# **Project Administration Manual**

Project Number: 49107-006

Loan and Grant Number(s): {LXXXX}

June 2018

India: West Bengal Drinking Water Sector Improvement Project

## **ABBREVIATIONS**

ADB – Asian Development Bank

AMSDF – Asset Management and Service Delivery Framework

DBO – design-build-operate DDR – due diligence report

DMF – design monitoring framework

DSISC – design supervision and institutional support consultants

EMP – environmental management plan

FY – financial year

GESI – gender equality and social inclusion
GIS – geographic information system
GRM – grievance redress mechanism
IEE – initial environmental examination
O&M – operation and maintenance
PAM – project administration manual

PHED – Public Health Engineering Department

PIU – project implementation unit PMC – project management consultants

PMU – project management unit

TOR – terms of reference

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## **Project Administration Manual Purpose and Process**

The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with the policies and procedures of the government and Asian Development Bank (ADB). The PAM includes references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The State of West Bengal acting through its Public Health Engineering Department (PHED) of the Government of West Bengal, will be the executing and the implementing agency, and is wholly responsible for the implementation of ADB-financed projects, as agreed jointly between the borrower and ADB, and in accordance with the policies and procedures of the government and ADB. ADB staff is responsible for supporting implementation including compliance by PHED of its obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At loan negotiations, the borrower and ADB agreed to the PAM and ensured consistency with the loan agreement. Such agreement is reflected in the minutes of the loan negotiations. In the event of any discrepancy or contradiction between the PAM and the loan agreement, the provisions of the loan agreement shall prevail.

After ADB Board approval of the project's report and recommendations of the President (RRP), changes in implementation arrangements are subject to agreement and approval pursuant to relevant government and ADB administrative procedures (including the Project Administration Instructions), and upon such approval, they will be subsequently incorporated in the PAM.

### I. PROJECT DESCRIPTION

- 1. The project will provide safe, sustainable and inclusive drinking water as per the standards set by the Government of India to about 1.65 million people in the arsenic, fluoride, and salinity-affected selected areas of Bankura, North 24 Parganas, and Purba Medinipur districts of West Bengal (project districts). It will introduce an innovative and sustainable institutional framework and advanced technology for smart water management (STWM) to enable efficient service delivery in the project districts.
- 2. The project will adopt a sector approach. Only subprojects adhering to the subproject selection criteria in Appendix 1 will be selected and proposed for funding under the project. Only subprojects within the districts of Bankura, North 24 Parganas, and Purba Medinipur will be covered, unless otherwise agreed with the Asian Development Bank (ADB). The subprojects proposed under the project stem from a district-wide comprehensive water quality and sustainability plan, and the completion of the Drinking Water Quality Action Plan (DWQAP) for the concerned district. The executing agency, the Public Health Engineering Department (PHED) of the Government of West Bengal (GOWB), prepared the DWQAPs for the project districts with the support of project preparatory consultants from the ADB. PHED has adopted the DWQAPs to guide present and future drinking water improvements both on source sustainability and water quality aspects in the project districts.
- 3. To ensure long-term asset sustainability and service delivery, on 9 November 2017, the GOWB issued a government order on the asset management and service delivery framework (AMSDF) to the 66 *gram panchayats* included under the project.<sup>2</sup> The AMSDF (Appendix 2) defines the roles and responsibilities of PHED (the bulk supplier and regulator), and the *gram panchayats* (the distribution service managers), and sets guidelines for metering, water user charges, and human resourcing.
- 4. **Project impact and outcome.** The impact of the project will be drinking water security ensured in West Bengal (Vision 2020, PHED,<sup>3</sup> and National Sub-Mission Guidelines for Arsenic and Fluoride Removal, Ministry of Drinking Water and Sanitation).<sup>4</sup> The outcome will be a safe, sustainable, and inclusive drinking water service received in project districts. The project outputs are:
  - (i) Output 1: Climate resilient drinking water infrastructure constructed. The project will provide a minimum of 70 lpcd of continuous potable water through metered connections to the households in selected areas of the project districts. The distribution systems will be designed on a district metering area (DMA) basis. Both the bulk and the distribution systems will be integrated with modern STWM and monitoring tools, including supervisory control and data acquisition (SCADA) and geographic information systems(GIS). Bulk water supply systems, consisting of intakes, water treatment plants, and transmission mains, will be sized to provide

<sup>2</sup> *Gram panchayats* are the village-level or the first tier of the local administrative body of the Government of West Bengal. Population covered under the 66 *project gram panchayats* is around 16,000–26,000.

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One neighboring block in South 24 Parganas district, Bhangur II, was included in North 24 Parganas' drinking water scheme based on need and economy of scale.

<sup>&</sup>lt;sup>3</sup> Government of West Bengal. Public Health Engineering Department. 2011. *Vision 2020: To Provide Safe, Sustainable and Adequate Water Supply to All Humans and Livestock by 2020.* Available from <a href="http://wbphed.gov.in/activities/vision-2020/">http://wbphed.gov.in/activities/vision-2020/</a>.

<sup>&</sup>lt;sup>4</sup> Government of India. Ministry of Drinking Water. 2016. National Sub-Mission for Arsenic and Fluoride Removal, Ministry of Drinking Water and Sanitation. Available at <a href="http://www.mdws.gov.in/national-sub-mission-guidelines-provide-safe-drinking-water-remaining-arsenic-and-fluoride-affected">http://www.mdws.gov.in/national-sub-mission-guidelines-provide-safe-drinking-water-remaining-arsenic-and-fluoride-affected</a>.

- water supply en route to urban and rural areas, and connected into a grid with the existing and the new systems in the project districts, where feasible, to improve the redundancy, resilience, and management efficiency of the system; and
- (ii) Output 2: Institutions and capacity of stakeholders for drinking water service delivery strengthened. The project will strengthen the institutions and capacity of stakeholders, including PHED and the project gram panchayats, for sustainable service delivery. It will support them to operate the STWM system, including water quantity and quality monitoring, electronic billing and collections, meter reading, and accounting.<sup>5</sup> The project will build the capacities and skills of the stakeholders on O&M, and support public awareness on water, sanitation, and hygiene (WASH). It will strengthen the sector through introducing and implementing AMSDF, institutionalizing water and sanitation safety planning, and developing a regulatory framework for and piloting of fecal sludge and septage management (FSSM).<sup>6</sup>
- 5. PHED will be responsible for operating, maintaining, and monitoring the bulk water supply up to the boundary of the *gram panchayats*. The *gram panchayats* will operate and maintain the respective distribution systems. The *Panchayat Samitis* and *Zilla Parsishads*, the bodies representing the second and the third tier of local administration of the government, will provide coordination, technical support, and perform regulatory and monitoring role at the block and district levels. PHED, through the AMSDF, will also act as the regulator of consumer services provided by the *gram panchayats* and assist them with advisory and technical support and training when required.
- 6. **Detailed description of project outputs**. In line with the agreed subproject selection criteria, the following subprojects are proposed under output 1:
  - (i) Climate-resilient drinking water infrastructure constructed in North 24 Parganas (plus one neighboring block in South 24 Parganas). The subproject will benefit around 550,000 people with surface-sourced potable water in the arsenic affected areas of Haroa and Barasat-II blocks in the North 24 Parganas district, and the Bhangar II block of the South 24 Parganas district. The key components of the subproject are (a) the construction of a water treatment plant with capacity of 100 million liters per day (MLD) at Rajarhat, (b) laying of around 4 kilometers (km) of transmission mains, (c) the construction of water reservoirs of around 32 million liters combined capacity, (d) the construction of three intermediate booster stations, and (e) the construction of around 39 overhead tanks and laying of distribution networks in 37 zones with around 120,000 household connections including water meters and associated STWM devices;
  - (ii) Climate-resilient drinking water infrastructure constructed in Bankura. The subproject will benefit around 680,000 people with surface-sourced potable water in the fluoride affected blocks of Gangajalghati, Indpur, Mejhia, and Taldangra. The key components of the subproject are: (a) appropriate source augmentation, such as the construction of an infiltration gallery, of around 33 MLD for the blocks

<sup>6</sup> ADB has partnered with the World Health Organization (WHO) to jointly support the government in preparing the water safety plan and sanitation safety plan guidelines for the state.

<sup>&</sup>lt;sup>5</sup> Project Smart Water Management is detailed in the supplementary linked document in Appendix 2 of the project's report and recommendation to the President.

<sup>&</sup>lt;sup>7</sup> Fourteen blocks in the district were covered for comprehensive piped water supply funded under the Backward Regions Grant Fund Phase-I of the Government of India.

- of Mejhia and Gangajalghati;<sup>8</sup> (b) construction of an intake and water treatment plant of around 32 MLD at Mukutmanipur dam for the blocks of Indpur and Taldangra, (c) construction of new storage facilities of around 38 ML capacity, (d) laying of around 300 km of transmission mains and around 2,100 km of distribution network, and (e) provision of around 155,000 household connections including water meters and associated STWM devices; and
- (iii) Climate-resilient drinking water infrastructure constructed in Purba Medinipur. The subproject will benefit around 420,000 people with surface-sourced potable water in the salinity affected areas of Nandigram-I, Nandigram-II, Nandakumar, and Chandipur blocks of Purba Medinipur district. The key components of the subproject are (a) the construction of an intake and 100 MLD capacity water treatment plant,<sup>9</sup> (b) the construction of four block-level storage reservoirs and associated booster pumping stations, (c) laying of around 64 km of primary transmission mains, (d) the construction of storage reservoirs of around 24 million liters capacity, (e) laying of the water supply distribution network of around 1,500 km in the two priority blocks, and (f) the provision of around 116,000 household connections including water meters and associated STWM devices.
- 7. Output 2 will support the following components:
  - (i) Adoption of the AMSDF by the project *gram panchayats*;
  - (ii) Completion of comprehensive DWQAPs for all districts in West Bengal;
  - (iii) Commissioning of the STWM system in PHED and project *gram panchayats*;
  - (iv) Completion of guidelines for water safety and sanitation safety plans, and a model plan each for water safety and sanitation safety, for West Bengal;
  - (v) Commissioning of flood forecasting and early warning system in Purba Medinipur;
  - (vi) Preparation and adoption of gender strategy by PHED;
  - (vii) Completion of the FSSM regulatory framework for West Bengal and commissioning of a pilot FSSM plant in one of the project districts:
  - (viii) Provision of training on utility management to at least 660 locals—including at least 33% female—in project *gram panchayats*;
  - (ix) Provision of training on utility management to a minimum of 200 PHED staff, including 100% of the female staff of the project management unit (PMU) and project implementation units (PIUs);
  - (x) Provision of training on leadership and water-related livelihood to at least 300 locals—with a minimum of 33% females—in project *gram panchayats*; and
  - (xi) Provision of public awareness on water conservation, demand management, and WASH to at least 500 locals in project *gram panchayats*—33% minimum female.

## II. IMPLEMENTATION PLANS

## A. Project Readiness Activities

8. A project preparatory team, comprising 16 international and national consultants engaged by ADB, supplemented PHED's efforts in:<sup>10</sup>

<sup>&</sup>lt;sup>8</sup> Contingent on ADB's review and acceptance of PHED's detailed source sustainability report, showing adequate quantity and quality of water available at the proposed source for the entire design period.

Ontingent on ADB's review and acceptance of PHED's salinity modelling report, to be submitted prior to contract award, showing no risk of salinity ingress at the proposed intake point for the entire design period.

<sup>&</sup>lt;sup>10</sup> International consultants in the project preparation team comprised: (i) Hydrogeologist, British Geological Survey, UK; (ii) Rural Water Supply Specialist; (iii) Climate Risk Vulnerability Assessment Specialist; (iv) Water Utility and

- (i) Preparing strategic planning documents for drinking water quality initiatives such as the DWQAPs:
- (ii) Conducting detailed analysis and preparing reports on arsenic and fluoride in West Bengal's drinking water sources, including characteristics, implications, and mitigation options;
- (iii) Conducting advanced climate risk vulnerability assessment and proposing mitigation and adaption measures for subprojects design;
- (iv) Conducting and supporting technical, financial and economic feasibility analyses, procurement capacity assessment, and due diligence required under the rules and requirements of the Government of India, the GOWB, and ADB;
- (v) Preparing all documentation required for processing the loan by ADB, such as frameworks for social and environmental safeguards, indigenous people protection, gender equality and social inclusion (GESI) action plan, subproject selection criteria, and AMSDF; and
- (vi) Meeting the project readiness criteria set by the Government of India for loan processing by supporting the preparation of bid documents for more than 40% of the total project costs and conducting advance contracting procurement.
- 9. In addition, PHED engaged a large team of design consultants using its own funds. The design consultants together with in-house PHED staff and the grant-funded project preparatory team from ADB prepared the project preliminary designs and conducted due diligence for the project. A PMU and three PIUs for the project districts have been established. PHED has already invited expressions of interest for loan-funded consultants and tenders for over 40% of civil works under the project.
- 10. Table 1 shows the project readiness activities and responsibilities. Table 2 contains the implementation plan for the project.

Smart Water Management Specialist; and (v) Procurement Specialist. National consultants in the project preparation team comprised: (i) Rural Water Supply/ Institutional Specialist; (ii) Financial Management Specialist and Economist; (iii) Social Safeguards and Gender Specialist; (iv) Environment Specialist; (v) Hydraulic Modelling and Water Supply Specialist; (vi) Water Supply and Sanitation Specialist; (vii) Hydrogeologist; (viii) Procurement Specialist; and (ix) two project coordinator/support engineers. Six consultants will continue supporting PHED during the early project implementation period, until loan consultants are mobilized.

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<sup>&</sup>lt;sup>11</sup>The project implementation units (PIUs) are established in Bankura, Purba Medinipur and North 24 Parganas districts. The North 24 Parganas PIU is also responsible for implementing all works and capacity building under the Project in South 24 Parganas.

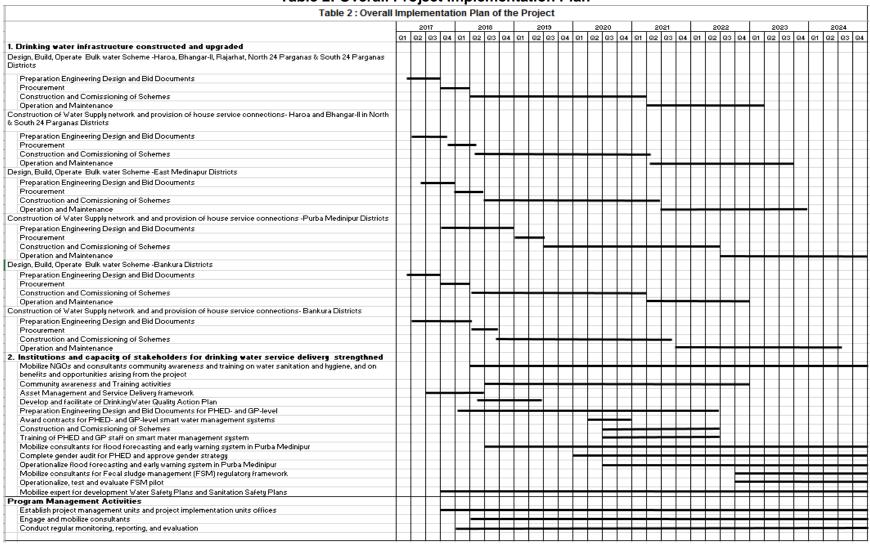
**Table 1: Project Readiness Activities** 

			2017			2018		
Milestones	Responsible Agency	Apr-Oct	Nov	Dec	Jan	Feb	Mar	Apr and beyond
Advance contracting actions								
<ul> <li>Surveys and detailed design of priority subprojects completed</li> </ul>	EA		Х					
Tendering of 35% of total works contracts	EA			Х				
Tendering for loan consultants	EA		Х					
Around 30% contracts awarded and loan consultants mobilized	EA							May 2018
Resettlement and land acquisition completed for priority projects	EA						Х	
ADB Loan Appraisal Field Mission	ADB	Sep 2017						
Loan negotiations	ADB and EA							May 2018
ADB approval	ADB							Aug 2018
Loan signing	ADB, DEA, and EA							Sep 2018
Government legal opinion provided	EA							Oct 2018
Government budget inclusion	EA		Х					
Loan effectiveness	EA, DEA, ADB							Oct 2018

ADB = Asian Development Bank, DEA = Department of Economic Affairs, Government of India, EA = executing agency.

## B. Overall Project Implementation Plan

**Table 2: Overall Project Implementation Plan** 



## III. PROJECT MANAGEMENT ARRANGEMENTS

## A. Project Implementation Organizations: Roles and Responsibilities

**Table 3: Roles and Responsibilities of Project Management Entities** 

	es and Responsibilities of Project Management Endices
Project Management	
and Implementation	Delegan I Desarra 1977
Entities	Roles and Responsibilities
State-Level Steering Committee	<ul> <li>Provide strategic guidance and policy support for (i) effective implementation of the project, and (ii) institutional and financial issues for the sustainable operation and management of water services;</li> <li>Facilitate inter-departmental coordination and cooperation;</li> <li>Review the performance of the project and provide direction on critical issues affecting the project and on compliance with ADB loan covenants;</li> <li>Review and approve annual budgets and the timely release of funds to the project; and</li> <li>Secure the establishment and adequate staffing of the state PMU and district PIUs.</li> </ul>
Public Health	Budget for and allocate adequate and timely counterpart funds and
Engineering	ensure the quality and continuity of PMU and PIUs' staff;
Department,	Facilitate government orders to ensure long-term asset sustainability
Government of West	and service delivery, defining the roles and responsibilities of PHED
Bengal	and project gram panchayats for sustainable asset management and
	service delivery; and
	Facilitate capacity building and strengthening of gram panchayats for
	decentralized management of rural water supply systems.
District-Level Steering	Monitor institutional and financial reforms and the implementation of
Committee	project components in the district;
	Identify and advise the steering committee and/or PMU on the policy
	support required for issues related to the operational and financial
	sustainability of schemes and subprojects;
	Direct district institutions on policy implementation for institutional
	reforms and strengthening and financial reforms as guided by the
	steering committee and the state government;
	Coordinate between the local agencies (gram panchayats and panchayat semitic) and PII is to facilitate approvals and elegrances.
	panchayat samitis) and PIUs to facilitate approvals and clearances and act as an arbitrator for any disputes between agencies and local
	institutions;
	Provide project oversight, including (but not limited to) the
	implementation of AMSDF by <i>gram panchayats</i> , to ensure long-term
	asset sustainability and service delivery; and
	Assist the process for project grievance redress including issues
	related to social and environmental safeguards that cannot be
	addressed at PIU level.

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Project Management	
and Implementation	Dales and Dasmana (Lift)
Entities	Roles and Responsibilities
Project Management Unit	<ul> <li>Manage the project and oversee its implementation;</li> <li>Be the focal point for communication with all stakeholders, including ADB, and be the signatory to all key documents including withdrawal</li> </ul>
	<ul> <li>applications and audit reports for submission to the Government of West Bengal and the Government of India on project matters;</li> <li>Ensure compliance with loan covenants, Government of India,</li> </ul>
	Government of West Bengal, and ADB guidelines, procedures, and policies;
	<ul> <li>Monitor compliance with (i) ADB Safeguard Policy Statement, (ii) GESI plan; and (iii) the resettlement, environmental assessment, and indigenous peoples frameworks for the project and the corresponding plans such as resettlement plans, IPPs, and IEEs for each of the subprojects;</li> </ul>
	<ul> <li>Maintain and manage project accounts, coordinate and conduct audits, financial reporting, disbursements, and budgeting for the project;</li> </ul>
	Submit disbursement applications;
	Ensure PIU staffing and provide them with adequate training and capacity building to implement project successfully;
	<ul> <li>Approve engineering designs, procurement documentation, and training and capacity building programs;</li> </ul>
	Manage the procurement of services and goods by the respective
	<ul> <li>implementing agencies in the project and guide PIUs accordingly;</li> <li>Process bills for goods and service contracts;</li> </ul>
	<ul> <li>Support the state-level steering committee on project issues, policies, and guidelines that support and enhance the project's implementation and the operational sustainability of the schemes, and facilitate enacting policies that are agreed by the steering committee;</li> </ul>
	Establish and maintain a project performance monitoring system at each subproject and monitor physical and non-physical investment activities under each subproject;
	Oversee the implementation of the GESI action plan, TA funding, and grant financing under the Urban Climate Change Resilience Trust Fund;
	<ul> <li>Conduct periodic review of the project's progress and submit agreed project reports to the steering committee, Government of West Bengal, MDWS, and ADB;</li> </ul>
	Prepare the project completion report; and
	Disseminate information related to the project to the public and
	media.
Project Implementation	Project Management
Units in Bankura, North	Manage the procurement of works;
24 Parganas, 12 and	Oversee the implementation of works contracts as the employer and
Purba Medinipur	support DSISC (engineer to the contracts) in the supervision of works contracts and ensuring quality;
	Process bills of works contracts; and
	<ul> <li>Manage, oversee, coordinate, and monitor the works contracts and supply of equipment and materials, ensuring sound works supervision and quality control;</li> </ul>

<sup>12</sup> The Project Implementation Unit of North 24 Parganas will also look after all project activities in South 24 Parganas.

Dreiget Management	
Project Management and Implementation	
Entities	Roles and Responsibilities
	Supervise the work of district-level NGOs, organizations and/or
	consultants engaged on the project and monitor the quality of their deliverables;
	<ul> <li>Implement resettlement plans, DDRs, IPPs, IEEs including EMPs, and a GESI action plan;</li> </ul>
	<ul> <li>Plan and monitor the implementation of training and capacity building programs in the subprojects;</li> </ul>
	Obtain rights of way and clearances;
	<ul> <li>Assist the district steering committee in reviewing and preparing the necessary documents;</li> </ul>
	Prepare progress reports on each contract; and
	<ul> <li>Maintain subproject and contract-level accounts including billing to project gram panchayats for bulk costs to be given to PHED.</li> </ul>
	Operation and Maintenance
	<ul> <li>Sensitize gram panchayat members about roles and responsibilities of project gram panchayats as per AMSDF for sustainable asset management and service delivery;</li> </ul>
	<ul> <li>Manage O&amp;M components of the subprojects and monitor their deliverables;</li> </ul>
	<ul> <li>Hand over distribution systems to the gram panchayats on completion of contracts;</li> </ul>
	<ul> <li>Manage training of stakeholders at gram panchayat-level and facilitate technical support on issues of O&amp;M and monitoring of water quality;</li> </ul>
	Oversee budgeting and accounting, project MIS, and reporting;
	Co-ordinate with PMU, Zilla Parsishads, and Panchayat Samitis on issues of water supply services by the gram panchayats, the release
	of grants to <i>gram panchayats</i> for O&M, water user charges, the bulk
	cost to be paid to PHED, accounting, and project MIS.
Tender Evaluation and	Consultant Selection
Recommendation	<ul> <li>Open expressions of interest and consultants' proposals;</li> </ul>
Committee	Evaluate expressions of interest and proposals;  Propore evaluation reported and
	<ul> <li>Prepare evaluation reports; and</li> <li>Submit recommendation to the tender approval committee.</li> </ul>
	Procurement of works and goods
	Open tender;
	Evaluate bids;
	Prepare evaluation reports; and
	Submit recommendation to the tender approval committee.
Tender Approval	Approves
Committee <sup>13</sup>	<ul> <li>Evaluation reports prepared by the tender evaluation and consultant selection committees and contract award proposals;</li> </ul>
	<ul> <li>Contract variation proposals with a financial implication of more than ₹50 million.</li> </ul>
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<sup>&</sup>lt;sup>13</sup> The Tender Evaluation and Recommendation Committee (TERC) evaluates proposals and makes recommendations to the Tender Approval Committee (TAC). Officials of PMU and PIU are the members of TERC. TAC is also part of PHED, but at a higher level. As per the government of West Bengal's procedures, PHED has the authority to accept high value proposals/contracts such as the ones under the project. The composition of the committees and the process followed for the approval of tenders are in accordance with the requirements of PHED.

Project Management and Implementation Entities	Roles and Responsibilities
Project <i>gram</i> panchayats through  Village Water and  Sanitation Committees <sup>14</sup>	<ul> <li>Establish sustainable asset management and service delivery systems at the gram panchayats level;</li> <li>Provide a forum for the effective involvement of gram panchayats stakeholders in project implementation, civic awareness, WASH, and water conservation activities;</li> <li>Discuss and finalize the proposal for institutional changes with assistance of the PMU and PIU;</li> <li>Provide guidance and support to the PIU to ensure smooth and timely implementation of projects; and</li> <li>Help the PIU obtain the support of the stakeholders;</li> <li>Assist in site clearance activities and obtaining statutory clearances.</li> </ul>

ADB = Asian Development Bank, AMSDF = asset management and service delivery framework, DDR = due diligence report, DSISC = design, supervision, and institutional support consultants, EMP = environmental management plan, GESI = gender equality and social inclusion, IEE = initial environmental examination, IPP = indigenous peoples plan, MIS = management information system, MDWS = Ministry of Drinking Water and Sanitation, O&M = operation and maintenance, PMU = project management unit, PIU = project implementation unit; PMC = project management consultants; PHED = Public Health Engineering Department.

Source: Asian Development Bank.

## B. Key Persons Involved in Implementation

**Executing and Implementing Agency** 

Public Health Engineering Department

Officer's Name: Mr. Manoj Pant

Position: Principal Secretary, Public Health Engineering

Department

Government of West Bengal

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**Asian Development Bank** 

Urban Development and Water

Division (SAUW)

South Asia Department

Staff Name: Mr. Sekhar Bonu

Position: Director

Telephone No. +632- 632-5628 Email address: sbonu@adb.org

Mission Leader Staff Name: Ms. Neeta Pokhrel

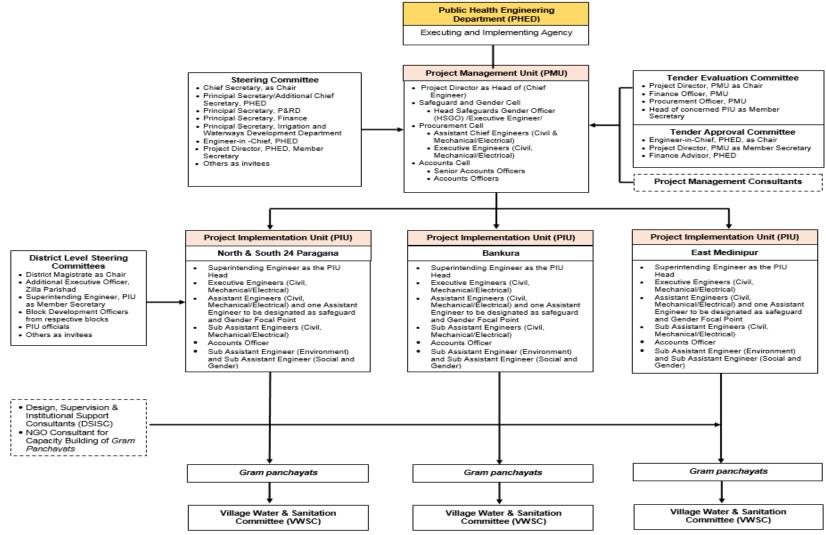
Position: Senior Urban Development Specialist

Telephone: No. +632 683 1408 Email address: npokhrel@adb.org

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While gram panchayats are the elected administrative body of the government at the local level, the Village Water and Sanitation Committees (VWSCs) are the committees formed to carry out the operation and maintenance of water supply and sanitation schemes in the gram panchayats, as required by the government. The VWSC reports to the gram panchayat. Formation of the VWSC is required under government guidelines to ensure that rural water supply programs are grounded in and have participation of local bodies. The members of VWSC generally include the political head of the gram panchayat, the elected member responsible for water and sanitation, other elected members, the executive officer of the gram panchayat, engineer, and selected members from the community. VWSCs have already been formed in 90% of the project gram panchayats. Formation of VWSC is one of the criteria for selection of project gram panchayats.

## C. Project Organization Structure



ADB = Asian Development Bank, DSISC = design, supervision and institutional support consultant, NGO = nongovernment organization, P&RD = Panchayat & Rural Development Department, PHED = Public Health Engineering Department, PIU = project implementation unit, PMC = project management consultants, PMU = project management unit, VWSC = Village Water and Sanitation Committee.

### IV. COSTS AND FINANCING

11. The project is estimated to cost \$349 million. The government has requested (i) a regular loan of \$240 million from ADB's ordinary capital resources, and (ii) a grant of \$3 million from the Japan Fund for Poverty Reduction to help finance the project. The loan will have a 25-year term including a grace period of 5 years, an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility, and such other terms and conditions as set forth in the draft loan and project agreements. Based on the straight-line repayment method, the average maturity is 15.25 years, and the maturity premium payable to ADB is 0.10% per year. The summary cost estimates for the project are in Table 4.

Table 4: Summary Cost Estimates
(\$ million)

(ψ 111111011)	
Item	<b>A</b> mount <sup>a</sup>
A. Base Cost <sup>b</sup>	
Climate-resilient drinking water infrastructure constructed	275.7
<ol><li>Institutions and capacity of stakeholders for drinking water service delivery strengthened</li></ol>	20.2
Subtotal (A)	295.9
B. Contingencies <sup>c</sup>	33.2
C. Financing Charges <sup>d</sup>	19.9
Total (A+B+C)	349.0

a In end-2017 prices; an exchange rate of \$1 = ₹65 is used.

b Includes taxes and duties of \$32.4 million to be financed from government resources by cash contribution.

<sup>c</sup> Physical contingencies are computed at 5.0% for civil works. Price contingencies are computed at 1.4%–1.6% on foreign exchange costs and 4.0%–4.6% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

d Includes interest and commitment charges. Interest during construction for the ADB loan has been computed at the 5-year United States dollar fixed-swap rate plus a spread of 0.5% and a maturity premium of 0.1%. Commitment charges for ADB loans are 0.15% per year to be charged on the undisbursed loan amount.

12. The GOWB will provide \$106 million to the investment costs of the project to finance (i) taxes and duties, (ii) O&M costs, (iii) land acquisition and resettlement costs, (iv) incremental recurrent costs, (v) financing charges during implementation, and (vi) part of the civil works and equipment. The GOWB will provide the loan and grant proceeds and counterpart funds to the implementing agency as a mix of loan and grant. ADB will finance the expenditures in relation to works, consulting services, capacity building, goods, and equipment. The Government of India will on-lend the ADB loan proceeds to the GOWB. The Government of India and GOWB have assured that they will meet any financing shortfall to ensure that project outputs are fully achieved. The summary financing plan for the project is in Table 5.

<sup>&</sup>lt;sup>15</sup> Under output 2 of the project, the grant under the Japan Fund for Poverty Reduction will support enabling and skilling communities for sustainable drinking water services in West Bengal, as detailed in the linked document in Appendix 2 of the project's report and recommendation to the President.

**Table 5: Summary Financing Plan** 

	Amount	Share of Total
Source	(\$ million)	(%)
Asian Development Bank	243.0	70%
Ordinary capital resources (regular loan)	240.0	
Japan Fund for Poverty Reductiona	3.0	
Government of West Bengal	106.0	30%
Total	349.0	100%

<sup>&</sup>lt;sup>a</sup> Administered by Asian Development Bank. Source: Asian Development Bank estimates.

13. Climate change adaptation is estimated to cost \$62.2 million, of which ADB will finance 70%.

## A. Cost Estimates Preparation and Revisions

14. PHED, with support from their consultants and the project preparatory team, prepared the cost estimates based on the detailed project reports and feasibility reports of subprojects. PHED used Microsoft Excel in preparing the cost estimate model, which is available to the project team and the PMU. The PMU will update the cost estimates throughout project implementation.

## B. Key Assumptions

- 15. The following key assumptions underpin the cost estimates and financing plan:
  - (i) Exchange rate: ₹65 = \$1 (as of November 2017).
  - (ii) Price contingencies based on expected cumulative inflation over the implementation period are shown in Table 6.
  - (iii) In-kind contributions cannot be easily measured and have not been quantified.

Table 6: Escalation Rates for Price Contingency Calculation

Item	2017	2018	2019	2020	2021	2022	2023	2024	Average
Foreign rate of price inflation	1.4%	2.9%	4.4%	5.9%	7.5%	9.1%	10.7%	12.3%	6.8%
Domestic rate of price inflation	4.0%	8.6%	13.1%	17.6%	22.1%	26.6%	31.1%	35.6%	19.8%
Source(s): ADB estimates.									

#### C. **Detailed Cost Estimates by Expenditure Category**

**Table 7: Cost Estimates by Expenditure Category** 

(\$ million)

ltom		Foreign	Local	Total	Total		% of Total
ltem		Exchange	Currency	Cost	<b>Net Cost</b>	Tax	<b>Base Cost</b>
A.	Investment Costs						
1.	Civil works and equipment	25.2	227.1	252.4	223.9	28.5	85.3%
	a. PHED-level	25.1	226.0	251.1	222.8	28.3	84.9%
	b. Gram Panchayat-level and FSSM	0.1	1.1	1.3	1.1	0.2	0.4%
2.	Operation and maintenance	1.4	12.7	14.1	12.3	1.7	4.8%
3.	Land acquisition and resettlement	-	9.2	9.2	9.2	-	3.1%
4.	Project management and capacity development	1.7	15.2	16.9	14.7	2.2	5.7%
	<ul> <li>a. Project management and design, supervision, and institutional support consultants</li> </ul>	1.4	12.2	13.6	11.8	1.8	4.6%
	b. Capacity building activities	0.1	1.2	1.3	1.1	0.2	0.4%
	c. NGO Consultants, GP-level skilling and community awareness	0.2	1.9	2.1	1.8	0.3	0.7%
	Subtotal (A)	28.3	264.3	292.6	260.2	32.4	98.9%
B.	Recurrent Costs						
1.	Incremental administrative costs	-	3.3	3.3	3.3	-	1.1%
	Subtotal (B)	-	3.3	3.3	3.3	-	1.1%
	Total Base Cost	28.3	267.6	295.9	263.5	32.4	100.0%
C.	Contingencies						
1.	Physical contingencies	1.2	11.4	12.6	12.6	-	4.3%
2.	Price contingencies	-	20.6	20.6	20.6	-	7.0%
	Subtotal (C)	1.2	32.0	33.2	33.2	-	11.2%
D.	Financing Charges During Implementation						
1.	Interest during construction	18.7	-	18.7	18.7	-	6.3%
2.	Commitment charges	1.1	-	1.1	1.1	-	0.4%
	Subtotal (D)	19.9		19.9	19.9	-	6.7%
	Total Project Cost (A+B+C+D)	49.4	299.6	349.0	316.6	32.4	117.9%

FSSM = fecal sludge and septage management, NGO = nongovernment organization, PHED = Public Health Engineering Department.

Notes:

1. Numbers may not sum precisely because of rounding.

2. The costs of the actual audits of the project are minor and will be borne by the government.

<sup>3.</sup> Minor environmental monitoring and implementation of resettlement plan and gender equity and social inclusion action plan cost are absorbed in B1. ADB will not finance land acquisition cost.

#### D. Allocation and Withdrawal of Loan and Grant Proceeds

**Table 8: Allocation and Withdrawal of Loan Proceeds** 

No.	Item	Amount Allocated for ADB Financing Category (\$ million)	Basis for Withdrawal from the Loan Account
1	Civil works and equipment	193.98	76.9% of total expenditure claimed
2	Project management and capacity development (project management and design supervision and institutional support consultants and capacity building activities)	12.91	87.0% of total expenditure claimed
3	Unallocated	33.11	
Total		240.00	

Note: Numbers may not sum precisely because of rounding. Source: Asian Development Bank estimates.

**Table 9: Allocation and Withdrawal of Grant Proceeds** 

No.	ltem	Amount Allocated for ADB Financing Category (\$ million)	Basis for Withdrawal from the Loan Account
1	Civil works and equipment (gram panchayat-level and FSSM) and project management and capacity development (NGO Consultants, gram panchayats-level skilling, and community awareness)	2.90	87.7% of total expenditure claimed
2	Unallocated	0.10	
Total		3.00	

NGO = nongovernment organization; FSSM = fecal sludge and septage management.

## E. Detailed Cost Estimates by Financier

**Table 10: Detailed Cost Estimates by Financier** 

(\$ million)

		AI	OB	Japan Fund for Poverty Reduction		Government of West Bengal			Total Costs	
Item	1	\$	%	\$	%	Tax	Non-Tax	Total	%	-
Α.	Investment Costs									
1.	Civil works and equipment	194.0	76.9%	1.1	0.4%	28.5	28.8	57.3	22.7%	252.4
	a. PHED-level	194.0	77.2%	-	0.0%	28.3	28.8	57.2	22.8%	251.1
	b. <i>gram panchayat</i> -level and FSSM	-	0.0%	1.1	87.7%	0.2	-	0.2	12.3%	1.3
2.	Operation and maintenance	-	0.0%	-	0.0%	1.7	12.3	14.1	100.0%	14.1
3.	Land acquisition and resettlement	-	0.0%	-	0.0%	-	9.2	9.2	100.0%	9.2
4.	Project management and capacity development	12.9	76.3%	1.8	10.6%	2.2	-	2.2	13.0%	16.9
	a. Project management and design, supervision, and institutional support consultant	11.8	87.0%	-	0.0%	1.8	-	1.8	13.0%	13.6
	b. Capacity building activities	1.1	87.0%	-	0.0%	0.2	-	0.2	13.0%	1.3
	c. NGO Consultants, <i>gram panchayat</i> -level skilling and community awareness	-	0.0%	1.8	87.0%	0.3	-	0.3	13.0%	2.1
	Subtotal (A)	206.9	70.7%	2.9	1.0%	32.4	50.4	82.8	28.3%	292.6
B.	Recurrent Costs									
1.	Incremental administrative costs	-	0.0%	-	0.0%	-	3.3	3.3	100.0%	3.3
	Subtotal (B)	-	0.0%	-	0.0%	-	3.3	3.3	100.0%	3.3
	Total Base Cost	206.9	69.9%	2.9	1.0%	32.4	53.7	86.1	29.1%	295.9
C.	Contingencies									
1.	Physical contingencies	12.6	99.6%	0.1	0.4%	-	-	-	0.0%	12.6
2.	Price contingencies	20.5	99.8%	0.1	0.2%	-	-	-	0.0%	20.6
	Subtotal (C)	33.1	99.7%	0.1	0.3%	-	-	-	0.0%	33.2
D.	Financing Charges During Implementation \( \)									
1.	Interest during construction	-	0.0%	-	0.0%	-	18.7	18.7	100.0%	18.7
2.	•	-	0.0%	-	0.0%	-	1.1	1.1	100.0%	1.1
	Subtotal (D)	-	0.0%	-	0.0%	-	19.9	19.9	100.0%	19.9
	Total Project Cost	240.0	68.8%	3.0	0.9%	32.4	73.6	106.0	30.4%	349.0

FSSM = fecal sludge and septage management, NGO = nongovernment organization, PHED = Public Health Engineering Department.

Notes: (i) Numbers may not sum precisely because of rounding; (ii) The costs of the actual audits of the project are minor and will be borne by the government; and (iii) Minor environmental monitoring and implementation of resettlement plan and gender equity and social inclusion action plan cost are absorbed in B1. ADB will not finance land acquisition cost.

#### F. **Detailed Cost Estimates by Outputs and/or Components**

**Table 11: Detailed Cost Estimates by Outputs** 

(\$ million)

			Out	tput 1	Outpo (Institutions and	
		Total	(Climate-resilie	nt Drinking Water e Constructed)	Stakeholders for Service Delivery	Drinking Water
Iten	n	Cost	\$	%	\$	%
Α.	Investment Costs					
1.	Civil works and equipment	252.4	252.4	100.0%	-	0.0%
	a. PHED-level	251.1	251.1	100.0%	-	0.0%
	b. Gram panchayat-level and FSSM	1.3	1.3	100.0%	-	0.0%
2.	Operation and maintenance	14.1	14.1	100.0%	-	0.0%
3.	Land acquisition and resettlement	9.2	9.2	100.0%	-	0.0%
4.	Project management and capacity development	16.9	-	0.0%	16.9	100.0%
	a. Project management and design supervision,	13.6	-	0.0%		
	institutional support consultants				13.6	100.0%
	b. Capacity building activities	1.3	-	0.0%	1.3	100.0%
	c. NGO Consultants, gram panchayat-level skilling	2.1	-	0.0%	2.1	100.0%
	and community awareness					
	Subtotal (A)	292.6	275.7	94.2%	16.9	5.8%
B.	Recurrent Costs					
1.	Incremental administrative costs	3.3	-	0.0%	3.3	100.0%
	Subtotal (B)	3.3	-	0.0%	3.3	100.0%
	Total Base Cost	295.9	275.7	93.2%	20.3	6.8%
C.	Contingencies					
1.	Physical contingencies	12.6	12.6	100.0%	-	0.0%
2.	Price contingencies	20.6	19.2	93.4%	1.4	6.6%
	Subtotal (C)	33.2	31.9	95.9%	1.4	4.1%
D.	Financing Charges During Implementation					
1.	Interest during construction	18.7	17.5	93.4%	1.2	6.6%
2.	Commitment charges	1.1	1.0	93.4%	0.1	6.6%
	Subtotal (D)	19.9	18.5	93.4%	1.3	6.6%
	Total Project Cost (A+B+C+D)	349.0	326.1	93.4%	22.9	6.6%

FSSM = fecal sludge and septage management, NGO = nongovernment organization, PHED = Public Health Engineering Department.

Note: 1. Numbers may not sum precisely because of rounding.

The costs of the actual audits of the project are minor and will be borne by the government. ADB will not finance land acquisition cost.
 Minor environmental monitoring and implementation of resettlement plan and gender equity and social inclusion action plan cost are absorbed in B1. Source: Asian Development Bank estimates.

## G. Detailed Cost Estimates by Year

Table 12: Detailed Cost Estimates by Year (\$ million)

		(Ψ	,						
Iter	n	Total	2018	2019	2020	2021	2022	2023	2024
Α.	Investment Costs								
1.	Civil works and equipment	252.4	9.7	46.0	59.6	47.1	49.3	34.3	6.4
	a. PHED-level	251.1	9.7	45.5	58.9	47.1	49.3	34.3	6.4
	b. Gram panchayat-level and FSSM through JFPR	1.3	0.1	0.5	0.7	-	-	-	-
2.	Operation and maintenance	14.1	-	-	-	0.6	2.1	6.4	5.0
3.	Land acquisition and resettlement	9.2	1.9	4.2	3.1	-	-	-	-
4.	Project management and capacity development	16.9	0.3	2.6	3.5	4.4	3.4	2.3	0.4
	Project management and design, supervision, and institutional support consultants	13.6	0.1	2.2	3.0	3.8	2.8	1.6	-
	b. Capacity building activities	1.3	0.1	0.2	0.2	0.2	0.2	0.3	0.1
	c. NGOs, gram panchayat-level skilling and community awareness, through JFPR	2.1	0.1	0.3	0.3	0.4	0.4	0.4	0.2
	Subtotal (A)	292.6	12.0	52.8	66.2	52.1	54.8	43.0	11.8
В.	Recurrent Costs								
1.	Incremental administrative costs	3.3	0.3	0.6	0.6	0.6	0.6	0.6	0.1
	Subtotal (B)	3.3	0.3	0.6	0.6	0.6	0.6	0.6	0.1
	Total Base Cost	295.9	12.2	53.4	66.8	52.7	55.4	43.6	11.9
C.	Contingencies								
1.	Physical contingencies	12.6	0.5	2.3	3.0	2.4	2.5	1.7	0.3
2.	Price contingencies	20.6	0.3	2.1	3.7	3.8	5.0	4.7	0.9
	Subtotal (C)	33.2	0.8	4.4	6.7	6.2	7.5	6.4	1.2
D.	Financing Charges								
1.	Interest during construction	18.7	0.1	0.7	1.7	3.0	4.4	5.7	3.1
2.	Commitment charges	1.1	0.2	0.3	0.3	0.2	0.1	0.0	0.0
	Subtotal (D)	19.9	0.2	1.0	2.0	3.2	4.5	5.7	3.1
	Total Project Cost (A+B+C+D)	349.0	13.3	58.8	75.5	62.1	67.4	55.7	16.3
===									

FSSM = fecal sludge and septage management, JFPR = Japan Fund for Poverty Reduction, NGO = non-government organization, PHED = Public Health Engineering Department.

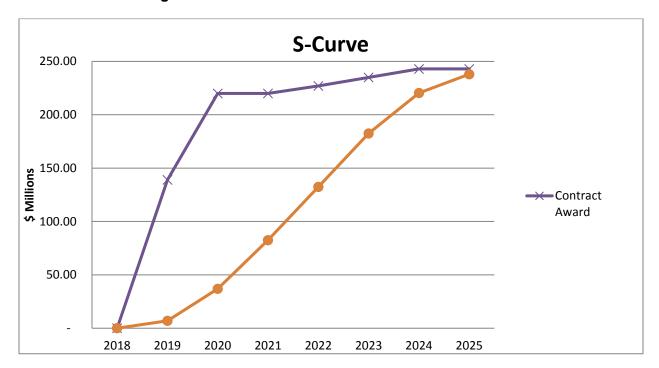
Note: 1. Numbers may not sum precisely because of rounding.

<sup>2.</sup> The costs of the actual audits of the project are minor and will be borne by the government.

<sup>3.</sup> Minor environmental monitoring and implementation of resettlement plan and gender equity and social inclusion action plan cost are absorbed in B1. ADB will not finance land acquisition cost.

## H. Contract Award and Disbursement S-Curve

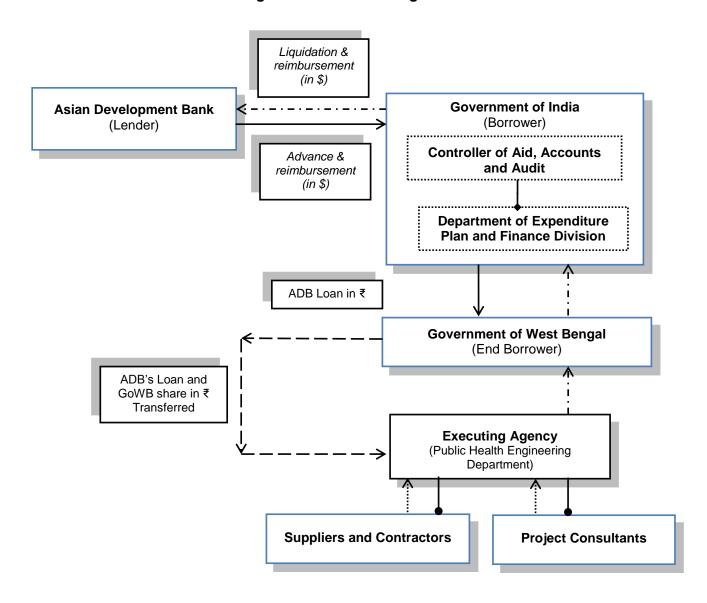
Figure 1: Contract Award and Disbursement S-Curve



	Contract Award						Di	sbursem	ent	
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
2018			67.00	99.00	99.00					
2019	139.00	139.00	162.00	162.00	162.00	7.00	10.00	18.00	24.00	24.00
2020	220.00	220.00	220.00	220.00	220.00	37.00	45.00	59.00	70.00	70.00
2021	220.00	220.00	220.00	227.00	227.00	82.50	95.00	107.50	120.00	120.00
2022	227.00	227.00	227.00	235.00	235.00	132.50	145.00	157.50	170.00	170.00
2023	235.00	235.00	235.00	243.00	243.00	182.50	195.00	203.50	212.00	212.00
2024	243.00	243.00	243.00	243.00	243.00	220.50	229.00	232.50	236.00	235.00
2025	243.00	243.00			243.00	238.00	243.00			243.00

## I. Fund Flow Diagram

Figure 2: Fund Flow Diagram





## V. FINANCIAL MANAGEMENT

## A. Financial Management Assessment

- 16. The financial management assessment (FMA) was conducted in accordance with ADB's Guidelines for the Financial Management and Analysis of Projects (2005), the Financial Due diligence: A Methodology Note (2009), and the Financial Management Technical Guidance Note (2015). The assessment considered the financial management capacity of PHED as the implementing agency for the proposed project, including arrangements for funds flow, staffing, accounting and financial reporting systems, financial information systems, and internal and external auditing arrangements.
- 17. PHED is one of the departments of the GOWB. The head of PHED is the Additional Chief Secretary and/or Principal Secretary. PHED will be responsible for the overall management, supervision, and execution of the project as the implementing agency through its dedicated PMU. The government created the PMU for the project within PHED in August 2017 and appointed a project director, responsible for implementing the project. Three PlUs—one for each of the project districts—were established under the PMU also in August 2017. <sup>17</sup> The PlUs will coordinate with the project *gram panchayats* for all implementation and capacity building activities during the project implementation period. PHED has considerable experience in implementing large-scale projects funded by the Government of India and the state government. In addition, PHED is currently implementing the West Bengal Piped Water Supply Project in Purulia (\$200 million), funded by the Japan International Cooperation Agency. The West Bengal Drinking Water Sector Improvement Project will be the first ADB-assisted project that PHED will implement. All positions in the PMU and the PIUs, as shown in the project organizational structure (Section III C), have already been approved by the government.
- 18. A dedicated project director, with assistance from large technical and non-technical teams, will manage the project on a full-time basis. The PMU, with the help of the PIUs, will be responsible for all day-to-day management of the project, including but not limited to (i) preparing an overall project implementation plan and detailed work program; (ii) providing overall monitoring and guidance on the implementation; (iii) monitoring and supervising all management activities; (iv) preparing project progress and project completion reports; (v) financial planning and budgeting, including contract awards and disbursements; and (vi) ensuring full compliance with ADB's resettlement, environmental, and other safeguard policies.
- 19. The major risk factors identified during the assessment that need to be addressed include:
  - (i) Limited experience of PHED in implementing and managing externally funded projects may cause delays in the implementation of the project;
  - (ii) Inadequate staff in the accounts and finance sections of the PMU may hamper timely preparation and submission of periodical financial reports;
  - (iii) Internal audit system in PHED needs strengthening to ensure timely preparation of project financial statements; and

ADB. 2005. Financial Management and Analysis of Projects. Manila. https://www.adb.org/sites/default/files/institutional-document/31339/financial-governance-management.pdf; ADB. 2009. Financial Due diligence: A Methodology Note. Manila. https://www.adb.org/sites/default/files/institutional-document/33540/files/financial-due-diligence.pdf; and ADB. 2015. Financial Management Technical Guidance Note. Manila.

<sup>&</sup>lt;sup>17</sup> The PIU for North 24 Parganas will also look after works and project activities in South 24 Parganas.

- (iv) No having an approved water user charges structure in the state may constrain the medium and long-term financial sustainability of PHED and the project *gram panchayats*.
- 20. Despite the highlighted risks, the financial management arrangements are satisfactory when considering PHED's proposed and ongoing actions, including the agreed asset management and service delivery framework (AMSDF) for the project *gram panchayats*. In addition, the project management consultants (PMC) will support PHED and the PMU in enhancing their financial management capacity. Similarly, design, supervision, and institutional support consultants (DSISCs), and project nongovernment organizations (NGOs), guided by PMC, will assist the PIUs and the project *gram panchayats* in enhancing their financial management capacity. The overall risk assessment for the proposed financing is *Moderate*. Considering GOWB's sufficient experience handling externally funded projects and the implementation arrangement for the project established by GoWB and PHED, the advance fund limit was set to the equivalent to 6 months forecast or 10% of the loan amount, and the statement of expenditures (SOE) single payment ceiling was set to \$100,000 and below. The action plan for mitigating the foreseen risks includes the measures is set out in Table 13.

Table 13: Financial Management Action Plan

	Current		Mitigation		Target
Area	Scenario	Risk	Measures	Responsibility	Date
Managing externally assisted projects	Limited experience of PHED in implementing and managing externally funded projects	This may cause a delay in the effective implementation of the project	Extending full training and capacity building support, developing a manual, and conducting periodic workshops with the help of the PMC to enhance the financial management capacity of PHED and the PMU. DSISCs and NGOs will give training and capacity building to PIUs and all project gram panchayats on the same.	PHED	April 2018
Staffing	Inadequate staff in the accounts and finance sections of PMU and PIUs	This may hamper the timely preparation and submission of periodical	Strengthening the accounts and finance sections of PMU and PIUs by engaging qualified staff	PHED	February 2018

	Current		Mitigation		Target
Area	Scenario	Risk	Measures	Responsibility	Date
		financial reports	for the timely preparation of financial reports.		
Internal audit	Internal audit system in PHED needs strengthening	This may result in backlogs in the preparation of project financial statements	Strengthening the internal audit process by appointing qualified staff or outsourcing to experienced audit firms.	PHED	December 2018
Financial Sustainability	No approved water user charge structure in the state	This may constrain PHED and project <i>gram panchayats</i> from achieving medium and long-term financial sustainability	Preparation and implementation of a water user charge structure and regular water user charge revisions by PHED and gram panchayats through the implementation of the agreed AMSDF.	PHED gram panchayats	Q3 2017–Q2 2018 (Preparation) Sep 2020 (Implementation)

AMSDF = asset management and service delivery framework; DSISC = design, supervision and institutional support consultants; NGO = nongovernment organization; PHED = Public Health Engineering Department; PMC = project management consultant; PMU = project management unit; WBDWSIP = West Bengal Drinking Water Sector Improvement Project.

21. The financial management assessment considered two types of risks: (i) inherent risks, i.e., risks outside the direct control of the entity financial management; and (ii) control risks, i.e., risks concerning the internal functioning and control of the entity's accounts division. Key risks are shown in Table 14.

**Table 14: Financial Management Inherent and Control Risk Assessment** 

Risk Type	Risk Assessment	Proposed Mitigation Measures
A. Inherent Risk		
Country-Specific Risks (India)	Low The financial management capacity and auditing standard in India are sound. India has a strong accounting profession, although the accounting is done on a cash basis in most levels of government.	Not applicable
Entity-Specific Risks (Government of	Moderate There is a strong institutional	AMSDF will be implemented by the
West Bengal)	mechanism and legislative framework	

Risk Type	Risk Assessment	Proposed Mitigation Measures		
	for budgeting, accounting, and auditing in a time-bound manner. There are no water user charges levied in the state of West Bengal. Costs related to water supply are covered by allocating revenues from taxes, transfers and other funds.	panchayats, which is necessary for the introduction of regular water user charges on the water supply to recover O&M costs.  In addition, gram panchayats assisted by PHED will need to prepare the financial projections to identify realistic and appropriate water user charge revisions.		
Project-Specific Risks	Substantial PHED is responsible for rural water supply in the state of West Bengal. PHED meets O&M costs out of the government budgetary allocations. Gram panchayats coordinate with PHED for water supply within their jurisdiction. There was a practice to levy water user charges on a monthly basis in the past. However, the collections became irregular, and some gram panchayats discontinued the practice. Gram panchayats maintain the water supply assets using the untied funds devolved and available.  Under the project, PHED will supply water up to overhead storage reservoirs, and gram panchayats will be responsible for the distribution, house connection, and metering. Gram panchayats will levy a flat monthly water user charges for the operation of assets developed under the project.  If there is a delay in levying water user charges or if the government decides not to levy any water user charges, gram panchayats may have financial difficulties in covering O&M costs.	The Government of West Bengal has issued an order on AMSDF that includes levying water user charges on each connection to recover the O&M costs in the project gram panchayats. Establishment of a strong legal, institutional, and financial arrangement and agreement on sharing the O&M costs between PHED and gram panchayats through the AMSDF. Commitment of the O&M budget allocation at both PHED and gram panchayats levels is a loan condition.		
Overall  Inherent Risk  Moderate  While entity-specific risks exist, these risks might be mitigated through implementation of the AMSDF and efforts of the government, PHED, and ot related government administrative units with the support of ADB. The Government administrative units with the support of ADB. The Government administrative units with the support of ADB. The Government administrative units with the support of ADB. The Government administrative units with the support of ADB. The Government administrative units with the support of ADB. The Government administrative units with the support of ADB. The Government panchayats in achieving their finance sustainability by implementing the AMSDF effectively, including introducin water user charge structure and carrying out regular revisions.				
B. Control Risk				
Implementing Entity	Low PHED is a full-fledged department of the Government of West Bengal under a Minister-in-Charge. PHED has implemented multiple large scheme projects (internally funded) and is currently (as of [date])	Not applicable		

D'al Tama	D'al Assessment	Duran and I Marchan Com Marchan
Risk Type	Risk Assessment	Proposed Mitigation Measures
	implementing one JICA-financed	
	project and has handled several projects financed by the Government	
	of India and the Government of West	
	Bengal.	
Flow of funds and	Moderate	
Budget Allocation	The Government of West Bengal will	Not applicable
Daaget / moodilen	receive the ADB loans in Indian	The applicable
	rupees from the Government of India.	
	The government will allocate ADB	
	loans and its counterpart funds to	
	PHED using the established	
	budgetary mechanism.	
	Disclosure of funds flow, allocation,	
	and yearly utilization will be available	
	in a transparent manner in the public	
	domain as part of the disclosure	
Ota Win n	requirements.	
Staffing	Low (PHED) All officers within PHED are	Not applicable
	All officers within PHED are permanent but are transferable within	Not applicable
	the divisions for regular rotation of	
	duties.	
	Staff within the accounts division of	
	PHED are from the Finance	
	Department of the Government of	
	West Bengal.	
	Substantial (PMU)	
	The Government of West Bengal	The Government of West Bengal
	created the PMU and three PIUs	needs to staff and deploy necessary
	under PHED for the current project.	officers fully before the loan
	PHED appointed the Project Director	effectiveness.
	and is in the process of appointing all staff under PMU and PIUs.	
	The government is yet to fully	
	complete the staffing of other	
	sections of the PMU including the	
	PFAU and the PIUs.	
	Delays in staffing the PMU, PFAU,	
	and PIUs may hamper the effective	
	implementation of the project.	
Accounting Policies &	Moderate	
Procedures	PHED follows the government	Not applicable
	accounting system and the PMU and	
	PIUs will follow the same system for	
	the project.	
	In addition, the PMU will prepare	
	separate annual project financial	
	statements for the project and report	
	as per the Guidelines issued by the DEA-C&AG.	
Internal Audit	Substantial	
IIIIGIIIAI AUUIL	Oubstatitiai	

Risk Type	Risk Assessment	Proposed Mitigation Measures
- 1	The Finance (Internal Audit)	PMU will appoint qualified staff or hire
	Department of the Government of	firms of auditors to carry out the risk-
	West Bengal was entrusted to carry	based internal audit of the project.
	out the internal audit of all	, ,
	departments of government,	
	including PHED.	
	As of April 2018, the practice of	
	internal audit is irregular in the	
	Government of West Bengal	
	including PHED.	
External Audit	Low (PHED)	
	PHED does not prepare any separate	Not applicable
	financial statements. All receipts and	
	payments are accounted by PHED	
	using the established account heads	
	and codes.	
	The government's annual financial	
	statements, including the financial	
	statements of PHED, are prepared by	
	the Accountant General (Accounts	
	and Entitlement) of the government.	
	C&AG is responsible for the external	
	audit of the Government of West	
	Bengal as a whole, including PHED.	
	C&AG completed an audit of the	
	government for the year 2014–2015.	
	Low (PMU)	
	The PMU will prepare separate	
	project annual financial statements	
	using the existing guidelines	
	applicable for all externally aided	
	projects in India.	
	C&AG will audit and report on the	Not applicable
	project annual financial statements of	1100 app. 1100 app.
	the project.	
Reporting and	Low (PHED)	
Monitoring	PHED maintains the management	Not applicable
	information system as required under	
	reporting and monitoring formalities.	
	PHED's budget, accounting, and	
	audit information are available in the	
	public domain under the disclosure	
	requirements.	
	Moderate (PMU and PIUs)	
	The PMU needs to prepare quarterly	<u> </u>
	and annual progress reports for	The reporting and monitoring
	reporting financial and physical	formalities required for the project
	progress of the project.	need to be established as part of the
	Proper project monitoring systems	project implementation.
	are required at the PMU and PIUs for	
	producing the desired reporting	
	structure for the project.	

Risk Type	Risk Assessment	Proposed Mitigation Measures
Information systems	Low (PHED) The system in operation suits PHED's requirement. A backup procedure is also in place.	Not applicable
	Moderate (PMU and PIUs) The PMU and PIUs will install the necessary systems for recording and reporting of project activities. The financial reporting system will have links to the financial information systems of individual projects to monitor progress.	Not applicable
Overall Control Risk	Moderate Other financial management risks are recognized, but not all of them are substantial. Delays in staffing the PMU and PIUs and establishing appropriate internal controls may hamper the effective implementation of the project. Initial support and capacity development for PHED, PMU, and PIU staff on ADB's procedures will be tackled with the support of qualified and experienced PMC and DSISCs.	

ADB = Asian Development Bank; C&AG = Comptroller and Auditor General; DEA = Department of Economic Affairs; DSISCs = Design, Supervision and Institutional Support Consultants; GoWB = Government of West Bengal; JICA = Japan International Cooperation Agency; O&M = operation and maintenance; PFAU = project finance and accounting unit; PHED = Public Health Engineering Department; PIU = project implementation unit; PMC = project management consultant; PMU = project management unit; WBDWSIP = West Bengal Drinking Water Sector Improvement Project.

### B. Disbursement

## 1. Disbursement Arrangements for ADB

- 22. The loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time), and detailed arrangements agreed upon between the government and ADB. The PMU will be responsible for (i) preparing annual contract awards and disbursement projections, (ii) requesting budgetary allocations for counterpart funds, (iii) collecting supporting documents, and (iv) preparing and sending withdrawal applications to ADB through the Government of India. Online training for project staff on disbursement policies and procedures is available. Project staff are encouraged to avail themselves of this training to help ensure the efficient disbursement of funds and fiduciary control.
- 23. **Advance fund procedure.** The Controller of Aid, Accounts, and Audit will establish and maintain an advance account for the ADB loan. The advance account is to be used exclusively for ADB's share of eligible expenditures. The Controller of Aid, Accounts, and Audit, who establishes the advance account in its name, is accountable and responsible for the proper use of advances from the account.
- 24. The total outstanding advance in the account should not exceed the estimate of ADB's share of expenditures to be paid through the advance account for the forthcoming 6 months. PHED may request for initial and additional advances based on an estimate using the expenditure sheet setting out the estimated expenditures to be financed through the account for the

<sup>&</sup>lt;sup>18</sup>Disbursement eLearning. <a href="http://wpqr4.adb.org/disbursement\_elearning.">http://wpqr4.adb.org/disbursement\_elearning.</a>

forthcoming 6 months.<sup>19</sup> PHED should submit supporting documents to ADB, or retain them, in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time) when liquidating or replenishing the advance account.

25. **Statement of expenditure procedure**. The statement of expenditure (SOE) procedure will be adopted for the reimbursement of eligible expenditures not exceeding \$100,000 per individual payment.<sup>20</sup> Supporting documents and records for the expenditures claimed under the SOE should be maintained and readily available for review by ADB's disbursement and review mission upon ADB's request for submission of supporting documents on a sampling basis and for an independent audit. Reimbursement and liquidation of individual payments above the SOE ceiling should be supported by full documentation when the withdrawal application is submitted to ADB.

## 2. Disbursement Arrangements for Counterpart Fund

26. PHED will provide counterpart funds from its annual budgets, which will be based on the amounts provided for the project in the state government's budget. The PMU will be responsible for (i) preparing disbursement projections, (ii) requesting budgetary allocations for counterpart funds, (iii) collecting supporting documents, and (iv) preparing claims and sending withdrawal applications to ADB through the Government of India. The government will bear taxes and duties as a cash contribution.

## C. Accounting

27. The PMU and PIUs will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the project. Project accounts will follow accepted accounting principles and standards followed by the Government of India and the state government. The PMU will prepare consolidated project financial statements in accordance with the accounting laws and regulations of the Government of India, which are consistent with international accounting principles and practices. The PMU can refer to the template financial statements provided in the standardized terms of reference for audits of ADB assisted projects, agreed with the Comptroller and Auditor General (C&AG), the Department of Economic Affairs (DEA), and ADB as a guide for preparing financial statements.

## D. Auditing and Public Disclosure

- 28. PHED will cause the detailed project financial statements to be audited in accordance with the government's audit regulations by the C&AG or any external auditor assigned by C&AG and acceptable to ADB. PHED will present to ADB the audited project financial statements together with the auditor's opinion in English within 6 months from the end of the fiscal year.
- 29. The project financial statements audit report will include a management letter and auditor's opinions, which will cover whether (i) the project financial statements present an accurate and fair view and representation in all material respects, and are in accordance with applicable financial reporting standards; (ii) the proceeds of the loan were used only for the purpose(s) of the project; and (iii) the borrower or executing agency was in compliance with the financial covenants contained in the legal agreements (where applicable).

<sup>19</sup> ADB. 2017. *Loan Disbursement Handbook*. Manila. (Appendix 10B. Summary Sheet for Issuance of Commitment Letter [Form ADB-CL-SS]).

<sup>&</sup>lt;sup>20</sup> Statement of expenditure forms are available in Appendixes 7B and 7C of ADB's *Loan Disbursement Handbook* (2017, as amended from time to time).

- 30. Review missions—and during program supervision—will monitor compliance with financial reporting and auditing requirements follow up regularly with all concerned parties, including the external auditor.
- 31. ADB has informed the Government of India, GOWB, PHED, and the PMU of its approach to delayed submissions and requirements for satisfactory and acceptable quality of the audited project financial statements.<sup>21</sup> ADB reserves the right to request a change of the auditor (in a manner consistent with the borrower's constitution) or additional support to the auditor, if the audits are not satisfactory to ADB or if the audits are substantially delayed. ADB reserves the right to verify the project financial accounts to confirm that the share of ADB's financing is used in accordance with its policies and procedures.
- 32. ADB's *Public Communications Policy 2011* will guide the public disclosure of the audited project financial statements, including the auditor's opinion on the project financial statements.<sup>22</sup> After review, ADB will disclose the audited project financial statements and the auditors' opinion on the project financial statements on ADB's website no later than 14 days from ADB's confirmation of their acceptability. The management letter, additional auditor's opinions, and audited entity financial statements will not be disclosed.<sup>23</sup>

## VI. PROCUREMENT AND CONSULTING SERVICES

33. All procurement of goods, works, and non-consulting and consulting services will be undertaken in accordance with ADB's *Procurement Guidelines* (2015, as amended from time to time) and ADB's *Guidelines on the Use of Consultants* (2013, as amended from time to time).

## A. Advance Contracting and Retroactive Financing

- 34. All advance contracting and retroactive financing will be undertaken in conformity with ADB's *Procurement Guidelines* (2015, as amended from time to time) and ADB's *Guidelines on the Use of Consultants* (2013, as amended from time to time). The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB approval. ADB has advised the borrower and PHED that approval of advance contracting and retroactive financing does not commit ADB to finance the project.
- 35. **Advance contracting.** Advance contracting would be for (i) the recruitment of consultants, and (ii) procurement of civil works including equipment.

(i) When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (a) the audit documents are overdue and (b) if they are not received within the next 6 months, requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed;

<sup>&</sup>lt;sup>21</sup> ADB's approach and procedures regarding delayed submission of audited project financial statements:

<sup>(</sup>ii) When audited project financial statements <u>are not received within 6 months after the due date</u>, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (a) inform the executing agency of ADB's actions and (b) advise that the loan may be suspended if the audit documents are not received within the next 6 months; and

<sup>(</sup>iii) When audited project financial statements <u>are not received within 12 months after the due date</u>, ADB may suspend the loan.

<sup>&</sup>lt;sup>22</sup> Public Communications Policy: http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications.

<sup>&</sup>lt;sup>23</sup> This type of information would generally fall under public communications policy exceptions to disclosure. ADB. 2011. *Public Communications Policy*. Paragraph 97(iv) and/or 97(v).

36. **Retroactive financing.** ADB will finance a maximum amount of up to the equivalent of 20% of the loan for eligible expenditures incurred before loan effectiveness but not earlier than 12 months before the signing of the loan agreement. Retroactive financing shall apply to consulting services, and civil works including equipment.

## B. Procurement of Goods, Works, and Consulting Services

- 37. International competitive bidding (ICB) procedures will be adopted for civil works contracts estimated to cost \$40 million or more. Shopping will be used for procurement of works and equipment contracts worth up to \$100,000. Community participation will be used for small contracts, under \$10,000, for community-level activities under the Japan Fund for Poverty Reduction (JFPR).
- 38. National competitive bidding (NCB) procedures will be adopted for all civil works contracts below \$40 million. ADB and the Government of India have reviewed the public procurement laws of the central and state governments to ensure consistency with ADB's *Procurement Guidelines* (2015, as amended from time to time) and ADB's *Guidelines on the Use of Consultants* (2013, as amended from time to time).
- 39. A comprehensive assessment of PHED's procurement capacity was conducted in accordance with ADB requirements. The GOWB's National Informatics Centre (NIC) e-procurement system was appraised in 2015–2016 and found compliant with ADB's procurement guidelines. This e-procurement system is successfully used by the ADB-funded Kolkata Environmental Improvement Investment Program-Project 2.<sup>24</sup> ADB reviewed and approved the e-procurement system along with the master bidding documents for design build operate (DBO) works.
- 40. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages, and national competitive bidding guidelines is described in Section C.
- 39. The terms of reference for all consulting services are detailed in Section D.
- 41. The following teams will provide consultancy services, supported by individual experts, and will be contracted as provided in the procurement plan:
  - (i) Project management consultant (PMC) estimated input: 348 person-months national consulting services to (a) facilitate project management and implementation and (b) strengthen PHED's institutional and operational capacity. A consulting firm will be engaged and selected following the quality- and cost-based selection (QCBS) method with a quality-cost ratio of 80:20:
  - (ii) Design, supervision, and institutional support consultants (DSISCs) x 3 estimated input: 1,050 person-months national consulting services to (a) undertake and/or verify engineering design, (b) supervise construction of works contracts, (c) monitoring safeguards compliance, and (d) provide capacity building support at the *Gram Panchayat* level for ensuring sustainable asset management and service delivery. Consulting firms will be engaged and selected following the

<sup>&</sup>lt;sup>24</sup> ADB.2016. Periodic Financing Request Report for India: Kolkata Environmental Improvement Investment Program – Tranche 2. Manila. <a href="https://www.adb.org/projects/42266-025/main">https://www.adb.org/projects/42266-025/main</a>.

quality- and cost-based selection (QCBS) method with a quality-cost ratio of 80:20; and

Project NGOs and/or consulting firms x3 – estimated input of 615 person-months national consulting services to build the capacity of project *gram panchayats* in smart water management, skilling, mobilizing communities, and improving their participation and awareness. These will be engaged and selected following the fixed-budget selection method.

#### C. Procurement Plan

42. As per the proposed procurement plan, one package will follow ICB procedures, and the remaining nine packages will follow NCB procedures. Shopping procedures will be used to purchase minor equipment and works, and community participation will be used for minor works under the JFPR. Procurement of civil works for the bulk supply schemes is planned on a performance-based DBO contracting framework using ADB's DBO standard bidding document. Most ICB and NCB contracts for works will be either for bulk supply schemes for the district following the master bidding document based on ADB's standard bidding document for DBO works, or for distribution management schemes following the master bidding document based on ADB's standard bidding documents for major works, both reviewed and approved by ADB. Contracts have been packaged to increase competition, benefit from economies of scale, and minimize coordination onus for the PIUs.

#### Procurement Plan - Basic Data

i i o o ai o i o	an Basis Bata
Project Name: West Bengal Drinking Water Sector	Improvement Project
Project Number: 49107-006	Approval Number: TBD
Country: India	Executing Agency: Public Health Engineering
	Department, Government of West Bengal
Project Procurement Classification: B	Implementing Agency: Public Health
Procurement Risk: Low	Engineering Department, Government of West
	Bengal
Project Financing Amount: \$ 349 million	Project Closing Date:
ADB Financing: \$243 million	30 June 2024 (loan)
Ordinary capital resources (regular loan): \$ 240	31 October 2022 (grant)
million	
Japan Fund for Poverty Reduction: \$3 million	
Non-ADB Financing: \$106 million	
Date of First Procurement Plan: 1 September	Date of this Procurement Plan: 17 May 2018
2017	

#### A. Methods, Thresholds, Review, and 18-Month Procurement Plan

#### 1. Procurement and Consulting Methods and Thresholds

43. Except as ADB may otherwise agree, the following process thresholds will apply to the procurement of goods and works.

Procurement of Goods and Works								
Method Threshold Comm								
International Competitive Bidding (ICB) for Works	\$40,000,000 and above	Prior review						
International Competitive Bidding for Goods	\$5,000,000	Prior review						

Procurement of Goods and Works										
Method	Threshold	Comments								
National Competitive Bidding (NCB) for	Below \$40,000,000 to	The first NCB bidding								
Works	\$100,001	document is subject to								
		prior review								
National Competitive Bidding for Goods	Below \$5,000,000 to \$100,001	The first NCB bidding								
		document is subject to								
		prior review								
Shopping for Works	Up to \$100,000	Prior review								
Shopping for Goods	Up to \$100,000	Prior review								
Community Participation for Works and	Up to \$10,000	Prior review								
Goods										

Consulting Services							
Method	Comments						
Quality and Cost Based Selection (QCBS)	Prior Review (FTP/STP 80:20)						
Quality Based Selection	Prior Review						
Consultants' Qualifications Selection	Prior Review						
Least-Cost Selection	Prior Review						
Fixed Budget Selection	Prior Review; for nongovernment organizations and/or consulting firms conducting capacity building activities for <i>gram panchayats</i> under the JFPR.						
Individual Consultants' Selection	Prior Review						

FTP = full technical proposal, JFPR = Japan Fund for Poverty Reduction, STP = simplified technical proposal.

## 2. Goods and Works Contracts Estimated to Cost \$1 Million or More

44. The table below lists goods and works contracts for which the procurement activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Descrip tion	Estimated Value (\$ million)	Procurement Method	Review (Prior / Post (Sampling)	Bidding Procedure	Advertise ment Date (Quarter/Year)	Comments
WW/N24P/01	Water treatment plant, reservoirs, transmission mains and pumping stations works in Haroa and Bhangar II	38.0	NCB	Prior	1S2E	Q4 2017 (27 October 2017, actual date)	Design, build, and operate. Prequalification of bidders and domestic preference is not applicable.  Will serve as master bidding document for NCB DBO packages.
WW/N24P/02A	Construction of overhead tanks and water distribution network and metering	19.8	NCB	Prior	1S2E	Q4 2017	Large works. Prequalification of bidders and domestic preference is not applicable.

Package	General Descrip	Estimated Value	Procurement	Review (Prior / Post	Bidding	Advertise ment Date	
Number	tion	(\$ million)	Method	(Sampling)	Procedure	(Quarter/Year)	Comments
	works in Haroa			, , ,			Will serve as master bidding document for NCB Works.
WW/N24P/02B	Construction of overhead tanks and water distribution network and metering works in Bhangar-II	20.9	NCB	Prior	1S2E	Q4 2017	Large works. Prequalification of bidders and domestic preference is not applicable.
WW/BKP/01	Intake, water treatment plant, reservoirs, transmission mains for Indpur— Taldangra block in Bankura	22.8	NCB	Prior	1S2E	Q4 2017	Design, build, and operate. Prequalification of bidders and domestic preference is not applicable.
WW/BKP/02A	Secondary transmission mains, overhead tanks including water distribution network and metering works in Indpur	18.3	NCB	Prior	1S2E	Q2 2018	Large works. Prequalification of bidders and domestic preference is not applicable.
WW/BK/02B	Secondary transmission mains, overhead tanks including water distribution network and metering works in Taldangra	18.2	NCB	Prior	1S2E	Q2 2018	Large works. Prequalification of bidders and domestic preference is not applicable.
WW/BK/03	Construction of infiltration galleries, pump house and overhead	20.3	NCB	Prior	1S2E	Q2 2018	Design, build, and operate. Prequalification of bidders and domestic

Package Number	General Descrip tion	Estimated Value (\$ million)	Procurement Method	Review (Prior / Post (Sampling)	Bidding Procedure	Advertise ment Date (Quarter/Year)	Comments
	tanks for Mejhia- Gangajalghati						preference is not applicable.
WW/BK/04	Water distribution network and metering works in Mejhia- Gangajalghati	17.4	NCB	Prior	1S2E	Q2 2018	Large works. Prequalification of bidders and domestic preference is not applicable.
WW/EM/01	Water treatment plant, reservoirs, transmission mains and pumping stations works in Purba Medinipur	52.4	ICB	Prior	1S2E	Q3 2018	Design, build, and operate. Prequalification of bidders and domestic preference is not applicable.
WW/EM/02	Secondary transmission mains, overhead tanks including water distribution network and metering works in Nandigram-I, II block in Purba Medinipur	34.3	NCB	Prior	1S2E	Q4 2018	Large works. Prequalification of bidders and domestic preference is not applicable.
SAN/01	Pilot Fecal Sludge and Septage Management Plant	0.9	NCB	Prior	1S2E	Q1 2019	Small works packages under the JFPR grant
STWM/ 01	Gram Panchayat- level smart water management equipment	1.1	NCB and shopping	prior	1S2E	Q2 2019	Multiple packages under the Japan Fund for Poverty Reduction

1S2E = single-stage: two-envelope bidding procedure, DBO = design–build–operate, ICB = international competitive bidding, NCB = national competitive bidding, Q = quarter.

Notes: Conversion Rate \$1= ₹65.

# 3. Consulting Services Contracts Estimated to Cost \$100,000 or More

45. The table below lists consulting services contracts for which the recruitment activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value (\$ million)	Recruitment Method	Review (Prior / Post)	Advertise- ment Date (Quarter/Ye ar)	Type of Propo- sal	Comments
DSC/N24P	Design, construction supervision and project implementation support consultants for 24 North Parganas	2.94	QCBS	Prior	Q4 2017	FTP	Following 80:20 ratio
DSC/EM	Design, construction supervision, and project implementation support consultants for Purba Medinipur	2.94	QCBS	Prior	Q4 2017	FTP	Following 80:20 ratio
DSC/BN	Design, construction supervision, and project implementation support consultants for Bankura	3.06	QCBS	Prior	Q4 2017	FTP	Following 80:20 ratio
PMC/01	Project management consultants	2.88	QCBS	Prior	Q4 2017	FTP	Following 80:20 ratio
NGO/ Consultants	Build local stakeholders' capacity for sustainable, resilient, and inclusive service delivery	0.85	FBS	Prior	Q2 2018		3 packages under the JFPR grant
Individual Consultants	Build local stakeholders' capacity for sustainable, resilient, and inclusive service delivery	0.35	ICS	Prior	Q3 2018		3 individual consultants under the JFPR grant

FBS = fixed-budget selection, FTP = full technical proposal, Q = quarter, QCBS = quality- and cost-based selection.

- 4. Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000 (Smaller Value Contracts)
- 46. The tables below group smaller-value goods, works, and consulting services contracts for which the activity is either ongoing or expected to commence within the next 18 months.

# B. Indicative List of Packages Required Under the Project

The following table provides an indicative list of goods, works and consulting services contracts over the life of the project, other than those mentioned in previous sections (i.e., those expected beyond the current period).

Goods and	Goods and Works												
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Review [Prior / Post/Post (Sampling)]	Bidding Procedure <sup>7</sup>	Comments <sup>8</sup>						
STWM/02	Gram Panchayat- level small goods and works	0.20	Multiple	Shopping	Prior		Under the Japan Fund for Poverty Reduction						
SAN/02	Gram Panchayat- level small works	0.10	Multiple	Community participation	Prior		Under the Japan Fund for Poverty Reduction						

- C. List of Awarded and On-going or Completed Contracts
- 47. The tables below list the awarded, ongoing, and completed contracts.

## 1. Awarded and Ongoing Contracts

Goods and	Goods and Works											
Package Number	General Description	Estimated Value	Awarded Contract Value	Procure ment Method	Advertise- ment Date (Quarter/ Year)	Date of ADB Approval of Contract Award	Comments					
None												

Consulting	Consulting Services												
Package Number	General Description	Estimated Value	Awarded Contract Value	Recruitment Method	Advertisement Date (Quarter/Year)	Date of ADB Approval of Contract Award	Comments						
None													

## 2. Completed Contracts

Goods and	d Works							
Package Number	General Description	Estimate d Value	Contract Value	Procure -ment Method	Advertise -ment Date (Quarter/ Year)	Date of ADB Approval of Contract Award	Date of Comple- tion	Comments
None								

Consultin	Consulting Services							
Package Number	General Description	Estimated Value	Contract Value	Recruitment Method	Advertisement Date (Quarter/ Year)	Date of ADB Approval of Contract Award	Date of Completion	Comments
None								

# D. Non-ADB Financing

48. The following table lists goods, works, and consulting services contracts over the life of the project, financed by Non-ADB sources.

Goods and Works				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Comments
None				

Consulting Services					
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Comments	
None					

Note: \$1=₹65 is the reference rate considered for conversion.

#### D. Consultant's Terms of Reference

49. The terms of reference for all consulting services under the project, including the loan consultants and consultants for the attached JFPR grant and transactional technical assistance consultants, are described in Appendixes 4 and 5.

#### VII. SAFEGUARDS

50. PHED, as the executing agency and implementing agency, will be responsible for compliance with ADB Safeguard Policy Statement (SPS) 2009.

#### A. Social Safeguards

- 51. **Screening and categorization.** The project is classified as category B for involuntary resettlement and category B for indigenous peoples as per ADB's *Safeguard Policy Statement* (2009) (SPS). PHED prepared a resettlement framework in line with the SPS and applicable laws to guide subproject screening and assess resettlement impacts. Subprojects with significant involuntary resettlement impacts will not be eligible for funding under the project. Based on three sample subproject draft resettlement plans and one due diligence report, the project will cause involuntary resettlement impacts that are deemed not significant. <sup>25</sup> The PHED will acquire land through negotiated settlement without recourse to expropriation as per GOWB regulations. Based on preliminary designs, around 7 acres is estimated to be acquired from around 42 private owners. The draft resettlement plans will form part of the bid and contract documents. The draft resettlement plans will be updated during detailed engineering design and submitted to ADB for review and disclosure. PHED, with the support of consultants, has the capacity to implement the resettlement framework and will prepare semiannual social safeguard monitoring reports for ADB's review and disclosure.
- 52. **Resettlement and indigenous people planning frameworks.** A resettlement framework and indigenous people planning framework were prepared and agreed with the state government and disclosed by the executing agency on their project website. The framework will be adopted to provide guidance when preparing mitigation plans for any involuntary resettlement and indigenous people impacts and risks identified during the project implementation.
- Resettlement plans and due diligence reports. PHED prepared three draft resettlement plans and one due diligence report (DDR) for the sample subprojects in accordance with the SPS and government laws, which was reviewed and endorsed by ADB. The executing agency has endorsed the resettlement plans and disclosed them on its project website. The PMU and PIUs will ensure that the plans are implemented, including ensuring that physically or economically affected persons are compensated prior to displacement in components ready for construction.

#### B. Environmental Safeguards

54. **Screening and categorization.** The project is classified as category B for the environment as per the SPS. Subprojects projected to have potentially significant adverse environmental impacts (categorized as A in the SPS) will not be considered for implementation under the project.

55. **Environmental assessment and review framework.** An environmental assessment and review framework (EARF) was developed in accordance with the SPS and applicable laws and regulations of the Government of India and agreed with the government. The EARF will guide subproject selection, screening, categorization, environmental assessment, preparation of environmental management, and implementation, and will facilitate compliance with the requirements specified in the SPS.<sup>26</sup> It will be reviewed regularly and, if necessary, updated during

<sup>25</sup> Resettlement Framework (accessible from the list of linked documents in Appendix 2); and Resettlement Plans: Bulk Supply and Distribution Systems for North 24 Parganas, and Bulk Supply System for Bankura (accessible from the list of linked documents in Appendix 2). The resettlement framework and resettlement plans have been disclosed to project-affected people, and on the ADB and PHED websites.

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The environmental assessment and review framework (i) provides an indicative list of subprojects to be financed under the project; (ii) provides subproject selection criteria including environmental considerations to be followed during project implementation; (iii) specifies the requirements that will be followed in subproject screening and categorization, assessment, planning, implementation, and monitoring; (iv) provides general anticipated

implementation if indicated by unanticipated new types of impacts (review of applicability and relevance) or if there is a change in the legal and regulatory framework. None of the provisions of EARF will be relaxed or lowered in the subsequent revisions and updates. Environmental assessment documents prepared under the project will, to the extent possible, meet both ADB and Government of India requirements to streamline the environmental procedures required by both ADB and the government.

- 56. For subprojects involving facilities and/or business activities that already exist or are under construction, PHED, supported by consultants, will undertake an environmental audit, including an on-site assessment to identify past or present concerns related to impacts on the environment. The objective of this environmental audit is to determine whether actions were in accordance with ADB's safeguard principles and requirements for borrowers and clients, and to identify and plan appropriate measures to address outstanding compliance issues. Where non-compliance is identified, contractor and/or consultants will prepare a corrective action plan to be agreed by ADB, PMU, and PIUs. The plan will define the necessary remedial actions, the budget for such actions, and the timeframe for resolution of non-compliance. The environmental audit report (including the corrective action plan, if any) will be made available to the public in accordance with the information disclosure requirements of the SPS. If a subproject involves an upgrade or expansion of existing facilities that has potential impacts on the environment, the requirements for environmental assessments and planning specified in the EARF will apply in addition to the compliance audit.
- 57. Environmental assessment and management plans. PHED prepared a draft initial environmental examination (IEE) with environmental management plans (EMPs) for three sample subprojects in the project districts based on preliminary designs and available detailed project reports.<sup>27</sup> The sample subprojects demonstrate the project is likely to have only small-scale, temporary, and localized impacts on the environment, which can be readily mitigated. The potential adverse environmental impacts are mainly related to the construction period, which can be minimized by applying mitigating measures and environmentally sound engineering and construction practices. Subproject locations are not within or adjacent to environmentally sensitive areas. The IEEs will form part of the bid and contract document. Each of the EMPs outlines specific mitigation measures, environmental monitoring requirements, and related institutional arrangements, including budget requirements, for implementation and, if required, will be further updated during the construction phase of a subproject. If some residual impacts are likely to remain significant after mitigation, the EMP will also include appropriate compensatory measures (offset) to ensure that the subproject does not cause significant net degradation to the environment.
- 58. The executing agency has disclosed all draft IEEs for the sample subprojects on its project website. The PMU will update IEEs during detailed engineering design and clear them with ADB prior to the start of construction activities. Contractors will be required to submit site-specific environmental management plans (SEMPs) including (i) proposed sites and locations for

environmental impacts of the subprojects to guide development of mitigation measures and monitoring parameters to be included in subproject design, construction, and operation; (v) includes a grievance redress mechanism, requirements of meaningful consultation with affected persons and other stakeholders, and information disclosure; (vi) provides safeguards implementation arrangements and identifies capacity building requirements and indicative budget, and (vi) specifies monitoring and reporting requirements.

<sup>27</sup> PHED prepared draft initial environmental examinations (IEEs) for sample subprojects—Harwa Bhangur bulk and distribution network schemes, Bankura bulk, subprojects, and packages. ADB has endorsed these. ADB and the PHED have publicly disclosed the draft IEEs on their websites. The draft IEEs will be finalized based on detailed engineering design and will be submitted to ADB for review and disclosure.

construction work camps, storage areas, hauling roads, lay down areas, and disposal areas for solid and hazardous wastes; (ii) specific mitigation measures following the approved EMP; (iii) monitoring program as per SEMP; and (iv) budget for SEMP implementation. PIU must approve the SEMP before any works can commence.

59. Table 14 provides a summary of environmental safeguards requirements applicable to the project.

Table 15: Summary of West Bengal Drinking Water Sector Improvement Project's Environmental Safeguards Requirements

Project Stage Compliance Requirements			
Prior to loan effectiveness			
Prior to loan effectiveness	Appointment of environment officers in the PMU and PIUs  APP		
Only and the standard Province	EARF endorsed and disclosed on ADB and project websites		
Subproject preliminary	Preparation of subproject guided by the environmental selection  Preparation of subproject guided by the environmental selection guided g		
design stage	guidelines and EARF's exclusions		
	Categorization of subproject using REA checklist		
	Exclusion of category A subprojects for funding under the project		
	Identification of and application for all regulatory clearances		
	Preparation of IEE for category B subprojects: site-specific		
	assessment, identification of potential impacts, formulation of		
	mitigation measures, conduct of meaningful consultations, and		
	preparation of draft IEE and EMP		
	Inclusion of IEE in subproject bid documents		
	Provision of budget for environmental monitoring included in overall		
B: 1.11	subproject cost		
Bidding process and	Approval of draft IEE by ADB prior to bid invitation		
contract award	Explanation of IEE, EMP provisions, and compliance requirements		
	to bidders in pre-bid meeting		
	Revision of contractors' provisions and budget for EMP		
	implementation during bid evaluation		
	Completion of all regulatory clearances and/or approvals for the		
	subproject prior to award of contract		
	Establishment of GRM and capacity building of GRC members on		
Defette Length and an	resolution of project-related grievances, issues, and/or complaints		
Detailed engineering	Finalization of IEE based on detailed engineering design		
design	Submission of SEMP by contractor for approval by PIU and inclusion in final IEE		
	Submission of final IEE to ADB for approval and disclosure		
Construction	Disclosure of final IEE on project website and subproject sites		
Construction	Confirmation of compliance of contractor with pre-construction      Trace division including preparation of construction health and exfert.		
	procedures including preparation of construction health and safety		
	plan, traffic management plan, establishment of labor camps		
	Implementation of SEMP by contractors  Output		
	Submission of monthly monitoring reports by contractors		
	Monitoring by PIUs guided by the PMU and assisted by consultants		
	Submission of semi-annual monitoring report to ADB		
	Implementation of SEMP during construction		
	Clean-up and restoration of sites to pre-construction (or better)		
	condition		
	Issuance of work completion certification to the contractor		
Operation	Confirmation that all regulatory clearances and/or approvals		
	required for operation of the facilities are in place		

Project Stage	Compliance Requirements	
	Implementation of O&M EMP	

ADB = Asian Development Bank, EARF = environmental assessment review framework, EMP = environmental management plan, EMR = environmental monitoring report, IEE = initial environmental examination, GRC = grievance redress committee, GRM = grievance redress mechanism, O&M = operation and maintenance, PMU = project management unit, REA = rapid environmental assessment, SEMP = site-specific environmental management plan.

#### C. Climate change

- 60. Climate risk and vulnerability assessment for the project. The project preparatory team conducted a climate risk and vulnerability assessment (CRVA) to assess the associated potential risks of climate change impacts and vulnerability of the project. The purpose was to ensure that the project components fully incorporate the necessary climate resilience and mitigation measures in the preliminary and detailed design and implementation stages of the project. The Summary Project Climate and Disaster Risk Assessment and Management Report are in the linked documents of Appendix 2 of the draft project report and recommendation to the President. The detailed CRVA is on PHED's project website.
- 61. Redesigning preliminary design of the project to make it climate-resilient. The initial project proposal from PHED incorporated small groundwater-based schemes for various blocks, without interconnected bulk supply, and without household connections and DMAs. The project was redesigned through extensive discussions between ADB and PHED over more than a year with support from the project preparatory team. Following the completion of DWQAPs that assessed the overall water quality and drinking water resources sustainability, PHED designed the proposed subprojects on a district-based approach and made them climate-resilient by taking the following steps: (i) tapping only sustainable surface and sub-surface based sources; (ii) designing the systems based on comprehensive DWQAPs; (iii) designing the distribution systems on a DMA basis with metered household connections and smart water management devices; (iv) assessing the potential risks of climate change impacts and vulnerability and ensuring project components incorporate necessary climate resilience and mitigation measures in the preliminary, detailed design, and implementation stages; (v) GOWB issuing a government order institutionalizing and outlining roles and responsibilities of PHED and the project gram panchayats through the AMSDF to ensure sustainable service delivery: (vi) ensuring that all bulk supply and distribution network schemes have a 2-year operation and maintenance period built into the contracts to assist PHED and the gram panchayats; and (vii) including extensive skills and capacity building of stakeholders through additional support from the Japan Fund for Poverty Reduction and the technical assistance.
- 62. The CRVA further assessed any associated potential risks of climate change impacts and the vulnerability of the revised preliminary design of the project to ensure that the project components incorporate necessary climate resilience and necessary mitigation measures in the preliminary, detailed design, and implementation stages of the project. These measures and details of additional mitigation and adaptation measures proposed for consideration by the design—build contractor or design consultants during the detailed design phase are identified, described, and costed in the CRVA. The CRVA and specific measures will also be included in all works packages contracts to guide them during detailed design.
- 63. **Resilience measures and climate change financing.** The initial proposal from PHED was redesigned to incorporate resilience measures, key aspect of which comprise the provision of a comprehensive or grid-based and sustainable surface or sub-surface based water supply and distribution system to project beneficiaries in the target blocks in the districts of Bankura,

North 24 Parganas, and Purba Medinipur, in West Bengal. Appendix 3 shows in detail the design and costing as climate financing of the resilient system formulated under the project. The system comprised resilient components over and above the initially proposed conventional piped water supply system. The objective of the resilient system is to ensure migration of the target beneficiaries from a baseline or presently sub-optimal system of water supply, which relies on localized groundwater sources. PHED, with support from the project preparatory team, carried out a cost comparison of the baseline without-project scenario with the proposed with-project resilient system of water to estimate the incremental financing required to achieve the desired climate-resilient outcome and outputs. The representative cost of the resilient system comprises the following components in each sub-project package: (i) cost of civil works; (ii) cost of equipment, vehicles, and furniture; and (iii) cost of land acquisition for locating the water treatment plant (WTP), clear water reservoirs and/or booster stations.

#### D. Safeguards Roles and Responsibilities

64. **Project management unit.** Key safeguard tasks and responsibilities of the PMU are as follows:

#### 1. Environmental Safeguards

- (i) Ensure subprojects comply with the exclusion criteria and project selection guidelines stipulated in the EARF;
- (ii) approve subproject environmental category;
- (iii) approve IEEs and ensure that updated IEEs/EMPs reflect final project designs;
- (iv) ensure that EMPs are included in bidding documents and civil works contracts;
- (v) ensure proper implementation of EMPs by contractors;
- (vi) facilitate and ensure compliance with all government rules and regulations regarding site and environmental clearances, as well as any other environmental requirements (e.g., location clearance certificates, environmental clearance certificates);
- (vii) oversee public consultation and disclosure;
- (viii) approve quarterly EMP implementation reports;
- (ix) review and approve semi-annual monitoring reports prepared by PMC; and submit to ADB:
- (x) oversee grievances redress process and ensure timely redress;
- (xi) undertake a regular review of safeguards-related loan covenants and compliance during program implementation; and
- (xii) organize periodic capacity building and training programs on safeguards for project stakeholders, and PHED, PMU, and PIU staff.

#### 2. Social Safeguards

- (i) Ensure subprojects conform to the agreed subproject selection criteria for the project;
- (ii) review and finalize subproject involuntary resettlement and indigenous people category;
- (iii) oversee preparation of resettlement plans, due diligence report (DDRs), and indigenous peoples plans (IPPs); confirm existing resettlement plans, DDRs, and IPPs are updated based on detailed designs, and that new subproject resettlement plans and DDRs are prepared in accordance with the resettlement framework and indigenous peoples planning framework (IPPF) prepared for the project;

- (iv) issue public notices for acquiring a particular land or property for the subproject along with project information and details as well as the project cut-off date;
- ensure that resettlement plans, DDRs, and IPPs are included in the bidding documents and civil works contracts;
- (vi) provide oversight on the social safeguard management aspects of subprojects and ensure that PIU and contractors implement resettlement plans, IPPs, and the impact avoidance measures outlined in the resettlement framework, IPPF, environmental management plan, resettlement plans, IPP, and/or DDR;
- (vii) ensure compliance with the provision in the contract to include the indigenous people to benefit from the facilities constructed under the project;
- (viii) facilitate and ensure compliance with all government rules and regulations regarding no objection certificates, third party certificates for negotiated settlement or donation, land ownership, and transfer details for each site, as relevant;
- supervise and guide the PIUs to properly carry out the social safeguard and gender monitoring (resettlement plans and/or IPP as per the resettlement framework and/or IPPF);
- (x) review, monitor, and evaluate the effectiveness with which the resettlement plans, IPPs, and provisions of DDRs are implemented, and recommend corrective actions to be taken as necessary;
- (xi) consolidate monthly social safeguard and gender monitoring reports from PIUs and the design, supervision, and institutional support consultants (DSISCs) and submit semi-annual social safeguard monitoring reports to ADB;
- (xii) ensure the timely disclosure of final resettlement plans, DDRs, and IPPs in a form and locations accessible to the public and affected persons;
- (xiii) address any grievances brought about through the grievance redress mechanism (GRM) promptly;
- (xiv) oversee the assessment of training needs of affected persons and vulnerable persons by PIUs and/or PMC; coordinate training activities and convergence with the livelihood programs of the government;
- (xv) identify training needs and coordinate training activities for the PIUs, contractors, project nongovernment organizations, and DSISCs for capacity building to implement the resettlement plans, IPP, and DDR, and GRM;
- (xvi) coordinate database management for social safeguards implementation and monitoring; and
- (xvii) coordinate public awareness campaigns by the PIUs, including resettlement provisions, with the help of print and electronic media.

#### 3. Gender

- (i) Establish a safeguards and gender cell within the PMU, headed by the Head, Safeguards and Gender Officer (HSGO). As a focal point in PMU for gender equality and social inclusion (GESI), the HSGO will take overall lead in preparing and monitoring the detailed implementation plan for GESI actions to be implemented by each of the PIUs supported by the DSISCs and the project NGOs;
- (ii) ensure training needs identification, development of gender inclusive training material, and women participation in view of activities and targets in GESI action plan;
- (iii) oversee time use surveys, and poverty and ethnicity mapping at the village level; approve water supply forms for water connection that collect information on ethnicity and socio-economic status and ensure collection of sex-disaggregated data;

- (iv) oversee the preparation of gender strategy and gender-responsive capacity development, training, and certification programs;
- (v) assist the project director in implementing activities listed in the GESI action plan;
- (vi) guide project NGOs in strengthening institutional capacity and conducting capacity building in the project *gram panchayats*, as identified under the project output 2, particularly AMSDF, the GESI action plan, and the JFPR grant component under the project;
- (vii) design and demonstrate capacity building training programs on pro-poor, gendersensitive governance, and gender-responsive service delivery;
- (viii) guide project NGOs in training communication assistants and community development officers to conduct community-level training on participatory planning, monitoring, maintenance of water, sanitation, and hygiene;
- (ix) assist the PMU and PIUs in constituting grievance redress committees (GRCs) in each project district and *gram panchayats* as per the targets in the GESI plan;
- (x) review project documents and contracts issued and signed by the PMU to ensure suitable clauses, such as that all bidding documents include a clause for the application of core labor standards (including equal pay for men and women for work of equal value) as per the minimum wage circular issued by the government;
- (xi) monitor and report on a quarterly basis to ADB gender activities as per the gender equality and social inclusion action plan;
- (xii) review monthly monitoring reports to be submitted by PIUs and *gram panchayats* to the PMU, and consolidate; prepare a quarterly progress report on GESI progress to be submitted with the project's quarterly progress report to ADB;
- (xiii) undertake documentation of key gender results and good practices and prepare the gender impact assessment reports for the project, which may be used for the project closure report; and
- (xiv) undertake necessary communication with PIUs, *gram panchayats*, and other departments to ensure social and gender inclusion in the project.
- 65. The PMU will establish a safeguards and gender cell with responsibility for ensuring compliance with the SPS. A HSGO, reporting to the project director, will head the cell. The HSGO will have overall responsibility for the implementation of the resettlement framework, IPPF, EARF, resettlement plans, EMPs, SEMP, and GESI action plan, as well as monitoring and reporting responsibilities. The safeguards and gender cell will be supported by environmental, social, and gender safeguard specialists in the PMC. Key safeguard tasks and responsibilities of the PMC on safeguards are as follows:

#### 1. Environmental Management Specialist, Project Management Consultant

- (i) Review and finalize REA checklist and classify the project;
- (ii) review and confirm project selection and design; ensure compliance with exclusion criteria and project environmental selection guidelines;
- (iii) review and finalize IEE reports including EMPs prepared and/or updated by PIUs and DSISCs;
- (iv) oversee public consultation and information disclosure activities; ensure timely disclosure;
- (v) advise and provide support in obtaining government clearances and approvals;
- (vi) review and confirm that IEEs and/or EMPs are included in bids and contracts;
- (vii) review and confirm SEMPs prepared by the contractor;
- (viii) oversee the implementation of SEMP by contractors and ensure corrective actions, where necessary;

- (ix) review and approve quarterly environmental monitoring reports submitted by PIU and/or DSISCs;
- (x) conduct site visits of project facilities and work sites to oversee implementation;
- (xi) prepare semi-annual environmental monitoring reports and submit to the Head, Safeguards and Gender Officer of the safeguard and gender cell within PMU;
- (xii) oversee grievance redress process; advise on critical grievances related to environmental issues and concerns; and
- (xiii) organize training and capacity development programs.

#### 2. Social Safeguards and Gender Specialist, Project Management Consultant

- (i) Establish a system to monitor social safeguards and the gender outcomes of the project, including the functioning of the grievance redress mechanism, and prepare indicators for monitoring important parameters of safeguards and gender;
- (ii) take proactive action to anticipate the gender equality and social inclusion and social safeguards aspects of the project to avoid delays in implementation;
- (iii) support the PMU to prepare resettlement plans and IPPs of subproject water supply schemes to be appraised during project implementation;
- (iv) support the PMU in ensuring that the social safeguard and GESI activities are carried out in accordance with the agreed plans and frameworks;
- (v) support PMU in preparing gender strategy for PHED;
- (vi) ensure that the relevant measures specified in the resettlement plans, IPPs, and GESI action plan are approved by ADB prior to the issuance of an invitation to bid, are incorporated in the bidding documents, and monitor their compliance on behalf of PMU;
- (vii) ensure monitoring of social safeguards plans and GESI action plan and address unanticipated impacts, if any; and
- (viii) provide training programs to PMU and PIU staff and contractors involved in the project implementation for strengthening their capacity in managing and monitoring social safeguards and gender.
- 66. **Project implementation unit.** At each PIU, an assistant engineer will have additional responsibilities of safeguards tasks and will be designated the safeguards officer. The safeguards officer will oversee safeguards implementation at PIU level, coordinate public consultations, information disclosure, regulatory clearances and approvals, implementation of resettlement plans, EMP implementation, and grievance redressal. Key safeguard tasks and responsibilities of the safeguards officer are as follows:

#### 1. Environmental Safeguards

- (i) Coordinate public consultation and information disclosure;
- (ii) liaise with local offices of regulatory agencies to obtain clearances and approvals; assist the PMU with clearances obtained at the state level;
- (iii) review and approve contractors SEMPs;
- (iv) oversee day-to-day implementation of SEMPs by contractors, including compliance with all government rules and regulations;
- (v) obtain rights of way;
- (vi) ensure continuous public consultation and awareness;
- (vii) coordinate grievance redress process and ensure timely actions by all parties;
- (viii) review monthly contractor's SEMP monitoring reports;
- (ix) review and forward quarterly monitoring reports to the PMU;

- (x) inform the PMU of unanticipated impacts and formulate a corrective action plan; and
- (xi) recommend issuance of work construction and/or work completion certification to the contractor upon verification of satisfactory post-construction clean-up.

#### 2. Social Safeguards and Gender

- 67. The PIUs, assisted by the project NGOs, will conduct safeguards implementation through the following key tasks:
  - (i) fill up involuntary resettlement and indigenous people impact checklist and classify the project;
  - (ii) conduct census and socio-economic surveys, detailed measurement surveys, and verification surveys of affected persons; conduct consultations with affected persons, finalize the list of affected persons, and prepare and/or update the resettlement plan, DDR, and IPP with the assistance of the PMC and submit to PIUs and the PMU for review, approval, and submission to ADB;
  - (iii) inform affected persons about (a) the project cutoff date, (b) public notice for the schedule of land acquisition and/or occupation, (c) entitlement matrix, and (d) compensation packages for different categories of loss and a tentative schedule of land clearing and/or acquisition for the start of civil works;
  - (iv) coordinate valuation of assets, such as land and trees of various species. Finalize compensation packages based on proper due diligence and assessment;
  - facilitate land acquisition and compensation processes in consultation with the district administration; coordinate, supervise, and monitor the disbursement of compensation;
  - (vi) obtain no objection certificates, land documents, and third-party certifications as required for the subproject;
  - (vii) include resettlement plans, IPPs, and DDRs in bidding documents and civil works contracts;
  - (viii) oversee day-to-day implementation of resettlement plans, DDRs, and IPPs by contractors, including compliance with all government rules and regulations; take necessary action for obtaining rights of way;
  - (ix) oversee resettlement plans, DDR, and IPP, and GESI plan implementation and maintenance of data for monitoring by contractors:
  - ensure compliance with the provision in the contract to include the indigenous people to benefit from the facilities constructed under the project;
  - (xi) take corrective actions when necessary to ensure no adverse social impacts;
  - (xii) submit monthly social monitoring reports to PIUs and PMU;
  - (xiii) conduct continuous public consultation and awareness;
  - (xiv) address any grievances brought about through the grievance redress mechanism promptly as per the resettlement plans, DDRs, and IPPs;
  - (xv) organize an induction course for the training of contractors, preparing them on resettlement plans, DDR, IPP, and GESI plan implementation, social safeguard, and gender monitoring requirements related to mitigation measures, and on taking immediate action to remedy unexpected adverse impacts or ineffective mitigation measures found during implementation;
  - (xvi) liaise with the district administration, *gram panchayats*, and line departments for dovetailing government's schemes for income generation and development programs for affected people, as and when required; and
  - (xvii) assist in the implementation, monitoring, and reporting of the GESI plan.

68. The PMC resettlement specialist will assist the PIU assistant safeguards officers (ASOs) in training, social safeguard supervision, monitoring, recordkeeping, and report preparation activities. The PIUs will be assisted by DSISC teams, which will include an environmental specialist, a social safeguards specialist, and three project NGOs with the following key tasks:

# 1. Environmental Specialist, Design, Supervision, and Institutional Support Consultants

- (i) Assist PIUs in ensuring that projects and components comply with the project exclusion criteria and selection guidelines stipulated in EARF:
- (ii) prepare environmental screening checklists and submit to the PMU for categorization; update checklist and category as required to reflect project changes, and report to the PMU;
- (iii) work closely with PIU and design teams to include environmental considerations in project location, design, and technical specifications;
- (iv) identify statutory clearances permissions and approvals required for each subproject; assist PIU in obtaining them;
- (v) assist in including in the project design any standards and conditions stipulated in regulatory clearances and consents;
- (vi) update the IEE and EMP to reflect any changes in the subproject during detail design and implementation; the IEE shall reflect the final project design;
- (vii) lead and/or assist PIU in public consultation in compliance with the EARF; reflect inputs from the public consultation in IEEs, EMPs, and project design;
- (viii) advise and assist PIU in disclosing relevant information on safeguards to stakeholders and affected people;
- (ix) assist and ensure all EMP measures related to project design and location are included in the detailed designs;
- (x) integrate the EMP into bid and contract documents. For design build operate (DBO) contracts, include full IEE including EMP in bids;
- (xi) advise contractor in the preparation of SEMP, as per the final project design, prior to the start of construction;
- (xii) ensure that all necessary clearances and permissions (including those required by the contractor) are in place prior to the start of construction:
- (xiii) monitor the implementation of SEMP:
- (xiv) ensure contractors including any subcontractors comply with the measures set in the EMP;
- (xv) assist PIU in establishing a grievance redress mechanism (GRM) for the project:
- (xvi) assist PIU in grievance redress, advise the contractor on appropriate actions on grievances, and ensure timely resolution of grievances and proper documentation;
- (xvii) identify any non-compliance or unanticipated impacts; initiate corrective actions and report to the PMU;
- (xviii) review and approve monthly monitoring reports submitted by contractors; consolidate and prepare quarterly environmental monitoring reports and submit to the PMU; and
- (xix) conduct training and capacity building activities (workshops, hands-on training, visits) to all stakeholders during the EMP implementation.

# 2. Social Safeguards and Gender Expert, Design, Supervision, and Institutional Support Consultants

- (i) Screen and categorize subproject components;
- (ii) carry out baseline surveys;
- (iii) ensure the contractors comply with the agreed social safeguards frameworks, resettlement plans, and DDRs on social safeguards for the project;
- (iv) prepare any additional draft resettlement plans and DDRs and prepare any new safeguard documents as required;
- (v) assist the PIUs in the implementation of final resettlement plans and GESI action plan:
- (vi) prepare periodic safeguard monitoring reports in a format acceptable to ADB and quarterly GESI action plan updates in the format provided in PAM;
- (vii) collect relevant data on implementation of GESI action plan and design a gendersensitive communication strategy and information, education, and communication materials illustrating key social and behavioural messages related to hygiene, sanitation, and health jointly with the communication specialist and in accordance with the GESI action plan; and
- (viii) assist PHED in carrying out awareness campaigns in project areas, focused on involving women and girls in water management activities and monitor activities of the project NGOs.

#### 3. Project Nongovernment Organizations

- 69. The project will engage an NGO or consulting firm that has local and community-based experience for each of the project districts (three in total) to support the project *gram panchayats* in their institutional and capacity building for sustainable, resilient, and inclusive service delivery, and operation and maintenance of the assets created. They will also support the PIUs in the implementation of the GESI action plan and community awareness and participation plan (CAPP) at the local level. The project NGOs will work in close coordination with the DSISC for the concerned PIU and report to the PIU. In particular, the project NGOs will (i) support gram panchayats in preparing for effective implementation of the government order for the AMSDF under the project; (ii) support PIUs in delivering outputs under the Japan Fund for Poverty Reduction grant component; (iii) support social safeguards, GESI compliance monitoring, and GESI action plan implementation at the *Gram Panchayat*-level; and (iv) conduct awareness-raising activities.
- 70. **Civil works contracts and contractors.** The bidding and contract documents will include IEEs, resettlement plans, DDRs, and IPPs. The PMU and PIUs will ensure that bidding and contract documents include specific provisions requiring contractors to comply with (i) all applicable labor laws and core labor standards on (a) prohibition of child labor as defined in the national legislation for construction and maintenance activities; (b) equal pay for equal work of equal value regardless of gender, ethnicity, or caste; and (c) elimination of forced labor; and with (ii) the requirement to disseminate information on sexually transmitted diseases, including HIV/AIDS, to employees and local communities surrounding the project sites. The contractor will be required to appoint an environment, health, and safety (EHS) supervisor to implement the EMP. The EHS supervisor will update the EMP and submit a SEMP for approval by PIU. Contractors will carry out all environmental mitigation and monitoring measures outlined in the EMP, approved SEMP, and their contracts. Key responsibilities of the EHS supervisor are:
  - (i) prepare SEMP and submit to PIU for approval prior to the start of construction;

- (ii) conduct orientation and daily briefing sessions to workers on the environment, health, and safety;
- (iii) ensure that appropriate worker facilities are provided at the workplace and labor camps as per the contractual provisions;
- (iv) record accidents and undertake remedial actions;
- (v) implement SEMP measures and report to PIU and/or DSISC if any new impacts surface; seek guidance as required in EMP implementation;
- (vi) conduct environmental monitoring (e.g., air, noise) as per the monitoring plan;
- (vii) ensure the implementation of the water quality surveillance program;
- (viii) prepare monthly EMP monitoring reports and submit to PIU;
- (ix) work closely with PIU safeguards officer and consultants to ensure communities are aware of project-related impacts, mitigation measures, and GRM; and
- (x) address any public compliance and grievances effectively and promptly.
- Capacity Building. PMU's HSGO and PIU safeguards officers will be trained by PMC 71. and DSISCs' safeguards experts on safeguards issues related to the project, GESI action plan, and GRM. They will also train the project NGOs, who will subsequently be involved in building capacity of the project gram panchayats. The EARF, resettlement framework, IPPF, CAPP, GESI action plan, and Trust Fund details provide indicative capacity building programs, including modules on (i) introduction and sensitization of all project stakeholders to the SPS on environmental, involuntary resettlement, and indigenous people policies and requirements; (ii) review, update, and preparation of the IEEs, SEMPs, resettlement plans, DDRs, and IPPs (as required) upon the completion of the detailed project design; (iii) improved coordination within nodal departments; (iv) monitoring and reporting requirements for the project; (v) roles and responsibility of parties for effective project implementation and sustainable, resilient, and inclusive service delivery post construction; (vi) project communication and participation requirements; and (vii) project GRM. PIU safeguards officers supported by the DSISCs will conduct briefings on safeguards principles, GRM, and GESI action plan for contractors upon their mobilization.

#### E. Common Grievance Redress Mechanism

- 72. A common GRM will be in place to address social, environmental, or any other project and/or subproject related grievances. The GRM described in in this section has been developed in consultation with stakeholders. A public awareness campaign will be conducted to ensure that awareness of the project and its grievance redress procedures is generated. The campaign will ensure that the poor, vulnerable, and others are made aware of grievance redress procedures and entitlements according to the project entitlement matrix, and PMU and concerned PIUs will be responsible for addressing their grievances.
- 73. Affected persons will have the flexibility of conveying grievances and/or suggestions by dropping grievance redress or suggestion forms in complaints/suggestion boxes or through telephone hotlines at accessible locations, e-mail, post, or by writing in a complaints' register in the offices of *gram panchayats*, the PMU, or PIU. The PMU and PIUs will carefully document the name of the complainant, date of receipt of the complaint, address and contact details of the complainant, the location of the problem area, and how the problem was resolved. The PMU HSGO together with PIU safeguard officers will have joint responsibility for timely grievance redress on safeguards and gender issues, and the registration of grievances, related disclosure, and communication with the aggrieved party. The affected persons will also be encouraged to seek a complaint registration number through PIU.

- The GRM provides an accessible, inclusive, and culturally appropriate platform for 74. receiving and facilitating resolution of affected persons' grievances related to the project. GRM consists of the following three tiers, one tier at project level and two beyond project level, as shown in Figure 3. Each tier identifies the persons responsible for addressing grievances and provides a time limit for this. For the project-level GRM, each of the PIUs will establish a grievance redress cell. The safeguards officers of the environmental and social safeguards unit (ESSU) of PIU, supported by the DSISC's social safeguards specialists, will be responsible for conducting periodic community meetings with affected communities to understand their concerns and help them through the process of grievance redress, including translating the complaints into Bangla, the local language, or English, recording and registering grievances of non-literate affected persons, and explaining the process of the GRM. All minor grievances will be resolved at the field level. Should the PIUs fail to resolve a grievance within the stipulated time, the PMU will be consulted. The PIU will implement the actions suggested by the PMU with DSISC support within the specified time. PIUs will also be responsible for follow-through for each grievance, periodic information dissemination to complainants on the status of their grievance, and recording of their feedback (satisfaction, dissatisfaction, and suggestions). If grievances cannot be resolved at the project level, they will be referred to the district steering committee (DSC), which will also act as the grievance redress committee (GRC), particularly, in matters related to land acquisition, payment of compensation, and environmental pollution, among others. For any matter deemed higher than district level or that may require inter-departmental coordination, the required grievance redress will be referred to the state-level steering committee.
- 75. The GRM aims to provide a time-bound and transparent mechanism to voice and resolve social and environmental concerns linked to the project. All grievances—major or minor—will be registered. In case of grievances that are immediate and urgent in the perception of the complainant, the contractor and supervision personnel from the PIU supported by DSISC will try to successfully resolve them in consultation with the head and members of the *gram panchayat*. In case of larger issues, they will seek the advice and assistance of the superintendent engineer PIU. Grievances not redressed through this process at the project level within the stipulated time will be referred to the DSC GRC. The GRC will continue to function throughout the project duration.

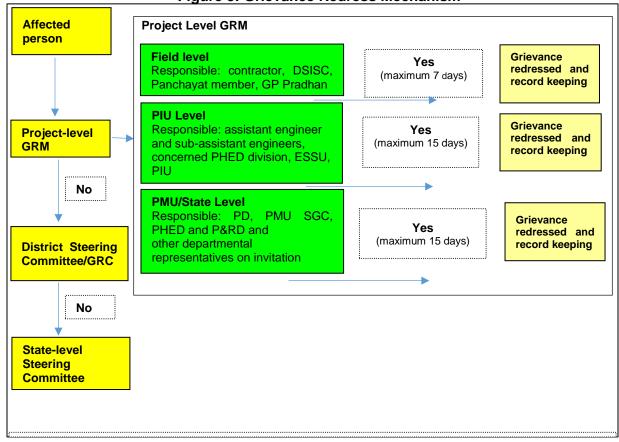


Figure 3: Grievance Redress Mechanism

DSISC = design, supervision, and implementation support consultant; ESSU = environmental and social safeguards unit of the project implementation unit, GRC = grievance redress committee; GRM = grievance redress mechanism, PIU= project implementation unit, P&RD = Panchayat and Rural Development; PMU = project management unit, PHED = public health engineering department; SGC = safeguards and gender cell of the project management unit.

- 76. The PHED will set up a DSC to monitor project implementation in each district. In its role as a GRC, the DSC will meet every month (if there are pending registered grievances), determine the merit of each grievance, and resolve grievances within the specified time upon receiving the complaint, failing which the state-level steering committee will address the grievance. The steering committee will resolve any escalated and unresolved grievances received. Grievances remaining unresolved by the steering committee may be referred by affected persons to the appropriate courts of law. The GRC will continue to function throughout the project duration. The PMU shall issue notifications to concerned PHED divisions to establish the respective PIU-level GRCs with details of composition, the process of grievance redress to be followed, and the time limit for grievance redress at each level.
- 77. An aggrieved person will have access to the country's legal system at any stage and accessing the country's legal system can run parallel to accessing the GRM and is not dependent on a negative outcome of the GRM.

#### F. Composition of the Grievance Redress Committee

78. The DSC, acting as the GRC, will comprise the District Magistrate (chair), PIU's superintending engineer (member secretary), and the following members: the Additional Executive Officer, *Zilla Parishad*; assistant (social and environmental) safeguard officers of the ESSU of the

PIU; institutional support and capacity building officer, PIU; block development officers from respective blocks; and representatives from the affected *Gram Panchayat* or community. The GRC may invite any eminent citizens, community-based organizations (CBOs), and NGOs as needed as observers. The DSC as the GRC must have a minimum of two women members. In case of any indigenous people impacts in future subprojects, the DSC, acting as the GRC, must have representation of the affected indigenous people community, including at least one female indigenous person, the chief of the tribe, or a member of the tribal council as traditional arbitrator to ensure that traditional grievance redress systems are integrated, and an NGO working with indigenous people's groups.

79. The state-level steering committee will have the Chief Secretary as its chair, and the project director as member secretary. The members of the state-level steering committee will be /Additional Chief Secretary / Principal Secretary, PHED; Principal Secretary, Panchayat and Rural Development; Principal Secretary, Finance; Principal Secretary, Irrigation and Waterways Development Department; and Engineer-in-Chief, PHED. The steering committee may invite others as needed.

#### G. Areas of Jurisdiction

80. The areas of jurisdiction of the district level GRC, headed by the District Magistrate, will be (i) all locations or sites within the district where subproject facilities are proposed or being implemented, or (ii) their areas of influence within the district. The state-level steering committee will have jurisdictional authority across the state (i.e., areas of influence of subproject facilities beyond district boundaries, if any).

#### H. Consultation Arrangements

81. Consultations will include regular group meetings and discussions by the social safeguards personnel of DSISC and PIUs with affected persons, at least twice during resettlement plan preparation. During the first year of project implementation, such meetings will take place on a quarterly basis, while in subsequent years they will be held at least twice a year. The consultation arrangements thus envisaged are intended to address both general and/or specific individual grievances through a participatory approach. The consultative process is meant to be flexible to provide timely mitigation of grievances of the affected persons.

#### I. Recordkeeping

82. Records of all grievances received, including contact details of the complainant, the date the complaint was received, the nature of the grievance, the agreed corrective actions, the date these were implemented, and their outcomes will be kept by the PIUs (with the support of DSISCs) and submitted to the PMU. The grievances will be summarized and shared with ADB in quarterly progress reports and semi-annual safeguards monitoring reports. The number of grievances recorded and resolved and the outcomes will also be displayed/disclosed in the PIU office, project or *gram panchayats* office, and on the web.

#### J. Information Dissemination Methods of the Grievance Redress Mechanism

83. The PIU, assisted by the DSISC, will be responsible for information dissemination to affected persons on grievance redressal procedures. The DSISC safeguards specialists will assist the PIU assistant safeguards officers (environment and social) with information, collateral, and awareness material, and in conducting project awareness campaigns. The campaigns will ensure

that the poor, vulnerable, and others are made aware of the grievance redress procedures and entitlements according to the agreed entitlement matrix, including who to contact and when, where and how to register a grievance, various stages of the grievance redress process, and time likely to be taken for redress of minor and major grievances. Grievances received, and responses provided, will be documented and reported back to the affected persons. The number of grievances recorded and resolved and the outcomes will be displayed in the PMU and PIU offices, *Gram Panchayats*, concerned local Panchayat notice boards, and on the web, as well as reported in the semi-annual environmental and social monitoring reports to be submitted to ADB. A sample grievance registration form is in Appendix 6.

- 84. **Periodic review and documentation of lessons learned**. The PMU's environmental and safeguards cell will periodically review the functioning of the GRM and record information on its effectiveness, especially on the PIUs' ability to prevent and address grievances.
- 85. **Costs**. The PIUs and PMU will bear all costs involved in resolving the complaints (meetings, consultations, communication, and reporting and information dissemination). Cost estimates for grievance redress are included in the resettlement cost estimates of the project.
- 86. **ADB's Accountability Mechanism.** If the established GRM cannot resolve the issue, the affected person also can use the ADB's Accountability Mechanism by directly contacting (in writing) the Complaint Receiving Officer at ADB headquarters or ADB India Resident Mission. The complaint can be submitted in any of the official languages of ADB's developing member countries. It is recommended that before submitting a complaint to the Accountability Mechanism, the affected person/s make a good faith effort to resolve their problems by working with the concerned ADB operations department (in this case, the resident mission). Only after doing that, and if they are still dissatisfied, they should approach the Accountability Mechanism. Information about the ADB Accountability Mechanism will be included in the project-relevant information and distributed to the affected communities as part of the project GRM.
- 87. **Capacity building.** PMU's safeguards and gender officer and PIUs' safeguards focal persons will be trained by PMC's social and resettlement experts and DSISC's resettlement and social specialists on safeguards issues of the projects and the GRM. The PMC and DSISC's experts will also train the relevant experts of the project NGOs. PMU and PIUs' staff, design engineers, contractors, and *Gram Panchayat*, block, and district-level officers involved in project implementation and operations would also receive capacity building briefings. Typical modules would be: (i) introduction and sensitization to SPS on involuntary resettlement and indigenous people policies and requirements resettlement framework and IPPF; (ii) review, update, and preparation of the resettlement plans and IPPs (as required) upon the completion of detailed project design; (iii) improved coordination within nodal departments; (iv) monitoring and reporting system; and (v) project GRM. PIU safeguards focal persons supported by DSISCs will brief contractors on safeguards principles and GRM upon their mobilization.
- 88. **Civil works contracts and contractors.** The resettlement plans and IPPs will be included in bidding and contract documents and verified by the PIUs and PMU. All contractors will be required to designate an environment, health, and safety (EHS) supervisor to ensure implementation of EMP, resettlement plan, and IPP safeguards provisions in the agreed safeguards framework for the project during civil works and O&M. They will also have the responsibility for communicating with the public under the guidance of the PMU and/or PIUs and registering all grievances prior to advising PIUs of the same. Contractors will carry out all mitigation and monitoring measures outlined in their contract.

#### VIII. GENDER AND SOCIAL DIMENSIONS

#### A. Gender and Social Inclusion Strategy

89. The project is classified as gender equity. The GESI action plan has clear targets, responsibilities, and resource allocation. The project will generate new employment for over 350 locals in the project gram panchayats, of whom 33% will be women. The project will provide potable continuous water supply through metered household connections to around 390,000 households, thus reducing the need for women to fetch water. The extensive capacity building, including trade-certified training on technical, financial, and customer management will enhance the local women's skills and enable employment. Local community-based organizations and nongovernment organizations will be involved in consultations and awareness meetings. Awareness raising campaigns on water conservation, climate resilience, and WASH will specifically target at least 33% participation by women and girls. Women, comprising at least 33% of the Village Water and Sanitation Committees (VWSCs) in the gram panchayats, will also receive leadership training. Supported by project consultants, PHED will conduct a gender audit, based on which it will develop and adopt a gender strategy. The project, with particular support from the grant from JFPR will (i) carry out extensive skilling and capacity building of the local stakeholders, including a minimum of 33% women; (ii) assist in institutionalizing an inclusive and gender-responsive policy framework through implementation of the AMSDF for the first time in West Bengal; and (iii) introduce innovative measures for smart water management that also result in inclusive and efficient service delivery at the village level. As such, the project is expected to set a new benchmark for inclusive and gender-sensitive water supply service delivery for the state of West Bengal and India.

# B. Institutional strengthening

- 90. The project will build the capacities of PHED, participating *gram panchayats*, and block and district authorities in sustainable, inclusive, gender-responsive, and resilient drinking water service delivery, as well as support the implementation of the institutional reforms required. Loan consultants will assist PHED in developing operational manuals and learning materials and will induct staff of the *gram panchayats*, VWSC members, and concerned stakeholders. The AMSDF that all *gram panchayats* will adopt and implement (Appendix 2) for long-term service delivery ensures that all households, including households headed by women and vulnerable households, will receive free connections and an affordable water user charges. Equal employment opportunities will be provided for women in the project activities across project units and offices of the PMU, PIUs, and gram panchayats.
- 91. The NGOs engaged under the project will prepare learning and awareness material for communities on water conservation, and improvement in sanitation and hygiene, and provide training on the same to local stakeholders, of whom a minimum 33% will be women and girls. The members of the community groups and neighborhood networks will also be trained.

## C. Gender-Sensitive Community Awareness and Participation Plan

92. The PHED, with support from project preparatory consultants, prepared an inclusive and gender-sensitive community awareness and participation plan (CAPP) for the project. The PMC, DSISCs, and project NGOs will help the PIUs and the project *gram panchayats* on its implementation (Appendix 8). In addition to inclusive planning and participatory approach for the project activities, the CAPP will also focus on increasing awareness on water conservation and WASH behavior and practices. This builds upon the existing knowledge among the poor

communities regarding WASH and will encourage them to practice the knowledge and help improve water use efficiency and WASH behavior and practices. The implementation of the CAPP will also help to reduce any resistance to project activities and avoid conflicts that may occur during planning, construction, and operation by mitigating political, social, economic, technical, and even commercial constraints. The nongovernment organizations engaged under the project will assist in organizing outreach initiatives in schools on WASH and health issues with at least 33% girls' participation.

#### D. Enhancing Livelihood Opportunities and Skills

93. Project NGOs will organize skills enhancement and capacity building, and leadership and livelihood training as outlined under the JFPR activities (refer to linked document in Appendix 2 of the project's report and recommendation to the President) for each of the *gram panchayats* for employment and income opportunities, especially in O&M of assets created in *gram panchayats*. The NGOs will also establish linkages with ongoing income generating and livelihood opportunities for women. A minimum of 33% of participants in all such activities will be women and girls.

# E. Project Management

- 94. A gender focal point will be designated in the PMU and PIUs and assigned the responsibility to oversee gender mainstreaming activities in the project, including the GESI action plan. Section D (Safeguards Roles and Responsibilities) outlines the roles and responsibilities of each party in ensuring the GESI action plan is implemented at all levels and by all parties of the project implementation. The safeguards officers at the PIUs, supported by the DSISC and project NGOs, will be primarily responsible for the timely implementation of GESI activities in the project, guided and supported by the HGSO in the PMU. She/he will coordinate with the PMC, DSISCs, PIUs, project NGOs, gram panchayats and government departments to ensure that all GESI activities are implemented and monitored effectively and reported in the GESI monitoring and reporting format agreed for the project (Appendix 8) and shared with ADB as an annexure to the project quarterly progress reports. The safeguards officers of the PIUs will also ensure that sex-disaggregated data is collected, monitored, and reported for all beneficiary-related parameters. She/he will also ensure that the project performance management system (PPMS) has gender indicators including sex-disaggregated data.
- 95. Core labor standards such as equal pay for work of equal value, occupational health and safety, disclosure signage, and separate sanitation facilities for women laborers in project sites will be incorporated in contract documents and monitored.

Table 16: Gender Action Plan: Gender Equality and Social Inclusion Action Plan

SI	Activity	Target / Indicator		Time		
			Responsibility	i iiiie		
	Output 1: Climate-resilient drinking water infrastructure constructed					
1.1	Provide potable water in project areas within own premises and inclusively	Households in project coverage areas have access to continuous piped potable water within the premises. Target: 390,000 households  households headed by women and vulnerable households included in the targeted 390,000 households provided with free or subsidized piped potable water connections. Target: 100%	PHED, Project gram panchayats, PMU, and PIU	Years 1– 6		
		Government institutions, including schools, hospitals, primary health centers, and community health centers in project coverage areas have access to free connections and subsidized continuous piped potable water supply services. Target: 100%				
1.2	Conduct project social and gender data mapping	Poverty and ethnicity mapping at village level undertaken using secondary data, for identification of households headed by women and vulnerable households and maintained in a roster at PIUs and <i>gram panchayats</i>	PMU, PIUs and gram panchayats //WSCs	Years 1– 6		
		Collection of primary data completed, using the application form for water supply connections to collect information on ethnicity and socio-economic status, and maintained in a roster at PIUs and <i>gram panchayats</i>	supported by project NGOs, PMC, and DSISC			
1.3	Create female- friendly work environments at PMU, PIUs, consultants' and contractors' offices, facility locations, work	Separate and safe toilets and changing facilities for females at the PMU, PIU, consultants' and contractors' offices, work sites and camps, and project facility locations. (Target: 100% of project and sub-project offices and sites.)  Government of India and Government of West Bengal policies on zero tolerance for sexual harassment and other forms of gender-based discrimination in the workplace implemented.	PMU, PIUs gram panchayats /VWSC PMC, DSISC, and contractors	Years 1– 6		
	sites, and camps	Ensure equal pay for women workers in project sites.				
Outr	out 2: Institutions and o	capacity of stakeholders for drinking water service delivery strengthened	1	l		
2.1	Manage drinking water services inclusively at the	At least 350 additional staff (including a minimum of 33% female) engaged by project <i>gram panchayats</i> to manage water supply services	gram panchayats	Years 3– 6		
	gram panchayats and PHED levels	Minimum 200 PHED staff, including 100% of PMU's and PIU's female staff, trained in technical and financial utility management				
2.2	Institutionalize inclusive practices in	The AMSDF implemented by project <i>gram panchayats</i> and PHED, institutionalizing inclusive operational practices and the policy framework for 100% connections	PIUs supported by project NGOs	Years 1– 4		

SI	Activity	Target / Indicator	Responsibility	Time
	each project gram panchayats	including all households headed by women and vulnerable households, and subsidized or affordable water user charges.		
		At least 660 locals in project <i>gram panchayats</i> , a minimum of 33% females, trained in technical, plumbing, and financial utility management skills VWSC members trained in their roles and responsibilities as per the VWSC guidelines, and their responsibilities for inclusive and sustainable water service delivery under the agreed AMSDF. Target: VWSCs of 66 project <i>gram panchayats</i> , with a minimum of 33% female		
2.3	Promote and help create women leadership in project gram panchayats and	Leadership and livelihood training provided to 300 local entrepreneurs in project gram panchayats, including new water supply staff and executive members of VWSCs, with a minimum of 33% female		
	PHED	For the minimum 218 females in project <i>gram panchayats</i> trained in technical and financial utility management skills, the 33% female VWSC members, and the 100% PHED staff trained on utility management, provide two refreshers or follow up courses/ training programs on leadership during the project implementation period		
2.4	Conduct community consultation and awareness activities, including benefits and opportunities arising from the project such	At least four community members (including 33% female) in each GP trained as trainers in community mobilization and awareness on water conservation, improvement in sanitation, and hygiene, and the benefits and opportunities arising from the project. Target: 4 *66 gram panchayats = 264 people trained, with a minimum of 33% female	Project NGOs in coordination with PMU, PIUs, and VWSCs	Years 1– 2
	as employment, skills training, and livelihood enhancement	Public awareness on water conservation, demand management, and WASH provided to at least 500 locals in project <i>gram panchayats</i> , a minimum of 33% female		
2.5	Conduct gender audit, develop and adopt gender strategy for PHED	PHED's gender strategy approved.	PMU, with support from PMC	Years 1– 6
2.6	Train PMU, PIUs, and other stakeholders in GESI and gender-responsive monitoring and reporting	Two GESI training workshops organized annually for PMU and PIU staff.  Training module on GESI incorporated in all training. Target: 100% of project training conducted by PMU and PIUs.	PMU and PIUs with support from consultants	Years 1– 6

SI	Activity	Target / Indicator	Responsibility	Time
2.7	Monitor and report on	Project NGOs, DSISCs, and PMC, engage specialists with experience in GESI	PMU with	Years 1-
	GESI action plan	implementation to provide technical support for GESI action plan implementation	support from	6
	implementation		consultants	
		GESI focal points appointed in PMU and each PIU		
		GESI action plan progress monitored regularly and reported every quarter with the project QPRs		
		PPMS developed with GESI indicators and regularly updated with sex- and social-disaggregated data		

AMSDF = Asset Management and Service Delivery Framework, DSISC = design, supervision, and institutional support consultants, QPR = quarterly progress report, PHED = Public Health Engineering Department, PIU = project implementation unit, PMC = project management consultant, PMU = project management unit, VWSC = village water and sanitation committees.

#### PERFORMANCE MONITORING, EVALUATION, REPORTING, AND IX. COMMUNICATION

#### A. **Project Design and Monitoring Framework**

The design and monitoring framework (DMF) for the project is in Table 17. 96.

Table 17: Design and Monitoring Framework Impacts the Project is aligned with: Drinking water security ensured in West Bengal (Vision 2020; and National Sub-Mission on Arsenic and Fluoride)<sup>a</sup>

_	Performance Indicators with Targets and	Data Sources and	,
Results Chain	Baselines	Reporting	Risks
Outcome Safe, sustainable, and inclusive drinking water service received in project districts <sup>b</sup>	By 2025: a. At least 1.65 million people receive continuous potable <sup>c</sup> piped water supply (2017 baseline: 0.8 million people in project areas affected with arsenic, fluoride, and salinity; no piped water supply)	a–c. Annual reports, including water quality, from PMU, PHED; and project quarterly progress reports	Extreme climate events beyond projections disrupt availability of water supply and infrastructure built
	b. At least 70% of project <i>gram</i> panchayats (governing bodies working at the village level) recover a minimum of 80% operation and maintenance costs, and operated with less than 15% nonrevenue water on average (2017 baseline: no services existed in project areas)  c. At least 70% of project <i>gram</i>		Unforeseen circumstances, such as flooding, affect the ability of project <i>gram</i> panchayats and the government to allocate resources to ensure water service delivery and sustainability
	panchayats provide potable water supply on average to 100% of poor households and households headed by women, and operate services with a minimum of 33% female staff <sup>d</sup> (2017 baseline: not applicable)		
Outputs 1. Climate-resilient drinking water infrastructure constructed	By 2024:  1a. Connections to at least 390,000 householde for 70 liters per capita per day of piped water supply completed (2017 baseline: 0)  1b. Three additional water treatment plants of at least 232 million liters per day of total capacity, and 110 storage reservoirs (ground level and overhead) with at least 94 million liters of total capacity commissioned, all equipped with smart water management devices (2017 baseline: 0)	1a–1d. PMU's annual reports, project quarterly progress reports	Competing priorities of the government and gram panchayats may affect timely project completion and capacity building
	1c. At least 4,800 kilometers of additional water distribution network laid and commissioned (2017 baseline: 0)  1d. 100% of water treatment plants, storage reservoirs, and distribution network commissioned under the project incorporate climate resilience measures (2017 baseline: not applicable)		

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
2. Institutions and	By 2024:	reporting	U19¥2
capacity of stakeholders for drinking water service delivery strengthened	2a. Government order on asset management and service delivery framework <sup>f</sup> adopted by at least 70% of the project <i>gram panchayats</i> (2017 baseline: not applicable)	2a–2j. PMU's and PHED's annual reports, project quarterly progress reports	
	2b District-level drinking water quality action plan developed for all districts of West Bengal (2017 baseline: 3 out of 23 districts)		
	2c. Smart water management system commissioned in PHED and project <i>gram panchayats</i> . (2017 baseline: Not commissioned)		
	2d. Guidelines for water safety plan and sanitation safety plan for West Bengal developed (2017 baseline: not completed)		
	2e. Flood forecasting and early warning system commissioned in Purba Medinipur (2017 baseline: not commissioned)		
	2f. Gender strategy for PHED developed (2017 baseline: not prepared)		
	2g. Fecal sludge and septage management regulatory framework completed for West Bengal, and a pilot treatment plant commissioned in one project district (2017 baseline: not completed, not commissioned)		
	2h. At least 660 additional locals in project gram panchayats, with a minimum of 33% females, and a minimum of 200 PHED staff reported increased skills in utility management (2017 baseline: 0, 0%, 0)		
	2i. At least 300 locals in project <i>gram</i> panchayats, with a minimum of 33% females, reported increased leadership and water-related livelihood skills (2017 baseline: 0, 0%)		
	2j. At least 500 locals in project <i>gram</i> panchayats, with a minimum of 33% females, reported increased awareness on water conservation, demand management, and water sanitation and hygiene (2017 baseline: 0, 0%)		

Key Activities with Milestones

1. Climate-resilient drinking water infrastructure constructed

- 1.1. Prepare detailed designs and bidding documents (Q2 2017–Q2 2018)
- 1.2. Award civil works contracts (Q2 2018-Q4 2018)
- 1.3. Construct and commission water supply schemes (Q3 2018–Q4 2021)
- 1.4. Operate and maintain water supply schemes (Q4 2021 onwards)
- 2. Institutions and capacity of stakeholders for drinking water service delivery strengthened
- 2.1. Mobilize nongovernment organizations and consultants for community awareness and training on water sanitation and hygiene, and on benefits and opportunities arising from the project (Q2 2018)
- 2.2. Conduct community awareness and training activities (Q3 2018–Q4 2022)
- 2.3. Facilitate adoption of asset management and service delivery framework, through passing of resolution, by the project *gram panchayats* (Q3 2017–Q2 2018)
- 2.4. Develop drinking water quality action plan for all districts in West Bengal (Q2 2018–Q2 2019)
- 2.5. Procure and commission PHED- and *gram panchayat*-level smart water management systems (Q1 2018–Q2 2022)
- 2.6. Award contracts for PHED- and *gram panchayat*-level smart water management systems (Q2 2020–Q4 2020)
- 2.7. Commission PHED- and gram panchayat-level smart water management systems (Q3 2020–Q2 2022)
- 2.8. Train PHED and gram panchayat staff on smart water management (Q3 2020–Q2 2022)
- 2.9. Mobilize consultants for flood forecasting and early warning system in Purba Medinipur (Q3 2018)
- 2.10. Complete gender audit for PHED and approve gender strategy (Q1 2020)
- 2.11. Operationalize flood forecasting and early warning system in Purba Medinipur (Q3 2020)
- 2.12. Complete FSSM regulatory framework; operationalize, test, and evaluate FSSM pilot (Q4 2022)
- 2.13. Develop water and sanitation safety plans for West Bengal and samples for one project district (Q4 2017)

#### **Program Management Activities**

- Establish PMU and PIU offices fully with dedicated staff and offices (Q4 2017)
- Engage and mobilize consultants (Q2 2018)
- Conduct regular monitoring, reporting, and evaluation (2018–2024)

#### Inputs

Asian Development Bank: Ordinary capital resources: \$240 million (regular OCR loan)

Japan Fund for Poverty Reduction: \$3 million (grant)

Urban Climate Change Resilience Trust Fund under the Urban Financing Partnership Facility<sup>9</sup>: \$2 million

Government: \$106 million (TA grant)

## Assumptions for Partner Financing: Not Applicable

FSSM = fecal sludge and septage management, GOWB = Government of West Bengal, lpcd = liter per capita per day, ML = million liters, MLD = million liters per day, NA = not available, NRW = non-revenue water, NGO = non-governmental organization, O&M = operation and maintenance, PHED = Public Health Engineering Department, PIU = program implementation unit, PMC = project management consultant, PMU = program management unit, Q = quarter, QPR = quarterly progress report, VWSC = village water and sanitation committee, WASH = water, sanitation, and hygiene, WTP = water treatment plant.

- <sup>a</sup> Government of West Bengal, Public Health Engineering Department. 2011. Vision 2020: To Provide Safe, Sustainable, and Adequate Water Supply to All Humans and Livestock in West Bengal by 2020. Kolkata; and Government of India, Ministry of Drinking Water and Sanitation. 2016. National Sub-Mission Guidelines to Provide Safe Drinking Water to Arsenic and Fluoride Affected Habitations in Rural India on Mission Mode. New Delhi.
- <sup>b</sup> Project districts are Bankura, North 24 Parganas (with one neighboring block of South 24 Parganas included), and Purba Medinipur.
- <sup>c</sup> Complying with Indian drinking water standards (Bureau of Indian Standards, IS 10500).
- <sup>d</sup> GOWB Government Order issued on 9 November 2017 mandates a 33% reservation for women in project generated employment at the local level.
- <sup>e</sup> Household service connection is a pipe and fixture that connects the network to a consumer.
- f As per a GOWB Government Order on the asset management and service delivery framework issued on 9 November 2017. The project gram panchayats will pass resolution to officially adopt them.
- <sup>9</sup> Financing partners: the Rockefeller Foundation and the governments of Switzerland and the United Kingdom. Administered by the Asian Development Bank.

Source: Asian Development Bank.

#### B. Monitoring

97. **Project performance monitoring.** Within 6 months of loan effectiveness, the PMU will establish the project performance management system (PPMS) using the targets, indicators, assumptions, and risks in the design and monitoring framework (DMF). The baseline data corresponding to indicators and targets set out in the DMF will be gathered during detail design stage and disaggregated by income levels, sex, and ethnicity as appropriate. The baseline data

for output and outcome indicators gathered during project processing will be updated and reported quarterly through progress reports prepared by the PMU with support from the PIUs, and for each ADB review mission. These quarterly reports (Appendix 9 has the agreed format) will provide the information necessary to update ADB's project performance reporting system.

- 98. **Compliance monitoring.** The executing agency will monitor the status of compliance with loan covenants—policy, legal, financial, safeguards, including gender and others—regularly and during the ADB review missions. The executing agency will report on a quarterly basis in the project progress reports prepared by the PMU with support from the PIUs and in the aide mémoire of ADB's review missions.
- 99. **Safeguards monitoring.** The PMU will monitor and report on the implementation of safeguards requirements and procedures. The PMU will undertake internal monitoring of safeguards covenants' compliance to be included in the quarterly project progress report and semiannual safeguards monitoring reports. The PMU with assistance from PMC will consolidate quarterly progress and semi-annual environmental and social monitoring reports from PIUs and submit semi-annual monitoring reports to ADB (refer Appendix 10 for agreed format). Safeguard officers in the PIUs will supervise design and construction works, facilitate preparation of safeguards documents, and evaluate compliance of investment project activities with ADB's Safeguard Policy Statement (2009). Details of the environmental and social safeguards are in the environmental assessment and review framework (EARF) and the resettlement framework.
- 100. **Gender and social dimensions monitoring.** PMU and the PIUs will implement and monitor the GESI plan. The gender focal point in PMU and the PIUs will oversee gender mainstreaming activities in the project. The safeguard officers at the PMU will ensure that all activities are implemented, monitored, and reported. The GESI implementation progress will be reported in the GESI monitoring and reporting format with the quarterly progress reports of the project (refer Appendix 8 for agreed format). Each ADB review mission will review and monitor the progress on the implementation of the GESI plan closely.

#### C. Evaluation

The government and ADB will jointly review the project progress at least twice a year. The review will include (i) the performance of the PMU, PIUs, participating gram panchayats, consultants, and contractors; (ii) compliance with safeguards requirements; (iii) physical progress of subprojects; (iv) effectiveness of capacity building and skilling activities for gram panchayats, PHED, and other stakeholders; (v) implementation of GESI action plan; (vi) compliance with loan covenants; and (vii) gram panchayats compliance with the AMSDF. The government and ADB will undertake a comprehensive midterm review in the third year of the project implementation to identify problems and constraints encountered and work out measures to address them. Specific items to be reviewed include (i) appropriateness of scope, design, implementation arrangements, and schedule of activities; (ii) assessment of implementation pace and achievements against project indicators; (iii) effectiveness of capacity building projects for the gram panchayats and other stakeholders; (iv) need for additional support for successful implementation of the project and operation and maintenance of assets created; (v) compliance with safeguard requirements; (vi) progress of the GESI plan; (vii) lessons learned, good practices' potential for replication; (viii) requirements of changes in implementation arrangements and procedures for tackling impediments in the project; (ix) fixing targets for the remainder of the project to recover time overruns; and (x) any issue that requires to be attended for the timely completion of the project.

102. Within 6 months of physical completion of the project, PHED will submit a project completion report to ADB.<sup>28</sup>

#### D. Reporting

103. PHED will provide ADB with (i) quarterly progress reports in a format consistent with ADB's project performance reporting system; (ii) consolidated annual reports including (a) progress achieved by output as measured through the indicators' performance targets, (b) key implementation issues and solutions, (c) updated procurement plan, and (d) updated implementation plan for the following 12 months; and (iii) a project completion report within 6 months of physical completion of the project. To ensure that projects will continue to be both viable and sustainable, the PMU should carefully review project accounts and the executing agency audited financial statement together with the associated auditor's report.

# E. Consultation and Participation Strategy and Plan

104. The project intends to maximize transparency by communicating project information to the stakeholders by various means. PHED, with support from project preparatory consultants, prepared an inclusive community awareness and participation plan (CAPP) for the project (Appendix 7). The objectives of the CAPP are to (i) involve all stakeholders in all phases of project implementation and provisioning of water supply services; (ii) enhance stakeholders' knowledge and skills in water supply systems management; (iii) help address gender, equity, and social inclusion issues in project implementation and in managing water supply services; (iv) influence behaviors that are critical to achieving better health outcomes; and (v) ensure widespread, continuous, and meaningful participation of key stakeholders with a focus on the poor and vulnerable groups through a series of activities planned. The PMU, with support from the PIUs, loan consultants, and the project NGOs, will implement the CAPP. The PMU will engage project NGOs to help the PIUs and *gram panchayats* to implement *gram panchayats*-level CAPP activities along with the GESI action plan and achieve other capacity building goals of the project for sustainable operations and maintenance.

#### 105. The project will also ensure the following:

(i) the PMU will set up a project-specific website within 6 months from the loan effectiveness and disclose all key project-related information including the scope, cost, and financial and institutional arrangements of the project; important project documents such as those of safeguards including the IEE reports, resettlement plans, procurement plan, and project progress. All notices inviting bids and notices inviting proposals for services are to be notified on the website. The website will also include information on project procurement including the list of participating bidders, the name of each winning bidder, basic details on bidding procedures adopted, the value of each contract awarded, the value of goods and services procured, and the intended utilization of loan proceeds under each contract being awarded. The website will also include general information on the project and contact details of the main staff of the executing agency in English and the local language. The website will also link to ADB's Integrity Unit website at <a href="https://www.adb.org/site/integrity/complaint-form">https://www.adb.org/site/integrity/complaint-form</a> for reporting to ADB any

28Project completion report format is available at: <a href="http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar">http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar</a>

- grievances or allegations of corrupt practices arising from the project and /or project activities;
- (ii) the PMU will ensure that all PMU and PIU staff are fully aware of ADB's procedures, including but not limited to procedures for implementation, procurement, use of consultants, disbursements, reporting, monitoring, and prevention of fraud and corruption;
- (iii) all PIUs and the participating *gram panchayats* will also fully disclose relevant project-related information such as subproject name and cost, information on bidding, contractor's name, contract price, and progress of construction through public briefings and bulletin boards; and
- (iv) all project offices, (PMU, PIUs, consultants' offices), subproject sites, and offices of the *gram panchayats* display the GRM.

#### X. ANTICORRUPTION POLICY

106. The Government, State Government, and PHED are advised of ADB's Anticorruption Policy (1998, as amended to date). Consistent with its commitment to good governance, accountability and transparency, implementation of the Project shall adhere to ADB's Anticorruption Policy. ADB reserves the right to review and examine, directly or through its agents, any alleged corrupt, fraudulent, collusive, or coercive practices relating to the Project. In this regard, investigation of government officials, if any, would be requested by ADB to be undertaken by the government.<sup>29</sup>

107. To support these efforts, relevant provisions of ADB's Anticorruption Policy are included in the Loan Regulations, Agreements, and the bidding documents. In particular, all contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the State, PHED, and all contractors, suppliers, consultants, and other service providers as they relate to the Project. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contract under the Project. Following additional measures have also instituted:

- (i) PHED will disclose to the public, and update annually, the project status and how the proceeds of the facility are used;
- (ii) for each contract financed under the project, PHED will disclose on its website information on the (a) list of participating bidders; (b) name of the winning bidder;
   (c) basic details on bidding procedures and procurement methods adopted; (d) amount of contract awarded; (e) list of goods and services, including consulting services procured; and (f) intended and actual utilization of the facility proceeds;
- (iii) full information disclosure and participatory monitoring at both the central and the local levels is expected to be effective in reducing the risk of corruption and improving governance; and
- (iv) within 6 months of the project effectiveness, the PMU will finalize a GRM that is acceptable to ADB and ensure that an officer with the requisite capacity is appointed in each PIU and the PMU. The role of this officer will be to resolve and act upon—independently and expeditiously—complaints and grievances or reports from stakeholders on misuse of funds and other irregularities relating to the project or specific subprojects in each local authority, and project activities in the PMU and PIUs including, but not limited to, grievances due to resettlement and environmental issues. The PMU and each PIU will create awareness amongst the

<sup>&</sup>lt;sup>29</sup> ADB's Integrity Office web site: <a href="https://www.adb.org/site/integrity/main.">https://www.adb.org/site/integrity/main.</a>

stakeholders of their right to submit complaints about grievances relating to the project.

#### XI. ACCOUNTABILITY MECHANISM

108. People who are or may be in the future adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice and seek a resolution of their problems as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make an effort in good faith to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.<sup>30</sup>

#### XII. RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL

109. All revisions and/or updates during implementation should be retained in this section to provide a chronological history of changes to implemented arrangements recorded in the PAM, including a revision to contract awards and disbursement S-curves.

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<sup>&</sup>lt;sup>30</sup> Accountability Mechanism. <a href="https://www.adb.org/site/accountability-mechanism/main.">https://www.adb.org/site/accountability-mechanism/main.</a>

#### SUBPROJECT SELECTION CRITERIA

1. All subprojects proposed for funding under the project must meet the screening and eligibility criteria. Since many areas within the project districts are affected by arsenic, fluoride, and/or salinity contamination, *gram panchayats* to be covered with water supply distribution system under eligible subproject will be selected based on formulated prioritization criteria. The subproject selection procedures including sub-project screening criteria, eligibility criteria, and *Gram Panchayat* prioritization criteria are set out below:

#### A. Screening Criteria

- 2. Each subproject must be and/or have:
  - (i) in a district affected by arsenic, fluoride, and salinity contamination of groundwater;
  - (ii) identified and prioritized based on the district-wide Drinking Water Quality Action Plan (DWQAP), a plan prepared to mitigate water quality problems holistically and ensure water security;
  - (iii) completed a climate risk and vulnerability assessment, identified mitigation measures, and incorporated these in the subproject scope and design:
  - (iv) conducted a source sustainability assessment of raw water for the entire design period and its outcome confirms that the required water quantity is available and raw water quality standards are met;
  - (v) not cover areas under any existing surface-based piped water supply system scheme or any other proposed scheme unless the system has reached the end of its useful life or needs substantial rehabilitation to ensure 70 liters per capita per day (lpcd) of potable water can be supplied to the households. Last mile connectivity (household connections) for existing schemes can be considered under the proposed subprojects to supply potable water to households;
  - (vi) obtained the necessary permission for raw water extraction in accordance with relevant laws and regulations;
  - (vii) prepared the preliminary design and get approval by the state steering committee of the Public Health Engineering Department (PHED) of the Government of West Bengal;
  - (viii) not fall in core zones of national parks, wildlife sanctuaries and biospheres, and critical habitats; and
  - (ix) not categorized as category A for the environment or requiring significant resettlement (social safeguards category A)<sup>2</sup> or assessed to have significant indigenous people impacts (category A).<sup>3</sup>

<sup>2</sup> The involuntary resettlement impacts of an ADB-supported project are considered significant (category A) if 200 or more persons will experience major impacts, which are defined as (i) being physically displaced from housing, or (ii) losing 10% or more of their productive assets (income generating).

<sup>&</sup>lt;sup>1</sup> Gram panchayats are governing bodies at the village level

The significance of impacts of an ADB-supported project on Indigenous Peoples is determined by assessing (i) the magnitude of impact in terms of (a) customary rights of use and access to land and natural resources; (b) socioeconomic status; (c) cultural and communal integrity; (d) health, education, livelihood, and social security status; and (e) the recognition of indigenous knowledge; and (ii) the level of vulnerability of the affected indigenous peoples community.

## B. Eligibility Criteria

3. The criteria categories to be considered for the subprojects are: (i) technical criteria, (ii) social criteria, (iii) environmental criteria, (iv) economic criteria, and (v) financial and institutional criteria.

### 1. Technical Criteria

- (i) The subproject should include or identify any pre-existing work relating to raw water intake, transmission mains, distribution networks, reservoirs, pumping stations, pumps, water treatment plant, tube wells, infiltration wells and associated structure, and house service connections, water meters, and measures aiming at the reduction of unaccounted-for water;
- (ii) the subproject shall meet the design standards of the Government of India or other equivalent technical authorities;
- (iii) design of the distribution system should be carried out on a district metering area (DMA) basis with 100% metering;
- (iv) the subproject should be designed based on the following service standards: 70 liters per capita per day (lpcd) of pressured and continuous supply (available water excluding permissible losses), and fully complying with the water quality requirements of Bureau of India standards;
- (v) the subproject should ensure availability of potable water as per service level standards to the beneficiaries for the entire design period;
- the subproject should not consider water sources that may be polluted by upstream users and avoid conflicts among users by not extracting water that is used for other purposes;
- (vii) the subproject shall be cost effective and provide most appropriate technoeconomic solutions considering full lifecycle, based on a review of technical options available to address the identified problems;
- (viii) the subproject shall be designed and executed as a seismic resistant structure in accordance with relevant national standards as applicable;
- (ix) the subproject should incorporate the latest technology, materials, execution modalities, and smart water solutions (a) for timely and cost-effective implementation of subprojects and (b) to ensure effective monitoring and operation and maintenance (O&M) of the output created:
- (x) all water conservation measures, including rainwater harvesting, to be introduced where feasible;
- (xi) the design and construction standards will be raised to the appropriate level based on the recommendations of the climate risk and vulnerability assessment (CRVA), including revised high flood levels of the rivers and natural streams, provision of production well and elevated embankment, measures to protect against storm surge, all pipes to be laid below the ground level with adequate cushion, provision of additional water storage for drought season, and structural measures for overhead tanks to stand more intense cyclones and heavy winds; and
- (xii) the subproject should include erosion prevention measures wherever applicable based on the outcome of geotechnical studies and to the extent possible, the subproject scope of distribution network-related household connections should be prioritized based on the extent of contamination or needs of the community. A suggested priority scoring is shown in Table A1.1.

### 2. Social Criteria

- (i) The subproject will, to the extent possible, not require land acquisition or involuntary resettlement, including the displacement of squatters or encroachers from the rights of way. If a land acquisition or involuntary resettlement is required for a subproject, a resettlement plan shall be prepared in accordance with applicable laws and regulations of the national and state government, ADB's Safeguard Policy Statement (2009) on involuntary resettlement, and the agreed resettlement framework for the project and submitted to ADB for approval. For subprojects not having involuntary resettlement impacts,<sup>4</sup> a due diligence report need to be prepared;
- (ii) if any indigenous peoples/scheduled tribes are likely to be affected significantly by a subproject, an indigenous peoples plan shall be prepared in accordance with ADB's Safeguard Policy Statement (2009) on indigenous people and the agreed indigenous peoples planning framework for the project and submitted to ADB for approval. For subprojects not having indigenous people impacts, an indigenous people due diligence report will be prepared or included in a specific section of the land acquisition due diligence report prepared for the subproject; and
- (iii) the subproject design shall include gender and pro-poor features both in terms of planning and design, i.e., 100% household connections, and other features of the GESI plan agreed for the project, and promote income generation potential for locals, including women. Examples include improving access to services to women and poor, affordability, and institutional arrangements of gram panchayats for O&M, e.g., 33% engagement of women skilled and unskilled labor, and others to the extent feasible.
- 4. **Environmental Criteria.** The subprojects will comply with environmental requirements specified in ADB's Safeguard Policy Statement (2009) and those specified in the country's environmental regulations, including legislation and standards of the national and state governments. Individual subproject's environmental assessment shall have been carried out in accordance with the Environmental Assessment and Review Framework of the Project, and the environmental management and monitoring plan will be included in the contract document. The subprojects with the type of activities listed in Appendix 5 of the SPS 2009 (ADB Prohibited Investment Activities List) do not qualify for ADB's financing.
- 5. **Economic Criteria**. Subprojects should demonstrate an effective economic internal rate of return following ADB guidelines and should have an economic internal rate of return of at least 9%. Subprojects should demonstrate cost-effectiveness in comparison with alternative schemes, and where relevant, these would include assessments of the investments with and without future climate resilience measures.
- 6. **Financial and Institutional Criteria.** Sub-projects must demonstrate financial and institutional sustainability by providing a 5-year horizon plan that targets 100% O&M cost recovery through water user charges s, transfers, and taxes. The plan must address O&M cost, sources of funds (i.e., state support and user charges), O&M staffing needs at the bulk water service provider level and at *gram panchayats* level, and whether the beneficiary *gram panchayats* have passed resolution to adopt the AMSDF.<sup>5</sup> The AMSDF covers institutional and financial requirements to

<sup>&</sup>lt;sup>4</sup> When no impacts (permanent or temporary) are identified by the project team.

<sup>&</sup>lt;sup>5</sup> Each *gram panchayat* must adopt the asset management and service delivery framework, issued as a government order, to receive distribution network funding under the project. The agreement specifies roles and responsibilities of

ensure sustainable water supply delivery.

- 7. **Procedures.** Each subproject will be prepared and processed in accordance with the following procedures:
  - (i) the executing agency will conduct feasibility studies including cost estimates for all subprojects. The executing agency will also prepare a checklist for (a) involuntary resettlement, (b) indigenous people, and (c) an environmental screening in accordance with the relevant framework and submit the same for ADB's review and categorization;
  - (ii) based on the categorization and upon completion of the detailed engineering design, the executing agency will prepare the appraisal reports for all subprojects to be considered under the project following the selection criteria together with the required attachments, i.e., appropriate resettlement plan, indigenous people development plan and environmental assessment report, and submit the same in a form acceptable to ADB;
  - (iii) the executing agency will translate the resettlement plan into the local language, disclose it to the affected people, and incorporate the results of the consultation before ADB's approval. The final resettlement plan will also be disclosed on the ADB website and the website of the executing agency;
  - (iv) ADB will review the summary appraisal report together with the required attachments. If ADB finds that a proposed subproject is not likely to satisfy the screening and eligibility criteria and/or the agreed procedures, ADB will advise the executing agency either (a) to modify the subproject proposal in a manner that will make it eligible for approval or (b) that the subproject must be rejected. If a subproject is rejected, the executing agency may propose a replacement subproject under the project; and
  - (v) ADB will not approve any subproject if all necessary government approvals have not been obtained prior to ADB approval. The executing agency will be responsible for obtaining all such approvals and will provide ADB with a report showing that all approvals have been obtained prior to the submission of the subproject appraisal report.

# C. Prioritization Criteria for Selection of *Gram Panchayats* for the Distribution Network

- 8. Many areas within the project districts are affected by arsenic, fluoride, and/or salinity contamination, making it necessary to prioritize the *gram panchayats* for distribution network coverage. The following should be used to prioritize areas:
  - (i) areas which are already covered under an existing surface-based piped water supply system or proposed to be covered by PHED shall not be prioritized;
  - (ii) arsenic and fluoride-affected blocks will be given preference over blocks affected by salinity;
  - (iii) the blocks which are far away from potable surface water sources (distance to be measured from the surface source to the center of the block) will be given preference;

all parties, including the bulk service provider (PHED), and the distribution network and services manager (*gram panchayats*) and others. It will also specify *gram panchayats*' consent to contribute to the operation and maintenance (O&M) system within the gram panchayats' premises, and also the setting of a realistic O&M cost recovery structure.

- (iv) blocks affected by depleting groundwater sources stated as critical or semi-critical as per the definition of the Central Groundwater Board of the Government of India will be given preference. Where blocks have reported depletion of groundwater resources, data from existing tube wells (obtained from the State Water and Investigation Directorate (SWID) of the Government of West Bengal will be taken into consideration;
- (vi) a bi/tripartite agreement exists between the Village Water and Sanitation Committee,<sup>6</sup> gram panchayat, and the block-level Panchayat Samiti, as the case may be, and the District Water and Sanitation Mission;<sup>7</sup>
- (vii) the gram panchayat has agreed to pass a resolution in *Gramsabha* on adopting the AMSDF:<sup>8</sup>
- (viii) gram panchayats with a higher proportion of poor people will get priority. The lowest band is set at the poverty line (i.e., people below the poverty line); and
- (ix) project readiness on source identification and land availability, with no or minimum involuntary resettlement and indigenous people impacts as per ADB's SPS (2009), are scored higher.
- 10. PHED will use the priority table in Table A1.1 for scoring subprojects and decide on the inclusion of blocks and *gram panchayats* under the project.

**Table A1.1: Suggested Priority Scoring Table** 

	Table A1.1: Suggested Priority Scoring Table				
SI.			Remar	ks / Points	
No	Criterion/Indicator	Details	Total	Break-Up	
1	General				
(i)	Block <sup>a</sup> covered by existing and/or ongoing surface-based piped water supply schemes (PWSS)	Yes / No			
(ii)	Groundwater in the block affected bybarsenic, fluoride, and/or salinity	Yes / No			
2	Water Supply		55		
(i)	Groundwater affected by arsenic contamination at block level	Yes / No	20		
	Population affected >50%	Yes / No		20	
	50% > Population affected >35%	Yes / No		15	
	35% > Population affected >20%	Yes / No		10	
	20% > Population affected >5%	Yes / No		8	
(ii)	Groundwater affected by fluoride contamination at block level	Yes / No	10		
	Population affected >15%	Yes / No		10	
	15% > Population affected >10%	Yes / No		8	
	10% > Population affected >5%	Yes / No		6	
(iii)	Groundwater is affected by salinity at block level	Yes / No	10		
	Population affected >15%	Yes / No		10	
	15% > Population affected >10%	Yes / No		8	
	10% >Population affected	Yes / No		6	
(iv)	Distance of block from sustainable source (surface / sub-surface) is:	Yes / No	5		

<sup>&</sup>lt;sup>6</sup> Water and Sanitation Committee formed at the gram panchayat level.

<sup>&</sup>lt;sup>7</sup> The District Water and Sanitation Mission is a registered society under the relevant State Act, constituted for monitoring and implementing the project at the district level.

<sup>&</sup>lt;sup>8</sup> Official meeting of the *gram panchayat*.

SI.			Remarks / Points	
No	Criterion/Indicator	Details	Total	Break-Up
	More than 60 km	Yes / No		5
	At a distance of 30–60 km	Yes / No		3
	At a distance of 15–30 km	Yes / No		2
(v)	Depletion of groundwater reserves	Yes / No	10	
	Block identified as critical (CGWB)	Yes / No		10
	Block identified as semi-critical (CGWB)	Yes / No		8
	Block with reported groundwater	Yes / No		5
	depletion (SWID / PHED data)			5
3	Sanitation		15	
	% of population with sanitary latrines			10 x %/100
4	Poverty and Community Interest		20	
(i)	Matrix scoring based on % BPL from			10 x
	government census			%BPL/100
(ii)	Formation of VWSC	Yes / No		5
(iii)	Declaration of the gram panchayats for	Yes / No		
	taking overall responsibility for O&M			5
	services			
5	Project Readiness	Yes / No	10	
(i)	Source identified	Yes / No		3
(ii)	Land available for Source Abstraction and	Yes / No		7
	Treatment Structures / Components			'

BPL = below poverty line, CGWB = Central Ground Water Board, O&M = operation and maintenance, PHED = Public Health Engineering Department, PWSS = piped water supply schemes, SWID = State Water and Investigation Directorate.

Table A1.2: PROFORMA OF SUBPROJECT APPRAISAL REPORTS

1.	Subproject Name	
2.	Subproject Area	
3.	Confirmation of	
	Screening Criteria	
4.	Introduction and	A. Background
	Rationale	[Brief description of the existing situation at city level and in subproject area.]
		B. What is the need, i.e., the demand-supply gap?
		[Assess the need, current service level, and demand, both in terms of quantitative and qualitative aspects.]
		C. What are the reasons for the demand–supply gap? [Increase in demand/usage/generation, lack of production/ collection/ treatment capacity, inefficiency distribution/collection.]
		D. What action is the government taking to address the gap? [Whether the subproject will solve the problem of the area or it is part of many parallel activities initiated by the government to solve the problem; what is the status of parallel development activities, if any.]

<sup>&</sup>lt;sup>a</sup> A block would be considered as covered if at least 70% of the population is being covered with a piped water supply system with the minimum average existing supply levels of 55 lpcd.

<sup>&</sup>lt;sup>b</sup> Arsenic concentration in groundwater exceeding > 0.01 mg/liter; fluoride contamination shall be beyond the permissible limit of 1.5mg/liter.

# 5. Description Subproject area [Brief description of topography, soil condition, climate, current population and GPs covering the indicators of the scoring matrix.] B. Assessment of existing situation [Status of physical infrastructure, their condition, and service level.] C. Objective of the subproject [Identify the specific outcome: how the subproject will mitigate the demandsupply gap; how many people will benefit (immediate and design); what will be the improvement in service level both in terms of quantity and quality; what are the service level standards?] D. Subproject component [Proposed physical activity under the subproject, including the specific outputs.1 E. What are the risks and assumptions [Indicate risks and assumptions for achieving the subproject output and outcome; Indicate the statutory approvals needed for implementation of the subproject.] A. What is the design period? 6. Design Features B. What is the basis of the design? • The population of the subproject area - Current (20XX) - At project completion (20XY) • The population currently availing of the service at the government standards - Water supply: · Target additional urban population that will avail of the service at the government standards upon completion of the project - Water supply: Capacity improvement Production of water - Current - At project completion (20XY) Service level improvement: Water supply - Current - At project completion (20XY) Technical parameters considered What are the estimated costs? 7. Project Cost Amount Item A. Base Cost 1. [name of contracts/ works or supply] 2. [name of contracts/ works or supply] 3. [name of contracts/ works or supply] 4. [name of contracts/ works or supply] Taxes and duties Subtotal (A) **B.** Contingencies 1. Price contingency

	Physical contingency
	Subtotal (B)
	Total (A+B)
	In mid-20XX prices.
8. Implementation	A. What is the timeframe for implementation of this subproject?
Period	Approval of this SAR
	Completion of detailed engineering design
	Issuance of tender documents
	Contract award
	Commencement of contract
	Completion of contract
9. Implementation	A. Who will implement the subproject?
Arrangement	' '
· ·	B. Who will be in charge of design and construction supervision?
10. Procurement and	A. What will be the procurement method?
Consultant	74 This this so the production in the same
Selection	
11. Operation and Maintenance	A. Who will be the asset owner after completion?
aaa	B. Estimated yearly O&M cost
	,
12. Economic and	A. Economic and financial justification as per the subproject selection
Financial Analysis	criteria
(Provide detailed analysis	
in an attachment)	
13. Environmental	A. Brief description of environmental impacts
Assessment	The second secon
	B. What is the executing agency's assessment on following?
	Likely to be classified as:
	Category A under the EIA Notification of 2006 of the Government of
	India
	Category B under the EIA Notification of 2006 of Government of India
	Unknown
	The project site is <u>not</u> :
	Within 10 km from the boundary of protected areas, notified areas, and
	interstate and international boundaries as defined under EIA Notification
	of 2006 of Government of India
	☐A part of National Parks, Sanctuaries, and Tiger Reserve areas
	(notified as defined under Indian Wildlife (Protection) Act, 1972)
	Near to reserved forest or protected forest as defined under Forest
	(Conservation) Act, 1980 (amended in 1988)
	The subproject does not require:
	Consent for Establishment and Consent for Operation under the Water
	(Prevention and Control of Pollution) Act, 1974 and/or the Air (Prevention
	and Control of Pollution) Act, 1981
	Authorization for waste processing and landfills under Municipal Solid
	Waste (Management and Handling) Rules, 2000 of Government of India
14. Involuntary	A. Brief Description of Resettlement Issues
Resettlement	•
	B. What is the executing agency assessment on the following?
	This subproject is <u>unlikely</u> to cause:
	Loss of any private agricultural land, homestead land, or vacant plot
	Loss of any government agricultural land, homestead land, or vacant
	plot used by (i) legal or (ii) illegal occupants

	□Loss of residential structure including but not limited to walls, fences, sheds, wells used by (i) legal or (ii) illegal occupants □Loss of commercial structure used by (i) legal or (ii) illegal occupants		
	Loss of trees and crops		
	Temporary loss of land		
	Temporary disruption of livelihood		
	Loss and temporary impacts on common resources		
15. Indigenous People	A. Brief Description of Issues		
Development			
	B. What is the executing agency assessment on following?		
	There are <u>no</u> indigenous people or ethnic minority groups present in		
	project locations (as defined by Indian Constitution Article 342 and		
	366(25)).		
16. Attachments	(x) Checklists for the SSR compliance		
Required for the	(xi) Resettlement Plan or DDR		
Subproject	(xii) IEE		
	(xiii) IPP (if required)		
	(xiv) Economic Analysis		
	(xv) Financial Analysis		
	(xvi) Source Sustainability and other Technical Feasibility Reports		
	(xvii) Priority scoring table for selection of blocks and gram panchayats in		
	the subproject area.		

Dated: 09/11/2017

# GOVERNMENT ORDER ON ASSET MANAGEMENT AND SERVICE DELIVERY FRAMEWORK

Government of West Bengal
Department of Panchayats & Rural Development
Joint Administrative Building (6th to 10th Floors) HC-07, Sector III
Bidhannagar, Kolkata – 700 106

No. 2643/PN/O/I/4P- 03 /2017

#### ORDER

Whereas, the Public Health Engineering Department (PHED), Government of West Bengal is committed for providing good quality drinking water supply infrastructures and services to the rural population in the State in accordance with its Vision Plan 2020;

Whereas, the PHED with funding support from the Asian Development Bank (ADB) is executing the West Bengal Drinking Water Sector Improvement Project (hereinafter called 'the Project') in three districts namely North 24-Parhanas, Purba Medinipur and Bankura in the beginning, wherein surface and sub-surface water from rivers will be drawn, treated and distributed to selected Gram Panchayats (GPs) and their habitations:

Whereas, the PHED will operate and maintain the bulk water supply system from the river to the overhead service reservoirs (ORs) of the GPs and the internal water distribution system within the GPs will have to be operated and maintained by the respective GPs using their own resources, the GPs concerned being part of this Project to receive water supply at the designed norms on completion of the Project;

Whereas, based on the current Government policies and powers conferred to the GPs through the West Bengal Panchayat Act, 1973 for managing water supply services, the water distribution systems within the respective jurisdictions of the selected GPs will be handed over to the GPs on completion of the projects for operation and maintenance management;

And Whereas it is considered necessary to clearly the roles and responsibilities of the PHED (the bulk water supplier), the GPs (the drinking water supply service providers) and all other offices and / or institutions concerned, in order to ensure provision of safe and sustainable water supply delivery to the households connected to the distribution systems in the concerned GPs;

Therefore, the Governor is pleased to order that the process of implementation of the West Bengal Drinking Water Sector Improvement Project shall commence in the jurisdiction of the selected GPs in the three districts (a district-wise list being enclosed as *Annexure-A*) with immediate effect following the directives contained in this order as stated hereinafter:

1) The selected GPs in the three districts shall discharge their responsibilities in connection with this Project through the Village and Water Sanitation Committees (VWSC) constituted / to be constituted in each GP in terms of the Order No.490/PN/O/I/4A-01 dated 10.6.2016 of the Panchayats & Rural Development Department (P&RDD), Government of West Bengal. Each VWSC will adopt a resolution to the effect that it agrees to discharge the responsibilities and abide by the terms and conditions laid down in this Order under overall guidance, support and control of the Gram Panchayat concerned for this purpose and it will be the responsibility of the GPs to accept the resolution in order to be eligible for being a part of this Project.

- 2) The financial and performance obligations, particularly the technical services and financial management aspects, shall be reviewed by the Executive Officers of the Zillla Parishads concerned on a half-yearly basis, along with representatives of the P&RDD and the P&RDD shall direct the GPs in writing to address any issues and concerns relating to fulfil their obligations as required. Such directive shall be binding on the GPs and they shall act appropriately to address those instantaneously. These reviews will be conducted based on quarterly and semi-annual compliance report produced by PHED to the reviewers.
- 3) The PHED shall design and construct the water treatment plant, transmission mains, rising mains, overhead service reservoirs, pipelines, appurtenances, distribution networks, house connections and install bulk and household meters as approved under the Project. The PHED will own all assets related to bulk water supply including overhead service reservoirs. These assets would be collectively known as "assets of PHED".
- 4) The PHED will connect the households and other consumers, present at the time of execution of the distribution system and registered within the jurisdiction of the GPs, through individual house/service connections with the active participation of the GPs. Any additional house/service connections after the handover of the distribution system shall be provided by the GPs at their will and cost and in conformity with the standard connection design prescribed by the PHED.
- 5) The PHED by virtue of this order would transfer the use and ownership of all the assets of the PHED beyond the bulk meter at the overhead service reservoir(s) covering pipelines, appurtenances, house connections, bulk and household meters (herein after called the "Transferred Assets") to the GPs on completion and commissioning for further operation and maintenance (hereinafter called the "O&M). All other "assets of PHED" up to the point of bulk meter would remain with the PHED. The representatives of both the PHED and the GPs shall sign handover agreement at the time of handover of the Transferred Assets. The PHED shall provide full technical details and preventive and emergency maintenance manuals of the Transferred Assets to the GP. PHED will provide potable water to the GP on daily basis at the OSRs (s) for the GP. It is the responsibility of the GP to provide water from the OSR (s) to the households of the GP.
- 6) The bulk water supply system is designed to provide 24 hours of water at the overhead service reservoir(s) for the GPs and such supply shall be sufficient to keep the distribution system charged and deliver water supply to household as and when required on opening of their taps, for 24 hours in a day. The GPs shall ensure that all house connections connected to the distribution system have the taps at all times and remain closed during non-requirement of water to avoid unwarranted consumption by households and wastage of water. The GPs shall thus be responsible for conducting all water conservation awareness and implement actions to ensure conservation to remain within the limit of water consumption designed by PHED as described below.
  - a) The total supply will be made available up to 70 litres per capita per day (lpcd). The PHED will supply bulk water based on the usage of GP and ensure availability of adequate supply at the overhead service to meet designed daily demand of the GPs. The quantity will be enhanced proportionately, based on the ensure supply of 70 lpcd at the household level in an equitable and inclusive manner throughout the design life

- of the assists. The GPs may raise issues of population growth and additional demand, if any, in the annual compliance report to the PHED.
- b) While the PHED shall be responsible for monitoring water quality of the bulk water supply system, and ensuring that it meets the standards set by the PHED, the GPs shall monitor water quality in the distribution system at household level following the procedures and format provided by PHED immediately in case of any water quality parameter exceeds the standards.
- c) The PHED shall inform the GPs about any planned shutdown at least 7days before and in case of emergency shutdown within 2 hours of the incident. The GPs shall have to plan mitigation measures such as buffer storage or shortened supplies etc. to overcome water shortage caused by shutdowns. Similarly, the GPs shall inform the concerned water shortage caused by shutdowns. Similarly, the GPs shall inform the concerned household on anticipated supply interruption in the distribution systems due to any repairs planned by the GP or due to interruption of bulk water supply. Interruptions in supply in the bulk water supply system and in the distribution system shall be restored by the PHED within 12 hours and 8 hours of the supply interruptions respectively except in circumstances of force majeure.
- The PHED shall provide all the concerned GPs, the following as minimum operational tools;
  - a) Tool Kits for valve operations and repairs of pipe/house connections leaks:
  - b) Handheld device for meter reading and billing; and
  - Billing, collection, and water Accounting Software and Regular Data entry requirement and protocol.

The GPs shall remain responsible for O&M of the Transferred Asses as per the standards prescribed by the PHED with requisite trained manpower, tools and equipment and other resources.

- 8) The GPs will supply water, base on the usage (up to 70 lpcd) to all households, barring the system shutdown period, in accordance with O&M procedures as specified above and carry out regular repairs of distribution network 9leak detection and repairs, replacement, repair related to house connections, etc.) within a day from their reporting and shall submit monthly report with all repair details to the PHED for updating the information in dynamic asset register database. The GPs shall maintain minimum inventory of standard materials required at all times to avoid delays in repairs.
- 9) The GPs will engage all personnel/vendors/contractors/local organisations as appropriate and following Government norms and procedures as applicable, for all O&M tasks and through formal written agreements. The GPs will prioritise engagement of local men and women from registered local poorer and marginalised Self Help Groups (preferably registered under 'Anandadhara'- the National Rural Livelihoods Mission for West Bengal) for O&M tasks at the GP level and shall ensure that at least 33% of them are women.
- 10) The GPs shall ensure that the personnel engaged are adequately trained/certified. The PHED will facilitate training of these personnel offered under the Project, and through other means. The GPs will ensure that they are paid in compliance with the requirements of Indian and State of West Bengal's Labour Laws and Regulations (including not

- employing or using children as labour) and shall not differentiate wages to male an female workers for the work of equal value.
- The GPs shall manage the computer-based household service connection (HSC) register and ensure its regular updating.
- 12) The GPs will arrange meeting and Gram Sabha as and when required to expedit decisions on issues related to the operation of water supply in a sustainable manner. Th GPs will act and take decisions as appropriate and in accordance with the guideline issued by the Government of West Bengal, with respect to matters related to servic levels, new house connections & disconnections, measures to meet O&M cots including sharing of part of bulk water supply cost of PHED, measures to control illegal connections-water thefts-misuse of water-defaulters-vandalism water conservation practices, use of state funds/grants.
- 13) The GPs shall abide by the agreed smart water management practices as outlined below to achieve water use efficiency. The PHED will be responsible for SMART Water Management of bulk water supply system and the GPS will be responsible for management of the water distributions system. The GPs will monitor supply received from the PHED and consumptions at household level, based on water meter readings, on a regular basis and provide the data in the water supply system MIS maintained by the PHED the GPs will undertake measures to enhance water use efficiency at household level.
- 14) As the PHED will be incurring expenses using its own resources to operate and maintain the bulk water supply system, the PHED will recover 30% of bulk water supply cost of bulk water supply cost from the GPs based on water consumption of the GPs (recorded and verified by bulk water meter installed downstream of the overhead service reservoirs) to meet part of the operating cost of the bulk water system. The bulk water will be charged at the rate Rs. 2 per 1000 litres for the initial two years after which the bulk water rate will be reviewed by the P&RDD in consultation with the PHED.
- 15) The GPs shall prepare an annual budget for O&M of all the Transferred Assets with support from PHED, taking into account expenses, bulk water supply cost to be paid to PHED, revenue collections, grants available from the Government of West Bengal etc., in accordance with Chapter-XII-Preparation of Budget by the gram Panchayat under the West Bengal Panchayat (Gram Panchayat Accounts, Audit and Budget) Rules, 2007. The GP shall share the annual O&M budget of drinking water supply at the beginning of the financial year and utilisation details of previous year to the PHED in the month of April every year.
- 16) The GPs would decide and levy appropriate user charges to cover operating costs of the Transferred Assets and part of the bulk water supply cost of the PHED by enacting appropriate bye-laws under Section 223 of the West Bengal Panchayats Act, 1973. The GPs would collect revenue after appropriate consumer meter reading in accordance with CHAPTER-III- Procedure for Collection of Revenues und the West Bengal Panchayat (Gram Panchayat Accounts, Audit and Budget) Rules, 2007. Billing and collection of revenue would strictly follow the adopted bye-laws. The GPS will raise bills on quarterly basis for O&M charges for water consumption by registered users, based on water meter reading and collect revenue of timely funding of all expenditures incurred by the GPs through the VWSC. The GPs would register the woman head of the household (with the

- exception of all-male households) as the registered user and raise water bill in her name.

  The GPs will undertake all measures that are necessary to abaci revenue mobilisation at GP level to meet this cost.
- 17) Each GP would ring-fence one VWSC account and credit in this ring-fenced VWSC account all receipt or collection of revenue from registered users by sale of water, and any other receipt in the nature of fees & deposits, grants, contributions, and aid concerning the VWSC. Each GP shall use the funds the debit for all expenditure approved (by the budget) for O&M of all Transferred Assets. The GPs Shall ensure that the ring-fenced VWSC account is used only for collections for the purpose of O&M of all Transferred Assets within the jurisdiction of the GP and shall be for no other purpose.
- 18) The GPs would maintain through the VWSCs appropriate accounts (receipts and payments account) for the collections and expenditure for the water supplied under the Project in accordance with Chapter-I-Procedure for Maintenance of Accounts under the West Bengal Panchayat (Gram Panchayat Accounts, Audit and Budget) Rules, 2007. The GPs would use the existing computerized accounting system (Gram Panchayat Management System of GPMS) that it follows to consider the accounting of water revenue and expenditure out of the same. The P&RDD would allow the GPs to create the appropriate account heads required for the purpose. The PHED would provide Billing and Water Accounting software and computer system to the GPs for accounting of consumption, billing, and collection of revenues.
- 19) The GPs shall monitor expenses and carry out revenue collection to ensure minimum financial deficit in the Water Supply Account. They will also be committed to undertaking measures to (a) optimise O&M costs, (b) improve revenue collections, (c) meet O&M expenses including bulk water supply cost to be provided to the PHED, and (d) maintain appropriate reserves/surplus funds/savings to fund unforeseen repairs/extensions/expansion of the Transferred Assets.
- 20) The GPs would ensure audit of the VWSC accounts in accordance with the Chapter-X-Audit under the West Bengal Panchayat (Gram Panchayat Accounts, Audit and Budget) Rules, 2007. For any other matters concerning financial management of the VWSC accounts, the GPs would adhere to all provisions of the West Bengal Panchayat (Gram Panchayat Accounts, Audit and Budget) Rules, 2007. The GPs shall present the accounts in Gram Sabha meetings annually and act transparently by disclosing accounts and audited reports.
- 21) The PHED shall transfer resources (Grants from Government of West Bengal) to the GPs for O&M as available and guided by government policies or will do the book adjustment against GP's share for bulk water supply operating cost.
- 22) The PHED will provide periodic training to la personnel/vendors/contractors/local organisations engaged by the GPs for O&M until the first two years of Asset transfer. The PHED will also provide policy guidelines from time to time to the GPs on issues related to Water Quality Monitoring, O&M, staffing, training, O&M Charges, accounting etc.
- 23) The PHED will respond to bulk water supply related concerns of the GPs and undertake appropriate remedial measures for service improvements within 24 hours. Each GP shall open a consumer grievance cell and redress water service related complaints within 24 hours.

- 24) The PHED shall be responsible for monitoring services of bulk water supply system and GPs shall monitor services within the GPs and to the P&RDD as required. As part of monitoring, the GPs shall conduct meetings with the VWSC, stakeholders involved in the O&M management, and consumers on regular basis to review water supply services. The GPs will participate in meetings related to water supply and co-ordinate with the PHED/Contractors/ZP/Panchayat Samiti/VWSC/VHSNC, SHGs, SHG Federations/Other GPs as and when required. The GPs will also co-ordinate with Junior Engineers (Rural Water Supply) at the Block level as and when needed for any technical support and advice. The PHED and the GPs will participate in review meeting organised at Zilla Parishad as and when necessary to share concerns and exchange support and to review semi-annual reporting of performance and audited account and third party technical audit, if necessary.
- 25) All concerned functionaries associated with the Project will take care of gender, equity and social inclusion in the management of water supply services. The GPs will ensure access and opportunities for all, irrespective of age, gender, religion, caste and economic condition, in decision-making processes at the GP level for managing the water supply services.
- 26) The GPs shall indemnify and hold harmless the PHED and its directors, officers, employees and agents from any claims, liabilities, damages, debts, judgments, settlements, costs and attorneys' fees of any type whatsoever for or arising out of any injury, including death, to any person, or damage to or loss of any property arising during the implementation of the order.
- 27) Except in the case of unforeseen and uncontrollable circumstances viz. calamities, floods, cyclones, carthquakes, or strikes, bundhs, hartals, rasta-rokos, curfews, accidents, etc., the obligations mentioned above will be strictly adhere to by all concerned. In case of any unforeseen contingencies or accidents as stated above, every effort will be made by all concerned to restore normalcy in water supply services as quickly as possible.
- 28) The Zilla Parishads and the Panchayat Samitis concerned shall be responsible for providing necessary support to the GPs in implementing the activities as mentioned above, to monitor the progress of work and to intervene appropriately in resolving issues that may emerge from time to time in the way of effective implementation of the Project.
- 29) The performance of the GPs will be taken into account as an essential condition at the time of annual performance assessment for the purpose of assessing eligibility of the GPs to get Performance Based Grants to be provided to the GPs under the Institutional Strengthening of Gram Panchayats (ISGP) Programme run by the P&RD Department.
- 30) In order to ensure drinking water supply services to be provided under the above mentioned project and to ensure the quality of the water to be supplied, the P&RDD shall provide necessary support, guidance and directives to the GPs and shall also take necessary action to the effect that in case any GP fails, for any reason, to meet the financial and performance obligations arising out of the Project, the P&RDD shall repay the bulk water supply cost to the PHED, either through deduction of the Grant eligible for the GP at source or by direct recovery from the GP or by any other appropriate measures that may be deemed fit in consultation with the PHED.

Dated: 09/11/2017

31) The P&RDD and the PHED will resolve issues of failure of obligations on the part of any agency or functionary or resolve disputes arising out of this Project amicably through review process stated above through the discussions and following the appropriate Government procedures.

> Additional Chief Secretary to the Government of West Bengal Panchayats & Rural Development Department & Public Health Engineering Department

# No. 2643/1(13)/PN/O/I/4P- 03 /2017

Copy forwarded for information & necessary action to:

- 1. The Sabhadhipati, North 24 Parganas Zilla Parishad
- 2. The Sabhadhipati, Purba Medinipur Zilla Parishad
- 3. The Sabhadhipati, Bankura Zilla Parishad
- The OSD & Engineer-in -Chief, PHED, Government of West Bengal
- 5. The District Magistrate, North 24 Parganas
- 6. The District Magistrate, Purba Medinipur
- 7. The District Magistrate, Bankura
- M. The Project Director, PMU, WBDWSIP & Director, WSSO, PHED, Government of West Bengal
- 9. The Additional Executive Officer, North 24 Parganas Zilla Parishad
- The Additional Executive Officer, Purba Medinipur Zilla Parishad
- 11. The Additional Executive Officer, Bankura Zilla Parishad
- The Policy Cell of this Department
- The P.S. to Hon'ble MIC, Panchayats & Rural Development Department and PHED, Government of West Bengal

Joint Secretary to the

Government of West Bengal

# PROJECT CLIMATE FINANCING CALCULATIONS

Project Sub- Component	Link to Climate Risks Identified in the Climate Risk and Vulnerability  Assessment Report	ADB financing <sup>a</sup> (\$ million)	Non- Qualifying Costs (\$ million)	Qualifying Costs
Output 1: Climate resilient drinking water infrastructure constructed	<ul> <li>Climate change risk and vulnerability assessment for the sub-projects proposed in the districts of Bankura, North 24 Parganas, and Purba Medinipur indicate that variation in climatic factors such as precipitation, temperature, and extreme weather events over the medium and long-term can significantly affect the quality and available quantity of localized sources. Therefore, long-term sustainable centralized sources have been selected such as perennial rivers, rivers with adequate discharge from upstream dams, sources tapped, and from large-scale reservoirs ensuring adequate year-round supply in an equitable manner.</li> <li>Provision of necessary water treatment and disinfection facilities for the extracted fresh water quantum to ensure potable water quality standard. Such provision(s) effectively ensure migration of target beneficiaries from the existing piped water supply systems reliant on contaminated (arsenic, fluoride, salinity affected) and/or scant resources to a long-term sustainable source.</li> <li>A significant portion of the components of the proposed water distribution systems is designed to ensure sustainable management of water resources. Water resilience will be achieved by demarcating the proposed distribution network into manageable district metering areas in the sub-project districts, providing bulk flow meters in the secondary network, and metered service connections for water supply to households to reduce non-revenue water and utilize the saved water elsewhere.</li> <li>The differential cost of system provision, i.e., the optimal scenario of a resilient system compared to the baseline scenario (sub-optimal or business-as-usual proposal initially prepared by the government) is considered as a "qualifying cost."</li> </ul>			
a)	Piped water supply scheme in Bankura District: \$101.1 million (resilient system)— \$72.43 million (original proposal)	101.1	72.43	28.67
b)	Piped water supply scheme North 24 Parganas district \$85.6 million-\$57.60 million	85.6	57.65	27.95
c)	Piped water supply scheme in Purba Medinipur district \$ \$89.0 million—\$71.53 million	89.0	71.54	17.46
d)	Additional adaptation measures to be used by the design build operate contractors during detailed design costed at \$6.1 million as outlined in the climate risk vulnerability assessment	6.10		6.10

Project Sub- Component	Link to Climate Risks Identified in the Climate Risk and Vulnerability Assessment Report Subtotal 1	ADB financing <sup>a</sup> (\$ million) 281.8	Non- Qualifying Costs (\$ million) 201.62	Qualifying Costs 80.18
Outrout O				
Output 2: Institutions and capacity of stakeholders for drinking water service delivery strengthened	<ul> <li>The project will strengthen the institutional structures and capacity of Public Health Engineering Department and project gram panchayats for efficient and sustainable drinking water service delivery.</li> <li>It will support and enable the gram panchayats to conduct web-based water quantity and quality monitoring, electronic billing and collections, meter reading, and accounting.</li> <li>The project will introduce innovative practices and high technology for smart water management to create a model for rural water service delivery.</li> <li>It will provide skills training and generate employment for about 350 locals, of whom at least 33% are expected to be females. It will support the project gram panchayats in creating public awareness on water, sanitation, and hygiene, and benefits and opportunities arising from the project. It will also support the state to strengthen water and sanitation safety planning and develop a regulatory framework and pilot for fecal sludge (or septage) management in West Bengal.</li> <li>It will prepare comprehensive Drinking Water Quality Action Plans for all districts in West Bengal to serve as a guiding document for long-term planning of water management at the district level.</li> <li>It will prepare Water Safety Plan and Sanitation Safety Plan guidelines for West Bengal and a sample or model of both.</li> <li>It will operationalize a flood forecasting and early warning system in Purba Medinipur.</li> <li>It will provide awareness on water conservation, rainwater harvesting and implement a smart water management system to effectively manage and measure nonrevenue water and provide household-level interconnection for efficient service delivery.</li> <li>Therefore, the cost of "Project Management &amp; Design Supervision" and total attributed cost of items "Capacity Development" and "gram panchayat level skill development and community awareness" are considered a qualifying cost (i.e., the additional cost of a resilient system compared with the business-as-usual system from</li></ul>	\$15.9	\$11.6	\$4.3
	Incremental administration (proportionate differential cost of project administration for resilient system vs. business-as-usual system, earlier shown and calculated in the civil works portion of the project).	\$5.6	\$4.1	\$1.5

Project Sub- Component	Link to Climate Risks Identified in the Climate Risk and Vulnerability Assessment Report	ADB financing <sup>a</sup> (\$ million)	Non- Qualifying Costs (\$ million)	Qualifying Costs
	Climate resilience technical assistance from ADB to commission smart water management for efficient water supply, commission early flood warning system and build capacity of stakeholders on resilient practices	\$2.0		\$2.0
	Subtotal 2			\$7.8
Total Climate F	- Financing			\$87.88

<sup>&</sup>lt;sup>a</sup> Cost for civil works, equipment, vehicles & furniture, and O&M cost for contractors' for 2 years (excluding land acquisition cost) are considered in the calculation.

#### **OUTLINE TERMS OF REFERENCE FOR LOAN-FUNDED CONSULTANTS**

## A. Project Management Consultants

#### 1. Introduction

- 1. Under the West Bengal Drinking Water Sector Improvement Project to be implemented by the project management unit (PMU) of the West Bengal Public Health Engineering Department (PHED), PHED will engage a project management consultant (PMC) for a period of 66 months in accordance with the quality- and cost-based selection (QCBS) procedure of the Asian Development Bank (ADB)'s Guidelines on the Use of Consultants, 2013 (as amended from time to time). The PMC will support the PMU and project implementation units (PIUs) of PHED, as well as the three design, supervision, and institutional support consultants (DSISCs), in providing engineering services, quality control and assurance, procurement control, financial management, cost and progress control, overall monitoring and performance management, monitoring of social, environmental, occupational health and safety, and gender compliance, and supervision of operation service components under design build operate (DBO) contracts.
- 2. The PMC will report to the PMU. The PMC's role is not to be the substitute to the PMU personnel but be enablers and facilitators to assist the PMU and transfer skills in the process of providing support to carry out knowledge management programs for the executing agency and agency staff on technical, procurement, and management issues. Knowledge programs would also include exposure visits to similar and/or related projects site.

## 2. Outline Scope of Work

- 3. The PMC will support the PMU and the PIUs in achieving all outcome and outputs of the project. The PMC will support the PMU and PIUs in setting and operationalizing project management, design control and quality assurance, financial management and auditing, safeguards, occupational health and safety management and compliance monitoring, reporting and auditing, and monitoring the work of the design and supervision consultants (DSISCs) and the project nongovernment organizations (NGOs) to achieve all outputs and outcomes under the project. The consultant will help the PMU to review and assure the quality of designs, surveys, and subproject designs; conduct procurement and quality audits; establish criteria for supervision, and coordination and overall management and monitoring to ensure proper construction supervision by the DSISCs and PIUs.
- 4. The consultant will be responsible for, but not be limited to, assisting in and advising the PMU on the following:
  - (i) reviewing and strengthening detailed design and bidding documents prepared by the DSISC. This includes river intakes infiltration galleries and riverbed tube wells, water treatment plants, ground level reservoirs, pumping stations, and transmission pipelines;
  - (ii) preparing and monitoring the annual work plan, detailed contract implementation schedule, and budget using computer-based program management tools;
  - (iii) developing mechanisms for accurately estimating the annual contract award and disbursement targets, based on the contract implementation schedule developed;
  - (iv) evaluating the project performance indicators as per the design and monitoring framework specified in the report and recommendation of the President in accordance with the gender equality and social inclusion framework;

- (v) compiling and preparing on behalf of the PMU all the reports for the project, including periodic progress reports, in the formats acceptable to ADB;
- (vi) supporting PMU in maintaining proper project accounts with all ledger and control systems;
- (vii) developing monitoring mechanisms for nonrevenue water (NRW) reduction, strategy for water user charges for recovery of operation and maintenance (O&M) costs considering affordability for the poor and vulnerable with a complete financial simulation model and affordability analysis;
- (viii) developing a plan for water meter reading, billing, and collection acceptable to ADB and the government;
- (ix) supporting PHED and *gram panchayats* in identifying the requirements of developing an efficient billing and collection system;<sup>1</sup>
- (x) supervising the installation and operationalization of the system by the project NGO consultants appointed by the PMU;
- (xi) supervising project NGO consultants providing on-the-job training to the *gram* panchayats on the implementation of billing and collection system;
- (xii) creating a ring-fenced water supply account at every *gram panchayats* with support from the project NGO consultants, so that *gram panchayats* can escrow the water revenue and spend it only for O&M of the distribution network;
- (xiii) evaluating bid proposals and preparing bid evaluation reports jointly with the DSISC:
- (xiv) supervising operation service components under design—build—operate contracts as a third-party auditor during the operation phase;
- (xv) carrying out quality and safety audits during construction;
- (xvi) reviewing different supervisory control and data acquisition (SCADA) proposals from DSISC and ensuring compatibility for developing a central control system for PHED:
- (xvii) monitoring social and environmental safeguards;
- (xviii) ensuring compliance with ADB's policies on gender and social inclusion;
- (xix) providing on-the-job training to counterpart PHED, PMU, PIU, and *gram* panchayats staff as required;
- (xx) providing assistance for testing, commissioning, and handing over of works to PHED; and
- (xxi) along with the DSISCs, suggesting improvements in the operation and maintenance of the water supply systems and recommending suitable solutions in case of difficulties during operation by the *gram panchayats*.

#### 3. Detailed Tasks

- 5. The consultant shall be required to cover the following activities, but not be limited to:
  - (i) Design review, quality assurance, and control. The consultant shall include a thorough review of the district water supply schemes being prepared by the DSISCs and prepare comprehensive review reports for the PMU. In preparing these review reports, the PMC will undertake a technical, financial, and economic due diligence of the options proposed by the DSISCs;
  - (ii) Procurement support. The PMC shall support the PMU in the bidding process beginning with the review of bid documents prepared by the DSISCs. PMC will also support the PMU in contract negotiations and award. PHED shall use its e-

<sup>&</sup>lt;sup>1</sup> *Gram panchayats* are governing bodies at the village level.

procurement system as acceptable to ADB. Procurement may be either singlestage or two-stage bidding as considered appropriate once the content of each contract package has been determined. It is likely that single-stage two-envelope bidding will be adopted for all works contracts under the project. The PMC shall support the PMU in the evaluation of the technical and financial bids. All procurement actions will follow the ADB Procurement Guidelines (2015, as amended from time to time). The PMC should ensure that bidding documents for ADB's review contain the environmental management plans and the resettlement plans for the respective contract packages. It will also ensure that no contract awards are recommended without compliance with safeguards and until suitable compensations, as required, are made. The PMC shall assist the PMU with all the necessary procedures during the pre-bid, bidding period, and bid evaluation stages. This shall include but not be limited to: review of bidder prequalification documents; attendance at the pre-bid meetings and site visits; technical and financial bid evaluation for single-stage and/or two-stage bid procedures; and preparation of bid evaluation reports for approval by the PHED Bid Evaluation Committee. For two-stage bids and single-stage two-envelope bids, the PMC shall be responsible for seeking any clarifications of the technical bids and/or preparation of relevant memorandums for inclusion in the invitation for the second stage bid:

- Construction engineering management and performance monitoring. The (iii) PMC shall assist the PMU in the overall management of the project for all components on technical, physical, financial, social, capacity development, and institutional matters. The scope of this work will include quality, cost and program control, formulation of project management plans and other plans, monitoring, supervision, and preparation of various reports including construction reports (monthly, quarterly, and annual) and completion reports. The PMC will develop monitoring mechanisms for NRW reduction, water user charges for operation and maintenance cost recovery, considering affordability for the poor and vulnerable with a complete financial simulation model and affordability analysis. It would also develop a plan for water meter reading, billing, and collection acceptable to ADB and the government. The PMC will also be responsible for monitoring contractor performance during the operation period with regard to service-level benchmarks and other key performance indicators, as well as providing expert advice on problems or bottlenecks prevailing or anticipated and countermeasures and corrective actions required;
- Contract management and acting as third party in the operational (iv) component of contracts. The PMC shall supervise the operational service components under the design build operate contracts as a third-party auditor. In doing so, the consultant will (a) regularly monitor physical and financial progress against the milestones as per the contracts so as to ensure completion on time: (b) monitor, as detailed out in the Contractors' Quality Assurance and Quality Control Manuals, the quality of inputs, processes, and outputs during all activities of construction to ensure the highest quality of works conforming to the specifications and drawings; (c) have overall responsibility for third-party inspections for which a third-party inspecting agency (TPIA) would be hired by the PMC using the "provisional sum" component of the contract. The PMC would oversee and ensure issuance of certificate/report by the TPIA as required at critical stages of identified contracts through the TPIA for civil, mechanical, electrical, and instrumentation component of works. The PMC would also ensure regular safety audits by using the services of the TPIA; and (d) assist the PMU in the resolution

- of various other contractual issues and overall contract management, examine contractors' claims for time extensions, variations, and additional compensation, and recommend appropriate decisions following the conditions of the contract;
- (v) Financial and accounting management - Project management unit. The PMC shall assist and support the PMU in all financial and accounting matters relating to the project. This shall include the following: (a) establishing and managing the project account and control system, submitting disbursement claims to ADB, maintaining all document for internal and external audit of project accounts, and administering the loan in accordance with ADB's disbursement guidelines, ensuring timely payments to the contractors and monitoring for compliance; (b) ensuring satisfactory financial management of the subprojects, helping the PMU in managing disbursement of funds and government counterpart funds following the ADB procedures; (c) supporting the establishment of a proper financial accounting and control system for each subproject and for the entire project in the PMU: (d) supporting the establishment of all necessary records and the procedures for maintaining and/or updating such records for each subproject and for the entire project; (e) ensuring accurate and timely submissions of all required reports to the PMU and ADB; and (f) helping the PMU in establishing systems for smooth and timely funds flow from ADB or the government to contractors;
- (vi) Financial and accounting management - gram panchayat. The PMC, with support from the project NGO consultants (appointed by the PMU), would ensure creating a ring-fenced water account at each of the participating gram panchayats under this project. Assist PHED and gram panchayats to define regulations and mechanisms for planning and operating [what], stating institutional setups, appointment procedures, and manner of financing operations for the new arrangement of water supply delivery involving PHED (bulk and transmission) and gram panchayats (distribution). Assist PHED and gram panchayats in designing the framework for water user charge regulation so that there is an exchange of revenue between water users and gram panchayats, and between gram panchayats and PHED. Assist PHED and gram panchayats to structure water user charges, preferably applying volumetric consumption-based charges, involving cross-subsidization for the poor and below poverty line (BPL) families, assist in implementing a comprehensive system billing, collection, and water accounting at participating gram panchayats. Provide legal guidance to ensure enforceability of contracts between PHED and gram panchayats. Assist during all initial steps to functionalize the newly created arrangement—defining internal management processes, staffing and job descriptions, and providing training to gram panchayats functionaries and other staff of PHED and the Panchayat and Rural Development Department. Assess and report on the governance and management structures of the new arrangement; this task would attempt to achieve inclusive and participatory utility governance, and professional and empowered management of the water supply delivery system involving PHED, gram panchayats, and water users. Subject to enabling legislation, ensure ring-fencing of the entire water supply set-up in each gram panchayat by creating separate profit centers for water supply with separate organizational, workforce, finances, and accounting. Assist PHED and gram panchayats to prepare reporting programs and design standard formats. With support from project NGO consultants, accomplish asset management exercise by introducing a system of physical verification, inventorying, and valuation of assets and preparing asset management plans. Along with this task, assist the Panchayat and Rural Development Department and gram panchayats in ensuring double-entry accounting in the existing gram

panchayats management system for all water-related revenue, expenses, collection, payment, and banking;

- Project performance management system. The PMC shall prepare a project (vii) performance management system (PPMS) in accordance with ADB Guidelines. The PMC shall establish the PPMS based on the design and monitoring framework for the project and gender equality and social inclusion principles. The PMC will implement the PPMS through (a) developing the baseline based on collection of primary data, collation of already collected primary data, and validation of secondary data; (b) continuously monitoring progress of the project as per the PPMS and, if required, conducting periodic evaluation surveys, preparing regular progress reports, and taking appropriate corrective action if necessary; (c) evaluating the project performance indicators as the per design and monitoring framework and the report and recommendation of the President, and in accordance with the gender equality and social inclusion; (d) developing a contract management computerized system (MIS) to monitor the progress of each contract and ensuring timely completion of the project maintaining the highest quality standards and the best construction management practices, including compliance with all safety requirements. The monitoring system will capture all stages (from design to construction) of subproject implementation. It will analyse the physical and financial progress of contracts against the work plans and related S-curves during construction, recommend ways to accelerate project implementation, assess reasons for delays, if any, and identify measures for improvement; and (e) undertaking visits to construction sites, monitoring the activities of the contracts, and providing concrete suggestions for the improvement of quality and pace of execution on sites as required:
- (viii) Compliance monitoring with social and environmental safeguards. The PMC will be responsible for the monitoring of and compliance with all social and environmental safeguards in accordance with ADB, Government of West Bengal, and Government of India policies. The PMC shall (a) establish a system to monitor the social and environmental safeguards of the project, including the functioning of the grievance redress mechanism, and prepare indicators for monitoring important parameters of the safeguards; (b) take proactive action to anticipate the potential environmental impacts and resettlement requirements of the project to avoid delays in implementation; (c) support the PMU to prepare draft resettlement plans, indigenous peoples plans, and the initial environmental examination (IEE) and environmental management plan (EMP) for subproject water supply schemes that may need to be appraised during project implementation; (d) support the PMU to update draft resettlement plans, indigenous peoples plans, and the Initial environmental examination (IEE) and environmental management plan (EMP) after the detailed design and detailed measurement survey, and obtain ADB's approval for public disclosure prior to contract award as required; (e) support the PMU in ensuring that the resettlement activities are carried out in accordance with the resettlement plan agreed between the government and ADB; (f) ensure that the relevant environmental mitigation measures specified in the updated EMP are incorporated into bidding documents and approved by ADB prior to issuance of invitation for bidding and monitor their compliance on behalf of the PMU; (f) conduct regular occupational health and public safety audits and ensure strict compliance with the required standards at all times in project sites; and (g) provide training programs to PMU staff involved in the project implementation for strengthening their capacity in managing and monitoring social and environmental safeguards; and

(ix) Compliance monitoring of gender equality and social inclusion plan. The PMC shall undertake the following work to ensure compliance with ADB's policies on gender equality and social inclusion (GESI), and in particular, ensure compliance with the project's agreed GESI action Plan. In doing so, the consultant will prepare and integrate indicators related to gender, social inclusion, and poverty in all program activities; ensure collection of disaggregated data and analysis of the results, especially benefits from the project corresponding to these indicators. The PMC would also (a) assist the PMU in implementing the GESI plan and supervising PIUs and the project NGOs implementing GESI actions; (b) provide inputs and sensitize important stakeholders regarding project objectives related to poverty, gender, and social inclusion ensuring inclusion of poor, women, indigenous people, and other marginalized and vulnerable groups in the subprojects; and (c) work in collaboration with selected NGOs to prepare socioeconomic profiles of selected areas, including social maps, to capture the social, economic, health, and sanitation status of the community, especially focusing on the likely improvement in the health status of the citizens, likely impact of health and hygiene, community participation and public education program to be implemented during the project, willingness to pay for wastewater management, ability to pay for improved water supplies, and current and likely changes in water consumption patterns.

## 4. Team Composition and Input Requirements

6. The consultant shall provide an expert team of professionals for the assignment. Indicative requirements are shown in Table A4.1.

Table A4.1: Project Management Consultants Indicative Team Composition

Project Management Consultants			
SI. No	Position	Quantity (In Person- Months)	
Α	Key Experts		
1	Team Leader cum Water Supply Engineer	40	
2	Deputy Team Leader cum Contract Management Specialist	30	
3	Water Supply Specialist – Design Cell (x2 persons)	60	
4	GIS Specialist – Design Cell	24	
5	Hydrogeologist – Design Cell	10	
6	Environmental Expert	30	
7	Social, Gender, and Re-settlement Specialist	30	
8	Procurement Specialist	24	
9	Project Finance and Accounting Specialist	40	
10	Project Planner and Management Specialist	20	
11	Occupational Health and Public Safety Manager	10	
12	IT-based MIS Expert	30	
	Subtotal	348	
В	Support Staff		
1	Support Engineers (x3 persons)	120	
2	Project Accountant	55	

	Subtotal	645
8	Computer Operator	55
7	Office Assistant (x 3 persons)	160
6	Secretary	55
5	System Manager	55
4	Office Manager	55
3	Draft Person cum AutoCAD Staff (x2 persons)	90

# B. Design, Supervision, and Institutional Support Consultants (for each of the project districts)

#### 1. Introduction

7. Under the West Bengal Drinking Water Sector Improvement Project to be implemented by the PMU of the West Bengal Public Health Engineering Department (PHED), PHED will engage three national consulting firms as the design, supervision, and institutional support consultants (DSISCs), in accordance with the quality- and cost-based selection (QCBS) procedure of the Guidelines on the Use of Consultants (2013, as amended from time to time) of the Asian Development Bank (ADB), for a period of 66 months in total. The DSISC will support the PMU and PIUs of PHED in preparing and validating engineering design, construction supervision, preparing for and implementing smart water management at the gram panchayat level, procurement activities, and overall implementation management in their respective jurisdictions. They will report to the PIUs directly, and the PMU as required.

## 2. Outline Scope of Work

- 8. The DSISCs shall assist each of the PIUs with their activities including, but not limited to, (i) preparation of subproject appraisal reports, detailed project reports, detailed engineering design, and bid documents; (ii) procurement and construction management; (iii) preparation of specification, bid document, and bid evaluation report of smart water management at the gram panchayat level; (iv) contract administration, construction supervision, quality assurance, and quality control as per the provisions of the construction contracts; (v) design modification to suit sites; (vi) measurement and billing for the works; (vii) measurement and billing under supplies contracts; (viii) compliance with safeguard requirements; and (ix) coordination with other government authorities.
- 9. The DSISCs will (i) update various studies and project preparation documents as required; (ii) carry out surveys and investigations; (iii) conduct detailed engineering designs; (iv) prepare schedule of quantities and specifications; (v) review designs and drawings prepared by the contractors; and (vi) support the PMU and the concerned PIU in the preparation of procurement packages, bid documents, invitations, and receipt and evaluation of bids. The consultants will make regular site visits, and supervise and manage the construction activities under the project by carrying out quality control, testing and reporting, monitoring construction activities, and certifying contractors' progress claims. The consultants will act as engineers on behalf of the PHED. The works under the project include mainly raw water intakes, water treatment plants, raw water and clear water transmission pipelines and related structures, ground level reservoirs, overhead tanks, water distribution networks, water meters, house service connections, [spell out] (SCADA), and smart water management system.

- 10. The scope of work of the consultant would be limited to works related to the particular PIU or district only. The selected consultant shall be required to cover the following activities including, but not be limited to:
  - (i) Surveys, investigations, and tests. Review available secondary data and reports and identify requirements for field surveys and other investigations. Based on the requirement assessment, the consultant with the agreement of the PIUs and the PMU will carry out all the required engineering surveys and investigations. The surveys will incorporate all the necessary features for design of all allied infrastructure. The consultant will review all topographic surveys provided to or carried out by the contractor along the alignment of the transmission mains and other pipelines, and the contour surveys for identified locations of intakes, water treatment plants, ground level reservoirs, and pumping stations. The consultant will review and prepare an interpretive report of all geotechnical investigations undertaken by the contractor. For admeasurement contracts, the consultants should also undertake topographic surveys for all distribution networks from the overhead tanks to the consumer households as necessary and undertake necessary geotechnical investigations at the overhead tanks sites and along the alignment of the distribution pipelines. The DSISC will also carry out hydrogeological investigations to confirm groundwater availability and [action verb required, e.g., dig] trial trenches to determine the nature of the subsoil along the water network on a case-specific basis. The DSISC should also carry out water quality analyses of raw water samples from existing groundwater sources (e.g., dug well, tube well), including samples of potable water from the existing water and sanitation distribution network. They should also measure high and low water levels, and collect hydrological studies for the rivers, for the last 10 years from the date of subproject proposal submission, from the Irrigation and Waterways Directorate, the Kolkata Port Trust, or other relevant agencies. The consultant, with the support of the project NGO, will carry out customer surveys to assess house connections requirements;
  - Appraisal of subproject, feasibility study, and preliminary design. Prepare (ii) subproject appraisal reports covering technical, social, and environmental aspects for each subproject complying with the subproject selection criteria and priorities, feasibility and analysis of alternatives, and finalization of preliminary designs. The preliminary designs will provide the technical rationale for the selection of the proposed design option, describe design criteria and parameters, design horizon, tentative cost estimates, and additional survey and investigation requirements for detailed design, and identify statutory requirements and proposed implementation procedures. The consultants should carry out population projections based on available and established data. They should prepare a comprehensive water demand assessment for each distribution zone or district metering area with appropriate provisions for water loss. The consultant will prepare outline distribution zone plans showing proposed locations of overhead tanks, pipe network layouts on the grid or ring pattern, as far as practicable, including locations for key meters and valves, alternative options for material and systems, and recommendations for the most economical and sustainable option for the chosen system for the detail design stage;
  - (iii) **Detailed engineering designs.** Once the preliminary designs are agreed, the consultants will prepare the detailed engineering designs, including IEEs, resettlement plans, and indigenous peoples plans as identified, and split them into an appropriate number of work packages in consultation with the PIU and PMU.

Designs will be sufficiently detailed to ensure clarity and understanding by the PIUs and PMU. All the designs should conform with the international and Indian engineering standards (CPHEEO manual, NRDWP and/or WBPHED Guidelines) as applicable. The consultant will prepare all necessary calculations to determine and justify the engineering solution proposed for each subproject component, and all calculations will be incorporated into the design reports. The entire water supply network should be designed using the acceptable dynamic models and district meter area approach. The consultants should ensure designs are implementable on the ground with least possible disturbance to other utilities. Based on the detailed engineering design, the consultants will prepare all necessary tender drawings, specification, bill of quantities, detailed cost estimates, implementation schedule, and quality control programs, and work out the detailed operation and maintenance costs for each of the water supply schemes as identified, and prepare bid packages considering ADB's Procurement Guidelines (2015, as amended from time to time) and ease of implementation. The specifications should adhere to the relevant Indian and international standards (as applicable) and should meet all ADB requirements. The DSISC will prepare a schedule of rates for the project based on market prices and update it semi-annually. For admeasurement contracts, the consultants will also prepare construction drawings with sufficient details to permit contractors to construct the work, wherever applicable. For DBO contracts, the consultants will prepare the employer's requirement with sufficiently detailed drawings based on their preliminary design for bidding and during execution will review and approve the contractor's design and drawings. For supply and installation of SCADA and smart water management system at the gram panchayats level under ADB's grant assistance support, the DSISC in consultation with the technical assistance consultants and NGO consultants, will prepare the specification and bid documents:

- (iv) **Bidding documents.** Prepare the necessary bid documentation required for national and international competitive bidding and/or shopping for all the procurement packages in accordance with ADB's procurement policies. The consultant will (i) assist PIUs and PMU in issuing bid invitations, additions and changes, and (ii) assist the PMU in issuing a clarification to bidders' queries, receiving of bids and evaluation, award of contract, preparation of contract agreement, and contract signing. The bidding documents will incorporate environmental and social mitigation measures from the relevant safeguard plans;
- (v) Construction supervision and contract monitoring. The consultant, as the PIU's or PMU's representative or the engineer under the contract, will supervise the construction of all the project components, monitor construction methods and quality control, certify that the quality of works conforms to the specifications and drawings, assess the adequacy of the contractor's input materials, labor, equipment, and construction methods, and resolve contractual issues. The consultant will also furnish all revisions and detailed drawings as necessary during the continuance of the contract, attend third-party inspections as necessary, examine the contractor's claims for variations or extension, and prepare recommendations for approval by the PIU or PMU, assist in preparing planned maintenance procedures, and check installations and commissioning. The consultants shall carry out regular inspections of contractors' construction equipment and materials, and monitor the safety of works, property, and personnel. The consultants will record the work measurement, certify the contractor's claims and assist the PIUs and PMU in contract monitoring, the preparation of the "as built" drawings, and assist in the issuance of completion

certificates. The consultants should establish efficient procedures for verifying contractor performance and reporting progress and problems in a timely manner, including quality control reports, quantity survey records, contractors' claims and invoices, and prepare payment certificates. The consultants should hold weekly progress meetings with the contractors to discuss progress and problems on the contracts and take minutes of meetings. The consultants will ensure all site testing of the works and commissioning tests are completed prior to the issuance of a certificate of completion or taking over certificate. The consultants have to fulfill the roles and responsibility of the engineer to the contracts. They will also monitor the performance of the contractor during the retention period, defects liability period, and operation service period, as decided by the PIU or the PMU. At the end of the project, the consultants will prepare the project completion report in the format required by the PIU or the PMU. The DSISC shall also supervise the supply and installation of SCADA and smart water management system at the gram panchayat level under ADB's grant assistance;

- (vi) Social safeguards monitoring. Carry out baseline surveys and ensure the contractors comply with the agreed social safeguards frameworks, resettlement plans, and due diligence reports on social safeguards for the project. The consultants will assist the PIUs and PMU staff to prepare any additional draft resettlement plans and due diligence reports and prepare any new safeguard documents as required. The consultants will also assist the PIUs in the implementation of final resettlement plans and help the PIUs and PMU to conduct public consultations and gender equality and social inclusion (GESI) plan implementation. The consultants will also prepare periodic safeguard monitoring reports in the format acceptable to ADB;
- Environmental safeguards monitoring. The consultants will screen subprojects (vii) and ensure that project components are not located in or near environmentally and/or archeologically-sensitive areas (e.g., wildlife sanctuaries, national parks, coastal regulation zone, protected monuments, world heritage sites) to avoid significant environmental impacts and ensure compliance with the environmental assessment review framework (EARF) and environmental guidelines in subproject selection and implementation. The consultants will prepare a rapid environmental assessment checklist and classify the project according to the EARF and ADB Safeguard Policy Statement (2009) for environmental safeguards while identifying environmental regulatory clearance requirements and assist PHED in obtaining all necessary clearances promptly. The consultants will prepare the initial environmental examination (IEE) and/or the environmental impact assessment (EIA) reports for all subprojects including environmental management plans (EMP) as required in compliance with the EARF, and update IEEs and EMPs during detailed design to reflect final project design. For DBO projects, the consultants will coordinate with the DBO contractor on design changes for necessary updates. The consultants will also assist PIUs in public consultation and information disclosure activities as per the EARF. The consultants will ensure inclusion of design-related EMP measures in the project design, include its costs in the project cost, include EMP in the bid and/or contract documents for implementation by the contractor, and ensure contractor compliance with staff resources as per the IEE, EMP, and/or bid. This will include day-to-day supervision of the implementation of the EMP and the environmental monitoring plan on site by contractors, including identification and prompt reporting to PIU and PMU of any unanticipated impact that may arise during implementation, and take necessary action towards its mitigation. The consultants will conduct awareness and training programs for PIU

and supervision staff (including contractors) on EMP implementation. Review the contractors' compliance with the measures set forth in the EMP and any corrective or preventative actions set forth in a safeguard monitoring report that the PMU and PIU will prepare from time to time, besides extending advice and guidance on any corrective or preventative actions to be implemented by the contractor in case of non-compliance, or new or unanticipated impacts that are part of the consultants' responsibilities. The consultants will ensure that PIU and PMU are informed promptly of any new significant impacts that were not identified in the IEE, develop necessary corrective actions as necessary, and ensure implementation by the contractors. The quarterly environmental monitoring reports, to be prepared by the consultants in the prescribed format and submitted to PIU, will include all such impacts and suggested actions. The quarterly report will also include the consultants' review and approval of the monthly progress reports on EMP implementation submitted by the contractor. The consultants will assist PIU in the implementation of the grievance redress system and advise the PIU and contractor on appropriate actions to redress the complaints to ensure that complaints and/or grievances are addressed promptly and that resolutions are properly documented. The consultants will prepare semi-annual monitoring reports for the PIU covering all aspects of social issues in the prescribed format. The consultants will, in effect, assist the PMU and PIU in all environmental and social safeguard related tasks as required:

- (viii) **Institutional capacity building.** The consultants will provide on-the-job training to PIUs, *gram panchayats*, and district-level and block-level engineers on project implementation during construction, commissioning, and during the handing over period of the assets to PHED and *gram panchayats*. The consultants will assist in testing, commissioning, and handing over of works to PHED and *gram panchayats*. The consultants will also prepare the operation and maintenance manual of the assets created by the project in collaboration with the respective contractors and PIUs. The consultants will train the *gram panchayats* in smart water management, accounting, billing, and operation and maintenance of the assets created under the project. The consultants will carry out orientation programs on safeguards, grievance redressal, and gender impacts for PIU staff and the contractor as required; and
- (ix) Gender equality and social inclusion. The consultants will collect baseline data on implementation of the gender action plan. Together with the communication specialist, they will design jointly a gender-sensitive communication strategy and information, education, and communication materials illustrating key social and behavioral messages related to hygiene, sanitation, and health in accordance with the Project Gender Equality and Social Inclusion (GESI) Action Plan. The consultants will assist the PIU in implementing the GESI Action Plan. The consultants will also assist the client in carrying out awareness campaigns focused on involving women and girls in water management activities in the focus areas, and monitor activities of the project NGOs.

### 3. Outline Team Composition and Input Requirements

11. The consultants shall provide expert teams of professionals for the assignment. Indicated requirements are shown in Tables A4.2—A4.4.

Table A4.2: Design, Supervision, and Institutional Support Consultants – North 24
Parganas Indicative Team Composition

De	Design, Supervision, and Institutional Support Consultants – North 24 Parganas		
SI. No	Position	Quantity (Person- Months)	
Α	Key Experts	,	
1	Team Leader cum Water Supply Engineer	30	
2	Deputy Team Leader cum Construction Management Expert	30	
3	Water Supply Network Engineer cum Hydro Modelling Expert	24	
4	Structural Engineer	18	
5	Mechanical Engineer	15	
6	Electrical Engineer	15	
7	Instrumentation/SCADA Engineer	9	
8	Environmental Expert	24	
9	Social, Gender and Re-settlement Specialist	24	
10	Construction Manager (x3 persons)	108	
11	WTP Process Engineer	12	
12	Quantity Surveyor	24	
13	Procurement Specialist	5	
14	GIS Specialist	12	
	Subtotal	350	
В	Support Staff		
1	Support Engineers – Design (Civil, Structural, Electrical / Instrumentation, Mechanical) (x4 persons)	180	
2	Support Staff – Environmental and Social Safeguards (x2 persons)	90	
3	Draft Person cum AutoCAD Staff (x3 persons)	120	
4	Support Engineers –Construction (Civil / Mechanical/ Electrical) (x6 persons)	240	
5	Office Manager	54	
6	System Manager	54	
7	Secretary	50	
8	Office Assistant (x3 persons)	150	
9	Computer Operator (x2 persons)	100	
	Subtotal	1,038	

Table A4.3: Design, Supervision, and Institutional Support Consultants – Bankura Indicative Team Composition

	Design, Supervision, and Institutional Support Consultants – Bankura	
SI. No	Position	Quantity (Person- Months)
Α	Key Experts	
1	Team Leader cum Water Supply Engineer	30
2	Deputy Team Leader cum Construction Management Engineer	30
3	Water Supply Network Engineer cum Hydro Modelling Expert	10
4	Structural Engineer	12
5	Mechanical Engineer	10
6	Electrical Engineer	10

7	Instrumentation/SCADA Engineer	9
8	Environmental Expert	24
9	Social, Gender, and Resettlement Specialist	24
10	Construction Engineers (x4 persons)	144
11	WTP Process Engineer	6
12	Quantity Surveyor	24
13	Procurement Specialist	5
14	GIS Specialist	12
	Subtotal	350
В	Support Staff	
1	Support Engineers – Design (Civil, Structural, Electrical / Instrumentation, Mechanical) (x4 persons)	180
2	Support Staff – Environmental and Social Safeguards (x2 persons)	90
3	Draft Person cum AutoCAD Staff (x3 persons)	120
4	Support Engineers – Construction (Civil / Mechanical/ Electrical) (x6 persons)	240
5	Office Manager	54
6	System Manager	54
7	Secretary	50
8	Office Assistant (x3 persons)	150
9	Computer Operator (x2 persons)	100
_	Subtotal	1,038

Table A4.4: Design, Supervision, and Institutional Support Consultants – Purba Medinipur Indicative Team Composition

Design, Supervision and, Institutional Support Consultants – Purba Medinipur		
SI. No	Position	Quantity (Person- Months)
Α	Key Experts	
1	Team Leader cum Water Supply Engineer	30
2	Deputy Team Leader cum Construction Management Engineer	30
3	Water Supply Network Engineer cum Hydro Modelling Expert	24
4	Structural Engineer	18
5	Mechanical Engineer	12
6	Electrical Engineer	10
7	Instrumentation/SCADA Engineer	10
8	Environmental Expert	24
9	Social, Gender and Re-settlement Specialist	24
10	Construction Engineers (x3 persons)	108
11	WTP Process Engineer	12
12	Quantity Surveyor	24
13	Procurement Specialist	12
14	GIS Specialist	12
	Subtotal	350

Design, Supervision and, Institutional Support Consultants – Purba Medinipur			
SI. No	Position	<b>Quantity</b> (Person- Months)	
В	Support Staff		
1	Support Engineers – Design (Civil, Structural, Electrical/ Instrumentation, Mechanical) (x4 persons)	180	
2	Support Staff – Environmental and Social Safeguards (x2 persons)	90	
3	Draft Person cum AutoCAD Staff (x3 persons)	120	
4	Support Engineers – Construction (Civil / Mechanical/ Electrical) (x6 persons)	240	
5	Office Manager	54	
6	System Manager	54	
7	Secretary	50	
8	Office Assistant (x3 persons)	150	
9	Computer Operator (x2 persons)	100	
	Subtotal	1,038	

# OUTLINE TERMS OF REFERENCE OF GRANT AND TECHNICAL ASSISTANCE CONSULTANTS

Outline Terms of Reference for Nongovernment Organizations and/or Consultants for Enabling and Skilling Communities for the Sustainable Operation and Management of Services under the Japan Fund for Poverty Reduction Grant

#### A. Introduction

- 1. Each of the three PIUs will engage a nongovernment organization (NGO) and/or consulting firm under the West Bengal Drinking Water Sector Improvement Project in accordance with the fixed-budget selection (FBS) procedures of the of the Asian Development Bank (ADB), for a period of 48 months, in accordance with ADB's *Guidelines on the Use of Consultants* (2013, as amended from time to time). The project NGOs will be an NGO or a consulting firm experienced in working on community mobilization and activities related to the supply services of rural drinking water at the grassroots level. The project NGO will support the institutional and capacity building of the *gram panchayats* to sustainably operate and manage the assets created under the proposed project and provide services to the consumers. In particular, the project NGOs will support the *gram panchayats* to prepare for the effective implementation of the management agreement signed for the asset management under the project and support the project implementation units (PIUs) in delivering outputs under the grant component of the project financed by the Trust Fund, as well as outputs under the gender equality and social inclusion (GESI) action plan for the project.
- 2. The project management unit (PMU) will also engage three individual consultants (national), as shown in Table A5.1, under the grant-funded (Japan Fund for Poverty Reduction) component, in accordance with ADB's *Guidelines on the Use of Consultants* (2013, as amended from time to time). The PMU will coordinate and monitor the activities of the three individual consultants and other consulting firms under the loan to ensure synergy, deliver the fecal sludge and septage management (FSSM) and sanitation support-related components, and guide and monitor the project NGOs to deliver the grant-funded activities successfully.

Table A5.1: Indicative Inputs of Individuals in the Project Management Unit

	Input
Role	(Person-Months)
Community Development Expert	30
Sanitation and Fecal Sludge Management Expert	30
Smart Water Management Expert	30

3. The project NGO will work in close coordination with the design, supervision, and institutional support consultant (DSISC) for the concerned PIU and report to the PIU. The PMU, based at the headquarters of the Public Health Engineering Department (PHED), will take overall responsibility for implementing and monitoring project progress, supported by the project management consultant (PMC). The project NGO will only be responsible for the PIU and district to which it is appointed and will work in consultation with the PMU, PIU, contractors, *gram panchayats*, and existing self-help groups and men groups in the project area. The NGO shall coordinate with the PMU, PIU, DSISC, and capacity building consultants of the project and the project *gram panchayats* in the concerned district. The NGO shall also maintain coordination with the concerned Panchayat Samitis and Zilla Parishad as and when required.

## B. Overall Scope of Work

4. **Inclusive and gender responsive project design**. Consult with the PMU, PIU, *gram panchayats*, and/or DSISC to ensure that gender-responsive, pro-poor, and inclusive project design is achieved so that (i) project coverage and serviced areas include 100% identified poor clusters and (ii) project design and implementation consider women's views on facility location at household and community level.

# 5. Gram panchayat-level efficient and smart water management:

- (i) Undertake need assessments for the establishment and operationalization of customer care centers at gram panchayat level. The customer care centers would address inquiries and register and redress grievances at each gram panchayat. After the completion and approval of feasibility reports, DSISC in consultation with the PMU and PIU would (a) develop the detailed designs, specifications, and bidding documents; (b) support the gram panchayats in procuring the items required for the operationalization of the customer care centers; and (c) supervise the installation and operationalization of the customer care centers. The NGO would co-ordinate closely with the DSISC, PIU and the gram panchayats at all stages. The NGO would provide on-the-job training to the gram panchayats on the efficient running of the customer care centers for at least 2 years from construction completion of the system;
- (ii) The NGO in consultation with the *gram panchayats*, PHED, and the project consultants would prepare detailed procedures for valve operations and installation of new house service connections. The NGO would print the detailed procedures with photographic illustrations in the required quantity in consultation with the PMU, PIU, and DSISC, and make the required copies available for distribution to the *gram panchayats*. The shape, size, design, and printing of the materials should be attractive to encourage its use by users. The NGO would provide on-the-job training to the operators, plumbers, fitters, and water meter readers on aspects of valve operations, installation of new house service connections, regular operation and maintenance (O&M) of the connections, meter readings, and leak detection. The NGO would also connect with the local industrial training institute and other institutes in the district for the provision of training to local residents for undertaking the job;
- (iii) The NGO, with the support of the DSISC and the contractor, will develop detailed procedures for breakdown and preventive maintenance of the water supply system and regularly provide on-the-job training to the gram panchayat on these aspects for at least 2 years from construction completion of the system. The NGO would print the detailed procedures with photographic illustrations in the required quantity in consultation with the PMU, PIU, and DSISC and make the required copies available for distribution to the gram panchayat. The shape, size, design, and printing of the materials should be attractive to encourage their use;
- (iv) The NGO would coordinate closely with the DSISC, PIU, and the *gram panchayats* at all stages. The NGO would provide on-the-job training to the *gram panchayats* on implementation of the billing and collection system for at least 2 years from construction completion of the system;
- (v) The NGO would assist the gram panchayats in providing input data for the supervisory control and data acquisition (SCADA)-monitored smart water management system and sensitize the gram panchayats about the interpretation of the output from the SCADA monitoring; and

(vi) The NGO would develop a leak detection strategy for the *gram panchayats* in consultation with the DSISC and PIU and assist the *gram panchayats* in rolling it out.

## 6. Capacity building and training:

- (i) The NGO would support the *gram panchayats* staff in revenue management and promote participatory budgeting of operation and maintenance costs of the water supply system. The NGO would also train the *gram panchayats* in the overall management of the tax, transfer to, and receipts from the state government;
- (ii) The NGO would train the *gram panchayats* in efficiently managing the water supply collection and billing systems. The NGO would organize exposure visits of the *gram panchayats* representatives to areas where such initiatives are being implemented successfully; and
- (iii) The NGO would train the agreed number of local people for each *gram* panchayats, with a minimum 33% participation by women, with the help of industrial training institutes, or other specialized technical training institutes, in trade certified plumbers, fitters, and other certified technical training, certified accounting, IT, and database management, and on tailored tasks such as assigned billing, collection, accounting, meter reading and calibration, and other smart water management training, and help facilitate water and sanitation safety planning and management.

## 7. Establishment and training of village water and sanitation committees:

- (i) Establish village water and sanitation committees (VWSC) in project gram panchayats according to the VWSC Guidelines<sup>1</sup> issued by the Panchayat & Rural Development Department (P&RD) and provide them with training on roles and responsibilities related to O&M management of distribution systems;
- (ii) The NGO should develop a training calendar and budgets with resource persons that will be involved in the delivery of the training in consultation with the PMU, PIU, and the *gram panchayats*; and
- (iii) The NGO would deliver training on livelihood enhancement and utility management, especially to women and vulnerable groups in *gram panchayats* in each gram panchayat, with a minimum 33% women participants, poor, and vulnerable, and conduct the agreed number of meetings with women and other stakeholders.
- 8. **Implementation of gender equity and social inclusion (GESI) plan.** The NGO would provide the agreed number of training events to *Gram Panchayats* on the implementation of the Gender Equality and Social Action (GESI) Plan. The NGO would train master trainers selected from *Gram Panchayat* members. In parallel, they would also orient the PMU, PIU, DSISC, project contractors, and officials from the gram panchayat, block, and district on the GESI plan and gender responsive-project management and implementation. They would arrange an agreed number of training events. The NGO would provide the necessary information to track the implementation progress of the GESI plan to the PMU, PIU, PMC, and DSISC on a monthly basis. They would also conduct women-only project orientation seminars. NGOs would also undertake poverty and ethnicity mapping at the household level using census data and conduct time use surveys as guided by the GESI plan.

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<sup>&</sup>lt;sup>1</sup> Government of West Bengal, Panchayat & Rural Development Department. 2016. Village Water and Sanitation Committee formation order Ref. 490/PN/0/1/4A-01/2015 dated 10 June 2016. India.

# 9. Public health improvement and community awareness:

- (i) The NGO would prepare a community participation plan in consultation with the *gram panchayats* and the PIU. The community participation plan should target participation of community at all stages of the project, ensure that the benefits are maximized, and that project objectives are met through smooth implementation;
- (ii) The NGO would support the gram panchayat to disseminate information to the customers and end users about the importance of individual house connections, the advantages of continuous water supply (24x7 water supply), and encourage them on individual house connections. The NGO should involve the communities at the *gram panchayats* for water conservation and focus on community awareness on health, hygiene, and sanitation through an agreed number of *gram panchayat*-level focus group discussions. The NGO would help the *gram panchayats* to install the agreed number of billboards and disseminate agreed materials to advocate the benefits of access to water and sanitation to women and girls. The designs shall be developed and tested in the field by the NGO in consultation with the gram panchayat and the DSISC and are to be approved by the PMU. The NGO would also arrange an agreed number and type of public service advertisements on water, sanitation, hygiene, and gender awareness on the local radio, newspapers, and cable television (strip advertisements);
- (iii) The NGO would organize regular awareness programs at schools, focusing on water conservation and sanitation (the numbers and types will be agreed with the PMU, PIUs, and *gram panchayats*). They will arrange creative activities (e.g., painting, essay-writing, theatre, story-telling, and/or singing with project-related themes) in local schools in the *gram panchayats*, obtain feedback from children, and document and take any required follow-up actions:
- (iv) The NGO should hold sensitization workshops for the elected representatives of the *gram panchayats* about scientific and sustainable water management techniques;
- (v) The NGO should conduct gram panchayat-level workshops on sanitation programs, particularly aimed at the orientation of the local representatives. At least two women per gram panchayat in the project area should be trained as master trainers in community mobilization and awareness campaign on water, sanitation, and hygiene (WASH) and awareness of the project and its benefits;
- (vi) The NGO should undertake a socio-economic survey at gram panchayat level that should include an assessment of the proportion of households below the poverty line, households headed by a female, Scheduled Caste, Scheduled Tribe, landless, and other vulnerable households, including those without a legal title, getting access to water supply services in the project *gram panchayats*. Such data must be made available to individual *gram panchayats* and the PIU; and
- (vii) The NGO should help the *gram panchayats* to develop a telescopic water user charge plan, based on the consumption pattern and pro-poor approach, and encourage conservation of water. The NGO should conduct an extensive information, education, and communication campaign regarding the importance of the quality of drinking water, telescopic water user charges, and focus on changes in behavioral aspects, like switching over from traditional practices to continuous water supply in the *gram panchayats*.

10. **Documentation and dissemination**. The NGO will prepare all reports as required, document successful activities, achievements, and lessons learned in print and video form, and share those with the PMU and PIU.

#### 11. Other activities:

- (i) Prepare and submit monthly progress reports to the PMU and PIU;
- (ii) participate in project meetings as and when required; and
- (iii) maintain records and documentation of tasks and activities performed and accounts as required.
- 12. **Indicative staffing requirements.** The core team of each of the three Project NGO should have the following minimum staff.

**Table A5.2 Project Nongovernment Organization Minimum Staff** 

Post Title	Person-Months
GESI and Community Development Specialist (Team Leader)	40
WASH Expert	15
IT Expert	20
Communication Expert	20
Community Facilitators (2 persons, must be women)	4*10*2= 80
Total	175

GESI = gender equity and social inclusion, IT = information technology, WASH = water, sanitation, and hygiene.

## C. Outline Terms of Reference for Consultants under the Proposed Associated Technical Assistance

- 13. The project will engage consulting services for this assignment for 82 person-months over 3 years. It will also recruit one national individual consultant (water supply information system expert) for 26 person-months. All consultants, both firm and individual, will be recruited in accordance with ADB's *Guidelines on Use of Consultants* (2013, as amended from time to time).
- 14. Disbursement under the technical assistance (TA) will be done in accordance with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time).
- 15. Table A5.3 shows the experts required and indicative person-months.

Table A5.3: Summary of Consulting Services

Positio	Position					
Firm						
1.	Team Leader / Water Utility and Smart Water Management Expert (International)	12				
2.	Water Resource and Flood Management Expert (International)	6				
3.	Deputy Team Leader / Water Utility and Smart Water Management Expert	26				
4.	Water Resource and Flood Management Expert	6				
5.	Disaster Risk Management and Planning Expert	4				
6.	Climate Change Resilience Expert	3				
7.	Community Engagement and Development Expert	4				
8.	Water Supply Network Expert	5				
9.	Hydrologist and flood Modelling Expert	3				
10	Instrumentation, Control, and SCADA Expert	4				

Position	Person- Months
11. IT Expert	6
12. GIS Expert	3
Individual  1. Water Supply Information Systems Expert	26

GIS = geographic information system, IT = Information Technology, SCADA = supervisory control and data acquisition.

## 1. Outline Scope of Work

**Table A5.4: Outline Scope of Work** 

	Table A5.4: Outline Scope of Work						
	Expected Outputs of the TA Consulting Firm and Individuals	Expected Activities					
1	Strengthen central, state, and district level smart water management and water quality monitoring system for drinking water supply in West Bengal.	<ul> <li>Finalize the objectives of smart water management for the project in consultation with key stakeholders</li> <li>Assess processes, outputs, and outcome.</li> <li>Assess existing institutional structure, roles, and responsibilities of each position and relations between functions groups including field-level units</li> <li>Review the internal monitoring and management process of PHED and suggest improvement</li> <li>Identify the strategy to fully integrate management and monitoring data and information in decision-making tools for PHED at the state and district level</li> <li>Evaluate existing IT and instrumentation usage; suggest technological interventions in terms of applications and their deployment considering the need</li> <li>Develop an approach to smart water and smart water workflows and data requirements</li> <li>Develop a system architecture that leverages the existing information technology and introduces the new architecture and data management required to deliver the smart water and flood warning systems</li> <li>Define system scope, functional requirements, and specifications needed for establishing centralized smart water management systems and ensure compatibility of the system with the equipment and monitoring tools to be procured for gram panchayats under a separate assistance</li> <li>Assess IT hardware requirements including computers, networking and peripheral hardware, instrumentation, and water and flow meters</li> <li>Develop a comprehensive procurement plan and estimate resource requirements</li> <li>Prepare specification, cost estimate, and bid document for establishing comprehensive smart water management system for real-time monitoring of bulk water supply infrastructure</li> <li>Prepare bidding documents for and assist in procuring equipment (following ADB procedures and involving PHED in the selection process), installing, and guiding the early operations of the system</li> </ul>					

	Expected Outputs of the TA Consulting Firm and Individuals	Expected Activities				
		<ul> <li>Oversee the implementation of the smart water management system</li> <li>Provide a direct day-to-day interface between PHED and the project</li> <li>Examine the design of the new water supply systems and identify locations for smart water instrumentation and feedback loops</li> <li>Supervise the work on a day-to-day basis and report as required to PHED on operational project matters and improvements or adjustments needed</li> <li>Identify training requirements for the use of smart water management system applications</li> <li>Identify external training institutes, trainers, and training modules for different target groups</li> </ul>				
2	Improve flood forecasting, early flood-warning, and community response system for selected local authorities in Purba Medinipur District	<ul> <li>Carry out a process and systems needs assessment on the scenario maps of climate change and inundation maps (surges and rainfall)</li> <li>Carry out bathymetry surveys</li> <li>Identify the locations for real-time RTDAS telemetry and/or GPRS network for rainfall stations</li> <li>Examine and analyze the nature and cause of flooding in the project area and determine the hydrology of the floodplain at this location</li> <li>Design a flood warning and flood response system based on this analysis that merges with any existing systems.</li> <li>Procure LiDAR maps</li> <li>Prepare instruments and equipment requirements for flood forecasting and early flood-warning system</li> <li>Procure equipment and install the in-flood control room with the communication and information management systems</li> <li>Develop real-time flood forecasting models and a spatial decision support system</li> <li>Link models and make the system live on a real-time basis</li> <li>Calibrate the model and run the system for 6 months</li> <li>Suggest institutional arrangement for running the system</li> <li>Prepare a plan for strengthening community response system</li> <li>Conduct comprehensive community awareness and participation program for improving the effectiveness of the community response system</li> </ul>				
3	Strengthen the capacity of agencies involved in water services provision and water quality monitoring in MDWS, and in West Bengal—particularly of PHED and local authorities—on climate	<ul> <li>Carry out on-the-job capacity building and training</li> <li>Identify training needs and prepare a training plan, including technical training, for usage of the smart water management system applications, flood forecasting, and early flood-warning system</li> <li>Develop training modules</li> <li>Identify external training institutes, trainers, and training modules for different target groups</li> </ul>				

Expected Outputs of the TA Consulting Firm and Individuals	Expected Activities
change resilience and disaster management. Prepare and implement a community awareness plan covering the above aspects	<ul> <li>Provide on-the-job training on the usage of the smart water management system, flood forecasting, and early flood-warning system</li> <li>Support the rollout of the training plan through coordination with training service providers</li> <li>Track training outcomes and feedback and update training modules</li> <li>Prepare a community engagement plan for the smart water system and separately for the flood warning and response systems, and workshop the plan with team members</li> <li>Identify potential community leaders</li> <li>Undertake door to door visits to meet the households in selected areas and establish rapport with the individual households to elicit the required information, such as the perception of the problems confronting them related to water and climate change</li> <li>Subsequently organize a series of meetings with other community members, such as elders living in the area, social workers, and elected representatives to elicit their cooperation in the implementation of the program and in ensuring their help and cooperation in making the community participate in the program</li> <li>Develop information, education, and communication materials</li> <li>Structure and implement various awareness raising program focusing on water conservation, monitoring, and community flood response system</li> </ul>

# **SAMPLE GRIEVANCE REGISTRATION FORM** (To be available in Bangla and English)

The		Project welcome	s complaints, su	agestions.
	nents regarding project impl			
vou to provide vo	our name and contact infor	mation to enable us to	n get in touch wi	ith you for
clarification and fe		mation to chasic do t	o got in todon wi	itir you loi
		nol dotoilo but wont	that information	
	se to include your person			
confidential, pleas	e inform us by writing/typing	^(CONFIDENTIAL)^ at	oove your name.	i nank you.
Date	Place of registration	Project Town		
		Project:		
Contact information	/personal details			
Name		Gender	* Male Age	
			* Female	
Home address		•		
Place				
Phone no.				
E-mail				
Complaint/suggestic	on/comment/question. Please	provide the details (who, w	what, where, and ho	ow) of your
grievance below:				
	chment/note/letter, please tick her			
How do you want us	s to reach you for feedback or u	pdate on your comment/gi	rievance?	
FOR OFFICIAL U	SE ONLY			
	ne of official registering grievance)			
	g g,			
Mode of communication	ation:			
Note/letter				
E-mail				
Verbal/telep	honic			
Reviewed by: (Name	es/positions of officials reviewing g	grievance)		
Action taken:				
Whether action take	n disclosed:	Yes		
		No		
Means of disclosure	):			
Comments/ Remar	ks:			
Prepared by:				
Approved by:				
Date:				

#### **COMMUNITY AWARENESS AND PARTICIPATION PLAN**

#### A. Introduction

- 1. Information disclosure, awareness of intents, impacts, and benefits of the project and opportunities to participate in decision-making processes to express choices and preferences are pre-requisites to elicit effective participation and eventually enhance ownership among communities. Such participation can also be used to influence water and sanitation-related behaviors that lead to better health outcomes. Ownership of water supply systems among rural communities has been recognized as one of the key factors in the sustainable operation and maintenance of water systems and the provision of sustainable services to the communities. This Community Awareness and Participation Plan (CAPP) builds on the community involvement framework provided under the National Rural Drinking Water Program of the Government of India, the agreed Asset Management and Service Delivery Framework for the project, and the Gender, Equity and Social Inclusion Plan (GESI) adopted for the project.
- 2. PHED, assisted by project preparatory consultants, prepared the CAPP to ensure widespread, continuous, and meaningful participation of key stakeholders through a series of activities planned and with a focus on the poor and vulnerable groups. PMU will recruit three non-government organizations (NGOs) to help the project management unit (PMU) and project implementation units (PIUs) in meaningful and widespread consultations, and public awareness initiatives during project implementation. The CAPP is the framework to help implement such activities.

#### B. Key Activities

#### **Activity 1: Understanding Communities**

3. Stakeholders were identified through institutional studies and consultations held at various levels. Consultations were held with target sections of beneficiaries of the subprojects including women, indigenous peoples and the poor, *gram panchayat* Pradhans and members, elected representatives, government departments from the state, district, and blocks, and other stakeholders. ADB carried out an assessment and categorization of gram panchayat based on secondary data to understand the socio-demographic, institutional, and financial contexts of the project gram panchayat and their local governance. PHED and project preparatory team conducted comprehensive socio-economic surveys in each of the subproject gram panchayat.

#### **Activity 2: Understanding the Key Stakeholders**

- 4. An indicative list of key stakeholders:
  - (i) Government agencies involved in the project and their officials;
  - (ii) elected representatives at the district and block level;
  - (iii) beneficiary households including poor and vulnerable households;
  - (iv) self-help group federations; self-help groups with a focus on gender-related activities;
  - (v) indigenous people and affected people (including land donors, land sellers);
  - (vi) Gram panchayat pradhan and elected members and community leaders;
  - (vii) Village Water and Sanitation Committee;
  - (viii) Gram panchayat -level government staff and gram panchayat staff;
  - (ix) women and men involved in the operation and maintenance of the water systems;
  - (x) schools;

- (xi) vendors and local contractors;
- (xii) NGOs and institutions and organizations involved in capacity building;
- (xiii) the media, including print and electronic media; and
- (xiv) contractors and workers of contractors deployed on construction activities in the project.

#### **Activity 3: Understanding the Key Information and Messages**

- 5. An indicative list of key information and messages for awareness generation and community participation:
  - (i) Objectives, rationale, design, schedule, impacts, employment opportunities, and overall benefits of the project;
  - (ii) the importance of improved health, hygiene, water, and sanitation and promotion of good practices related to water and sanitation safety planning through various behavioral changes;
  - (iii) the roles and responsibilities of various stakeholders in the project;
  - (iv) enhanced water service levels and service infrastructure covered under the project;
  - (v) gender equity and social inclusion in participation and accessing services;
  - (vi) women's empowerment including livelihood enhancement and leadership;
  - (vii) women and the community's responsibilities related to water conservation and protection of project facilities;
  - (viii) operation and maintenance of the assets created under the project and the roles of the gram panchayat, Village Water and Sanitation Committee, and households;
  - (ix) project's smart water management approach focusing on water use efficiency and related behaviors;
  - (x) operational and financial sustainability of water supply services and the need to pay for services, water user charges, and cross-subsidization for poorer households;
  - (xi) roles and responsibilities described by government orders for asset management and service delivery between the Public Health Engineering Department (PHED) and the gram panchayat;
  - (xii) local institutional setup and forums available for participation and decision making; and
  - (xiii) grievance redress mechanism as detailed in the safeguard documents.

#### **Activity 4: Design and Implement Communication Strategy**

- 6. The CAPP's success will be determined by the effectiveness of a coordinated and well-delivered communication strategy, which will promote the cooperation of communities based on their understanding and acceptance of the project and its objectives. It will also require effective inter-agency coordination between the executing agency, districts, and blocks, NGOs engaged on the project and community stakeholders at the gram panchayat level. The communication strategy will be inclusive, targeting all beneficiary households and especially the poor and the vulnerable groups whose voices are not generally heard and whose participation is often weak in decision-making processes.
- 7. The communication strategy will include planning and implementing various activities to maximize reach, such as community consultations, seminars, meetings, training, and campaigns; public service advertisements using local electronic and print mass media; billboards; school activities; gender-focused meetings, and interpersonal communication by master trainers and local government staff. The project communication strategy also includes a project website disclosing key project-related information, including the scope, cost, and financial and institutional

arrangements, safeguards reports, such as initial environmental examination (IEE) and resettlement plans, and progress on procurement, contract awards, and disbursements.

## C. Community Awareness and Participation Plan

8. Awareness-building activities are required to ensure that communities are mobilized as participants in the project. Information disclosure and community awareness are essential for maintaining public or community support and redressing grievances during the implementation period. Awareness building and education activities will target all communities and relevant stakeholder groups within the project area with an emphasis on pro-poor, gender-sensitive activities. The PMU will oversee these activities through the PIUs. The project will work through the gram panchayat and village water and sanitation committees to implement these activities. Key activities of the CAPP are listed in the table below.

#### COMMUNITY AWARENESS AND PARTICIPATION PLAN

			Consultation			
Project Cycle	Target Group	Consultation Tools	and Participation Target	Indicators	Source of Verification	Responsibility
Planning stage	PHED, P&RD officials at the state and project district officials	Meetings	Consultation on: • project scope and design issues	Project scope defined	Feedback notes and minutes documented and shared	PHED
	Households, GP and VWSC members, local elected representatives and community leaders, and community- based organizations such as self- help groups	<ul> <li>Focus group discussions</li> <li>Interviews</li> </ul>	Consultation on:  • Water supply services situation and improvements required and on water service delivery-related issues	Number of such consultations held	Feedback notes and minutes documented and shared	PHED assisted by DSISCs and project NGOs
Subproject identification stage	Beneficiaries, including women, youth, indigenous peoples and scheduled tribes, and other poor and marginalized social groups  Elected representatives and local community leaders	<ul> <li>Focus group discussions</li> <li>Information leaflets about subproject and benefits</li> <li>Open house meetings</li> <li>Key informant interviews</li> <li>Information leaflets about subproject and benefits</li> </ul>	Consultation on:  Overview of service requirements  Subproject selection criteria  Reason for prioritizing the subproject  Improvements and/or benefits envisaged  User contribution requirements	Number of consultation sessions carried out for various stakeholder groups including number of participants	Note of views received and incorporated into the selection of subprojects	PHED assisted by DSISCs and Project NGOs

Project Cycle	Target Group	Consultation Tools	Consultation and Participation Target	Indicators	Source of Verification	Responsibility
	Community-based organizations, women self-help groups and federations; others	<ul> <li>Open house meetings</li> <li>Information leaflets about subproject and benefits</li> <li>Open house meetings</li> </ul>	Implementation schedules and arrangements			
	Local registered NGOs	Information leaflets about subproject and benefits     Open house meetings				
Subproject design stage	All households including poor and vulnerable households, self-help groups, gram panchayat and VWSC, schools, ASHA worker, general public	Training to trainers on awareness generation     Local meetings organized by gram panchayat and project NGOs	Consultation on: Campaigns on water, sanitation, and hygiene (WASH) project benefits and costs, connection charges, water user charges, affordability for poor households, gender and social inclusion issues, women's empowerment including livelihood enhancement and leadership, women and the community's responsibilities related to water conservation and protection of project facilities.	Number of master trainers trained  Number of gram panchayat meetings held	Campaign reports  Willingness to pay survey reports	PMU/PIUs VWSC, and project NGOs, supported by DSISCs
Subproject implementation stage	All households including poor and vulnerable	<ul><li>Focus group discussions</li><li>Meetings at gram</li></ul>	Consultation on: • Project schedules,	Number of consultations held in a year	Project MIS reports	PIUs, project NGOs

Project Cycle	Target Group	Consultation Tools	Consultation and Participation Target	Indicators	Source of Verification	Responsibility
	households, self-help groups	panchayat level	<ul> <li>completion targets,</li> <li>preparations required for operation and maintenance,</li> <li>rules and regulations to be adopted for billing, collection, account maintenance,</li> <li>misuse of water, illegal connections, water thefts and water user charges,</li> <li>SMART water management</li> </ul>	Number of project gram panchayats covered where such consultations have taken place, in a year	PMC and SPISC and NGO reports	
	Gram panchayats, VWSC, local community leaders, representative households	Consultation meetings     Focus group discussions	Consultation on:  O&M arrangements,  operational and sustainability issues,  SMART water management,  asset management and service delivery agreement of PG and PHED.	Number of consultation meetings held on agreements	Feedback notes of the meetings	PMU/PIUs, project NGOs supported by PMC and DSISC, P&RD representatives
	Local elected representatives, local community leaders, and block officials	Consultation meetings     Focus group discussions	Consultation on: Project overview, project infrastructure components, implementation schedules and targets, O&M arrangements including asset management and service delivery agreements with PHED	Number of consultations and focus group discussions held  Number of elected representatives covered out of total	NGO reports	PIUs, project NGOs supported by PMC and DSISC

Project Cycle	Target Group	Consultation Tools		Consultation and Participation Target	Indicators	Source of Verification	Responsibility
	PHED, PMU, PIU officials; districts, blocks, and P&RD officials; elected representatives at the state and district levels	Project orientation workshops	•	Introduce the project, its objectives, design, schedule, impact, and benefits, roles and responsibilities of various stakeholders operational and financial sustainability and related reform Issues	Number of workshops conducted in a year	Workshop reports	PMU, PIUS supported by PMC and DSISCs
Post-project implementation	Beneficiary households and communities	Structured meetings     Focus group discussions     Individual interviews	•	Service delivery issues, service satisfaction levels, billing and collection issues.	Number of beneficiary consultations held on service-related issues	Project MIS reports of service delivery; billing and collection data  Reports that document feedback from beneficiaries	PIUs, project NGOs with respective gram panchayats/VWSCs
	gram panchayats, VWSC, local community leaders	Consultation meetings     Focus group discussions	•	O&M arrangements and operational and financial sustainability issues, obligations under the asset management and service delivery agreement of gram panchayat and PHED, technical and capacity building support required	Number of consultation meetings held in a year  Number of gram panchayats covered with such consultations in a year	Feedback notes of the meetings Project MIS reports	PMU/PIUs, project NGOs supported by PMC and DSISC, P&RD representatives

Project Cycle	Target Group	Consultation Tools	Consultation and Participation Target	Indicators	Source of Verification	Responsibility
Monitoring and evaluation	Beneficiary households, elected representatives, local community leaders, and women and men involved in O&M	Individual interviews     Focus groups discussions     Meetings at gram panchayat level	Monitoring service delivery,     impacts on women and vulnerable amongst the beneficiaries,     obligations under the asset management and service delivery agreements of PHED and gram panchayats,     support provided by gram panchayats, VWSC, blocks, and PMU/PIU.	Number of formal evaluations conducted in a year	Evaluation reports	PIUs and project NGOs in consultation with VWSCs and beneficiary households

DSISC= Design, Supervision and Institutional Support Consultants, NGO = nongovernment organization, PHED = Public Health Engineering Department, PIU = project implementation unit, PMC = project management consultant, O&M = operation and maintenance, PMU = project management unit, P&RD = Panchayat & Rural Development Department, VWSC = village water and sanitation committee, WASH = water, sanitation, and hygiene.

## GENDER EQUALITY AND SOCIAL INCLUSION PLAN MONITORING AND REPORTING FORMAT **Quarterly Update Report**

	Progress	s to Date	
		Cumulative Progress	
	Progress in last 6-	(This should include	Issues and
	months	qualitative and	Challenges
	(MM/YY to MM/YY)	quantitative information	(Include reasons
	(This should include	on progress [including	why an activity
	qualitative and	sex-disaggregated data]	was not fully
	quantitative information	from the start of the	implemented, or if
	on progress in last 6-	GESI implementation to	targets fall short,
	months [sex-	the previous quarter's	or reasons for the
Activities and Target / Indicator	disaggregated data])	progress report.)	delay.)
Output 1: Climate-resilient drinking water infrastructure constructed			
Activity 1.1. Provide potable water supply in project areas within own pre-	mises and inclusively		
Households in project coverage areas have access to continuous piped			
potable water within premises. Target: 0.39 million households, and			
minimum 0.52 million women.			
Household headed by women and vulnerable households included in			
the targeted 0.39 million households provided with free or subsidized			
piped potable water connections. Target: 100%			
Government institutions, including schools, hospitals, primary health			
centers, and community health centers, in project coverage areas have			
access to free connections and subsidized continuous piped potable			
water supply services. Target: 100%			
Activity 1.2. Conduct project social and gender data mapping			
Poverty and ethnicity mapping at village level undertaken using			
secondary data, for identification of household headed by women and			
vulnerable households and maintained in a roster at PIUs and gram			
panchayats.			
Collection of primary data completed, using the application form for			
water supply connections to collect information on ethnicity and socio-			
economic status, and maintained in a roster at PIUs and gram			
panchayats.			
Activity 1.3. Create female-friendly work environment at PMU, PIUs, cons	sultants' and contractors' of	tices, tacility locations, work	sites, and camps
Separate and safe toilets and changing facilities for females at PMU,			
PIU, consultants' and contractors' offices, work sites and camps, and			
project facility locations. (Target: 100% of project and sub-project			
offices and sites)			
Government of India and Government of West Bengal policies on zero			
tolerance for sexual harassment and other forms of gender-based			
discrimination in the workplace implemented.			

	Progres	s to Date	
		Cumulative Progress	
	Progress in last 6-	(This should include	Issues and
	months	qualitative and	Challenges
	(MM/YY to MM/YY)	quantitative information	(Include reasons
	(This should include	on progress [including	why an activity
	qualitative and	sex-disaggregated data]	was not fully
	quantitative information	from the start of the	implemented, or if
	on progress in last 6-	GESI implementation to	targets fall short,
	months [sex-	the previous quarter's	or reasons for the
Activities and Target / Indicator	disaggregated data])	progress report.)	delay.)
Ensure equal pay for women workers in project sites.		T	• ,
Output 2: Institutions and capacity of stakeholders in drinking wat	er service delivery strengtl	nened	
Activity 2.1. Manage drinking water services inclusively at the gram pand			
At least 350 additional staff (including a minimum of 33% female)			
engaged by project gram panchayats to manage water supply services.			
Minimum 200 PHED staff, including 100% of PMU's and PIU's female			
staff, trained in technical and financial utility management.			
Activity 2.2. Institutionalize inclusive practices in each project gram pane	chavat		
Asset Management and Service Delivery Framework (AMSDF)			
implemented by project gram panchayats and PHED, institutionalizing			
inclusive operational practices and the policy framework for 100%			
connections including all household headed by women and vulnerable			
households, and subsidized or affordable water user charges.			
At least 660 locals in project <i>gram panchayats</i> , a minimum of 33%			
females, trained in technical, plumbing, and financial utility			
management skills.			
VWSC members trained in their roles and responsibilities as per the			
VWSC guidelines, and their responsibilities for inclusive and			
sustainable water service delivery under the agreed AMSDF. Target:			
VWSCs of 66 project <i>gram panchayats</i> , a minimum of 33% female.			
Activity 2.3. Promote and help create women leadership in project gram	panchayats and PHFD		
Leadership and livelihood training provided to 300 local entrepreneurs			
in project gram panchayats, including new water supply staff and			
executive members of VWSCs, with a minimum of 33% female.			
For the females in project <i>gram panchayats</i> trained in technical and			
financial utility management skills, the VWSC members, and the PHED			
staff trained on utility management, provide two refreshers or follow up			
courses/ training programs on leadership during the project			
implementation period.			
Activity 2.4. Conduct community consultation and awareness activities,	including benefits and oppor	tunities arising from the pro	iect such as
employment, skills training, and livelihood enhancement	3	3 2 20	,
At least four community members (including 33% female) in each gram			
panchayat trained as trainers in community mobilization and	1	1	

	Progress	s to Date	
	Progress in last 6- months (MM/YY to MM/YY) (This should include qualitative and quantitative information on progress in last 6- months [sex-	Cumulative Progress (This should include qualitative and quantitative information on progress [including sex-disaggregated data] from the start of the GESI implementation to the previous quarter's	Issues and Challenges (Include reasons why an activity was not fully implemented, or if targets fall short, or reasons for the
Activities and Target / Indicator	disaggregated data])	progress report.)	delay.)
awareness on water conservation, improvement in sanitation, and hygiene, and the benefits and opportunities arising from the project.  Target: 4 *66 gram panchayat = 264 people trained.	gg .g		
Public awareness on water conservation, demand management, and WASH provided to at least 500 people in project <i>gram panchayats</i> , a minimum 33% female.			
Activity 2.5. Conduct gender audit, develop and adopt gender strategy fo	r PHED	•	
PHED's gender audit conducted, gender strategy developed and adopted.			
Activity 2.6. Train PMU, PIUs, and other stakeholders in GESI and gender	er-responsive monitoring an	d reporting	
Two GESI training workshops organized annually for PMU and PIU staff.	•		
Training module on GESI incorporated in all training. Target: 100% project training conducted by PMU and PIUs.			
Activity 2.7. Monitor and report on GESI action plan implementation			
Project NGOs, DSISCs, and PMC engage specialists with experience in GESI implementation to provide technical support for the implementation of the GESI action plan.			
GESI focal points appointed in PMU and each PIU.			
GESI action plan progress monitored regularly and reported every quarter with the project QPRs.			
PPMS developed with GESI indicators and regularly updated with sex- and social-disaggregated data.			

AMSDF = Asset Management and Service Delivery Framework, DSISC = supervision and institutional support consultants, QPR = quarterly progress report, PHED = Public Health Engineering Department, PIU = project implementation unit, PMC = project management consultant, PMU = project management unit, VWSC = village water and sanitation committees.

#### **OUTLINE QUARTERLY PROGRESS REPORT FORMAT**

#### A. Introduction and Basic Data

- (i) ADB loan number, project title, borrower, executing agency, implementing agency(ies);
- (ii) Total estimated project cost and financing plan;
- (i) Status of project financing including availability of counterpart funds;
- (ii) Dates of approval, signing, and effectiveness of ADB loans;
- (iii) Original and revised (if applicable) ADB loan closing date and elapsed loan period based on original and revised (if applicable) loan closing dates; and
- (iv) Date of last ADB review mission.

#### B. Utilization of Funds (ADB Loan and Counterpart Funds)

- (i) Cumulative contract awards financed by the ADB loan, and counterpart funds (commitment of funds to date), and comparison with time-bound projections (targets);
- (ii) Cumulative disbursements from the ADB loan, and counterpart funds (expenditure to date), and comparison with time-bound projections (targets); and re-estimated costs to completion, need for reallocation within ADB loan categories, and whether an overall project cost overrun is likely.

#### C. Project Purpose

- (i) Status of project scope and implementation arrangements compared with those in the report and recommendation of the President (RRP), and whether major changes have occurred or will need to be made;
- (ii) An assessment of the likelihood that the immediate development objectives (project purpose) will be met in part or in full, and whether remedial measures are required based on the current project scope and implementation arrangements; and
- (iii) An assessment of changes to the key assumptions and risks that affect attainment of the development objectives.

#### D. Implementation Progress

- (i) Provide a summary assessment of progress or achievements in implementation since the last progress report;
- (ii) Assessment of the progress of each project component, such as,
  - (a) recruitment of consultants and their performance;
  - (b) procurement of goods and works (from the preparation of detailed designs and bidding documents to contract awards); and
  - (c) the performance of suppliers, manufacturers, and contractors for goods and works contracts;
- (iii) Assessment of progress in implementing the overall project to date in comparison with the original implementation schedule—quantifiable and monitorable target, (include simple charts such as bar or milestone to illustrate progress, a chart showing actual versus planned expenditure, S-curve graph showing the relationship between physical and financial performance, and actual progress in comparison with the original schedules; and
- (iv) An assessment of outcome and/or output achievements versus targets—based on the project performance monitoring system (PPMS) developed from design and monitoring framework of the project.

**E. Major Project Issues and Problems**. Summarize the major problems and issues affecting or likely to affect implementation progress, compliance with covenants, and achievement of immediate development objectives. Recommend actions to overcome these problems and issues (e.g., changes in scope, changes in implementation arrangements, and reallocation of loan proceeds).

#### F. Compliance with Safeguards and Covenants

- (i) Review the borrower's compliance with policy loan covenants, and, where relevant, provide any reasons for any noncompliance or delay in compliance; and
- (ii) Provide a summary assessment of compliance with resettlement and environmental safeguards.

#### **Appendixes**

- 1. Summary Loan Covenant Review
- 2. Summary Gender Equality and Social Inclusion Action Plan Progress (separate format available)

#### **OUTLINE OF SEMI-ANNUAL MONITORING REPORTS TEMPLATE**

#### I. SEMI-ANNUAL ENVIRONMENTAL MONITORING REPORT TEMPLATE

1. This template must be included as an appendix in the initial environmental examination that will be prepared for the project. It can be adapted to the specific project as necessary.

#### A. Introduction

- (i) Overall project description and objectives;
- (ii) Environmental category as per ADB Safeguard Policy Statement (2009);
- (iii) Environmental category of each subproject as per national laws and regulations;
- (iv) Project safeguards team;

#### Table A10.1:

1 4510 7 (10.11)							
Name	Designation/Office	Email Address	Contact Number				
1. PMU							
2. PIUs							
3. Consultants							
		·					

- (v) Overall project and sub-project progress and status; and
- (vi) Description of subprojects (package-wise) and status of implementation (preliminary, detailed design, on-going construction, completed, and/or O&M stage):

#### Table A10.2

			Contract	If Ongoing	Construction
Package Number	Components/List of Works	5 5 5		%Physical Progress	Expected Completion Date

<sup>&</sup>lt;sup>a</sup> If ongoing construction, include the percentage of physical progress and expected date of completion.

## B. Compliance Status with National/State/Local Statutory Environmental Requirements

Table A10.3: Compliance Status with National/State/Local Statutory Environmental Requirements

Package No.	Subproject Name	Statutory Environmental Requirements <sup>a</sup>	Status of Compliance <sup>b</sup>	Validity if Obtained	Action Required	Specific conditions that will require environmental monitoring as per Environment Clearance, Consent and/or Permit to Establish <sup>c</sup>

Note: All statutory clearances, no-objection certificates, and permits should be obtained prior to the award of contracts. Attach as appendixes all clearances obtained during the reporting period. If already reported, specify in the "remarks" column.

#### C. Status of Compliance with Environmental Loan Covenants

**Table A10.4: Status of Compliance with Environmental Loan Covenants** 

No. (List schedule and paragraph number of Loan Agreement)	Covenant	Status of Compliance	Action Required	

#### D. Compliance Status with the Environmental Management Plan

- 2. Refer to EMP Tables in approved IEE/s.
  - (i) Confirm if IEE/s require contractors to submit site-specific environmental management plans (EMP) and/or construction EMPs. If not, describe the methodology for monitoring each package under implementation;

**Table A10.5: Package-Wise Implementation Status** 

	Table Atolo: I dokage Wise implementation states									
		Design	Final IEE based on Detailed Design			Site-specific EMP (or	Remarks			
		Status	Not Yet		Disclos		Constructio			
		(Preliminary	Due	Submitted	ed on		n EMP)			
		Design	(detailed	to ADB	project	Final IEE	approved by			
		Stage/Detail	design not	(provide date	website	provided to	Project			
Package		ed Design	yet	of	(Provide	Contractor/s	Director?			
Number	Components	Completed)	completed)	submission)	Link)	(Yes/No)	(Yes/No)			

<sup>&</sup>lt;sup>a</sup> Specify (environmental clearance? Permit/consent to establish? Forest clearance? Etc.)

<sup>&</sup>lt;sup>b</sup> Specify if obtained, submitted and awaiting approval, application not yet submitted.

<sup>&</sup>lt;sup>c</sup> Example: Environmental clearance requires ambient air quality monitoring, Forest Clearance/Tree-cutting Permit requires two trees for every tree, etc.

- (ii) Identify the role/s of the safeguards team including schedule of on-site verification of reports submitted by consultants and contractors;
- (iii) For each package, provide name/s and contact details of contractor/s' nodal person/s for environmental safeguards;
- (iv) Include an appendix with all the supporting documents including signed monthly environmental site inspection reports prepared by consultants and/or contractors;
- (v) With reference to the approved EMP, site-specific EMP and/or construction EMP, complete quarterly update report;
- (vi) Provide the monitoring results as per the parameters outlined in the approved EMP (or site-specific EMP/construction EMP when applicable); and
- (vii) In addition to the table on EMP implementation, the main text of the report should discuss in details the following items:
  - (a) **Grievance redress mechanism.** Provide information on the establishment of a grievance redress mechanism (GRM) and the capacity of the grievance redress committee to address project-related issues and complaints. Include as appendix Notification of the Grievance Redress Mechanism (town-wise if applicable); and
  - (b) Complaints received during the reporting period. Provide information on number, nature, and resolution of complaints received during the reporting period. Attach records as per GRM in the approved IEE. Identify safeguards team member/s involved in the GRM process. Attach minutes of meetings (ensure English translation is provided):
    - (a) Confirm if any dust was noted to escape the site boundaries and identify the dust suppression techniques followed for site/s;
    - (b) Identify if muddy water escaped site boundaries, or muddy tracks were seen on adjacent roads;
    - (c) Identify type of erosion and sediment control measures installed onsite/s and condition of erosion and sediment control measures including if these were intact following heavy rain;
    - (d) Identify designated areas for concrete works, chemical storage, construction materials, and refueling. Attach photographs of each area:
    - (e) Confirm spill kits on site and site procedure for handling emergencies;
    - (f) Identify any chemical stored on site and provide information on storage condition. Attach photograph;
    - (g) Describe the management of stockpiles (e.g., construction materials, excavated soils, spoils). Provide photographs;
    - (f) Describe the management of solid and liquid wastes on-site (quantity generated, transport, storage, and disposal). Provide photographs;
    - (h) Provide information on barricades, signages, and on-site boards. Provide photographs; and
    - (i) Check if any activities are being undertaken out of working hours and how that is being managed.

## **Table A10.6**:

Mitigation	Parameters Monitored (As a	Mothedof	Leastion of	Date of	Name of Person			
IEE)	should be monitored)	Monitoring	Monitoring	Conducted	Who Conducted the Monitoring			
Design Phase								
nase			1					
				•				
•			•	_				
	Measures (List from	Measures (List from IEE)  minimum those identified in the IEE should be monitored)  mase	Measures (List from IEE) minimum those identified in the IEE should be monitored) Method of Monitoring	Measures (List from IEE) minimum those identified in the IEE Monitoring Monitoring  Location of Monitoring  Monitoring  Manage  Location of Monitoring	Measures (List from IEE) minimum those identified in the IEE should be monitored) Monitoring Conducted  Monitoring Monitoring Conducted			

Table A10.7: Overall Compliance with CEMP and Environmental Management Plan

No.	Subproject Name	EMP/ CEMP Part of Contract Documents (Y/N)	CEMP/ EMP Being Implemented (Y/N)	Status of Implementation (Excellent/ Satisfactory/ Partially Satisfactory/ Below Satisfactory)	Action Proposed and Additional Measures Required

- E. Approach and Methodology for Environmental Monitoring of the Project:
  - (i) A brief description of the approach and methodology used for environmental monitoring of each subproject.
- F. Monitoring of Environmental Impacts on Project Surroundings (Ambient Air, Water Quality, and Noise Levels):
  - (i) Brief discussion on the basis for monitoring;
  - (ii) Indicate type and location of environmental parameters to be monitored;
  - (iii) Indicate the method of monitoring and equipment to be used; and
  - (iv) Provide monitoring results and an analysis of results in relation to baseline data and statutory requirements.

As a minimum, the results should be presented as per the tables below.

**Air Quality Results** 

				Parameters (Government Standa		t Standards)
				PM10	SO2	NO2
Site No.		Date of Testing	Site Location	μg/m3	μg/m3	μg/m3
ua/m3 –	NO -	PM - SO -			<u> </u>	l

 $\mu$ g/m3 = \_\_\_\_, NO = \_\_\_\_, PM = \_\_\_, SO = \_\_\_\_

			Parameters (Monitoring Resul		
			PM10	SO2	NO2
Site No.	Date of Testing	Site Location	μg/m3	μg/m3	μg/m3

 $\mu$ g/m3 = \_\_\_\_\_, NO = \_\_\_\_\_, PM = \_\_\_\_, SO = \_\_\_\_\_.

**Water Quality Results** 

		Water Quant	y ivos	uito				
			Parameters (Government Standards)					
				Conductivit	BOD	TSS	TN	TP
Site No.	Date of Sampling	Site Location	рН	y μS/cm	mg/L	mg/L	mg/L	mg/L
uS/cm -	BOD - ma/l - mill	igram per liter TN -	Т	P = TSS =	_	•	•	

			Parameters (Monitoring Results)					
			Conductivit BOD TSS TN TF				TP	
Site No.	Date of Sampling	Site Location	рН	y μS/cm	mg/L	mg/L	mg/L	mg/L

µS/cm = , BOD =	_ , mg/L = milligram per liter, TN	N = , TP = , TSS = .

**Noise Quality Results** 

			LA <sub>eq</sub> (dBA) (Government Standard)		
Site No.	Date of Testing	Site Location	Day Time	Night Time	

LA<sub>eq</sub> (dBA) = \_\_\_\_\_.

			LA <sub>eq</sub> (dBA) (Monitoring Results)		
Site No.	Date of Testing	Site Location	Day Time	Night Time	

LA<sub>eq</sub> (dBA) = \_\_\_\_\_.

### G. Summary of Key Issues and Remedial Actions

(i) Summary of follow-up time-bound actions to be taken within a set timeframe.

## Appendixes:

- 1. Photos
- 2. Summary of consultations
- 3. Copies of environmental clearances and permits
- 4. Sample of environmental site inspection report
- 5. Other

## SAMPLE ENVIRONMENTAL SITE INSPECTION REPORT

Project Name Contract Number					
NAME: TITLE: LOCATION:		DMA:			
WEATHER CONDITION:					
INITIAL SITE CONDITION:					
CONCLUDING SITE CONDITION:					
Satisfactory Unsatisfactory	Incident	Resolved	Unresolved		
INCIDENT: Nature of incident:					
Intervention Steps:					
Incident Issues					
		Survey			
	Project	Design			
Resolution	Activity Stage	Implementation			
		Pre-Commissionii	ng		
		Guarantee Period	I		
Ir	nspection				
Emissions	Waste Min	imization			
Air Quality	Reuse and	Reuse and Recycling			
Noise pollution	Dust and Litter Control				
Hazardous Substances	Trees and	Trees and Vegetation			
Site Restored to Original Condition	Yes		No		
Signature	-				
Sign off					
Name Position		Name Position			

## II. SEMI-ANNUAL SOCIAL SAFEGUARDS MONITORING REPORT TEMPLATE

- 1. Under the ADB Safeguard Policy Statement (2009) and the *Operations Manual* section on safeguard policy (OM F1), borrowers/clients are required to establish and maintain procedures to monitor the status of implementation of safeguard plans and ensure progress is made toward the desired outcomes. For projects categorized as A or B in involuntary resettlement and/or indigenous people, the borrowers/clients are required to submit semiannual monitoring reports for ADB review. The level of detail and comprehensiveness of a monitoring report is commensurate with the complexity and significance of social safeguards impacts (involuntary resettlement and indigenous people) and with the current status of the project implementation phase.
- 2. This outline can be used for periodic monitoring report (semiannual) and resettlement plan/indigenous peoples plan (IPP) completion report to start the civil works in the impacted areas. A safeguard monitoring report may include the following elements:

#### A. Executive Summary

3. This section provides a concise statement of project scope and impacts, key findings and recommended actions.

#### B. Background of the Report and Project Description

- 4. This section provides a general description of the project, including:
  - Background and context of the monitoring report, which includes the information on the project, project components, safeguards categorizations and general scope of the social safeguards impacts;
  - (ii) Information on the implementation progress of the project activities, scope of the monitoring report and requirements, reporting period, including frequency of submission, and changes in project scope and adjusted safeguard measures, if applicable; and
  - (iii) Summary table of identified impacts and the mitigation actions.

#### C. Scope of Impacts

- 5. This section outlines the detail of
  - (i) Scale and scopes of the project's safeguards impacts;
  - (ii) Vulnerability status of the affected people and/or communities; and
  - (iii) Entitlements matrix and other rehabilitation measures, as applicable, as described in the approved final resettlement plans and IPPs.

#### D. Compensation and Rehabilitation

- 6. This section describes the process and progress of the implementation of the safeguards plan and other required activities as determined in the plan, including: <sup>41</sup>
  - (i) Payment of compensation for the affected assets, allowances and/or loss of incomes to the entitled persons; and

<sup>&</sup>lt;sup>41</sup> Depending on the status of the final detail design during the submission of the report, this activity might not yet have started. Provide instead the information on the expected date the activity will be conducted.

- (ii) Provisions of other types of entitlement as described in the matrix and implementation of livelihood rehabilitation activities as determined in the plan.
- 7. Quantitative as well as qualitative results of the monitoring parameters, as agreed in the plan, should be provided.

#### E. Public Participation and Consultation

8. This section describes public participation and consultations activities during the project implementation as agreed in the plan. This includes final consultations with affected people during resettlement plan finalization after the completion of the detail design, the numbers of activities conducted, issues raised during consultations, and responses provided by the project team, implementing nongovernment organizations, project supervision consultants, and/or contractors.

#### F. Grievance Redress Mechanism

9. This section described the implementation of the project's grievance redress mechanism (GRM) as designed in the approved resettlement plan/IPP. This includes evaluations of its effectiveness, procedures, complaints received, timeliness to resolve issues and complaints, and resources provided to solve the complaints. Special attention should be given if there are complaints received from the affected people or communities.

#### G. Institutional Arrangement

10. This section describes the actual implementation, or any adjustment made to the institutional arrangement for managing the social safeguards issues in the projects. This includes the establishment of a safeguards unit or team and the appointment of staff in the executing agency and/or implementing agency, implementation of the GRM and its committee, supervision and coordination between institutions involved in the management and monitoring of safeguards issues, and the roles of nongovernment organizations and women's groups in the monitoring and implementation of the plan, if any.

#### H. Monitoring Results – Findings

11. This section provides a summary and describes the key findings of the monitoring activities. The results are compared against previously established benchmarks and compliance status, e.g., adequacy of involuntary resettlement compensation rates and timeliness of payments, adequacy and timeliness of involuntary resettlement rehabilitation measures including serviced housing sites, house reconstruction, livelihood support measures, and training; budget for implementing EMP, resettlement plan, or IPP, timeliness and adequacy of capacity building. The section also compares the findings against the objectives of safeguards or desired outcomes documented, e.g., involuntary resettlement impacts avoided or minimized; livelihood restored or enhanced; indigenous peoples' identity, human rights, livelihood systems, and cultural uniqueness fully respected; indigenous people not suffering adverse impacts, environmental impacts avoided or minimized. For financial intermediary projects, this includes the effectiveness of the Environmental and Social Management System (ESMS) managed by the financial intermediary and its participating institutions. <sup>42</sup> If noncompliance or any major gaps are identified, include the recommendation of the corrective action plan.

<sup>&</sup>lt;sup>42</sup> An external agency may be required to conduct an audit of the project environmental and social management system that is specific for the financial intermediary projects.

#### I. Compliance Status

12. This section will summarize the compliance status of the project activities with the loan covenants, ADB SPS (2009) on SR 2 and the approved final resettlement plan(s).

#### J. Follow up Actions, Recommendations, and Disclosure

- 13. This section describes recommendations and further actions or items to focus on for the remaining monitoring period. It also includes lesson learned for improvement for future safeguards monitoring activities. Disclosure dates of the monitoring report to the affected communities should also be included. A time-bound summary table for required actions should be included, with the following:
  - (ii) List of Affected Persons and Entitlements;
  - (iii) Summary of resettlement plan/IPP with entitlement matrix
  - (iv) Copies of affected people's certification of payment (signed by the affected peoples);
  - (v) Summary of minutes of meetings during public consultations; and
  - (vi) Summary of complaints received and solution status.