Program Information Document (PID)

Concept Stage | Date Prepared/Updated: 14-Dec-2024 | Report No: PIDPC00132

BASIC INFORMATION

A. Basic Program Data

Project Beneficiary(ies)	Region	Operation ID	Operation Name
Bangladesh, Bangladesh, Bangladesh	SOUTH ASIA	P506770	Metro Dhaka Water Security and Resilience Program
Financing Instrument	**Estimated Appraisal Date**	**Estimated Approval Date**	**Practice Area (Lead)**
Program-for-Results Financing (PforR)	22-Sep-2025	04-Dec-2025	Water
Borrower(s)	**Implementing Agency**		
Economic Relations Department	Local Government Department		

Proposed Program Development Objective(s)

To improve access to WSS services, reduce pollution loads (entering the rivers and canals), and enhance resilience in Metro Dhaka region

COST & FINANCING (US$, Millions)

Maximizing Finance for Development

Is this an MFD-Enabling Project (MFD-EP)?	To be decided
Is this project Private Capital Enabling (PCE)?	To be decided

SUMMARY

Government program Cost	**330.00**
Total Operation Cost	**330.00**
Total Program Cost	300.00
IPF Component	30.00
Total Financing	**330.00**
Financing Gap	**0.00**

FINANCING

Total World Bank Group Financing	**330.00**
World Bank Lending	330.00

Concept Review Decision

The review did authorize the preparation to continue

B. Introduction and Context

Country Context

1. **Bangladesh experienced rapid economic and social progress in recent decades, reaching lower middle-income status in 2015.** Stable macroeconomic conditions underpinned an average annual real GDP growth of 6.4 percent between 2010 and 2023. Over the same period, poverty and extreme poverty declined by 19.6 and 6.8 percentage points to 30 percent and 5 percent, respectively.[1] However, the pace of poverty reduction has slowed during the past few years, and urban inequality has widened.

2. **An interim government led by Nobel Laureate Dr. Muhammad Yunus was sworn in August 8, 2024,** after former Prime Minister Sheikh Hasina resigned and left the country amid a student-led mass uprising. The events surrounding the resignation caused severe economic disruptions, including a surge in inflation, and a decline in industrial and service sector activities and exports and remittance inflows. The economic activities and the law-and-order situation have been gradually improving since the transition.

3. **Real GDP grew by 5.2 percent in FY24.** On the supply side, GDP growth was primarily driven by industry, which expanded by 5.8 percent—lower than the decadal average of 9.5 percent, impacted by energy shortages, import restrictions, and monetary tightening. Services growth also slowed to 5.3 percent as domestic purchasing power declined due to persistent inflation. Agricultural growth remained modest at 3.3 percent.

4. **The fiscal deficit is estimated to have reached 4.5 percent of GDP in FY24.** Revenue growth was robust but remained one of the lowest globally at 8.5 percent of GDP. Expenditure is estimated to have increased modestly to 13.0 percent of GDP, driven by current expenditure. The public debt to GDP ratio increased to 38.8 percent but remained sustainable.

5. **Bangladesh is at low risk of overall and external debt distress in the January 2023 joint IMF-World Bank Debt Sustainability Assessment (DSA).** Bangladesh is not currently subject to Debt Limits Conditionality under the Sustainable Development Finance Policy (SDFP). In its most recent Staff Report, the IMF stressed the need for Bangladesh to accelerate its ambitious reform agenda to achieve a more resilient, inclusive, and sustainable growth, requiring substantial investments in human capital and infrastructure.

6. **Bangladesh faces a high level of vulnerability to climate and disaster hazards.** The Global Climate Risk Index ranked Bangladesh as the seventh most affected country by weather-related loss events in the 2000-2019[2] period, with high vulnerability to cyclones, floods, and storm surges. Recurring flooding in Bangladesh affects a greater population than any other natural hazard, impacting more than a million people annually. Addressing climate risks will reduce disruptions to economic growth and enhance resilience of vulnerable populations.

[1] Based on international poverty line of US$3.65 and US$2.15 per day (2017 purchasing power parity) for poverty & extreme poverty, respectively.
[2] German watch (2021) Global Climate Risk Index 2021

Sectoral and Institutional Context of the Program

7. **Bangladesh's transition to an upper middle-income country will involve rapid economic transformation and urbanization.** Bangladesh is one of the most densely populated countries (1,084 persons per km^2), with population projected to grow from 170 million to 265 million by 2050. Over this period, the urban population is also expected to increase from 38 percent to 60 percent. The major cities of Dhaka and Chattogram, along with other regional urban centers, are the hubs of economic growth, and industrial and export activities, that contribute significantly to Bangladesh's employment, and GDP. The Dhaka metropolitan region[3] (metro Dhaka), with 22 million people, accounts for one-third of the country's urban population, generates half of the country's formal employment, and contributes 35 percent to the national GDP. Chattogram is the country's main port city and export powerhouse.[4] Other major cities such as Gazipur, Narayanganj, Comilla, Sylhet, Mymensingh, and Barisal are evolving rapidly as regional growth centers.

8. **Bangladesh is endowed with substantial water resources, but rapid urbanization and economic development have led to a sharp rise in water demand.** As the world's largest delta country, Bangladesh has a network of more than 430 rivers and canals that provide fresh surface and ground water resources to meet drinking water needs and demand from agriculture, industries, fisheries, and other economic sectors. However, the demands for water have and will continue to increase substantially across major consumption sectors – residential, industrial, and agriculture - due to the ongoing structural and economic transformation of the country.

9. **Dhaka's water security is threatened by severe pollution, and flooding.** Urban settlements and industrial clusters within and around in Dhaka are polluting rivers and canals through the discharge of untreated sewage and industrial effluent, which often contains hazardous chemicals and heavy metals. As a result**,** these critical drainage networks suffer from reduced flows, sedimentation, encroachment, impaired navigability, and massive pollution that has destroyed their natural ecology and rendered the water unfit for drinking, irrigation, or industry use. Metro Dhaka is increasingly being impacted by climate change - flooding risks are compounded by inadequate stormwater drainage systems, and reduced water flow capacity in rivers and canals due to pollution, encroachment, and siltation.

10. **Inadequate coverage and poor quality of water supply and sanitation (WSS) services in metro Dhaka is adversely affecting water security and livability.[5]** *Water Supply*: There are significant spatial disparities in access to water supply services in metro Dhaka – while Dhaka city has 70 percent piped water supply network coverage, the adjacent cities (Gazipur, Narayanganj, Savar) have less than 25 percent coverage. High dependency on contaminated groundwater (including E coli and heavy metals) with limited water treatment capacity is a major concern from public health perspective. *Sanitation:* Dhaka city's piped sewerage system currently covers only 20 percent of the population, and an additional two percent of households have access to a functional fecal sludge management (FSM) system. Access to safely managed sanitation services (including onsite sanitation) options is very low in the other cities. *It is worth noting that metro Dhaka's WSS service delivery challenges are intricately intertwined with the pollution and flooding issues – on one side, inadequate sanitation services is a major contributing factor to water pollution, while on the other side, widespread pollution and flooding issues threaten the quality and sustainability of WSS services.*

11. **Governance challenges in the water sector include fragmentation, institutional capacity, and regulatory constraints.** The overlapping and fragmented mandates, weak inter-institutional coordination (at national and local levels), lack of accountability, and misaligned incentives are adversely affecting the efforts to implement coordinated planning, service delivery, and monitoring systems for addressing the above-mentioned challenges. Water service providers are facing institutional capacity constraints including inadequate human resource capacity (staffing levels, skills and expertise), lack

[3] Dhaka metropolitan region includes Dhaka city (North and South), Gazipur, Narayanganj, and Savar.

[4] Chattogram produces 40 percent of Bangladesh's industrial output, handles more than 75 percent of the exports, contributes 40 percent of the government's revenues, and generates employment for 16 percent of the total employed labor force in the industrial sector

[5] Safely managed water supply and sanitation service coverage in Bangladesh stands at 54% and 29% respectively.

of customer and service delivery orientation, and inadequate planning and monitoring. Institutional systems for asset management and operations are weak. Lack of institutional capacity to plan, design and implement projects and carry out sustainable O&M in a timely and quality manner is a fundamental reason behind increasing water pollution and flood risks. Lastly, regulatory enforcement for pollution control and service delivery standards remains weak due to lack of real-time monitoring system, weak capacity to monitor compliance, especially for industries, and weak enforcement of punitive measures available as per the regulations. The encroachments in wetlands and river corridors have severely impacted water flow capacity in the metro Dhaka.

12. **Addressing the above-mentioned challenges requires a multi-sectoral phased approach comprising a package of governance reforms, institutional development and infrastructure investments.** Such an approach should (i) structure fiscal incentive mechanisms to improve WSS service delivery (coverage, quality and efficiency), reduce pollution and enhance resilience; (ii) implement policy and regulatory reforms to enforce service delivery standards, and address pollution and encroachment issues; (iii) strengthen institutional capacity for integrated multi-sectoral planning, implementation, sustainable operations and monitoring; and (iv) implement reforms to enable cost recovery, financial sustainability, creditworthiness, and private capital mobilization.

Relationship to CAS/CPF

13. **The proposed PforR Program is consistent with the World Bank's Country Partnership Framework (CPF) FY23-27 (discussed by the World Bank Board of Executive Directors on April 27, 2023, Report No. 181003-BD) and Country Climate and Development Report, and directly contributes to the World Bank Group's mission of ending extreme poverty and boosting shared prosperity on a livable planet.** It will support CPF's aim to "contribute towards improved socioeconomic inclusion" and "enhance climate resilience" through energy efficiency and resilient water supply services. The Bangladesh CCDR also highlights the inadequacy of WSS in the country and the need for improved sanitation as an adaptation measure to urban flooding. It will enhance gender equality and empowerment and hence contribute to 'improved socioeconomic inclusion' by reducing water-related costs such as collection time that presently fall disproportionally on women and girls.

14. **The PforR Program and the overall MPA are part of a World Bank South Asia regional initiative or "program of programs" to provide Water, Sanitation, and Hygiene (WASH) services to about 100 million people across the South Asia Region by 2035.** It will contribute directly to the objectives and beneficiary targets under the World Bank's newly launched Global Challenge Program on Water Security and Climate Adaptation (Water GCP) – focusing on pillar 1: achieving universal access to safely managed WSS, and pillar 3: reducing the impacts of floods and droughts and managing water resources sustainably.[6]

Rationale for Bank Engagement and Choice of Financing Instrument

15. **The Program for Results (PforR) instrument will support the GOB in establishing a platform to advance the implementation of critical interventions to enhance Dhaka's water security and resilience.** It will adopt a comprehensive and integrated approach for implementation underpinned by institutional development, governance reforms, and restructured financial incentives to fund priority investments. The PforR is the right instrument to support systems development and institutional capacity necessary for long-term implementation of the government program to tackle the complex water security and resilience challenges of Dhaka in an incremental manner. It will pave the way for future investment programs that may focus on complex infrastructure development activities in subsequent phases.

C. Program Development Objective(s) (PDO) and PDO Level Results Indicators

Program Development Objective(s)

[6] The pillars are as defined in the approved water GCP approach paper https://documentsinternal.worldbank.org/Search/34400279

To improve access to WSS services, reduce pollution loads (entering the rivers and canals) and enhance resilience in Metro Dhaka region

PDO Level Results Indicators

16. The proposed PDO level results indicators are:

- People provided with safely managed drinking water supply and sanitation services, of which percentage women.
- Beneficiaries with enhanced resilience to flood risks, of which percentage women.
- Amount of wastewater/fecal sludge collected and treated as per regulatory norms.
- Institutional framework and water quality monitoring system adopted for pollution management.

D. Program Description

PforR Program Boundary

17. **The proposed PforR Program ('P', the Program) will support a subset of GOB program interventions for enhancing water security and resilience in metro Dhaka.** The proposed Program will support GOB in operationalizing the UIP, laying the foundation for the long-term implementation of critical interventions and kickstarting a subset of priority and impactful activities in the immediate to short-term through incentives focused on development results including institutional development. The GoB has (i) identified four focus areas, namely river pollution management, urban planning and land management, improved water flows and flood resilience, and improved navigation and water borne transportation and (ii) prioritized implementation in seven hotspots[7] which have high pollution levels, population density, service gaps, and increased exposure to flood risks. The proposed Program will provide financial incentives and technical support to the four hotspot areas in metro Dhaka and will focus on improving governance; building institutional systems; identifying, planning, and implementing short term lower risk priority investments; and enhancing financial sustainability and private capital mobilization.

18. **More specifically, the boundaries of the Program are as follows**:

- **Services.** The Program will focus on drinking water supply, sewerage management and sanitation, and storm water drainage. Some small scale and less complex activities related to solid waste management, industrial effluent management, and canal rehabilitation will also be supported.
- **Governance, institutions, and financing.** The Program will support governance reforms for improved coordination and sustainable management of water resources, institutional capacity development, regulatory enforcement, water resource planning, water quality monitoring systems and financial sustainability.
- **Duration.** The Program will be implemented over a period of six years (2026-2032).
- **Financing.** The PforR Program budget is US$330 million, funded by IDA credit.
- **Implementation responsibilities.** The Program will be managed by the Local Government Division (LGD) in coordination with Ministry of Water Resources (MoWR). The implementing agencies will be Narayanganj City Corporation, Gazipur City Corporation, Dhaka South City Corporation, and Dhaka North City Corporation. Bangladesh Bank (BB) will be responsible for the proposed financing facility. Technical Assistance will be provided to support the implementing agencies and WARPO (for river basin and water resource planning). LGD will coordinate with Department of Environment, Rajdhani Unnayan Kartripakkha (RAJUK) and Ministry of Industries for pollution control regulations, land zoning regulations and industrial effluent management.

The Program comprises three mutually reinforcing results areas (RA), as briefly described below.

[7] Gazipur, Narayanganj, Savar, Kallyanpur, Goranchatbari, Kamrangirchar, and Purbachal

19. **Results Area 1 (RA#1): Strengthen water governance, planning, and financing**. This RA will strengthen water governance in Dhaka by incentivizing priority reforms. This will include (i) establishing national level governance mechanisms for coordinating and monitoring program implementation, including fiscal allocations and other policy issues, (ii) strengthening institutional framework, capacities and systems at local level (CCs, Municipalities) for implementation, and (iii) improving the regulatory enforcement[8] systems and capacity for addressing key pollution sources.

20. **More specifically, RA#1 will incentivize preparation of city water security & resilience plans (CWSRP) for integrated investment planning and implementation approach**. These plans will be prepared by CCs and municipalities for their respective jurisdictions and will lay down the investment priorities, with clear linkage to WSS access, pollution reduction and flood resilience objectives. It will institutionalize the long-term, multi-sectoral, and spatially targeted investment planning process, and will also enable the implementation agencies to identify, prioritize and implement investment activities under this Program. These plans will also play a key role in establishing participatory process for stakeholder engagement and awareness generation during planning and implementation (inc. community led maintenance).

21. **Additionally, RA#1 will support financial performance improvement and enable private capital mobilization**. It will incentivize (i) reforms for transparent financial management systems (planning, budgeting, expenditure management), tariffs for cost recovery and own-source revenues (OSRs) enhancement, and (ii) operationalization of a dedicated financing facility within Bangladesh Bank's Green Transformation fund to help mobilize private sector financing for water sector.

22. **Results Area 2: Improve access to safely managed WSS services and reduce pollution**. This RA will support city corporations (CCs) /DWASA in implementing priority interventions for improving the coverage and quality of WSS services and contribute to reducing water pollution in rivers and canals. The key activities would include drinking water supply network and treatment systems and household connections, on-site sanitation and fecal sludge management systems, river corridor cleanup campaigns, interception/ diversion networks and decentralized treatment, and solid waste collection, recycling and material recovery facilities. The focus would be to support the implementation of small to moderate scale activities with visible results for demonstration effect on the ground. In addition, this RA will prioritize two cross-cutting interventions at the local level (i) the development of water quality monitoring systems, and (ii) strengthening operations and maintenance (O&M) capacity and systems – for WSS services and pollution management.

23. **Results Area 3: Improve water flows in rivers and canals and enhance flood resilience**. This RA will focus on building systems and capacities to shift from a fragmented and reactive approach towards urban flood risks to a more robust and planned approach based on comprehensive planning and adequate infrastructure systems. This RA will support (i) robust planning based on sustainable river and flood management approaches, and (ii) small-scale priority investments for rehabilitating and connecting canals and rivers for improved water flows, and reducing flood risks through drainage network improvement, nature-based solutions, and clean-up activities.

24. **An Investment Project Financing (IPF) component is proposed to provide technical assistance for implementing governance reforms, institutional capacity development, program management, coordination and reporting**. Firstly, the IPF component will provide hands-on support to the key implementation agencies to (i) implement Program activities including governance reforms, institutional systems, preparing investment plans, designing and implementing investment projects, and (ii) undertake important technical activities such as information, communication and awareness generation, E&S capacity development, needs assessments, technical studies and investigations for water resource management and river basin planning, and preparatory studies for investments to be financed in subsequent phases of the program or through other sources. Secondly, TA will be provided to BB and partner financial institutions for conducting feasibility assessments and structuring projects to be financed by the facility. Lastly, this component will finance the costs of

[8] In coordination with the ongoing efforts under World Bank assisted Bangladesh Environmental Sustainability and Transformation (BEST) Project

independent verification agency, incremental operational costs including recruitment of experts (technical, environment, social, financial management, procurement), and other expenses for program management and implementation support.

E. Initial Environmental and Social Screening

25. The Program is expected to provide significant environmental, social and economic benefits. However, there may be some adverse environmental and social (E&S) impacts that need careful management. Program interventions will be designed to reduce pollution levels in rivers and canals, but construction activities could have potentially negative environmental effects, including noise, dust, and water pollution. Given the fact that Dhaka and its surrounding areas are some of the most densely populated urban / peri-urban areas in the world, there is a likelihood of irreversible adverse social or economic impacts. There are probable community health and safety risks during the construction phase and O&M phases of the program. Additionally, the handling and disposal of dredged materials and construction waste must be carefully managed to prevent secondary pollution as well as associated impacts on health and safety of people. Rehabilitation efforts in river corridors and wetlands also have the potential to affect local biodiversity and ecosystems if not managed properly.

26. During the preparation phase, a comprehensive Environment and Social Systems Assessment (ESSA) will be conducted. The Program activities will be designed carefully to exclude large-scale and high-risk activities that may affect critical natural habitats and cause significant environmental impacts (including potential impacts on rivers or canals) from the Bank's funding. The ESSA will identify the gaps and weaknesses, if any, between the country systems and applicable WB policies for PforR operations and the measures required to address the same. ESSA will also inform the list of activities to be excluded from both the Bank and GoB financing based on risk assessment. For the Program, appropriate DLIs and interventions in Program Action Plans (to be determined through ESSA) will be included in the Program. Proactive and meaningful stakeholder engagement will be critical at every stage of the Program. Appropriate stakeholder engagement strategies and plans will be developed right at the start of the Program and implemented throughout.

Legal Operational Policies

Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Area OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts of the IPF Component

27. The IPF component will provide technical support to address the implementation agencies' E&S capacity constraints. The TA activities proposed under the IPF component will inform and support the planning and implementation of activities under the PforR operations, and therefore the downstream E&S risks and impacts relevant to the implementation are likely to be significant. Hence, the E&S risks of the IPF component have also been rated as **substantial.**

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