

Project Administration Manual

Project Number: 52174-002
Grant Number: G0837; and Loan Number: L4192
June 2022

The People's Republic of Bangladesh: Emergency
Assistance Project – Additional Financing

ABBREVIATIONS

ADB	–	Asian Development Bank
ADF	–	Asian Development Fund
BREB	–	Bangladesh Rural Electrification Board
CPD	–	Client Portal for Disbursement
DC	–	Deputy Commissioner
DMF	–	Design and Monitoring Framework
DPHE	–	Department of Public Health Engineering
DPP	–	Development Project Proposal
EARF	–	Environment Assessment Review Framework
EOI	–	Expression of Interest
ERD	–	Economic Relations Division
FAPAD	–	Foreign Aided Projects Audit Directorate
FMA	–	Financial Management Assessment
GESI	–	Gender Equality and Social Inclusion
GOB	–	Government of Bangladesh
ICDDR,B	–	International Centre for Diarrhoeal Disease Research, Bangladesh
IEE	–	Initial Environmental Examination
IOM	–	International Organization for Migration
IP	–	Indigenous Peoples
kV	–	Kilo Volt
LCB	–	Limited Competitive Bidding
MVA	–	Megavolt Ampere
NGO	–	Non-Government Organizations
OCB	–	Open Competitive Bidding
PAM	–	Project Administration Manual
PD	–	Project Director
PIU	–	Project Implementation Unit
PMU	–	Project Management Unit
QCBS	–	Quality and Cost Based Selection
RFQ	–	Request for Quotation
RHD	–	Roads and Highway Department
RP	–	Resettlement Plan
RRRC	–	Refugees Relief and Repatriation Commission
SOE	–	Statement of Expenditures
TA	–	Technical Assistance
UN	–	United Nations
UNFPA	–	United Nations Population Fund
UNHCR	–	United Nations High Commissioner for Refugees
UNICEF	–	United Nations Children's Fund
WB	–	World Bank
WHO	–	World Health Organization

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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 should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The executing and implementing agencies are 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 executing and implementing agencies of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At grant and loan negotiations, the borrower and ADB shall agree to the PAM and ensure consistency with the grant and loan^a agreements. Such agreements shall be reflected in the minutes of the grant and loan negotiations. In the event of any discrepancy or contradiction between the PAM and the grant and loan agreements, the provisions of the grant and loan agreements 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 Staff Instructions) and upon such approval, they will be subsequently incorporated in the PAM.

^a The name of the operational financing document may vary on a project-to-project basis; this reference shall be deemed to encompass such variations, e.g., a Framework Financing Agreement, as applicable

I. PROJECT DESCRIPTION

A. Rationale

1. **Description of emergency.** Since August 2017, Bangladesh has received about 886,000 displaced persons from Myanmar in Cox's Bazar District.¹ The influx has caused a huge strain on the local infrastructure and economy; and brought significant challenges to food supply, shelter, health, sanitation, water supply, and other essential services to the communities. It has also caused significant environmental stress since the camps are located in the most vulnerable part of the country, which is highly prone to natural disasters (cyclones, floods, and chronic droughts), exacerbated by the impact of climate change. Despite international support provided for basic services over the years, the pressure on the environment in the camps and the adjacent communities remain high. The Government of Bangladesh, with the support of development partners and UN agencies, has managed the COVID-19 response effectively and has contained its spread in the camps and surrounding areas. However, as the trajectory of COVID-19 is unpredictable, the risk of outbreak at any point of time remains high because of overcrowding and unhygienic conditions in the camps. Containing the COVID-19 outbreak and providing basic water supply and sanitation for health and hygiene within the most densely populated camps in the world continue to be the challenges. Sustaining the measures to address public health emergencies in the camps is urgent. Hence, the proposed scope of the project remains emergency assistance.

2. **Response to COVID-19 pandemic.** On 14 May 2020, the first case of COVID-19 was detected in the camps. As of 8 May 2022, 5,929 persons have tested positive, and 42 deaths have been reported in the camps. Recognizing the threat of the pandemic to the population in the camps, the government quickly included the displaced persons in its national deployment and vaccination plan. The vaccination campaign, targeting 389,369 displaced persons aged 18 years and above, was rolled out in two phases: phase 1 during August 2021–September 2021 and phase 2 during December 2021–February 2022. Of the target, 342,377 (88%) have received the first dose and 280,334 (72%) have received the second dose. However, the risk of COVID-19 in the camps continues to remain high. Some 194,091 families live in 33 extremely congested camps, with four to six members living in a single room—making physical distancing and self-isolation a challenge. Hence, urgent action is needed to address the risk of overcrowding; lack of access to clean water, sanitation, and hygiene; and the facilities for public health services in the camps that are not covered under the ongoing project.

3. **Request for emergency assistance.** The scope of the ongoing project identified in 2018 for Asian Development Bank (ADB) assistance was estimated at \$200 million. This includes basic and urgent needs for water supply and sanitation, disaster risk management, energy sources, and access road improvement. However, due to grant funding constraints, ADB approved phase 1 for \$100 million on 6 July 2018 from its Asian Development Fund (ADF), with the possibility of additional grant financing of up to \$100 million for the second phase (phase 2), subject to the

¹ The figure includes more than 115,000 babies born since the influx, but it does not include 35,519 previously registered displaced persons from Myanmar sheltering in Kutupalong and Nayapara registered camps. As of 31 March 2022, 926,561 displaced persons are registered, more than 75% of whom are women, girls, and children.

progress of the first phase, an assessment of needs, and the availability of additional grant funds.² Among the identified needs, the unfunded needs for water supply and sanitation, disaster risk management, and access roads remain high priorities for the living conditions of the displaced persons in the camps. Further, the government has requested ADB to provide grant funding for the COVID-19 response, which includes support for strengthening emergency operations centers, bolstering diagnostic capabilities, training health workers on case detection and management, and improving the clinical management and health care services.

4. **Progress of the ongoing project.** Phase 1 was signed on 9 August 2018 and declared effective on 1 October 2018. It has helped improve the safety of the camps; and provided clean drinking water, community bathing facilities, solar streetlights, multipurpose cyclone shelters, food distribution centers, better roads, drainage, bridges, walkways, and hill retention. Women and vulnerable people have benefited from the ongoing project.³ As of 18 May 2022, physical progress is more than 95%. The project implementation involved 50 packages for civil works, goods, and consulting services. All procurement packages were awarded by 31 December 2020. The contract amount has reached \$99.28 million (99.3%) of the grant amount, while disbursement has reached \$86.31 million (86.3%). COVID-19 adversely affected the implementation, so the grant closing date was extended to 5 January 2023. Safeguard policy requirements have been complied with by selecting the subprojects without significant adverse environmental and social impacts, following the selection criteria developed for the ongoing project. The project has successfully managed the identified risks. The project performance rating remained *on track* for the project implementation period.⁴

5. **Assessment of needs.** The funding requirement under the 2021 JRP prepared by the Inter Sector Coordination Group (ISCG), including the COVID-19 response in the camps, was \$943.10 million.⁵ At the end of the 2021 JRP cycle (January–December 2021), only \$678.6 million (71.9%) of the 2021 JRP funding needs had been met. By major cluster, the funding fell far short of needs—only \$42.10 million (31.2%) for health facilities, \$11.08 million (9.9%) for disaster risk management, and \$25.48 million (23.2%) for water supply and sanitation were met. The funding gaps of these items remain high.⁶ The ISCG’s Joint Multi-Sector Needs Assessment in 2020 indicated that about 88% of people in the camps have access to clean drinking water, but many wells are facing groundwater drawdown; only 62% have access to bathing facilities at home and 31% use community bathing facilities; and just 42% of households have adequate lighting.⁷ As the JRP is prepared for humanitarian response, the government requested ADB and the World Bank for grant funding to meet the urgent basic needs for infrastructure and services.

² The report and recommendation of the President (footnote 1) provides that “Given the urgent need to provide basic infrastructure services to the displaced persons, ADB proposes grant financing of \$100 million for investments that will help with the immediate needs of the displaced persons, with the possibility of additional financing of up to \$100 million in a second phase. The scope and timing of the second phase of support would be subject to the progress of the first phase, an assessment of needs, and the availability of additional grant funds, among other factors” (para. 13).

³ Women and girls benefitted from better safety and security through the provision of streetlights and nano-grids, and better health and hygiene facilities through community bathing facilities and clean water supplies. Women also gained income from labor employment (13% women employed) and other income-generating activities in the camps.

⁴ Details are in Summary of Project Performance (accessible from the list of linked documents in [Appendix 2](#)).

⁵ UN Office for the Coordination of Humanitarian Affairs. Financial Tracking Service. [Bangladesh: 2020 Joint Response Plan for Rohingya Humanitarian Crisis \(January–December\)](#).

⁶ The 2022 JRP was launched on 29 March 2022. Including Bhasan Char (\$99.71 million), the funding needed is \$881 million. However, only 0.9% of the 2022 JRP needs have been met as of 3 April 2022. UN Office for the Coordination of Humanitarian Affairs. Financial Tracking Service. [Bangladesh: Rohingya Refugee Crisis Joint Response Plan 2022](#).

⁷ ISCG, *Joint Multi-Sector Needs Assessment (J-MSNA): Bangladesh Rohingya Refugees - May 2021*. https://reliefweb.int/sites/reliefweb.int/files/resources/2021_05_iscg_msna_2020_report_refugee_english.pdf

6. **Request for additional grant.** The government requested (footnote 11) ADB to provide the remaining \$100 million in grant funding for phase 2 of the ongoing project. However, based on the immediate available grant fund, the proposed additional grant is limited to \$41.40 million. This amount comprises \$37.00 million to be sought from the Expanded Disaster and Pandemic Response Facility (DRF+) and \$4.40 million from ADF savings and cancellations. Including the proposed additional financing, the ADB grant funding for the overall project will total \$141.40 million.

7. **Request for a concessional loan.** The rehabilitation of 80.76 kilometers (km) of road from Cox's Bazar to Teknaf was one of the major components of the original needs assessment. Only a 50.00 km section of the road—from Cox's Bazar to Unchiprang (where the main Kutupalong camp is located)—was rehabilitated under the ongoing project. The remaining Unchiprang–Teknaf section (30.76 km) could not be included in phase 2 because of grant funding constraints. As the Cox's Bazar–Teknaf road is the main artery connecting the camps and Teknaf, its rehabilitation is urgent. The government has requested a \$30 million concessional ordinary capital resources (OCR) loan for rehabilitation of this section.

B. Impact, Outcome, and Outputs

8. The project is aligned with the following impact: social recovery of displaced persons in Teknaf and Ukhiya camps accelerated (unchanged). The project will have the following outcome: living and health conditions, safety, and resilience of displaced persons improved (revised).⁸ It will benefit about 1,210,000 people in the camps and the affected host communities.

9. The scope of the overall project will be expanded to COVID-19 response in the camps and urgent remaining gaps in infrastructure and associated services—as indicated in the 2018 assessment—for water supply and sanitation that will help contain COVID-19; disaster risk management; and access roads in the camps and affected host communities. The project outputs and activities are summarized below.

i. Grant Part

- (i) **Output 1: Water supply and sanitation, and coronavirus disease response.** The project will support the improvement of infrastructure and services to meet the basic human needs of clean water supply and sanitation that build community resilience against COVID-19, including (i) 200 water, sanitation, and hygiene facilities, integrated with solar-powered running water supply; (ii) 100 existing community bathing facilities, improved with solar power⁹ and running water; (iii) three solid waste management facilities, and the cost overrun of two ongoing contracts under phase 1 (para 2 and footnote 10); and (iv) a surface water based piped water supply system at Ukhiya. For the COVID-19 response, the project will support (i) one severe acute respiratory infection isolation and treatment center (SARI-ITC) operations in Teknaf, enhanced by the construction of a multipurpose disaster-resilient isolation and cyclone center equipped with a 200-bed segregated space for women patients; (ii) six primary health care centers and/or diagnostic centers upgraded or expanded in Teknaf;¹⁰ (iii) 1,000 sets of gender-responsive personal protective equipment procured and distributed to women and girls;

⁸ The revised design and monitoring framework is in Appendix 1.

⁹ The extent of the solar component is only about 0.15% of the total project cost and the solar component is deemed a minor and noncore category.

¹⁰ The six primary health care centers comprise two basic emergency obstetric and newborn care health facilities at Ukhiya and Teknaf *upazila* (sub-district) and four primary health care centers.

(iv) operations and logistics support and expansion of the diagnostic facility of four health care centers on diagnosis, infection prevention and control, and surveillance at points of entries; (v) improving skills in diagnosis, infection prevention and control, and surveillance of at least 250 health care workers (including 30% women) in Cox's Bazar District; and (vi) upgrading three health care facilities for SARI-ITCs with 200 beds.¹¹ The project will also support the construction of two semipermanent community centers led by women. These centers will train women and girls in the camps on health and hygiene, including the COVID-19 response, and provide shelter to victims of domestic violence. COVID-19 response activities will be implemented in partnership with UN agencies.

- (ii) **Output 2: Disaster risk management strengthened.** The camps and surrounding areas are highly vulnerable to seasonal cyclones, monsoon flooding, landslides, and lightning strikes. The local roads connecting to strategic facilities are poor and vulnerable to such climate disasters. The additional financing will strengthen the disaster risk mitigation by (i) constructing six school-cum-cyclone shelters in local primary schools, and (ii) upgrading 12.7 km of rural access roads leading to the camp areas with climate change adaptation and climate induced disaster-resilient design.
- (iii) **Output 3: Energy sources provided.** This output has not changed under the project.

ii. Loan Part

- (iv) **Output 4: Access roads improved.** The project will rehabilitate a 30.76 km section of National Highway 1 (N1) from Unchiprang to Teknaf, including culverts and bridges, with climate change adaptation and climate disaster-resilient design. The dilapidated road is an artery for the supply of essential goods and the transport of host communities in Teknaf to Cox's Bazar. The road improvement is expected to halve the travel time, generating time savings of 1.5 hours. The construction and rehabilitation of the roads will accelerate the relief distribution, improve mobility in the camps and host communities, and facilitate the economic activities and income generation.

10. **Subprojects.** The subprojects for development and implementation under the additional will be selected in close coordination with the government and development partners, following the subprojects selection criteria having,

- i) Direct impact on the lives of people in camp;
- ii) Minimum land acquisition or on government land;
- iii) No duplication in funding from other donors;
- iv) Conforming to ADB's safeguards requirements;
- v) Projects outside critical habitats and protected areas;
- vi) Subject to prior review and approval by ADB.

Detailed subproject selection criteria and a list of indicative subprojects are in Appendix 1.

¹¹ The three health care facilities for SARI-ITCs are in Leda, camp 2W, and camp 20E.

II. IMPLEMENTATION PLANS

A. Project Readiness Activities

Table 1: Project Readiness Activities

Indicative Activities	2022 / Months					Responsible Agencies/Government
	March	April	May	June	July	
Advance contracting actions		X	X			LGED, DPHE, RHD
Retroactive financing actions					X	LGED, DPHE, RHD
Establish project implementation arrangements	X	X				LGED, DPHE, RHD
ADB Board approval				X		ADB
Grant / loan signing				X		ERD and ADB
Government legal opinion provided					X	ERD
Government budget inclusion				X		ERD
Grant / loan effectiveness					X	ERD and ADB

ADB = Asian Development Bank, DPHE = Department of Public Health Engineering, ERD = Economic Relations Division, RHD= Roads and Highway Department.
Source: Asian Development Bank.

B. Overall Project Implementation Plan.

The project will be implemented for 30 months, and the grant will close on 30 June 2025.

Table 2: Implementation Schedule

	Activities	2022			2023				2024				2025	
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
A	DMF													
Output 1:	Water Supply and Sanitation, and COVID-Response													
1	One surface water treatment plant construction in Ukhiya													
2	200 integrated WASH facilities with solar powered running water supply													
3	100 existing bathing facilities improved with solar power and running water													
4	Upgrade, and operation & management of 40 mini pipe water supply system													
5	Three integrated solid waste management facilities constructed													
6	One SARI-ITC operations, enhanced with construction of multipurpose disaster resilient isolation center with 200 beds segregated space for women													
7	Six primary health care/diagnostic centers upgraded or expanded in Teknaf													
8	Operational and logistics support and expansion of diagnostic facility of four selected health care centers on diagnosis, infection prevention and control													
9	Train at least 250 health care workers (30% women) in Cox's Bazar district;													
10	Upgrade three health care facilities for SARI-ITCs with 200 beds													
11	Construction of two semi-permanent women-led community centers													
Output 2:	Disaster Risk Management Strengthened													
1	Six school cum cyclone shelters constructed													
4	Ukhiya Daroga Bazar RHD–Moricha GC via Bhalukia Bazar-Patabari Road													
5	Coat Bazar RHD–Shaplapur GC Road via-Sonarpara GC Monkhalii Road													
Output 3:	Energy Access provided													
Output 4:	Access Roads Improved													
1	Unchiprang to Teknaf (30.7 km) including culverts and bridges													
2	Recruitment of construction supervision consultant													
B	Management Activities													
1	Procurement plan key activities to procure contract packages													
2	Consultant selection process													
3	Environment management plan key activities													
4	Gender action plan key activities													
5	Communication strategy key activities													
6	Semi-annual and/or midterm review													
7	Project completion report													
Legend:														
	Procurement activities													
	Implementation + O&M													

DMF = design and monitoring framework.

Source: Asian Development Bank.

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations: Roles and Responsibilities

Table 3: Project Implementation Organizations: Roles and Responsibilities

Project Implementation Organizations	Management Roles and Responsibilities
Ministry of Finance, Economic Relations Division	<ul style="list-style-type: none"> • Will enter into the grant and loan agreements with ADB • Oversight the DPP and RDPP approval process • Participate in quarterly project progress review meetings • Coordination with other line ministries as needed
<p>Executing / Implementing agencies</p> <p>1) Department of Public Health Engineering (DPHE); Local Government Division; Ministry of Local Government, Rural Development and Co-operatives [Output 1]</p> <p>2) Local Government Engineering Department (LGED); Local Government Division; Ministry of Local Government, Rural Development, and co-operatives [Outputs 1 and 2]</p> <p>3) Roads and Highway Department (RHD); Road Transport and Highways Division; Ministry of Road Transport and Bridges [Output 4]</p>	<ul style="list-style-type: none"> • Continue with project management unit (PMU) headed by a project director with provision of procurement staff. • Provide operational support and budget for project activities and PMU's activities. • Higher level coordination with government and partner agencies for successful implementation of the project. • Safeguards implementation. • Monitoring and evaluation of project activities and outputs including periodic review. • Dissemination of project activities and outputs. • Quality assurance of project outputs. • Provide progress reports to the coordination committee. • Provide quarterly project progress, annual audit reports and others as required. • Operation and maintenance of advance accounts. • Preparation and submission of withdrawal applications. • Maintenance of appropriate supporting documents. • Undertake day-to-day implementation activities. • Supervise the project management and construction supervision consultants, and safeguards consultants. • Prepare bid documents, manage the bidding process, submit to ADB for required clearances. • Implement the project design, procurement, and safeguards implementation activities.
Office of Refugees Relief and Repatriation Commissioner (RRRC)	<ul style="list-style-type: none"> • Acts as a nodal agency for coordination at project site. • Provides all necessary coordination among the stakeholders for smooth project implementation.
ADB	<ul style="list-style-type: none"> • Undertake regular project reviews and facilitate implementation of project including compliance by the executing/implementing agencies.

ADB = Asian Development Bank. RRRC = Refugees Relief and Repatriation Commission.

Source: Asian Development Bank.

B. Key Persons Involved in Implementation

Executing Agency

Local Government Engineering
Department, Ministry of Local
Government, Rural
Development and
Cooperatives (MLGRDC)

Officer's Name: Malay Kumar Chakraborty,
Position: Project Director
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Department of Public Health
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Roads and Highway
Department; Ministry of
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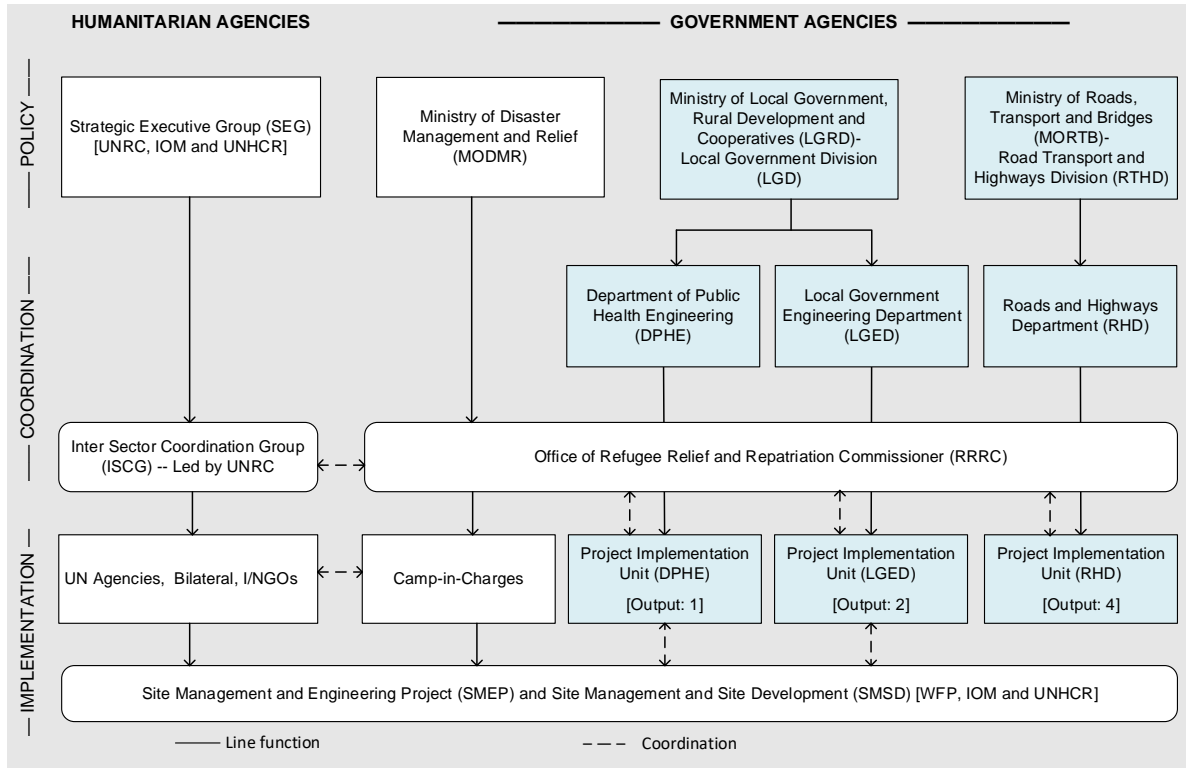
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C. Project Organization Structure (Additional Financing)

Figure 1: Project Organization Structure



IV. COSTS AND FINANCING

11. The additional financing amounts to \$71.40 million, comprising \$41.40 million grant for water supply and sanitation, and COVID-9 response (Output 1), disaster risk management (Output 2) and \$30.00 million COL for access road improvement (Output 4).

12. The summary cost estimates of the grant, loan and total additional financing are presented in Table 4.a–4.c. Including the government counterpart the additional financing is estimated to cost \$83.89 million. The summary cost estimate and financing plans are presented for grant and loan, and for the total.

13. The grant part of the additional financing is estimated to cost \$49.27 million, including the government counterpart for taxes and duties, land acquisition and resettlement, and other support for project administration.

Table 4.a: Summary Cost Estimates [Grant]
(\$ million)

Item	Current Amount ^a	Additional Financing ^b	Total
A. Base Cost^c			
1. Water supply and sanitation, and COVID-19 Response			
a. Water supply and sanitation	42.31	21.34	63.65
b. COVID-19 response	-	15.99	15.99
2. Disaster risk management strengthened	20.94	8.63	29.57
3. Energy sources provided	7.85	-	7.85
4. Access roads improved	34.16	-	34.16
5. Project Management	1.45		1.45
Subtotal (A)	106.71	45.96	152.67
B. Contingencies^d	13.29	3.31	16.60
Total (A+B+C)	120.00	49.27	169.27

COVID-19 = coronavirus disease.

^a Refers to the original amount.

^b Includes taxes and duties of \$7.90 million which will be financed in cash contribution by the government. Such an amount does not represent an excessive share of the project cost.

^c In mid-2021 prices as of 20 December 2021.

^d Physical and price contingencies, and a provision for exchange rate fluctuation, are included.

Note: The cost estimate includes government contribution.

Source: Asian Development Bank.

14. The loan part of the project is estimated to cost \$34.62 million (Table 4.b) including the government counterpart for taxes and duties, land acquisition and resettlement, and other support for project administration, as applicable.

Table 4.b: Summary Cost Estimates [Loan]
(\$ million)

Item	Current Amount ^a	Additional Financing ^b	Total
A. Base Cost^c			
1. Access roads improved	-	22.76	22.76
2. Project Management (Recurrent Cost)	-	0.73	0.73
Subtotal (A)	-	23.49	23.49
B. Contingencies^d	-	10.48	10.48
C. Financing Charges During Implementation	-	0.65	0.65
Total (A+B+C)	-	34.62	34.62

COVID-19 = coronavirus disease.

^a Refers to the original amount.

^b Includes taxes and duties of \$3.89 million, which will be financed in cash contribution by the government. Such an amount does not represent an excessive share of the project cost.

^c In mid-2021 prices as of 20 December 2021.

^d Physical and price contingencies, and a provision for exchange rate fluctuation, are included. More contingencies are allowed to implement 3 additional bridges and making 4 lanes to 1.5 km in Teknaf Bazar.

Note. The cost estimate includes government contribution.

Source: Asian Development Bank Source: Asian Development Bank.

15. ADB will finance up to 100% of eligible expenditures for civil works, supply of goods and equipment, consulting services, exclusive of taxes and duties imposed within the territory of Borrower. The government will finance the land acquisition, taxes and duties, recurrent costs, environmental and social mitigation, project management, and remuneration of counterpart staff. The summary cost estimate of Phase 2 is in Table 4.c.

Table 4.c: Summary Cost Estimates [Phase 2]
(\$ million)

Item	Current Amount ^a	Additional Financing ^b	Total
A. Base Cost^c			
1. Water supply and sanitation, and COVID-19 response			
a. Water supply and sanitation	42.31	21.34	63.65
b. COVID-19 response	-	15.99	15.99
2. Disaster risk management strengthened	20.94	8.63	29.57
3. Energy sources provided	7.85	-	7.85
4. Access roads improved	34.16	22.76	56.92
5. Project Management	1.45	0.73	2.18
Subtotal (A)	106.71	69.45	176.16
B. Contingencies^d	13.29	13.79	27.08
C. Financing Charges During Implementation	0.00	0.65	0.65
Total (A+B+C)	120.00	83.89	203.89

COVID-19 = coronavirus disease.

^a Refers to the original amount.

^b Includes taxes and duties of \$11.79 million (Grant part- \$7.90 million and Loan part- \$3.89 million) which will be financed in cash contribution by the government. Such an amount does not represent an excessive share of the project cost.

^c In mid-2021 prices as of 20 December 2021.

^d Physical and price contingencies, and a provision for exchange rate fluctuation, are included. More contingencies are allowed to implement 3 additional bridges and making 4 lanes to 1.5 km in Teknaf Bazar.

^e COL part will incur interest during construction.

Note. The cost estimate includes government contribution.

Source: Asian Development Bank.

16. The summary of financing plans for additional financing – for grant, loan, and the total, including the ongoing project are in Table 5.a–5.c.

Table 5.a: Summary Financing Plan [Grant]
(\$ million)

Source	Current ^a		Additional Financing		Total	
	Amount (\$ million)	Share of Total (%)	Amount (\$ million)	Share of Total (%)	Amount (\$ million)	Share of Total (%)
Asian Development Bank						
Special Funds resources (ADF Grant)	100.00	83.30	41.40	84.03	141.40	83.54
Government	20.00	16.70	7.87	15.97	27.87	16.46
Total	120.0	100.0	49.27	100.00	169.27	100.00

ADF = Asian Development Fund.

^a Refers to the original amount.

Source: Asian Development Bank.

Table 5.b: Summary Financing Plan (Loan)
(\$ million)

Source	Current		Additional Financing		Total	
	Amount (\$ million)	Share of Total (%)	Amount (\$ million)	Share of Total (%)	Amount (\$ million)	Share of Total (%)
Asian Development Bank						
OCR (Concessional Loan)	-	-	30.00	86.66	30.00	86.66
Government	-	-	4.62	13.34	4.62	13.34
Total	-	-	34.62	100.00	34.62	100.00

OCR = ordinal capital resources.

Source: Asian Development Bank.

Table 5.c: Summary Financing Plan [Phase 2]
(\$ million)

Source	Current ^a		Additional Financing		Total	
	Amount (\$ million)	Share of Total (%)	Amount (\$ million)	Share of Total (%)	Amount (\$ million)	Share of Total (%)
Asian Development Bank						
Special Funds Resources (ADF Grant)	100.00	83.33%	41.40	49.35%	141.40	69.35
OCR (Concessional Loan)	-	-	30.00	35.76%	30.00	14.71
Government	20.00	16.67%	12.49	14.89%	32.49	15.94
Total	120.00	100.00%	83.89	100.00%	203.89	100.00

ADF = Asian Development Fund. OCR = ordinal capital resources.

^a Refers to the original amount.

Source: Asian Development Bank

A. Cost Estimates Preparation and Revisions

17. For all three outputs, cost estimates were provided by the respective executing and implementing agencies. The cost estimates are taken based on the costs of similar projects executed in the recent past and the ongoing government's approved scheduled rates. The government's development project proformas (DPPs) for all three components have been prepared by the respective executing/implementing agencies. The executing agencies may make the revision of the DPP (R-DPP) using the updated cost estimates if any changes in the cost estimates are arisen due to the changes in the project scope or other unforeseen reasons during the project implementation.

B. Key Assumptions

18. The following key assumptions underpin the cost estimates and financing plan:
- (i) Exchange rate: Tk85.80 = \$1.00 (as of 20 December 2021).
 - (ii) Price contingencies based on expected cumulative inflation over the implementation period are as follows (Table 6):

Table 6: Escalation Rates for Price Contingency Calculation

Item	2021	2022	2023	2024	2025	Average
Foreign price inflation adjustment factor	0.8%	2.46%	4.21%	6.03%	7.94%	5.16%
Domestic price inflation adjustment factor	2.80%	8.72%	15.13%	21.80%	28.75%	18.60%

Source(s): Asian Development bank

- (iii) In-kind contributions are not considered. However, any such contribution will be calculated based on the requirement and details as outlined in the DPP.

C. Detailed Cost Estimate by Expenditure for additional financing

**Table 7.a: Cost Estimates by Expenditure Category [Grant]
(\$ million)**

Item	Foreign exchange	Local Currency	Total	% of Total Base Cost
A. Investment Cost				
Civil Works	-	33.44	33.44	72.75%
Non-Consulting Services	7.18	1.22	8.40	17.04%
Consulting Services	-	4.12	4.12	8.96%
Sub-total (A)	7.18	38.78	45.96	100.00%
B. Recurrent Costs				
Project Management	-	-	-	-
Sub-total (B)	-	-	-	-
Total Base Cost (A+B)	7.18	38.78	45.96	100.00%
C. Contingencies				
Physical	-	2.01	2.01	4.37%
Price	-	1.30	1.30	2.82%
Subtotal (C)	-	3.31	3.31	7.20%
Total Project Cost (A + B + C)	7.18	42.09	49.27	107.20%

Base cost includes taxes and duties of \$7.94 million; Tk = Bangladesh Taka

Note: Numbers may not sum precisely because of rounding.

Sources: Asian Development Bank and executing agencies' estimate.

**Table 7.b: Cost Estimates by Expenditure Category [Loan]
(\$ million)**

Item	Foreign exchange	Local Currency	Total	% of Total Base Cost
A. Investment Cost				
Civil Works	-	22.18	22.18	94.42%
Consulting Services	-	0.58	0.58	2.46%
Sub-total (A)	-	22.76	22.76	96.89%
B. Recurrent Costs				
Project Management	-	0.73	0.73	3.10%
Sub-total (B)	-	0.73	0.73	3.10%
Total Base Cost (A+B)	-	23.49	23.49	100.00%
C. Contingencies				
Physical	-	8.09	8.09	34.44%
Price	-	2.39	2.39	10.17%
Subtotal (C)	-	10.48	10.48	44.66%
D. Financial Charges During Implementation	0.65	0.00	0.65	2.76%
Total Project Cost (A + B + C + D)	0.65	33.97	34.62	147.38%

Base cost includes taxes and duties of \$3.89 million; Tk = Bangladesh Taka

Note: Numbers may not sum precisely because of rounding

Sources: Asian Development Bank and executing agencies' estimate

**Table 7.c: Cost Estimates by Expenditure Category [Phase 2]
(\$ million)**

Item	Foreign exchange	Local Currency	Total	% of Total Base Cost
A. Investment Cost				
Civil Works ^a	-	55.62	55.62	80.10%
Non-Consulting Services	7.18	1.22	8.40	12.09%
Consulting Services	-	4.70	4.70	6.77%
Sub-total (A)	-	61.54	68.72	98.95%
B. Recurrent Costs				
Project Management	-	0.73	0.73	1.05%
Sub-total (B)	-	0.73	0.73	1.05%
Total Base Cost (A+B)	-	62.27	69.45	100.00%
C. Contingencies				
Physical	-	10.10	10.10	14.54%
Price	-	3.69	3.69	5.31%
Subtotal (C)	-	13.79	13.79	19.85%
D. Financial Charges During Implementation	0.65	-	0.65	0.94%
Total Project Cost (A + B + C + D)	7.83	76.06	83.89	120.79%

Base cost includes taxes and duties of \$11.79 million (Grant part- \$7.90 million and Loan part- \$3.89 million).

Tk = Bangladesh Taka

Note: Numbers may not sum precisely because of rounding.

^a Include cost of climate adaptation of \$15.80 million and mitigation \$5.38 million.

Sources: Asian Development Bank and executing agencies' estimate.

D. Allocation and Withdrawal of Grant and Loan Proceeds

Table 8: Allocation and Withdrawal of Grant Proceeds

Category		Amount (\$)	Basis
1	Civil Works	28,590,000	100% of total expenditure claimed*
2	Non-Consulting Services	7,180,000	100% of total expenditure claimed*
3	Consulting Services	3,110,000	100% of total expenditure claimed*
4	Unallocated ^a	2,520,000	
	Total	41,400,000	

*Exclusive of taxes and duties imposed within the territory of the Borrower.

^a Unallocated amount comprised of price and physical contingencies.

Table 9: Allocation and Withdrawal of Loan Proceeds

Category		Amount (\$)	Basis
1	Civil Works	18,960,000	100% of total expenditure claimed*
2	Consulting Services	440,000	100% of total expenditure claimed*
3	Interest charge	650,000	100% of amount due
4	Unallocated ^a	9,950,000	
	Total	30,000,000	

*Exclusive of taxes and duties imposed within the territory of the Borrower.

^a Unallocated amount comprised of price and physical contingencies.

E. Detailed Cost Estimate by Financier for the additional financing

Table 10.a: Cost Estimates by Financier [Grant]
(\$ million)

Item	ADB		GOB		Total {C = A+B}	Taxes and Duties
	Amount {A}	% of Cost Category {A/C}	Amount {B}	% of Cost Category {B/C}		
A. Investment Costs						
Civil Works	28.59	85.50%	4.85	14.50%	33.44	4.85
Non-Consulting Services	7.18	85.50%	1.22	14.50%	8.40	1.22
Consulting Services	3.11	75.50%	1.01	24.50%	4.12	1.01
Subtotal (A)	38.88	84.59%	7.08	15.40%	45.96	7.08
B. Recurrent Costs						
Subtotal (B)	-		-		-	
Total Base Cost (A+B)	38.88	84.60%	7.08	15.40%	45.96	7.08
C. Contingencies						
Physical	1.52	75.62%	0.50	24.87%	2.01	0.50
Price	0.99	75.00%	0.33	25.00%	1.31	0.33
Subtotal (C)	2.52	5.40%	0.83	1.80%	3.31	0.83
Total Project Cost (A + B + C)	41.40	84.03%	7.90	16.03%	49.27	7.90

ADB = Asian Development Bank; ADF = Asian Development Fund; GOB = Government of Bangladesh

Note: Numbers may not sum precisely because of rounding.

Sources: Asian Development Bank and executing agencies' estimate.

Table 10.b: Cost Estimates by Financier [Loan]
(\$ million)

Item	ADB		GOB		Total {C = A+B}	Taxes and Duties	
	Amount {A}	% of Cost Category {A/C}	Amount {B}	% of Cost Category {B/C}			
A. Investment Costs							
Civil Works	18.96	85.50%	3.22	14.50%	22.18	64.08%	3.22
Consulting Services	0.44	75.50%	0.14	24.50%	0.58	1.68%	0.14
Subtotal (A)	19.40		3.36		22.76	65.75%	3.36
B. Recurrent Costs							
Project Management	-	-	0.73	100.00%	0.73	2.11%	-
Subtotal (B)	0.00		0.73		0.73	2.11%	-
Total Base Cost (A+B)	19.40	82.60%	4.09	17.40%	23.49	67.86%	3.36
C. Contingencies							
Physical	7.75	96.50%	0.34	4.50%	8.09	23.36%	0.34
Price	2.20	92.00%	0.19	8.00%	2.39	6.90%	0.19
Subtotal (C)	9.95	11.00%	0.53	2.24%	10.48	30.27%	0.53
D. Financial Charges During Implementation	0.65	100.00%	0.00	0.00%	0.65	1.89%	-
Total Project Cost (A + B + C + D)	30.00	86.67%	4.62	13.33%	34.62	100.00%	3.89

ADB = Asian Development Bank; ADF = Asian Development Fund; GOB = Government of Bangladesh

Note: Numbers may not sum precisely because of rounding.

Sources: Asian Development Bank and executing agencies' estimate.

Table 10.c: Detailed Cost Estimates by Financier [Phase 2]
(\$ million)

	ADB		GOB					
	Grant		Loan		Amount {B}	% of Cost Category {B/C}	Total {A1+A2 +B = C}	Taxes and Duties {D}
	Amount {A1}	% of Cost Category {A1/C}	Amount {A2}	% of Cost Category {A2/C}				
A. Investment Costs								
1. Civil Works	28.59	51.40%	18.96	34.09%	8.07	14.51%	55.62	8.07
2. Non-Consulting Services	7.18	85.48%	-	-	1.22	14.52%	8.40	1.22
3. Consulting Services	3.11	66.17%	0.44	9.36%	1.15	24.47%	4.70	1.15
Subtotal (A)	38.88	56.58%	19.40	28.23%	10.44	15.19%	68.72	10.44
B. Recurrent Costs								
1. Project Management	-	-	-	-	0.73	100.00%	0.73	-
Subtotal (B)	-	-	-	-	0.73	100.00%	0.73	-
Total Base Cost (A+B)	38.88	55.98%	19.40	27.93%	11.17	16.08%	69.45	10.44
C. Contingencies								
1. Physical	1.53	15.36%	7.75	78.84%	0.81	5.80%	10.10	0.84
2. Price	0.99	25.13%	2.20	56.41%	0.51	18.50%	3.70	0.51
Subtotal (C)	2.52	18.14%	9.95	72.47%	1.32	9.90%	13.79	1.35
D. Financial Charges During Implementation	-	-	0.65	100.00%	-	-	0.65	-
Total Project Cost (A + B + C + D)	41.40	49.35%	30.00	35.76%	12.49	14.92%	83.89	11.79

ADB = Asian Development Bank; ADF = Asian Development Fund; GOB = Government of Bangladesh

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank.

F. Detailed Cost Estimates by Output and/or Component

Table 11: Detailed Cost Estimates by Output and/or Component
(\$ million)

Item	Total Cost	Grant				Loan	
		Output 1		Output 2	Output 4		
		Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category
A. Investment Cost							
1. Civil Works	55.62	24.81	44.61%	8.63	15.52%	22.18	39.88%
2. Non-Consulting Services	8.40	8.40	100.00%	-	0.00%	-	0.00%
3. Consulting Services	4.70	4.12	87.66%	-	0.00%	0.58	12.34%
Subtotal (A)	68.72	37.33	54.32%	8.63	12.56%	22.76	33.12%
B. Recurrent Costs							
1. Project Management	0.73	-	0.00%	-	0.00%	0.73	100.00%
Subtotal (B)	0.73	-	0.00%	-	0.00%	0.73	100.00%
Total Base Cost with Taxes (A+B)	69.45	37.33	53.75%	8.63	12.43%	23.49	33.82%
C. Contingencies							
1. Physical	10.10	1.63	16.14%	0.38	3.76%	8.09	80.10%
2. Price	3.69	1.05	28.53%	0.24	6.52%	2.39	64.95%
Subtotal (C)	13.79	2.68	19.45%	0.62	4.50%	10.48	76.05%
D. Financial Charges During Implementation	0.65	-	-	-	-	0.65	100.00%
Total Project Cost (A + B + C + D)	83.89	40.01	47.70%	9.25	11.03%	34.62	41.27%

ADB = Asian Development Bank; ADF = Asian Development Fund; GOB = Government of Bangladesh.

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank.

G. Detailed Cost Estimates of Additional Financing by Year

Table 12.a: Detailed Cost Estimates by Year [Grant]
(\$ million)

Item	Total	2022	2023	2024	2025
A. Investment Costs					
1. Civil Works	33.44	8.36	13.38	8.36	3.34
2. Non-Consulting Services	8.40	2.10	4.20	2.10	-
3. Consulting Services	4.12	1.03	1.65	1.03	0.41
Subtotal (A)	45.96	11.49	19.22	11.49	3.76
B. Recurrent Costs					
1. Project Management	-	-	-	-	-
Subtotal (B)	-	-	-	-	-
Total Base Cost (A+B)	45.96	11.49	19.22	11.49	3.76
C. Contingencies					
1. Physical	2.01	-	0.80	0.80	0.41
2. Price	1.30	-	0.52	0.52	0.26
Total Contingency	3.31	-	1.32	1.32	0.67
Total Project Cost (A + B + C)	49.27	11.49	20.54	12.81	4.43
% Total Project Cost	100.00%	23.32%	41.68%	26.00%	9.00%

ADB = Asian Development Bank; ADF = Asian Development Fund; GOB = Government of Bangladesh

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank.

Table 12.b: Detailed Cost Estimates by Year [Loan]
(\$ million)

Item	Total	2022	2023	2024	2025
A. Investment Costs					
1. Civil Works	22.18	5.55	8.87	5.55	2.22
2. Consulting Services	0.58	0.15	0.23	0.15	0.06
Subtotal (A)	22.76	5.69	9.10	5.69	2.28
B. Recurrent Costs					
1. Project Management	0.73	0.18	0.29	0.18	0.07
Subtotal (B)	0.73	0.18	0.29	0.18	0.07
Total Base Cost (A+B)	23.50	5.87	9.39	5.87	2.35
C. Contingencies					
1. Physical	8.09	-	3.24	3.24	1.62
2. Price	2.39	-	0.96	0.96	0.47
Total Contingency	10.48	-	4.20	4.20	2.09
D. Financial Charges During Implementation					
	0.65	0.16	0.26	0.16	0.07
Total Project Cost (A + B + C + D)	34.62	6.03	13.85	10.23	4.51
% Total Project Cost	100.0%	17.42%	40.0%	29.55%	13.03%

Source: Asian Development Bank.

Table 12.c: Detailed Cost Estimates by Year [Phase 2]
(\$ million)

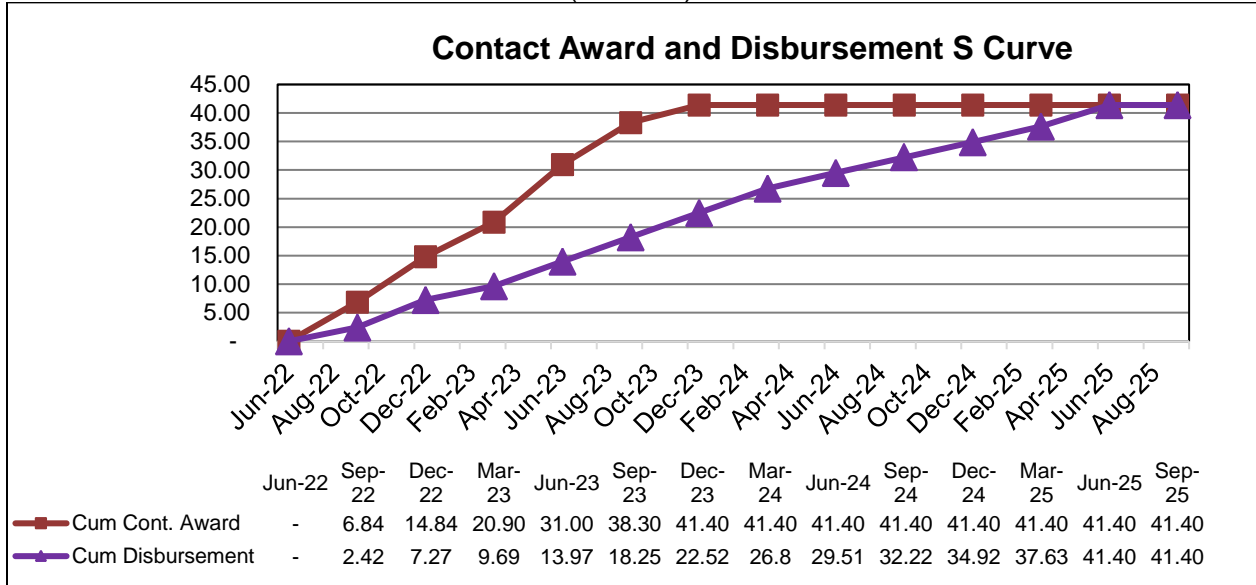
Item	Total	2022	2023	2024	2025
A. Investment Costs					
1. Civil Works	55.63	13.91	22.25	13.91	5.56
2. Non-Consulting Services	8.40	2.10	4.20	2.10	0
3. Consulting Services	4.71	1.18	1.88	1.18	0.47
Subtotal (A)	68.72	17.18	28.32	17.18	6.04
B. Recurrent Costs					
1. Project Management	0.72	0.18	0.29	0.18	0.07
Subtotal (B)	0.72	0.18	0.29	0.18	0.07
Total Base Cost (A+B)	69.45	17.36	28.62	17.36	6.11
C. Contingencies					
1. Physical	10.10	-	4.04	4.04	2.02
2. Price	3.69	-	1.48	1.48	0.73
Total Contingency	13.79	-	5.52	5.52	2.75
D. Financial Charges During Implementation	0.65	0.16	0.26	0.16	0.07
Total Project Cost (A + B + C + D)	83.89	17.52	34.40	23.04	8.93
% Total Project Cost	100.00%	20.88%	41.01%	27.46%	10.64%

ADB = Asian Development Bank; ADF = Asian Development Fund; GOB = Government of Bangladesh.
Source: Asian Development Bank.

H. Contract and Disbursement S-Curve

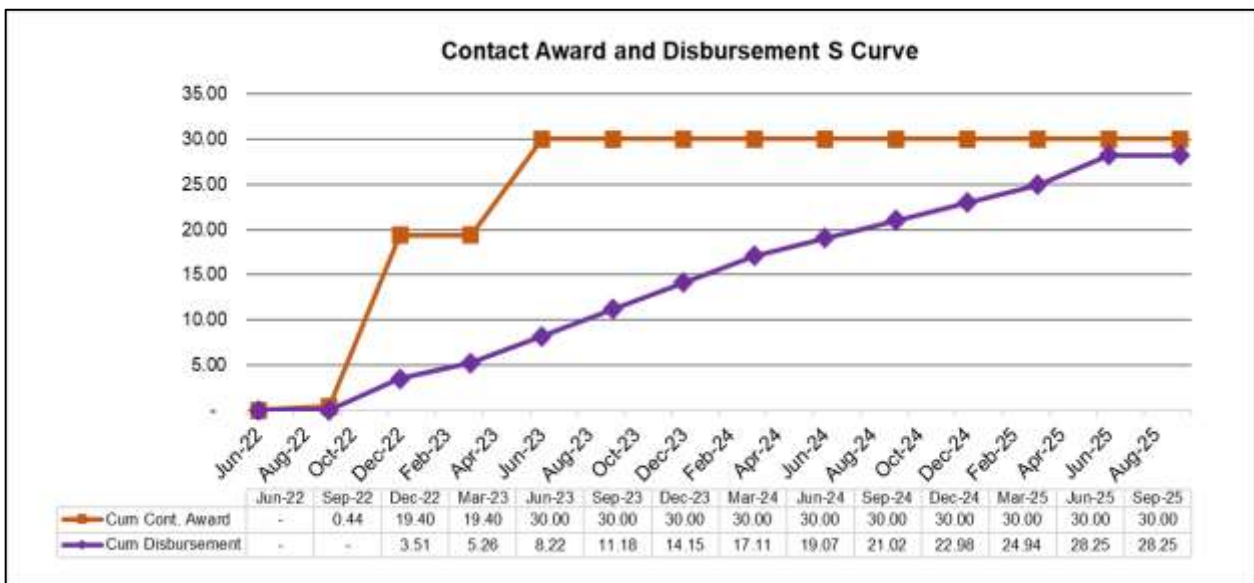
19. The projections for contract award and disbursement (S-curve) for the grant and loan are in Figure 2. These are for ADB portion of additional financing, that gets recorded in ADB's e-Ops.

Figure 2: Contract Award and Disbursement Projection [Grant]
(\$ million)



Source: Asian Development Bank.

Figure 3: Contract Award and Disbursement Projection [Loan]
(\$ million)

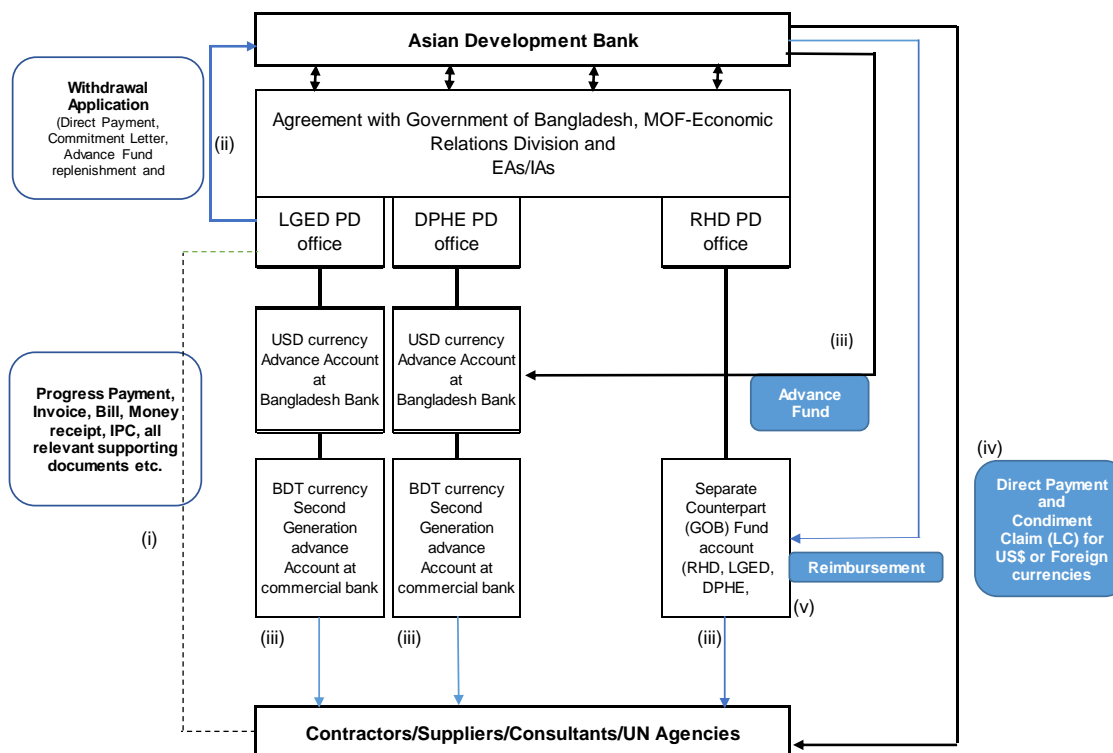


Source: Asian Development Bank.

I. Fund Flow Diagram

20. The project specific fund flow mechanism is presented in Figure 3. This illustrates the fund and document flow from ADB and to the government to implement project activities.

Figure 4: Funds Flow Diagram



LGED=Local Government Engineering Department, DPHE=Department of Public Health Engineering, RHD=Roads and Highways Department, MOF=Ministry of Finance, DP=Direct Payment, AF=Advance Fund, RPL=Replenishment, LIQ=Liquidation, CL=Commitment Letter, EA=Executive Agency, IA=Implementing Agency, LDH=Loan Disbursement Handbook.

(i) Contractors/Suppliers and Consultants submit Progress Payment, Invoice, Bill, IPC and all supporting documents.

(ii) EA/IA submit withdrawal application (DP, AF, RPL, LIQ and CL) with required supporting documents to ADB as per LDH.

(iii) **Advance Fund:** ADB disburse to Bangladesh Bank project imprest account of LGED and DPHE in USD. Then the equivalent BDT amount transfer to second generation advance account and the amount again transfer to district office sub-account. Districts authorised official pay to contractors, suppliers and consultants.

(iv) **Direct Payment and Condiment Claim (under CL):** ADB disburse directly to contractors/suppliers and consultants (Only USD and Foreign Currencies).

(v) **Reimbursement:** ADB disburse to Counterpart (GOB) account.

V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

21. An updated financial management assessment (FMA) for additional financing was conducted for three implementing agencies (IAs) in accordance with *ADB's Guidelines for Financial Management and Analysis of Projects*¹² and *Financial Due Diligence: A Methodology Note*.¹³ The FMA considered the capacity of three IAs to be responsible for implementing the additional financing project: (i) DPHE, (ii) LGED and (iii) RHD. The updated assessment has reviewed the funds-flow arrangements, staffing, budgeting, accounting and financial reporting systems, financial information systems, and internal and external auditing arrangements. The purpose of this updated FMA is to ensure that adequate financial management arrangements are in place for the proposed projects. The FMA draws on lessons learnt during the implementation of past and existing projects, various sector governance assessments, interviews with EA/IA's PMU/PIUs and other relevant government staff.

22. Financial performance of EAP is rated as 'on track' as all IAs have complied with the requirement to submit APFS for their respective project components. The additional financing for EAP will have similar project outputs as for the Phase 1 of the project, with two exceptions: (i) output 3 for energy sources will be dropped, and (ii) Output 1 will have additional scope for supporting public health services and COVID-19 disease management. Several UN agencies will be contracted by DPHE for carrying out activities identified under Output 1- for COVID-19 response. UN agencies will receive an advance payment and submit reports, as required, to liquidate the advance. All three EAs/IAs for the additional financing of the project have established accounting, reporting, and budgeting procedures in place in line with government regulations and have experience in implementing ongoing ADB funded projects.

23. The FMA update concluded that the overall pre-mitigation financial management risk of implementing agencies remains "**substantial**". Further strengthening of current arrangements is critical for effective support for the additional financing project. Risks relating to internal audit and reporting remained unchanged at 'substantial' for all the IAs and risk for information system was downgraded to '**moderate**' (from 'low'), because of manual records alongside the automated government system. These risks potentially contributed to the high number of audit observations and reconciliation issues noted in the recent APFSs (all audit observations have now been addressed by the IAs and reconciliations were completed during the fact-finding mission). Given that some risks have increased, and risks previously rated as substantial have not improved with the control measures in place, further measures will be introduced to improve the financial management arrangement of the project. In particular, a chartered accountant will be engaged to conduct internal audit of project transactions (see Appendix 7 for TOR) and an off the shelf accounting package will be installed in all the IAs, which will be financed by the TA for the project.

¹² ADB. 2005. *Financial Management and Analysis of Projects*. Manila

¹³ ADB. 2009. *Financial Due Diligence A Methodology Note*. Manila

24. Based on the assessment, the updated financial management risks are in Table 13.

Table 13: Financial management and internal control risk assessment

Risk	Risk Rating	Risk Description	Mitigation Measures or Action Plans	Update
<i>Inherent Risk</i>				
1. Country-specific Risks	S	Partly weak PFM systems and FM capacity.	ADB and other Development partners will continue dialogue with the GOB and provide support to enable the country to improve its PFM performance.	No change
2. Entity-specific Risks	S	Multiple entities are responsible for the execution and implementation of this project. The Governance structure and roles and responsibilities are not clearly delineated, which may lead to confusion and overlap.	A clear organizational structure will be prepared, and specific terms of reference will be developed for PMU/PIU staff and the design and supervision consultants.	Risk is revised to Moderate Phase 1 of the project has been progressing well with adequate staffing in the PMU/PIUs and the support of consultants.
Overall Inherent risk SUBSTANTIAL				
<i>Control Risk – LGED</i>				
1. Implementing Entity	M	LGED has a good track record in implementing ADB funded projects but there may be delays in establishing and staffing the PMU.	A PMU/PIU with adequate staff will be established by grant signing.	No change PMU has adequate staffing in place.

Risk	Risk Rating	Risk Description	Mitigation Measures or Action Plans	Update
2. Fund Flow	S	<p>(i) The government's counterpart financing may not be released on time which may cause delays in project implementation.</p> <p>(ii) ADB advance fund might be used for unintended purposes at the field level.</p>	<p>(i) Firm commitment from the MOF for the timely release of counterpart part fund will reduce the risk of allocation and delayed release of funds. Direct Payment mechanism is to be used for major foreign component payments for contractors and suppliers for ADB share.</p> <p>(ii) LGED will give assurance that ADB funds will be separately administered and maintained from counterpart funds.</p> <p>(iii) ADB reserves the right to randomly audit all project subaccounts.</p> <p>(iv) Subaccounts are subject to external audit by FAPAD and project internal audits.</p>	<p>Risk is revised to Moderate</p> <p>Budget for the project is under preparation and expected to be approved 30 June 2022.</p> <p>All other mitigation measures have been implemented by LGED and continue to be in place.</p>
3. Staffing	S	Competent finance and accounting staff dedicated to the project might not be assigned on time and lack of experience with ADB's systems and procedures among new staff.	Government commitment and budget allocation for dedicated accounting staff in PMU and PIU with prior experience in ADB projects.	<p>Risk is revised to Moderate</p> <p>Accounting staff assigned to the PMU and continue to support the project.</p>
4. Accounting Policies and Procedures	M	Lack of well documented policies and procedures for the project.	Existing GOB policies and procedures are followed. The specific accounting/reporting procedures for the project will be established with support from FM experts under TA.	<p>No change</p> <p>Whilst GOB policies are followed, a project specific accounting/reporting manual has not been finalized. This will be completed by February 2022.</p>
5. Internal Audit	S	LGED may not have sufficient resources to perform the internal audit function for this project.	<p>LGED will give assurance that adequate internal audit staff will be assigned to this project.</p> <p>Strengthen the internal audit function with the support of FM consultants.</p>	<p>No change</p> <p>Recommended to further strengthen through a CA firm to conduct internal audits for all IAs of the project.</p>

Risk	Risk Rating	Risk Description	Mitigation Measures or Action Plans	Update
6. External Audit	L	FAPAD may not provide an audit opinion on the use of funds. Long outstanding audit observations.	The LGED will liaise with FAPAD to ensure the project is part of FAPAD's annual audit plan and that ADB's audit requirements are strictly followed. The audit observations to be resolved in a timely manner. The status of audit observations to be included in QPRs. IAs need to ensure FAPAD audited report is submitted within 6 months of the fiscal year end.	Risk is revised to Moderate Timely submission of APFS with unqualified audit opinion was received. However, of the total six audit observations, 5 have been settled and 1 is unsettled (LGED has submitted information to FAPAD).
7. Reporting and Monitoring	S	The reporting system is in place at the respective implementing agency's level. However, a financial reporting arrangement will need to be set up for the project.	The financial reporting procedure and format to be developed with support from FM experts under the TA.	No change Reporting system to be further strengthened through off-the shelf software.
8. Information Systems	L	LGED is currently using an adequate IT system and the existing information systems to be supplemented with the use of ADB's disbursement systems to ensure the project financial reports are complete and accurate.	Use of ADB client portal for disbursement to submit and track WAs to ensure timely availability of funds. Use of LFIS to reconcile ADB disbursement records with project records on a quarterly basis to ensure all WAs have been correctly reflected in the PFS.	Risk is revised to Moderate Unreconciled amount of USD 0.6 million noted in the FY2020 APFS, which was reconciled during the fact-finding mission.
Overall Control Risk- LGED — SUBSTANTIAL				
Control Risk – DPHE				
1. Implementing Entity	M	DPHE has a good track record in implementing ADB funded projects but there may be delays in establishing and staffing the PMU.	A PMU/PIU with adequate staff will be established by grant signing.	No change PMU has adequate staffing in place.

Risk	Risk Rating	Risk Description	Mitigation Measures or Action Plans	Update
2. Fund Flow	S	<p>(i) The government's counterpart financing may not be released on time which may cause delays in project implementation.</p> <p>(ii) ADB advance fund might be used for unintended purposes at the field level.</p>	<p>(i) Firm commitment from the MOF for the timely release of counterpart part fund will reduce the risk of allocation and delayed release of funds. Direct Payment mechanism is to be used for major foreign component payments for contractors and suppliers for ADB share.</p> <p>(ii) DPHE will give assurance that ADB fund will be separately administered and maintained from counterpart fund.</p> <p>(iii) ADB reserves the right to randomly audit all project subaccounts.</p> <p>(iv) Subaccounts are subject to external audits by FAPAD and project internal audits.</p>	<p>Risk is revised to Moderate</p> <p>Budget for the project is under preparation and expected by to be approved 30 June 2022.</p> <p>All other mitigation measures have been implemented by DPHE and continue to be in place.</p>
3. Staffing	S	Competent finance and accounting staff dedicated to the project might not be assigned on time and lack of experience with ADB's systems and procedures among new staff.	Government commitment and budget allocation for dedicated accounting staff in PMU and PIU with prior experience in ADB projects.	<p>Risk is revised to Moderate</p> <p>Accounting staff assigned to the PMU and continue to support the project.</p>
4. Accounting Policies and Procedures	M	Lack of well documented policies and procedures for the project.	GOB policies and procedures are followed. The specific accounting/reporting procedures for the project will be established with support from FM experts under TA.	<p>No change</p> <p>Whilst GOB policies are followed, a project specific accounting/reporting manual has not been finalized. This will be completed by June 2022.</p>
5. Internal Audit	H	DPHE has no internal audit division. An accountant from the Office of the Controller and Auditor General is posted on a part-time basis for internal audit.	<p>DPHE will give assurance that adequate internal audit staff will be assigned to this project.</p> <p>Strengthen the internal audit function with the support of FM consultants.</p>	<p>No change</p> <p>Recommended to further strengthen through a CA firm to conduct internal audits for all IAs of the project.</p>

Risk	Risk Rating	Risk Description	Mitigation Measures or Action Plans	Update
6. External Audit	L	FAPAD may not provide an audit opinion on the use of funds. Long outstanding audit observations.	The DPHE will liaise with FAPAD to ensure the project is part of FAPAD's annual audit plan and that ADB's audit requirements are strictly followed. The audit observations are to be resolved in a timely manner. The status of audit observations to be included in QPRs. IAs need to ensure FAPAD audited report is submitted within 6 months of the fiscal year end.	Risk is revised to Substantial FY2020 APFS for RHD contained a qualified opinion due to lack of vouchers to verify expenses. In addition, of the total 9 audit observations, 5 have not been settled, though DPHE has submitted information to FAPAD.
7. Reporting and Monitoring	S	The reporting system is in place at the respective implementing agency's level. However, a financial reporting arrangement will need to be set up for the project.	The financial reporting procedure and format to be developed with support from FM experts under the TA.	No change Reporting system to be further strengthened through off-the shelf software.
8. Information Systems	L	DPHE is currently using an adequate IT system and the existing information systems to be supplemented with the use of ADB's disbursement systems to ensure the project financial reports are complete and accurate.	Use of ADB client portal for disbursement to submit and track WAs to ensure timely availability of funds. Use of LFIS to reconcile ADB disbursement records with project records on a quarterly basis to ensure all WAs have been correctly reflected in the PFS.	Risk is revised to Moderate Unreconciled amount of USD 0.7 million noted in the FY2020 APFS, which was reconciled during the fact-finding mission.
Inventory and Asset Management	S	Asset management practices in the entities receiving equipment may be inadequate.	Entities receiving equipment under the project to maintain sound asset management practices including an asset register and conduct periodic inventories.	No change Mitigation measures continue to be in place.
Overall Control Risk- DPHE—SUBSTANTIAL				
Control Risk – RHD				
1. Implementing Entity	M	RHD has a good track record in implementing ADB funded projects but there may be delays in establishing and staffing the PMU.	A PMU/PIU with adequate staff will be established by grant signing.	No change PMU has adequate staffing in place.

Risk	Risk Rating	Risk Description	Mitigation Measures or Action Plans	Update
2. Fund Flow	M	(i) The government's counterpart financing may not be released on time which may cause delays in project implementation.	(i) Firm commitment from the MOF for the timely release of counterpart part fund will reduce the risk of allocation and delayed release of funds. Direct Payment mechanism is to be used for major foreign component payments for contractors and suppliers for ADB share. (ii) All expenditures are subject to external audits by FAPAD.	Risk is revised to Low Budget for the project is under preparation and expected to be approved 30 June 2022. All other mitigation measures have been implemented by RHD and continue to be in place.
3. Staffing	S	Competent finance and accounting staff dedicated to the project might not be assigned on time and lack of experience with ADB's systems and procedures among new staff.	Government commitment and budget allocation for dedicated accounting staff in PMU and PIU with prior experience in ADB projects.	Risk is revised to Moderate Accounting staff assigned to the PMU and continue to support the project.
4. Accounting Policies and Procedures	M	Lack of well documented policies and procedures for the project.	Existing GOB policies and procedures are followed. The specific accounting/ reporting procedures for the project will be established with support from FM experts under TA.	No change Whilst GOB policies are followed, a project specific accounting/reporting manual has not been finalized. This will be completed by February 2022.
5. Internal Audit	S	RHD has no internal audit division.	Pre-audit will be done by the accounts officer before making any payments in the PIU. Strengthen the internal audit function with the support of FM consultants.	No change Recommended to further strengthen through a CA firm to conduct internal audits for all IAs of the project.

Risk	Risk Rating	Risk Description	Mitigation Measures or Action Plans	Update
6. External Audit	L	FAPAD may not provide an audit opinion on the use of funds. Long outstanding audit observations.	The RHD will liaise with FAPAD to ensure the project is part of FAPAD's annual audit plan and that ADB's audit requirements are strictly followed. The audit observations to be resolved in a timely manner. The status of audit observations to be included in QPRs. IAs need to ensure FAPAD audited report is submitted within 6 months from the fiscal year end.	Risk is revised to Substantial FY2020 APFS for RHD contained a qualified opinion due outstanding advance amounts and unreconciled expenditures to ADB disbursement records. In addition, of the total 9 audit observations, only 1 has been settled whilst RHD has submitted information to FAPAD to settle the remaining 8.
7. Reporting and Monitoring	S	The reporting system is in place at the respective implementing agency's level. However, a financial reporting arrangement will need to be set up for the project.	The financial reporting procedure and format to be developed with support from FM experts under the TA.	No change Reporting system to be further strengthened through off-the shelf software.
8. Information Systems	M	Under the IBAS++ may only records, those payments carry out through the government treasury while advance fund and direct payments will have to be recorded manually and The existing information systems are to be supplemented with the use of ADB's disbursement systems to ensure the project financial reports are complete and accurate.	Use of ADB client portal for disbursement to submit and track WAs to ensure timely availability of funds. Use of LFIS to reconcile ADB disbursement records with project records on a quarterly basis to ensure all WAs have been correctly reflected in the PFS.	Risk is revised to Substantial Unreconciled amount of USD 5.3 million noted in the FY2020 APFS, which was reconciled during the fact-finding mission.
Overall Control Risk- RHD—SUBSTANTIAL				
Overall Control Risk- ALL—SUBSTANTIAL				

H – High, S- Substantial, M – Moderate, L – Low.

25. To mitigate the risks identified in the FMA, following action plans are discussed and agreed with the government. Status of ongoing and outstanding actions must be reported in the Project Quarterly Progress Report, to be submitted to ADB within 45 days of the end of the quarter.

Table 14: Time-bound Action Plan

Area	Risk Mitigating Activity	Timeline	Entity	Status
Government counterpart fund	Grant assurance on timely release of counterpart funds (for tax and duties, land acquisition, resettlement costs and project management staff).	Grant agreement (by inception & continuous)	MOF /LGED/ DPHE/ RHD	Completed for phase 1 To be completed by June 2022 for phase 2
Capacity support	Training provided on ADB's FM requirements and disbursement procedures and systems (LFIS, CPD).	By inception & continuous throughout the project implementation.	ADB/ LGED/ DPHE/ RHD	Ongoing - consultant will continue training PMU/PIU staff.
Detailed FM capacity assessment	Each IAs will conduct a detailed FM capacity assessment based on findings on APFS including management letter as identified by FAPAD i.e., need to conduct a risk assessment with mitigation measures. Engage an FM consultant to prepare detailed mitigation plans with action plans to address the identified risk areas.	At the end of each fiscal year after getting APFS.	LGED/ DPHE/ RHD	Ongoing – consultant will assist IAs to implement adequate measures to address audit observations.
Accounting and reporting procedure	Develop an accounting manual with the support of TA FM consultant.	At the start of the project	LGED/ DPHE/ RHD	Not completed – to be completed by June 2022
Inventory and assets management systems	Entities receiving covid-19 equipment and kits under the project to maintain sound asset management practices including an asset register and conduct periodic inventories.	Continuous from grant effectiveness	DPHE	Ongoing
Internal audit	Assign an officer as a focal to develop an internal audit function at each IAs. Strengthen the IA's internal audit function with the assistance of FM consultant under TA i.e. (i) development of an internal audit TOR, (ii) establishment of a monitoring system for IA's management to track the status and aging of past audit observations, etc.	At the start of the project	LGED/DPHE /RHD	Engage a chartered accountancy firm to perform internal audit function for LGED/DPHE RHD. Internal audit report for LGED, DPHE and RHD to be submitted within 60 days after every six-month period, commencing in July 2022.
Financial Reporting	Include comprehensive financial information as agreed with ADB in the quarterly progress reports to be submitted to ADB. Prepare PFS in accordance with the ADB's requirements (including	Within 45 days after each quarter.	LGED/ DPHE/ RHD	Ongoing

Area	Risk Mitigating Activity	Timeline	Entity	Status
	statement of budget vs actual, WA-wise reconciliation and comprehensive notes disclosures) Engage an FM expert to develop a PFS format in accordance with ADB requirements.	Within 2 months after grant effectiveness.		
External Audit	Ensure the project is included in the audit plan of the FAPAD. Audited project financial statements (APFS) with management letter to be submitted by FAPAD separately to ADB within 6 months after the end of fiscal year in the format acceptable to ADB. Timely resolutions of all outstanding audit observations and other internal control issues from prior years to be resolved.	Annually throughout the project implementation. Timely BS replies to FAPAD and follow-up throughout the project implementation.	LGED/ DPHE/ RHD	Completed and will continue. However, timeliness in resolving unsettled observations needs to improve. For future APFSs, IAs should submit information to FAPAD to settle audit observations within four weeks of receipt of final audit report.
Information system	A unified web-based project monitoring and management information system (MIS) to be established by the PMU to monitor implementation, fund-flow, accounting, audit, and reporting functions. The TA consultant will provide support. Use of ADB disbursement systems (CPD and LFIS) to reconcile project accounts and ADB disbursement records on a quarterly basis. Detailed reconciliation by WA to be included in the QPRs and the APFS submitted to ADB.	At the start of the project. Quarterly from grant first disbursement throughout project implementation.	ADB/LGED/ DPHE/RHD LGED/DPHE /RHD	Tally software to be installed in LGED, DPHE and RHD by June 2022. Reconciliation to be performed with ADB disbursement records on a quarterly basis and reported in QPRs (see Appendix 6 for template).

H – High, S- Substantial, M – Moderate, L – Low.

26. With the implementation of mitigation measures, it is expected that the financial management capacity of EAs/IAs for the project will be adequate. It is also concluded that EAs/IAs have sufficient capacity to administer the advance fund and Statement of Expenditures (SOE) procedures under the proposed fund flow scheme.

B. Disbursement

i. Disbursement Arrangements for ADB Funds

27. The grant and loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time),¹⁴ and the detailed arrangements agreed upon between the government and ADB. Project staff are encouraged to avail themselves of this training to help ensure efficient disbursement and fiduciary control.

28. Reimbursement, advance fund, direct payment, and commitment procedures will be adopted in the disbursement of grant proceeds. Respective EAs/IAs will be responsible for the preparation and submission of withdrawal applications to ADB.

29. The direct payment will be made to the UN agencies under their contracts. Direct payment procedure will primarily apply to the payment of foreign currency expenditures.

30. **Advance fund procedure.** Separate advance accounts should be established and maintained by each IA. The currency of advance accounts will be US Dollar. LGED and DPHE will open separate USD currency advance accounts at Bangladesh Bank. Each IA will have a separate sub-account in local currency (Taka) at a commercial bank as approved by the Ministry of Finance. The advance account is to be used exclusively for ADB's share of eligible expenditures. The authorized signatory of the IAs will administer the advance account, also accountable and responsible for proper use of advances including the sub-accounts.

31. The total outstanding advance to all the advance account should not exceed the estimate of ADB's share of expenditures to be paid through the advance account for the forthcoming 6 months. The IAs may request for initial and additional advances to the advance account based on an Estimate of Expenditure Sheet¹⁵ setting out the estimated expenditures to be financed through the accounts for the forthcoming 6 months. Supporting documents should be submitted to ADB or retained by the IAs in accordance with *ADB's Loan Disbursement Handbook* (2017, as amended from time to time) when liquidating or replenishing the advance account.

32. **Statement of expenditure procedure.**¹⁶ The SOE procedure may be used for reimbursement of eligible expenditures or liquidation of advances to the advance account. The ceiling of the SOE procedure is equivalent to \$100,000 per individual payment. Supporting documents and records for the expenditures claimed under the SOE procedure should be maintained at the PMUs and made readily available for review by ADB, upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit. Reimbursement and liquidation for individual payments exceeding the SOE ceiling should be supported by full documentation when submitting the withdrawal application to ADB.

33. Before the submission of the first withdrawal application, the borrower should submit to ADB sufficient evidence of the authority of the persons who will sign the withdrawal applications on behalf of the borrower, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is stipulated in the *Loan Disbursement*

¹⁴ The handbook is available electronically from the ADB website at <http://www.adb.org/documents/loan-disbursement-handbook>

¹⁵ Estimate of Expenditure sheet is available in Appendix 8A of [ADB's Loan Disbursement Handbook \(2017, as amended from time to time\)](#),

¹⁶ SOE forms are available in Appendix 7B and 7D of [ADB's Loan Disbursement Handbook \(2017, as amended from time to time\)](#).

Handbook (2017, as amended from time to time). Individual payments below such amount should be paid (i) by the EAs/IAs and subsequently claimed to ADB through reimbursement, or (ii) through the advance fund procedure, unless otherwise accepted by ADB. The IAs should ensure sufficient category and contract balances before requesting disbursements or liquidations of advance account. For submission of withdrawal applications to ADB, ADB's Client Portal for Disbursements (CPD)¹⁷ system is mandatory.

ii. **Disbursement Arrangements for Counterpart Fund**

34. The government counterpart funds will be sufficiently allocated in the budget annually. Under the project, EAs/IAs will be responsible for preparing the disbursement projections and requesting for budgetary allocations for counterpart funds to the Ministry of Finance. EAs/IAs will submit to ADB annual contract awards and disbursement projections at least a month before the start of each calendar year.

C. Accounting

35. The IAs will maintain, or cause to maintain, separate books and records by funding source for all expenditures incurred on the project following the government's financial regulations. For the project, IAs will prepare the consolidated project financial statements in accordance with Bangladesh Financial Procedures and Accounting Procedures, which are consistent with International Accounting Standards (IAS).

D. Auditing and Public Disclosure

36. The EAs/IAs will cause the detailed project financial statements to be audited in accordance with International Standards on Auditing by an independent auditor acceptable to ADB. The audited project financial statements together with the auditor's opinion will be presented by the EAs/IAs in English language to ADB within 6 months from the end of each fiscal year. The EAs/IAs will ensure that total amount in the audited project financial statements will reconcile with ADB's disbursement amount during the respective fiscal year.

37. The audit report for the project financial statements will include a management letter and auditor's opinions, which cover (i) whether the project financial statements present an accurate and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting standards; (ii) whether the proceeds of the grant were used only for the purpose of the project; and (iii) whether the borrower or executing agency was in compliance with the financial covenants contained in the legal agreements.

38. Compliance with financial reporting and auditing requirements will be monitored by loan/grant review missions and during normal program supervision, and followed up regularly with all concerned, including the external auditor.

39. The government and EAs/IAs have been made aware of ADB's approach to delayed submission, and the requirements for satisfactory and acceptable quality of the audited project

¹⁷The CPD facilitates online submission of WA to ADB, resulting in faster disbursement. The forms to be completed by the Borrower are available online at <https://www.adb.org/documents/client-portal-disbursements-guide>.

financial statements.¹⁸ ADB reserves the right to require a change in the auditor (in a manner consistent with the constitution of the borrower), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

40. Public disclosure of the audited project financial statements, including the auditor's opinion on the project financial statements, will be guided by ADB's Access to Information Policy 2018.¹⁹ After the review, ADB will disclose the audited project financial statements and the opinion of the auditors on the project financial statements no later than 14 days of ADB's confirmation of their acceptability by posting them on ADB's website. The management letter, additional auditor's opinions, and audited entity financial statements will not be disclosed.²⁰

VI. PROCUREMENT AND CONSULTING SERVICES

41. Given the urgent project needs, procurement of goods, works, and consulting services will be carried out in a manner consistent with the simplified and expedient procedures under the ADB *Disaster and Emergency Assistance Policy* (2021) and ADB Procurement Policy and Procurement Regulations for ADB Borrowers (2017, as amended from time to time).

42. Procurement risk is "substantial" based on the project procurement risk assessments and strategic procurement planning carried out during the preparation of the project. The major risks include: (i) splitting of goods and works contract packages to keep them below internal review threshold; (ii) ghost bidders who win and resort to back-to-back subcontracting; (iii) delayed decision making within EAs and IAs; (iv) scope or price variation claims from contractor due to "unforeseeable" conditions; (v) significant environmental event (e.g. floods, cyclone, earthquake, tsunami) impacts project; and (vi) impacts of COVID-19 pandemic in the procurement processes and during contract implementation. A series of measures have been put in place to mitigate these risks.

43. Value for Money considerations have been incorporated in the project components design. It is important to introduce only the tested and successful methods in the project. Otherwise lack of familiarity with new approaches, untested in the country, would make it difficult for both EAs/IAs and Bidders and undermine procurement. The national electronic Government purchase (e-GP) system will be used. In the additional financing project, optimum value for money (VFM) will be achieved by engaging by direct contracting selected UN agencies to implement COVID-19

¹⁸ ADB's approach and procedures regarding delayed submission of audited project financial statements: 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 advance accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.

(i) When audited project financial statements are not received within 6 months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of advance 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.

(ii) When audited project financial statements are not received within 12 months after the due date, ADB may suspend the loan.

¹⁹ Access to Information Policy Sept. 2018: <https://www.adb.org/documents/access-information-policy>

²⁰ This type of information would generally fall under Access to Information Policy exceptions to disclosure. ADB. 2018. *Access to Information Policy*. Paragraphs 17(viii) and/or 17(xiii).

response; these UN agencies have been already working in the Cox's Bazar Project Area and have well established supply chain and logistics networks. UNICEF, UNFPA, WHO and IOM will be engaged. The resources, experience, and establishment of these UN agencies for COVID-19 response in the camps make their engagement more economical and effective. Their direct engagement will also ensure the compatibility of the results and quality of works. The Government will direct contract these four UN agencies to act as service providers, pursuant to their own procedures.²¹ The contracts of each of the UN agencies will be subject to ADB's prior review and concurrence. Due diligence and benchmarking for each of these UN agencies have been conducted by ADB and found acceptable.

44. As the procurement under this project is supporting the COVID-19 response which will be financed by grant proceeds, a waiver of the ADB member country eligibility restrictions have been applied and there shall be no member eligibility restrictions for the procurement of goods, works, non-consulting and consulting services using grant proceeds. On this basis, universal procurement shall apply to all procurement using the grant proceeds. This waiver does not apply to any procurement using the loan proceeds.

45. Keeping in mind the selection criteria for physical interventions, most of the civil works and goods contracts shall be awarded using open competitive bidding (OCB), national advertisement method. To ensure efficiency, special procedures for emergency lending will be used including (i) reducing the bidding period to 14 days, as appropriate; (ii) use of single stage-one envelope bidding procedures; (iii) developing a master bid document for each of the IA; and (iv) developing time bound action plan for each activity to contract award including contract management plan. Some civil works and goods contracts may be procured using limited competitive bidding (national advertisement) and direct contracting where appropriate, following procedures acceptable to ADB. Small and simple works and goods, up to \$100,000 may be procured using the International/National request for quotation (RFQ) method. Community participation is encouraged in the procurement of small works of simple nature. Subject to modifications of bidding documents to comply with ADB requirements, the national electronic Government Procurement (e-GP) system shall be used for OCB to award most civil and goods contracts. When using the electronic procurement system (www.eprocure.gov.bd), the IAs will use the standard bidding documents e-PW3-D and ePG3 agreed by ADB (<https://cptu.gov.bd/standard-documents/standard-tender-document.html>), using the open tendering method in the e-GP system for procurement of works and goods, respectively, manual bidding may be used, in some cases, as appropriate.

46. Consultants under the grant and loan shall be recruited in accordance with ADB Procurement Policy and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). Consulting firms shall be recruited through open competitive bidding procedures, local advertisement using Quality and Cost Based Selection (QCBS) method [quality: cost ratio of 80:20 or 90:10 as appropriate], simplified technical proposal or biodata technical proposal. Other selection methods like Consultants' Qualification based selection (CQS) may also be used,

²¹ These four UN agencies will be responsible for operations of SARI-ITC in Teknaf including the PPEs and consumables; operations of Basic Emergency Obstetric and Newborn Care (BEmONC) facilities at Ukhiya and Teknaf Upazilla health centers, and four Primary Health Care Centers, distribution of Hygiene kits to women and girls in camps, and operations of women lead community centers. These UN agencies will also be responsible for operational and logistics support to upgrade and modernize diagnostic facilities and laboratories in selected four health care facilities on case detection, surveillance and communication on infection prevention, control and points of entry, and training to at least 250 health workers; and operational support to three health care facilities for SARI-ITCs with a capacity up to 200 beds in and nearby the camps, including their regular operations and maintenance.

as appropriate. Individual consultants shall be recruited following competitive selection methods, international or local advertisement, based on project requirements. Consultants already engaged in the ongoing project and other ADB-financed projects providing similar services required may be recruited directly through single source selection, as appropriate, subject to the satisfactory performance of the consultant(s). This arrangement will provide an efficient way to recruit consultants under the emergency nature of the project. Some social and gender studies/support may be provided using local nongovernment organizations (NGOs). The option to have direct contracting NGO(s) and/or UN agency(ies) already engaged in the project area, may also be explored, as appropriate. The UN agencies will be contracted by the EA/IA using appropriate standard form(s) of agreement(s) designed for use by the government to contract the specific UN agency. Terms of reference, input and selection method shall be further reviewed and agreed upon with the IAs during inception mission.

47. To strengthen and sustain the institutional and technical capacities of the executing and implementing agencies, and for timely and efficient delivery of the outputs, in addition to the grant and loan, a piggyback Technical Assistance (TA) for Supporting Project Implementation of the Emergency Assistance Project shall continue funding the consulting services and monitoring and evaluation.²² All consultants under the TA shall be recruited in accordance with ADB Procurement Policy (2017, as amended from time to time) and associated PAIs/TA Staff Instructions.

48. All EA/IAs will be required to use Procurement Activity Monitoring Tool (PAMT),²³ a web-based database (www.bdpamt.org), to record and monitor time taken at each step of procurement process, track delays, if any, and take appropriate quick action, for all prior and post review packages of goods and works under the project.

A. Advance Contracting and Retroactive Financing

49. All advance contracting and retroactive financing will be undertaken in conformity with ADB Procurement Policy and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB's approval. The borrower, EAs/IAs have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the project.

50. **Advance contracting.** ADB allowed advance contracting for recruitment of consultants and procurement of goods, related services and civil works including inviting and receiving bids, evaluation of bids; and recruitment of consultants for contracts that might be approved for implementation prior to grant and loan effectiveness. The issuance of invitations to bid under advance contracting will be subject to ADB's approval.

51. **Retroactive financing.** Retroactive financing will be allowed for up to 30% of the grant and loan amount for eligible expenditures incurred under the project, provided that such expenditures have been incurred not earlier than 12 months before the date of signing of the grant/loan agreement.

²² The piggy-back transaction technical assistance, TA 9546 is estimated to cost \$4,000,000. On top of this, the government will provide in-kind counterpart equivalent to 3.33% of the TA amount. On 29 November 2021, the TA completion date has been extended by 18 months until 30 June 2023 and the TA is supplemented with \$1,000,000 from ADB's Technical Assistance Special Fund TASF-7. Originally, the TA for \$3,000,000 was financed by TASF-6.

²³ PAMT was developed by ADB Bangladesh Resident Mission and rolled-out in 2016 following successful pilot testing.

B. Procurement of Goods, Works, and Consulting Services

52. For works and goods contracts, two contracts of similar nature for each respective agency shall be prior reviewed by ADB and the rest shall be post reviewed (sampling). In the case of consulting services, all contracts shall be prior reviewed. In the case of consulting services, the terms of references (TOR) shall be developed before inviting the expression of interests (EOI). ADB shall review short-listing and draft request for proposal (RFP) before the issuance of RFP and proposal evaluation. The government may modify the detailed arrangements set forth in the procurement plan only with the prior agreement of ADB, and such modifications must be reflected in the updates to the procurement plan.

C. Procurement Plan

53. The initial procurement plan has been prepared indicating various packages with cost estimates, type of procurement method, bidding documents, bidding procedures and review requirements for goods, works, non-consulting services, and consulting services. It will be uploaded in Procurement Review System (PRS) and it will be updated as and when required. The changes may involve changes in the selection or procurement methods including the review requirements.

54. The initial procurement plan is detailed in Appendix 2.

55. **Regulation and Reference Documents.** Before the start of any procurement, ADB and the government will review the public procurement laws and regulations of the government to ensure consistency with ADB's Procurement Policy and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). The procedures to be followed for Open Competitive Bidding (OCB), national advertisement, for works and goods, shall be those set forth for the National Open Tendering Method in *The Public Procurement Rules, 2008* (as updated and pursuant to *The Public Procurement Act, 2006* issued by the Government of Bangladesh) with the clarifications and modifications described in the following paragraphs required for compliance with the provisions of the Procurement Regulations for ADB Borrowers (2017, as amended from time to time)

- a) **Eligibility.** The eligibility of bidders shall be as defined under Section-I "Introduction" of the Procurement Regulations; accordingly, no bidder or potential bidder should be declared ineligible for reasons other than those provided in Section-I of the Procurement Regulations, as amended from time to time.
- b) **Location of Bid Submission.** Submission of bids to 'primary' and 'secondary' locations, or 'multiple droppings' of bids, shall not be required or allowed. Advertisements and bidding documents shall specify only one location for delivery of bids.
- c) **Bid Price as Percentage of Estimate.** Bids shall not be rejected based on percentage above or below the estimated cost, and contract award shall be based on the lowest evaluated bid price of responsive bid from eligible and qualified bidder.
- d) **Lottery** - A lottery system shall not be used to determine a successful bidder, including for the purpose of resolving the deadlocks.
- e) **Rejection of All Bids and Rebidding.** Bids shall not be rejected, and new bids solicited without ADB's prior concurrence, irrespective of the review requirements.

D. Consultant's Terms of reference

56. Estimated 215 person-months (for 23 national positions) of consulting services are required to (i) facilitate subproject design, procurement, and contract management, (ii) monitoring and supervision, and (iii) strengthening the institutional and operational capacity of the EAs/IAs under the additional financing. The required input and expertise of the consulting services may be further confirmed and modified during the project implementation stage.

57. Indicative terms of reference for consulting services are in Appendix 3.

VII. SAFEGUARDS

58. The project is categorized as B for environment, B for involuntary resettlement, and C for indigenous peoples. Safeguards frameworks, specifically an environmental assessment and review framework (EARF) and a resettlement framework were updated to provide guidance on additional interventions in accordance with ADB's Safeguards Policy Statement 2009. A separate Indigenous Peoples Planning Framework is not required as the Project will not include subprojects that affect indigenous people. This will be ensured through screening all subprojects using the indigenous people screening checklist (Appendix 4).²⁴ Initial environmental examinations and environmental management plans will be prepared and implemented for subprojects consistent with the updated EARF and will be incorporated into bidding documents and contract documents to be implemented by contractors. The Resettlement Plan for RHD has been updated for AF scopes in consistence with the Resettlement Framework. The Project will avoid land acquisition.²⁵ In cases where there is a need to reorganize camps to accommodate project interventions for connecting roads or drainage, PIUs in coordination with the camp-in-charges and UN's site management teams, will ensure shelters will not be disturbed until an equivalent shelter within the camps are constructed and that water, sanitation, and hygiene facilities are ensured during the reorganization.

59. Subprojects will conform with ADB's Safeguards Policy Statement, 2009 (SPS) with respect to social and environment considerations. Subprojects with significant (category A) environmental²⁶ and resettlement²⁷ impact, or with adverse impacts on indigenous peoples (category A and B), will be excluded.

Environment

- (i) Subprojects will not be undertaken in critical habitats and protected areas²⁸ including those either legally protected or officially proposed for protection.
- (ii) Subprojects should follow environmental guidelines in the updated EARF.

Social

²⁴ Screening of impacts on indigenous peoples will include an analysis of common property resources that may be shared by indigenous peoples in the project area.

²⁵ Direct purchase or lease agreements avoid land acquisition. Where voluntary donation or negotiated settlement are used, SPS and the RF will be followed.

²⁶ Subprojects or subprojects likely to have significant impacts that are irreversible, diverse, or unprecedented.

²⁷ 200 or more persons will be physically relocated from their homes, 200 or more persons lose 10% or more of their productive or income generating assets, or 200 or more persons experience a combination of both.

²⁸ Including national parks, wildlife reserves, conservation area, wetlands, ancient/cultural and archeological areas, for example Teknaf Wildlife Sanctuary and Himachari National Park in Cox Bazaar (Schedule 2, EPR).

- (i) Subprojects will not result in involuntary restrictions on land use or access to legally designated parks and protected areas.
- (ii) Subprojects will not include: (a) commercial development of cultural resources or knowledge of indigenous peoples (IP), (b) physical relocation from traditional or customary lands, (c) commercial development of natural resources, (d) establishing legal recognition of rights to lands and territories, or (e) acquisition of land traditionally owned, customarily used, occupied, or claimed by IPs.
- (iii) Subprojects will not trigger IP safeguards.

60. The EAs/IAs will form PIUs which will have Safeguards (one Environment and one Resettlement) Focal Persons to coordinate environmental and social safeguards planning and implementation, assisted by the project management consultants (PMC). The PMU will dedicate a focal person for safeguards monitoring and supervision. PIUs will report to the dedicated focal in PMU and RP, EMP, monitoring reports and other documents for compliance requirement will be submitted to ADB through PMU. The PMU will guide the PIU in social safeguards implementation, monitoring, and reporting. The PMC will include an Environment Specialist and a Resettlement Specialist engaged during project implementation. The PIUs will ensure that the updated EARF and resettlement framework are followed during the subproject implementation. PIUs will prepare the respective safeguards documents for approved subprojects. The PIUs will be assisted by design supervision consultants (DSC) which will include Environment Specialists and Resettlement Specialists engaged during project implementation. The PIUs will undertake screening and classification of subprojects for submission to the EA/IA and ADB. Safeguards documents will be reviewed and approved by the EA/IA and ADB. PIUs will be tasked with the day-to-day implementation and monitoring of safeguards plans. PIUs will also obtain all clearances and fulfill the government requirements. PIUs will be responsible for data required for safeguards planning and preparation, monitoring and progress reports, and coordination with relevant departments such as Department of Environment and Bangladesh Forest Department to consult and/or obtain endorsement, if necessary. ADB TA will facilitate a social safeguard specialist to support the team in RP monitoring and reporting social safeguards issues and an environmental safeguard consultant to support with regular environmental monitoring and report. Institutional roles and responsibilities are detailed in the updated EARF and resettlement framework.

61. **Prohibited investment activities.** Pursuant to ADB's Safeguard Policy Statement (2009), ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the Safeguard Policy Statement (2009).

VIII. GENDER AND SOCIAL DIMENSIONS

62. The project is classified as Effective Gender Mainstreaming, and a Gender Equality and Social Inclusion (GESI) Action Plan has been prepared, in consultation with the UN's Intersectoral Coordination Group (ISCG) and its Gender in Humanitarian Assistance (GIHA) platform. To ensure the effective implementation of the GESI Action Plan, the project will hire a Social Development (GAD) expert based in Cox's Bazar. This will ensure effective participation of women and vulnerable groups in all project-supported activities in line with the commitments set out in the GESI/AP including -but not limited- to labor opportunities, decisions-making processes, and access to basic services. GESI-related results will be reported using sex-disaggregated data.

GENDER EQUALITY AND SOCIAL INCLUSION ACTION PLAN (GESI/AP)²⁹

Output/Activities	Indicators and targets	Responsibility	Timeframe
Output 1a: Water supply and sanitation improved			
1. All 700 community bathing facilities ³⁰ with running water are enhanced for women (2018 baseline: 0)	1. All bathing facilities will have lights and stairs 2. 10%-20% women will be employed 3. Bidding documents (bathing facilities) will include the provision of hiring 10-20% women as construction laborers 4. All contractors maintain labor registers showing name, sex, and wage of workers <ul style="list-style-type: none"> • Provisions for separate toilets for men and women workers at project construction sites or accommodations 	DPHE PIU	By 2024
2. Arrange inclusive public consultations to build mini-piped WSSs, integrated waste management facilities and small surface water treatment plants	5. Public consultations will be conducted with local communities to validate proposed sites for WASH facilities and WSS systems [Target: 33% women and girls]	DPHE	By 2024
3. Conduct awareness programs	6. Awareness programs on water conservation, water quality and hygiene education will be conducted [Target: 33% women and girls], including menstrual hygiene	DPHE	By 2024
Output 1b: Public health services improved			
4. Isolation with institutional quarantine facilities with provision for segregated space for women patients established in and around Camps in Cox's Bazar (2020 baseline: 0)	<ul style="list-style-type: none"> • Segregated isolation spaces for women patients will be established with separate toilet facilities 	DPHE, UNICEF and IOM	By 2024
5. Emergency equipment and gender responsive personal protective equipment for managing COVID-19 outbreak procured and distributed to the health facilities (2020 baseline: 0)	7. 1000 PPE of women and girls include products of gears responding to their distinct sizes <ul style="list-style-type: none"> • Other products will be identified based on needs of female health workers will be considered at project onset [incl. menstrual hygiene products (e.g., sanitary napkins, disposable sanitized underwear)] 	DPHE and UNFPA	By 2024
6. Training (including refresher training) of 250 medical and non-medical staff on	8. 30% women health workers will be trained	DPHE and WHO	By 2024

²⁹ Quantitative targets (e.g. number of public consultations, awareness programs and orientations and estimated number of household connections) have been set based on available information and data. They will be further refined and assessed on project onset by the ADB Team in consultation with the EAs.

³⁰ Please note 800 bathing facilities will be constructed in the AF while 300 has already been constructed in the ongoing project

Output/Activities	Indicators and targets	Responsibility	Timeframe
COVID-19 case management and infection prevention and control conducted (2020 baseline: 0)			
Output 2: Disaster risk management strengthened			
7. Ensure multipurpose cyclone shelters have sex-disaggregated and disable friendly toilets and designated space for women, including pregnant women and lactating mothers	9. 16 multipurpose cyclone shelters constructed with specific features	LGED	By 2024
9. Semi-permanent Women Led Community Centers constructed for capacity development of women and girls in camp area (2020 baseline: 0)	10. 2 women-led Community Centers (WLCCs) established 11. At least 33% women and girls from public consultations with increased awareness on the construction, proposed sites, and functions of WLCCs	LGED, UNFPA	By 2024
10. Awareness raising on national core labor standards, gender, COVID-19, HIV/AIDS, human trafficking, avoidance of sexual harassment and exploitation	12. All contractors and relevant RHD and LGED field staff will be oriented on national core labor standards, codes of conduct and prevention of sexual exploitation and abuse and COVID-19 [½ day training/package] 13. All bidding documents will incorporate provisions for core labor standards and equal pay; awareness on gender-based violence (GBV) and community-based redress mechanism and disseminate information at worksites on the risks of HIV/AIDs and STIs	RHD & LGED	By 2024

DDMR= Department of Disaster Management and Relief; DPHE= Department of Public Health and Engineering; EA= Executing Agency; LCS=Labor Contracting Society; LGED=Local Government and Engineering Department; O&M= Operation and Maintenance; PMU= Project Management Unit; RHD= Roads & Highway Department; WSS = water supply and sanitation.

Source: Asian Development Bank.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING, AND COMMUNICATION

A. Revised Project Design and Monitoring Framework

Impact the Project is Aligned with			
Social recovery of displaced persons in Teknaf and Ukhiya camps accelerated (defined by the project)			
Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
<p>Outcome</p> <p>Living and health conditions, safety, and resilience of displaced persons improved^a</p>	<p>By 2021</p> <p>a. By 2025, reported cases of waterborne diseases decreased by 20% (2018 baseline: <u>192,560 cases</u>)^b</p> <p>b. By 2025, occurrence 400 ha of landslides and flooding in project area protected from flood during average monsoon months reduced by 50% (2018 baseline: <u>4,800.0 ha</u>)^c (OP3.2.1)</p> <p>c. By 2021, at least 90% of households in project area connected to <u>solar</u> electricity (2018 baseline: 70% households with <u>solar-powered light</u>) (OP1.3)</p> <p>d. By 2021, average travel time to transport relief goods and services to campsites reduced by 50% (2018 baseline: <u>2.5 hours</u>)</p> <p>e. By 2025, at least 90% of suspected COVID-19 cases in the camps reported, investigated, and treated in the camps' facilities (2022 baseline: 0%) (OP1.1)</p>	<p>a.–e. Project beneficiary survey Executing agency reports, <u>evaluation reports, UN agencies' situation reports, and other evaluation reports</u></p>	<p>R: Crisis and influx of displaced persons extend beyond the project life and exceed projected demand for services.</p> <p>R: <u>Unpredictable trajectory of COVID-19 constrains capacity of health system in the camps and host community.</u></p>
<p>Outputs</p> <p>1. Water supply and sanitation, and COVID-19 response improved</p>	<p>By 2020</p> <p>1a. By 2021, 5–7 mobile water carriers for the distribution of potable water to the camps provided (2018 baseline: 0)</p> <p>1b. By 2024, 500 700 community bathing facilities (<u>200 with solar-powered running water</u>) for women constructed and maintained, of which 10%–20% of total construction workers employed are women (2018 baseline: 0) (<u>OP1.2; OP2.1, OP1.3.1</u>)</p> <p>1c. By 2021, 40 mini piped water supply systems with production tube wells constructed (2018 baseline: 0) (<u>OP1.3.1</u>)</p> <p>1d. By 2024, 5 8 integrated solid waste management facilities constructed, and a collection system established (2018 baseline: 0) (<u>OP1.3.1, OP 3.3.1</u>)</p> <p>1e. By 2024, 2 4 small surface water treatment plants constructed or expanded (2018 baseline: 0) (<u>OP1.3.1</u>)</p> <p>1f. By 2024, 4 health care facilities for SARI-ITC (1 in Teknaf, 1 in Leda or Cox's Bazar, 1 in camp 2W, and 1 in camp 2E) upgraded and operationalized, with segregated</p>	<p>1a.–1e. Periodic project progress reports prepared by the executing agency</p> <p>1f.–1i., 1k–1l <u>Periodic project progress</u></p>	<p>A: <u>UN agencies and government complete implementation of COVID-19 response activities on time.</u></p> <p>R: Extreme climate events disrupt or delay execution of works.</p>

	<p><u>spaces for women patients (2022 baseline: 0) (OP1.1.2, OP2.2.2)^d</u></p> <p><u>1g. By 2024, 6 primary health care centers and/or diagnostic facilities in 2 upazilas upgraded or expanded (2020 baseline: 0 health care centers with semipermanent structures) (OP1.1.2)^e</u></p> <p><u>1h. By 2024, 1,000 gender-responsive PPE sets procured and distributed to women and girls (2020 baseline: 0)</u></p> <p><u>1i. By 2024, operational and logistics support, and facilities for diagnosis, infection prevention and control, and surveillance at points of entry in at least 4 selected health care facilities upgraded or expanded (2022 baseline: 0 health centers with diagnostic facilities) (OP1.1.2, OP2.2)</u></p> <p><u>1j. By 2024, at least 250 health care workers (30% women) in Cox's Bazar District increased skills on conducting proper diagnosis, infection prevention and control, and surveillance at points of entry to health facilities (2022 baseline: 0) (OP1.1.1, OP2.2)</u></p> <p><u>1k. By 2024, 2 semipermanent community centers led by women established (2021 baseline: 0) (OP2.5.1)</u></p> <p><u>1l. By 2024, 1 multipurpose disaster-resilient isolation center constructed at ICDDR, B (SARI-ITC) in Teknaf (2021 baseline: 0) (OP1.1.2, OP3.2.5)</u></p>	<p><u>reports prepared by the executing agency, monitoring report from IOM, UNFPA, UNHCR, UNICEF, and WHO.</u></p> <p><u>1j. Pre- and post-training assessment</u></p>	
2. Disaster risk management strengthened	<p><u>2a. By 2024, 40 16 multipurpose cyclone shelters constructed with sex-disaggregated and persons with disability-friendly toilets and designated space for women, including pregnant women and lactating mothers (2018 baseline: 0) (OP2.5.2, OP4.3)^f</u></p> <p><u>2b. By 2021, 20 semipermanent 4 large e-voucher shops for food distribution constructed, and employed of which 10%–20% of total construction workers employed in the community are women (2018 baseline: 0) (OP1.2, OP2.1; OP2.5.1, OP4.3)^f</u></p> <p><u>2c. 5 km of hill slope protection and/or toe walls constructed by 2020 (2018 baseline: 0)</u></p> <p><u>2d. By 2021, 5 11 km stormwater drainage network constructed (2018 baseline: 0) (OP3.2.5, OP4.3)^f</u></p> <p><u>2e. By 2020, 200 lightning arresters installed (2018 baseline: 0) (OP3.2.5, OP4.3)^f</u></p> <p><u>2f. By 2024, 12.7 km rural access roads rehabilitated to climate induced disaster-resilient design (2018 baseline: earthen road) (OP3.2.5, OP4.1.2)^f</u></p> <p><u>2g. Gender-sensitive disaster risk management plans, adopting community-based disaster risk reduction approach, prepared and implemented (2018 baseline: not applicable)</u></p>	2a.–2f. Periodic project progress reports prepared by the executing agency	

3. Energy sources provided	<p>3a. By 2021, a 33/11 kV, 10 MVA substation constructed; and Cox's Bazar-Teknaf grid augmented (2018 baseline: 0) (OP4.1.2) ^f</p> <p>3b. By 2021, a 50 km, ≤11 kV new distribution line constructed with 5 MVA distribution transformers installed (2018 baseline: 0) (OP4.1.2) ^f</p> <p>3c. By 2021, 2,000 new mini grid-connected streetlights and 4,000 2,000 new stand-alone solar LED lights with built-in solar photovoltaic panels and battery banks installed (2018 baseline: 62 grid-connected streetlights and 2,495 solar photovoltaic streetlights inside the camps) (OP3.1.3, OP4.1.2) ^f</p> <p>3d. 70,000 retained heat cookers provided (2018 baseline: 0)</p> <p>3e. By 2021, 50-100 solar photovoltaic micro grid systems installed at Balukhali, Kutupalong, Noyapara, Leda, and Shamlapur camps (2018 baseline: 0) (OP3.1.3, OP4.1.2) ^f</p>	3a.–3e. Periodic project progress reports prepared by the executing agency	
4. Access roads improved	<p>4a. By 2022, 30 25 km of internal roads and stairs (where required) with drainage facilities constructed (2018 baseline: 0) (OP4.1.2) ^f</p> <p>4b. By 2024, 30-35 km of rural roads connecting to food storage centers, food distribution centers, field hospitals, primary health care centers, cyclone shelters, and primary education centers reconstructed and rehabilitated (2018 baseline: 0) (OP4.1.2) ^f</p> <p>4c. By 2024 2024, 50 80.76 km of the road from Cox's Bazar to Teknaf resurfaced, including the improvement of critical sections (market areas and culverts) (2018 baseline: 0) (OP4.1.2) ^{f, 9}</p> <p>4d. 10%–20% of women employment in the construction and rehabilitation of access roads achieved (2018 baseline: 0)</p>	4a.–c. Periodic project progress reports prepared by the executing agency	
<p>Key Activities with Milestones</p> <p>1. Water supply and sanitation, and COVID-19 response improved</p> <p>1.1 Identify and appraise subprojects, as required (by Q3-2018) (completed)</p> <p>1.2 Recruit consultants (by Q3-2018) (by Q3 2022)</p> <p>1.3 Prepare bid documents and commence bidding (by Q3-2018) (by Q2 2022)</p> <p>2. Disaster risk management strengthened</p> <p>2.1 Identify and appraise subprojects, as required (by Q3-2018) (completed)</p> <p>2.2 Recruit consultants (by Q3-2018) (Q3/2022)</p> <p>2.3 Prepare bid documents and commence bidding (by Q3-2018) (by Q2 2022)</p> <p>2.4 Complete disaster risk capacity building for implementing agencies /and key stakeholders (Q4 2018)</p> <p>3. Energy sources provided</p> <p>3.1 Identify and appraise subprojects, as required (by Q3-2018) (completed)</p> <p>3.2 Recruit consultants (by Q3-2018) (completed)</p> <p>3.3 Prepare bid documents and commence bidding (by Q3-2018) completed</p> <p>4. Access roads improved</p> <p>4.1 Identify and appraise subprojects, as required (by Q3-2018) (completed)</p> <p>4.2 Recruit consultants (by Q3-2018) (Q3 2022)</p> <p>4.3 Prepare bid documents and commence bidding (by Q3-2018) (Q2/2022)</p>			
<p>Project Management Activities</p> <p>Recruit design, monitoring, and supervision consultants (by Q4-2018) (completed)</p> <p>Establish project implementation units (by Q3-2018) (completed)</p>			

<p>Establish monitoring and evaluation system (<u>completed</u>)</p> <p>Carry out quality reviews (<u>ongoing</u>)</p> <p>Establish coordination mechanism with UN agencies and other development partners (<u>ongoing</u>)</p> <p>Design and initiate training and capacity-building programs for public health and medical staff (<u>by Q3 2022</u>)</p>
<p>Inputs</p> <p>Asian Development Bank:</p> <p>Asian Development Fund grant: <u>\$141.40 million (\$41.40 additional financing)</u></p> <p>Concessional ordinary capital resources loan: <u>\$30.00 million</u></p> <p>Technical Assistance Special Fund (TASF 6): \$3 <u>\$4.00 million (grant)</u></p> <p>Government of Bangladesh: \$20.0 million <u>\$32.49 million (\$12.49 million additional financing)</u></p>

A = assumption, COVID-19 = coronavirus disease, ha = hectare, ICDDR,B = International Centre for Diarrhoeal Disease Research, Bangladesh, IOM = International Organization for Migration, km = kilometer, kV = kilovolt, LED = light-emitting diode, MVA = megavolt-ampere, OP = operational priority, PPE = personal protective equipment, Q = quarter, R = risk, SARI-ITC = severe acute respiratory infection isolation treatment center, UN = United Nations, UNFPA = United Nations Population Fund, UNHCR = United Nations High Commissioner for Refugees, UNICEF = United Nations Children's Fund, WHO = World Health Organization.

- ^a People directly benefited: 886,000 displaced persons and 324,000 persons from host communities.
- ^b Periodic situation reports of UN agencies (UNHCR, IOM, UNICEF, and WHO) in Cox's Bazar.
- ^c Camp numbers 9, 11, 12, 18, and 21 are identified as most vulnerable to floods and landslides during the monsoon months (May–August). Source: Inter Sector Coordination Group Report. 12 August 2018; [Relocation Update, 12 August 2018 - Bangladesh | ReliefWeb](#) In the absence of a system to monitor flood events, the indicator was changed to protected area from flooding. This is aligned with OP 3.2.1.
- ^d For the SARI-ITC in Teknaf, upgrading includes building disaster-resilient semipermanent structures for the SARI-ITC and cyclone shelter, with bed capacity of up to 200 beds, allocating segregated spaces for women patients, and providing operational support for recurrent costs, medicines, and PPE. For the other three SARI-ITCs, upgrading includes allocating segregated spaces for women patients, and providing operational support for recurrent costs, medicines, and PPE.
- ^e The six primary healthcare centers comprise two basic emergency obstetric and newborn care health facilities and four primary healthcare centers at Ukhiya and Teknaf upazila (sub-district).
- ^f While the camps are located in rural areas, the population is now akin to small towns which would require urban planning for infrastructure and services. Hence, the indicators are tagged to OP 4 (making cities more livable).
- ^g Financed under the \$30 million concessional ordinary resources loan.

B. Monitoring

63. **Project performance monitoring.** Overall monitoring of each project component in terms of progress will be undertaken by the government, which will review monthly progress reports submitted by the IAs. The line ministries concerned, acting on behalf of the government, will monitor progress, procurement, quality, and contract management. In addition, ADB will undertake regular site visits and provide guidance to the project director, and to project consultants. ADB and IAs will conduct semiannual reviews throughout the implementation of the project and will regularly monitor the (i) project output quality, (ii) implementation arrangements, (iii) implementation progress, and (iv) disbursements. Performance will be monitored based on indicators and targets stipulated in the design and monitoring framework. These will be reported quarterly through IAs' quarterly progress reports and after each ADB review mission. These quarterly reports will provide information necessary to update ADB's project performance reporting system.³¹

64. **Compliance monitoring.** The grant agreement specifies the undertakings and covenants that will be monitored through regular review missions and on a quarterly basis in discussion with EAs/IAs. Compliance with undertakings and grant covenants, social and environmental safeguards, and financial and economic aspects will be jointly monitored by ADB and the EAs/IAs.

³¹ ADB's project performance reporting system is available at <http://www.adb.org/Documents/Slideshows/PPMS/default.asp?p=evaltool>.

65. **Safeguards monitoring.** The EAs/IAs with the support from the PMC and ADB will brief the PIU Safeguards Focal Persons on monitoring requirements for EMP and resettlement plan implementation. Monitoring data will be generated by the PIUs. The PIUs will submit monitoring data and other required information to the EAs/IAs. The EAs/IAs will prepare semi-annual monitoring reports (one for environment and one for involuntary resettlement) that describe progress of safeguards implementation, compliance issues, and corrective actions, reporting will be initiated from six months of inception. Reports will be posted in a location accessible to the public. Safeguards monitoring requirements including suggested monitoring report formats are in the updated EARF and Resettlement Framework.

66. **Gender and social dimensions monitoring.** Gender and social data will be monitored, collated, and analyzed to provide an indication of change in the life of beneficiaries, which in turn will be important for recording the outputs and performance of the project. The implementation status of gender action plan will be reported to ADB by the EAs/IAs with routine project progress reports and other monitoring reports. In addition, the inclusion and compliance with labor standards, health and gender aspects will be monitored through review of bidding documents, contract awards, and progress reports.

C. Evaluation

67. ADB will conduct regular semi-annual review missions to review, discuss progress, and report on the project performance. ADB will conduct regular coordination meetings involving all IAs, relevant stakeholders including deputy commissioner (DC), Cox's bazar, other development partners and agencies. The extended mission office in Cox's Bazar will help for close coordination, facilitation of sub-projects development and implementation including monitoring. A mid-term review mission will be carried out in one and half years after the effectiveness of the grant and loan. Within six months of physical completion of the project, EAs/IAs will submit the borrower's project completion reports for their respective subprojects.

68. A consolidated midterm analysis report will be prepared and disseminated during the midterm review mission, expected in September 2023.

D. Reporting

69. The IAs 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 indicator's performance targets, (b) key implementation issues and solutions, (c) updated procurement plan, and (d) updated implementation plan for the next 12 months, (e) semi-annual environmental monitoring report for construction period, (f) Initial Environmental Examination (IEE) and Environmental Management Plan (EMP) on the subprojects as guided by the updated EARF; and (iii) a project completion report covering environmental safeguard compliance within 6 months of physical completion of the project. To ensure that projects will continue to be both viable and sustainable, project accounts and the audited financial statement together with the associated auditor's report will be adequately reviewed.

E. Stakeholder Communication Strategy

70. The project will comply with the policy of transparency and accountability of the ADB Access to Information Policy (AIP) 2018 with communications strategy that will ensure (i) available

information about the project reaches all people concerned, and (ii) stakeholders, including women and other vulnerable groups, are able to participate. Despite the urgent nature of the project, the EAs/IAs, government offices, development partners, beneficiaries, and host communities were widely consulted during the consultation and fact-finding missions. Further consultations will be conducted for each subproject to obtain feedback regarding the subject design, implementation, and any other relevant issues.

71. Necessary project information will be shared with the relevant stakeholder groups using appropriate tools and language. Information bulletin boards, leaflets, project briefs in Bangla, including timetable, status, and implementation progress, will be posted on ADB website, and disseminated locally. Stakeholder communication will be strengthened through ADB website. All documents on environmental, safeguards and gender issues, including progress reports will be made available to the public according to ADB's Access to Information Policy 2018. The project progress, benefits and lessons learnt will be shared with the print and electronic media appropriately. Specifically, the stakeholder communications strategy of the project will include the following approaches:

- (i) The government will cause the executing and implementing agencies to ensure that all project staff are fully aware of –and capable of explaining to stakeholders– the ADB procedures, including, but not limited to, procedures for implementation, procurement, use of consultants, disbursements, reporting, monitoring, and prevention of fraud and corruption.
- (ii) The implementing agencies, will disclose on its website within three months of grant /loan effectiveness all key project-related information, including the scope, cost, and financial and institutional arrangements of the project, project safeguard reports such as IEE and RPs, and project progress such as procurement, contract award and disbursement. The project will disclose the audited financial project financial statements as part of ADB AIP 2018. The website will also include information on project procurement including the list of participating bidders, name of each winning bidder, basic details on bidding procedures adopted, the value of each contract awarded, and the list and value of goods/services procured and the intended utilization of grant proceeds under each contract being awarded. The website will also provide the contact details of PIUs staff in English and Bangla languages, and will link to ADB's Integrity Unit website at <http://www.adb.org/Integrity/complaint.asp> for reporting to ADB any grievances or allegations of corrupt practices arising out of the project and/or project activities. The website will be updated once in 3 months.
- (iii) a multi-stakeholder coordination, through RRRC, will be ensured, for sufficient consultation and participation of beneficiaries, UN agencies, other development partners, NGOs, including the women, poor and vulnerable groups, in the project.

X. ANTICORRUPTION POLICY

72. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the project.³² All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all project contractors, suppliers, consultants, and other service providers.

³² Anticorruption Policy: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

Individuals and/or entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the project.³³

73. To support these efforts, relevant provisions are included in the grant agreement, project agreement and the bidding documents for the project. All contracts financed by ADB in connection with the project will include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency, implementing agencies and all contractors, suppliers, consultants, and other service providers as they relate to the project. ADB will disseminate ADB's anticorruption policy to EAs and the IAs.

74. Project-specific measures to enhance governance and prevent corruption, designed with the stages of project implementation and the disbursement chain in mind, include (i) the requirement for the PIUs to follow government's procedure for all expense and revenue items including cash and the proper and accurate maintenance of financial records; (ii) establishing a project website to provide transparency on project details; and (iii) adhering to risk assessment and risk mitigation plan, which is in Appendix 5.

XI. ACCOUNTABILITY MECHANISM

75. People who are, or may in the future be, 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 try in good faith to solve their problems by working with the ADB operations department concerned. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.³⁴

XII. RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL

76. The first draft of the PAM was agreed upon at grant negotiations on 18 May 2022. All revisions/updates including the revision to contract awards and disbursement s-curves during the project implementation will be recorded as below in this Section of the PAM:

S.N.	Date	Revisions
First revision		
Second revision		

³³ ADB's Integrity Office web site: <http://www.adb.org/integrity/unit.asp>

³⁴ Accountability Mechanism. <http://www.adb.org/Accountability-Mechanism/default.asp>.

SUBPROJECT SELECTION CRITERIA AND APPROVAL PROCEDURES

1. Subprojects for development and implementation under the proposed grant will be selected in close coordination with the government and development partners, following the criteria that having,

- i) Direct impact to the lives of people in the camps;
- ii) Minimum land acquisition or on government land;
- iii) No duplication in funding from other donors;
- iv) Conforming to ADB's safeguards requirements;
- v) Projects outside critical habitats and protected areas;
- vi) Subject to prior review and approval by ADB.
- vii) Period for implementation will not extend beyond the project closing date, unless project duration extension is agreed between ADB and GOB; and
- viii) Selection of subproject has incorporated beneficiary consultation.

2. The first subproject to be carried out by each implementing agency shall be subject to prior review and approval by ADB.

A. Safeguards Criteria

3. Subprojects will conform with ADB's Safeguards Policy Statement, 2009 (SPS) with respect to social and environment considerations. Subprojects with significant (category A) environmental¹ and resettlement² impact, or with impacts on indigenous peoples (category A and B), will be excluded. Subprojects with activities described in ADB's Prohibited Investment Activities List will also be excluded.

Environment:

- (i) Subprojects will not be undertaken in critical habitats and protected areas³ including those either legally protected or officially proposed for protection.
- (ii) Subprojects should follow environmental guidelines in the environmental assessment and review framework.

Social:

- (i) Subprojects will not result in involuntary restrictions on land use or access to legally designated parks and protected areas.
- (ii) Subprojects will not include: (a) commercial development of cultural resources or knowledge of indigenous peoples (IP), (b) physical displacement from traditional or customary lands, (c) commercial development of natural resources, (d) establishing legal recognition of rights to lands and territories, or (e) acquisition of land traditionally owned, customarily used, occupied, or claimed by IPs.

¹ Subprojects or subprojects likely to have significant impacts that are irreversible, diverse, or unprecedented.

² 200 or more persons will be physically displaced from home, 200 or more persons lose 10% or more of their productive or income generating assets, or 200 or more persons experience a combination of both.

³ Including national parks, wildlife reserves, conservation area, wetlands, ancient/cultural and archeological areas (Schedule 2, EPR).

- (iii) Subprojects will not result IP safeguards.

B. Procedures

4. Each subproject will be prepared and processed in accordance with the following procedures:

- (i) Technical study, for all subprojects comprising civil works, will be conducted by the executing / implementing agencies including its cost estimate. The implementing agencies will also prepare and fill out checklist for (a) involuntary resettlement; (b) indigenous people screening check list; and (c) an environmental screening in accordance with the relevant frameworks;
- (ii) All safeguards categorization and safeguards documents (resettlement plan, initial environmental examination (IEE) with environmental management plan (EMP) will be provided to ADB for review and concurrence;
- (iii) The IAs will translate the resettlement plan into the local language and disclose it to the affected people and incorporate the results of the consultation. The resettlement plan and IEE (with EMP) will also be disclosed on the ADB website and the website of executing and implementing agencies;
- (iv) The EAs/IAs will prepare development project proposals (DPP) for all subprojects to be considered under the project following the selection criteria, together with the required attachments for approval.

PROCUREMENT PLAN Basic Data

Project Name: Emergency Assistance Project- Additional Financing		
Project Number: 52174-002	Approval Number: xx78	
Country: Bangladesh	Executing Agency: Department of Public Health Engineering, Local Government Engineering Department, Roads and Highways Department	
	Implementing Agency: N/A	
Project Procurement Risk: Substantial		
Project Financing Amount: US\$ 83,460,000 ADB Financing: US\$ 71,400,000 Co-financing (ADB Administered): - Non-ADB Financing:	Project Closing Date: 31 December 2024	
Date of First Procurement Plan: 27 December 2021	Date of this Procurement Plan: 18 May 2022 Version-1	
Procurement Plan Duration (in months): 30 months	Advance Contracting: Yes	e-GP: Yes

A. Methods, Review and Procurement Plan

Except as Asian Development Bank (ADB) may otherwise agree, the following methods shall apply to procurement of goods, works, and consulting services.

Procurement of Goods and Works	
Method	Comments
Open Competitive Bidding (OCB) for Goods	First contract of each type of procurement shall be prior reviewed for each implementing agency
Request For Quotation for Goods	First contract of each type of procurement shall be prior reviewed for each implementing agency
Open Competitive Bidding (OCB) for Works	First contract of each type of procurement shall be prior reviewed for each implementing agency
Request For Quotation for Works	First contract of each type of procurement shall be prior reviewed for each implementing agency
Direct Contracting	DC with UN Agencies and/or NGOs already implementing projects in the project area will be considered; any/all DC packages shall be prior reviewed
Consulting Services	
Method	Comments
Quality- and Cost-Based Selection for Consulting Firm	Open Competitive Bidding, 80:20 or 90:10, STP, prior review
Consultants' Qualification Selection	Small value assignments, prior review
Competitive Individual Consultant	ICS, prior review

B. Lists of Active Procurement Packages (Contracts)

The following table lists goods, works, and consulting services contracts for which the procurement activity is either ongoing or expected to commence within the procurement plan duration.

Goods and Works							
Package Number	General Description	Estimated Value (in \$)	Procurement Method	Review	Bidding Procedure	Advertisement Date (quarter/year)	Comments
EAP2/DP HE/AF-W2A	Construction of surface water based piped-water supply system at Host Community at Ukhiya Upazilla.	9,840,000	OCB	Prior	1S1E	Q3/2022	Advertising: National No. of Contracts: Multi Lots Prequalification of Bidder(s): No Domestic Preference Applicable: No. Advance Contracting: No Bidding Document: Works. e-GP: Yes
EAP2/DP HE/AF-W9A	Construction of 100 nos. of integrated WASH facility including bathing and latrines with solar-pump system water supply facility at Ukhiya and Teknaf, Cox's Bazar	1,665,000	OCB	Prior	1S1E	Q3/2022	Advertising: National No. of Contracts: Single Prequalification of Bidder(s): No Domestic Preference Applicable: No. Advance Contracting: No Bidding Document: Works. e-GP: Yes Bidding Document: Works. e-GP: Yes
EAP2/DP HE/AF-W9B	Construction of 100 nos. of integrated WASH facility including	1,665,000	OCB	Post	1S1E	Q3/2022	Advertising: National No. of Contracts: Single

Goods and Works							
Package Number	General Description	Estimated Value (in \$)	Procurement Method	Review	Bidding Procedure	Advertisement Date (quarter/year)	Comments
	bathing and latrines with solar-pump system water supply facility at Ukhiya and Teknaf, Cox's Bazar						Prequalification of Bidder(s): No Domestic Preference Applicable: No. Advance Contracting: No Bidding Document: Works. e-GP: Yes
EAP2/DP HE/AF-W10	Enhancement of 100 bathing facilities in the camps constructed under Phase 1- with solar powered running water supply system	200,000	OCB	Prior	1S1E	Q3/2022	Advertising: National No. of Contracts: Single Prequalification of Bidder(s): No Domestic Preference Applicable: No. Advance Contracting: No Bidding Document: Works.
EAP2/DP HE/AF-W11	Upgradation and operation and management of 40 mini pipe water supply system constructed under Phase 1	1,070,000	OCB	Post	1S1E	Q3/2022	Advertising: National No. of Contracts: Single Prequalification of Bidder(s): No Domestic Preference Applicable: No. Advance Contracting: No Bidding Document: Works.
EAP2/DP HE/AF-W12A	Integrated waste management facilities constructed,	800,000	OCB	Prior	1S1E	Q3/2022	Advertising: National No. of Contracts: Multiple Lots

Goods and Works							
Package Number	General Description	Estimated Value (in \$)	Procurement Method	Review	Bidding Procedure	Advertisement Date (quarter/year)	Comments
	and a collection system established in Ukhiya upazilla, Cox's Bazar						Prequalification of Bidder(s): No Domestic Preference Applicable: No. Advance Contracting: No Bidding Document: Works. e-GP: Yes
EAP2/DP HE/AF-W12B	Integrated waste management facilities constructed, and a collection system established in Teknaf upazilla, Cox's Bazar	800,000	OCB	Post	1S1E	Q3/2022	Advertising: National No. of Contracts: Single Prequalification of Bidder(s): No Domestic Preference Applicable: No. Advance Contracting: No Bidding Document: Works.
EAP2/DP HE/AF-W12C	Integrated waste management facilities constructed, and a collection system established in Cox's Bazar	800,000	OCB	Post	1S1E	Q3/2022	Advertising: National No. of Contracts: Single Prequalification of Bidder(s): No Domestic Preference Applicable: No. Advance Contracting: No Bidding Document: Works. e-GP: Yes
EAP2/DP HE/AF-W13	Renovation of Isolation Centers (maternity red zones) in 2	1,430,000	OCB	Prior	1S1E	Q3/2022	Advertising: National No. of Contracts: Single

Goods and Works							
Package Number	General Description	Estimated Value (in \$)	Procurement Method	Review	Bidding Procedure	Advertisement Date (quarter/year)	Comments
	BEmONC (Basic Emergency Obstetric and Newborn Care) health facilities at Ukhiya & Teknaf Upazilla Health Complex (UHC) and 4 Primary Health Care Centers (PHC)						Prequalification of Bidder(s): No Domestic Preference Applicable: No. Advance Contracting: No Bidding Document: Works.
EAP/LGED/OCB-N/AF-W23	Construction of 3 Cyclone Shelters under Ukhiya Upazilla, District: Cox's Bazar	2,600,000	OCB	Prior	1S1E	Q3/2022	Advertising: National No. of Contracts: Single Prequalification of Bidder(s): No Domestic Preference Applicable: No. Advance Contracting: No Bidding Document: Works. e-GP: Yes
EAP/LGED/OCB-N/AF-W24	Construction of 3 Cyclone Shelters at under Teknaf Upazilla, District: Cox's Bazar	2,600,000	OCB	Post	1S1E	Q3/2022	Advertising: National No. of Contracts: Single Prequalification of Bidder(s): No Domestic Preference Applicable: No. Advance Contracting: No Bidding Document: Works. e-GP: Yes

Goods and Works							
Package Number	General Description	Estimated Value (in \$)	Procurement Method	Review	Bidding Procedure	Advertisement Date (quarter/year)	Comments
EAP/LGED/OCB-N/AF-W25	Construction of 2 Women Led Community Centers for capacity building of women and girls in camps and host community in Ukhiya	670,000	OCB	Prior	1S1E	Q3/2022	Advertising: National No. of Contracts: Single Prequalification of Bidder(s): No Domestic Preference Applicable: No. Advance Contracting: No Bidding Document: Works. e-GP: Yes
EAP/LGED/OCB-N/AF-W26	Construction of a multipurpose disaster resilient isolation center at ICDDR,B / SARI-ITC, Teknaf,	2,510,000	OCB	Prior	1S1E	Q4/2022	Advertising: National No. of Contracts: Single Prequalification of Bidder(s): No Domestic Preference Applicable: No. Advance Contracting: No Bidding Document: Works. e-GP: Yes
EAP/LGED/OCB-N/AF-W27	Upgrade with disaster resilient design of Ukhiya Daroga Bazar RHD– Moricha GC via Bhalukia Bazar-Patabari Road (7.7 km),	2,080,000	OCB	Prior	1S1E	Q3/2022	Advertising: National No. of Contracts: Single Prequalification of Bidder(s): No Domestic Preference Applicable: No. Advance Contracting: No Bidding Document: Works.

Goods and Works							
Package Number	General Description	Estimated Value (in \$)	Procurement Method	Review	Bidding Procedure	Advertisement Date (quarter/year)	Comments
EAP/LGED/OCB-N/AF-W28	Upgrade with disaster resilient design of Coat Bazar RHD– Shaplapur GC Road Via- Sonarpara GC Monkhal Road (5 km).	1,350,000	OCB	Post	1S1E	Q3/2022	Advertising: National No. of Contracts: Single Prequalification of Bidder(s): No Domestic Preference Applicable: No. Advance Contracting: No Bidding Document: Works. e-GP: Yes
EAP/RHD/AF-W3	Rehabilitation of National Highway Part-3	19,450,000	OCB	Prior	1S1E	Q2/2022	Advertising: National No. of Contracts: Single Prequalification of Bidder(s): No Domestic Preference Applicable: No. Advance Contracting: No Bidding Document: Works. e-GP: No
EAP/RHD/AF-W4	Rehabilitation of National Highway Part-4	2,080,000	OCB	Prior	1S1E	Q2/2022	Advertising: National No. of Contracts: Single Prequalification of Bidder(s): No Domestic Preference Applicable: No. Advance Contracting: No Bidding Document: Works.

Goods and Works							
Package Number	General Description	Estimated Value (in \$)	Procurement Method	Review	Bidding Procedure	Advertisement Date (quarter/year)	Comments
							e-GP: No
EAP2/DPHE/AF-G1	1,000 gender responsive personal protective equipment procured and distributed to women and girls	850,000	OCB	Prior	1S1E	Q3/2022	Advertising: National Bidding Document: Goods e-GP: Yes

Non-Consulting Services							
Package Number	General Description	Estimated Value (in \$)	Procurement Method	Review	Bidding Procedure	Advertisement Date (quarter/year)	Comments
EAP2/DPHE/AF-NCS1	Operationalization of 200-bed SARI-ITC (severe acute respiratory infection isolation treatment center) Teknaf including the supplies of PPEs and consumables— non consulting service contract with UN agency [UNICEF]	3,000,000	DC/UN Agency	Prior		Q3/2022	UN Agency – DC
EAP2/DPHE/AF-NCS2	Operation and logistics support, and diagnostic facility upgraded/expanded to at least 4 selected health care facilities on diagnosis, infection prevention and control, and surveillance at points of entry; and training of 2,500 health workers, with at least 30% women - non consulting service contract with UN agency [WHO]	3,790,000	DC/UN Agency	Prior		Q3/2022	UN Agency – DC

Non-Consulting Services							
Package Number	General Description	Estimated Value (in \$)	Procurement Method	Review	Bidding Procedure	Advertisement Date (quarter/year)	Comments
EAP2/DPHE/AF-NCS3	Scaling-up and operational support to 3 health care facilities for Severe Acute Respiratory Infection (SARI) ITCs with a capacity up to 200 beds—1 in Leda/Cox's Bazar; 1 in camp 2W; and 1 in camp 20E— non consulting service contract with UN agency [IOM]	1,810,000	DC/UN Agency	Prior		Q3/2022	UN Agency – DC
EAP2/DPHE/AF-NCS4	Renovation of Isolation Centers (maternity red zones) in 2 BEmONC (Basic Emergency Obstetric and Newborn Care) health facilities at Ukhiya & Teknaf Upazilla Health Complex (UHC) and 4 Primary Health Care Centers (PHC) including Hygiene kits distributed to women and girls in camps - through UN Agency [UNFPA]	1,150,000	DC/UN Agency	Prior		Q3/2022	DC/UN Agency

Consulting Services							
Package Number	General Description	Estimated Value (in US\$)	Selection Method	Review	Type of Proposal	Advertisement Date (quarter/year)	Comments
EAP/DPHE/CON/2	Design, Monitoring and Supervision consulting services of DPHE component, Cox's Bazar	1,150,000	QCBS	Prior	STP	Q2/2022	Type: Firm Advertising: National Quality-Cost Ratio: 80:20 Advance Contracting: Yes e-GP: No
EAP/RHD/CON/2		500,000	QCBS	Prior	STP	Q2/2022	Type: Firm

Consulting Services							
Package Number	General Description	Estimated Value (in US\$)	Selection Method	Review	Type of Proposal	Advertisement Date (quarter/year)	Comments
	Design, Monitoring and Supervision consulting services of RHD component, Cox's Bazar						Advertising: National Quality-Cost Ratio: 80:20 Advance Contracting: Yes e-GP: No
EAP/LGED/CON/2	Design, Monitoring and Supervision consulting services of LGED component, Cox's Bazar	660,000	QCBS	Prior	STP	Q2/2022	Type: Firm Advertising: National Quality-Cost Ratio: 80:20 Advance Contracting: Yes e-GP: No

C. List of Indicative Packages (Contracts) Required Under the Project

The following table lists goods, works, and consulting services contracts for which procurement activity is expected to commence beyond the procurement plan duration and over the life of the project (i.e., those expected beyond the current procurement plan duration).

Goods and Works						
Package Number	General Description	Estimated Value (in US\$)	Procurement Method	Review	Bidding Procedure	Comments
None						
Consulting Services						
None						

D. List of Awarded and Completed Contracts

The following table lists the awarded and completed contracts for goods, works and consulting services under Phase 1

Goods and Works					
Package Number	General Description	Contract Value	Date of ADB Approval of Contract Award	Date of Completion	Comments
EAP/BREB/G1	Supply and installation of 200 nos. lightning arresters along the access roads from Palongkhali to Kutupalong camp, and all other camps.	244,761.76	18-NOV-18	15-JUL-19	e-GP: No
EAP/BREB/G2A	Supply, installation, and Operation & Maintenance of 2,000 Nos. Solar PV Powered LED Street Lights	1,178,011.95	15-NOV-18	15-JUL-19	e-GP: No
EAP/BREB/G2B	Supply and installation of 2,000 nos. solar powered 20-watt LED streetlights, in all camps	1,337,440.64	12-MAY-19	04-FEB-20	Received the revised signed contract as per approved cost variation e-GP: No
EAP/BREB/G7	Supply and installation of 200 nos. lightning arresters along the access roads from Palongkhali to Kutupalong camp, and all other camps including Strengthening of RCC bases of the existing 200 lightning arrester	263,004.45	02-MAR-20		e-GP: Yes e-GP Type: e-Bidding
EAP/DPHE/G4	Supply and operation of 4 no. drilling rigs	481,255.15	09-JAN-20		e-GP: No
EAP/BREB/G5	Supply, Installation Testing commissioning of 50 nos. solar nano-grid for household electricity supply within the camp (150 household per cluster: to cater 7,500 HH) at Balukhali mega camp	1,596,676.22	31-JUL-19		e-GP: No
EAP/BREB/G6	Supply, Installation and Operation & Maintenance of Solar PV Nano Grid for household electricity supply and Power Backup (IPS System)	1,516,271.18			e-GP: Yes e-GP Type: e-Bidding

Goods and Works					
Package Number	General Description	Contract Value	Date of ADB Approval of Contract Award	Date of Completion	Comments
	for the CIC offices within the Mega-Camp				
	Lot 1: G6-A: Supply, Installation and Operation & Maintenance of Solar PV Nano Grid for household electricity supply and Power Backup (IPS System) for the CIC offices within the Mega-Camp	758,135.59	02-MAR-20		
	Lot 2: G6-B: Supply, Installation and Operation & Maintenance of Solar PV Nano Grid for household electricity supply and Power Backup (IPS System) for the CIC offices within the Mega-Camp	758,135.59	02-MAR-20		
EAP/BREB/W1 A	Design, Supply, Installation, Testing & Commissioning of 33/11kV, 10/14MVA Sub-station (Turn-key)	699,852.27	25-NOV-18	07-MAR-20	e-GP: No
EAP/DPHE/G1	Supply of 7 no. Water Carriers for Emergency Water supply including operation and maintenance for 2 years in Cox's Bazar, Ukhiya and Teknaf	469,880.72	18-DEC-18	30-JUN-19	e-GP: No
EAP/DPHE/W1 0	Construction and operation of Integrated waste management and resource recovery facility with collection system at Shamlapur, Teknaf	196,212.07	17-JUN-19		e-GP: Yes e-GP Type: e-Bidding
EAP/BREB/W2	Design, Supply and Construction of 50 KM, 11 KV and Below Lines in the Camp Areas of Displaced Personnel and Other Areas at Ukhiya and Teknaf (Turnkey)	964,675.17	27-NOV-18		e-GP: No

Goods and Works					
Package Number	General Description	Contract Value	Date of ADB Approval of Contract Award	Date of Completion	Comments
EAP/DPHE/W13	Construction of Community Bathing Facilities for women, Group -1	199,812.58	15-NOV-18	30-JUN-19	e-GP: No
EAP/DPHE/W14	Construction of Community Bathing Facilities for women, Group -2	512,407.45	25-MAR-19	30-MAR-20	e-GP: Yes e-GP Type: e-Bidding
EAP/DPHE/W15	Construction of Community Bathing Facilities for women, Group -3	480,790.01	20-APR-19	30-MAR-20	e-GP: Yes e-GP Type: e-Bidding
EAP/DPHE/W2	Construction and operation of mini piped water supply system with solar powered production tube well in camps and adjacent affected villages: Group 2 (Camp 8W)	1,612,936.03	06-MAR-19	30-JUN-20	e-GP: Yes e-GP Type: e-Bidding
EAP/DPHE/W9 A (Lot 1)	Construction and operation of 2 Integrated waste management and resource recovery facilities with collection system at the outskirts of Kutupalong Balukhali Megacamp, Ukhuya Group-2	537,028.18	16-MAY-20		e-GP: Yes e-GP Type: e-Bidding
EAP/DPHE/W9 A (Lot 2)	Construction and operation of 2 Integrated waste management and resource recovery facilities with collection system at the outskirts of Kutupalong Balukhali Megacamp, Ukhuya Group-2	146,875.51	01-JAN-20		e-GP: Yes e-GP Type: e-Bidding
EAP/DPHE/W12A (Lot 1)	Construction of surface water reservoir based piped water system at Nayapara, Teknaf	1,753,677.26	18-JUN-20		e-GP: Yes e-GP Type: e-Bidding

Goods and Works					
Package Number	General Description	Contract Value	Date of ADB Approval of Contract Award	Date of Completion	Comments
EAP/DPHE/W11 (Lot 1)	Construction of Surface Water Treatment Plant (SWTP) for supporting water supply at Cox's Bazar city and surrounding areas	2,161,330.30	29-JUN-20		e-GP: Yes e-GP Type: e-Bidding
EAP/DPHE/W11 (Lot 2)	Construction of Surface Water Treatment Plant (SWTP) for supporting water supply at Cox's Bazar city and surrounding areas	2,492,398.22	30-JUN-20		e-GP: Yes e-GP Type: e-Bidding
EAP/DPHE/W11 (Lot 4)	Construction of Surface Water Treatment Plant (SWTP) for supporting water supply at Cox's Bazar city and surrounding areas	2,432,661.73	29-JUN-20		e-GP: Yes e-GP Type: e-Bidding
EAP/DPHE/W9 B	Construction and operation of 2 Integrated waste management and resource recovery facilities with collection system at the outskirts of Kutupalong Balukhali Megacamp, Ukhiya Group-2	535,384.24	10-MAR-20		e-GP: Yes e-GP Type: e-Bidding
EAP/DPHE/W5	Construction and operation of mini piped water supply system with solar powered production well in camps and adjacent affected villages:	789,873.57	25-APR-19		e-GP: Yes e-GP Type: e-Bidding

Goods and Works					
Package Number	General Description	Contract Value	Date of ADB Approval of Contract Award	Date of Completion	Comments
	Group 5 (KRC and Camp 3)				
EAP/DPHE/W3	Construction and operation of mini piped water supply system with solar powered production well in camps and adjacent affected villages: Group 3 (Camp 17)	1,648,741.59	25-MAR-19		e-GP: Yes e-GP Type: e-Bidding
EAP/DPHE/W4	Construction and operation of mini piped water supply system with solar powered production well in camps and adjacent affected villages: Group 4 (Camp 2)	1,535,919.56	20-APR-19		e-GP: Yes e-GP Type: e-Bidding
EAP/DPHE/W1	Construction and operation of mini piped water supply system with solar powered production well in camps and adjacent affected villages: Group1 (Camp 5)	820,240.36	27-NOV-18		e-GP: No
EAP/DPHE/W1 2B	Construction of pipe water systems for the camps in Unchiprang/ Shamlapur, Teknaf	2,740,814.64	05-DEC-19		e-GP: Yes e-GP Type: e-Bidding
EAP/LGED/OC B-N/W19	Construction of Semi-Permanent Food Distribution Centers and loading /unloading yard in Ukhiya and Teknaf	746,715.60	29-JAN-19	05-FEB-20	Received revised signed contract as per approved cost variation e-GP: Yes e-GP Type: e-Bidding
EAP/LGED/OC B-N/W8	Construction of 3 nos. school cum cyclone shelter for affected people, 3 story LGED Prototype, in Ukhiya	1,275,635.32	08-NOV-18		e-GP: Yes e-GP Type: e-Bidding
EAP/LGED/OC B-N/W9	Construction of 3 nos. School cum cyclone shelter for affected people, 3 story LGED Prototype, in Teknaf	1,113,381.33	06-FEB-19		e-GP: Yes e-GP Type: e-Bidding
EAP/LGED/OC B-N/W6	Construction of 4 nos. school cum cyclone shelter for affected people, 3 story LGED Prototype, in Ukhiya	1,492,548.32	13-FEB-19		e-GP: Yes e-GP Type: e-Bidding

Goods and Works					
Package Number	General Description	Contract Value	Date of ADB Approval of Contract Award	Date of Completion	Comments
EAP/LGED/OC B-N/W1A	Construction of 7.5 km Internal Roads and Stairs with Drainage Facilities Inside the camps in Ukhiya, Group 1	2,589,537.13	01-APR-20		e-GP: Yes e-GP Type: e-Bidding
EAP/LGED/OC B-N/W1B	Construction of 7.5 km Internal Roads and Stairs with Drainage Facilities Inside the camps. in Ukhiya, Group 2	1,094,843.23	28-NOV-19		e-GP: Yes e-GP Type: e-Bidding
EAP/LGED/OC B-N/W20	Construction of Storm Water Drainage Network inside camps and evacuating water outside camps, 2 groups in Ukhiya	1,560,576.71	27-NOV-19		e-GP: Yes e-GP Type: e-Bidding
EAP/LGED/OC B-N/W21	Construction of Storm Water Drainage Network inside camps and evacuating water outside camps: 1 group in Teknaf	1,178,336.91	28-NOV-19		e-GP: Yes e-GP Type: e-Bidding
EAP/LGED/OC B-N/W10	Hill Slope Protection Works inside the Kutupalong Balukhali Mega Camp, Ukhiya Group -1	694,856.24	17-MAY-20		e-GP: Yes e-GP Type: e-Bidding
EAP/LGED/OC B-N/W5	Upgradation of existing 8.8 km link road connecting Cox's Bazar-Teknaf and Marine Drive Highways, Ukhiya	1,720,674.98	23-JUN-19		e-GP: Yes e-GP Type: e-Bidding
EAP/LGED/OC B-N/W3	[Re-bid 01] Improvement of 1.0 km Existing Folia Para Road Connecting Highway to U-B Road Ukhiya and Upgradation of 2.5 km Existing N.I. Chowdhury Road Connecting Marine Drive to U-B Road.	1,035,395.89	01-JUL-19		e-GP: Yes e-GP Type: e-Bidding

Goods and Works					
Package Number	General Description	Contract Value	Date of ADB Approval of Contract Award	Date of Completion	Comments
EAP/LGED/OC B-N/W4C	Improvement of Hajirpara Mukter Swdagor bari Side-Dakhin Faliapara Sajahan bari Rd. Ch. 0-2400m, Malercul LGED Road-Dakhin Faliapara Rd. Ch. 0-814m, Ali Mohammed Pingir Rd. Ch. 0-2327m and Tuturbill Gonarpara Rd. Ch. 0-1830m by BC, under Ukhiya Upazilla, Cox's Bazar	1,980,326.74	15-APR-20		e-GP: Yes e-GP Type: e-Bidding
EAP/LGED/OC B-N/W4D	Improvement of Ratnapalong UP office Coat Bazar – Valukhiya Bazar Road by BC at Ch. 00-4300m & Ratnapalong UP Office – Chakbaita Bazar via Goyalmara Road by BC at Ch. 00-4435m under Ukhiya Upazilla, Cox's Bazar	1,236,208.49	02-APR-20		e-GP: Yes e-GP Type: e-Bidding
EAP/LGED/OC B-N/W6A	Construction of Boundary wall of 7 Nos. Multipurpose Cyclone Shelters at Ukhiya Upazilla and 3 Nos. Multipurpose Cyclone Shelters at Teknaf Upazilla, District: Cox's Bazar	319,568.80	02-JAN-20		e-GP: Yes e-GP Type: e-Bidding
EAP/RHD/W1	Rehabilitation of National Highway from Link Road (Cox's Bazar) (Chainage 381+494) to Ukhia (Chainage- 406+494)	12,214,233.23	28-NOV-18		e-GP: No
EAP/RHD/W2	Rehabilitation of National Highway from Ukhia (Chainage 406+494) to Unchiprang (Chainage- 431+494)	15,501,667.61	29-NOV-18		e-GP: No

Consulting Services					
Package Number	General Description	Contract Value	Date of ADB Approval of Contract Award	Date of Completion	Comments
EAP/DPHE/CON/1	Design, Monitoring and Supervision consulting services of DPHE component, Cox's Bazar	1,129,454.07	02-OCT-19		e-GP: No
EAP/LGED/CON/1	Design, Monitoring and Supervision consulting services through ICT for LGED component, Cox's Bazar	719,410.85	17-DEC-18		e-GP: No
EAP/RHD/CON/1	Design, Monitoring, and supervision consulting services for RHD component, Cox's Bazar	631,855.21	21-MAR-19		e-GP: No

OUTLINE TERMS OF REFERENCE OF CONSULTANTS

A. Consultants

The Terms of reference briefly indicate the qualification and experience requirements of experts and the tasks to be performed. It is envisaged that four specialist firms will be engaged to provide individual experts to help the project implementation units of each executive agency. Firms will be recruited following limited competitive bidding with the support and assistance of ADB. An overview of the consultancy inputs and positions by project output and implementing agencies are shown in Table 1 and 2, and detail TOR of individual expert is discussed in subsequent attachments 1 to 4 of this Appendix.

Table 1: Summary of Consultants

Project Output	Implementing Agency	Firm (Key Person-Months)
Output 1: Water Supply and Sanitation	DPHE	88
Output 2: Disaster Risk Management	LGED	94
Output 4: Access roads	RHD	60
Total		242

DPHE= Department of Public Health Engineering; LGED= Local Government Engineering Department; RHD= Roads and Highways Department

Table 2: Summary of Consultant Positions

Executing Agency	Name of Expert (Number)	Individual/Firm	Key Person-Month (PM)
DPHE	Team Leader/ Sr. Water Supply and Sanitation Engineer (1)	Firm	18
	Solid Waste Management Expert (1)	Firm	12
	Sanitation and Faecal Sludge/Waste Water Expert (1)	Firm	15
	Structural Design Engineer (1)	Firm	15
	Procurement Expert (1)	Firm	6
	Quality Control Engineer (1)	Firm	10
	Environmental Engineer (1)	Firm	4
	Environmental Safeguard Specialist (1)	Firm	18
LGED	Social Safeguard Specialist (1)	Firm	4
	Team Leader/Senior Municipal Engineer (1)	Firm	18
	Drainage and Storm Water Management Specialist (1)	Firm	12
	Procurement Expert (1)	Firm	6
	Quality Control Engineer (1)	Firm	6
	Environmental Engineer (1)	Firm	4
	Environmental Safeguard Specialist (1)	Firm	18
	Social Safeguard Specialist (1)	Firm	3
	Social Development Specialist (GAD) (1)	Firm	6
	Cyclone Shelters Structural Engineer (1)	Firm	6
	Storm Water Hydrologist: (1)	Firm	6
	Design/Structural Engineer (Road/Storm water Drain/Slope Protection/Food Distribution Centre) (1)	Firm	12
Disaster Risk Management Specialist (1)	Firm	12	
Non-Key Experts:			

	Under Provisional Sum of the consultancy contract, a non-government organization (NGO) will be subcontracted for the social mobilization by 4-social mobilizers in supporting the mitigation of social- and health-related risks (i.e. sexually-transmitted infections) and human trafficking (specifically, children and women) throughout project implementation. (4)	Firm	94
RHD	Team Leader/ Senior Highway Engineer (1)	Firm	18
	Senior Resident Engineer/ Quality Control/ Material Engineer (Road) (1)	Firm	12
	Senior Contract/ Procurement Specialist (1)	Firm	6
	Senior Bridge Engineer (1)	Firm	4
	Environment Specialist (1)	Firm	4
	Social Safeguards and Gender Development Specialist (1)	Firm	4
	Quantity Engineer (Road)	Firm	12

TERMS OF REFERENCE
for
Design, Monitoring, and Supervision Consultants
Output 1: Water Supply and Sanitation
Agency: Department of Public Health Engineering

A. Scope of Service

The consultants will directly work with Department of Public Health Engineering (DPHE) to deliver output 1 of the project related to Water Supply and Sanitation, which will cover the following interventions:

- i. Mini piped water supply system with production tube-well (chlorinated, solar powered groundwater based), pipe network, and stand-pipe water distribution points - 30 km;
- ii. Integrated waste management (both fecal and solid waste), and resource recovery facility with collection system at the outskirts of the camps - 2 nos;
- iii. Construction of surface water treatment plant for supporting water supply at Cox's Bazaar city and surrounding areas, capacity 350 m³/hour, water intake from bankhali river- 1 no;
- iv. Develop surface water reservoirs and associated facility to expand the existing surface water treatment system from 300 to 450 m³ per day for the refugees and host community;
- v. Construction/ upgradation of pipe water systems including surface water treatment units for the camps in Shamlapur and Unchiprang, Teknaf- 2 nos.;
- vi. Community Bathing facility in camps (for 15 females per bathroom)- 1,000 nos;
- vii. Supply of Water Carrier (capacity 3000 liter) for Emergency Water supply- 7 nos.;
- viii. Supply of Waste Management Equipment/vehicle (Vacuu tag, suction pump, and pipe, etc.) - 30 nos.

For design, construction and supervision and smooth implementation of above packages, DPHE will recruit a firm following limited competitive bidding.

88 Person months of key staff and 204 person-months of non-key staff inputs will be required to complete all the activities of output 1. The summary of consultant requirement is in tables 3 and 4, and the Terms of References (TORs) of individual key staff are described in section B.

Table 3: Summary of key staff

Particulars	Person-month
Team Leader/ Sr. Water Supply and Sanitation Engineer	18
Solid Waste Management Expert	12
Sanitation and Faecal Sludge/Waste Water Expert	15
Structural Design Engineer	15
Procurement Expert	6
Quality Control Engineer	10
Environmental Engineer	4
Environmental Safeguard Specialist	18
Social Safeguard Specialist	4
Total Key staff	88

B. Team Composition

DPHE/K1: Team Leader/ Sr. Water Supply and Sanitation Engineer (1 national x 18 months)

Qualification and Experience

The Sr. Water Supply & Sanitation Engineer will have post-graduate degree in Civil Engineering with specialization in drinking water supply and source development (ground and surface water) with over 15 years of experience in planning, design, operation, management and supervision of water supply and sanitation activities and having 10 years of practical experience in urban water supply and sanitation in Bangladesh and elsewhere in the developing countries. He will assist the PMO and the PIUs under the overall supervision of the Team Leader and the Deputy Team Leader. Design experience of water supply sub projects will be considered as added advantage.

Duties and Responsibilities

The duties and responsibilities of the Sr. Water Supply & Sanitation will include but not limited to the following:

- (i) Assist the Team Leader about water supply and sanitation activities under the project;
- (ii) Assist in selection of water supply/sanitation sub-projects following sub-project selection criteria of the project;
- (iii) Assist PIUs in planning, design and construction of production well, treatment plants, overhead tanks, pipe network system, iron and arsenic removal plants, prepare specifications, bid documents, drawings, etc.;
- (iv) Work closely with environmental resilient specialist to incorporate adaptation measures into water supply designs, with focus on salinity intrusion into ground and surface waters;
- (v) Help conducting survey for location of Surface Water Treatment Plants, Production Tube Wells and stand pipes;

- (vi) Prepare feasibility study, detailed engineering designs, including specifications, drawings, and detailed cost estimates for water supply components
- (vii) Assist in preparation of bidding documents, bill of quantities and conducting bidding and contract award
- (viii) Monitor and supervise the works as the per the detailed design and contract requirement
- (ix) Prepare guidelines for organizing community, establish operation and management mechanism for long time sustainability of the services;
- (x) Develop mechanism for identification of water supply system leak detection and leak management to prevent water losses;
- (xi) Assist PIU in identification of proper places for Community Bathing Facilities, transfer station and sludge disposal;
- (xii) Assess appropriate O&M arrangements to ensure sustainable operation of the facilities to be built and incorporate them in the bid documents;
- (xiii) Assist PMO and PIUs in developing leaflets, brochures, posters, etc. for public awareness campaign for better hygiene;
- (xiv) Impart training to related PIU staffs for successful O&M of water supply network;
- (xv) Perform any other task assigned by the Team Leader, Deputy Team Leader, and the Project Director.

DPHE/K2: Solid Waste Management Expert (1 National X 12 Months)

Qualification and Experience

The expert is preferred to have a Master's degree in civil or environmental engineering or related discipline; and (ii) a minimum of 10 years' relevant project experience involving SWM including planning, design and implementation.

Duties and Responsibilities

The duties and responsibilities of the expert will include but not limited to the following:

- (i) Lead technical and socioeconomic analysis and preparation of solid waste management feasibility study Identify the suitable/appropriate interventions (both hard and soft) propose the implementation process stemming from climate-resilient integrated waste management.
- (ii) Prepare detailed engineering design (in difficult terrain/slope etc.), specifications, drawings, and detailed cost estimates and operation and maintenance arrangements.
- (iii) Propose an institutional and implementation modality for construction and O&M, such as service contracts, build-operate, and performance-based contract, with special attention to sustainability and the scope of private sector/community/NGO involvement.
- (iv) Work out a strategy for community-based solid waste management including collection mechanism particularly in low income areas
- (v) Explore the viability for developing regional treatment and/or disposal facilities involving towns and/or urban centers of near proximities.
- (vi) Propose an appropriate procurement plan/mechanism for the solid waste management components.
- (vii) Lead the preparation of the model bidding documents and management contracts as appropriate

- (viii) Provide orientation and training to the concerned on solid waste management process, its socio economic viability, overall environmental improvement and importance from climate resilience aspects.
- (ix) Work closely with the other experts as required

DPHE/K3: Sanitation and Faecal Sludge/Waste Water Expert (1 National X15 Months)

Qualification and Experience

The expert will be preferably a graduate in municipal/civil engineering, with at least 15 years working experience in sanitation and waste management. The Specialist work closely with the SWM expert to design sanitation and integrated waste management subprojects. He/she should have good communication skills, be familiar with participatory approaches to project design and implementation and can assist in the capacity building and training programs.

Duties and Responsibilities

The expert will perform the following tasks:

- (i) Assess the existing sanitation systems and the projected quantity and quality of effluent
- (ii) Identify problems and opportunities for the provision, operation, and management of a sustainable waste management system
- (iii) Select appropriate sanitation technology options and preferred options including design criteria for (i) septic tanks and de-sludging; and (b) pit latrines and de-sludging; integrated resource recovery with SWM as appropriate
- (iv) Prepare detailed design for sludge disposal site and for maximizing opportunities for sludge after-use;
- (v) Collect and test waste water sample of the study area and analyze them for identifying the appropriate management technologies/mechanism;
- (vi) Develop detailed design of the system, specification, BOQ and cost estimate
- (vii) Prepare detailed cost estimates and specifications for proposed sanitation equipment
- (viii) Prepare operation and maintenance (O&M) options and a preferred option for implementing the proposed improved sanitation/waste management system;
- (ix) Prepare Sanitation System Manuals for sustainable sanitation system involving private/community/NGO managed O&M system
- (x) Support the development of Community Consultation Plans and participate in consultations with any Stakeholder Committees that may be established during the subproject implementation

DPHE/K4 Structural Design Engineer (1 National x 15 months)

Qualification and Experience

The Structural Engineer will have first class degree in civil engineering with over 15 years' experience in the field of design of civil works in Bangladesh or any other developing country. 7 years' practical experience in designing urban and related civil works will be essential.

Duties and Responsibilities

The duties and responsibilities of the Sr. Structural and Design Engineer will include, but not limited to the following:

- (i) Work under the general supervision and guidance of the Team Leader;
- (ii) Produce detailed situation reports for the subproject area internal road network including the design
- (iii) Help PMO and PIUs in the structural design of civil construction works that includes roads, Surface water drains and other relevant structures required for ensuring smooth communications within the camp and safe evacuation from the camps;
- (iv) Collect relevant data, information related to structural design of schemes included in the priority list of structures;
- (v) Develop solutions that would give help to pedestrians and improve the road side drainage
- (vi) Undertake detailed design, prepare design reports for the sub-project;
- (vii) Develop climate resilient design including the choice of materials, durability considering quick construction/rehabilitations
- (viii) Prepare bidding documentation, advise on the selection of contractors and other companies/agencies essential to implementing the subproject proposals and for all procurement related matters
- (ix) Assist in the preparation of detailed estimate and bill of quantities;
- (x) Device computer based design module using standard updated software and help to train PIU and PMO staff in using Auto CAD/other design software;
- (xi) Check/inspect sites that need special attention
- (xii) Conduct community consultation and participation of the community in the upgrading of roads facilities; and
- (xiii) Perform any other task assigned by the Team Leader, Deputy Team Leader, and the Project Director.

DPHE/K5: Procurement Expert (1 National x 6 months)

Qualification and Experience

The expert will be preferably graduate in engineering, civil engineering, or similar / relevant discipline with a minimum of 10 years working experience in procurement and contract management. He/she will be responsible for carrying out the following the following principle tasks:

- (i) Collate and review technical specifications and work with experts to devise evaluation criteria
- (ii) Prepare rate analyses for all BoQ items and engineering estimates for all project components
- (iii) Assist client in updating the project procurement plan and advise client to ensure timeliness of procurement processes
- (iv) Familiarity with ADB procurement process for procurement in emergency and disaster management projects
- (v) Advise and support client in obtaining ABD and GoB approval of procurement processes
- (vi) Preparing bidding documents and assist client in tender evaluation, award and management of contracts ensuring compliance with applicable ADB and GoB procurement guidelines

- (vii) Prepare contract documents and assist the EA in the bidding process and contract award

DPHE/K6: Quality Control Engineer (1 National x 10 months, Intermittent)

Qualification and Experience

The Quality Control Engineer will have degree in civil engineering with Masters in relevant field from any recognized university. and have 15 years' experience in quality control activities of civil work with 10 years' experience of quality control activities in urban civil work in Bangladesh and developing countries. Experience to work in quality control laboratories will get preference.

Duties and Responsibilities

The duties and responsibilities of the Quality Control Engineer will include, but not limited to the following:

- (i) Work under the general supervision and guidance of the Team Leader and Sr. Structural Engineer;
- (ii) Ensure quality control/assurance of ongoing and completed civil works;
- (iii) Prepare annual work plan for supervision and monitoring of civil work;
- (iv) Undertake regular field visits to all sub-projects to review implementation and supervision of subproject physical works, to confirm that specified quality standards are being achieved. Contribute to resolving any QC/QA issues;
- (v) Prepare and manage/participate in programs for on-site audit checks during the execution of physical works (construction and maintenance), of quality and quantity control, and provide advice on remedial actions as required
- (vi) Arrange laboratory testing of materials used for construction work in LGED laboratories/ elsewhere, as required;
- (vii) Arrange field testing of construction materials/activities;
- (viii) Design monitoring procedures/formats for quality control/assurance of civil work;
- (ix) Collect, compile and analyze test results of civil work and submit reports to the PMO;
- (x) Identify deviations from the standard specifications/quality of civil work and arrange rectification of the same, as required;
- (xi) Certify final bills regarding quality compliance;
- (xii) Train PIU staff/contractors to ensure quality;
- (xiii) Assist PIUs to establish mobile maintenance team; and
- (xiv) Perform any other task assigned by the Team Leader, Deputy, and the Project Director.

DPHE/K7: Environmental Engineer (1 National X 6 Person Months)

Qualification and Experience

He/she will have post-graduate degree in Civil/Environmental Engineering, or related degree with over 12 years of experience, of which preferably 10 years involved in planning and design of environmental resilient infrastructure projects, preferably in water supply, waste management, roads and drainage, hill slope protection and will have a preferably 6 years proven work experience and skill in similar positions.

He/she will be responsible of the following:

- (i) Assist the team in incorporating environmental resilience into detailed designs of subprojects, particularly for water supply, waste management and drainage subprojects such as location of intakes, depth of production wells, width and orientation of drains and slope protection mechanisms.
- (ii) Assist the PMUs/PIUs in the selection of eligible subprojects using subproject selection criteria
- (iii) work closely with water supply and drainage engineers and other experts on team to incorporate adaptation and mitigation measures into both physical and non-physical components
- (iv) Work closely with the engineers to identify, quantify, and clearly report the incremental costs of climate adaptation and mitigation in the project design

DPHE/K8: Environmental Safeguard Specialist (1 national x 18 months, intermittent)

Qualification and Experience

Graduate in Civil Engineering with specialization in environment or similar / relevant discipline with at least 10 years of relevant working experience.

Duties and Responsibilities

He/she will assist and be responsible for implementing the following principle tasks:

- (i) Prepare Initial Environmental Examination (IEE)/Environmental Impact Assessments (EIA) in accordance with the Environmental Assessment Review Framework (EARF) for subprojects
- (ii) Ensure all Environmental Management Plan (EMP) measures are included in contract documents
- (iii) Ensure compliance with all relevant national laws
- (iv) Interact with the sector specialists and integrate environmentally sound practices into the detailed design of project components;
- (v) Work out the site-specific mitigation and adaptation measures for components as required and integrate the same into contractual provisions;
- (vi) Assist the Environmental Resilient Specialist in environmental training programs and workshops for the staffs of the PIU and contractors
- (vii) Prepare activity plans as identified in IEE (includes site management plans, waste management plans, sludge management and disposal plans, occupational safety plans, etc.);
- (viii) Supervise the implementation of the EMP by the contractors;
- (ix) Prepare quarterly environmental monitoring reports as required;
- (x) Assist in providing occupational health and safety training for contractors' personnel before commencement of civil works for all sub-projects
- (xi) Establish dialogue with the affected communities and ensure that the environmental concerns and suggestions are incorporated and implemented in the project;
- (xii) Facilitate in responding to any public grievances

DPHE/K9: Social Safeguard Specialist (1 national x 4 months, intermittent)

Qualification and Experience

Graduate in sociology, social anthropology, or similar/ relevant discipline with at least 10 years of relevant working experience in design and implementation of resettlement plans and framework. The specialist should be well conversant with laws relating to land acquisition, state procedures in implementation of resettlement packages and ADB procedures.

Duties and Responsibilities

He/she will be implementing the following tasks:

- (i) Prepare Due-diligence reports (DDR) in accordance with Resettlement Framework (RF) for the subprojects as needed;
- (ii) Establish dialogue with the affected communities and ensure that their concerns and suggestions are incorporated and implemented in the project;
- (iii) Submit all draft DDR to ADB for review and clearance before contract award
- (iv) If Involuntary Resettlement triggers, work closely with the PMUs/PIU to implement the Resettlement Plan (RP) and specifically responsible for implementation of proposed compensation, rehabilitation, and income restoration measures, consultations with affected persons (APs) during rehabilitation activities, and assisting in grievance redress;
- (v) Ensure compliance with all Government rules and regulations and ensure that DDR/RP is in compliance with ADB's SPS-2009;
- (vi) Lead community consultation during design phase of components and as part of the preparation of the RP;
- (vii) Coordinate monitoring of RP implementation including reporting;
- (viii) Prepare resettlement training programs and workshops for the staff of the PIU and contractors;
- (ix) Facilitate in responding to any public grievances and keep the record of all the grievance.

Table 4: Summary Non-Key Expert

Expert Code	Title of Expert	Require Qualification	No. of Expert	Total Person-Month
DPHE/SS 01	Construction Supervision Engineer	<ul style="list-style-type: none"> • Bachelor's degree in civil/material engineering • 8 years of professional experience • 5 years of in construction supervision of civil works 	3	72
DPHE/SS 02	Quantity Surveyors	<ul style="list-style-type: none"> • Bachelor's degree in civil engineering • 8 years of professional experience • 5 years in quantity survey, cost estimate and BOQ preparation 	1	24
DPHE /SS 03	Financial Management Expert	<ul style="list-style-type: none"> • Bachelor's degree in accounting • additional qualifications in finance • 7 years of professional experience • Must have at least 2 years of experience of working in ADB or other (WB/IsDB/JICA) externally assisted projects in disbursement and finance areas 	1	18

DPHE /SS 04	Office Manager	<ul style="list-style-type: none"> • Diploma in civil Engineering • 8 years of professional experience • 5 years as CAD technician 	1	24
DPHE /SS 05	CAD Technicians	<ul style="list-style-type: none"> • Diploma in civil Engineering • 8 years of professional experience • 5 years as CAD technician 	1	12
DPHE /SS 06	Laboratory Technicians	<ul style="list-style-type: none"> • H.S.C in science background • 3 years of professional experience as a laboratory technician 	1	18
DPHE /SS 07	Assistant Laboratory Technicians	<ul style="list-style-type: none"> • H.S.C in science background • 1 years of professional experience as a laboratory technician 	2	36
Sub-Total=			10	204

Note: 1. CVs of all key experts shall be evaluated and scored.
2. Consultants shall propose 10 non-key experts to complete the assignment based on the requirements provided in the TORs. The consultant is required to submit CV of non-key experts with the proposal, however, the CVs will not be scored but evaluated on fail/pass criteria.

Two non-key staff positions require specific TORs as follows:

1. Non-key Expert– DPHE/SS 01: Construction Supervision Engineers (3 Nationals X 24 months)

Qualification and Experience

Bachelor degree in civil engineering preferably with Masters in equivalent field from any recognized university. Preferred 10 years of work experience of which 7 years' extensive supervision experience of the implementation of infrastructure projects. He/she will be responsible for the following tasks:

- (i) Supervise the day-to-day works construction activities and assist PIUs to ensure quality of works.
- (ii) Examine and make recommendations on the contractor's facilities, to ensure that these facilities conform to the agreed contract documents;
- (iii) Examine and make recommendations on the contractor's proposed work methods including but not limited to examining and approving occupational health and safety procedures;
- (iv) Assess the adequacy of materials, equipment and labor provided by the contractors, the contractor's methods of work, and rate of progress and (where required) recommend appropriate action to expedite progress;
- (v) Examine and make recommendations on the contractor's plans defining the location of the crushing and aggregate processing plants and the like;
- (vi) Issue all necessary field instructions to the contractor, and examine and control the work to ensure that these are carried out according to the contract documents
- (vii) Provide general guidance to the contractor as may be necessary to ensure that the works are carried out per schedule and within the terms of contract
- (viii) Ensure that the SEMP's are prepared prior to actual construction; supervise the implementation of environmental mitigating measures required for the construction activities;
- (ix) Inspect all working areas and installations during the execution of the works;

- (x) Compute quantities of works and materials, which have been accepted and approved, and examine and certify contractor's payment requests;
- (xi) Report monthly on the progress of the works, the contractors' performance, quality of works, and the subproject's financial status and projections;
- (xii) Ascertain and agree with the contractor all work measurements and review, and recommend payment claims and certify these within the terms of the contract. Record the results of measurements carried out for quantities to be paid
- (xiii) Conduct regular quality control test to assure quality of the work.
- (xiv) Advise the client on any environmental recommendations to overcome possible problems encountered
- (xv) Review the following contractor's documents and recommend appropriate action to the EA/IA, as necessary: periodic progress reports, quality-testing results, requests for variation, contractor's claims, and contractor's invoices;
- (xvi) Carry out an inspection upon completion of works and recommend on maintenance during defect liability period; and
- (xvii) Ensure that 'as-built' drawings are prepared for all works as construction progresses.

2. Non-key Expert – DPHE/SS 01: Financial Management Expert (1 Nationals X 18 months)

Qualification and Experience

A bachelor's degree in accounting with additional post graduate degree in finance. He/she should have preferably 7 years of professional experience in disbursement and finance areas, of which 2 years' experience must be in ADB or other (WB/IsDB/JICA) externally assisted projects.

Responsibilities:

General

- Work under supervision and guidance of PMU (project director), provide support and guidance to the PIU and PIU financial and accounting staff;
- Effectively manage the financial aspects of the project in a timely coordinated manner.

Training

- Provide capacity building support to PIU to ensure that relevant staff of PIUs and other offices understands the requirements of ADB for disbursement and financial reporting; and
- Identify training needs of PIU staff, prepare training program, and conduct training in coordination with other Financial Management Specialist of the projects.

Accounting, reporting and disbursement

- Preparing, developing, maintaining and using an accounting database system to maintain all transaction and procurement records of the PMU/PIU;
- Setting up a project specific bank account (Advance account, 2nd generation advance account and PIU account) for ADB grant in the name of Project and maintain it;
- Preparing and payment request with appropriate supporting documents to PMU approval authority and ADB following the agreed fund flow and appropriate disbursement categories;

- Tracking and expediting payments to suppliers, contractors, consultants and others;
- Book keeping of all expenses, payments and accounts to meet the professional statutory requirements of the GOB; and
- Ensuring all project financial activities are aligned to ADB & GOB disbursement requirement and highest level of integrity is maintained in all financial transactions.

Internal audit

- Facilitating and cooperating with internal auditors whenever required;
- Advises on action to be taken to mitigate gaps in internal controls and effectively follows up on action to be taken.

APFS

- Prepare or assist to prepare annual project financial statements in the form acceptable to ADB to ensure timely submission.
- Advises and monitors audit observation and effectively follow up and implements audit recommendation and resolving the audit issues.
- Advises on compliances with grant covenant and ensure compliance on grand covenant is maintained.
- Assist PMU/PIU to address issues raised by ADB on audited project financial statements requirement and effectively follow up on actions to be taken

Reporting

- Develop monitoring format for progress monitoring of activities and tasks of the project relevant to financial management on a monthly basis.
- Responsible for accurately monitoring and reporting actual and forecast future expenditures of funds (from the different sources) on a monthly basis and quarterly basis.

TERMS OF REFERENCE

for

Design, Monitoring and Supervision Consultants

Output 2: Disaster Risk Management

Output 4 (part 2): Internal Roads and Drains

Agency: Local Government Engineering Department

A. Scope of Service

The consultant will directly work with Local Government Engineering Department (LGED) to deliver all items of output 2 of the project, and a part of output 4 related to internal road network within the camps, which will cover the following interventions:

- i. Internal Roads and Stairs with Drainage Facilities inside the Camps - 30 km
- ii. Construction of School cum Cyclone Shelter for affected people, 3 storied LGED Prototype - 10 nos.
- iii. Hill Slope Protection Inside the Mega Camp- 5 km
- iv. Construction of Semi-Permanent Food Distribution Centers and loading /unloading yard -20 nos.
- v. Construction of Storm Water Drainage Network-6 km

For smooth implementation of above packages, LGED will recruit a firm following limited competitive bidding.

88 Person months of key staff 177 person-months of non-key staff inputs will be required to complete all the activities of LGED. The summary of consultant requirement is in tables 5 and 6, and the TORs of individual key staff are described in section B.

Table 5: Summary of key staff

Output name	Particulars	Person-month
Internal Roads and Drains	Team Leader/Senior Municipal Engineer	18
	Drainage and Storm Water Management Specialist	12
	Procurement Expert	6
	Quality Control Engineer	6
	Environmental Engineer	4
	Environmental Safeguard Specialist	3
	Social Safeguard Specialist	3
	Social Development Specialist (GAD)	6
Resilience and Disaster Management Works	Cyclone Shelters Structural Engineer	6
	Storm Water Hydrologist	6
	Design/Structural Engineer	12
	Disaster Risk Management Specialist	12
Total Key staff		94

B. Team Composition

LGED/K01: Team Leader/Senior Municipal Engineer (1 National x 24 months)

Qualification and Experience

The Team Leader will have degree in Civil Engineering/Municipal Engineering with over 20 years of experience, of which at least 15 years involved in planning, design and supervision of urban development projects and will have a minimum of 10 years proven work experience and skill in similar position in similar developing countries specially in South and South-East Asia. The Team Leader will be familiar with all aspects of the tasks listed in the scope of works and will have overall responsibility for managing the team.

Duties and Responsibilities

The duties and responsibilities will include, but not limited to the following:

- (i) Review all relevant project documents, ADB Guidelines, GOB Rules & Procedures and assist PIUs, and other team members for smooth efficient, effective and successful implementation of infrastructure and services;
- (ii) Ensure close co-operation and assistance to the Project Director in all respects for effective and successful implementation of the Project including effective coordination with all development partners and NGOs;
- (iii) Assist Project Director in the preparation and implementation of annual work plan;
- (iv) Assist Project Director in preparation of standard bidding documents, tender/contract evaluation and supervision of civil works, review and ensure quantity and quality of work as per specifications and certify bills for the works implemented under the project, for roads and drainage structures;

- (v) Assist PIU in preparation of Inception Reports and other Reports, such as, Monthly, Quarterly, Annual and Mid Term Progress Reports, etc.;
- (i) Co-ordinate and supervise activity of other consultants of the team to ensure smooth implementation of the project activity;
- (ii) Assist PIU in contract administration and supervision to ensure quality control of subprojects;
- (iii) Ensure regular checking and supervision of works at field level and conform quality and quantity of work as per specification and certify bills for construction work;
- (vi) Assist PIUs to establish mobile maintenance units;
- (vii) Assist the concerned stakeholders to prepare plan for cleanliness of drains, canal etc.;
- (viii) Perform any other activity assigned by the Project Director.

LGED/K02: Drainage and Storm Water Management Specialist (1 National x 12 months, intermittent)

Qualification and Experience

The Drainage Engineer will have degree in civil engineering with specialization in drainage, flood, and slope protection. He/she should have at least 15 years' overall experience and 7 years' practical experience in planning, design construction and management of flood control and urban drainage system projects in Bangladesh or any other developing country. Design experience of drainage structures will be essential.

Duties and Responsibilities

The duties and responsibilities of the Drainage Engineer will include, but not limited to the following:

- (i) Work under the general supervision and guidance of the Team Leader;
- (ii) Work closely with environmental resilient specialist to incorporate climate adaptation into drainage designs
- (iii) Assist PIUs to develop drainage subproject per selection criteria and appropriate drainage network for the project
- (iv) Conduct physical surveys as required
- (v) Prepare feasibility studies and designs of flood control and urban drainage system improvement subprojects prioritized under the project, especially in the densely populated slum areas, in collaboration with other relevant specialists;
- (vi) Discuss the technical viability of various proposed options for each subproject and demonstrate that they are most cost efficient;
- (vii) Prepare detailed engineering designs, including specifications, drawings, and detailed cost estimates for drainage and flood control components
- (viii) Include climate adaptation into drainage subprojects including the cost estimate;
- (ix) Assist in preparation of bidding documents, bill of quantities and conducting bidding and contract award
- (x) Assist in identifying places for community toilets, wash station, transfer station and sludge disposal to ensure linkage to safe drainage
- (xi) Coordinate with relevant government departments, such as, Bangladesh Water Development Board (BWDB), and Ukhia and Teknaf Pourashavas to ensure consistency in the approach for reducing water logging and flood impacts;

- (xii) Review O&M options and prepare an O&M strategy including technical procedures to ensure efficiency and sustainability of the selected subprojects; and
- (xiii) Perform any other task assigned by the Team Leader, Deputy Team Leader, and the Project Director.

LGED/K03: Procurement Expert (1 National x 6 months)

Qualification and Experience

The expert will be preferably graduate in engineering, civil engineering, or similar / relevant discipline with a minimum of 10 years working experience in procurement and contract management. He/she will be responsible for carrying out the following the following principle tasks:

- (i) Collate and review technical specifications and work with experts to devise evaluation criteria
- (ii) Prepare rate analyses for all BoQ items and engineering estimates for all project components
- (iii) Assist client in updating the project procurement plan and advise client to ensure timeliness of procurement processes
- (iv) Familiarity with ADB procurement process for procurement in emergency and disaster management projects
- (v) Advise and support client in obtaining ABD and GoB approval of procurement processes
- (vi) Preparing bidding documents and assist client in tender evaluation, award and management of contracts ensuring compliance with applicable ADB and GoB procurement guidelines

LGED/K04: Quality Control Engineer (1 National x 6 months Intermittent)

Qualification and Experience

The Quality Control Engineer will have degree in civil engineering with Masters in relevant field from any recognized university. and have 15 years' experience in quality control activities of civil work with 10 years' experience of quality control activities in urban civil work in Bangladesh and developing countries. Experience to work in quality control laboratories will get preference.

Duties and Responsibilities

The duties and responsibilities of the Quality Control Engineer will include, but not limited to the following:

- (i) Work under the general supervision and guidance of the Team Leader and Sr. Structural Engineer;
- (ii) Ensure quality control/assurance of ongoing and completed civil works;
- (iii) Prepare annual work plan for supervision and monitoring of civil work;
- (iv) Undertake regular field visits to all sub-projects to review implementation and supervision of subproject physical works, to confirm that specified quality standards are being achieved. Contribute to resolving any QC/QA issues;

- (v) Prepare and manage/participate in programs for on-site audit checks during the execution of physical works (construction and maintenance), of quality and quantity control, and provide advice on remedial actions as required
- (vi) Arrange laboratory testing of materials used for construction work in LGED laboratories/ elsewhere, as required;
- (vii) Arrange field testing of construction materials/activities;
- (viii) Design monitoring procedures/formats for quality control/assurance of civil work;
- (ix) Collect, compile and analyze test results of civil work and submit reports to the PMO;
- (x) Identify deviations from the standard specifications/quality of civil work and arrange rectification of the same, as required;
- (xi) Certify final bills regarding quality compliance;
- (xii) Train PIU staff/contractors to ensure quality;
- (xiii) Assist PIUs to establish mobile maintenance team; and
- (xiv) Perform any other task assigned by the Team Leader, Deputy, and the Project Director.

LGED/K05: Environmental Engineer (1 National X 4 Person Months)

Qualification and Experience

He/she will have post-graduate degree in Civil/Environmental Engineering, or related degree with over 12 years of experience, of which preferably 10 years involved in planning and design of environmental resilient infrastructure projects, preferably in water supply, waste management, roads and drainage, hill slope protection and will have a preferably 6 years proven work experience and skill in similar positions.

He/she will be responsible of the following:

- (i) Assist the team in incorporating environmental resilience into detailed designs of subprojects, particularly for water supply, waste management and drainage subprojects such as location of intakes, depth of production wells, width and orientation of drains and slope protection mechanisms.
- (ii) Assist the PMUs/PIUs in the selection of eligible subprojects using subproject selection criteria
- (iii) work closely with water supply and drainage engineers and other experts on team to incorporate adaptation and mitigation measures into both physical and non-physical components
- (iv) Work closely with the engineers to identify, quantify, and clearly report the incremental costs of climate adaptation and mitigation in the project design

LGED/K06: Environmental Safeguard Specialist (1 national x3 months intermittent)

Qualification and Experience

Graduate in Civil Engineering with specialization in environment or similar / relevant discipline with at least 10 years of relevant working experience.

Duties and Responsibilities

He/she will assist and be responsible for implementing the following principle tasks:

- (i) Prepare Initial Environmental Examination (IEE)/Environmental Impact Assessments (EIA) in accordance with the Environmental Assessment Review Framework (EARF) for subprojects
- (ii) Ensure all Environmental Management Plan (EMP) measures are included in contract documents
- (iii) Ensure compliance with all relevant national laws
- (iv) Interact with the sector specialists and integrate environmentally sound practices into the detailed design of project components;
- (v) Work out the site-specific mitigation and adaptation measures for components as required and integrate the same into contractual provisions;
- (vi) Assist the Environmental Resilient Specialist in environmental training programs and workshops for the staffs of the PIU and contractors
- (vii) Prepare activity plans as identified in IEE (includes site management plans, waste management plans, sludge management and disposal plans, occupational safety plans, etc.);
- (viii) Supervise the implementation of the EMP by the contractors;
- (ix) Prepare quarterly environmental monitoring reports as required;
- (x) Assist in providing occupational health and safety training for contractors' personnel before commencement of civil works for all sub-projects
- (xi) Establish dialogue with the affected communities and ensure that the environmental concerns and suggestions are incorporated and implemented in the project;
- (xii) Facilitate in responding to any public grievances

LGED/K07 Social Safeguard Specialist (1 National x 3 months intermittent)

Qualification and Experience

19. Graduate in sociology, social anthropology, or similar/ relevant discipline with at least 10 years of relevant working experience in design and implementation of resettlement plans and framework. The specialist should be well conversant with laws relating to land acquisition, state procedures in implementation of resettlement packages and ADB procedures.

Duties and Responsibilities

He/she will be implementing the following tasks:

- (i) Prepare Due-diligence reports (DDR) in accordance with Resettlement Framework (RF) for the subprojects as needed
- (ii) Establish dialogue with the affected communities and ensure that their concerns and suggestions are incorporated and implemented in the project;
- (iii) Submit all draft DDR to ADB for review and clearance before contract award
- (iv) If Involuntary Resettlement triggers, work closely with the PMUs/PIU to implement the Resettlement Plan (RP) and specifically responsible for implementation of proposed compensation, rehabilitation, and income restoration measures, consultations with affected persons (APs) during rehabilitation activities, and assisting in grievance redress
- (v) Ensure compliance with all Government rules and regulations and ensure the DDR/RP is in compliance with ADB's SPS-2009;

- (vi) Lead community consultation during design phase of components and as part of the preparation of the RP;
- (vii) Coordinate monitoring of RP implementation including reporting;
- (viii) Prepare resettlement training programs and workshops for the staff of the PIU and contractors
- (ix) Facilitate in responding to any public grievances and keep the record of all the grievance

LGED/K08: Social Development Specialist (GAD) (1 national x 6 months intermittently)

Qualification and Experience

Graduate in sociology, development studies or similar/ relevant discipline with at least 5-7 years of relevant working experience in design and implementation of GESI/AP and gender related activities.

Duties and Responsibilities

He/she will be implementing the following tasks:

- i. Ensure GESI measures are incorporated in LGED activities especially in line the gender targets
- ii. Ensure results are reported and monitored in an effective manner.
- iii. compliance with national core labor standards (CLS) in construction-related works, and representation in user committees;
 - (iv) Provide guidance and support to the LGED project staff in mobilizing communities to participate in project activities such labor opportunities, in user committees, in awareness raising and capacity building events;

LGED/K09: Cyclone Shelters Structural Engineer (National): 1x 6 PM (intermittent)Detailed Tasks Assigned/or Expected Outputs

- a. Develop standard designs and specifications for all project cyclone shelter buildings;
- b. Undertake detail designs and preparation of drawings for each of the selected Cyclone Shelter structures based on site survey and investigation information provided by others;
- c. Provide advice when requested by the quality control engineers on any design and construction problems encountered during implementation, related to cyclone shelter structures.
- d. Assist with any other duties as may be reasonably assigned

Required Qualifications

- a. Educational Qualification: B.Sc. degree in Civil Engineering or equivalent. Advance Degree/Training in Structural Engineering will be an advantage
- b. General Experience: 15 years of general experience.
- c. Specific Experience: 10 years' experience in the design and construction of multi-story RCC buildings, preferably for coastal areas Cyclone Shelters in Bangladesh (Including seismic and extreme wind loads). Experience in design of Cyclone Shelters in Bangladesh would be an advantage.

LGED/K10: Storm Water Hydrologist: (1 National x 6 PM, intermittent)

Detailed Tasks Assigned/or Expected Outputs

- a. Prepare analysis of hydrological and meteorological data and verify findings with the stakeholders like BWDB and Meteorological Department.
- b. Provide design criteria for hydraulic design of the storm water drainage system;
- c. Investigate the hydraulic conditions on the sites for the detailed design;
- d. Advise Design Engineers on dimensions of the drain based on the hydrological analysis.

Required Qualifications

- a. Educational Qualification: B.Sc. degree in Civil Engineering/ Water Resources Engineering/Hydrology or equivalent. Advance Degree/Training in surface water hydrology will be an advantage.
- b. General Experience: 10 years of general experience.
- c. Specific Experience: 5 years' experience in the hydrological and meteorological data analysis for designing drainage network. Should be fully familiar with computer processing of data, GIS software especially ARCGIS.

LGED/K11: Design/Structural Engineer (Storm water Drain/Slope Protection/Food Distribution Centre): (1 National x 12 PM, Intermittent)

Detailed Tasks Assigned/or Expected Outputs

- a. Assist in the development of standard designs and technical specifications for all project drain/slope protection/food distribution centers in close co-ordination with the cyclone shelter structural engineer.
- b. Undertake detail designs and preparations of drawings for the drain, slope protection and food distribution centers based on site survey information;
- c. Provide advice to the field engineers on any design and construction problems encountered during implementation of the civil works;
- d. Assist in any other duties as may be reasonably assigned.

Required Qualifications

- a. Educational Qualification: B.Sc. degree in Civil Engineering or equivalent. Advance Degree/Training in Structural Engineering will be an advantage.
- b. General Experience: 15 years of general experience.
- c. Specific Experience: 10 years' experience in the design and construction of drain, slope protection and steel structures. Experience in design of storm water drainage/hill slope protection works in hilly areas of Bangladesh would be an advantage.

LGED/K12: Disaster Risk Management Specialist: (1 National x 12 PM)

In coordination with the Ministry of Disaster Management and Relief, the consultant will work in close coordination with sub-national disaster management authorities and humanitarian responders to the IDP/refugee crisis to enhance disaster risk management capabilities of implementing partners, host communities, camp managers and camp populations in the seven Upazillas comprising Cox's Bazar district.

Detailed Tasks Assigned/or Expected Outputs

- a. Finetune hazard profiles, disaster assessments and seasonal calendars to develop a comprehensive risk analysis of the project area and analysis of current DRM practices;
- b. Initiate and facilitate community-based DRR in the project area based on existing plans and procedures as well as consultations with host communities and camp managers;

- c. Support capacity development and advise on funding pilot projects that illustrate the potential of disaster risk reduction, provide livelihood support and enhance collaboration between host communities and camp populations;
- d. Develop emergency preparedness and disaster response plans based on international minimum standards (e.g. Sphere and INEE) and good practice (e.g. incident command systems); and
- e. Test response readiness during drills or actual response operations required by the unfolding situation.
- f. Assist with any other duties as may be reasonably assigned.

Required Qualifications

- a. Educational Qualification: Master's degree in any disaster risk management-related field. Academic degree/specialized training in disaster risk management will be an advantage.
- b. General Experience: 15 years of working experience in disaster risk management. Documented outputs from guiding national and international partners on contingency planning, emergency preparedness and disaster risk reduction would be an advantage.
- c. Specific Experience: Field experience from community-based DRR and disaster response in the project area or Bangladesh would be a plus.
- d. Good communication and coordination skills are essential along with a drive for results.

Table 6: Non-key Expert

Expert Code	Title of Expert	Relevant Experience and Qualification	No of Position	Total Person-Month
LGED/SS 01	Construction Supervision Engineer	<ul style="list-style-type: none"> • Bachelor's degree in civil/material engineering • 8 years of professional experience • 5 years of in construction supervision of civil works 	3	45
LGED/SS 02	Quantity Surveyors	<ul style="list-style-type: none"> • Bachelor's degree in civil engineering • 8 years of professional experience • 5 years in quantity survey, cost estimate and BOQ preparation 	1	24
LGED/SS 03	Financial Management Expert	<ul style="list-style-type: none"> • Bachelor's degree in accounting • additional qualifications in finance • 7 years of professional experience • Must have at least 2 years of experience of working in ADB or other (WB/IsDB/JICA) externally assisted projects in disbursement and finance areas 	1	18
LGED/SS 04	Office Manager	<ul style="list-style-type: none"> • Diploma in civil Engineering • 8 years of professional experience • 5 years as CAD technician 	1	24
LGED/SS 05	CAD Technicians	<ul style="list-style-type: none"> • Diploma in civil Engineering • 8 years of professional experience • 5 years as CAD technician 	1	12

LGED/SS 06	Laboratory Technicians	<ul style="list-style-type: none"> • H.S.C in science background • 3 years of professional experience as a laboratory technician 	1	18
LGED/SS 07	Assistant Laboratory Technicians	<ul style="list-style-type: none"> • H.S.C in science background • 1 years of professional experience as a laboratory technician 	2	36
Sub-Total			10	177

Two non-key staff positions require specific TORs as follows:

1. Non-key Expert – LGED/SS 01: Construction Supervision Engineers: (National 3 x 15 Months)

Detailed Tasks Assigned/or Expected Outputs

- Identify Quality control issues in the project arising from the design and construction of physical works, and bring these to the attention of the higher authority if they are not able to be promptly and effectively resolved at site;
- Assist in checking and supervising detailed engineering surveys and site investigations;
- Advise on scheduling of use of any construction equipment leased to contractors, to achieve timely execution of works and efficient utilization of equipment;
- Monitor on-site material and equipment storage and handling procedures, and environmental practices, and advise on remedial actions as required;
- Assist in the site supervision of all construction works to ensure that design standard and technical specifications are achieved, including use of appropriate construction methods, on-site quality control, and proper checking in accordance with the approved quality plans;
- Identify any issues related to the performance of field and laboratory testing which should be addressed
- Jointly measure and check with the EA staff all works quantities presented for payment, and jointly approve the quality and quantity of all works;

Required Qualifications

- Educational Qualification: B.Sc. degree in Civil Engineering or equivalent.
- General Experience: 8 years of general experience.
- Specific Experience: 5 years' experience in site supervision for civil engineering projects and supervision/monitoring of related field and laboratory tests. Experience in civil works site supervision in coastal areas of Bangladesh would be an advantage.

2. Non-key Expert – LGED/SS 03: Financial Management Expert (1 Nationals X 18 months)

Same TOR as of DPHE/SS 01

Indicative Provisional Sum: Under Provisional Sum of the consultancy contract, a non-government organization will be subcontracted for the social mobilization by 4-social mobilizers in supporting the mitigation of social- and health-related risks (i.e. sexually-transmitted infections) and human trafficking (specifically, children and women) throughout project implementation.

TERMS OF REFERENCE
for
Construction Supervision Consultants
Output 4: Access Roads
Agency: Roads and Highways Department

A. Background

1. Beginning August 2017, Bangladesh has received over 700,000 displaced people from Myanmar, joining an around 300,000 refugees who had arrived in waves over the past decades. They are living in 33 camps spread over Cox's Bazar district causing a huge strain on the local people and its economy. The displaced people and refugees together outnumber the local population by over 2:1 and pose significant challenges of supply of food, shelter, health, sanitation, water, and other essential services. United Nations (UN) agencies and other agencies are providing humanitarian relief such as food, water, medical aid, and temporary shelter. The existing services are significantly stretched. The Government of Bangladesh (GoB) requested ADB for grant support to provide basic infrastructure and essential services to displaced people & refugees and local people.

2. Given the humanitarian need and heart-wrenching condition of the refugees, ADB is considering providing grant financing of up to \$200 million, with \$100 million for the first phase. The scope and timing of the second phase support will be considered subject to the progress of the first phase. ADB support will be focused, selective, and well-targeted in the areas of (i) road access to and within camps; (ii) water and sanitation; (iii) energy supply; and (iv) disaster risk mitigation. It will build on the support provided by GoB and complement support provided by the United Nations (UN) agencies, the World Bank (WB) and other agencies. With the principle of putting people first, the project will seek to ease the vulnerabilities and risk of hunger, disease, and disaster.

3. The impact of the Phase 1 Project (the Project) will be: Social recovery of affected communities accelerated in the sub-districts of Ukhia and Teknaf. The outcome will be: Living conditions and resilience of affected communities improved. One of the project output among four outputs: improvement of access roads. This output consists rehabilitation of (a) sub-district and Union roads to connect food storage centers, food distribution centers, field hospitals, primary health care centers, cyclone shelters, and primary education centers; (b) emergency access roads to the camp area; (c) existing access roads and drainage system; and (d) resurfacing the road from Cox's Bazar to Teknaf including improvement of critical sections i.e. market areas and culverts.

B. Objective and Scope

4. Objective. The main objective of the consulting assignment is to (i) ensure high standards of quality assurance in execution of works and completion of work within stipulated time limit, (ii) comprehensive supervision of project implementation activities carried out by the contractor(s) to ensure complete compliance with the drawings, technical specifications and various stipulations in the contract documents, and (iii) monitor safeguards implementation includes environment, social, gender, health and safety activities associated with the project.

5. The Investment Program will include the following packages of civil works:

Civil Works Package Details	Number of Packages	Remarks
Improvement of Cox's Bazar-Teknaf Road (80.70 km)	4	Civil works for road projects
Phase 1: Cox's Bazar-Whykong (60 km)	3	

1. The scope of civil works for road projects normally involve two periods:

(i) Construction	12 Months
(ii) Defect Liability	12 Months

6. Accordingly, the consulting services involve the following tasks during the construction and defect liability periods.

7. Task: **Construction Supervision of Road Works**. The consultant will (i) review, and make modification as necessary to the detailed design for the project road already prepared by the RHD (ii) provide procurement supports, (iv) provide construction supervision to civil works, and (v) provide other technical support upon RHD's request. In addition to the above services, the consultant will undertake maintenance quality checks for project road with regard to the technical, contractual, and financial aspects of the project implementation.

C. Detailed Tasks of the Assignment

8. The consultant will carry out the following tasks under the Investment Program.

a. Review of Detailed Design

- (i) Collect and analyze data for the project area to analyze the detailed design already prepared by the RHD;
- (ii) Assess the surrounding area and check the drainage patterns, design provisions, proposed structures i.e. bridges, culverts, overpasses, pavement etc. as already prepared/proposed in the detailed design for proposed structures or modify existing detailed design: if required, in consultation with RHD.
- (iii) Conduct field visit to the entire length of the project road to assess/ check the locations of utility service lines both buried/surface throughout the project road and to identify the potential impacts of the project on road safety.
- (iv) Prepare relevant design reports/mapping for utility services with the analyses, risk assessments, findings, and safety recommendations acceptable to client
- (v) Determine/design the appropriate pavement structure for roadways, bazaar areas, intersection points, storage areas and parking areas and in consultation with RHD modify the design of pavements incorporating the rigid or composite pavement; if required

b. Procurement Support

- (i) Finalize/modify the bidding documents already prepared by the RHD with necessary incorporation of changes as per the modified/final detailed design using ADB's Procurement Guidelines.
- (ii) Provide support services, which will involve assisting RHD to respond to questions from bidders and to issue addenda when required. Services during the bidding period will also include the arranging a pre-bid meeting and site visit and the public opening of bids.

- (iii) The technical sub-committee reporting to the evaluation committee will consist of an integrated team of technical specialists from RHD and the consultant.
- (iv) Any non-compliance or deviation from the bidding documents, as issued will be noted, and where appropriate, clarification from bidders will be requested.
- (v) Upon completion of the bid evaluation, the evaluation committee will issue a Bid Evaluation Report with recommendations for award of the contract(s). The Consultant will assist RHD in finalizing the contract. This assistance will include and not limited to the verification of performance bonds and guarantees.

c. Construction Supervision

- (i) As the engineer's representative, the consultant will assist in administering the construction contracts.
- (ii) Make all necessary measurements and control the quality of works and advise the Engineer in making all engineering decisions required for the successful and timely implementation of the construction contracts.
- (iii) Review and cross check to ensure the work schedule compatible with the progress of land acquisition and resettlement, environmental clearance, and another associated safeguard implementation.
- (iv) Ensure that all works comply with the approved engineering designs and technical specifications, including all elderly-, children-, women- and disabled (ECWD) design features and other gender-related features included in the Gender Equality and Social Inclusion Action Plan (GESI/AP), agreed schedule and budget, terms and conditions of the contracts standard engineering practice, and ADB safeguards policy:
- (v) Provide general guidance and issue instructions to contractors;
- (vi) Advise the Project Director as well as ADB's Project Management Team in making engineering decision;
- (vii) Clarification about the disputed issues, anomaly, error or risk that could affect the project objectives and make the appropriate recommendations and/or take the necessary actions to remedy them;
- (viii) Ensure that the construction method proposed by the contractor for carrying out the works are satisfactory;
- (ix) Inspect contractor's construction equipment; results of materials and soil tests: safety of the works property and personnel; and schedule of mitigation measures for adverse environmental impacts. Notify contractors to remedy works and materials that fail to comply with specifications;
- (x) Review the design of culverts, underpasses, bridges, foot over bridges and ensure that the methods of construction are complied with the safety measures;
- (xi) Monitor and supervise (a) progress of contractors works vis-à-vis contract schedule, and (b) progress of contractors' works vis-à-vis applicable technical specifications and design;
- (xii) Check that 'as-built' drawing is prepared by the contractors for all works as construction processes;
- (xiii) Develop the quality assurance system and quality control plan for provisions of pavement and structures;
- (xiv) Review and certify work volume and process interim and final payments of the contractors. Ensure timely submission of contractors' interim payment certificates and release of payment.

- (xv) The supervision consultant will process interim and final payment certificate submitted by the contractors.
- (xvi) If so required by the employer, the supervision consultant will provide any of the following as additional services: (a) prepare reports including technical appraisals, additional contract documentation and/or review and comment on the contractor's proposals, as may be required for the successful completion of the Project; and (b) provide any other specialist services as may be required from time to time.

d. Performance Monitoring and Safeguards Implementation

- (i) Design and undertake project performance monitoring and evaluation of the Project in accordance with ADB's Project Performance Management System (PPMS) Handbook.
- (ii) Monitor, facilitate and in some instances, implement other social and gender related activities, including Sexually Transmitted Infections (incl. HIV), human trafficking and road safety awareness campaign to the communities along the corridor and labor.
- (iii) Ensure that the construction methods as proposed by the contractor for carrying out the works are satisfactory with particular reference to the Environmental Management Plan; requirements of the environmental clearance issued by DOE; to the technical requirements of sound environmental standards on the basis of ADB's SPS requirements; inspection of contractor's construction equipment; and safety of the works, property, personnel, and general public; the schedule of mitigation measures for adverse environmental impacts to be monitored by the consultant will be provided
- (iv) Supervise and monitor the implementation of contract-specific environmental mitigation plan (EMP). In case of unexpected environmental impacts, coordinate with the Project Director and PIC to recommended necessary mitigation measures to the Committee of Roads and ADB for implementation;
- (v) Coordinate with local government agencies or specialized non-governmental institutions working in Sexually Transmitted Infections (incl. HIV), anti-trafficking and road safety awareness campaigns to produce awareness, print materials, which will be distributed and posted in high traffic areas in and around the land ports and conduct awareness campaigns in major settlements along the concerned corridor.
- (vi) Monitor and conduct gender mainstreaming activities associated with the project through the Gender and Social Inclusion Plan (GESI/AP) and ensure gender targets are on track.
- (vii) Monitor the status of the contractor's compliance with STI/HIV prevention provisions, national labor laws (i.e. prohibition of child and forced labor), and the employment of the poor and affected persons and women in the civil works contracts.

D. Consultant's Inputs

9. The assignment will be carried out over a period of Twenty-Four (24) months from the date of commencement (expected by October 2018). The assignment will be implemented by a consulting firm. It is anticipated that about 60 person-months of input by national consultants, and 168 person-months of non-key experts will be required.

10. Based on satisfactory performance of the consultant, contract may be extended for Phase 2 through contract variation or direct contracting or new selection process depending upon implementation situation of Phase 2. Phase 2 will consist of supervision of one civil work contract for the Whykong-Teknaf road construction.

11. Attendance **Management of Consultants**. In the attendance sheet, which should be provided along with the consultant invoice, the site consultant personnel attendance sheet shall be countersigned by the authorized person determined by the client. However, Team Leader of the Consultant shall countersign the entire attendance (field and head office) sheet which will be the integral part of the Consultant Invoice.

Table 3: Required Experts

No.	Title	Relevant Experience and Qualification	Position	Person-Months
Key Expert (National)				
NC01	Team Leader/ Senior Highway Engineer	<ul style="list-style-type: none"> Bachelor degree in civil engineering, post graduate degree preferred 20 years of professional experience 15 years in planning, supervision, preparation, design and construction of highway projects, at least 7 years as project team leader of highway projects 	1	18
NC03	Senior Resident/ Quality Control Engineer	<ul style="list-style-type: none"> Bachelor degree in civil engineering 15 years of professional experience 10 years in Project Engineer/Project Manager in highway and infrastructure projects 	1	12
NC04	Senior Contract/ Procurement Specialist	<ul style="list-style-type: none"> Bachelor degree in engineering or construction science, post graduate degree preferred 15 years of professional experience 10 years of experience in preparation/management of construction contracts and procurements for international bidding with knowledge of FIDIC Contract 	1	6
NC05	Senior Bridge Engineer	<ul style="list-style-type: none"> Bachelor degree in civil engineering, post graduate degree preferred 10 years of professional experience 8 years of experience in bridge design and construction 	1	4
NC06	Environment Specialist	<ul style="list-style-type: none"> Master degree in environmental engineering or environmental science, 10 years of professional experience 8 years of experience in environment impact assessment for road/infrastructure projects 	1	4
NC07	Social Safeguards Specialist (GAD)	<ul style="list-style-type: none"> Bachelor's degree in social sciences, post- graduate degree preferred 5-7 years of experience in social and gender and development (SD/GAD) in infrastructure sectors and -preferably- in road construction/rehabilitation 	1	4
NC02	Quantity Engineer (Road)	<ul style="list-style-type: none"> Bachelor degree in civil/material engineering 10 years of professional experience 	1	12

		<ul style="list-style-type: none"> 8 years of experience in quality control and materials testing for highway projects 		
Sub-Total=			7	60
Non-key Expert				
SS 01	Site Engineer	<ul style="list-style-type: none"> Bachelor's degree in civil/material engineering 5 years of professional experience 3 years of in road construction 	2	24
SS 02	Quantity Surveyors	<ul style="list-style-type: none"> Bachelor's degree in civil engineering 10 years of professional experience 8 years in quantity survey, cost estimate and BOQ preparation 	2	36
LGED/ SS 03	Financial Management Expert	<ul style="list-style-type: none"> Bachelor's degree in accounting additional qualifications in finance 7 years of professional experience Must have at least 2 years of experience of working in ADB or other (WB/IsDB/JICA) externally assisted projects in disbursement and finance areas 	1	18
SS 04	Office Manager	<ul style="list-style-type: none"> Diploma in civil Engineering 8 years of professional experience 5 years as CAD technician 	1	24
SS 05	CAD Technicians	<ul style="list-style-type: none"> Diploma in civil Engineering 8 years of professional experience 5 years as CAD technician 	1	12
SS 06	Laboratory Technicians	<ul style="list-style-type: none"> H.S.C in science background 3 years of professional experience as a laboratory technician 	1	18
SS 07	Assistant Laboratory Technicians	<ul style="list-style-type: none"> H.S.C in science background 1 years of professional experience as a laboratory technician 	2	36
Sub-Total=			10	168

Note: 1. CVs of all key experts shall be evaluated and scored.
2. Consultants shall propose 10 non-key experts to complete the assignment based on the requirements provided in the TORs. The consultant is required to submit CV of non-key experts with the proposal, however, the CVs will not be scored but evaluated on fail/pass criteria.

E. Output and Reporting Requirements

12. The Consultant will prepare and submit reports in a format and content agreed with RHD, and ADB. The Project Director may require the Consultant to perform other tasks consistent with the above scope, including preparation of technical appraisals/ additional contract documentation, and review and comment on the contractors' proposals. The documentation and reporting requirements included but are not limited to the following:

- (i) Provide monthly report with necessary civil work information including photos.
- (ii) Report and update the works implementation schedule, highlight any unforeseen delays, and timely propose corrective measures.

- (iii) Undertake project performance monitoring and evaluation following the project framework and ADB's Project Performance Management System (PPMS) Handbook and reporting up to project completion.
- (iv) Develop and maintain a storage and retrieval system of records.
- (v) Documenting information supplied by the field teams, decision made at meetings, progress on civil works, certified achievements and milestones, financial records, any deviations from or changes to the contract plan (scope, cost, materials time), correspondences, site diaries, test data and quality control reports, quality survey records, as-built drawings, and progress reports.
- (vi) Prepare Environmental and Social monitoring report and provide inputs to GESI/AP
- (vii) Prepare Project Completion Report.

F. Data, Local Services, Personnel and Facilities to be provided by the Client

13. The Client will provide the Consultant with the following:
- (i) Access to design reports prepared, to data, records, and other information required to perform the assigned tasks;
 - (ii) Counterpart staff and engineers to work with the Consultant;
 - (iii) Recommend to the competent authority for the Consultant and each of the personnel for work permits and other documents as necessary;
 - (iv) Assist in obtaining necessary visa for the personnel and, if appropriate, their eligible dependent; Assist in clearance through customs of any property required for the services.
 - (v) Issue to officials, agents, and representatives of the Government all such instructions as may be necessary or appropriate for the prompt and effective implementation of the services.
 - (vi) Office space at site (including utilities, office equipment, and furnishings) for national experts, and for other as-needed field/technical support staff. In case the contract with the contractor is delayed
 - (vii) Fully equipped and furnished testing laboratory;
 - (viii) Necessary survey equipment.

INDIGENOUS PEOPLE SCREENING CHECKLIST

Date: _____

A. Instructions			
Indicate if the project requires broad community support (BCS) of Indigenous Peoples communities. BCS is required when project activities involve (a) commercial development of the cultural resources and knowledge of indigenous peoples, (b) physical displacement from traditional or customary lands; and (c) commercial development of natural resources within customary lands under use that would impact the livelihoods or the cultural, ceremonial, or spiritual use that define the identity and community of indigenous peoples.			
B. Indigenous Peoples Category			
[] New [] Recategorization — Previous Category []			
[] Category A	[] Category B	[] Category C	[] Category FI
C. Project requires the broad community support of affected Indigenous Peoples communities.			
[] Yes		[] No	
D. Comments			
Project Team Comments:			
E. Approval			
Proposed by:			
Name:			
Signature:			
Date:			
Endorsed by:			
Name:			
Signature:			
Date:			

KEY CONCERNS (Please provide elaborations on the Remarks column)	YES	NO	NOT KNOWN	Remarks
A. Indigenous Peoples Identification				
1. Are there socio-cultural groups present in or use the project area who may be considered as "tribes" (hill tribes, schedules tribes, tribal peoples), "minorities" (ethnic or national minorities), or "indigenous communities" in the project area?				

KEY CONCERNS (Please provide elaborations on the Remarks column)	YES	NO	NOT KNOWN	Remarks
2. Are there national or local laws or policies as well as anthropological researches/studies that consider these groups present in or using the project area as belonging to "ethnic minorities", scheduled tribes, tribal peoples, national minorities, or cultural communities?				
3. Do such groups self-identify as being part of a distinct social and cultural group?				
4. Do such groups maintain collective attachments to distinct habitats or ancestral territories and/or to the natural resources in these habitats and territories?				
5. Do such groups maintain cultural, economic, social, and political institutions distinct from the dominant society and culture?				
6. Do such groups speak a distinct language or dialect?				
7. Has such groups been historically, socially, and economically marginalized, disempowered, excluded, and/or discriminated against?				
8. Are such groups represented as "Indigenous Peoples" or as "ethnic minorities" or "scheduled tribes" or "tribal populations" in any formal decision-making bodies at the national or local levels?				
B. Identification of Potential Impacts				
9. Will the project directly or indirectly benefit or target Indigenous Peoples?				
10. Will the project directly or indirectly affect Indigenous Peoples' traditional socio-cultural and belief practices? (e.g. child-rearing, health, education, arts, and governance)				
11. Will the project affect the livelihood systems of Indigenous Peoples? (e.g., food production system, natural resource management, crafts and trade, employment status)				
12. Will the project be in an area (land or territory) occupied, owned, or used by Indigenous Peoples, and/or claimed as ancestral domain?				
C. Identification of Special Requirements <i>Will the project activities include:</i>				
13. Commercial development of the cultural resources and knowledge of Indigenous Peoples?				

KEY CONCERNS (Please provide elaborations on the Remarks column)	YES	NO	NOT KNOWN	Remarks
14. Physical displacement from traditional or customary lands?				
15. Commercial development of natural resources (such as minerals, hydrocarbons, forests, water, hunting or fishing grounds) within customary lands under use that would impact the livelihoods or the cultural, ceremonial, spiritual uses that define the identity and community of Indigenous Peoples?				
16. Establishing legal recognition of rights to lands and territories that are traditionally owned or customarily used, occupied or claimed by indigenous peoples ?				
17. Acquisition of lands that are traditionally owned or customarily used, occupied, or claimed by indigenous peoples?				

D. Anticipated project impacts on Indigenous Peoples

Project component/ activity/ output	Anticipated positive effect	Anticipated negative effect
1. LIST ALL PROJECT COMPONENT / ACTIVITY / OUTPUTS HERE	---- INDICATE EFFECTS TO IPS OR PUT N/A AS NECESSARY	
2.		
3.		
4.		
5.		

Note: The project team may attach additional information on the project, as necessary.

RISK ASSESSMENT AND RISK MANAGEMENT PLAN

Risk Description	Rating	Mitigation Measures	Responsibility
Financial Management and Sustainability			
Risks related to financial management (i) Timely and accurate project financial information is not prepared resulting in reconciliation issues and audit observations. (ii) Low capacity of accounting staff to adequately manage internal controls and financial management. (iii) Non-compliance with the financial management system resulting in various audit objections	S	(i) Continued support of FM consultant to all the IAs and implementation of accounting software will mitigate this risk. (ii) Capacity building to PIU staffs on ADB financial management requirements and disbursement guidelines will be continued by ADB staff and full time FM expert under TA to ensure robust and transparent project financial management. (iii) Engagement of a chartered accountancy firm to perform internal audit of project transactions in all the IAs and finalization/implementation of the accounting procedures manual.	EAs/IAs/ADB
Delays in approval and release of Government counterpart fund / matching fund and delays in payment to contractors	M	(i) Economic Relations Division will coordinate for appropriate counterpart fund. (ii) DPPs and TAPPs will be timely prepared, submitted and approved through consultant supports	ERD/Planning Ministry
Institutional Capacity and Coordination			
Delay / insufficient key staff mobilization in PMUs and PIUs	M	(i) Economic Relations Division will be requested to help appoint key staff for PIUs as needed.	ERD/EAs/IAs
Weak / lack of dedicated PIU staff during project implementation period may hamper fast-track implementation of subprojects, including timely completion of due diligence required for subprojects	S	(i) PIUs at project site will be reinforced with consultants to assist in the implementing design, construction supervision, safeguard application, procurement, financial management, and reporting. (ii) TA consultants will be recruited to (i) support the IAs to help procurement, management, monitoring, and reporting project activities. (iii) ADB's extended mission at Cox's bazaar will provide close support on technical, financial, and coordination.	EAs/IAs/ADB
Weak interagency coordination among NGOs, UN agencies, national agencies, and other stakeholders due to overlapping roles, may delay and	M	(i) Refugees Relief and Repatriation Commission at site will be closely coordinated to steer the project as needed.	Project Coordination Committee; RRRC

Risk Description	Rating	Mitigation Measures	Responsibility
undermine effective implementation of project activities		(ii) Flexible and relaxed procurement procedures will be implemented for emergency and relief procurement and operations, and this will help in fast tracking the project.	
Procurement, Implementation and Operation			
Delays in subproject selection and approval of DPPs and TAPPs	M	(i) ADB and IAs will closely work with RRRC for selection of subprojects in the camps and avoid duplication. (ii) TA consultants for each sector will be mobilized at the earliest to support DPPs and TAPPs preparation; approval will be ensured within Q1/2022.	ADB, RRRC, IAs/EAs
Delays in procurement of large packages that need CCGP approval	M	(i) ADB, IAs and project coordination committee will closely work to expedite approval process. (ii) Consultants will be mobilized at the earliest to support IAs in preparing bid documents and packaging. (iii) UN Agencies will be engaged for health components	ADB/IAs
Difficulty in mobilizing labor and machinery, especially in the camp site due to COVID-19 lock down and restriction	M	(i) Cost estimates will consider, keeping in mind the appropriate tender premiums, as applicable, especially for more difficult work in the difficult locations or at difficult climatic conditions, COVID-19 restriction to ensure adequate contractor participation. (ii) Scheduling of labor and machinery mobilization will take into account the monsoon and rainy monsoon season.	IAs/Contractors
Extreme climate events causing disruption of / delay in execution of works [because of a limited working season and unpredictable and harsh weather conditions]	H	(i) Implementation schedule will factor in seasonal weather conditions, including the monsoon season, and expected rainfall, which often triggers further landslides and erosion, potentially damaging constructed infrastructure. (ii) Project construction activities will be scheduled in such a way that the available working season is efficiently utilized. (iii) Access and climate challenges will be managed by prioritizing the needs; only those works that can realistically be completed in the given timeframe are included. (iv) Financial and human resources will be allocated to project areas for certain periods contingent on when and to what extent extreme weather conditions could restrict works.	IAs/Consultants/Contractors

Risk Description	Rating	Mitigation Measures	Responsibility
		(v) The contractor's work schedule will include a longer working shift per day to make up for the lost hours due to bad weather.	
Implementation delays due to land acquisition, right of ways and other safeguards issues	L	(i) Subproject selection will filter out those scopes requiring land acquisition and right of ways. (ii) Strong coordination mechanism will be ensured based on the experience of Phase 1.	IAs/RRRC
Weak monitoring and supervision of civil works resulting in poor quality and delays	M	(i) Adequate consulting support will be provided to overcome the capacity constraints of the implementing agencies regarding procurement and contract management. (ii) ADB and IAs will make periodic review and monitor the progress of all ongoing contracts, to ensure timely and quality completion of works. (iii) ADB's TA consultant will be mobilized adequately in construction and safeguards compliances.	ADB/IAs
Lack of sustainability of infrastructure and physical assets built or supplied under the project, due to lack of ownership and weak management mechanism	M	(i) A sustainable framework for asset management and takeover by the CiCs will be developed (ii) Assets will be transferred to the respective beneficiary agencies / local government to ensure utilization and maintenance. (iii) Procurement package will provide provision operation and maintenance until the grant availability (June 2021); (iv) Government will be requested to allocate annual budgets for long-term sustainability of infrastructure (water treatment plants and roads).	EAs/IAs
Governance			
Reputational risks from the misuse theft and sale of the assets and equipment for cash	M	(i) Close coordination with CiCs and UN communities will be ensured. (ii) Awareness program through GESI AP. (iii) ADB communication strategy will be strengthened.	EAs/IAs/ADB/RRRC
Environmental and Social Safeguards			
Sub-projects selection and implementation may be delayed due to protected forest and critical natural habitat	L	(i) Sub-project selection will filter out all Protected Areas. (ii) Based on Phase 1 experience, the forest department will be contacted in advance to identify the boundary of legally designated or proposed Protected Areas in Cox's Bazar. (iii) Afforestation/tree plantation will be done in barren hills or deforested land for proper compensation.	EAs/IAs/ADB/RRRC/BFD

Risk Description	Rating	Mitigation Measures	Responsibility
Increase in human and drug trafficking, and increased Sexually Transmitted Infections (including HIV) prevalence as a result of new population into the communities	M	<ul style="list-style-type: none"> (i) Wone led community centers will be strengthened (in partnership with UNFPA). (ii) Linkages with organizations providing health services to ensure early detection and prevention of prevalence Sexually Transmitted Infections (including HIV) (iii) Zero tolerance to drugs trafficking notice in project site and workers' consent on the issue to be ensured by the IAs prior engagement at work 	EAs/IAs/ADB
COVID-19 infection may hamper project activities	H	<ul style="list-style-type: none"> (i) All EAs/IAs will cause to implement the COVID-19 Occupation Health and Safety Guidelines. (ii) Contract Agreement will have the provision of complying the COVID-19 Occupational Health and Safety Guidelines. 	EAs/IAs/ADB

H = High; S = Substantial; M = Moderate; L = Low

ADB = Asian Development Bank; BFD = Bangladesh Forest Department; CCGP = cabinet committee for government purchase; DPP = Development Project Proposal; EA = executing agency; e-GP = electronic government procurement; ERD = Economic Relations Division; IA = Implementing Agency; IUCN = International Union for conservation of Nature; NGO = Non-government organization; PIU = project implementation unit; PMU = project management unit; RRRC = Refugees Relief and Repatriation Commission; TA = technical assistance; TAPP = Technical Assistance Project Performa; UN = United Nations.
Source: ADB.

OUTLINE TERMS OF REFERENCE FOR INTERNAL AUDITOR

A. Objective

1. The objectives of the internal audit are to: (i) periodically review the adequacy of the project financial management arrangements in LGED, DPHE and RHD, and (ii) provide the project management with timely information on corrective actions necessary to improve those arrangements. The Internal Auditor shall be responsible for internal checks and controls to ensure the credibility and efficacy of the systems and procedures for project management for ensuring transparency and compliance with the relevant guidelines and rules, including requirements stipulated in the Project Administration Manual (PAM) and government requirements.

B. Scope of Work

2. The internal audit will be carried out for the duration of the project (July 2022 to December 2024) on semiannual basis following the relevant standards of internal auditing and will include such tests and controls as the auditor considers necessary under the circumstances.³⁸

3. When conducting internal audit, special attention should be paid to the following:

- (i) Ensure that the accounting and financial management systems remain reliable and effective in design and assess the extent to which they are being followed.
- (ii) Review the efficacy, adequacy, and application of accounting, financial, and operating controls and thereby ensure the accuracy of the books of accounts.
- (iii) Identify areas of significant inefficiencies in the existing systems and suggest necessary remedial measures.
- (iv) Confirm the existence of financial propriety in all decisions and verify compliance to government and statutory requirements as well as requirements of the Asian Development Bank (ADB), where applicable.
- (v) Confirm that the agreed procurement procedures and arrangements have been followed for works, goods, and services.
- (vi) Check that all expenditures incurred have the necessary supporting documents and have been incurred following the rules of the Government of Bangladesh and the relevant financing agreement with ADB.
- (vii) Ensure adequate records regarding the assets created and assets acquired by the project, including details of cost, identification, and location of assets are being maintained.
- (viii) Carry out physical verification of assets as appropriate.
- (ix) Review the reliability and integrity of financial and operating information and the means used to identify, measure, classify, and report such information.
- (x) Review and appraise the economy and efficiency with which resources are employed.
- (xi) Review operations or programs to ascertain whether results are consistent with established objectives and goals and whether the operations or programs are being carried out as planned.
- (xii) Conduct an audit of management information system applications to ascertain reasonable assurance.
- (xiii) Monitor compliance with the best practices of corporate governance and identification of significant deviations thereof.

³⁸ International Standards for the Professional Practice of Internal Auditing issued by the Institute of Internal Auditors could be used as a reference.

(xiv) Ascertain the integrity and reliability of financial and other information provided to the management and stakeholders, including that used in decision making.

(xv) Comment on the effectiveness of the mechanisms available in LGED, DPHE and RHD for ensuring compliance with observations of the earlier audit reports, and report on the corrective action taken on the observations of the earlier audit reports, along with a list of serious observations made by the Foreign Aided Project Audit Directorate (FAPAD) that have not yet been complied with.

4. The internal audit to be conducted on semiannual basis and the report should be submitted to the Project Director in LGED, DPHE and RHD within 60 days of the end of each semiannual period.

C. Minimum Qualification Requirements

5. The consultant shall meet the following minimum requirements:

(i) Must be a qualified chartered accountant firm with qualified chartered accountants/ certified internal auditors

(ii) Should have preferably a minimum of 7 years of progressive experience related to auditing in public/private firms, preferably, in the development sector

(iii) Experience with financial management arrangements for projects, preferably foreign and/or donor-funded projects

D. Person-Months Requirements

6. The consulting service will be required from July 2022 to December 2024, with intermittent inputs of three weeks, for every six-month period, and a total of 12 weeks over the 30 month period of the project.