



Government of the People's Republic of Bangladesh
Bangladesh Water Development Board (BWDB)

Coastal Embankment Improvement Project, Phase-1 (CEIP-1)



**Consultancy Services for Feasibility Studies and
Preparation of Detailed Design for the Following Phase (CEIP-2)**

Progress Report No. 5
December 2021



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1. General

1.1 Introduction

A Consultancy Contract was signed on 19th July 2021 between the Bangladesh Water Development Board (BWDB) and the Consultant to provide Consultancy Services for Feasibility Studies and Detailed Design for the next Phase of the Coastal Embankment Improvement Project. The Consultant is represented by the Joint Venture (JV), being Royal HaskoningDHV (RHDHV) lead firm from The Netherlands, Northwest Hydraulic Consultants (NHC) from Canada and Inros Lackner (INROS) from Germany. The JV will implement the Consultancy Services in association with Bangladesh sub-consultants Development Design Consultants (DDC), Strategic Planning and Management Consultants (SPMCS), Knowledge Management Consultants (KMC) and Center for Environmental and Geographic Information Services (CEGIS).

As per the Terms of Reference the main objective of the Consultancy Services is to support BWDB in preparation of comprehensive coastal embankment improvement program and implementation of the following phases of CEIP.

Following CEIP-1, the next phase of CEIP is intended to improve certain polders of the remaining 122 polders and to that end a selection will have to be made of a next batch of 13 polders. These 13 polders will be combined with the 7 polders from the envisaged Package 3, and an optimal investment option will be selected. From this investment plan the first batch of polders will be taken forward for the preparation of tender documents for the next phase of CEIP.

The Consultancy Services comprise the preparation of a Feasibility Study according to the international standards, which will form the basis for project appraisal by the World Bank and the Government of Bangladesh (GoB) and will also cover the preparation of detailed designs and bidding documents of a batch of works to be implemented under the next phase of CEIP. Preparation of feasibility studies for the 13 selected polders as identified in the investment plan and tender documents for the first batch of polders as identified in the investment plan to be implemented under the next phase of the project.

This Monthly Progress Report (MPR) is over the month of December 2021 and will provide information and details on the activities and progress of this month.

1.2 Key challenges, risks and recommendations

1.1.1 Key challenges and risks

Some key challenges and risks are summarised as follows:

- The Inception Report should be approved soon in order not to further delay the activities of the depending on this approval;
- Surveys commenced in order not to miss the dry season of 2021/2022; in an assignment with a duration of 12 man months, the only opportunity.

1.1.2 Recommendations

Although the Polder Screening Report and Prioritization Report could not be submitted (see above), Consultants will proceed with their activities as much as is possible as per guidance of the Project Director.

1.3 Contractual Tasks of Consultants as per Terms of Reference

The main tasks of the Consultancy Services as per Terms of Reference are listed in Table 1-1.

Table 1-1: Contractual Tasks of Consultants

Task 1: Prioritization to select the next batch of polders for CEIP	
Task 1.1	Prioritization of 122 polders and selection of 23 polders for detailed prioritization
Task 1.2	Detailed prioritization of 23 polders and selection of 13 polders for Feasibility Study
Task 1.3	Selection of an optimal investment option
Task 2: Preparation of Feasibility Studies for the 20 polders (including updating/reviewing 7 Polders of Package-1 of CEIP-1) selected in Task 1	
Task 2.1:	Preparation of feasibility level designs
Task 2.2	Project benefits and economic analysis
Task 2.3:	Social assessment and beneficiary participation aspects
Task 2.4	Environmental and Social Management Framework (ESMF)
Task 2.5	Update framework for Monitoring and Evaluation
Task 2.6	Assessment of International Waterway aspects
Task 3: Preparation of Detailed Design and Bidding Documents, ESIA's and LAP/RAP	
Task 3.1	Detailed Designs and Bidding Documents
Task 3.2	Environmental and Social Impact Assessments (ESIAs)
Task 3.3	Resettlement Action Plan (RAP)
Task 3.4	Preparation of Land Acquisition (LA) Plans and LA Proposals
Task 3.5	Project Implementation Plan and Procurement Packaging
Task 3.6.	Operation and Maintenance (O&M)

2. Summary of Key Achievements during the reporting month

A summary of Key Achievements during the reporting month is listed in Table 2-1.

Table 2-1: Key Achievements during this reporting month

No.	Item	Key Achievements during this reporting month
1	Submission of Reports	<ul style="list-style-type: none"> Submission of Polder Screening Report. Submission of Prioritization Report including Strategic Investment Plan. Submission of revised Inception Report.

3. Progress of Tasks

3.1 Introduction

The progress of each of the Tasks is described in this chapter together with possible challenges and risk and recommendations for improvements if any. The Tasks of the Terms of Reference (ToR) are guiding in this respect.

3.2 Various tasks and Administration updates

3.2.1 Preparation of revised Inception Report

Consultants finalised the revised Inception Report incorporating all the comments and suggestions received so far. This revised Inception Report was submitted on 27th December 2022.

3.2.2 Development of Information Management Execution Plan

Activities continued and training was given to Staff who will operate the systems.

3.2.3 Replacement of Deputy Team Leader

On 2nd December 2021, Consultants were informed by the Project Director that a better candidate for the position of Deputy Team Leader should be proposed than the candidate proposed on 27th July 2021 by Consultants.

3.3 Task 1: Prioritization to select the next batch of polders for CEIP

3.3.1 Task 1.1: Prioritization of 122 polders and selection of 23 polders for detailed prioritization

In this month activities focussed on the deliverable "Polder Screening Report" as per Consultancy Contract and indicated in the Terms of Reference (ToR) as "Preliminary List of screening of 23 Polders".

In the Inception Report submitted on 11th September 2021, the Consultant has already partially elaborated on the approach and process of pre-selection of 23 polders out of the 125 remaining polders and has set the groundwork for this Polder Screening Report as far as was possible with the data available and time span of only one month. In this Report, the Consultant has taken forward and refined the aforementioned approach, updated the assessment with more secondary data, conducted more consultations with the Main Stakeholders and developed a Multi Criteria Analysis (MCA) which has been filled in for all 125 polders with the available secondary data.

The Polder Screening Report was submitted on 27th December 2022.

3.3.2 Task 1.2: Detailed prioritization of 23 polders and selection of 13 polders for Feasibility Study

In this month activities also focussed on the Deliverable "Prioritization Report" (as per ToR: "Prioritization List of 13 Polders with detailed Report updating MCA of 2013 (Task-1.2) and the Strategic Plan report on selection of an optimal investment option including 20 Polders (including CEIP-1 Polders) (Task 1.3)").

Following the Deliverable "Polder Screening Report" (as per ToR: "Preliminary List of screening of 23 Polders"), where 23 polders have been pre-selected, the "Prioritization Report" elaborates on the prioritization of 15¹ polders which will be taken forward in the next phase of the Coastal Embankment Improvement Project (CEIP). For the prioritization process, use was made of the Multi Criteria Analysis (MCA) which was developed in the "Polder Screening Report". The values of certain criteria of the MCA have been updated with results of thorough assessments for the 23 pre-selected polders. Following the selection of 15 polders, a Strategic Investment Plan was developed, including the 5 Polders from CEIP-1, and as such arriving at a total of 20 Polders. After approval of this Prioritization Report, technical surveys can be initiated and conducted; accordingly, it is noted that surveys in connection to the environmental and social tasks of the Consultancy Services have already commenced.

The Prioritization Report was submitted on 27th December 2022.

3.4 Task 2: Preparation of Feasibility Studies for the 20 polders (including updating/reviewing 7 polders of Package-3 of CEIP-1) selected in Task 1

3.4.1 Task 2.1: Preparation of feasibility level designs

Activities from previous month continued and feasibility level designs were prepared to estimate volumes and quantities and arrive at preliminary cost estimates to be used in the MCA.

3.4.2 Task 2.2: Project benefits and economic analysis

Activities from previous month continued and in addition to that data was collected in the field to develop flood damage curves..

3.4.3 Task 2.3: Social assessment and beneficiary participation aspects

Activities from previous month continued.

¹ Initially, and as per ToR, 13 polders would have been selected for the next batch, however, due to the fact that 2 of the 7 polders of Package-3 under CEIP-1 will be funded by Government of Bangladesh, 2 additional polders should be selected for the next batch to arrive at a total of 20 polders for the next phase of CEIP; hence 13 polders and 2 additional resulting in said 15 polders.

3.4.4 Task 2.4: Environmental and Social Management Framework (ESMF)

Activities from previous month continued.

3.4.5 Task 2.5: Update framework for Monitoring and Evaluation

Consultants have been assessing the current framework for monitoring and evaluation in this month. Under the ongoing CEIP-1, the Consultant for the so-called Third-Party Monitoring and Evaluation of overall implementation of CEIP is responsible for the monitoring and evaluation of project performance as well as the project impact. The primary purposes of the framework they have established and their services include: (i) carrying out independent monitoring and evaluation of project progress, inputs, outputs, processes, outcomes and impacts in relation to the various project works and activities; (ii) carrying out independent monitoring of project specific operational risks and mitigation measures and (iii) providing independent and regular feed back to the Project Steering Committee (PSC) on its evaluations of the above as well as on any other specific issue as directed by the PSC. Via the BWDB website (<http://ceip-bwdb.gov.bd/>) the results of this monitoring can be followed.

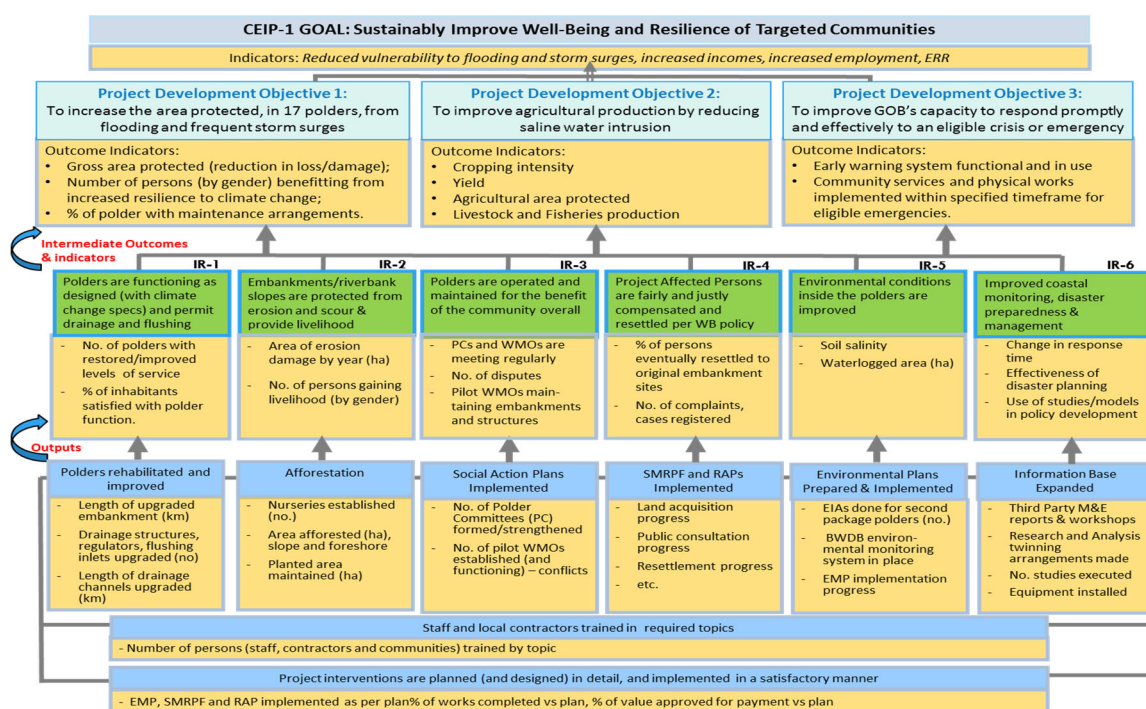


Figure 3.1: CEIP-1 Results Framework developed by Sheladia Associates, Inc.

Based on experience of the ongoing CEIP-1, the said monitoring framework has been assessed, and recommendation will be made for improvements and changes which may be needed when designing the interventions of the next phase of CEIP. Third-Party Monitoring and Evaluation Consultant has prepared a new approach for CEIP-1 Results Framework which is presented in Figure 3.1. The latter will, together with the Third-Party Monitoring and Evaluation Consultant, further detailed and updated in next stages of the studies; based on a comprehensive Theory

of Change, the Result Framework structure will be updated to include output indicators to capture expected benefits in agriculture and aquaculture sectors².

3.4.6 Task 2.6: Assessment of International Waterway aspects

In this reporting month no activities to report on this Task.

3.5 Task 3: Preparation of Detailed Design and Bidding Documents EIA's and LAP/RAP

3.5.1 Task 3.1 Detailed Designs and Bidding Documents

Preparations were commenced for the execution of bathy, topographic, hydro metric measurements and geotechnical field surveys.

3.5.2 Task 3.2 Environmental Impact Assessments (EIAs)

Activities from previous month continued this month.

3.5.3 Task 3.3 Resettlement Action Plan (RAP)

Activities from previous month continued this month.

3.5.4 Task 3.4 Preparation of Land Acquisition (LA) Plans and LA Proposals

Activities from previous month continued this month.

3.5.5 Task 3.5 Project Implementation Plan and Procurement Packaging

In this month no activities to report on this Task.

3.5.6 Task 3.6. Operation and Maintenance (O&M)

In this month no activities to report on this Task.

4. Summary of Staff Inputs

A summary of inputs of Consultant's Staff in each of the Tasks are summarised in Table 4-1.

² FAO Guidance Note, 4 October 2021

Table 4-1: Inputs of Consultant's Staff in each of the Tasks this month

Inputs of Consultant's Staff in each of the Tasks this month**												
Task	Position	Task 0: Inception Phase	Task 1: Prioritization to select the next batch of polders for CEIP	Task 1.1: Prioritization of 122 polders and selection of 23 polders for detailed prioritization	Task 1.2: Detailed prioritization of 23 polders and selection of 13 polders for feasibility study	Task 1.3: Selection of an optimal investment option	Task 2: Preparation of Feasibility Studies for the 30 polders (including updating/revising 7 polders of Package 1 of CEIP-1) selected in Task 1	Task 2.1: Preparation of feasibility level designs	Task 2.2: Project benefits and economic analysis	Task 2.3: Social assessment and beneficiary participation aspects	Task 2.4: Environmental and Social Management Framework (ESMF)	Task 2.5: Update framework for Monitoring and Evaluation
International Staff	Team Leader *)											
	Hydraulic Structural Engineer *)											
	Geotechnical Engineer *)											
	Coastal Zone Management Specialist											
	Social Scientist / Sociologist / Resettlement											
	MIS Specialist *)											
	Economist											
	Project Coordinator *)											
	Survey Coordinator *)											
	River Modeller *)											
	Project Director *)											
	Additional Coastal Engineer *)											
	Additional River and Coastal Dynamics Expert *)											
	Additional Civil Engineer *)											
	National Staff											
	Deputy Team Leader											
	Cyclone and Storm Surge Modelling Specialist											
	Coastal and Estuarine Morphologist											
	Senior Hydraulic Engineer - 1											
	Senior Hydraulic Engineer - 2											
	River Engineer											
	Resettlement and Indigenous Peoples Specialist											
	Environmental Specialist											
	Design Engineer - 1											
	Design Engineer - 2											
	Design Engineer - 3											
	Geo-technical Engineer											
	GIS/Remote Sensing Specialist											
	Procurement / Contract Management Specialist											
	Agricultural / Irrigation Specialist											
	Economist											
	Survey Engineer / Quantity Surveyor - 1											
	Survey Engineer / Quantity Surveyor - 2											
	Survey Engineer / Quantity Surveyor - 3											
	Land Acquisition Specialist - 1											
	AutoCAD Specialist - 1											
	AutoCAD Specialist - 2											
	Ecologist											
	Forestry Specialist											
	Fishery Specialist											

Notes

*) Bangladesh inputs

**) Consultant's Staff input to this Task =