BANGLADESH WATER DEVELOPMENT BOARD



Project Completion Report: IMED 04/2003(Revised)

Name of the Project

: River Bank Protection Works at Bachamara, Bahadurpur and Dhulsura area to Protect from River Bank Erosion at Manikganj District (1st Revised).

Implementation Period

January, 2021 to June, 2023

Name of Ministry/Organization:

Ministry of Water Resources / Bangladesh

Water Development Board.

Name of BWDB Division

Manikganj WD Division, BWDB,

Manikganj.

Name of BWDB Circle

: Dhaka O&M Circle, BWDB, Dhaka.

Name of BWDB Zone

: Central Zone, BWDB, Dhaka.

November, 2023

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

PROJECT COMPLETION REPORT: IMED 04/2003 (Revised)

A. PROJECT DESCRIPTION:

01. Name of the Project : River Bank Protection Works at Bachamara, Bahadurpur

and Dhulsura area to Protect from River Bank Erosion at Manikganj District (13 Revised)

02.

Administrative Ministry/Division : Ministry of Water Resources (MoWR)

03. **Executing Agency** : Bangladesh Water Development Board (BWDB)

Location of the Project 04.

Division	District	Upazilla
Dhaka	Manikganj	Daulatpur
		Harirumpur

05. **Objective of the Project**

- To arrest riverbank erosion by construction of riverbank protective works along the left bank of Jamuna River at Bachamara, along the left bank Padma River at Dhulsura 1200m and 400m at bahadurpur total 4075m.
- The Project is to sustain socio-economic enhancement and safety of national security in vast tract of area under Manikgani.
- To Protect of 12951.00 lakh assets of project area people by protecting their house, government and semi government structure, cultivable land etc.

06. **Estimated Cost**

(In lakh Taka)

		\ \ \ \ \ \ \ _
	Original	Latest Revised (1st)
(a) Total	4947.35	5551.21
(b) Taka	4947.35	5551.21
(c) Foreign Currency	-	-
(d) Project Aid	39	-
		-

:

PP
25-05-2021
14-12-2022

08. Implementation Period

	Date of Commencement	Date of Completion
(a) Original	January, 2021	December, 2022
(b) Latest Revised (1st)	January, 2021	June, 2023
(c) Actual	January, 2021	June, 2023

09. Financing Arrangement (Source-wise):

9.1 Status of Loan/Grant

a) Foreign Financing : Not Applicable

Source (s)	Currency as per Agreement	Amount in US \$ (Million)	Nature (Loan/Grant/ supplier's/	Date of Agreement	Date of Effective -ness	Date of Closing	
			credit)			Origina l	Revised
1	2	3	4	5	6	7	8

b) GOB:

(In lakh Taka)

Total amount	Loan	Grant	Cash Foreign Exchange
1	2	3	4
5551.21	-	5551.21	

9.2 Utilization of Project Aid: (Source wise)

(In million)

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
	Not Applicable					

9.3 Re-imbursible Project Aid (RPA):

(In lakh Taka)

R P A Am	R P A Amount		R P A Amount Amount		Amount	Amount	Remarks
As per PP	As per Agreement	Spent	Claimed	Re-imbursed			
1	2	3	4	5	6		
		Not Appl	icable				

B. <u>IMPLEMENTATION POSITION</u>

01. Implementation Period:

Implementation Period as per PP		Actual Implementation	Time Over-run (% of original	Remarks	
Original	Latest Revised	period	implementation period)	:	
1	2	3	4	5	
January, 2021 to December, 2022	January, 2021 to June, 2023	January, 2021 to June, 2023	25%	Extended scope of work according to RDPP	

02. Cost of the Project:

(In lakh Taka)

Description	Estimated Cost		Actual expenditure	Cost over-run (% of original cost)	Remarks
	Original	Latest revised	expenditure	(· · · · · · · · · · · · · · · · · · ·	
1	2	3	4	5	6
TOTAL	4947.35	5551.21	5508.72	11.34%	Extended
TAKA	4947.35	5551.21	5508.72	11.34%	scope of work
PA	-	-	-		according to RDPP

03. Project Personnel: Project work has been completed by existing manpower of Manikganj WD Division. There were no provision of project personnel recruitment in this project

Sanctioned	Manpower	Status of the	Manpower			
strength as per PP	employed Manpower during requirement for execution O&M as per pp		Existing manpower for O & M	Others		
1	2	3	4	5	Male	Female
Officer (s)	Existing man	power of the implemen	nting agency wer	re deployed	during ex	ecution of
Staff(s)	the project					
Total:					*	

04. Training of Project Personnel (Foreign/Local):

Field of	Provision as per PP		Actu	Remarks	
Training /Study tour/workshop/ Seminer etc.	Number of person	Man - months	Number of person	Man - months	
1	2	3	4	5	6
		le			

a. Foreign

4

b. Local

05. Component-wise Progress (As per latest approved PP):

(In lakh Taka)

(iii iakii 1aka)							
Items of work		Target	(as per PP)	Actual	Progress	Reasons for deviation (±)	
(as per PP)	Unit	Financia l	Physical (Quantity)	Financial	Physical (Quantity)		
1	2	3	4	5	6	7	
Traveling	Item	3.00	L.S	3.00	L.S	-	
Petrol, oil, lubricant	Item	3.00	LS	2.99	LS		
Printing and bunding	Item	1.00	L.S	0.99	L.S	-	
Stamp and seal	Item	1.00	L.S	0.99	L.S	-	
Honorarium	Item	12.00	L.S	12.00	L.S	-	
Vehical	Item	3.00	L.S	3.00	L.S	-	
Maintenance				·	·		
Computer and miscelenius	No	1.00	1	1.00	1	-	
Engineering and other equipments (Level Machine)	No	1.50	2	1.49	2	-	
Engineering and other equipments (Hand GPS)	No	1.00	2	1.00	2	-	
Other machineries and equipment (Multimedia)	No	2.00	1	2.00	1	<u>-</u>	
Protective Work	K.M	5482.71	4.075	5480.26	4.075	-	
Total =		5511.21	100.00%	5508.72	100.00%		

06. Information regarding Project Director (s):

Name &	Full time	Part time	Responsible	Date	of	Remarks
Designation with pay Scale.		,	for more than	Joining	Transfer	
1	2	3	4	5	6	7
Md. Mayn Uddin, Executive Engineer 4300-69850(5 th grade)	Full	-	No	22-06-2021	•	

07. Procurement of Transport (in Nos.): No provision of vehicle procurement in this project

Type of transport	Number as per P.P.	Procured with date	Transferred to Transport Pool with date	Transferr ed to O & M with date	Condemned/ damaged with date	Remarks				
1	2	3	4	5	6	7				
Car										
Jeep										
Microbus										
Minibus										
Bus		,								
Pick-up										
Truck		Not Applicable								
Motor Cycle										
By-cycle]									
Speed Boat										
Launch	1									
Others										
with name					<u> </u>	:				

8. Procurement of Goods, Works and Consultancy Services:

08.1 Goods & Works of the Project costing above Tk. 200.00 lakh. and Consultancy above Tk. 100.00 lakh:

Description of procurement (goods/works	Tende	Tender/Bid/Proposal Cost (in crore Taka)			Tender/	Bid/Propos al	Date of completion of works/services and supply of goods	
/consultancy) as per bid document	As per DPP	As per RDP P	Contract value (Origina 1)	Contra ct value (Revise d)	Invitat ion date	Contract signing date	As per contra ct	Actual
1	2		3		4	5 .	6	7
Precautionary protective work along the Left bank of Jamuna River from km.1.500 to km. 2.150 = 650 m at Bachamara in C/W River Bank Protection Works at Bachamara, Bahadurpur and Dhulsura area to Protect from River Bank Erosion at Manikganj District under Mankiganj WD Division, BWDB, Manikganj during the FY- 2021-22 & 2022-23.	7.889	7.889	7.031	7.889	07-09- 21	13-06-22	31-05-22	30-06-22
Precautionary protective work along the Left bank of Jamuna River from km.2.150 to km. 2.800 = 650	7.882	7.068	7.882	7.882	07-09- 21	13-06-22	31-05- 22	30-06- 22

				·			,	,
m at Bachamara in C/W River Bank Protection Works at Bachamara, Bahadurpur and Dhulsura area to Protect from River Bank Erosion at			,					
Manikganj District under Mankiganj WD Division, BWDB, Manikganj during the FY- 2021-22 & 2022-23.	1							
Precautionary protective work along the Left bank of Jamuna River from	7.863	7.054	7.863	7.863	07-09- 21	13-06-22	31-05-	30-06- 22
km.2.800 to km. 3.450 = 650 m at Bachamara in C/W River Bank Protection Works at Bachamara, Bahadurpur and Dhulsura area to Protect from River Bank Erosion at Manikganj District under								
Mankiganj WD Division, BWDB, Manikganj during the FY- 2021-22 & 2022-23.								
Precautionary Protective work along the Left bank of Padma River from km.32.375 to km. 32.900 = 400 m at Bahadurpur in C/W	5.912	3.945	5.909	5.909	07-09- 21	10-04-23	31-05-	10-06- 23
River Bank Protection Works at Bachamara, Bahadurpur and Dhulsura area to Protect from River Bank Erosion at Manikganj District under		,						
Mankiganj WD Division, BWDB, Manikganj during the FY- 2021-22 & 2022-23.	,			,				
Precautionary Protective work along the Left bank of Padma River from km. 46,500 to km. 46,900 = 400 m at Dhulsura in C/W River	6.884	6.250	6.884	6.884	07-09- 21	13-06-22	31-05-	30-06-
Bank Protection Works at Bachamara, Bahadurpur and Dhulsura area to Protect from River Bank Erosion at Manikganj District under Mankiganj WD Division,								
BWDB, Manikganj during the FY- 2021-22 & 2022-23. Precautionary Protective		Ì		ì	ì		·	
	0.195	6.250	0 177	0.177	07.00	10.04.22	21.05	10.06
work along the Left bank of Padma River from km. 46.900 to km. 47.300 = 400 m at Dhulsura and km	9.185	6.250	9.177	9.177	07-09- 21	10-04-23	31-05- 22	10-06-
Padma River from km. 46.900 to km. 47.300 = 400	9.185	6.250	9.177	9.177		10-04-23		1
Padma River from km. 46.900 to km. 47.300 = 400 m at Dhulsura and km 32.175 to km 32.375 = 200m Total 600m in C/W River Bank Protection Works at Bachamara, Bahadurpur	9.185	6.250	9.177	9.177		10-04-23		1

Precautionary Protective work along the Left bank of Padma River from km.	9.214	6,250	9,210	9.210	07-09- 21	10-04-23	31-05- 22	10-06- 23
47.300 to km. 47.700 = 400 m at Dhulsura and Km								
31.975 to km 32.175 = 200m		ì	Ì	` '				
in C/W River Bank Protection Works at								
Bachamara, Bahadurpur and Dhulsura area to Protect								
from River Bank Erosion at								
Manikganj District under Mankiganj WD Division,	1				•	٠,		
BWDB, Manikganj during the FY- 2021-22 & 2022-23.								

8.2 Use of Project Consultant (s) (Foreign/Local): No Provision of deploying consultant in this project

Name of the Field	Approved man month		Actual man month utilised	Remarks	
	As per PP	As per contract		. '	
1	2	3	. 4 ,	5 .	
		Not Applic	able		

a) Foreign: Not Applicable

b) Local: Not Applicable

09. Construction/Erection/Installation Tools & Equipment:

Description of items	Quantit y (as per PP)	Quantity procured with date	Transferred to O & M with date	Disposed off as per rule with date	Balanc e	Remarks
1	2	3	4	5	6	7
Desktop PC and Printer with scanner	1	30/06/22	Manikganj WD Division 25/06/23			Is being used for official Work of
Level Machine	2	30/06/22	Manikganj WD Division 25/06/23			Manikganj WD Division
Hand GPS	2	30/06/22	Manikganj WD Division 25/06/23		,	
Multimedia	1	30/06/22	Manikganj WD Division 25/06/23			

C. <u>FINANCIAL AND PHYSICAL PROGRAMME</u>:

01. (a) Original and revised schedule as per PP:

(In lakh Taka)

Financial Year	Financial provision & physical target as per original PP							n & physical target as st revised PP		
	Total	Taka	P.A.	Physical %	Total	Taka	P.A.	Physical %		
i	2	3	4	5	6	7	8	ĝ		
2020-21	2105.00	2105.00		_	0.00	0.00		0.00		
2021-22	2352.00	2352.00		70.00%	4343.00	4343.00		75.00%		
2022-23	490.35	490.35		30.00%	1208.21	1208.21		25.00%		
Total	4947.35	4947.35		100.00%	5551.21	5551.21		100.00%		

01. (b) Revised ADP allocation and progress:

(In lakh Taka)

Financial	Revi	sed Allocat	ion & t	arget	Taka	Expenditure & physical progress			
Year	Total	Taka	P.A.	Physical	release	Total	Taka	P.A.	Physical
				%					%
1	2	3	4	5	6	7	8	9	10
2021-22	4343.00	4343.00		87.12%	4343.00	4342.96			87.12%
2022-23	1168.00	1168.00		12.88%	1168.00	1165.76			12.88%
Total	5511.00	5511.00		100.00%	5511.00	5508.72			100.00%

D. ACHIEVEMENT OF OBJECTIVES OF THE PROJECT:

Objectives as per PP	Actual achievement	Reasons for
		shortfall, if any
(a) To arrest riverbank erosion by construction of riverbank protective works along the left bank of Jamuna River at Bachamara 1950m, along the left bank Padma River at Dhulsura 1200m and 925m at bahadurpur total 4075m. (b) Ensuring the safety of various important public private projects proposed by reducing the risk of damage to the project areas. (c) To Protect of 14328.50 lakh assets of project area people by protecting their house, government and semi government structure, cultivate land etc. (d) To improve socio economic condition of that project area.	(b) Ensured the safety of various important public private projects by reducing the risk of damage to the project areas. (c) Total 14328.50 lakh assets of project area saved. (d) Socio economic condition	

E. BENEFIT ANALYSIS

01. Annual Out-put:

Items of out-put	Unit	Estimated quantity expected at full capacity	Actual quantity of out-put during the 1st year of operation at full capacity (or during, real production for newly completed project).			
Incremental paddy production on project area	Hectare	52.00	The project has just been implemented. Output values can be accessed after a year from completion.			
Fish Culture Firm	Hectare	8.00	The accessed after a year front completion.			
Poultry Farm	Nos.	15				
Poultry Feed Industry	Nos.	3				

02. Cost / Benefit:

Item	Estimated	Actual
(1) Benefit cost ratio of the project (i) Financial	1.30:1.00	Will be evaluated later by concerned directorate of BWDB
(ii) Economic		and IMED.
(2) Internal Rate of Return (i) Financial	19.89%	
(ii) Economic	,	

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

F. MONITORING AND AUDITING

0.1 Monitoring:

(a) Ministry / Agency:

Name & designation of the inspecting official	Date of Inspection	Identified Problems	Recommendations
1 .	2	3	4
Sayeda Salma Jafrin, Additional Secretary (Admin), MoWR.	28-05-2022	1. Urgent emergency work needs to be implemented on the left bank of Padma river in Ujanpara area of Gopinathpur union under Harirampur upazila of Manikganj district.	ı -

(b) <u>IMED</u>:

(c) Others: Mid Term Evaluation Committee

Name &	Date of	Identified Problems	Recommendations
designation of the inspecting official	Inspection	1 1 OURCHIS	
1	2	3	4
Mid Term	06-01-2023		1. 3.550 km of arrow conservation works: Arrow conservation works have been implemented. The
Evaluation	&		remaining 0.525 km work needs to be started
Committee	07-01-2023		immediately. Apart from this, regular maintenance of the implemented work should be maintained through regular budget allocation after the completion of the project.
		,	2. The plantation work must be completed and maintained within the stipulated time.
			3. The project should be compulsorily completed by June, 2023 by completing all activities as per approved RDPP. With a view to mandatory completion of the project by June, 2023, the remaining activities are to be started immediately. In this regard, it is necessary to strengthen the monitoring activities by the senior officials of BWDB along with the project director.
			4. The quality of construction materials used in construction i.e. cement, sand should be tested from the laboratory of Bangladesh University of Engineering (BUET) and the report obtained from the test should be stored at the site.
			5. Used sand and cement mixed geo bags in the ratio of sand: cement 6: 1. In this case, if sand and cement are used in proportion, it can be checked that it will give proper strength. This method can be used for other projects if sufficiently sustained.
			6. Continuous Curing should be done after placing the cement sand bag on the sloping part of the river bank so that the cement sand mixture can achieve proper strength.
			7. The project authority will ensure that the work is carried out properly according to the proper specification and design. Quality of construction work must be ensured.
			8. It is necessary to preserve the pre- and post-work pictures of the implementation of the project work so that the results of the implemented work can be well observed. Besides, through the use of modern technology, the project work can be monitored from the project manager's office.
			9. No site office has been constructed for the project. It is preferable to have a site office in the project area.
			10. Multiple signboards containing information about the project activities should be installed in the project area.
	·		

0.2. Auditing during and after Implementation:

2.1. Internal Audit:

Period of Audit	Date of submission	Major findings/	Whether objections	
	of Audit Report	objections	Resolved or not.	
1	2	3	4	
	Not A	pplicable		

2.2. External Audit:

Audit period	Date of	Major findings/	Whether objections
	submission		
	of Audit Report	objections	Resolved or not.
1	2	3	4
2021-2022	23-03-2023	Government revenue loss due to not	Not Yet Resolved
	1	insuring against various risks of the	
		contract work as per the terms of the	
		contract and determining the insurable	
		amount at the appropriate rate and	
		deducting VAT on the insurance	
		premium at the prescribed rate despite	
		the insurance is done Tk 361811.00.	
	,		
	,		

G. <u>DESCRIPTIVE REPORT</u>

1. General Observations/Remarks of the Project on:

1.1 Background

Bachamara Union of Daulatpur Upazila is located on the left bank of Jamuna River flowing through the western side of Manikganj District and Bahadurpur and Dhulsura Union of Harirampur Upazila are located on the left bank of Padma River flowing through the southwestern side. In Daulatpur upazila, Jamuna river is mainly divided into two channels. A channel comes up to Aricha via Bera-Nagarbari-Natakhola on the western side. The other came from the eastern side through Chauhali-Daulatpur-Zafarganj to Aricha. Prior to 2006, the west side channel was wider than the east side channel and the flow was higher in the west side channel. Over the last few years, the channel on the west side has been getting shorter and the channel on the east side has been getting wider. At present the main flow of river Jamuna is flowing through the eastern side channel i.e. by the side of Chauhali-Daulatpur-Jafarganj-Aricha Ghat.

In the last few years, extensive erosion has been observed along Chauhali-Daulatpur-Jafarganj. The channel on the eastern side splits into two branches 3.00 km upstream of Jafarganj Bazar under Shivaloy Upazila. Bachamara area under Daulatpur upazila of Manikganj district and Bahadurpur union under Harirampur upazila have been affected by severe erosion of Jamuna and Padma rivers respectively during the monsoon season for the past few years. If the severity of this breakdown becomes widespread, the MP, Chairman, Deputy Commissioner of the area expressed deep concern. Considering the severity of the erosion in the last few years, large areas of Bachamara areas are being submerged in the river every year. Only in the last monsoon season, more than 500 meters in Deshkool of Bahadurpur, Gopinathpur and Dhulsura Union under Harirampur Upazila and more than 700 meters in Deshkool of Bachamara Union of Daulatpur Upazila have disappeared.

If the erosion continues like this, valuable agricultural lands, markets, schools, madrasas, mosques, communication roads along with the riverside areas will disappear into the river bed; As it will increase the suffering of the people and the environment will become poor, Hon'ble Member of Parliament Mr. Naimur Rahman (Durjoy) visited the place and issued a DO letter to prevent the damage by dredging/excavating the parts of Yamuna and Padma rivers. In view of this, a review meeting was held in the meeting room of the Ministry of Water Resources on May 12, 2019 A.D. in order to prevent the damage by dredging/excavating parts of Jamuna and Padma rivers within Daulatpur and Shivaloy upazilas of Manikganj district under the chairmanship of the Secretary of the Ministry. In

the said meeting, it was decided to take up the project under 50.00 crore rupees for the work of the urgent part for the time being to prevent river erosion.

If the proposed project is implemented, river erosion will be reduced to a large extent in Bachamara area under Daulatpur upazila and Ramkrishnapur and Bahadurpur areas under Harirampur upazila. In the light of the above decision, a technical committee was formed by the Bangladesh Water Development Board for project formulation. Based on the report submitted by the technical committee and in the light of the approved design, the project was formulated as per the approved schedule of rates for the year 2019-20 of the Dhaka osm Circle of BWDB. The project was approved by the Honble Minister, Ministry of Planning on 25-05-2021 AD at a cost of Tk 4947.35 lakhs. The project implementation period is from January, 2021 to December, 2022. According to the original approved DPP, 1.950 km in Bachamara area of Daulatpur upazila of Manikganj district and 400 meters in Bahadurpur area of Harirampur upazila and 1200 meters in Dhulsura area, a total of 3550 meters of protective works are included.

On last 12-06-2022 in the 2nd meeting of the Project Steering Committee under the chairmanship of Mr. Senior Secretary, Ministry of Water Resources, "(a) Regarding identification of emergency break area and implementation of additional defense works in necessary parts in Bahadurpur area of Harirampur Upazila outside the scope of the project through formation of technical committee. A decision was taken regarding revision of DPP of the project. According to the decision of the meeting, a technical committee was constituted by BWDB including members of IWM and CEGIS. The said committee gave opinions and recommendations regarding the project "It is reasonable to implement another 525 meters of defense works upstream of the 400 meters of defense works implemented on the left bank of Padma river in Bahadurpur area under the revised DPP project, so that many public and private establishments will be saved from disappearing into the river". Accordingly, the 1st revised DPP of the project was prepared by keeping an additional 525 meters length of defense works in the project area which was approved by the Ministry of Water Resources on 14-12-2022. The revised implementation period of the project is fixed from January, 2021 to June, 2023. In the approved 1st revised DPP, 1.950 km in Bachamara area of Daulatpur upazila of Manikganj district and 925 meters in Bahadurpur area of Harirampur upazila and 1200 meters in Dhulsura area, a total of 4075 meters are included.

1.2 Justification/Adequacy

Project Area Bachamara Union of Daulatpur Upazila on the left bank of Yamuna River flowing through the western side of Manikganj District and Ramakrishnapur, Gopinathpur and Dhulsura Union of Harirampur Upazila on the left bank of Padma River flowing through the south-western side. In Daulatpur upazila, Yamuna river is mainly divided into two channels. A channel comes up to Aricha via Bara-Nagarbari-Natakhola on the western side. The other came from the eastern side through Chowhali-Daulatpur-Zafarganj to Aricha. Considering the severity of erosion in the last few years, the country of Bachamara areas is losing an average of 200 meters into the river every year. In the last monsoon season alone, more than 500 meters in Ramkrishnapur, Gopinathpur and Dhulsura Unions under Harirampur Upazila and more than 700 meters in Bachamara Union of Daulatpur Upazila have disappeared. If the erosion continues like this, valuable agricultural lands, markets, schools, madrasas, mosques, communication roads along with the riverside areas will disappear into the river bed; It will increase the suffering of people and the environment will become poor The project area under discussion has been selected in view of the above conditions.

1.3 Objectives

- Prevention of erosion of areas through river bank protection works in Bahadurpur, Ramkrishnapur and Dhulsura Union areas under Harirampur upazila on the left bank of Bachamara Bazar and Padma river under Daulatpur upazila of Manikganj district.
- 2. Ensuring the protection of various public and private important structures (Schools, Colleges, Union Parishad Buildings, Mosques, Graveyards, Cyclone Centres, Markets etc.) by reducing the risk of collapse in the project areas.
- 3. Protection of assets of about 14238.50 lakhs including protection of houses, agricultural and non-agricultural land, forest gardens, crops etc. of the people living in the project area.
- 4. Improvement of the socio-economic status of the area and elimination of adverse effects on the national economy.

1.4 Project revision with reasons:

As per Project Steering Committee (PSC) decision additional 525m protective work included in revised DPP to safe important structures at Gopinathpur of Harirumpur Upazilla at Manikganj district.

2. Rationale of the project in respect of Concept, Design, Location and Timing.

The geographical position of Bangladesh is at the outfall of the world's largest river basin known as GBM Basin. About 8% of the basin area lies inside the country's boundary. The other 92% area exists out side of country's boundary on which Bangladesh have no control in terms of both geo-graphically and hydrologically. Therefore, flood inundation, draught, rainfall-runoff; river bank erosion etc. are regular phenomena in Bangladesh. Almost every year at least one seasonal hazards occured either in disastrous or in non-disastrous terms regarding the loss livlihood, crops and property. In the project area of this project, the most vulnerable natural hazard is Jamuna and Padma River left Bank erosion. Therefore, the project main objective is set for stopped or reduce the bank erosion in order to reduce or stopped the loss of livlihood, properties and crops situated on and adjacent the river bank area. If the objective can achived, the people of that area will benefit regarding no loss of their household, crops and other properties both movable and immoable. The practice of implenting River Bank Protection Work (RBPW) in Bangladesh already have an sustainable form of protective measures which had been implemented at least for last 30 years. For the big mighty river such as Jamuna and Padma River, the permanent protective works had been implemented in several sever erosion prone segment or river reach in Sirajgonj, Bogra, Kurigram, Gaibandha and Tangail district of Bangladesh. In this project, also a highly recommended or sustainable form of protective works had been implemented by Sand Cement Geo-bag placing and Sand filled Geo-Bags dumping and combination of both as per the provisions of approved design. Since Bangladesh is densely populated with poor natural resources base. The major problem responsible for poverty includes high level of landlessness due to river bank erosion (i.e., population displacement and potential erosion damages and losses to productive agricultural and urban land and severs damage to property and infrastructure), recurrent floods, unemployment, illiteracy and malnutrition. The population of the Project area is very dense (about 967 per square kilometer) and landless population is about 20-30% who are now living as squatters in flood embankment and other Govt. areas. Socio-economic development of the people through agriculture and business generation development providing flood control support and protection of potential lands, infrastructures of urban and rural areas from erosion damages is the main objective to alleviate poverty of the area.

3. Brief description on planning and financing of the project and its applicability.

♦ Project Identification

The project is located in 3 locations of two upazilla at Manikganj District. One location is Bachamra of Daulatpur Upazilla which is about 40 Km. downstream of Bangabandhu Bridge and the 2nd location is Bahadurpur of Harirumpur Upazilla which is about 15 km downstream of Aricha ghat and the 3nd location is at Dhulsura of Harirumpur Upazilla which is about 30.00 km downstream of Aricha ghat. Along with the house-hold, crops and properties situated on and adjacent to the left bank of Jamuna and Padma River. To provide Precautionary protection of the above-mentioned infra-structures from the Jamuna and Padma River left bank erosion, the project was identified to implement improved bank revetment immediately. Since the Jamuna and Padma river morphology is very unpredictable, a continuous protection is necessary for the sustainability of the protective works. Therefore, the technical committee of BWDB has been identified the project in order to implement 4.075 km of Precautionary Protective work which will ensure a continuous protection of about 4.075 km along the left bank of Jamuna and Padma River of Manikganj Dstrict

♦ Project Preparation

Local Honorable MP Mr. Naimur Rahman (Durjoy), Manikganj-1 sent a D.O Letter to Senior Secretary of MoWR. Honorable Senior Secretary of MoWR instructed BWDB to prepare a project by forming a technical committee. Then the project was taken according to Technical Committee Report.

Appraisal

The Project apprisal meeting was held at the Ministry of Water Resources (MoWR) on 28-01-2020. As per decision of appraisal Committee meeting DPP was recast and sent to the Ministry of Planning for approval.

- Credit Negotiation
 Not applicable
- Credit Agreement
 Not applicable
- Credit Effectiveness
 Not applicable
- Loan Disbursement
 Not applicable
- Loan Conditionalities
 Not applicable
- Project Approval.

The project had been approved by Honorable Planning Minister at 20-05-2021 on the basis of PEC meeting held on 31-01-2021. The PEC took decision for approved the project proposal as this is very important and usefull to protect the divastating Jamuna and Padma River Erosion in the project area.

♦ Others (if any).

4. Analysis of the Post-Implementation situation and result of the project:

4.1 Whether the beneficiaries of the project have clear knowledge about the Target/ Objectives of the project. Yes.

4.2 Programme for use of created-facilities of the project –

The stockholders are direcly taking advantages of the created facilities of the project.

4.3 O & M programme of the project.

Post Project recurrent O & M works will be done from the regular O & M allocation

4.4 Impact of the project -

4.4.1 Direct

Protection of river bank erosion and reducing the threat.

4.4.2 Indirect

Environmental enhancement from river erosion hazard consequently sustainable socio-economic enhancement.

4.5 Transfer of Technology and Institutional Building through the project

Not Applicable

4.6 Employment generation through the project.

Employment generation for skilled and unskilled about 90 thousand mandays during the project period.

4.7 Possibility of Self employment

There are possibilities of self employment as existing commercial and business centres are procted from river bank erosion

4.8 Possibility of women-employment opportunity

Possibility of the women employment is also there.

4.9 Women's participation in development

Yes.

4.10 Probable Impact on Socio-Economic activity.

Due to the protection of river bank erosion various types of infrastructures have been saved. Hence, socio-economic balance in the locality has been achieved.

4.11 Impact on environment

Environmental enhancement has been achieved through the implementation of the project. Bank erosion hazards of environment has been eradicated.

4.12 Sustainability of the project

The project will be sustainable provided some periodic maintenance is ensured.

4.13 Contribution to poverty alleviation/reduction

The project fulfilled following benefits in compatible starategic goal i.e, a) reduction of vulnerability to water relted disester, b) manage erosion of Jamuna and Padma River and protect growth centres, government & no-government establishment and households insuring proverty allivation as PRS.

- (1) The project ensures immovable properties of total worth of Tk. 14238.50 lakh.
- (2) It generated employment for skilled/unskilled during construction period and in annual O & M phase in project performance. Also, better employment access in business territory sectors is enhanced.
- (3) Natural security against river Bank erosion is restored.
- Opinion of the public representatives, local elite, local administration, teachers, 4.14 religious leaders, women's representatives etc.

Positive remarks regarding the Project.

Contribution of Micro-credit programmes and Comments on overlapping with 4.15 any NGO activities.

Not Applicable

5.	Problems encountered during Implement	entation (v	vith duration & steps taken to remove
5.1	those) Project Management: <i>Didn't arise</i> .	5.12	Project aid disbursement and re-imburs

- Project Director: Didn't arise. 5.2
- Land Acquisition: Not Applicable. 5.3
- 5.4 Procurement: Didn't arise.
- Consultancy: Not Applicable. 5,6
- 5.7 Contractor: Didn't arise
- Manpower: Didn't arise 5.8
- law & Order: Didn't arise 5.9
- Natural clamity: Problem due to 5.10 natural clamity was arisen from flood
- Project financing, allocation and 5,11 Release: Didn't arise
- Design formulation/approval: 5.12 Didn't arise.

sment:

- 5.13 Mission of the development partners. Not Applicable.
- Time & Cost Over-run: Time over-run by 5.14 25.00% and cost over-run by (+) 12.21%.
- 5.15 Project Supervision/Inspection: Not arisen.
- 5.17 Delay in Decision: Not arisen.
- 5.18Transport: Not Applicable.
- 5.19 Training: Not Applicable.
- 5.20 Approval: Did n't arise.
- Others.: None 5.21

6. Remarks & Recommendations of the Project Director:

The physical components of the project have been implemented as per the approved design and specification. This is mainly a Precautionary protection work project. A total of 4.075 km Bank protective works have been implemented along the left bank of Jamuna (1.950 km) and Padma River (2.125 km). As a result of the implementation of the project 3 places in two upazillas of Manikganj district have been saved from river erosion. There should be a provision of O&M Budget for regular Maintenace of this implemented work as Padma and Jamuna is very unpredictive river.

Date: 15/11/2023

Muddi

Signature and seal of the Project Director/ Manager
(Md. Mayn Uddin)

(Md. Mayn Uddin)

(Md. Mayn Guarry Executive Engineer Manikganj WD Division BWDB, Manikganj.

7. Remarks/Comments of Agency Head

This project was implemented to mitigate river bank erosion in Bachamara, Bahadurpur and Dhulsura area of the Manikganj district. A total of 4.075 km precautionary protective work was implemented under this project on the left bank of the Jamuna and the Padma River. The implementation of precautionary protective work has stopped river bank erosion thus providing safety to the people living in project area. The project is serving its intended purpose and can be regarded as a successful project.

Date: 03/12/2023

Signature and Seal (S.M. Shahidul Islam) ID NO: 650307001 Director General

8. Remarks/Comments of the officer in- charge of the Ministry/Division BWDB, Dhaka.

Under this project 4.075 km precautionary protective work has been implemented along the left bank of Jamuna River (1.950 km) and Padma River (2.125 km). The Project has been completed successfully.

Date:

Signature and Seal