

BANGLADESH WATER DEVELOPMENT BOARD



PROJECT COMPLETION REPORT: IMED-04/2024

**Name of the
Project:**

**Feasibility Study for the Management of the Mahananda
River in Chapainawabganj District and Padma River Basin
in Chapainawabganj, Rajshahi and Natore District.**

PROJECT PERIOD: September 2022- December 2023

**OFFICE : Office of the Superintending Engineer
Directorate of Planning-2
Pani vaban, Dhaka.**

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Government of the People's Republic of Bangladesh
Ministry of planning
Implementation Monitoring and Evaluation Division

PROJECT COMPLETION REPORT (PCR): IMED 04/2024 (Revised)

A. PROJECT DESCRIPTION

01.	Name of the Project	:	Feasibility Study for the Management of the Mahananda River in Chapainawabganj District and Padma River Basin in Chapainawabganj, Rajshahi and Natore District.
02.	Administrative Ministry/Division	:	Ministry of Water Resources (MoWR)
03.	Executing Agency	:	Bangladesh Water Development Board (BWDB)
04.	Planning Commission Sector/Division	:	Sector: 09-Environment, Climate change and Water Resources Division: Agriculture, Water Resources and Rural Institutions Division
05.	Type of Project (Investment/Technical/Feasibility Study): Feasibility Study		
06.	Location of the Project (As per Project Document):		
Sl. No	Division	District	City Corporation/ Municipality/Upazila
1.	Rajshahi	Chapainawabganj	Bholahat, Gomastapur, Nachol, Shibganj, Chapainawabganj Sadar
		Rajshahi	Godagari, Paba, Rajshahi Sadar, Charghat, Bagha
		Natore	Lalpur

07. Estimated Cost, Implementation Period and Approval: (In Lakh Taka)

Subject	Approved Estimated Cost				Implementation Period	Date of Approval	Approved by
	Total	GOB (Foreign Exchange)	PA (RPA)	Self-finance			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Original	481.25	481.25			September 2022-June 2023	20/09/2022	MoWR
1 st Revised (if applicable)							
2 nd Revised (if applicable)							

1 st No Cost Extension (If Applicable)	481.25	481.25			September 2022-December 2023	15/01/2023	MoWR
2 nd No Cost Extension							

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(If Applicable)							

Intercomponent Adjustment (If applicable)							

08. Objective of the Project

<p>Overall objective:</p> <p>The main objective of the study is the management of the Mahananda river and management of the Ganges/Padma river basin in Chapainawabganj, Rajshahi and Natore districts.</p> <p>Specific Objectives (in bullets):</p> <ul style="list-style-type: none"> • Protection of Mahananda river and left bank of Padma river from erosion within the study area; • Rehabilitation of the existing structures and bank protection works along the Ganges/ Padma river; • Design of proposed interventions; • Environmental and Social Impact Assessment; • Preparation of DPP of the subsequent investment project.

09. Background of the Project (In brief):

Mahananda River:

Originating from India, the Mahananda river enters into Bangladesh at Bholahat upazila of Chapainawabganj district. Later on, it flows through Shibganj, Nachol and Sadar upazila of Chapainawabganj district and falls into the Padma river at Debinagar area under Godagari upazila of Rajshahi district. The river is about 95 km long. The river is experiencing bank erosion at several places for which it is necessary to identify the actual causes of bank erosion such as water ponding and subsequent mitigation of the erosion problem.

The Ganges/Padma River:

Originating from the glacier melted water of the Himalayas, the Ganges/ Padma river enters into Bangladesh through Chapainawabganj district via Murshidabaad district of India. The Chapainawabganj district shares about 38.37 km length of the Ganges/ Padma river inside Bangladesh. To mitigate bank erosion, about 27.37 km length of the Ganges/ Padma bank is already taken up under bank protection work of BWDB through different projects. A list of the ongoing and completed projects are as follows:

Sl. No.	Project Name	Estimated Cost(In lacs)	Implementation Timeline	Implemented Riverbank Protection Work Length (km)	Remarks/ Status of the project
1	Padma River's left bank protection work in Chapainawabganj District's Sadar & Shibganj Upazila's Paka Narayanpur	14615.04	From 2001 to 2005-06	8 spurs, 1 bridge and 20.48 embankment & 2.48 (Protective Work)	Project Completed
2	Protection of Chapainawabganj Sadar & Shibganj Upazila from Padma River's erosion	15324.18	From 2008 to 2012	11.67 (Protective Work)	Project Completed
3	Chapainawabganj District's Alatuli's protection work from Padma's riverbank erosion (2 nd correction)	27418.39	From 2012 to June/2018	7.12 (Protective Work)	Project Completed
4	Chapainawabganj District's Sadar Upazila's Charbagdanga & Shahjahanpur area's protection from Padma's riverbank erosion	56600.00	From 2020 to June/2023	6.10 (Protective Work)	Ongoing
Total Protection Work				27.37 km	

Still, 11 km length of Ganges/ Padma adjacent to Bangladesh-India border is unprotected. Erosion of this unprotected portion may evict the local people. Local people of the border area are considered as the vigilant watchman of the border who work together with the border guards to protect country's sovereignty. Therefore, to ensure country's sovereignty, protection of vulnerable river bank along the border area is important. Currently, the Dovagi and Nano Jagannathpur area of Durlavpur union and Babupur, Kanchira & Lakhipur area of Paka union under Shibganj upazilla of the district are facing the threats of bank erosion. Mentionable that, a study titled "Feasibility Study for Left Bank Protection of the River Padma from Babupura to Indo-Bangladesh Border in Shibgonj Upazilla, under Chapai Nawabganj District" was conducted in 2006 to protect this area from erosion but no further implementation was done.

In view of the above, BWDB has decided to conduct a detailed feasibility study to protect the vulnerable portion of the Ganges/ Padma river in Chapainawabganj District. The appraisal meeting on the proposed PFS was held on 16 March 2022 in MoWR. As per decision of the meeting, the study would also incorporate land reclamation at the confluence of the Ganges/ Padma and Mahananda river together with bank protection work of the Mahananda river in Chapainawabganj district. The reclaimed land could be used for Mulberry cultivation specially at Radhanagar, Chargobindapur and Neemgachi mouza. The DPEC meeting on the PFS was held on 03 July 2022 in MoWR. As per decision of the DPEC meeting, the 96.673 km length of the Ganges/ Padma under Rajshahi district and about 14 km of its length under Natore district is included within the study area.

10. Major Activities:

- Bathymetric survey of the selected reaches of the concerned river as per requirement of the morphological study;
- Primary data collection on water level, discharge and sediment concentration, bed material and existing bankline;
- Identification of the historical erosion trend and extent of erosion prone/ vulnerable locations at the study reaches;
- Identification of discharge, bed level and environmental flow of rivers (Ganges/ Padma /Padma, Mahananda) within the study area;
- Preparation of flood inundation map showing extent and depth of inundation with identification of flood shelters;
- Morphological analysis of the Mahananda and Padma river at and around the study area through mathematical modelling;
- Application of two-dimensional erosion management model of the Mahananda and Padma river to identify the vulnerable locations at the study area from the base model (without proposed measure condition);
- Application of the model incorporating river training measure(s) to test its performance to protect vulnerable locations, restrain bank erosion and sustainability;
- Establishment of alternative options such as dredging of existing islands (chars) to mitigate the erosion process using survey data and modelling results;
- Assessment of impact of existing and proposed protective measure(s) on the hydro-morphological aspects of the Mahananda and Ganges/Padma river at the upstream and around the vulnerable sites;
- Development of a river model and assessment of surface water availability at selected locations of Ganges/ Padma and Mahananda river for different return period;
- Investigation of the reasons behind erosion of the ongoing bank protection works of BWDB along the Padma river at Bakher ali, Goadubi, Charbagdanga and Sahjahanpur area and completed bank protection works of BWDB along the Padma river at Alatuli area in Chapainawabganj district;
- Recommendation on hydraulic design parameters of the protective measure(s);
- Preparation of detailed engineering design, drawing & cost estimate of proposed interventions;
- Assessment of the quality of the surface water, ground water and soil sample of the study area;
- Identification of important ecosystem (land/aquatic) and measures for conservation/restoring of those ecosystem;
- Preparation of Environmental and Social Impact Assessment (ESIA) report following approved format of DoE, and presentation of EIA report at the DoE in getting requisite clearance certificate thereof;
- Preparation of Environmental Management Plan (EMP) for conservation of wetland, aquatic resources, fisheries resources, bird sanctuaries etc.;
- Preparation of environmental enhancement and conservation plan.

11. Reasons for Revision (if applicable): **Not Applicable**

- 1st Revision:
- 2nd Revision

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11.1 Reasons for No-Cost Time Extension (if applicable):

- 1st time No-Cost Time Extension:

The administrative order of the project was issued on 20/09/2022 and RFP was issued to the Consultants on 16/10/2022. As project activities can not be started before signing the contract with the consultants, all project activities has been shifted accordingly.

- 2nd time No-Cost Time Extension

12. Financing Arrangement (Source-wise):

12.1 Status of Loan/Grant

a) Foreign Financing: **Not Applicable**

Source (s)	Currency as per Agreement	Amount in US\$ (million)	Nature (Loan/Grant/s upplier's credit)	Date of Agreement	Date of Effectiveness	Date of Closing	
						Original	Revised
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

b) GOB:

Total amount	Loan	Grant	Cash Foreign Exchange
(1)	(2)	(3)	(4)
481.25	-	481.25	-

c) Self-finance/Equity: **Not Applicable**

Total amount	Self-finance	Equity	Cash Foreign Exchange
(1)	(2)	(3)	(4)

12.2 Utilization of Project Aid (Source wise): **Not Applicable**

Source (s)	Total Amount		Actual Expenditure		Unutilized Amount	
	In Us\$	In Local Currency	In Us\$	In Local Currency	In Us\$	In Local Currency
(1)	(2)	(3)	(4)	(5)	(6)	(7)

12.3 Reimbursable project Aid (RPA): **Not Applicable**

Source (s)	RPA Amount		Amount Spent	Amount Claimed	Amount Re-imbrued	Remarks
	As per Project Document	As per Agreement				
(1)	(2)	(3)	(4)	(5)	(6)	(7)

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B. IMPLEMENTATION POSITION

13. Implementation Period:

Implementation Period as per Project Document		Actual implementation	Time Over-run (% of original implementation period)	Remarks
Original	Latest Revised			
(1)	(2)	(3)	(4)	(5)
September 2022- June 2023 (10 months)	September 2022- December 2023 (16 months)	September 2022 - December 2023 (16 months)	(60%)	The administrative order of the project was issued on 20/09/2022 and RFP was issued to the Consultants on 16/10/2022. As project activities can not be started before signing the contract with the consultants, all project activities has been shifted accordingly.

14. Cost of the Project:

Description	Estimated Cost		Actual expenditure	Cost over-run (% of original cost)	Remarks
	Original	Latest revised			
(1)	(2)	(3)	(4)	(5)	(6)
TOTAL	481.25	-	439.73	(-8.63 %)	The actual expenditure was less than the estimated cost.
TAKA	481.25	-	439.73		
PA	-	-	-		

15. Information regarding Project Director (s):

Name, Main Designation & Grade. Mobile Number (From Beginning)	Full time (Yes/No)	Part time (Yes/No)	Responsible for more than one project	Period		Remarks
				Joining	Transfer	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bidyut Kumar Saha Additional Chief Engineer (Civil) (In Charge), South-Western Zone, BWDB, Khulna; Grade-4; 01911059497	Yes	No	Yes	17 October 2022	05 February 2024	-

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16. Personnel:

16.1 Personnel of Project implementation Unit (PIU): Existing manpower of Directorate of Planning-2, BWDB were engaged with implementation of the project.

Sl. No.	Name of Post (Grade)	Approved Strength	Employed during Implementation
(1)	(2)	(3)	(4)
	-	-	-
Total=	-	-	-

16.2 Personnel Required after the Project Completion: **Not Applicable**

Sl. No.	As P reposed in Project Document (PD)		Recruited (Yes/No)	If not recruited explain reason and latest status
(1)	Name of Post (2)	Number (3)	(4)	(5)
Total=				

17. Training (Foreign/Local): An on-the job training for BWDB officials was arranged under this project.

Category	Sl. No.	No. of Days/Weeks/Months (D/W/M), Batch & Participants					
		As in Project Document			Achievement		
		D/W/M	Batch (s)	Participants(s)	D/W/M	Batch (s)	Participants(s)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Local Training		2 Days	02	10	2 Days	02	10
Sub Total=		2 Days	02	10	2 Days	02	10
Foreign Training		07 Days	01	04	-	-	-
Sub Total=		07 Days	01	04	-	-	-
Total=					2 Days	02	10

(PD= Project Document)

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18. Component-wise Progress (As per latest approved Project Document):

Name of Component	Unit	Quantity	Estimated Cost (Taka in Lac)					Actual Progress (Taka in Lac)				
			Total	GOB	P A	Self- finance	Oth ers	Total	GOB	PA	Self- finance	Oth ers-
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(a) Revenue:												
1. Honorarium	LS	LS	1.00	1.00	-	-	-	0.42	0.42	-	-	-
2. Domestic Travel Expenses (TA & DA)	LS	LS	1.50	1.50	-	-	-	1.48	1.48	-	-	-
3. Computer Consumables	LS	LS	0.250	0.250				0.250	0.250			
4. Printing and Binding	LS	LS	0.250	0.250				0.250	0.250			
5. Other Stationary	LS	LS	0.250	0.250	-	-	-	0.250	0.250	-	-	-
6. Consultancy Expenditure	LS	LS	475.50	475.50	-	-	-	436.58	436.58	-	-	-
7. Computer (Repair)	LS	LS	0.250	0.250	-	-	-	0.250	0.250	-	-	-
8. Machineries and Equipments (Repair)	LS	LS	0.250	0.250				0.250	0.250			
Sub-total (Revenue)			479.250	479.250	-	-	-	439.73	439.73	-	-	-
(b) Capital												
1. Computers and accessories (1 no. of computer with printer and scanner)	LS	LS	2.00	2.00	-	-	-	0.00	0.00	-	-	-
Sub-total (Capital)			2.00	2.00	-	-	-	0.00	0.00	-	-	-
Total a+b (Revenue+ Capital)			481.250	481.250	-	-	-	439.73	439.73	-	-	-

19. Procurement of Transport (in Nos.): **Not Applicable**

Type of transport	Number as per Project Document	Number Procured with date	Transferred to Transport Pool with date	Transferred to O & M with date	Condemned/ damaged with date	Returned or transferred to following project	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Car							
Jeep							
Microbus							
Minibus							
Bus							
Pick-up							
Truck							

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Motor - Cycle							
By-cycle							
Speed Boat							
Launch							
Others with name							

20. Project Consultant (s) (Local/Foreign):

Name of the Field	Approved man month		Actual man month utilized	Number of Deliverables		Remarks
	As per Project Document	As per contract		As per Project Document	Actual	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
a) Local:	Mathematical Modelling Component: 42 man month	Mathematical Modelling Component: 42 man month	Mathematical Modelling Component: 42 man month	Inception Report, Interim Report, Draft Final Report, Final Report.	Inception Report, Interim Report, Draft Final Report, Final Report.	Mathematical Modelling Component was conducted by IWM and Environmental and Social Study Component was conducted by CEGIS.
	Environmental and Social Study Component: 14 man month	Environmental and Social Study Component: 14 man month	Environmental and Social Study Component: 14 man month	Inception Report, Draft Final Report, Final Report.	Inception Report, Draft Final Report, Final Report.	
b) Foreign:	-	-	-	-	-	-

21. Infrastructure/Erection/Installation Tools & Equipment: **Not Applicable**

Description	Quantity (as per project document)	Quantity Procured with date	Transferred to O & M with date	Disposed-off as per rule with date	Balance	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)
-	-	-	-	-	-	-

22. Procurement of Goods, Works and Services:

22.1 Information on packages:

a) Total number of packages as per Project Document: 8 (Goods- 6 Works- 0 Services-2)

b) Total number of packages procured: 7 (Goods- 5 Works- 0 Services- 2)

c) Reason for not procuring (if any): Computers & accessories were enough and sufficient at that time for the officials engaged in this project. Hence, Computers & accessories were not procured under this project.

d) Number of packages for which the estimated cost is more than 1% of the estimated cost of the project: 0 (Goods- 0 Works- 0 Services- 0)

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- 22.2 Detailed Package-wise information of Goods, Works and Services (For each case the highest 50 (fifty) packages) (Please use the format as in Annexure-I (a), I(b) and I(c))

C. FINANCIAL AND PHYSICAL TARGET AND PROGRESS

23. Original and Revised Financial Provision and physical Target (as per Project Document):

Financial Year	Financial provision & physical target as per original Project Document						Financial provision & physical target as per latest revised Project Document					
	Total	GOB	P.A.	Self-finance	Others	Physical %	Total	GOB	P.A.	Self-finance	Others	Physical %
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2022-23 and 2023-24	481.25	481.25	-	-	-	100%	-	-	-	-	-	-
Total	481.25	481.25	-	-	-	100%	-	-	-	-	-	-

24. Revised ADP allocation and progress:

Financial Year	Revised Allocation & target						GOB Release	Expenditure & physical progress						Unspent* GoB Released
	Total	GOB	P.A.	Self-Finance	Others	Physical %		Total	GOB	P.A.	Self-Finance	Others	Physical %	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)= 8-10
2022-23	190.00	190.00	-	-	-	60%	188.00	187.95	187.95	-	-	-	60%	-
2023-24	282.00	282.00	-	-	-	40%	253.79	251.78	251.78	-	-	-	39.46%	2.01
Total=	472.00	472.00	-	-	-	100%	441.79	439.73	439.73	-	-	-	99.46%	2.01

*Attach the Proof for Reconciliation of Unspent GOB Released

**To determine the physical quantity, use the formula as in the circular of Planning Division

D. ACHIEVEMENT OF OBJECTIVES OF THE PROJECT

25. Project objective, Actual achievement and Reason for shortfall (if any):

Objectives as per Project Document	Actual achievement	Reasons for shortfall (if any)
(a) Protection of Mahananda river and left bank of Padma river from erosion within the study area;	Completed. The study recommended bank protection works along the left bank of Padma river and Mahananda river which is incorporated in Section-4 of the Final Report.	-
(b) Rehabilitation of the existing structures and bank protection works along the Ganges/ Padma river;	Completed. The study suggested measures for rehabilitation of the existing structures	-

	and bank protection works along the Ganges/Padma river in Section-4 of the Final Report.	
(c) Design of proposed interventions;	Completed. Design of all proposed interventions are attached in Appendix-B and Appendix-C of the Final Report.	-
(d) Environment and Social Impact Assessment;	Completed. A detailed ESIA is done and incorporated in Section-5 of the Final Report together with a separate ESIA report.	-
(e) Preparation of DPP of the subsequent investment project.	Completed. All necessary documents to prepare DPP are attached in the Final Report. The respective DPP will be prepared by the concerned field office of BWDB.	

b) BENEFIT ANALYSIS

26. Annual Out-put: Not Applicable for the Study Project.

Items of out-put	Unit	Estimated quantity expected at full capacity	Actual quantity of out-put during the 1 st year of operation at full capacity (or during, real production for newly completed project)
a)			
b)			
c)			
d)			
e)			
f)			

27. Cost/Benefit: Not Applicable (It is not an investment project, hence not applicable)

Item	Estimated	Actual
(1) Benefit cost ratio of the project:		
(i) Financial		
(ii) Economic		
(2) Internal Rate of Return:		
(i) Financial		
(ii) Economic		

Please give reasons for shortfall, if any, between the estimated and actual benefit: **Not Applicable**

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c) MONITORING AND AUDITING

28. Monitoring: Nil.

Name & Designation of the inspecting official	Date	Identified Problems	Recommendations
1	2	3	4
a) IMED:			
b) Ministry/Agency:			
c) Others: (Please specify)			

29. Auditing during and after Implementation:

29.1 Internal Audit: Not conducted yet.

Period of Audit	Date of submission of Audit Report	Sl. No.	Major findings/objections and Money involved	Whether objections resolved or not (if not, mention status)
1	2	3	4	5
Total findings/objections and Money involved=				

29.2 External Audit: Not conducted yet.

Period of Audit	Date of submission of Audit Report	Sl. No.	Major findings/objections and Money involved	Whether objections resolved or not (if not, mention status)
1	2	3	4	5
Total findings/objections and Money involved=				

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d) POST-PROJECT REMARKS

30. General Observations/Remarks on the Project

30.1 Background

Mahananda River:

Originating from India, the Mahananda river enters into Bangladesh at Bholahat upazila of Chapainawabganj district. Later on, it flows through Shibganj, Nachol and Sadar upazila of Chapainawabganj district and falls into the Padma river at Debinagar area under Godagari upazila of Rajshahi district. The river is about 95 km long. The river is experiencing bank erosion at several places for which it is necessary to identify the actual causes of bank erosion such as water ponding and subsequent mitigation of the erosion problem.

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30.2 Justification/Adequacy

The project relevance has been derived from national master plan and national goal of the country. The National Master Plan, Bangladesh Delta Plan 2100, Perspective Plan of Bangladesh and the 8th Five Year Plan have been consulted to frame the project. The relevant slice of the text of the plans are furnished below:

- **Perspective Plan of Bangladesh 2021 – 2041.**

This Plan addresses governance, human development, industry and trade, agriculture, climate change and environment. The Plan presents a path to shift Bangladesh from a rural agrarian economy to a primarily industrial and digital economy.

- **8 th Five Year Plan, FY2021 to FY2025.**

The 8th FY Plan initiates the transition to the goals of the Perspective Plan and is built around six themes: (i) rapid recovery from COVID; (ii) GDP growth acceleration; employment generation, and rapid poverty reduction, (iii) a broad-based strategy of inclusiveness; (iv) a sustainable development pathway that is resilient to disaster and climate change; (v) improvement of critical institutions; and (vi) achieving the United Nations 17 sustainable development goals.

- **National Women Development Policy (2011).**

National Women Development Policy (2011) provides clear goals relating to women, poverty, water, and agriculture in the context of climate change.

- **Linkage with Sustainable Development Goal (SDG)**

SDGs' targets	Integrated Issues (Development Targets) with Government 8FYP
SDG 13. Take urgent action to	i) Protection against Flood for safety of

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combat climate change and its impacts.	people, crop, and other resources. Conservation of rivers, waterways, wetlands etc. ii) River dredging to enhance navigability and to facilitate water transportation and utilization of surface water irrigation.
Achievement of Targets due to implementation of the project	
<ul style="list-style-type: none"> • Mitigation of Flood in the study area. • Protection of riverbanks vis-vis lands and rural resources along the banks of the river. • Enhance food security by taking necessary measures of embankment damage along the banks of the river. 	

- **Linkage with Bangladesh Delta Plan (BDP), 2100**

- The Project will contribute to the implementation of the Bangladesh Delta Plan 2100 from technical aspect.
- The concept of the project is in line with BDP 2100. Particularly, the Project contributes to the following strategies and sub-strategies:
 - Strategy at National Level
 - Strategy FR 1: Protecting Economic Strongholds and Critical Infrastructure.
 - Strategy FR 2: Equipping the FMD Schemes for the future.
 - Sub-strategy FR 2.5: River management, excavation and smart dredging preceded by appropriate feasibility study.
 - Strategy FR 3: Safeguarding Livelihoods of Vulnerable Communities.
 - Sub-strategy FR 3.7: River management as well as improved flood management, drainage, O&M and flow management.
 - Hotspot Specific Strategies
 - River Systems and Estuaries.
 - Improvement of the conveyance capacity as well as stabilizing the rivers.

30.3 Objectives

(a) Overall objective:

The main objective of the study is the management of the Mahananda river and management of the Ganges/Padma river basin in Chapainawabganj, Rajshahi and Natore districts.

(b) Specific Objectives:

- Protection of Mahananda river and left bank of Padma river from erosion within the study area;
- Rehabilitation of the existing structures and bank protection works along the Ganges/ Padma river;
- Design of proposed interventions;
- Environmental and Social Impact Assessment;
- Preparation of DPP of the subsequent investment project.

30.4 Project revision with reasons: Not Applicable.

31. Rationale of the project (Considering the following issues):

- 31.1 Concept
- 31.2 Design
- 31.3 Location and
- 31.4 Timing.

Chapainawabganj shares 38.37 km long border with the river Padma and the adjacent areas here face severe river bank erosion almost every year. BWDB has implemented some projects which ensure 27.37 km long riverbank protection. But the rest 11.00 km (from Babupura to Indo-Bangladesh border) long riverbank is unprotected and is troubled with severe erosion. Every year approximately 50.0m to 500.0m land (from upstream of Babupura to Ayub Bishwash's Tola Indo-Bangladesh border) is being lost due to bank erosion along the left bank of the Padma river. As a result, people are losing their homesteads, land and valuable properties. It is to be mentioned that people of these areas act as the vigilant watchmen of the borders along with the border guard security forces. If they face such problems because of erosion, they will be compelled to leave these border areas and our borders will be left unprotected. Moreover, many important infrastructures in the nearby areas are also at risk. So, it's imperative to protect this 11.00 km long riverbank along the left bank of the Padma for the sake of safeguarding the sovereignty of Bangladesh and for ensuring the protection of people's lives and properties there.

32. Brief description on planning and financing of the project and its applicability (Consider the following issues):

32.1 Project Identification:

Originating from India, the Mahananda river enters Bangladesh through Bholahat Upazilla of Chapainawabganj district and falls into the Padma/Ganges river at Debinagar area under Godagari upazila of Rajshahi district. The river is about 95 km long and experiencing bank erosion at several places such as at Ranihati under Moharajpur union where about 46 m riverbank shifting due to erosion has been observed on right bank of Mahananda river during the last 10 years. The erosion problem along both banks of the Padma has also been assessed. Severe bank erosion along the left bank of the Padma at Namo Jagannathpur under Durlavpur union of Shibganj upazila where about 370m bank has been eroded towards countryside during the period 2010 to 2022. The riverine people of the surrounding areas are facing difficulties losing their homesteads, valuable lands and installations from the erosion of these rivers.

In view of the above, BWDB conducted this feasibility study to protect vulnerable portion of the Ganges/ Padma river in Chapainawabganj district as well as those of the Mahananda river.

32.2 Project Preparation:

In view of the above, BWDB prepared a PFS to execute the feasibility study project.

- 32.3 Appraisal: The DPEC meeting was held on 03/07/2022.
- 32.4 Credit Negotiation: N/A
- 32.5 Credit Agreement: N/A
- 32.6 Credit Effectiveness: N/A
- 32.7 Loan Disbursement: N/A
- 32.8 Loan Conditions: N/A
- 32.9 Project Approval: The project was approved by honorable state minister, MoWR on 20/09/2022.
- 32.10 Others(specify)

9 ✓

33. Analysis of the post- implementation situation and result of the project (Consider following issues):**Not Applicable for this study project.**

- 33.1 Whether the beneficiaries of the project have clear knowledge about the Target/Objectives of the project.
- 33.2 Programme for use of created-facilities of the project
- 33.3 O & M Program of the project.
- 33.4 Impact of the project (Direct & Indirect)
- 33.5 Transfer of Technology and Institutional Building through the project.
- 33.6 Employment generation through the project.
- 33.7 Possibility of Self-employment.
- 33.8 Possibility of Women-employment opportunity.
- 33.9 Women's participation in development.
- 33.10 Probable Impact on Socio-Economic activity.
- 33.11 Impact on environment.
- 33.12 Sustainability of the project.
- 33.13 Contribution to poverty alleviation/reduction.
- 33.14 Opinion of the public representatives, local elite, local administration, teachers, religious leaders, women's representatives etc.
- 33.15 Contribution of Micro-credit programs and Comments on overlapping with any NGO activities.

34. Problems encountered during Implementation (with duration & steps taken to resolve those) (Consider following issues):

- 34.1 Project management:
- 34.2 Project Director:
- 34.3 Land Acquisition:
- 34.4 Procurement:
- 34.5 Consultancy:
- 34.6 Contractor:
- 34.7 Manpower:
- 34.8 Law & Order:
- 34.9 Natural calamity:
- 34.10 Project financing:
- 34.11 Allocation and release:
- 34.12 Design formulation/approval:
- 34.13 Project aid disbursement and re-imburement:
- 34.14 Mission of the development partners:
- 34.15 Time & Cost Over-run:
- 34.16 Project Monitoring:
- 34.17 Delay in Decision:
- 34.18 Transport, Training:
- 34.19 Approval and Others:

This is a consultancy service procurement project. No such problems were occurred.

9

35. Remarks & Recommendations of the Project Director:

The study was approved by the Ministry of Water Resources (MoWR) vide memo number :42.00.0000.041.14.061.22-78, dated 20 September 2022. The project was accomplished on 19 December 2023.

The main objective of the study is the management of the Mahananda river and management of the Ganges/Padma river basin in Chapainawabganj, Rajshahi and Natore districts.

The study has been framed to attain its objectives through two components: Mathematical Modelling Component and Environmental and Social Study Component. Under Mathematical Modelling Component, detailed hydromorphological analysis of the concerned area was done through mathematical modelling. Based on the outputs of the mathematical modelling, project interventions have been proposed. Under Environmental and Social Study Component of the project, detailed environmental and social impact assessment (ESIA) has been completed to analyse the impact of the proposed interventions on the environment and the society of the project area.


The study proposed four (4) different options to attain its objectives. Among the 4 options, the best suited option has been selected based on the multicriteria analysis considering technical, economical, environmental and social aspects of the proposed interventions. After analyzing the best option, around 68.12 km long bank protection works have been proposed along the banks of the Padma river. About 10.44 km precautionary bank protection works has been suggested at Panka-Narayanpur Union. Moreover, on the basis of field observations, satellite image analysis and application of 2D morphological model, about 40.665 km long bank protection works in Mahananda river and 3.75 km long bank protection works in Punarbhaba river have been recommended for implementation.

Moreover, 50m long cross bar at 100m interval has been proposed for construction at Durlavpur for middle 4.0km reach where bank erosion has been found to be severe. Also, 4.25km long dredging works have been suggested in this location if there is no issue of dredger mobilization at site due to proximity of the international boundary. 6 km long dredging parallel to the previously dredged channel at Chakrajapur has also been recommended for implementation.

It is anticipated that the study project output would help in DPP preparation and implementation of the subsequent investment project.

Date.....19.09.2024.....

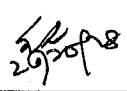
Signature and seal of the Project Director


বিদ্যুৎ কুমার সাহা
অতিরিক্ত প্রধান প্রকৌশলী
দক্ষিণ-পশ্চিমাঞ্চল
বাগাইচৌরী, খুলনা

36. Remarks/Comments of Agency Head:

In order to protect the Mahananda river and the left bank of the Padma river from erosion and to rehabilitate the existing structures and bank protection works along the Padma/Ganges river in Chapainawabganj, Rajshahi and Natore district, BWDB has conducted this detailed feasibility study. It is expected that implementation of the project based on the study outcomes would bring lots of benefits to the people living in the project area. It is also anticipated that the project will generate a significant number of employment opportunities during implementation and post project condition.

Date.....26-70-78.....


Signature and seal of Agency Head

(Muhammad Amirul Haq Bhuiya)
ID No. 660118001
Director General
BWDB, Dhaka

37. Remarks/Comments of the Secretary/Senior Secretary of the Ministry/Division:

The project has been done successfully and subsequent investment project will be taken as per recommendations of the study.

Date.....

Signature and seal of Secretary

Information Related to Procurement of Goods:

As per Project Document		Estimated Cost. (Taka in Lac)	Procurement Method	Approving Authority	Date of Tender Invitation	Name of Newspaper	Date of Opening	Date of Approval	Date of NOA	Contract Price & Date	Actual Payment	Date of Completion	
Package No	Description of Package											As per Contract	Actual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
PADMA-PG01/22-23	Computer Consumables	Plan Actual Deviation	DPM DPM	PD PD	- -		- -	- -	- -	- -	25000/-	-	-
PADMA-PG02/22-23	Printing & Binding	Plan Actual Deviation	DPM DPM	PD PD	- -		- -	- -	- -	- -	25000/-	-	-
PADMA-PG03/22-23	Other Stationary	Plan Actual Deviation	DPM DPM	PD PD	- -		- -	- -	- -	- -	25000/-	-	-
PADMA-PG04/22-23	Repair and Maintenance of Computer	Plan Actual Deviation	DPM DPM	PD PD	- -		- -	- -	- -	- -	25000/-	-	-
PADMA-PG05/22-23	Repair and Maintenance of Machineries and equipment	Plan Actual Deviation	DPM DPM	PD PD	- -		- -	- -	- -	- -	25000/-	-	-

* Please mention Dates for plan and actual

* Deviation in days (difference between plan and actual)

* Plan as per procurement plan described in project document

Information Related to Procurement of Works: Not Applicable

As per Project Document Package No	Description of Package	Estimated Cost. (Taka in Lac)	Procurement Method	Approving Authority	Date of Tender Invitation	Name of Newspaper	Date of Opening	Date of Approval	Date of NOA	Contract Price & Date	Actual Payment	Date of Completion	
												As per Contract	Actual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
		Plan											
		Actual											
		Deviation											
		Plan											
		Actual											
		Deviation											
		Plan											
		Actual											
		Deviation											

* Please mention Dates for plan and actual

* Deviation in days (difference between plan and actual)

* Plan as per procurement plan described in project document

Information Related to Procurement of Services:

As per Project Document Package No	Description of Pack age	Estimated Cost. (Taka in Lac)	Procurement Method	Approving Authority	Date of Tender Invitation	Name of Newspaper	Date of Opening	Date of Approval	Date of NOA	Contract Price & Date	Actual Payment	Date of Completion As per Contract	Actual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
PADMA- PS01/22- 23	Procurement of Consultancy Services (Mathematical Modelling Component) in connection with the project "Feasibility Study for the Management of the Mahananda River in Chapainawabganj District and Padma River Basin in Chapainawabganj, Rajshahi and Natore District."	387.81	SSS (National)	ADG (Planning, Design and Research)	15.09.22		17.10.22	25.10.22	25.10.22	3,77,91,150/- (22/01/2023)	3,51,08,000/-	30/11/2023	30/11/2023
	Actual	387.81	SSS (National)	ADG (Planning, Design and Research)	16.10.22		08.12.22	08.12.22	08.12.22				
	Deviation				32		53	45	45				
PADMA- PS02/22- 23	Procurement of Consultancy Services (Environmental and Social Study Component) in connection with the project "Feasibility Study for the Management of the Mahananda River in Chapainawabganj District and Padma River Basin in Chapainawabganj, Rajshahi and Natore District."	87.69	SSS (National)	ADG (Planning, Design and Research)	13.01.23		15.02.23	22.02.23	22.02.23	85,49,965/- (03/01/2023)	85,49,965/-	30/11/2023	30/11/2023
	Actual	87.69	SSS (National)	ADG (Planning, Design and Research)	16.10.22		08.12.22	08.12.22	08.12.22				
	Deviation				-90		-70	-77	-77				

* Please mention Dates for plan and actual

* Deviation in days (difference between plan and actual)

* Plan as per procurement plan described in project document

ব্যাংকের কপি

টি.আর.ফরম নং-৬ (৪)
(এস আর অনুচ্ছেদ ৩৭ দ্রষ্টব্য)

চালান ফরম



জনতা ব্যাংক লিমিটেড, গ্রীনরোড কর্পোরেট শাখা শাখায় টাকা জমা দেওয়ার চালান

যে সরকারি প্রতিষ্ঠানের অনুকূলে অর্থ জমা হচ্ছে	যার মাধ্যমে টাকা প্রদত্ত হলো তার নাম, সনাক্তকরণ নম্বর ও ঠিকানা	যে ব্যক্তির/প্রতিষ্ঠানের পক্ষ হতে টাকা প্রদত্ত হলো তার নাম, সনাক্তকরণ নম্বর ও ঠিকানা	চালান নং	কি বাবদ জমা দেওয়া হলো তার বিবরণ	জমার পরিমাণ
সচিবালয়, পানি সম্পদ মন্ত্রণালয়	মোঃ জাকিরুল ইসলাম ২৩৯৬০৭৭৯৮০ বাসা: হোন্ডিং, মৌসুমী সি ৪/৬, বাপাউরো অফিসার্স কোয়টার, গ্রাম/রাস্তা: ১১, ডাকঘর: বনানী-১২১৩, উপজেলা: বনানী, জেলা: ঢাকা, বিভাগ: ঢাকা	131016000-বাংলাদেশ পানি উন্নয়ন বোর্ড, 131016000-BANGLADESH WATER DEVELOPMENT BOARD ***Identity not shown***	২৪২৫-০০০৫১৪৮৪৫৮১	১৪৪১২০২-পূর্ববর্তী অর্থবছরের অতিরিক্ত গৃহীত অর্থ ফেরত	২০০.৬৬৬.৫০

নতুন কোড: ১৪৭০১০১১০০২১৭-১১০০০০০০০-১১০০১০০০-১৪৪১২০২ অন্যান্য বিবরণ/মন্তব্য (যদি থাকে):

CHAPAINABABGONJ JELASTHO MOHANONDA NODI EBONG

CHAPAINABABGANJ.RAJSHAHI EBONG NATORE JELASTHO PADMA NODIR BESIN

BEBOSTHAPONA SONGKRANTO KAJER SOMVABBOTA SOMIKKHA, PROJECT CODE

NO:২২২০১৫০০০.RECURRING UNSPENT TK:৬৬৬.৫০.CAPITAL UNSPENT TK:২০০০০০.TOTAL

UNSPENT TK:২০০৬৬৬.৫০ FOR THE FY ২০২৩ - ২৪

মোট (অংকে) = ২০০.৬৬৬.৫০

টাকা (কথায়): দুই লক্ষ ছয় শত ছয়টি টাকা পঞ্চাশ পয়সা

তারিখ: ২১/০৮/২০২৪ খ্রি.

এটি একটি সিস্টেম জেনারেটেড চালান, কোন স্বাক্ষর প্রয়োজন নেই।



ব্যাংকের কপি

টি.আর.ফরম নং-৬ (৪)
(এস আর অনুচ্ছেদ ৩৭ দ্রষ্টব্য)

চালান ফরম



জনতা ব্যাংক লিমিটেড, গ্রীনরোড কর্পোরেট শাখা শাখায় টাকা জমা দেওয়ার চালান

যে সরকারি প্রতিষ্ঠানের অনুকূলে অর্থ জমা হচ্ছে	যার মাধ্যমে টাকা প্রদত্ত হলো তার নাম, সনাক্তকরণ নম্বর ও ঠিকানা	যে ব্যক্তির/প্রতিষ্ঠানের পক্ষ হতে টাকা প্রদত্ত হলো তার নাম, সনাক্তকরণ নম্বর ও ঠিকানা	চালান নং	কি বাবদ জমা দেওয়া হলো তার বিবরণ	জমার পরিমাণ
সচিবালয়, পানি সম্পদ মন্ত্রণালয়	মোঃ জাকিরুল ইসলাম ২৩৯৬০৭৭৯৮০ বাসা: হোন্ডিং, মৌসুমী সি ৪/৬, বাপাউরো অফিসার্স কোয়টার, গ্রাম/রাস্তা: ১১, ডাকঘর: বনানী-১২১৩, উপজেলা: বনানী, জেলা: ঢাকা, বিভাগ: ঢাকা	131016000-বাংলাদেশ পানি উন্নয়ন বোর্ড, 131016000-BANGLADESH WATER DEVELOPMENT BOARD ***Identity not shown***	২৪২৫-০০০৫১৪৮৪৫৮১	১৪৪১২০২-পূর্ববর্তী অর্থবছরের অতিরিক্ত গৃহীত অর্থ ফেরত	২০০.৬৬৬.৫০

নতুন কোড: ১৪৭০১০১১০০২১৭-১১০০০০০০০-১১০০১০০০-১৪৪১২০২ অন্যান্য বিবরণ/মন্তব্য (যদি থাকে):

CHAPAINABABGONJ JELASTHO MOHANONDA NODI EBONG

CHAPAINABABGANJ.RAJSHAHI EBONG NATORE JELASTHO PADMA NODIR BESIN

BEBOSTHAPONA SONGKRANTO KAJER SOMVABBOTA SOMIKKHA, PROJECT CODE

NO:২২২০১৫০০০.RECURRING UNSPENT TK:৬৬৬.৫০.CAPITAL UNSPENT TK:২০০০০০.TOTAL

UNSPENT TK:২০০৬৬৬.৫০ FOR THE FY ২০২৩ - ২৪

মোট (অংকে) = ২০০.৬৬৬.৫০

টাকা (কথায়): দুই লক্ষ ছয় শত ছয়টি টাকা পঞ্চাশ পয়সা

তারিখ: ২১/০৮/২০২৪ খ্রি.

এটি একটি সিস্টেম জেনারেটেড চালান, কোন স্বাক্ষর প্রয়োজন নেই।



সচিবালয়, পানি সম্পদ মন্ত্রণালয় -এর
কপি

টি.আর.ফরম নং-৬ (৪)
(এস আর অনুচ্ছেদ ৩৭ দ্রষ্টব্য)

চালান ফরম



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যে সরকারি প্রতিষ্ঠানের অনুকূলে অর্থ জমা হচ্ছে	যার মাধ্যমে টাকা প্রদত্ত হলো তার নাম, সনাক্তকরণ নম্বর ও ঠিকানা	যে ব্যক্তির/প্রতিষ্ঠানের পক্ষ হতে টাকা প্রদত্ত হলো তার নাম, সনাক্তকরণ নম্বর ও ঠিকানা	চালান নং	কি বাবদ জমা দেওয়া হলো তার বিবরণ	জমার পরিমাণ
সচিবালয়, পানি সম্পদ মন্ত্রণালয়	মোঃ জাকিরুল ইসলাম ২৩৯৬০৭৭৯৮০ বাসা: হোন্ডিং, মৌসুমী সি ৪/৬, বাপাউরো অফিসার্স কোয়টার, গ্রাম/রাস্তা: ১১, ডাকঘর: বনানী-১২১৩, উপজেলা: বনানী, জেলা: ঢাকা, বিভাগ: ঢাকা	131016000-বাংলাদেশ পানি উন্নয়ন বোর্ড, 131016000-BANGLADESH WATER DEVELOPMENT BOARD ***Identity not shown***	২৪২৫-০০০৫১৪৮৪৫৮১	১৪৪১২০২-পূর্ববর্তী অর্থবছরের অতিরিক্ত গৃহীত অর্থ ফেরত	২০০.৬৬৬.৫০

নতুন কোড: ১৪৭০১০১১০০২১৭-১১০০০০০০০-১১০০১০০০-১৪৪১২০২ অন্যান্য বিবরণ/মন্তব্য (যদি থাকে):

CHAPAINABABGONJ JELASTHO MOHANONDA NODI EBONG

CHAPAINABABGANJ.RAJSHAHI EBONG NATORE JELASTHO PADMA NODIR BESIN

BEBOSTHAPONA SONGKRANTO KAJER SOMVABBOTA SOMIKKHA, PROJECT CODE

NO:২২২০১৫০০০.RECURRING UNSPENT TK:৬৬৬.৫০.CAPITAL UNSPENT TK:২০০০০০.TOTAL

UNSPENT TK:২০০৬৬৬.৫০ FOR THE FY ২০২৩ - ২৪

মোট (অংকে) = ২০০.৬৬৬.৫০

টাকা (কথায়): দুই লক্ষ ছয় শত ছয়টি টাকা পঞ্চাশ পয়সা

তারিখ: ২১/০৮/২০২৪ খ্রি.

এটি একটি সিস্টেম জেনারেটেড চালান, কোন স্বাক্ষর প্রয়োজন নেই।



