



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. 7
February 2022**



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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 February 2022 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:

- It is important that the Polder Screening Report and the Prioritization Report are approved soonest in order not to have further delays;
- The same holds for approval of the Inception Report.

1.1.2 Recommendations

The Inception Report Workshop was held and this provides ways and means to now swiftly approve the reports submitted in December 2021.

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	Workshop	<ul style="list-style-type: none"> The Workshop for the Inception Report was held on 8th February 2022.
2	Approval	<ul style="list-style-type: none"> The Revised Inception Report was approved on 27th February 2022.
3	Consultations	<ul style="list-style-type: none"> Consultations with Officials in the field and local people.

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 Development of Information Management Execution Plan

Activities continued and weekly meetings are held to fine tune the system whilst data are coming in from the various sources.

3.2.2 Inception Report Workshop

On the 8th February 2022 (see Figure 3.1), a Workshop for presentation of the Inception Report was held in the premises of the BWDB in Pani Bhaban. Due to COVID-19 regulations of the Government of Bangladesh, the workshop was held in a hybrid manner with both virtual and physical attendants in the BWDB premises.

Special Guests honoured the workshop with their attendance. The Special Guests were:

- Mr. Md. Mahbur Rahman – Additional Director General (East Region), BWDB;
- Mr. Jyoti Prosad Ghosh - Additional Director General (West Region), BWDB;
- Dr. Zia Uddin Baig - Additional Director General (Planning, Design & Research).

The Chief Guest of the workshop was Mr. Fazlur Rahman, the Honourable Director General of BWDB. The Workshop was also attended by CEIP-1 Project Director Mr. Syed Hasan Imam, Representatives of the World Bank and other relevant representatives of Bangladesh Authorities and parties. The invaluable comments of the guests and participants have been considered and included in the Final Inception Report.



Figure 3.1: Inception Report Workshop 8th February 2022

3.2.3 Final Inception Report

Following the Inception Report Workshop, comments and suggestions were incorporated in the Draft Final Inception Report and submitted on 18th February 2022 whereafter the Project Director informed Consultants on 27th February 2022 that the Inception Report was approved by the Competent Authority and the Final Inception Report could be finalised and submitted. The latter was submitted on 1st March 2022.

3.2.4 Proposal for Additional Consultancy Services

As stated in the ToR, "The Consulting Service is for comprehensive coastal embankment improvement program study for the remaining 122 polders, the following main tasks are envisaged:

- Task 1: Prioritization to select the next batch of polders for CEIP 2;
- Task 2: Preparation of Feasibility Studies for the 20 polders (including updating 7 Polders of Package-3 of CEIP-1) selected in Task 1;
- Task 3: Preparation of Detailed Designs and Bidding Documents of the 13 polders and reviewing detailed Designs and Bidding Document of 7 Polders of Package-3."

Hence, the Consultancy Services include Feasibility Studies and preparation of Detailed Designs and Bidding Documents for 13 Polders selected in CEIP-2 and reviewing and updating the Feasibility Studies and Detailed Designs and Bidding Documents of 7 Polders of Package-3 of CEIP-1, as the latter have been already designed in detail but have not been rehabilitated yet.

As 2 of the 7 Polders of Package-3 of CEIP-1 have now been approved by the Government of Bangladesh as individual projects, there is no need to include these 2 Polders in CEIP-2. Therefore, only 5 of the remaining Polders of Package-3 of CEIP-1 will be taken over and reviewed/updated to be included in CEIP-2. Following the abovementioned change, the Project Director informed Consultants vide Memo No. CEIP-1/S23/1611 dated 15th November 2021 on the list of 20 Polders to be taken forward in the Feasibility Studies and preparation of Detailed Designs and Bidding Documents implying additional Consultancy Services for 2 additional Polders. The additional Polders will be Polder 4 and Polder 5 following the recommendations made in the Prioritisation Report submitted in December 2021. Those Polders are located in Satkhira District and their total area constitutes almost 60% of the total area covered by the 13 selected Polders. The perimeter of Polder 4 and Polder 5 constitutes almost 40% of the total perimeter of the selected Polders.

In view of the above, Consultant submitted a proposal on 12th February 2022 for the implementation of the additional Consultancy Services for the Feasibility Studies and Preparation of Detailed Designs for the following Phase, to allow conducting the Consultancy in a timely manner and inclusion of the two additional polders. In addition to the additional budget required for the preparation of the Feasibility Studies and Detailed Designs for Polder 4 and Polder 5, an extension in time of 6 (six) months will be required to allow conducting the additional Consultancy Services.

3.2.5 Participate in World Bank Mission February 2022 and March 2022

A (virtual) World Bank Mission was held in the period 16th February 2022 to 20th March 2022 and met virtually with Representatives of the Government of Bangladesh (GoB) to jointly carry

out an Implementation Support Review (ISR) for the Coastal Embankment Improvement Project Phase-1. Since the current preparation of the Feasibility Studies and Detailed Design is part of CEIP-1, the progress of this assignment was also monitored. To this end, a virtual meeting was held on 17th February 2022 in which Consultant presented their findings and reported on progress made so far. The following challenges were raised by the Consultants in their presentation as follows:

- Timely availability of relevant reports and data;
- Uncertainty of duration of COVID-19 restrictions;
- Safety issues in Bangladesh;
- Timely approval of Deliverables;
- Due to unavoidable situations submission of deliverables has been deferred and this impacts submission of future deliverables;
- Approval process of replacement Deputy Team Leader;
- Approval of proposal for additional Consultancy Services due to increase of Scope of Work;
- Decision on how to take Strategic Investment Plan further.

During the virtual meeting it was emphasised that timely submission and subsequent approval was important and due to unavoidable situations submission of deliverables has already been deferred and causing delays. The question was further raised why not all the Polders of Package-3 of CEIP-1 were not taken forward since they were already prepared.

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 no activities were conducted on this Task.

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

In this month no activities were conducted on this Task.

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 updated with field data and results coming forward from the morphologic assessment. The latter determining where measures are not needed to combat erosion, either being (expensive) bank protection works or re-alignment of embankments.

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 identify the project benefits.

3.4.3 Task 2.3: Social assessment and beneficiary participation aspects

Activities from previous month continued.

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

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

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.

With regard to implementation of nature-based solutions, Consultants prepared a framework of where possibly these works could be implemented in a sustainable manner (see an example in Figure 3.2).

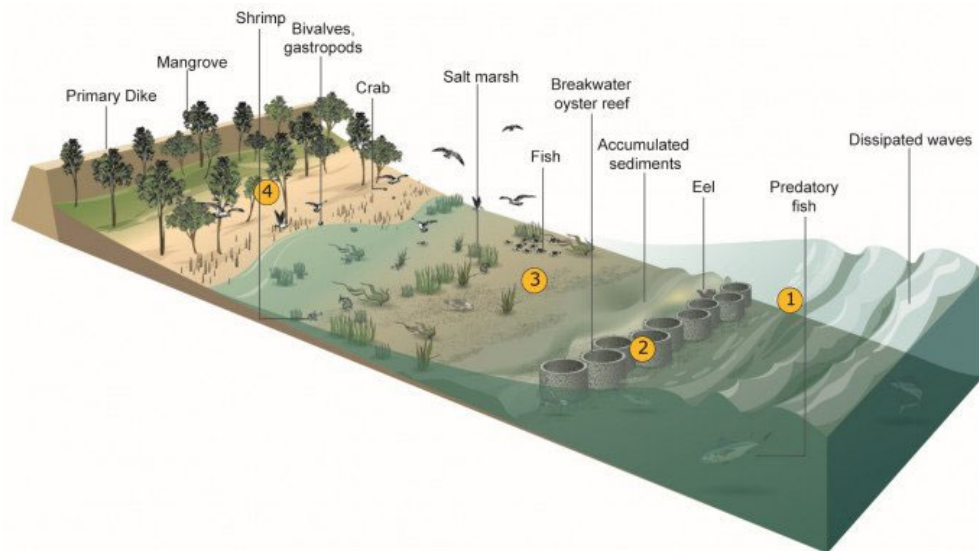


Figure 3.2: Nature based solution for coastal protection (Source: Ecobas)

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.

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 3.6: Operation and Maintenance (O&M)	Task 3.5: Project Implementation Plan and Procurement Packaging	Task 3.4: Preparation of Land Acquisition (LA) Plans and LA Proposals	Task 3.3: Resettlement Action Plan (RAP)	Task 3.2: Environmental and Social Impact Assessments (ESIAs)	Task 3.1: Detailed Designs and Bidding Documents	Task 2.6: Assessment of International Waterway aspects	Task 2.5: Update framework for Monitoring and Evaluation	Task 2.4: Environmental and Social Management Framework (ESMF)	Task 2.3: Social Assessment and beneficiary participation aspects	Task 2.2: Project benefits and economic analysis	Task 2.1: Preparation of feasibility level designs	Task 2: Preparation of Feasibility Studies for the 20 polders (including updating/revising 7 Polders of Package-1 of CEIP-1) selected in Task 1	Task 1.3: Selection of an optimal investment option	Task 1.2: Detailed prioritization of 23 polders and selection of 13 polders for feasibility Study	Task 1.1: Prioritization of 122 polders and selection of 23 polders for detailed prioritization	Task 1: Prioritization to select the next batch of polders for CEIP	Task 0: Inception Phase
Position	Task																		
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 = [Black Box]