access to convenient,

reliable, and safe water sources located near their homes. It is anticipated that such facilities will contribute to their well-being and development by offering greater convenience, improving health outcomes, and creating enhanced socio-economic opportunities.

In recent years, there has been a broadening of the perspective on women's participation in the domain of water resources management. The Ministerial Declaration adopted at the International Conference on Freshwater in Bonn in 2001 emphasizes that water resources management should embrace a participatory approach. It highlights the importance of involving both women and men and ensuring equal participation in managing the sustainable use of water resources and sharing its benefits. Furthermore, the Declaration underscores the need to strengthen the role of women in water-related areas and expand their participation in these endeavors.

Gender-based behavioral norms dictate that the task of water collection is predominantly associated with women due to their traditional roles within the domestic sphere. However, these norms have expanded to encompass women's association with the entire domestic space. In this broader sense, the domestic space represents the working area traditionally assigned to women. Conversely, beyond the home, women's involvement decreases, and men's begins, with men typically identified with activities outside the domestic realm, referred to as the extra-domestic space.

Gender dynamics significantly influence decision-making processes related to water resource management. While women typically make decisions concerning domestic water management, men traditionally assume responsibility for water management issues outside the domestic sphere. Specifically, men are expected to take on formal decision-making roles concerning the creation, maintenance, and overall management of water resources. In contrast, women are often expected to participate by communicating their needs through informal channels within households and through women's groups outside the home.

Gender dynamics reveal that gender differentiation contributes to social complexities in accessing improved water supply interventions. In many instances, improved water sources are installed within areas socially categorized as elite boundaries. It is essential for development bureaucracies responsible for this task to recognize that addressing these complexities goes beyond simply providing physical structures and importing "top-down" institutions. Instead, they must focus on designing and implementing water supply programs that are attuned to the socio-cultural realities of the user communities.

#### **4. Study Findings:**

The assessment of water integrity within the Rajshahi and Khulna Water Supply and Sewerage Authorities (WASA) has yielded significant insights into the governance and operational dynamics of these vital institutions. Through a multifaceted examination encompassing qualitative and quantitative analyses, key aspects of transparency, accountability, and participation within the water sector have been elucidated.

Preliminary findings indicate notable variations in the integrity landscape between the two WASAs, underscoring the nuanced challenges and opportunities inherent within each jurisdiction. While both entities exhibit strengths in certain areas, such as regulatory frameworks and community engagement initiatives, weaknesses and vulnerabilities have also been identified, particularly concerning procurement processes and stakeholder inclusivity.

Furthermore, comparative analyses between Rajshahi and Khulna WASAs reveal divergent approaches to addressing integrity risks and implementing corrective measures. These disparities underscore the importance of context-specific interventions tailored to the unique needs and circumstances of each locality.

Overall, the findings underscore the imperative for sustained efforts towards enhancing water integrity within Rajshahi and Khulna WASAs, with a focus on fostering greater transparency, strengthening accountability mechanisms, and promoting meaningful stakeholder participation. These insights will inform targeted interventions aimed at bolstering the governance and operational efficiency of these critical water management entities.

#### a. Policy provisions, strengths and limitations.

Water and sanitation services are essential for human health, social well-being, and economic development. These services are critical for maintaining public health and preventing the spread of diseases. However, water and sanitation services are not uniformly accessible worldwide, and differences exist in how they are provided and managed. In general, activities related to water and sanitation can be broadly divided into two categories: urban and rural-oriented. In Bangladesh, the Department of Public Health Engineering (DPHE) is primarily responsible for providing rural water and sanitation services. DPHE operates and maintains rural water supply systems, including tube wells, hand pumps, and deep wells, as well as constructing latrines and other sanitation facilities. In contrast, urban water and sanitation services in Bangladesh are managed by different authorities, including the Water Supply and Sewerage Authority (WASA) and City Corporations. These agencies are responsible for the supply of piped water to urban areas, as well as the construction and maintenance of sewerage systems and operating cleanliness services.

In 2013, the Bangladesh government enacted the Bangladesh Water Act 2013 with the aim of regulating the holistic development, management, extraction, distribution, utilization, safeguarding, and preservation of water resources. Within the Water Act 2013, water resources encompass surface water, groundwater, rainwater, atmospheric water, and water from estuaries, floodplains, coasts, or similar locales. As per Article 3(1) of the Act, all rights pertaining to these water bodies are conferred upon the State, acting on behalf of its citizens. Furthermore, Article 3(2) of the Act recognizes access to drinking water and water for hygiene and sanitation as fundamental rights for all individuals.

This section of the report delves into the legal framework governing the water and sanitation sector in Bangladesh, employing the Transparency, Accountability, Participation, and Anti-Corruption (TAPA) approach. Key legal instruments guiding the sector encompass various acts, rules, policies, and plans, including but not limited to:

- Embankment and Drainage Act of 1952
- Bangladesh Water Act of 2013
- Bangladesh Water Rules of 2018
- National Water Policy of 1999
- National Water Management Plan of 2001
- National Environment Policy of 2018
- Bangladesh Climate Change Strategy and Action Plan (BCCSAP) of 2009
- National Adaptation Plan of 2022
- Review of past performances (FAP12)

- Coastal Embankment Improvement Project-1 (CEIP-1)
- Right to Information Act
- National Integrity Strategy.

The study conducted a thorough review of national and regional policies, rules, and regulations pertaining to water and sanitation, with a specific focus on their implications for the operations of WASA (Water Supply and Sewerage Authority) and city corporations. The findings derived from this review are as follows:<sup>39</sup>

<b>National Strategy for Water Supply and Sanitation 2021</b>		
<b>Policy Provision</b>	<b>Strengths</b>	<b>Limitations</b>
The 2021 Strategy has outlined three core pillars: expanding the reach and quality of WASH (Water, Sanitation, and Hygiene) services, addressing persistent and emerging challenges within the sector, and strengthening governance, coordination, monitoring, and reporting mechanisms. This strategic framework is designed to provide a strategic direction for activities aimed at attaining sustainable development goals in the WASH sector.	Strategy 14 underscores the importance of adopting an integrated and community-involved development approach, emphasizing community engagement across all phases of development, including monitoring and awareness-raising. Additionally, it highlights the allocation of the Annual Development Program (ADP) to Local Government Institutions (LGIs) based on their specific needs and performance in managing water supply and sanitation systems. Strategy 16 mandates compliance with existing laws, regulations, policies, and strategies, ensuring adherence to established guidelines.	However, the strategy lacks clarity regarding the specific laws or policies that stakeholders must follow, leading to ambiguity and potentially hindering effective implementation. This lack of specificity raises concerns about the strategy's practicality and its ability to guide stakeholders on legal and policy requirements. Consequently, the strategy's ambiguity may impede accountability within the sector, jeopardizing efforts to promote fairness and justice in project execution.
<b>Bangladesh Water Act, 2013</b>		
<b>Policy Provision</b>	<b>Strengths</b>	<b>Limitations</b>
Constructing any structure on or near a flood control embankment without proper authorization is strictly prohibited to maintain the area's sustainability. This regulation acts as an anti-corruption measure by mandating permission for all construction activities,	The prohibition outlined in the act aims to prevent unauthorized construction near flood control embankments, thereby ensuring the sustainability of these structures by mitigating encroachments. Such encroachments have the potential to impede effective flood management practices and pose risks to the safety of surrounding areas. Additionally,	The lack of specific details in the act regarding procedures, criteria, and requirements for obtaining permission to construct structures near flood control embankments poses a risk of inconsistent interpretation or application, potentially hindering effective implementation. This

<sup>39</sup> This analysis is a customized version of WIN, Bangladesh water integrity assessment 2023.

<p>ensuring no exemptions by default.</p> <p>The Executive Committee is authorized to issue directives ensuring embankment sustainability, promoting transparency and preventing potential exploitation. This mechanism guarantees permission prior to construction near embankment zones.</p> <p>Furthermore, the committee can impose restrictions or conditions on activities altering floodwater flow to protect area integrity. Through enhanced oversight and strict law enforcement, these actions effectively combat corruption</p>	<p>the act has bestowed authority upon the Executive Committee to issue directives and uphold the sustainability of embankments. This empowerment enables a specialized entity to oversee and enforce adherence to regulations, thereby enhancing the maintenance and functionality of flood control infrastructure by imposing restrictions on activities that obstruct or divert floodwater flow through embankments. These measures are crucial in safeguarding the effectiveness of flood management strategies.</p>	<p>absence of clear guidelines could lead to confusion among stakeholders, including developers and regulatory authorities, about the proper protocols for engaging in construction activities near flood control structures. Consequently, there is a possibility of delays, disputes, and legal challenges arising from differing interpretations of the regulations, which could impede the overall goal of mitigating flood risks and ensuring public safety.</p> <p>Moreover, the act fails to provide a comprehensive explanation of enforcement mechanisms or penalties for non-compliance. Without clearly defined enforcement provisions, ensuring adherence to regulations and addressing violations effectively may be challenging. Uncertainty regarding the consequences of non-compliance could create loopholes exploited by violators, undermining the regulatory framework's integrity and overall effectiveness in promoting responsible construction practices near flood control embankments.</p> <p>Additionally, the act's focus primarily on flood control embankments may</p>
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		<p>overlook other critical water-related issues, such as water quality, pollution prevention, and water resource management. An inclusive water act should address a broader range of concerns to ensure comprehensive water governance and effectively tackle interconnected challenges related to water management.</p> <p>Incorporating provisions addressing various aspects of water conservation, pollution control, and sustainable resource management can better safeguard water resources for present and future generations while promoting environmental sustainability and resilience against evolving threats and challenges.</p>
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<b>Bangladesh Water Rules, 2018</b>		
<b>Policy Provision</b>	<b>Strengths</b>	<b>Limitations</b>
<p>Section 4 of the Water Rules 2018 mandates the relevant authority to actively collect information on Trans-Boundary Rivers and other water resources, storing this data in a centralized database to ensure transparency in water resource management.</p> <p>In Section 5(4), the objective of conducting public hearings is outlined, emphasizing the importance of involving communities, organizations, and experts in formulating the National Water Policy to</p>	<p>The proactive data collection clause in Section 4 ensures the maintenance of an up-to-date database on Trans-Boundary Rivers and other water resources, facilitating informed decision-making and effective water resource management. This provision equips decision-makers with comprehensive information crucial for sustainable water governance practices.</p> <p>Section 5(4) emphasizes public involvement through consultations, fostering inclusivity in policy development and enhancing the credibility and efficacy of the National Water</p>	<p>The rule's failure lies in its inability to adopt a comprehensive and integrated approach to water resource management. The primary focus of the rules is on regulating water usage and abstraction, neglecting broader issues such as pollution control, watershed management, and conservation. This limited scope hinders the effectiveness of the rules in addressing the multifaceted challenges associated with water resource management.</p>



<p>facilitate broad participation in decision-making.</p> <p>Section 7 emphasizes the necessity of establishing water costs to ensure long-term sustainability in water distribution operations within a robust financial and legal framework, underscoring the importance of transparency in this aspect of water management.</p> <p>In Section 11, the Director General is granted the authority to delegate inspection tasks of specific areas or project sites across the country to officials from the Water Resources Agency or other relevant agencies, highlighting the importance of stakeholder participation under Transparency, Accountability, and Public Access (TAPA).</p> <p>According to Section 27, the relevant committee is obligated to engage with the local population to identify solutions to water-related crises, devise initiatives, implement monitoring mechanisms for water resources, and enforce suitable regulations. Local participation is crucial for ensuring stakeholders' interests are adequately represented and balanced in the decision-making process.</p>	<p>Policy. Engaging the public ensures diverse perspectives are considered, leading to more robust water management frameworks.</p> <p>The introduction of water pricing mechanisms in Section 7 acknowledges the financial aspects of water distribution operations, promoting environmentally sustainable and economically efficient practices. By integrating cost considerations, this provision encourages responsible water resource use.</p> <p>Section 11's provision for delegating inspection duties streamlines monitoring and enforcement activities, enhancing compliance with water resource regulations. This delegation facilitates a more agile regulatory framework, contributing to effective enforcement.</p> <p>Mandating District Integrated Water Resources Management Committees in Section 14 encourages grassroots participation and collaboration in water resource management. This decentralized approach integrates local knowledge into decision-making, leading to more contextually relevant strategies.</p> <p>Section 27 highlights the importance of engaging relevant committees with the local community, promoting dialogue to address water-related challenges and enforce regulations. This provision</p>	<p>Moreover, the rules lack robust enforcement mechanisms and penalties for non-compliance, which undermines their effectiveness in curbing illegal water extraction, pollution, and unsustainable practices. Without proper enforcement measures, the rules risk being disregarded, leading to continued degradation of water resources.</p> <p>Another critical aspect that the rules fail to address is the impacts of climate change on water resources. In countries like Bangladesh, which are highly vulnerable to climate change, rising sea levels and changing precipitation patterns directly affect water availability. Therefore, it is imperative for the rules to incorporate provisions for climate change adaptation and resilience to ensure the sustainability of water resources in the face of changing climatic conditions.</p> <p>By neglecting these crucial aspects, the rules fall short of providing a holistic and effective framework for managing water resources. It is essential for policymakers to reevaluate the existing rules and introduce amendments that take into account the interconnected nature of</p>
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	<p>ensures inclusive practices and active participation of local stakeholders in water governance.</p> <p>Involving local populations in water management processes, as advocated in Section 27, fosters a sense of ownership and responsibility, leading to more sustainable practices. This inclusive approach ensures local concerns are considered, resulting in effective water governance strategies tailored to community needs</p>	<p>water resource management, enforcement mechanisms, and the impacts of climate change. Failure to address these issues could lead to irreversible damage to water ecosystems and jeopardize the availability of clean and safe water for future generations.</p>
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**Pro Poor Strategy for water & sanitation sector in Bangladesh- 2005**

<b>Policy Provision</b>	<b>Strengths</b>	<b>Limitations</b>
<p>The strategy aimed at assisting impoverished individuals is structured around four key components. These include defining hardcore impoverished households, establishing fundamental minimum services, identifying and organizing impoverished households, and implementing a mechanism for distributing subsidies.</p> <p>Additionally, the strategy emphasizes providing micro-credit support, generating employment opportunities, and strengthening capacities within local government institutions. It underlines the significance of monitoring and evaluation conducted by these institutions.</p> <p>In conclusion, the strategy proposes that hardcore impoverished households should receive full subsidies</p>	<p>Sections 4 and 5 have clearly outlined the fundamental requirements concerning the provision of safe water and the level of sanitation facilities for impoverished individuals, particularly those categorized as the hard-core poor. These sections serve as a blueprint for policymakers and stakeholders to understand the crucial elements needed to address water and sanitation issues within disadvantaged communities.</p> <p>Furthermore, Section 6 places a significant emphasis on the necessity to prioritize the hardcore poor when it comes to the allocation of resources for water supply and sanitation facilities, recognizing their heightened vulnerability and dire need for assistance. Additionally, Section 5.2 goes into detail by including a specific provision that mandates Local Government Institutions (LGIs) to actively engage with the poor population in decision-making processes</p>	<p>The Strategy is deficient in providing a comprehensive framework that would effectively hold individuals within specific sectors accountable for implementing measures that cater to the needs of impoverished and marginalized populations, thereby falling short in establishing meaningful guidelines for ensuring social responsibility towards these vulnerable groups.</p>

<p>while also being obligated to contribute towards the operational and maintenance costs of water and sanitation facilities.</p>	<p>related to water and sanitation, ensuring their voices are heard and their perspectives are taken into account.</p>	
<p><b>National Adaptation Plan (2023)</b></p>		
<p><b>Policy Provision</b></p>	<p><b>Strengths</b></p>	<p><b>Limitations</b></p>
<p>This plan puts special emphasis on the marine ecosystem. Monitoring and surveillance are given priority to ensure transparency and accountability.</p>	<p>The plan acknowledges the significance of enhancing functional participatory water management. Engaging stakeholders and local communities in water management processes fosters inclusivity, local ownership, and effective implementation of water-related adaptation measures. By prioritizing participatory approaches, the plan recognizes the value of indigenous knowledge, perspectives, and involvement in decision-making processes.</p>	<p>The plan lacks the establishment of an enabling policy framework to incentivize private sector involvement in adaptation, develop strategies to secure increased climate funding, and integrate the National Adaptation Plan (NAP) into overall development planning processes. Comprehensive approaches involving the entire government and society are needed to address these gaps effectively.</p> <p>While the approach outlined in the plan aims to reduce climate risks, facilitate recovery, raise awareness, and promote behavioral changes to support ongoing transformation, proper coordination remains a significant challenge according to the plan. Improved coordination is essential for ensuring the effectiveness of these efforts.</p> <p>Another critical priority is the establishment of an early warning and dissemination system for water resource management, which is</p>

		urgently needed to ensure accountability and timely response to water-related challenges.
<b>The Right to Information Act, 2009</b>		
<b>Policy Provision</b>	<b>Strengths</b>	<b>Limitations</b>
The legal provisions that grant citizens the right to obtain information from public offices and authorities enable them to formally or electronically solicit information. Information Officers are designated to receive and address requests within a period of 20 working days, with charges imposed for the provision of information. These measures are implemented to uphold transparency and accountability in governance, ensuring that the public has access to relevant information as a fundamental right.	<p>The Act serves as a cornerstone for enhancing transparency and accountability within public offices and authorities, fostering public trust and deterring corrupt practices. By mandating transparency, it promotes openness and honesty in government operations, empowering citizens with the fundamental right to access information. This enables individuals to make well-informed decisions and actively participate in civic affairs, fostering a more engaged and knowledgeable citizenry.</p> <p>Moreover, the emphasis on transparency and citizen empowerment contributes to a strengthened democratic society, where informed individuals play a pivotal role in shaping public policies and holding officials accountable. Upholding democratic principles, the Act ensures governance processes are conducted with integrity and in the best interests of the public.</p> <p>In essence, the Act is vital for building a robust and participatory democracy, where transparency, accountability, and citizen engagement are paramount values.</p>	The Act's requirement of a 20-working-day timeframe to respond to information requests could lead to delays, particularly in cases of high request volumes or when the information sought is complex. This may hinder the efficient dissemination of information and could diminish the Act's effectiveness. Additionally, the Act allows for the imposition of fees for information provision, which could pose financial obstacles, especially for marginalized or economically disadvantaged individuals. Levying fees may create barriers to accessing information and could potentially undermine the Act's goal of ensuring equal access to information for all citizens.
<b>National Integrity Strategy (NIS) of Bangladesh</b>		
<b>Policy Provision</b>	<b>Strengths</b>	<b>Limitations</b>

<p>In Section 1.2, Integrity was previously described as the embodiment of behavioral excellence deeply rooted in ethics, morality, and honesty, reflecting a profound commitment to longstanding norms, values, customs, and societal principles. At the individual level, integrity entails a sense of duty and sincerity towards one's responsibilities, emphasizing unwavering honesty. This complex concept also involves strict adherence to established ethical standards and a deep respect for the moral fabric of society.</p> <p>Section 9 explicitly mandates the formation of an 'Ethics Committee' within every Ministry/Division, along with the appointment of an 'Integrity Focal Point' for this purpose. The Cabinet Division is tasked with serving as the Secretariat for this institutional framework, overseeing and coordinating the various initiatives outlined in this comprehensive Strategy. This strategic approach highlights the essential role of ethical considerations in nurturing a culture of integrity within the state and broader society, reinforcing the Government's constitutional obligation to implement diverse measures aimed at upholding these principles and values, as outlined in Section 4.1a.</p> <p>Furthermore, promoting integrity within the state and</p>	<p>The Strategy provides a clear interpretation of integrity, defining it as behavioral excellence shaped by ethics, morality, and honesty, with a strong emphasis on upholding established norms, values, customs, and societal principles to foster a collective understanding of integrity. This interpretation serves as a guiding principle for individuals and institutions, directing them towards ethical conduct and principled actions.</p> <p>The establishment of Ethics Committees within each Ministry/Division and the appointment of an Integrity Focal Point demonstrate a firm commitment to fostering integrity within governmental bodies. This institutional framework ensures the presence of specialized structures and mechanisms dedicated to addressing integrity-related issues, promoting ethical conduct, and combating corruption effectively.</p> <p>Recognizing the government's constitutional duty to prioritize integrity in its operations and interventions reflects a deep commitment to promoting integrity in both the state and society. This acknowledgment highlights the critical role of integrity in governance and societal well-being, emphasizing the importance of ethical conduct and principled decision-making in all governmental affairs.</p>	<p>The National Integrity Strategy (NIS) appears to primarily focus on enhancing integrity within governmental and public sectors but lacks a clear and meaningful time-bound action plan. A more comprehensive strategy that engages non-governmental entities and addresses integrity challenges across various sectors of society could significantly improve its overall effectiveness. Additionally, the Strategy lacks detailed information on specific guidelines, plans, interventions, or actions necessary to promote integrity. This lack of specificity may lead to inconsistencies in implementation across different ministries and divisions.</p> <p>Moreover, the NIS does not outline specific provisions for monitoring and evaluating the progress and outcomes of its initiatives. The absence of robust monitoring and evaluation mechanisms could hinder the evaluation of the Strategy's effectiveness, identification of areas for improvement, and ensuring accountability. It is crucial for a strategy of this nature to have clear monitoring and evaluation frameworks in place to accurately assess its success and impact.</p>
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<p>society is not merely discretionary but rather a fundamental Constitutional imperative requiring the implementation of targeted interventions to advance this overarching goal. These interventions are strategically designed to align with the core principles of transparency, accountability, and anti-corruption, ensuring a holistic approach to fostering a culture of integrity and ethical conduct within both governmental and societal spheres.</p>		
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**Local Government (Municipalities) Act, 2009**

<b>Policy Provision</b>	<b>Strengths</b>	<b>Limitations</b>
<p>Chapter III, section 54(3) stipulates that Municipalities are required to utilize advanced information technology to inform citizens about all government services, including those outlined in the Citizen Charter, particularly focusing on modern services.</p> <p>Section 57 emphasizes citizen participation, allowing expert individuals or groups to attend relevant meetings of the council, standing committee, or any other committee upon expressing their interest. Their opinions on specific matters will be considered, and if appropriate, decisions or recommendations will be made based on these opinions.</p> <p>For effective coordination among agencies responsible for development work, Section 59 mandates the</p>	<ul style="list-style-type: none"> <li>- The Act makes the performance of Paurashavas more transparent and specific, aiming to provide better public services in urban areas.</li> <li>- It introduces a well-organized law for the development of town-based local governments, enhancing control and guidance by the national government.</li> <li>- The Act specifies detailed functions for Paurashavas, including development planning and implementation, to ensure efficient use of financial resources.</li> </ul>	<ul style="list-style-type: none"> <li>- The Act may not fully address the issue of inadequate tax collection, which can hinder the payment of salaries and the delivery of services and development activities by the Paurashava.</li> <li>- It allows the government to intervene and take actions against Paurashavas' decisions if deemed not in line with the Act or against the public interest, potentially limiting the autonomy of local governments.</li> <li>- The requirement for government approval on various matters, including the imposition of taxes and development plans, may slow down the decision-making process and implementation of initiatives.</li> </ul>

<p>formation of one or more committees aimed at ensuring coordination in various matters, including development activities. The involvement of concerned individuals from the municipal area will be ensured, with the composition and scope of these committees determined by rules.</p> <p>Concerning infrastructure development pertaining to water supply and sewerage, Section 97 outlines that municipalities involved in municipal environmental infrastructure projects, such as water supply, drainage, sewerage, waste management, roads, and commercial infrastructure, may implement projects using two specified methods for the benefit of municipal citizens.</p> <p>To uphold the right to information, Section 112(1) of the act states that, subject to existing laws, any citizen of Bangladesh has the right to receive information relating to the municipality in the prescribed manner.</p>		
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**Rajshahi City Corporation Act, 1987**

Policy Provision	Strengths	Limitations
<p>In Fourth part, Second section, Water supply and drainage systems</p> <p>85 (1) Subject to any other law for the time being in force, the Corporation shall provide for the supply of pure water in</p>	<ul style="list-style-type: none"> <li>- The Rajshahi City Corporation is officially formed after 75% of its elected commissioners have been elected and their names published, ensuring a democratic process for its constitution.</li> <li>- The term for the Rajshahi City Corporation is set for five years,</li> </ul>	<p>This Ordinance was repealed by the Local Government (City Corporation) Act, 2009 (Act No. 60 of 2009).</p>



<p>sufficient quantity for public and private use in the City.</p> <p>(2) The Corporation may, if it considers it necessary or the Government directs, formulate and implement water supply schemes in accordance with the rules for the purpose of making necessary arrangements for the supply, storage and distribution of water.</p> <p>(3) In cases where piped water supply is provided, the Corporation may arrange for water supply to public and private houses in accordance with the regulations and collect money therefor.</p> <p>87 (1) Subject to any other law for the time being in force, the Corporation shall provide adequate drainage sewers for the disposal of water in the city and shall construct, maintain and preserve and keep clean the sewers with due regard to the health and convenience of the public.</p>	<p>starting from the day of its first meeting after being officially formed, which provides a clear timeline for governance.</p> <p>- Actions taken under the previously repealed ordinance are considered valid, ensuring continuity and legal stability for decisions made before the amendment.</p>	
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<b>The Khulna City Corporation Ordinance 1984</b>		
<b>Policy Provision</b>	<b>Strengths</b>	<b>Limitations</b>
<p>In Part Iv Chapter li Water Supply And Drainage The same provision as stated above in the Rajshahi City Corporation act also included in this act.</p>		<p>This Ordinance was repealed by the Local Government (City Corporation) Act, 2009 (Act No. 60 of 2009).</p>
<b>Local Government (City Corporation) Act, 2009</b>		
<b>Policy Provision</b>	<b>Strengths</b>	<b>Limitations</b>
<p>Though specific clause for water and sanitation services by the City corporation was not found in the act but transparency and accountability related to</p>	<p>- The Local Government (City Corporation) Act, 2009 strengthens local governance by providing a legal framework for the operation and management</p>	<p>- The Act may not fully address the dynamic needs of urban development, including infrastructural development and building</p>



<p>disclosure of information through Citizen Charter and Citizens Right to information are importantly mentioned in the section two chapter 6 and section 5 chapter 2]</p> <p>44 (1) The Corporation shall publish the details of provision of civil services, conditions of provision of services and confirmation of fixed period of provision of services through a document entitled “Nagarik Sanad”.</p> <p>110 (1) Any citizen shall have the right to obtain any information relating to the Corporation in the prescribed manner.</p>	<p>of city corporations, ensuring accountability and efficiency in urban management.</p> <ul style="list-style-type: none"> <li>- The Act empowers City corporation to provide various civic benefits, coordinate activities, and implement urban development plans for the welfare of citizens, ensuring a structured approach to urban management.</li> <li>- It mandates the supply of water, drainage, waste management, and the development of infrastructure like roads and public health facilities, directly contributing to improved living conditions in City corporation areas.</li> <li>- The Act allows for the formulation of plans aimed at ensuring economic and social justice, highlighting its focus on comprehensive urban development and the well-being of the community.</li> </ul>	<p>control, to provide municipal services to citizens in municipal areas as urban challenges evolve over time.</p> <ul style="list-style-type: none"> <li>- It might not have provisions for the technical management and financial capacity required for municipalities to perform their functions effectively, which can hinder the delivery of services to citizens.</li> </ul>
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**b. AWIS scoring of water governance rules and regulations.**

Two extensive workshops, each spanning an entire day, were held consecutively in two major cities: Rajshahi and Khulna. The workshops took place at the premises of the Rajshahi City Corporation (RCC) and the Khulna City Corporation (KCC), with one day dedicated to each city respectively (one day at RCC and one day at KCC). These workshops served as collaborative platforms for stakeholders from diverse backgrounds and levels of engagement. A total of 54 individuals actively participated in these sessions, representing a broad spectrum of stakeholders including government officials, media, civil society representatives, community leaders, youths, NGO representatives, industry professionals, and concerned citizens.

To assess the strengths of the policy and regulation to satisfy integrity indicators such as transparency, accountability, and inclusion, participants in the AWIS workshop were tasked with providing their scores for each category.

**Scoring Procedure:**

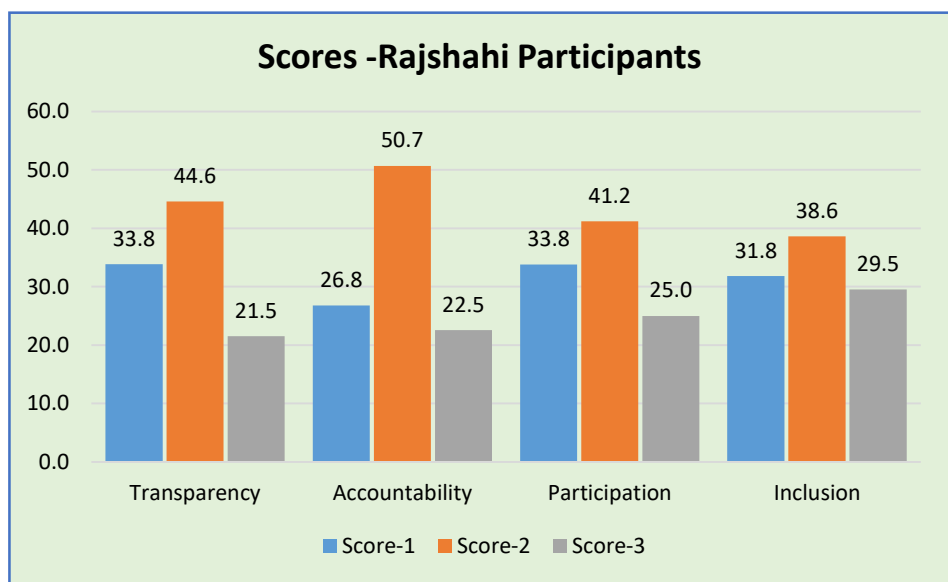
The scoring process was conducted confidentially, with participants providing anonymous annotations. It operated like a voting system, with each participant independently assigning scores without disclosing

individual assessments. Each indicator was divided into scores ranging from 1 to 3, and represented by different colors.

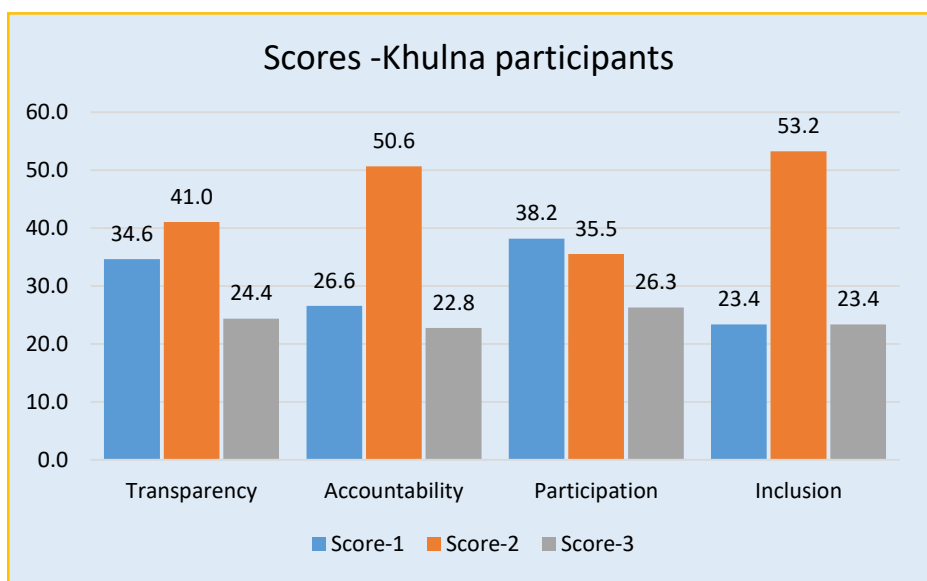
**Scores of Indicators:**

Strong Policy and Regulation Exist with Very Limited Gaps	3	
Partially Developed Policy and Regulations with Opportunity for Improvement	2	
Weak Policy and Regulation with Significant Gaps Requiring Extensive Revision	1	

The summary of the scoring exercise is depicted in the graph below, illustrating the findings for each category of response regarding the strength to promote integrity in the Water and Sanitation sector in Rajshahi and Khulna City Corporations.



**Figure-1: Indicator wise Combined Score of Rajshahi**



**Figure-2: Indicator wise Combined Score of Khulna**

**Score - 3: Strong Policy and Regulation Exist with Very Limited Gaps**

This score indicates that the existing policy and regulations are robust and comprehensive, with minimal gaps or deficiencies. It suggests that the framework is well-established and effectively addresses integrity indicators such as transparency, accountability, and inclusion.

**Score- 2: Partially Developed Policy and Regulations with Opportunity for Improvement**

A score of 2 signifies that while the policy and regulations are in place, there are still areas that need development or enhancement. However, there is potential for improvement, and with further refinement, the framework can reach an acceptable level in terms of integrity indicators.

**Score- 1: Weak Policy and Regulation with Significant Gaps Requiring Extensive Revision**

This score reflects that the policy and regulation framework is lacking in strength and effectiveness. There are substantial gaps and deficiencies that necessitate significant interventions to revise and strengthen the existing framework. Achieving acceptability in terms of integrity indicators would require substantial efforts and revisions.

**Annotations:**

Participants were requested to provide annotations alongside their scores. The summary of the participants' views is outlined below:

**Policy and Legislation**

"WASA faces several critical challenges that hinder its effectiveness. Firstly, its policy framework is outdated, lacking the necessary updates to address evolving needs. Additionally, there is a notable absence of a SMART (Specific, Measurable, Achievable, Relevant, Time-bound) policy, despite public demand for such strategic planning. This deficiency renders WASA's policy weak compared to counterparts in other countries. Compounding the issue is a severely deficient legislative system in water sanitation, allowing service providers to exploit loopholes. To enhance WASA's services and ensure effective governance, robust management and legislative reforms are imperative."

**Service and Legislation**

"WASA is confronted with several pressing issues that undermine its service delivery. Primarily, the services provided fall short of expectations, failing to meet the needs of the populace adequately. Moreover, accountability is lacking among service providers, leaving the public without recourse for subpar service. Compounding matters, some personnel within WASA lack the requisite expertise in delivering quality water services. Further exacerbating the situation is the absence of specific legislation governing WASA service providers, leading to ambiguity in their roles and responsibilities. Consequently, many within WASA operate without clear job descriptions, providing services on a casual basis. Addressing these shortcomings necessitates the establishment of robust service rules for WASA's service providers to ensure improved service delivery and accountability."

## **Regulation**

"WASA faces significant challenges stemming from outdated regulations, which hinder its ability to effectively regulate its service providers. The existing regulatory framework is weak, allowing WASA service providers to exploit loopholes. To address these issues, specific rules and regulations tailored to the WASA sector are urgently needed. Furthermore, implementing area-specific regulations is crucial to meeting the diverse needs of the populace across different regions."

## **Anticorruption measures, Budget and Expenditure**

"At the field level, accountability among WASA staff is notably lacking, leaving the general populace without recourse for subpar service. Instances of demanding undue payments for services further exacerbate the issue, enabled by lenient enforcement and a lack of punitive measures. Moreover, the opaque nature of WASA's budget and expenditure prevents public scrutiny, disenfranchising citizens from participating in decision-making processes. To combat corruption within WASA, the establishment of a robust monitoring system is imperative, ensuring transparency and accountability throughout the organization."

## **Transparency**

"The general populace lacks access to information regarding the roles and responsibilities of WASA personnels, contributing to a lack of clarity regarding their services and accountability. While WASA offices may have general rules for service delivery, these are not readily accessible for review by the public. To ensure transparency, WASA must disclose all service delivery rules, fostering accountability and trust. Additionally, implementing a complaint box and developing a responsive mechanism for addressing complaints are crucial steps in enhancing transparency and improving service delivery."

## **Accountability**

"WASA staff lack accountability to the general populace, exacerbating the disconnect between service providers and the community they serve. The lack of clarity regarding the specific roles and responsibilities of WASA personnels further hinders public engagement and oversight. To address these issues, WASA must establish clear guidelines to ensure staff accountability to the general public, fostering transparency and trust between the organization and its stakeholders."

## **Participation**

"The general populace exhibits minimal participation in WASA programs, highlighting a significant gap in community engagement. WASA currently lacks specific rules or mechanisms to facilitate and encourage public participation in its initiatives. To address this issue effectively, WASA must establish a robust communication system aimed at fostering widespread public involvement in its programs and decision-making processes."

## **Inclusion**

"WASA currently lacks a comprehensive policy for including the general populace in its programs, leading to a notable absence of community engagement strategies. Although WASA involves the public in developing service delivery plans, the absence of a formal inclusion strategy hinders its ability to meet the diverse demands of the population. To bridge this gap and ensure effective community

participation, WASA must develop and implement a specific inclusion strategy aimed at engaging and empowering the general public in its programs and decision-making processes."

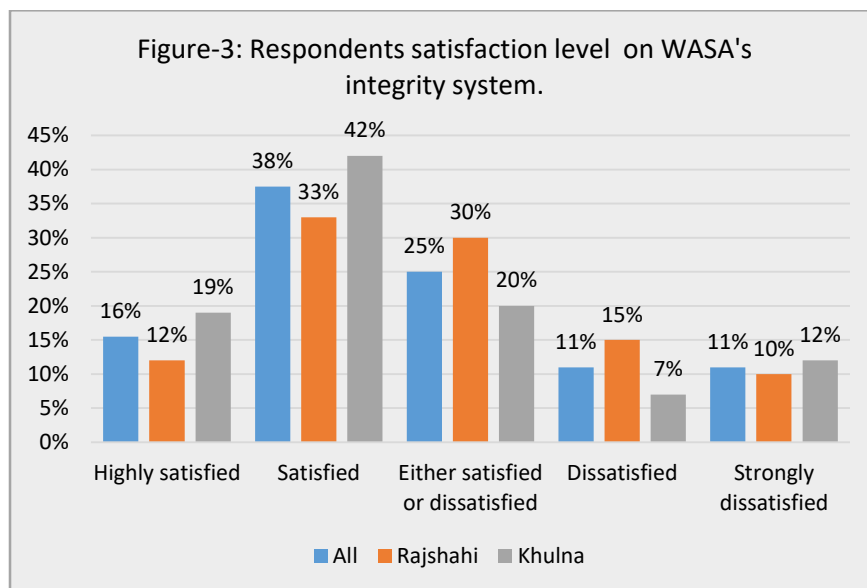
**c. Status of Water Integrity: Insights from Citizen Knowledge and Experience**

(Transparency, Accountability, Participation, Gender and Inclusion and Anticorruption measures)

**i. Citizens’ Satisfaction on WASA’s Service**

Indeed, a content citizenry plays a pivotal role in advancing principles of good governance and integrity within public institutions. Thus, the study embarked on an initial inquiry to gauge citizen satisfaction with the services provided by the Water Supply and Sewerage Authorities (WASA) and city corporations. Through the administration of semi-structured questionnaires featuring five-scale satisfaction ratings, respondents were prompted to assess their levels of contentment.

The figure below provides a visual representation of the satisfaction levels reported by residents of both Khulna and Rajshahi cities:



This preliminary assessment serves as a foundational step in understanding public perceptions and sentiments towards WASA and city corporation services, laying the groundwork for subsequent analyses and interventions aimed at enhancing governance and integrity within these institutions. The above figure revealed that yet 22 % of city population are totally dissatisfied of which 11 % are strongly dissatisfied on the system which includes transparency, accountability, people’s participations and anti-corruptions measure by authority. Though among the respondents, 16 percent cited “Highly Satisfied” 38 percent “Satisfied”, one fourth (25%) “Either satisfied or dissatisfied”.

**ii. Transparency:**

Ensuring transparency in this sector can help to prevent corruption, ensure accountability, and promote trust between stakeholders. When stakeholders have access to information about water and sanitation services and policies, they can more effectively participate in decision-making processes and hold service providers and policymakers accountable for their actions.

To measure transparency in the Rajshahi and Khulna City Corporation water and sanitation sector, the assessment participants were asked several questions related to transparency through face-to-face interview and recorded their responses. Table 1 represents detailed responses. Several questions were asked during the face-to-face interview and responses recorded accordingly. The question covered “WASA services”, “WASA encourage public demand”, “Source of information”, “Availability of Citizen charter at WASA office” “WASA’s campaign program” and “Knowledge on Water and sanitation services”. The detailed findings refer to table 1.

To validate the quantitative findings, qualitative data were collected through two other sources such as “Key Informant Interviews” and “FGDs”. The majority of the FGDs participants cited they are not fully satisfied with WASAs transparency mechanism, nearly similar opinion mentioned KIIs respondents though some of the KIIs participants were WASA and City Corporation officials and there is no significant difference between overall transparency levels.

<b>Table 1. Perceptions of Transparency: Assessing Knowledge of Rajshahi and Khulna City Corporation and WASA</b>						
<b>Response</b>	<b>Know about agencies providing WATSAN services.</b>	<b>Service providers encourage public demand</b>	<b>Citizen Charter at visible place</b>	<b>Knowledge on WASA’s campaign program</b>	<b>Knowledge on price for Watson services</b>	<b>Overall Transparency Situation</b>
<b>Rajshahi and Khulna City Corporation (n=200)</b>						
<b>Response</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>
Yes	46.0%	20.0%	50.0%	38.0%	18.0%	34.4%
No	25.5%	76.0%	30.0%	37.5%	37.5%	41.3%
Don’t know	28.5%	4.0%	20.0%	24.5%	44.5%	24.3%
<b>Rajshahi City Corporation (n=100)</b>						
Yes	45.0%	20.0%	49.0%	42.0%	19.0%	35%
No	32.0%	76.0%	30.0%	30.0%	45.0%	42.6%
Don’t know	23.0%	4.0%	21.0%	28.0%	36.0%	22.4%
<b>Khulna City Corporation (n=100)</b>						
Yes	47.0%	20.0%	51.0%	34.0%	17.0%	33.8%
No	19.0%	76.0%	30.0%	45.0%	30.0%	40%
Don’t know	34.0%	4.0%	19.0%	21.0%	53.0%	26.2%

The study findings unveiled significant gaps in public awareness and transparency regarding water and sanitation services. Specifically, it was revealed that a substantial portion of ordinary citizens, comprising 25.5%, lack basic knowledge about these services. Alarming, 28.5% of citizens remain unaware of the agency responsible for overseeing water and sanitation provisions, indicating a critical lack of clarity in governance structures.

Moreover, despite claims by authorities that they prioritize public demand in service introductions, an overwhelming 80% of respondents disputed this assertion, indicating a significant disconnect between official narratives and public experiences. The introduction of citizen charters emerged as a promising transparency mechanism; however, the accessibility and visibility of such charters remain questionable, with 50% of respondents expressing difficulty in accessing them.

Furthermore, essential transparency indicators such as service pricing and public awareness initiatives remain obscure to a considerable portion of respondents. Specifically, 37.5% of participants lack knowledge about both indicators, while 24.5% and 44.5% admitted to being completely unaware of them, respectively.

Overall, the study suggests that transparency indicators fall short of meeting citizen expectations. These findings underscore the urgent need for enhanced transparency measures and improved communication strategies to bridge the gap between authorities and citizens, ensuring greater accountability and public trust in water and sanitation services.

### iii. Accountability:

Accountability is fundamental to the equitable and effective distribution of resources, policies, and services in the water and sanitation sector. It ensures that the rights and needs of all stakeholders.

Accountability plays a crucial role in ensuring that resources, policies, and services related to water and sanitation are distributed fairly and effectively, and that the rights and needs of all stakeholders are upheld. This means that those responsible for managing and implementing water and sanitation initiatives are held responsible for their actions and decisions.

To assess the accountability mechanisms, initiatives, and practices in the water and sanitation sector of Rajshahi and Khulna City Corporations, respondents participated in face-to-face interviews and provided their responses. The detailed responses and the level of accountability practices and measures are presented in Table 2. The assessment also reveals that there is no significant difference in the accountability levels between the two cities. The face-to-face interviews were conducted, and responses were recorded accordingly. The questions covered various aspects, including the availability of complaint boxes, mechanisms for resolving complaints, and other relevant inquiries. Detailed findings can be referred to in Table 2.

Drawing from the assessment, which encompassed both quantitative data and insights from two qualitative studies, it is evident that participants expressed opinions regarding the current state of accountability within both city corporations and WASA. These opinions underscore a clear opportunity for improvement in their service delivery approaches to enhance accountability.

<b>Table-2: Understanding Public Awareness: Accountability Mechanisms in Water and Sanitation across Rajshahi and Khulna City Corporations and WASA</b>					
<b>Response</b>	<b>Any Complain box is in place</b>	<b>Any complain launches as of today</b>	<b>Complain Readdressed mechanism</b>	<b>Knowledge on WASA's campaign program</b>	<b>Cumulative Accountability status</b>
<b>Response</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>
Yes	26.0%	14.5%	21.5%	17.0%	19.75%

<b>Table-2: Understanding Public Awareness: Accountability Mechanisms in Water and Sanitation across Rajshahi and Khulna City Corporations and WASA</b>					
<b>Response</b>	<b>Any Complain box is in place</b>	<b>Any complain launches as of today</b>	<b>Complain Readdressed mechanism</b>	<b>Knowledge on WASA's campaign program</b>	<b>Cumulative Accountability status</b>
<b>Response</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>
No	46.0%	59.5%	43.5%	57.0%	51.5%
Don't know	28.0%	26.0%	35.0%	26.0%	28.75%
<b>Rajshahi City Corporation (n=100)</b>					
Yes	31.0%	11.0%	9.0%	11.0%	15.5%
No	58.0%	71.0%	57.0%	61.0%	61.8%
Don't know	11.0%	18.0%	34.0%	28.0%	22.8%
<b>Khulna City Corporation (n=100)</b>					
Yes	21.0%	18.0%	34.0%	23.0%	24.0%
No	34.0%	48.0%	30.0%	53.0%	41.3%
Don't know	45.0%	34.0%	36.0%	24.0%	34.8%

The table delineates various response categories pertaining to accountability mechanisms and practices within the Water and Sanitation sector, encompassing aspects such as the presence of complaint boxes, the initiation and resolution of complaints, mechanisms for addressing grievances, and awareness of WASA's campaign program. Each percentage in the table corresponds to the proportion of respondents within each respective response category.

According to the data presented, only 19.75% of respondents across both city corporation areas affirmed their comprehensive understanding of accountability mechanisms in place, while 51.5% indicated a lack of awareness, and 28.75% expressed uncertainty regarding the existence of accountability measures. Notably, the overall situation appears relatively more favorable in Khulna compared to Rajshahi. For instance, 61.8% of respondents from Rajshahi City reported a dearth of knowledge regarding accountability indicators, whereas 41.3% of respondents from Khulna City expressed a similar lack of awareness.

Despite authorities' claims of implementing complaint boxes and establishing mechanisms for addressing grievances, disparities between the perceptions of authorities and service recipients are evident. This underscores potential gaps.

#### iv. Participation:

Participation in decision-making processes is a fundamental aspect of democratic societies, enabling individuals to express their views and exercise their right to freedom of association and expression. In the context of the water sector, participation plays a crucial role in ensuring that all relevant



stakeholders, including communities, government agencies, NGOs, and the private sector, are actively engaged in planning, management, and decision-making related to water resources. This active involvement fosters a sense of ownership and responsibility among stakeholders, leading to more sustainable outcomes.

The assessment of participation levels among Rajshahi and City Corporation dwellers in WASA's service delivery and decision-making processes regarding water supply was conducted through various methods, including face-to-face interviews, Key Informant Interviews (KII), and Focus Group Discussions (FGDs). The quantitative survey findings revealed a strikingly low participation rate of 4.8%, with significant disparities observed between respondents from the two cities. Detailed responses to specific questions on participation status were presented in Table 3, highlighting the need for further investigation into factors affecting participation in water management decision-making.

Enhancing participation in water management processes is essential for ensuring sustainable and equitable access to water resources. Addressing barriers to participation and promoting inclusive decision-making mechanisms are critical steps towards achieving effective and sustainable water governance.

<b>Table-3: Engagement Analysis: Participation Patterns of City Dwellers in Rajshahi and Khulna City Corporation/WASA Programs</b>							
<b>Response</b>	<b>Participation in WASA/ CC arranged public hearing</b>	<b>Had opportunity to raise concern</b>	<b>Authority ensured participation in water resource management</b>	<b>Ever participate in such management events</b>	<b>Participatory planning and budgeting System is in place</b>	<b>Ever participated in planning /budget making</b>	<b>Cumulative status of Participations</b>
<b>Rajshahi and Khulna City Corporation (n=200)</b>							
<b>Response</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>
Yes	10.0%	5.0%	6.5%	2.5%	2.5%	2.5%	4.8%
No	81.0%	85.5%	77.0%	86.0%	87.5%	84.0%	83.5%
Don't know	9.0%	9.5%	16.5%	11.5%	10.0%	13.5%	11.7%
<b>Rajshahi City Corporation (n=100)</b>							
Yes	11.0%	6.0%	5.0%	3.0%	3.0%	2.0%	5.0%
No	79.0%	87.0%	81.0%	83.0%	86.0%	87.0%	83.8%
Don't know	10.0%	7.0%	14.0%	14.0%	11.0%	11.0%	11.2%
<b>Khulna City Corporation (n=100)</b>							
Yes	9.0%	4.0%	8.0%	2.0%	2.0%	3.0%	4.7%
No	83.0%	84.0%	73.0%	89.0%	89.0%	81.0%	83.2%
Don't know	8.0%	12.0%	19.0%	9.0%	9.0%	16.0%	12.2%

This analysis examines the extent of citizen engagement in programs facilitated by Water and Sanitation Authorities (WASA) or City Corporations (CC), focusing on various participation categories such as public hearings, opportunities for raising concerns, and involvement in water resource management events. The data, presented in tabular form, delineates response percentages across different response categories and subgroups, namely Rajshahi City Corporation and Khulna City Corporation. Despite claims of proactive communication and encouragement by authorities regarding public hearing events, the study reveals a substantial lack of awareness, with only 10% of respondents indicating knowledge of such programs, distributed unevenly between Khulna (9%) and Rajshahi (11%). Additionally, a significant majority (81%) expressed a lack of familiarity, while 9% remained entirely unaware of participation opportunities. Furthermore, indicators such as opportunities for raising concerns and participation in water resource management events garnered low positive responses overall, with an average positive participation rate of 4.8%, varying slightly between Rajshahi (5%) and Khulna (4.7%). The table thus serves as a valuable tool for assessing and comparing citizen engagement levels across different program categories and geographic locations, shedding light on potential disparities and patterns within water and sanitation programs organized by WASA/CC.

Despite efforts by authorities to promote participation, the findings underscore significant gaps in awareness and engagement among respondents. The disparity in awareness levels regarding public hearing programs between Khulna and Rajshahi highlights the need for targeted communication strategies tailored to specific geographic contexts. Moreover, the low positive response rates across various participation indicators signal a broader challenge in fostering meaningful citizen involvement in water sector initiatives.

By highlighting areas of low awareness and engagement, the analysis underscores the importance of enhancing communication strategies and participatory mechanisms to foster greater citizen involvement. Moving forward, policymakers and stakeholders must prioritize efforts to bridge the gap between authorities and citizens, ensuring that participation opportunities are accessible, inclusive, and responsive to the needs of diverse communities.

#### v. Gender and Inclusion:

Inclusion is a fundamental human right aimed at embracing individuals regardless of race, gender, disability, or other needs, ensuring equal access and opportunities while eliminating discrimination and intolerance. The assessment of inclusion status within the programs administered by Water and Sanitation Authorities (WASA) in Rajshahi and Khulna City Corporations is crucial for evaluating the effectiveness of efforts to promote inclusivity. Through face-to-face interviews with randomly selected respondents, this analysis examines the general inclusion status in WASA's programs and highlights differences between Rajshahi and Khulna City Corporations.

The assessment reveal that there are notable disparities between Rajshahi and Khulna City Corporations. Rajshahi City Corporation demonstrates a comparatively better inclusion status within WASA's programs than Khulna City Corporation. The low level of inclusion indicated significant challenges in ensuring equal access and opportunities within WASA's programs. The variation between Rajshahi and Khulna City Corporations suggests the presence of contextual factors such as infrastructure, socioeconomic dynamics, and governance structures may contribute to the observed differences in inclusion status between the two city corporations.

Drawing from the assessment, which encompasses both quantitative and qualitative inputs from participants, it is evident that both the Water and Sanitation Authorities (WASAs) in Rajshahi and Khulna

must prioritize the development of robust strategies for inclusivity, particularly focusing on marginalized communities.

The table below illustrates public perceptions of inclusion and gender equality within WASA activities, offering insights into the state of water integrity through inclusion.

<b>Table-4: Equitable Engagement: Analyzing Gender and Inclusion</b>						
<b>Response</b>	Women and marginalized have equal opportunity to participate WATSAN	Women and under privileged working in the WASA/ CC	Women and marginalized have easy access get services from WASA	Anybody attended in WASA / CC arranged program	Women are welcomed to express their concern	Cumulative status of Inclusion
<b>Rajshahi and Khulna City Corporation (n=200)</b>						
<b>Response</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>	<b>Percent</b>
Yes	2.5%	5.0%	12.5%	2.5%	4.5%	5.4%
No	93.0%	88.0%	80.0%	83.5%	83.5%	85.6%
Don't know	4.5%	7.0%	7.5%	14.0%	12.0%	9.0%
<b>Rajshahi City Corporation (n=100)</b>						
Yes	2.0%	6.0%	22.0%	3.0%	5.0%	7.6%
No	91.0%	89.0%	74.0%	78.0%	78.0%	82.0%
Don't know	7.0%	5.0%	4.0%	19.0%	17.0%	10.4%
<b>Khulna City Corporation (n=100)</b>						
Yes	3.0%	4.0%	3.0%	2.0%	4.0%	3.2%
No	95.0%	87.0%	86.0%	89.0%	89.0%	89.2%
Don't know	2.0%	9.0%	11.0%	9.0%	7.0%	7.6%

The table outlines respondents' perspectives on gender equality and inclusion in Water and Sanitation (WATSAN) activities, focusing on factors such as participation opportunities, employment, and access to services within Rajshahi and Khulna City Corporations. It indicates that only a small percentage of respondents, 2.5%, believe that women and marginalized groups have equal opportunities to engage in WATSAN activities. Additionally, 5% of marginalized individuals have opportunities for employment within WASA/CC, while 12.5% report easy access to WATSAN services. Moreover, a mere 2.5% attended WASA-organized events, and only 4.5% of women had the chance to express their concerns in meetings. Overall, 5.4% of respondents perceive that women's participation and inclusion criteria are met by the respective water sector authority. This data offers insights into respondent perceptions regarding gender equality and inclusion, allowing for comparisons between Rajshahi and Khulna WASA/CC and highlighting differences in promoting water integrity. Interestingly, Rajshahi appears to fare better in gender and inclusion categories compared to Khulna. According to the voice of the respondents, the

situation regarding women's participation and the inclusion of marginalized individuals is described as frustrating by the respondents in this study.

To supplement these quantitative findings, qualitative data were gathered through Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs). WASA representatives in KIIs emphasized their commitment to maintaining inclusion criteria during feasibility studies for new projects.

#### vi. Anticorruption Measures

Corruption within the water and sanitation sector entails hindering the fair and comprehensive implementation of laws and regulations, misappropriating funds designated for water-related projects, disrupting equitable resource allocation processes, and artificially inflating costs (WIN, 2016). Such misconduct contravenes ethical, moral, traditional, legal, and civic standards. Anti-corruption measures encompass actions aimed at preventing and combating corrupt practices like bribery, embezzlement, nepotism, fraud, and abuse of power. These measures strive to foster transparency, accountability, and integrity across both public and private sectors, constituting vital components of sustainable development and good governance.

To evaluate the anti-corruption efforts of both city corporation WASAs and gauge public perception, a series of questions were posed during face-to-face interviews using a standardized questionnaire. Based on responses from both cities, it is evident that neither city's WASA has an effective strategy for curbing corruption. Only 7.4 percent of total respondents expressed satisfaction with WASA's anti-corruption activities, with no significant disparity observed between the two cities. The below Table provides detailed insights into WASA's anti-corruption endeavors.

The findings from both Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) reveal that most participants are dissatisfied with WASAs' anticorruption policies and activities. This sentiment is echoed across both qualitative methodologies, despite the inclusion of WASA and City Corporation officials among the KII respondents. Overall, there is no significant disparity observed in the perceived effectiveness of anticorruption strategies and policies.

Table-5: Public Perception on Authority's Anticorruption Initiatives							
Response	Participation in WASA/ CC arranged public hearing	Had opportunity to raise concern	Authority ensured participation in water resource management	Ever participate in such management events	Participatory planning and budgeting System is in place	Ever participated in planning /budget making	Cumulative status of Participations
<b>Rajshahi and Khulna City Corporation (n=200)</b>							
Response	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Yes	6.0%	12.5%	14.0%	4.0%	5.0%	3.0%	7.4%
No	90.0%	81.0%	79.0%	90.0%	85.5%	86.5%	85.3%
Don't know	4.0%	6.5%	7.0%	6.0%	9.5%	10.5%	7.3%
<b>Rajshahi City Corporation (n=100)</b>							

<b>Table-5: Public Perception on Authority's Anticorruption Initiatives</b>							
<b>Response</b>	Participation in WASA/ CC arranged public hearing	Had opportunity to raise concern	Authority ensured participation in water resource management	Ever participate in such management events	Participatory planning and budgeting System is in place	Ever participated in planning /budget making	Cumulative status of Participations
Yes	7.0%	20.0%	22.0%	5.0%	6.0%	3.0%	10.5%
No	91.0%	76.0%	74.0%	91.0%	82.0%	84.0%	83.0%
Don't know	2.0%	4.0%	4.0%	4.0%	12.0%	13.0%	6.5%
<b>Khulna City Corporation (n=100)</b>							
Yes	5.0%	5.0%	6.0%	3.0%	4.0%	3.0%	4.3%
No	89.0%	86.0%	84.0%	89.0%	89.0%	89.0%	87.7%
Don't know	6.0%	9.0%	10.0%	8.0%	7.0%	8.0%	8.0%

The table illustrates various response categories pertaining to anticorruption measures, including participation in WASA/CC arranged public hearings, opportunities to voice concerns, authority ensuring involvement in water resource management, among others. The percentages denote the proportion of respondents within each category. For instance, within the Rajshahi and Khulna City Corporation group, 6.0% participated in WASA/CC arranged public hearings, 12.5% had the opportunity to raise concerns, 14.0% reported authority ensuring participation in water resource management, 5% reported participation in participatory budgeting processes, and only 3% reported involvement in such events. The assessment revealed that over 92% of respondents expressed unawareness of any authority-initiated initiatives against corrupt practices in the water sector.

Overall, the table offers insights into the level of participation and engagement of respondents in anticorruption measures across various areas and subgroups. It facilitates comparisons between groups and underscores any disparities or trends in responses concerning anticorruption efforts. It was observed that both Khulna and Rajshahi are in similar positions regarding anticorruption measures. However, Key Informant Interviews (KIIs) disclosed that due to the personal charisma of the Managing Director of Khulna WASA, some anticorruption measures are visibly effective to citizens.

Based on the assessment, which amalgamates quantitative data and qualitative insights, it is evident that both city corporations and WASAs need to formulate robust anticorruption strategies and policies and diligently enforce them.

#### vii. Right to information:

Article 39 of the Bangladesh Constitution guarantees the right of every citizen to freedom of speech and expression and freedom of the press, and subjects these rights to reasonable restrictions in the interest of state security, friendly relations with foreign states, public order, etc. The right to seek, receive and impart information is not explicitly mentioned, although the preamble of the Right to Information Act stipulates that this right is an inalienable part of freedom of expression.

The Right to Information Act, 2009 was a groundbreaking decision on the part of the Bangladesh government and paved the way for citizens to get information from public authority is a right. The Act is

manifested as a well-recognized and significant legal instrument for fundamental freedom of expression to citizens.

The RTI Act 2009 in Bangladesh has some unique features to guarantee the right of the citizen. As per article 9 of the act, no request shall be summarily rejected on the ground of national security, but if there is any part of the request that is not related to national security it must be disclosed to the citizen who has sought such information. The Act has superseded all prevailing acts including the official Secrecy Act 1923, meaning there is no restriction on free flow of information. Some of the information like life, death, arrest, confinement or release by law enforcing agencies etc. must be disclosed within 24 hours of request by any citizen.

This study examines the perception and access to information among city dwellers regarding Water and Sanitation Authorities (WASA)'s service delivery, strategies, and policies concerning water supply. The assessment reveals that only 13% of respondents express satisfaction with WASA's right to information policy and strategy, indicating a significant disparity between the two cities. Table 6 provides detailed insights into right to information related to WASA's activities, shedding light on the effectiveness of transparency measures in ensuring public access to vital information on water supply services.

Table-6: Unveiling Transparency: Insights from Respondents on the Right to Information							
Response	Know that getting information is a citizens rights	Know how to apply for information from authority	Ever visited WASA/CC seeking information	Designated information officer area available	Knowledge about price of necessary information	Have paid undue amount for information	Cumulative status of Participations
<b>Rajshahi and Khulna City Corporation (n=200)</b>							
Response	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Yes	19.0%	18.0%	15.5%	11.0%	6.5%	8.5%	13.1%
No	70.0%	70.5%	69.5%	65.0%	83.5%	84.0%	73.8%
Don't know	11.0%	11.5%	15.0%	24.0%	10.0%	7.5%	13.2%
<b>Rajshahi City Corporation (n=100)</b>							
Yes	21.0%	17.0%	22.0%	13.0%	7.0%	11.0%	15.2%
No	68.0%	76.0%	63.0%	64.0%	78.0%	81.0%	71.7%
Don't know	11.0%	7.0%	15.0%	23.0%	15.0%	8.0%	13.2%
<b>Khulna City Corporation (n=100)</b>							
Yes	17.0%	19.0%	9.0%	9.0%	6.0%	6.0%	11.0%
No	72.0%	65.0%	76.0%	66.0%	89.0%	87.0%	75.8%
Don't know	11.0%	16.0%	15.0%	25.0%	5.0%	7.0%	13.2%

The presented table offers an analysis of data concerning various response categories related to the right to information in the water and sanitation sector. These categories include respondents' awareness of information as a citizen's right, knowledge of the application process for information from authorities, visits to WASA/CC for information, and more. Each percentage in the table represents the proportion of respondents within a specific response category. For instance, within the Rajshahi and Khulna City Corporation group, 19.0% of respondents acknowledged knowing that obtaining information is a citizen's right, 18% knew how to apply for information, 15.5% had visited WASA or City corporations seeking information, 11.0% confirmed the presence of designated information officers at City Corporation and WASA offices, 6.5% were aware of the cost of information, and 8.5% reported paying an additional amount to obtain information. A concerning revelation from this assessment is that over 86% of participants lacked knowledge about the mentioned response categories.

Furthermore, the table is subdivided into subgroups based on location (Rajshahi City Corporation and Khulna City Corporation), each displaying its respective set of response percentages. Overall, the table offers insights into the awareness and involvement of respondents regarding their right to information across various areas and subgroups. It was determined that no significant differences were identified in comparisons between groups, thereby highlighting the absence of disparities or patterns in responses.

## 5. Recommendations and Discussions

Integrity in the water sector refers to using powers and resources ethically and honestly for the provision of sustainable and equitable water and sanitation services. It is built through transparency, accountability, participation, and the proactive implementation of strong anti-corruption measures.

To make the water sector in Bangladesh transparent, it is important to address governance issues in water management institutions (WMIs) and integrate the nexus perspective into water governance <sup>40</sup><sup>41</sup>. This can be achieved by focusing on indicators such as transparency, accountability, participation, and social equity <sup>42</sup>. The government should also consider coordination, technical capacity, and transparency in project selection and implementation <sup>43</sup>.

Water and sanitation services play a fundamental role in promoting human health, societal welfare, and economic advancement. These services are indispensable for safeguarding public health and mitigating the transmission of diseases. However, their accessibility varies globally, with differing approaches to provision and management. Broadly categorized, activities pertaining to water and sanitation can be segmented into urban and rural spheres. In Bangladesh, urban water and sanitation services in Bangladesh are overseen by distinct authorities such as the Water Supply and Sewerage Authority (WASA) and municipal / city corporations. These entities are tasked with supplying piped water to urban regions and managing the construction and upkeep of sewerage systems.

<sup>40</sup> Getirana, A., Biswas, N. K., Qureshi, A. S., Rajib, A., Kumar, S., Rahman, M., & Biswas, R. K. (2022). Avert Bangladesh's looming water crisis through open science and better data. *Nature*, 610(7933), 626–629. <https://doi.org/10.1038/d41586-022-03373-5>

<sup>41</sup> Islam, Md. R., Jahan, C. S., Rahaman, Md. F., & Mazumder, Q. H. (2020). Governance status in water management institutions in Barind Tract, Northwest Bangladesh: An assessment based on stakeholder's perception. *Sustainable Water Resources Management*, 6(2), 21. <https://doi.org/10.1007/s40899-020-00371-1>

<sup>42</sup> Karim, S. (2022). A Critical Appraisal of the Sustainability of Bangladesh's Water Governance from Nexus Perspectives. *Bangladesh Political Science Review*, 15(1), 227–253. <https://doi.org/10.5701>

<sup>43</sup> Ferdous Hoque, S. (2023). Socio-spatial and seasonal dynamics of small, private water service providers in Khulna district, Bangladesh. *International Journal of Water Resources Development*, 39(1), 89–112. <https://doi.org/10.1080/07900627.2021.1951179>



To ensure transparency, it is crucial to enforce existing laws and policies related to water pollution prevention and control. By addressing these issues and integrating the nexus perspective, the water sector in Bangladesh can become more transparent and sustainable.

In 2013, the Government of Bangladesh enacted the Bangladesh Water Act 2013, which outlines provisions for the integrated development, management, extraction, distribution, utilization, protection, and conservation of water resources. Within this legislation, water resources encompass surface water, groundwater, rainwater, atmospheric water, and water from estuaries, floodplains, coasts, or similar locales. Article 3(1) stipulates that all rights to the aforementioned waters shall vest in the State on behalf of the populace. Furthermore, Article 3(2) of this Act recognizes the right to drinking water and water for hygiene and sanitation as inherent rights for all individuals.

**a. Strengthening policy advocacy through the systematic accumulation of empirical knowledge and documentation:**

Strengthening policy advocacy through evidential knowledge and documentations is essential for driving informed decision-making and fostering positive societal change. By grounding advocacy efforts in rigorous research, data, and documented evidence, advocates can effectively make their case to policymakers, stakeholders, and the public. Evidential knowledge provides credibility and legitimacy to advocacy initiatives, helping to build trust and garner support for proposed policy solutions. Documenting the impacts of existing policies, highlighting best practices, and showcasing successful interventions serve as powerful tools for advocating for policy reform or implementation. Additionally, by employing a variety of mediums such as research reports, case studies, policy briefs, and infographics, advocates can tailor their messaging to different audiences and effectively communicate complex issues in accessible ways. Ultimately, by strengthening policy advocacy through evidential knowledge and documentations, advocates can increase the likelihood of policy uptake, implementation, and ultimately, positive social change.

**b. Robust campaign and community based awareness program needed to be design and implement**

Designing and implementing robust campaigns and community-based awareness programs are crucial steps in addressing various social, environmental, and public health issues. These initiatives serve to educate, engage, and mobilize communities towards positive behavioral change and collective action. By leveraging a combination of traditional and digital communication channels, such as social media, community events, workshops, and educational materials, these programs can effectively reach diverse audiences and amplify their impact. Tailoring messages and activities to local contexts and needs ensures relevance and resonance within communities. Moreover, fostering partnerships with local organizations, leaders, and influencers enhances outreach and facilitates grassroots participation. Through these efforts, robust campaigns and community-based awareness programs can empower individuals, build social cohesion, and drive sustainable change at the grassroots level.

**c. Developing, distributing and communicating integrity promotional message through state of art materials and channels**

Developing, distributing, and communicating integrity promotional messages through state-of-the-art materials and channels is essential for organizations committed to fostering trust and credibility. By meticulously crafting messages that uphold ethical values and principles, these organizations can resonate with their audience and reinforce their dedication to integrity. Utilizing cutting-edge technologies and design techniques allows for the creation of visually captivating and engaging



promotional materials that capture attention and leave a lasting impression. Moreover, selecting the most effective communication channels, whether traditional or digital, ensures that these messages reach the intended audience efficiently. Through strategic distribution and consistent communication, organizations can effectively convey their commitment to integrity, strengthen their reputation, and build enduring relationships with stakeholders.

**d. Developing collaborations and network among the sectoral actors**

Developing collaborations and networks among sectoral actors is paramount for achieving collective goals and driving meaningful impact within industries or fields. By fostering partnerships and connections among various stakeholders such as businesses, governmental agencies, non-profit organizations, and academia, opportunities for innovation, knowledge sharing, and resource mobilization are maximized. Collaborations enable the pooling of expertise, resources, and perspectives, leading to more comprehensive solutions to complex challenges. Networking facilitates the exchange of ideas, best practices, and insights, fostering a culture of continuous learning and adaptation. Ultimately, building robust collaborations and networks strengthens the resilience and effectiveness of the sector, driving sustainable growth and progress.

**e. Increasing coordination among the agencies working for water and sanitation sector.**

Increasing coordination among the agencies working within the water and sanitation sector is crucial for enhancing efficiency, effectiveness, and impact in addressing global water challenges. By fostering greater collaboration and communication among governmental bodies, non-governmental organizations (NGOs), international agencies, and community-based organizations, opportunities for synergies and resource optimization are maximized. Coordination facilitates the alignment of efforts, reduces duplication of services, and promotes the sharing of best practices and lessons learned. It enables a more holistic approach to addressing water and sanitation issues, encompassing aspects such as access to clean water, sanitation facilities, hygiene education, and sustainable water resource management. Strengthening coordination mechanisms helps ensure that limited resources are utilized effectively, leading to improved outcomes in terms of public health, environmental sustainability, and socioeconomic development. Ultimately, increased coordination among agencies working in the water and sanitation sector is essential for achieving universal access to safe water and sanitation services, a fundamental human right essential for human dignity and well-being.

**f. Civil society organizations and community engagements needed to strengthen**

Civil society organizations (CSOs) and community engagement play crucial roles in strengthening societies and addressing various social, economic, and environmental challenges. Civil society organizations and community engagement are essential for strengthening societies, promoting social justice, and advancing sustainable development. By working collaboratively with communities and other stakeholders, CSOs can drive positive change and create more inclusive and resilient societies.

**g. Citizens consultations and demand generations activities needed to regularized**

Citizen consultations and demand generation activities are essential components of participatory governance and democratic processes. Regularizing citizen consultations and demand generation activities is essential for promoting inclusive governance, empowering citizens, improving service delivery, and strengthening democratic institutions. By institutionalizing these processes, governments can foster greater transparency, accountability, and citizen participation, ultimately contributing to more responsive and effective governance.

**h. Public accountability mechanism through peoples' participation in planning and public opinion sharing shall be encouraged through regular interval.**

Encouraging public accountability mechanisms through people's participation in planning and public opinion sharing at regular intervals is essential for fostering transparency, responsiveness, and trust in governance. Regular public participation promotes transparency by making government actions and decisions more visible and accessible to citizens. When people have the opportunity to provide input and feedback on plans and policies, it enhances accountability as governments are held accountable for their actions and decisions. Encouraging public accountability mechanisms through people's participation in planning and public opinion sharing at regular intervals is not only a hallmark of good governance but also a catalyst for inclusive and sustainable development. By institutionalizing these practices, governments can strengthen democracy, enhance transparency and accountability, and foster citizen empowerment and trust in public institutions.

Some other recommendations can be effective for promoting water integrity at Rajshahi and Khulna City Corporations are;

1. **Strengthen Outreach and Communication:** WASA/CC should implement comprehensive outreach and communication strategies to increase awareness about public hearing programs and other participation opportunities. This may involve utilizing multiple channels such as social media, community events, and traditional media outlets.
2. **Enhance Transparency and Accountability:** Authorities should establish transparent mechanisms for citizen feedback and engagement, ensuring that concerns raised by the public are addressed and incorporated into decision-making processes. This could include establishing platforms for public consultations and feedback mechanisms.
3. **Foster Collaborative Partnerships:** WASA/CC should collaborate with civil society organizations, local communities, and other stakeholders to enhance citizen participation in water and sanitation programs. By fostering partnerships, authorities can leverage local knowledge and resources to promote inclusive governance practices.

## 6. Conclusion

In conclusion, the recommendations put forth for relevant government agencies and civil society organizations (CSOs) present a holistic approach to addressing the water and sanitation sector's challenges. Actions such as reinforcing enforcement, streamlining project approval procedures, and reclaiming water bodies from encroachment are imperative for combating corruption, promoting transparency, and safeguarding water resources. Furthermore, initiatives such as regulating sand extraction, allocating adequate resources for maintenance, and engaging communities in project planning contribute significantly to sustainable water management efforts. Integration of vulnerability-based project mechanisms, climate resilience strategies, and evidence-driven project selection and management techniques are essential for enhancing the efficiency and longevity of water initiatives.

Moreover, establishing a comprehensive governance framework and fortifying policy structures will foster coordination, transparency, and accountability among all stakeholders. CSOs play a pivotal role in enhancing policy frameworks, expanding access to clean water, advocating for sanitation and hygiene, addressing the impacts of climate change, and facilitating knowledge exchange and capacity-building within the sector. Through collaborative implementation of these recommendations, government agencies and CSOs can advance toward ensuring equitable access to safe water and sanitation services, safeguarding the environment, and fostering sustainable development across communities.

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[Appendix 1: FGD Guidelines](#)

[Appendix 2: Household Survey Questionnaire](#)

[Appendix 3: KII Guidelines](#)

[Appendix 4: Consultations workshop Schedule](#)