# BANGLADESH WATER DEVELOPMENT BOARD



# Project Completion Report: IMED 04/2003(Revised)

Name of the Project

: River Bank Protection Project along the left bank of the Jamuna River from Kaolibari Bridge to Shakharia (Varua - Bot tola) in Gopalpur & Bhuanpur Upazila of Tangail

District (1st Revised).

Implementation Period

March, 2017 to June, 2021

Name of Ministry/Organization

: Ministry of Water Resources /Bangladesh Water Development Board.

Name of BWDB Division

: Tangail O & M Division, BWDB, Tangail.

Name of BWDB Circle

: Mymensingh 0 & M Circle, BWDB, Mymensingh.

Name of BWDB Zone

: Central Zone, BWDB, Dhaka.

## 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 Project along the left bank of the

Jamuna River from Kaolibari Bridge to Shakharia (Varua

- Bot tola) in Gopalpur & Bhuanpur Upazila of Tangail

District (1st Revised).

02. Administrative Ministry/Division:

Ministry of Water Resources.

03. Executing Agency

Bangladesh Water Development Board.

04. Location of the Project

Bhuiyanpur & Gopalpur Upazila of Tangail District.

05. Objective of the Project

- To protect the flood control embankment-cum-road; house-hold; cropslands and immovable & movable property situated on the left bank of Jamuna River from Kaolibari to Shakharia area from the erosion of Jamuna river of Bhuiyanpur and Gopalpur upazila of Tangail District.
- To enhance the protection of Nalinbazar area from the erosion of Jamuna river so that the Bhuiyanpur Tarakandi road-cum-flood control embankment can protected from the erosion of Jamuna River.
- In order to improve the life & livlihood and small scale economy of the locality by protect the erosion of the Jamuna River.
- To protect the life and property of about a value of 74686.00 lakh taka by implementing the protective works of a length of 3.00 Km and Jamuna river dredging works of 3.40 Km. and dredging valume of about 56.49 lakh cubic meter.

#### 06. Estimated Cost:

(In lakh Taka)

	Original	Latest Revised
(a) Total	20056.86	21534.53
(b) Taka	20056.86	21534,53
(c) Foreign Currency	-	-
(d) Project Aid	-	•
(e) RPA	**	-

07.	Data of Annuarial	DCD	Dbb
07.	Date of Approval	PCP	l DPP
	1.1	<u> </u>	

(a) Original

24/08/2017

(b) Latest Revised

:

24/06/2019



## 08. Implementation Period

	Date of Commencement	Date of Completion
(a) Original	March, 2017	June,2019
(b) Latest Revised	March, 2017	June, 2020
(c) No Cost time Extension	March, 2017	June, 2021
d) Actual	March, 2017	June, 2021

## 09. Financing Arrangement (Source-wise):

#### 9.1 Status of Loan/Grant

#### a) Foreign Financing:

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

## b) GOB:

(In lakh Taka)

Total amount	Loan	Grant	Cash Foreign Exchange
•		•	
21534.53		21534.53	<b>-</b>

## 9.2 Utilization of Project Aid: (Source wise)

(In million)

Source (s)	Total Amount		Actual Expenditure		Unutilized Amount	
	In US \$	In Local	In US \$	In Local	In US \$	In Local Currency
		Currency		Currency		
1	2	3	4	- 5	6	7
N/A	N/A	N/A	N/A	N/A	N/A	N/A

## 9.3 Re-imbursible Project Aid (RPA):

(In lakh Taka)

R P A Amount		Amount	Amount	Amount Re-	Remarks
As per PP	As per Agreement	Spent	Claimed	imbursed	
1	2	3	4	5	6
N/A	N/A	N/A	N/A	N/A	N/A



## **B.** IMPLEMENTATION POSITION

## 01. Implementation Period:

Implementation Period as per DPP		Actual Implementatio	Time Over-run (% of original	Remarks
Original	Latest Revised	n period	implementation period)	
1	2	3	4	5
March, 2017	March, 2017 to	March, 2017	85.84%	Due to morphological changes of
to June, 2019	June, 2021	to June, 2021		Jamuna river, the approved
(2 years 4	(4 years 4	(4 years 4		design of river bank protection
months)	months)	Months)		work, the main componant of the
				project, had been revised which
				required to revised of the
				project's DPP. This is the main
				issue to extended the project
				implementation period and also,
				Covid'19 pandemic situation
				affect on the implementation of
				the project componant demanding
				1 (one) year extension of the
				implementation period to finished
				the physical works completely.

## 02. Cost of the Project:

(In lakh Taka)

Description	Estimat	Estimated Cost			Remarks
	Original	Latest revised	expenditure	(% of original cost)	
TOTAL	20056.86	21534.53	16087.98	-19.79%	Due to the decreasing of Jamuna river dredging works cost as per the Post-
TAKA	20056.86	21534.53	16087.98	-19. <b>79%</b>	Work Survey.
PA	0.00	0.00	0.00	0.00%	

# **03. Project Personnel:** The Project has been implemented by existing manpower of Tangail O & M Division, BWDB, Tangail.

Sanction	ned	Manpower	Status of the e	Manpower			
strength as DPP	s per	employed during execution	Manpower requirement for O & M as per DPP	Existing manpower for O & M	Others	Employed	
1		2	3	4	5	Male	Female
Officer (s)	12	12	N/A	N/A	N/A	12	-
Staff(s)	11	11	N/A	N/A	N/A	10	1
Total:	23	23	N/A	N/A	N/A	22	1



## 04. Training of Project Personnel (Foreign/Local): No Provision of training in this project

Field of Training /Study tour	Provision a	as per DPP	Actua	Remarks	
/workshop /Seminer etc.	Number of person	Man - months	Number of person	Man - months	
1	2	3	4	5	6
a. Foreign	N/A	N/A	N/A	N/A	N/A
b. Local	N/A	N/A	N/A	N/A	N/A

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

		,		,		(In lakh Taka)
Items of work	Unit		s per DPP)		Progress	Reasons for deviation
(as per DPP)		Financial	Physical (Quantity)	Financial	Physical (Quantity)	(±)
1	2	3	4	5	6	7
A. Revenue						
Travel allowances	L. S.	2.00	1 item	1.40	1 item	
Petrol & Lubricant	L. S.	4.20	1 item	4.17	1 item	
Printing & Publication	L. S.	2.00	1 item	1.99	1 item	
Stationary, seal & Stamp	L. S.	2.00	l item	2.00	1 item	
Hydrological & Morphological Study	L. S.	20.00	1 item	19.24	1 item	
Honorarium (for the different committee members i.e. PSC, PIC etc.)	L. S.	4.80	1 item	4.64	1 item	
Honorarium (for the midterm evaluation committee.)	L. S.	10.00	1 item	8.64	1 item	
Survey and study	L. S.	5.00	1 item	4.98	1 item	
Sub-Total (Revenue) =		50.00		47.06		
B. Capital					L	<u> </u>
Jeep (Not exceeding 2500 C.C. With 5 doors)	No.	95.00	1	0.00	-	Procurement process of the Jeep cann't under taken as per the embargo of Ministry of Finance vide memo no.07.156. 026.00.01.2004(part-2)- 836 Date: 03 December, 2020.
River Bank Protection Works from Kaolibari to Shakharia (Varua Bot tola)	Km.	8754.92	3.000	8519.90	3.00 (100%)	
Repair of Existing	Km.	976.90	0.400	865.24	0.400	
Protective Works [In between of Km. 0.400 and Km. (-) 0.450]					(100%)	
Jamuna River Dredging from Km. 0.00 to Km. 3.40.	Km. / Cum	11637.71	3.40 Km./ 6548583 cum	6655.78	3.40 Km./ (100%) 4666778 cum (71.26%)	Volume of dredging works decreased due to the bed erosion occurred naturaly which was not included in the measurement of dredging works done by the contractors. The volume of dredging works had been determined by Joint pre and post work Survey carried out by BWDB's taskforce and IWM.

Items of work	Unit	Target (as	per DPP)	Actual I	Progress	Reasons for deviation
(as per DPP)		Financial	Physical	Financial	Physical	(± <u>)</u>
			(Quantity)		(Quantity)	
I	2	3	4	5	6	7
		·				Though the volume of dredging works decreased the over all project goals didn't changed or not interrupted.
Sub-Total (Cap	ital) =	21464.53		16040.92		
Physical Contingency =		10.00		0.00		
Price Continge	ency =	10.00		0.00		
Total ( Revenue+Cap	ital) =	21534.53	100.00%	16087.98	95.24%	

## 06. Information regarding Project Director (s):

Name &	Full	Part	Responsible	Date	e of	Remarks
Designation with	time	time	for more than	Joining	Transfer	
pay Scale.			one project			
1	2	3	4	5	- 6	7
Md. Shahjahan Siraj	Yes	-	No.	31 October,	28 August,	
Executive Engineer				2017	2018	
Pay Scale: 5th Grade			·			
BDT 43000-44940-						
46970-49090-						
69850/-						
Md. Mahfuzur	Yes	<del>-</del> /	. No.	28 August,	23 January,	
Rahman				2018	2019	
Executive Engineer		i i				
Pay Scale: 5 <sup>th</sup> Grade						
BDT 43000-44940-						
46970-49090-				•		
69850/-						
Md. Sirajul Islam	Yes	-	No.	31 January,	till to date	
Executive Engineer				2019		
Pay Scale: 5th Grade						
BDT 43000-44940-						
46970-49090-						
69850/-						

## 07. Procurement of Transport (in Nos.):

Type of transport	Number as per D. P.P.	Procured with date	Transferred to Transport Pool with date	Transferred to O & M with date	Condemne d/ damaged with date	Remarks
1	2	3	4	5	6	7
Car	_	-	-	-	-	-
Jeep	1	N/A		<del>-</del>	•	Procurement process of the Jeep cann't under taken as per the embargo of Ministry of Finance vide memo no. 07.156. 026.00.01.2004 (part-2)-836 Date: 03 December, 2020.
Microbus	-	-	s==	-	-	-
Minibus	-	-	-	-	-	-
Bus	-	-	**	94A	•	-
Pick-up	-	-	-		-	-
Truck	-		-	$\bigcap$	-	-

Type of transport	Number as per D. P.P.	Procured with date	Transferred to Transport Pool with date	Transferred to O & M with date	Condemne d/ damaged with date	Remarks
1	2	3	4	- 5	6	7
Motor Cycle	-		-	-		-
By-cycle	-	-	-	-	-	-
Speed Boat	-	-	-	-	-	-
Launch	-	2	- <b>-</b>	-	-	-
Others	-	-	••	-	•	-
with name						

## 08. Procurement of Goods, Works and Consultancy Services:

## 08.1 Works of the Project costing above Tk. 200.00 lakh:

Description of procurement (works) as per bid document		st (in crore ka)	Те	nder	Date of con wor	
	As per DPP	Contracte d value	Invitati on date	Contract signing	As per contract	Actual
I	2	3	4	5	6	7
(a) Bank Protective work along the left bank of Jamuna River from km 0.00 to km. 0.260 = 260 m at Kaolibari area of Gopalpur upazila, District Tangail. (Package No. Works – Kaolibari - 01/	Original - 8.89 Revised- 7.19	Original- 7.46 Revised- 7.19	31-12- 2017	17-05- 2018	26-06- 2019	26-06- 2019
2016-17)	7.15	7.17				
(b) Bank Protective work along the left bank of Jamuna River from km 0.260 to km 0.530 = 270 m at Kaolibari area of Gopalpur upazila, District Tangail. (Package No. Works - Kaolibari - 02/	Original- 8.69 Revised- 7.49	Original- 7.75 Revised- 7.49	31-12- 2017	31-05- 2018	26-06- 2019	26-06- 2019
2016-17)  (c) Bank Protective work along the left bank of Jamuna River from km 0.530 to km 0.810 = 280 m at Kaolibari area of Gopalpur upazila, District	Original- 8.75 Revised-	Original- 8.00 Revised-	31-12- 2017	21-05- 2018	28-06- 2019	28-06- 2020
Tangail. (Package No. Works - Kaolibari - 03/2016-17)  (d) Repair of existing Bank Protective work	7.76 Original-	7.76 8.73	13-10-	19-12-	25-06-	25-06-
along the left bank of Jamuna River 400 m within Km 0.400 and Km. (-) 0.450 at Nalin Bazar area of Gopalpur upazila, district Tangail (Package No. Works - Kaolibari - 04/2016-17)	5.37 Revised- 9.70		2019	2019	2020	2021
(e) Bank Protective work along the left bank of Jamuna River from km 0.810 to km 1.080 = 270 m at Kaolibari area of Gopalpur upazila, District Tangail. (Package No. Works – Kaolibari - 05/2016-17)	Original- 8.44 Revised- 7.49	Original- 7.72 Revised- 7.49	31-12- 2017	20-05- 2018	30-06- 2019	30-06- 2019
(f) Bank Protective work along the left bank of Jamuna River from km 1.080 to km 1.350 = 270 m at Shakharia area of Bhuiyanpur upazila, District Tangail. (Package No. Works-	Original- 8.68 Revised- 7.39	Original- 7.75 Revised- 7.40	31-12- 2017	24-09- 2018	30-06- 2019	30-06- 2019
District Tangail. (Package No. Works- Shakharia - 06/2017-18)	1.57	7.40				
(g) Bank Protective work along the left bank of Jamuna River from km 1.350 to km 1.550 = 200 m at Shakharia area of Bhuiyanpur upazila, District Tangail. (Package No. Works-Shakharia - 07/2017-18)	Original- 6.42 Revised- 5.47	Original- 5.69 Revised- 5.47	31-12- 2017	24-09- 2018	30-06- 2019	30-06- 2019
(h) Bank Protective work along the left bank of Jamuna River from km 1.550 to km 1.680 = 130 m at Shakharia area of Bhuiyanpur upazila, District Tangail. (Package No. Works-Shakharia - 08/2017-18)	Original- 5.41 Revised- 3.58	Original- 3.64 Revised- 3.58	31-12- 2017	15-04- 2018	01-05- 2019	30-06- 2019
(i) Bank Protective work along the left bank of Jamuna River from km 2.550 to km 3.000 = 450 m at Shakharia area of Bhuiyanpur upazila,	Original- 15.52 Revised-	Original- 13.97 Revised-	13-10- 2019	04-12- 2019	30-06- 2020	30-06- 2020

Description of procurement (works)		st (in crore ka)	Te	nder	Date of com work	
as per bid document	As per DPP	Contracte d value	Invitati on date	Contract signing	As per contract	Actual
$m{l}$	2	3	4	5	6	7
District Tangail. (Package No. Works- Shakharia - 09/2018-19)	15.58	15.58				
(j) Bank Protective work along the left bank of Jamuna River from km 1.680 to km 1.900 = 220 m at Shakharia area of Bhuiyanpur upazila, District Tangail. (Package No. Works-	Original- 6.84 Revised- 6.16	Original- 6.16 Revised- 6.09	27-06- 2018	28-08- 2018	28-06- 2019	31-12- 2019
Shakharia - 11/2018-19)  (k) Bank Protective work along the left bank of Jamuna River from km 1.900 to km 2.120 = 220 m at Shakharia area of Bhuiyanpur upazila, District Tangail. (Package No. Works-Shakharia - 12/2018-19)	Original- 7.13 Revised- 6.42	Original- 6.42 Revised- 6.28	25-06- 2018	28-08- 2018	30-06- 2019	30-06- 2019
(I) River Bank Protective work at the left bank of Jamuna river at Shakharia from km. 2.120 to km. 2.550 = 430.00 m. in c/w Protection Project of left bank of Jamuna river from Kaolibari to Shakharia Bhorua-Bottala in Gopalpur & Bhuapur Upazila of Tangail District under Tangail O&M Division BWDB Tangail during the year 2018-19. (Package No. Works-Shakharia - 13/2018-19)	Original- 15.30 Revised- 13.77	Original- 13.77 Revised- 13.21	25-06- 2018	28-08- 2018	28-06- 2019	28-06- 2019
(m) Jamuna River Dredging Work from Km. 0.000 to Km. 0.800= 0.800 Km. at Kaolibari area in c/w River Bank Protection Project along the Left Bank of Jamuna River from Kaolibari Bridge to Shakharia (Varua-Bottola) (1st	Original- 25.34 Revised- 31.43	29.85	03-12- 2019	12-08- 2020	30-06- 2021	30-06- 2021
Revised) in Gopalpur upazila during the year 2019-20.Bank (Package No.Work-Kaolibari-10/2018-19/Lot-1)						
(n) Jamuna River Dredging Work from Km. 0.800 to Km. 1.550 = 0.750 Km. at Kaolibari area in c/w River Bank Protection Project along the Left Bank of Jamuna River from Kaolibari Bridge to Shakharia (Varua-Bottola) (1st Revised) in Gopalpur upazila during the year 2019-20. (Package No. Work-Kaolibari-10/2018-19/Lot-2)	Original- 25.34 Revised- 28.85	25.98	03-12- 2019	19-08- 2020	30-06- 2021	30-06- 2021
(0) Jamuna River Dredging Work from Km. 1.550 to Km. 2.500 = 0.950 Km. at Kaolibari area in c/w River Bank Protection Project along the Left Bank of Jamuna River from Kaolibari Bridge to Shakharia (Varua-Bottola) (1st Revised) in Gopalpur upazila during the year 2019-20. (Package No. Work-Kaolibari-14/2018-19/Lot-1)	Original- 25.34 Revised- 30.82	29.28	03-12- 2019	11-06- 2020	30-06- 2021	30-06- 2021
(p) Jamuna River Dredging Work from Km. 2.500 to Km. 3.400 = 0.900 Km. at Kaolibari area in c/w River Bank Protection Project along the Left Bank of Jamuna River from Kaolibari Bridge to Shakharia (Varua-Bottola) (1st Revised) in Gopalpur upazila during the year	Original- 25.34 Revised- 25.18	22.66	19-05- 2020	11-10- 2020	30-06- 2021	30-06-2021
2019-20. (Package No. Work-Kaolibari- 14/2018-19/Lot-2)						

# 8.2 Use of Project Consultant (s) (Foreign/Local): No provision of deploying consutant in this project

Name of the Field	Approve	ed man month	Actual man month utilised	Remarks	
	As per PP	As per contract			
<b>'</b>	2	3	4	5	
(a) Foreign:	N/A	N/A	N/A	-	
(b) Local:	N/A	N/A	N/A	-	



09. Construction/Erection/InstallationTools & Equipment:

Description of items	Quantity (as per DPP)	Quantity procured with date	Transferred to O & M with date	Disposed off as per rule with date	Balance	Remarks
N/A	2	3	A	5)	6	7
	N/A	N/A	N/A	N/A	N/A	N/A

# C. FINANCIAL AND PHYSICAL PROGRAMME:

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

(In lakh Taka)

Financial Year	Financial	l provision per origi		cal target as	Financial provision & physical target as per latest revised DPP			
	Total	Taka	P.A.	Physical %	Total	Taka	P.A.	Physical %
1	2	3	4	5	6	7	- 8	9
2016-17	3270.26	3270.26	0.00	16.30%	0.00	0.00	0.00	0.00%
2017-18	8059.79	8059.79	0.00	40.19%	3.00	3.00	0.00	0.14%
2018-19	8726.81	8726.81	0.00	43.51%	10065.00	10065.00	0.00	46.74%
2019-20	-	_	-	_	11466.53	11466.53	0.00	53.12%
2020-21	-	_	_	-	-	-	-	-
Total =	20056.86	20056.86	0.00	100.00%	21534.53	21534.53		100.00%

## 01. (b) Revised ADP allocation and progress:

(In lakh Taka)

Financial	Rev	ised Allocati	on & ta	rget	Taka	Expe	nditure & ph	ysical pr	ogress
Year	Total	Taka	P.A.	Physical %	release	Total	Taka	P.A.	Physical %
1	2	3	4	5	6	7	8	9	10
2016-17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2017-18	5.00	5,00	0.00	0.00%	3.00	2.00	2.00	0.00	0.00
2018-19	5500.00	5500.00	0.00	38.17%	5500.00	5418.61	5418.61	0.00	38.17%
2019-20	4000.00	4000.00	0.00	18.57%	4000.00	3692.49	3692.49	0.00	18.57%
2020-21	9408.00	9408.00	0.00	43.26%	9408.00	6974.88	6974.88	0.00	38.50%
Total =	18503.00	18508.00	0.00	100.00%	18506.00	16087.98	16087.98	0.00	95.24%

## D. ACHIEVEMENT OF OBJECTIVES OF THE PROJECT:

	Objectives as per DPP	Actual achievement	Reasons for shortfall, if any
a)	To arrest river bank erosion and flood protection	There was a provision of 3.00 Km Long	N/A
	coverage by construction of River Bank	River bank Protective Work to	
	Protection works for a length of 2.550 km (from	implement along the left Bank of	
	km 0.000 to km 2.550 at Kaolibari bridge to	Jamuna River. Up to 30 June, 2021, 3.00	
	Shakharia (Bharua-Bot Tala) and dredging of	Km. long Protective Work had been	
	Jamuna river from 0.000 km to 3.000 km in	imlemented alongh the left bank of	
}	between Kaolibari & Shakharia covering area of	Jamuna River at Kaolibari to Shakharia	
	15000 ha. lands of Gopalpur & Bhuapur Upazila	(Varua Bot tola). Therefore, the	
	of Tangail district.	achievement of Project goal under the	
		provision of Protective Work had been	
		achieved in 100%.	



	Objectives as per DPP	Actual achievement	Reasons for shortfall, if any
b)	Safeguard the BWDB's Existing River Bank	By implementing the Protective works at	N/A
	Protection Works at Nalin Bazar area	a length of 3.00 Km. the local people's	
	downstream of Kaolibari bridge to Shakharia	immovable properties as well as public	
	(Bharua-Bot Tala) area;	properties had been safe against Jamuna	
		River erosion.	
c)	Safeguard security of Tarakandi-Bhuapur Road	Tarakandi - Bhuapur road- cum -	N/A
	cum Embankment from erosion & flooding of	embankment had been safeguard and	
	the Jamuna River; and	secured by implementing the protective	
		work along the left bank of Jamuna	
		river.	
(d)	It is anticipated that huge immovable properties	After implementing the protective work	N/A
	situated in and around the eroding bank of the	of a length of 3.00 Km along the left	
	river with approximate total worth of Tk.	bank of Jamuna river, the immovable	
	74686.00 lakh which are supposed to be	properties situated in and around the	
	adversely affected will be saved by the proper	Jamuna river bank with approximate	
	implementation of the project throughout	total worth BDT. 74686.00 lakh had	
	construction of 3.0 km protective works under	been secured and safeguard against	
	the project (Appendix-A)	River erosion of that area.	

## 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).
$m{I}$	2	3	4
Bhuiyanpur-Tarakandi road-cum-flood control embankment	Km.	3.00	3.00
Safeguard to river bank erosion	Ha	1500	1500
Cultivable Land of the Local People	ha	750	750
Crops of Cultivable Land of the Local People	ha	750	750
Residential Land of the Local People	ha	180	180
Kacha/ Pucca House	Nos.	2300	2300
Kacha/Semi Pucca/ Pucca Shops	Nos.	582	582
Metalled Road	Km.	7.00	7.00
Market	Nos.	3	3
Post Office	Nos.		1
Schools/ Colleges/ Mosques/ Madrasha/ Upazila Complex/ NGO Office, Upazila Health Complex/ UP Office/ Hat Bazar, etc.	Nos.	35.00	35.00



#### 02. Cost / Benefit:

Item	Estimated	Actual		
1	2	3		
(1) Benefit cost ratio of the project	(1) B/C Ratio	It will be evaluated later		
(i) Financial	(i) 1.17: 1	by concern directorate of BWDB and IMED		
(ii) Economic	(ii) 1.36: 1	BWBB and IWBB		
(2) Internal Rate of Return	(2) Internal Rate of Return			
(i) Financial	(i) 15.18%			
(ii) Economic	(ii) 18.53%			

03. Please give reasons for shortfall, if any, between the estimated and actual benefit: N/A

#### F. MONITORING AND AUDITING

## 0.1 Monitoring:

Name & designation of the inspecting official	Date of Inspection	Identified Problems	Recommendations
	2	3	4
(a) Ministry / Agency: Kabir Bin Anwar Senior Secretary	08/04/2021	Not found	Necessary action should be taken to complete the Dredging within the stipulated time.
A.M.Aminul Hoque Director General, BWDB.	29/08/2020	Not found	
Mahmudul Islam Additional Secretary (Dev.), MoWR.	30/11/2019	Not found	
Md. Azadur Rahman Mallik Joint Secretary (admin) Ministry of Water Resources	28-08-2020	Not found	Necessary action should be taken to complete the Project within the stipulated time.
Akhil Kumar Biswas Chief Engineer, Central Zone, BWDB.	30/11/2019	Not found	
Mantu Kumar Biswas Joint Chief, MoWR.	30/11/2019	Not found	
Md. Abdul Matin Sarkar Chief Engineer, Central Zone, BWDB.	Several times	Not found	
Md. Shahjahan Siraj Superintending Engineer, Mymensingh O&M Circle, BWDB, Mymensingh.	Several times	Not found	



Name & designation of the inspecting official	Date of Inspection	Identified Problems	Recommendations
Md. Sirajul Islam Executive Engineer Tangail O & M Division BWDB, Tangail	Several times	3 Not found	4
(b) IMED: 1. Md. Afzal Hossen Director, IMED	18.02.2019	N/A	i) Manufactured c. c. block should be dumped or placed by proper co-ordination with BWDB taskforce.  ii) Contractors of 4 packages of dredging work should be apointed within February, 2019 and dredging work should be start within Feb-March, 2019.  iii) Manufactured c.c. block /Geo-bag should be dumped or placed within short time by co-ordinating with the takskforce efficiently in order to implement the project within the scheduled time.
	an man s		<ul> <li>iv) Hydrological and Morphological Survey should be executed immediately.</li> <li>v) Monitoring of BWDB and MoWR should be strong in order to implement within the project period.</li> <li>vi) All physical works should be completed as per</li> </ul>
2. Khandakar Md. Ali Director, IMED	08.02.2020	N/A	approved design and Specification.  i) The physical and financial progress of the project is not satisfactory at all. Necessary initiative should be taken to achieve the physical progress as per target fixed.
			ii) The project period will ends on June/2020. That means only four month time is remaining. So during this four month how will the remaining 70% physical work will completed, a work plan regarding this have to sent to IMED immediately.
			<ul><li>iii) In case of c. c. block manufacturing, stone chips should wash properly and specified size of stone chips should be used.</li><li>iv) In case of c.c. block placing, the khoa filter used</li></ul>
			above geo-textile filter, should be of good quality.  v) The dredging works to be implemented under the project should implement if it will effective. In that case, a technical committee should form in order to verify either it will effective or not.
			vi) MoWR and BWDB should strong their monitoring.
			vii) All the physical works of the project should execute as per approved design & specification.
			viii) Meeting of PSC and PIC committee should held on time and the decisions should implement timely.
			ix) External & internal Audit should complete timely.



Name & designation of the inspecting official	Date of Inspection	Identified Problems	Recommendations
(c) Others: (Please specify)  1. Md. Ataul Gani Deputy Commissioner, Tangail	2 08-04-2021	N/A	4

#### 0.2. Auditing during and after Implementation:

#### 2.1. Internal Audit: Not Conducted

Period of Audit	Date of submission of	Major findings/	Whether objections resolved		
	Audit Report	objections	or not.		
1	2	3	4		
N/A	N/A	N/A	N/A		

#### 2.2. External Audit:

Audit period	Date of submission of Audit Report	Major findings/ objections	Whether objections resolved or not.		
1	2	$oldsymbol{j}_{a_{i}}$	4		
2017-18	N/A	N/A	N/A		
2018-19	01-12-2019 to 30-03-2020	A total financial loss of BDT 6,28,906.00 had been made by pass & certifying the payment against labour charges for laying C. C. blocks for protective works and dumping C. C. blocks beyond 200 meter.	A broad-sheet reply along with the annexure (proof) in order to established the reply for the objection, made by the payment authority had been submitted to the competent authority of Civil Audit Directorate of Bangladesh.		
2019-20	N/A	N/A	N/A		
2020-21	Yet to be conducted	N/A	N/A		

#### G. DESCRIPTIVE REPORT

#### 1. General Observations/Remarks of the Project on:

#### 1.1 Back ground:

Bangladesh is a riverine country and bank line erosion of different rivers has been a recurrent effect. The present project is located at the downstream of Pingna Bazar about 15 km west of Gopalpur Upazila of Tangail district. The area is dispersed in the left bank of the Jamuna River. The Brahmaputra-Jamuna River is the largest river system in Bangladesh accounting for more than 50% of the total inflow into the country from cross border. The river is braided in nature without any fixed banks as well as frequently shifting channels. Thus process of bank erosion has been a complex and devastating consequent with deleterious social and natural impacts viz. loss of lives and properties due to river erosion and/or dynamic changes of the river morphology.

Devastating bank erosion occurred since June'2001 at Kaolibari Bridge to Shakharia (Bharua-Bat Tala) of Gopalpur & Bhuapur Upazila of Tangail District. Considering the intensity/velocity of river erosion rate at these affected places, it seems that the said affected segment of Bhuapur-Tarakandi embankment cum road are supposed to be washed out into the river unless emergency permanent revetment work to be constructed within next financial year. The~existing Bhuapur-Tarakandi



embankment cum road is the sole way of road communication network from entire Tangail district and Jamuna Fertilizer Industry towards northern & southern part of Bangladesh. In the situation, entire road communication of the region will be disrupted by the continuous threat of riverbank erosion at the affected place. Besides, vast important local area under Gopalpur, Bhuapur, Modhupur, Ghatail & Kalihati Upazila in the district of Tangail will be affected by the severity of seasonal floods. On the other hand, vast arable lands will be adversely affected for reduction of soil fertility by land deposition due to intrusion of flood water with sands.

During the flood 2007, severe river bank erosion occurred at the Nalin bazar and its adjacent areas. River bank eroded at an average of 738m bank revetment work has been done under Emergency Disaster Damage Rehabilitation Project/2007. Again severe erosion occurred during the flood of 2009 upstream of the completed work. The site was visited by the Director General, BWDB, Dhaka. 735 m bank revetment work has been done under GoB funding. If the proposed work could not be done there is every possibility of engulfing the entire area by the erosion of mighty Jamuna River. Bangladesh is a riverine country and bank line erosion of different rivers has been a recurrent effect.

#### 1.2 Justification/Adequacy

Bangladesh is a densely populated with poor natural resources base, lack of industrialization and vulnerability to natural disasters; like flooding, river bank erosion, saline inundation and cyclones etc. made Bangladesh as one of the undeveloped countries in the world. 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 1085 per square kilometer) and landless population is about 20-30% who are now living as squatters in flood embankment and other Govt. areas. Socioeconomic 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. The proposed Project is placed in environmental screening category B since its bank protective works by construction of improved bank revetment work; do not create irreversible and diverse adverse physical and social impacts. Identifiable adverse impacts would be confined to the implementation period, and shall occur primarily in one or two construction seasons each lasting several months. As such, the proposed interventions by providing river bank protective work and development of embankment have very little impacts or no negative impacts in and around the area. The proposed project would prevent the erosion loss of about I 000 ha of riparian land including about I 00 hac, of urban and semi-urban built-up area in the vicinity of Kaolibari to Shakharia (Bharua-Bot tala) areas of Gopalpur & Bhuapur Upazilla of Tangail Distict and protect a population of about 125000 people from loss of land, livelihood, property, displacement and impoverishment. It would also prevent severe flood damage to crops, property and infrastructure as a result of embankment breached induced increased flooding from the Jamuna River.

#### 1.3 Objectives

Main objectives of the project are:

• To arrest river bank erosion and flood protection coverage by construction of River Bank Protection works for a length of 3.00 km (from km 0.000 to km 3.00 at Kaolibari bridge to Shakharia (Bharua-Bot Tata) and dredging of Jamuna river from 0.00 km to 3.40 km in between Kaolibari & Shakharia covering area of 15000 ha lands of Gopalpur & Bhuapur Upazila of Tangail district.

- Safeguard the BWDB's River Bank Protection Works at Kaolibari bridge to Shakharia (Bharua-Bot Tata) area implemented with view to enforcing security of the Tarakandi-Bhuapur Road cum Embankment;
- Safeguard security of Jamuna Fertilizer Factory & Ghatail Cantonment from threat of flooding of the Jamuna River; and
- Immovable properties situated in and around the eroding river bank of the project area (with approximate total worth of Tk. 74686.00 lakh) will be saved from the Jamuna river erosion.

#### 1.4 Project revision with reasons

#### a. Changes in Jamuna River Morphology in Project Area:

The DPP of the project had been prepared on the basis of approved design and drawings which were also prepared and approved on the basis of design data & information collected by the concern field officials during the year 2014-15. The Government order (GO) of approving the DPP of the project had been issued on 24 Agust, 2017 maintaining the implementation period March 2017 to 30 June 2019. There are about 2 to 3 years elapsed from the formulation of the DPP to the approval of the Project. During this period of time, the river morphology of the Jamuna River had been changed with a considearable remaks. Therefore after the deployed contractor's mobilization, it had been observed that huge amount of silt or sand deposition occurred within the area of the Launching apron of the Protective Work. Therefore, depth of water had also been decreased in the launching apron of the protective work. This caused an inconvenience regarding the dumping procedure according to the DPP provision of the project. This phenomenon comes in front including an obligation to prepare the variation proposal of the on-going contracts. The variation proposal consist of "Geo-bag dumping from engine boat positioned by a total station" instead of "Geo-bag dumping from Berge positioned by a total station" due to the decreased of flow depth in the zone of Geo-bag dumping in the Launching apron. Due to this unavoidable situation, the DPP had required revision.

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

Implementation of 3.00 Km. Protective Work & 3.40 Km Dredging will save the lives and valuable properties under the project area along with the important Tarakandi-Bhuiyanpur Road cum Embankment at Gopalpur & Bhuiyanpur upazila of Tangail District.

The nature and objective of the project have direct relevance of the national objectives of attaining self-reliance in food grain production, generation of rural development, poverty alleviation especially for rural poorer section, creation social & environmental balance and building economic infrastructures for the future generations to sustain.

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

#### Project Identification

The project was identified by the Bangladesh Water Development Board to save the infrastructures, residential land, cultivable land, and other valuable assets of Kaolibari to Shakharia (Vaua-Bot tola) area of Gopalpur & Bhuiyanpur Upazila in Tangail District. Local MP requested to Water Resources Ministry to take up a protective work project along the vulnerable length of the Jamuna River Bank. Accordingly, as per the instructions of Water Resources Ministry, Bangladesh Water Development Board taken up the mentioned project in cooperation by field office Tangail O & M Division, BWDB, Tangail.

#### ♦ Project Preparation

According to the meeting minutes circulated vide MoWR, Planning Section-4, Dhaka's memo no. 42.00.0000.042.14.009.13-279, dated 18/11/2013, decision was taken to formulate a project comprising most important area of Pingna Bazar considering the proposed project as Hon'ble Prime Minister's Commitment Project to protect Cantonment and Fertilizer factory in an urgent basis.

For project formulation, BWDB authority constituted a Technical Committee by order of its secretariat vide memo no. 124-BWDB/Sectt/ER/Section-1/Loose-2013, dated 21/11/2013to devise the best option of river bank protection work at Pingna Bazar area only. The said committee submitted the report preparing design and estimate. Later on, decision has been taken to incorporate dredging component in river bank protection project considering satellite images and Arial view of submerged char's along with hydrological and morphological status of the river in ECNEC meeting held on 04 August 2015. Decision was again taken in ECNEC meeting held on 10/05/2016 to incorporate capital dredging component which costs 50% - 60% of the project cost in every protection and embankment related project.

Accordingly, present project has been formulated to construct 3.00 Km River bank protection work along the left bank of the Jamuna River and 3.40 Km Dredging work in Jamuna River to increase the conveyance capacity of River. Implementing this project helps to protect Kaolibari to Shakharia (Varua-Bot tola) its adjacent area of Gopalpur and Bhuiyanpur upazila of Tangail District.

#### ◆ Appraisal

The appraisal meeting was held on 11/01/2017 at Planning Commission. As per decision of appraisal meeting the DPP was corrected and sent to the Ministry of Planning for approval of the above project.

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

The Project was approved by ECNEC on 24 August 2017 and 1st Revised DPP was approved by Honorable State Minister, Ministry of Water Resources on 24/06/2019.

- 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, the beneficiaries have clear knowledge about the project's target and objectives.

4.2 Programme for use of created-facilities of the project



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. Therefore, there are no direct facilities that are created by the implementation of the project, which can be distributed or to explain to the beneficiaries by setting a programme.

## 4.3 O & M programme of the project.

After complementation of the project major repair/rehabilitation works will be accomplished from regular O&M budget of BWDB.

## 4.4 Impact of the project -

#### **4.4.1 Direct**

- Safeguard to arrest river bank erosion and flood protection coverage by construction of River Bank Protection works for a length of 3.00 km (from km 0.000 to km 3.00 at Kaolibari bridge to Shakharia (Bharua-Bot Tata) and dredging of Jamuna river from 0.00 km to 3.40 km in between Kaolibari & Shakharia covering area of 15000 ha lands of Gopalpur & Bhuapur Upazila of Tangail district.
- Safeguard the BWDB's River Bank Protection Works at Kaolibari bridge to Shakharia (Bharua-Bot Tata) area implemented with view to enforcing security of the Tarakandi-Bhuapur Road cum Embankment;
- Safeguard security of Jamuna Fertilizer Factory & Ghatail Cantonment from threat of flooding of the Jamuna River; and
- Huge immovable properties situated in and around the eroding bank of the river with approximate total worth of Tk. 74686.00 lakh which are supposed to be adversely affected will be saved by the implementation of the protective work under the project.

#### 4.4.2 Indirect

- Environmental up gradation.
- Safety of human livelihood and properties.
- Improvement of socio-economic condition.

# 4.5 Transfer of Technology and Institutional Building through the project Not Applicable.

# 4.6 Employment generation through the project.

Some employment opportunity already have generated indirectly but not directly in the project area. Indirect way of employment generation may happen during the confirmation of the scocial security of the beneficiaries against Jamuna rievr erosion. Many small investors already start their business as the area is safe and secured from Jamuna river erosion. Also Jamuna river dredging makes a sustainable and continous river flow through the dredged Channel which will provide all the year round navigability for water transport facilities through river rute. This may generate some employment.

## 4.7 Possibility of Self employment

In the project area local residents already had involve in poultry business and other business appropriate for the specific area as they felt safe and secured environment against Jamuna river erosion. Therefore, so many opportunities are in front of them to make them self employed.

## 4.8 Possibility of women-employment opportunity

In the project area normaly women-employment opportunity is greater than the other area of Bangladesh. The women are engaged in shop keeping of grocery, poultry, vegetable firming etc. Now-a-days they make initiative to extend their business because they didn't feel any tension regarding their household may damaged by Jamuna river erosion.

## 4.9 Women's participation in development

Women's participation in development has been increased normally in the project area. Because, most of the local peoples are living under the poverty line. Therefore in the locality no one can employ the poor people in the hous-hold works also. So the women can participate in the development works to earn money for living. Also so many development projects of various departments are running in the area, which make scarcity of labour to engage in the work. Therefore, womwn participation in the area is greater than the other area of Bangladesh.

## 4.10 Probable Impact on Socio-Economic activity.

After implementation of the project it is observed that Socio-economic impact of riverbank protection work has created various glorious socioeconomic effects. Mainly after implementation of the river bank protection work, the loss of agricultural land, loss of home-stead land, loss of agricultural production by river erosion in the project area had been removed permanently. Therefore the monetary involvement to reduce these losses also not required for the people living in the project area. Thus the impact is positive which makes the people to upgrading their living standard.

#### 4.11 Impact on environment

There is nothing adverse on the environment due to implementation of the project. Rather, river bank erosion stopped permanently in the project area which also makes the environment healthy and clean. Because river bank erosion is a disaster. Any disaster makes the environment unhealthy.

#### 4.12 Sustainability of the project

The project works have been implemented according to the provision of approved design and specification. Therefore, regarding sustainability of the project there is no doubt.

## 4.13 Contribution to poverty alleviation/reduction

The loss of agricultural land, loss of home-stead land, loss of agricultural production by river erosion in the project area had been removed permanently. No loss of agricultural land, no loss in agricultural production. Therefore, the project implementation reduces the poverty of the project area.

# 4.14 Opinion of the public representatives, local elite, local administration, teachers, religious leaders, women's representatives etc.

The Project has been completed successfully. River erosion has been stoped permanently. Also, Jamuna river dredging works make one active river channel



diverted from the country side towrds river side. The dredged channel is now one of the most flowing channels in the project area. This dredging work reduces the threat of river erosion. Therefore, public representatives, local elite, local administration, teachers, religious leaders, women's representatives etc. are very happy and claim to implement the similar project to stop the river erosion in the divastating erosion prone area of the Tangail District.

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

Since the project area become a safe and secured area regarding the vurnarable Jamuna river erosion disaster, Micro Cerdit programmes are smoothly going on in the project area. There is no threat of damages the home-stead of client, no loss of agricultural land and therefore no loss of agricultural production, micro-credit programme's contribution in the project area increasing their activities in the area.

# 5. Problems encountered during Implementation (with duration & steps taken to remove those)

#### 5.1 Project Management

Only during the first year of the project implementation period, there was a delay regarding method of implementation of the project work. After that there was no problem occured regarding project management of the project.

### 5.2 Project Director

During the implementation of the project three project directors was working one after another in the project. Among the three, one official works for only three months. Therefore, no problems had encountered regarding project Director.

#### 5.3 Land Acquisition

There is no provision of Land acquisition in the project RDPP.

#### **5.4 Procurement**

There was no promblem encountered regarding procurement of the Protective works component of the Project. But for the procurement of dredging works, it needs three/four times re-tendaring for the selection of the competant contractors. Because, the Contractor's didn't have any idea of dredging works in Jamuna River as it is a multi Channel River. After providing some verbal clarifications to the contractors they attend in the procurement process and finally engage themself in the dredging works.

#### 5.5 Consultancy

There is no provision of Consultancy in the project DPP.

#### 5.6 Contractor

There was no promblem encountered regarding contractors engages for the implementation of the Project's works.

#### 5.7 Manpower

There is a shortage in manpower to monitor the contractor's work. But this shortage didn't make any problem in implementation of the project.

#### 5.8 law & Order

During the project implementation period there was no issues occured to deteriorate the law & ordern situation of the project area. Only during the starting of the dredging of Jamuna River, a few numbers of local people went to the work site and asked the contractors reprentative either their

home-stead and agricultural land will be affected due to the implementation of the dredging work or not. After few conversations with the concerned people, they convinced and returned back from the work side.

#### 5.9 Natural calamity

Natural Calamity such as flood, rain & excess hot weather and thunder strom had stopped project work for few days during the implementation period. Specially, in rainy season it was happened with a high intensity. Actually, project work had been carried on during the winter season as this is the perfect time to execute any development work in Bangladesh. But in case of work related to river like Jamuna River, there were some extra time which was elapsed due to the high stages of water in the river. River bank protection work hase to implement from the lowest water level of the river. Therefore during flood period the woks had to stop and the work had to start when the water level goes at or near the lowest water level.

#### 5.10 Project financing, allocation and release

No problem occurred.

#### 5.11 Design formulation/approval

Formulation and approval of design for the implementation of civil works didn't make any problems to implementation of the project.

#### 5.12 Project aid disbursement and re-imbursment

The project had been implented by the financing of GoB. There was no aid to the project financing.

#### 5.13 Mission of the development partners

Since the project had been implemented by GoB financing only, therefore no development partner was invoved in project implementation.

#### 5.14 Time & Cost Over-run

Since first year of the project implementation period had been passed by taking decision either the project will implement by BWDB or by delegated method of implementation will take place by other competant agency or othority, therefore one year time extension was required. Also, world corona pandiamic made one year useless for work execution. These reasons made the project time over run at about 85%. But there was no cost over run occurred for the project implemntation.

### 5.15 Project Supervision/Inspection

Did n't arise.

#### 5.16 Delays in Decision

Did n't arise.

#### 5.17 Transport

Not applicable

#### 5.18 Training

Not Applicable

#### 5.19 Approval

Did n't arise.

#### 5.20 Others.

None

John John

#### 6. Remarks & Recommendations of the Project Director:

This Project is a honorable Prime Minister Committed project. During her visit to Bhuiyanpur, Tangail during 30/06/2012, she made commitment for this project in a public meeting. After that a CCTF project proposal was formulated on the committed development works. But that didn't come to fruitation due to fund crisis. After that ministry of Water Resources and BWDB took initiatives to formulate a project in GoB financing. This project is the output of that initiative.

The project has been completed with full satisfaction. This is mainly a river bank protection project. A total of 3.00 km Bank protective works have been implemented as per the approved design and specification. Another component of the project is 400m bank protective works repair. The physical works of this component also execute properly as per approved design and specification. But the dredging component of the project needed more afford to implement. In Jamuna River, in the locality, this dredging works under this project is first time initiative to implement. Therefore, the dredging works was stopped by the local people living in the chars of Jamuna River. They argued with the authority that the dredging work may harm their crops field and residence in permanent Char. But the project implementing authority tried to convince the people several times to start the dredging works in time. Finally they filed a writ petition to stop the dredging work in the honorable high court division. BWDB also filed a leave to appeal against that writ petition. Finally, the petitioner dropped their writ petition and also put-off their restriction against the dredging work. Due this unavoidable circumstance, the dredging works progress did not achieved in full margin. But this has not made the project compromise to achieve it's goals. This Project has ensured the saveguard to river bank erosion in the project area. Regular repair and maintenance works will ensure longer sustainability of this project.

Reccommendation: In order to finds the necessity of repair and maintenance of the protective works, concerned responsibles field officials should visit and monilor the project area regularly.

Date: 14.08.2021

Signature and seal of the Project Director

#### 6. Remarks/Comments of Agency Head

The project has been taken up based on a commitment made by the Honotrable Prime minster during her visit to Bhuanpur Tangeil in 2012. This project has ensured sofeguard from reiver enosion to existing Bhuapur-Tarrakandi road cum flood control embankment, vast lands, and immovable public and provate establishments in Gropalpure and Bhuapure Upozila of Tangeil. About 15000 Ha area is now sofe from tiverbank erosion where various immovable properties worth 74686 lakh taka aree suited.

<b>5</b>						
Date:	 	 • • • • •	 ••••	• • • •	• • • •	٠.

Signature and Seal

BWDB, Dhaka.

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

Signature and Seal

Date: