

PROJECT COMPLETION REPORT : IMED 04/2003 (Revised)

Name of the Project: River Bank Protection & Development and Town
Protection Project(Phase-IV)

Administrative Ministry/Division: Ministry of Water Resources.

Executing Agency: Bangladesh Water Development Board.

# 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 & Development and

Town Protection Project (Phase-IV)

02. Administrative Ministry/Division

: Ministry of Water Resources.

03. Executing Agency

: Bangladesh Water Development Board.

04. Location of the Project:

: Different locations in Bangladesh as shown in the table below:

Division	District	Upazila				
1	2	3				
Chittagong	Chittagong	Patiya, Rangunia, Hathajari, Raujan, Chandanaish, Satkania, Lohagar				
	Rangamati	Naniarchar, Kowkhali				
	Cox's Bazar	Cox's Bazar Sadar, Moheskhali, Pekua, Ramu,				
	Noakhali	Companyganj				
	Khagrachari	Panchari, Dighinala				
	Feni	Feni Sadar				
	Chandpur	Chandpur Sadar				
	Comilla	Debidar, Muradnagar, Titas				
Sylhet	Sylhet	Fenchuganj, Balaganj, Kanaighat				
	Moulvi Bazar	Kamalganj, Kulaura				
	Sunamganj	Jamalganj, Sunamganj Sadar.				
Dhaka	Manikganj	Ghior				
	Tangail,	Kalihati				
	Mymensing	Gafargaon				
	Jamalpur	Jamalpur sadar				
	Faridpur	Modhukhali, Faridpur sadar				
	Rajbari	Baliakandi				
	Madaripur	Rajoir, Madaripur sadar				
Khulna	Magura	Muhammadpur, Sripur				
	Satkhira	Ashashuni				
	Khulna	Kayera				
Barisal	Patuakhali	Kalapara, Baufall, Dumki				
	Barisal	Agoiljhara, Bakerganj, Barisal sadar.				
	Pirojpur	Pirojpur sadar, Sarupkhati, Mathbaria				
	Bhola	Borhan uddin,				
	Jhalakathi	Nalsity				
	Barguna	Pathar-ghata				
Rajshahi	Natore,	Gurudaspur, Singra				
	Chapainawabganj	Chapai nawabganj sadar				
	Bogra	Gabtoli,				
	Pabna	Bhangura, Chatmohar				
	Lalmonirhat	Hatibanda, Kaliganj, Patgram				
	Nilphamari	Dimla , Jahldhaka, Kishorgonj, Domar.				
	Kurigram	Rajarhat, Ulipur				
	Gaibanda	Sudarganj				
	Rangpur	Gangachara				

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## 05. Objective of the Project

The objectives of the Project are:

- To protect the important town, ports, valuable govt. and non-government installations, religious and historical places, households etc. from the erosion of about 230 large and small rivers run throughout alluvial flood plains of Bangladesh.
- To protect the eroded bank of cross-boundary rivers in order to avoid island/char formation along the Indian Territory.
- To protect the land from river erosion of 10,000 hectare/year which caused the millions of people landless every year.
- To protect the overall social and physical environment from pollution and natural hazard.

#### 06. Estimated Cost

(In lakh Taka)

	(
Original	Latest Revised
15450.00	19133.81
15450.00	19133.81
-	-
-	-
-	-
	15450.00

:

07. Date of Approval : PCP PP

(a) Original

30.06.2008

(b) Latest Revised

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08.05.2011

#### 08. Implementation Period

:

4	Date of Commencement	Date of Completion
(a) Original	July'2008	June'2011
(b) Latest Revised	July'2008	June'2015
(c) Actual	July'2008	June'2015

09. Financing Arrangement (Source-wise) : GOB

9.1 Status of Loan/Grant: Dose not arise

#### a) Foreign Financing:

Source (s)	Currency as per Agreement		(Loa	ature n/Grant/ plier's/	Date of Agreement	2000	Date of Closing	
			CI	redit)			Original	Revised
1	2	3		4	5	6	7	8
				N/A				

## b) GOB:

(In lakh Taka)

Total amount	Loan	Grant	Cash Foreign Exchange
1	2	3	4
19133.81	-	19133.81	-

# 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	
			N/A				

# 9.3 Re-imbursible Project Aid (RPA):

(In lakh Taka)

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

# B. IMPLEMENTATION POSITION

# 01. Implementation Period :

Imple	mentation Period as per PP	Actual Implementation	Time Over-run (% of original	Remarks
Original	Latest Revised	Period	implementation period)	
1	2	3	4	5
July'2008- June'2011	As per approved Latest (2 <sup>nd</sup> revised) RDPP: July'2008-June'2012	July'2008- June'2015	133.33%	
	As per Latest approved Time Extention: July'2008-June'2015			

# 02. Cost of the Project :

(In lakh Taka)

Description	Estimated Cost		Actual expenditure	Cost over-run (% of original cost)	Remarks	
	Original	Latest revised	expenditure	(70 of original cost)		
1	2	3	4	5	6	
TOTAL	15450.00	19133.81	16733.7136	8.30%		
TAKA	15450.00	19133.81	16733.7136	8.30%		
PA	-	-	-	-	-	

# 03. Project Personnel:

Sanctioned	Manpower	Statı	is of the e	existing manpow	Manpower			
strength as per PP	employed during execution	Manpo requireme O&M as	nt for	Existing manpower for O & M	Others	Em	ployed	
1	2	3		4	5	Male	Female	
Officer (s)	Existing ma	npower of	the imp	olementing age	ency were	deploye	ed during	
Staff(s)	execution of	the project.						
Total:								

# 04. Training of Project Personnel (Foreign/Local): Not scheduled with this project

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			
Foreign			Not scheduled with					
Local			Not scheduled with this project					

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

(In lakh Taka)

SI no	Items of work		Target (as per PP)		Actual P	Reasons for deviation (±)	
	(as per PP)	Unit	Financial	Physical (Quantity)	Financial	Physical (Quantity)	
1	2	3	4	5	6	7	8
1	Petrol & Lubricant	1 item	10.00	1 item	5.5325	1 item	
2	Project Evaluation of Phase-I, II & III	1 item	10.00	1 item	9.9780	1 item	
3	Survey & Investigation	1 item	7.35	1 item	5.4597	1 item	
4	Repair of transport & vehicle	1 item	8.00	1 item	6.8775	1 item	
5	Other repairs & rehabilitation	1 item	3.50	1 item	3.4967	1 item	
6	Fax Machine	1 no.	0.30	1 No.	0.3000	1No.	
7	Photocopier	1 no.	1.40	1 No.	1.3800	1No.	
8	Computer including 1 Laptop with Laser Printer & Scanner(2nos.)	4 set 2 nos.	5.00	4 set 2 nos.	4.9998	4 set 2 nos.	
9	Bank Protection Work	31855m	19073.66	31855m (100%)	16681.0894	30265 m (95.01%)	The reason of shortfall described in Annexure-A
10	Irrigation Structure(Sluice/Inlet)	2nos.	14.60	2 Nos.	14.6000	2nos.	
	Total		19133.81	100%	16733.7136	95.73%	

# 06. Information regarding Project Director (s):

		Full time	Part time	Responsi ble	Da	te of	Remar ks
	Name & Designation with pay Scale.			for more than one project	Joining	Transfer	
	1	2	3	4	5	6	7
1.	S.M.Azizul Hoque, PD. 15,000-600-19,800/-	Full time	-	No	18.12.2007	09.09.2008	
2.	Md.Ismail Hossain, PD 25,750-1000-33,750/-	Full time	-	No	09.09.2008	25.07.2011	
3.	Md.Abdur Rahman Akhanda, PD 25,750-1000-33,750/-	Full time	-	No	25.07.2011	29.08.2011	
4.	Golam Sadeque, PD 25,750-1000-33,750/-	Full time	-	No	29.08.2011	30.10.2011	
5.	K.M.Nazmul Haque, PD, 25,750-1000-33,750/-	Full time	-	No .	30.10.2011	15.01.2012	
6.	A.K.M.Momotaz Uddin, PD 25,750-1000-33,750/-	Full time	-	No	15.01.2012	09.10.2012	
7.	Md.Abdur Razzaque Khan, PD 25,750-1000-33,750/-	Full time	-	No	09.10.2012	02.02.2014	
8.	Md.Amir Faisal, PD 25,750-1000-33,750/-	Full time	-	No	04.02.2014	05.08.2014	
9.	Md.Mamunur Rahid,PD. 25,750-1000-33,750/-	Full time	-	No	05.08.2014	01.09.2014	Addl. Charge.
10.	Syed Jafar Niaz, PD 25,750-1000-33,750/-	Full time	-	No	01.09.2014	26.04.2015	3
1	Musa Nurur Rahman, PD. 25,750-1000-33,750/-	Full time	-	No	26.04.2015	30.06.2015	

# 07. Procurement of Transport (in Nos.): N/A

Type of	Number	Procured	Transferred to	Transferred	Condemned/da	
transport	as per P.P.	with date	Transport	to	maged with	Remarks
			Pool with date	0 & M	date	
				with date		
1	2	3	4	5	6	7
Car	-	-	N/A	-	-	
Јеер	-	-		-	-	
Microbus	-	-		-	-	
Minibus	-	-		-	-	
Bus	-	-		-	-	
Pick-up	-	-		-	-	
Truck	-	-		-	-	
Motor Cycle	-	-		-	-	
By-cycle	-	-		-	ars	
Speed Boat	-	-		-	-	
Launch	-	-		-	-	
Others	-	-		-		
with name						

# 08. 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		id/Proposal rore Taka)	Tender/B	id/Proposal	works/services	mpletion of s and supply of ods
/consultancy) as per bid document	As per PP	Contracted value	Invitation date	Contract signing/ L.C opening date	As per contract	Actual
1	2	3	4	5	6	7
Protection of Astomonisha Bazar of Bhangura Upazilla and Mirzapur Bazar of Chatmohar Upazilla from the erosion of the Gumani-Atrai River. (Sub-project- 57)	4.9212	3.8263	27.08.2008	15.02.2009	15.06.2010	30.06.2010
Protection of Purba Meher Rupali Bazar, Uzantila Launchghat in Ploder No-64/2B from the erosion of the Matamuhuri river.(Sub-pr- 06)	2.7500	2.7240	15.11.2011	22.02.2012	30.06.2012	31.12.2012
Protection of Jamalganj Town from the erosion of the Surma river. (Sub-Project-29)	4.5000	4.3865	01.10.2011	29.11.2011	14.06.2012	28.06.2013
Protection of Chachkoir bazar and Santoshpur from the erosion of the Atrai and Tulshi river. (Sub- project-53)	2.7000	2.6958	26.09.2011	27.12.2011	30.05.2012	15.02.2013
Protection of Tushkhali and Shafa Bandar from the erosion of the Boleswar river. (Sub-Project-63)	2.3224	2.1699	27.11.2011	06.03.2012	12.03.2012	15.12.2013
Protection of Teesta right bank embankment in between KM.5.60 to KM. 7.50 at mauza Jharsingheswar.(Sub-Proj-84)	4.9500	4.8922	09.04.2009	07.06.2009	15.06.2010	25.06.2011
Slope protection of Tessta main canal under Teesta Barrage Project 1 <sup>st</sup> phase. (Sub-Project-73)	3.5800	3.5755	09.04.2009	07.06.2009	14.06.2010	14.06.2010
Protection of Paisarhat Bandar from the erosion of Paisha river. (Sub-Project-59)	2.2500	2.2494	18-09-2011	06-02-2012	27-09-2012	10-02-2014
Protection of Barisal Airport from the erosion of the Sugandha river.(Sub-Project-69)	3.9000	3.3607	25-11-2010	01-06-2011	24-10-2011	30-06-2014
Protection of Police line from the erosion of the left bank of Mohananda river at sadar Upazilla in Chapainawabganj district. (Sub-Project-55)	3.4960	3.4960	08.09.2011	15.11.2011	30.06.2012	24.06.2013
Protection of the west bank of the Sandha river at Sharupkathi, north bank of the Indurkhathi (Miarhat) at Kaurikhara BSCIC Industrial area. (Sub-Project-64)	3.2690	3.2687	27.01.2011	12.05.2011	05.06.2011	30.05.2014
Protection of Left Guide Bund(D/S of Right Guide Bund of Flood By Pass) of Teesta Barrage. (Sub-Proj-83)	4.2000	4.1948	28.06.2011	29.09.2011	30.04.2012	15.06.2014
Protection of Kuakata sea beach from wave action of the Bay of Bengal.(Sub-Project-58)	6.4800	6.2884	14.03.10	07.10.10	06-02-2011	11-05-2014

8.2 Use of Project Consultant (s) (Foreign/Local):

Name of the Field	Approved man month			Actual man month utilised	Remarks	
	As per PP	As per o	ontract			
1	2		3	4	5	
Foreign:				N/A.		
Local:				N/A.		

# 09. Construction/Erection/Installation Tools & Equipment:

Description of items	Quantity (as per PP)	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
			N/A.			

# C. FINANCIAL AND PHYSICAL PROGRAMME:

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

(In lakh Taka)

Financial	Financial p	rovision & p	hysica	d target as	Financial provision & physical target as per				
Year		per origina	1 PP		latest revised PP				
	Total	Taka	P.A.	Physical %	Total	Taka	P.A.	Physical %	
1	2	3	4	5	6	7	8	9	
2008-2009	7303.80	7303.80	-	47.27%	1766.07	1766.07	-	9.23%	
2009-2010	4990.07	4990.07		32.30%	4724.84	4724.84	-	24.70%	
2010-2011	3155.50	3155.50	-	20.42%	8967.84	8967.84	-	46.87%	
2011-2012	-	-	-	-	3675.06	3675.06	-	19.21%	
2012-2013	-	-	-	-	-	-	-	-	
2013-2014	-	-	-		-	-		-	
2014-2015	-	-	-	-	-	-	-	-	
Total	15450.00	15450.00		100%	19133.81	19133.81		100%	

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

(In lakh Taka)

Financial	Revis	ed Allocatio	on & ta	ırget	Taka	Expenditu	re & physica	ıl progi	ress
Year	Total	Taka	P.A.	Physical %	release	Total	Taka	P.A.	Physical %
1	2	3	4	5	6	7	8	9	10
2008-09	1800.00	1800.00	-	10.60%	1800.00	1766.07	1766.07	-	10.60%
2009-10	4750.00	4750.00	-	28.00%	4750.00	4724.84	4724.84	-	28.00%
2010-11	2100.00	2100.00	-	10.98%	2100.00	2024.14	2024.14	-	10.57%
2011-12	2308.00	2308.00	-	15.46%	2308.00	2306.07	2306.07	-	19.50%
2012-13	2500.00	2500.00	-	16.07%	2500.00	2494.40	2494.40	-	17.12%
2013-14	3684.00	3684.00	-	14.21%	3684.00	3339.07	3339.07	-	9.53%
2014-15	383.00	383.00	-	2.00%	135.00	79.12	79.12	-	0.41%
Total	17525.00	17525.00	-	97.32%	17277.00	16733.71	16733.71	-	95.73%

# D. ACHIEVEMENT OF OBJECTIVES OF THE PROJECT:

Objectives as per PP	Actual achievement	Reasons for shortfall, if any
To protect the important town, ports, valuable govt. and non-government installations, religious and historical places, households etc. from the erosion of about 230 large and small rivers run throughout alluvial flood plains of Bangladesh.	Important town, valuable govt. and non-government installations, religious and historical places, households etc. had been protected from erosion of rivers.	-
To protect the eroded bank of cross- boundary rivers in order to avoid island/char formation along the Indian Territory.	The eroded bank of cross-boundary rivers had been protected in order to avoid island/char formation along the Indian Territory.	-
To protect the land from river erosion of 10,000 hectare/year which caused the millions of people landless every year.	The land had been protected from river erosion of 10,000 hectare/year which caused people landless every year.	-
To protect the overall social and physical environment from pollution and natural hazard.	The overall social and physical environment had been protected from pollution and natural hazard.	-

## E. BENEFIT ANALYSIS

01. Annual Out-put: As it is a project consisting of only one major physical component like river bank protective work along 31885 meter length, its direct benefit can not be quantifiable. Valuable immovable properties (both public & private properties) within the project area has been saved by virtue of implementation of the project. Safeguard to human life and properties & social and national security from sustainable socio-economic enhancement has also been achieved in the area.

Items of output	Unit	Estimated expected a	quantity t full capacity	actual quantity of out-put during the 1st year of operation at full capacity (or during, real production for newly completed project).
Outputs:			N/A	•

## 02. Cost / Benefit:

Item	Estimated	Actual
Benefit cost ratio of the project	Benefit-Cost Ratio (BCR):	
(i) Financial	Financial: 1.41:	
	1.00	N/A
(ii) Economic	Economic: 1.64:	
	1.00	
Internal Rate of Return (i) Financial	Internal Rate of Return (IRR): Financial : 21.45 %	
(ii) Economic	Economic: 26.20 %	
(II) Economic	20,20 /0	

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
1	2	3	4
(a) Ministry/ Agency:			
(b) IMED:			
Mr. Rabindranath Barman, Director	13.05.2010	a.Delay in budget/ fund allocation.	a.Timely budget/fund allocation. b.Early Contractor selection
Mr. Rabindranath Barman, Director	29.06.2010	a.Slow progress due to contractors non-initiative. b. Short manpower of BWDB	a.Speed-up progress. b. Posting of adequate manpower of BWDB

Mr. Rabindranath Barman, Director	14.05.2011	a.Slow progress	a.Speed-up progress. b. Step for allocating of adequate budget/fund.
Mr. Babulal Robidas, Assistant Director	15.05.2011		a.Close monitoring of the site.
(c) Others:(Please specify)			

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

#### 2.1. Internal Audit:

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

#### 2.2. External Audit:

Audit period	Date of submission of Audit Report	Major findings/ Objections	Whether objections resolved or not.
1	2	3	4
2012-2014	26/10/2014	Loss of Tk. 98,81,438/- for not realizing from contractor after cancellation of contract.	Not resolved
2012-2014	26/10/2014	Financial loss of Govt. Tk. 2,29,846/- due to sanctioning of estimate of geo-textile in excess of c.c. block area.	Not resolved
2012-2014	26/10/2014	Liability of tk. 25.0 crore unnecessarily created due to making contract agreement & notification of award.	Not resolved

## G. DESCRIPTIVE REPORT

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

#### 1.1 Background:

Bangladesh is a land of rivers and one of the largest deltaic flood plain formed by the three mighty river systems of Ganges, Brahmaputra and Meghna. These three river system together with their tributaries and distributaries made a complex river network in the country there are about 310 small and big rivers. As 93% of the total catchments area lies outside Bangladesh, so it has virtually no control over the huge water and sediment flow coming from our territorial boundary. These flood plains and costal delta are in a constant state morphological change. The largest seasonal variation of river flow results in river bank erosion sometimes at a large scale. This has significant economic and social impact. The losses of land, crops and property have caused many to be landless. Government of Bangladesh has taken necessary steps to mitigate this erosion over the years.

1.2 Justification/Adequacy: River bank erosion is one of the major natural disasters of Bangladesh. It has caused untold miseries to thousands of people every year living along the banks

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of rivers in Bangladesh. To date, erosion alone has rendered millions homeless and has become a major social hazard. Most of the slum dwellers in rural, urban and metropolitan towns and cities are victims of river bank erosion.

The project "River Bank Protection & Development and Town Protection Project, Phase-IV" was conceived in response to protect the important towns, ports, valuable govt. and non-government installations, religious and historical places, households etc. from the erosion of different rivers.

List of sub-projects of "River Bank Protection & Development and Town Protection Project, Phase-IV (2<sup>nd</sup> Revised)" is attached herewith as <u>Annexure-B</u>

## 1.3 Objectives

The objectives of the Project are:

- To protect the important town, ports, valuable govt. and non-government installations, religious and historical places, households etc. from the erosion of about 230 large and small rivers run throughout alluvial flood plains of Bangladesh.
- To protect the eroded bank of cross-boundary rivers in order to avoid island/char formation along the Indian Territory.
- To protect the land from river erosion of 10,000 hectare/year which caused the millions of people landless every year.
- To protect the overall social and physical environment from pollution and natural hazard.

## 1.4 Project revision with reasons:

Original: From FY: 2008-2009 (July, 2008) to FY: 2010-2011 (June, 2011) 1st Revised: From FY: 2008-2009 (July, 2008) to FY: 2010-2011 (June, 2011) 2<sup>nd</sup> Revised: From FY: 2008-2009 (July, 2008) to FY: 2011-2012 (June, 2012)

# Reasons for 1st Revision:

As per approved design for the 43 sub-projects, estimates were prepared and it was found that the cost had been increased. In that situation 3 (three) nos. technical committees were formed by Chief Monitoring, BWDB, Dhaka to assess the actual requirement of works, the quantity and cost. As per committees' report it was found that cost of works for almost all the sub projects had become higher than approved DPP. So, the project was needed revision due to increase of cost as per approved design, prepared on the basis of actual field conditions. Considering the increased cost for these 43 sub-projects and the original cost for rest 35 sub-projects, DPP was revised (1st revision) for 78 sub-projects due to the following reasons:

- In preparing the original DPP in 2005-2006 there was no specific design. During the last 3-4 years (from 2005 to 2008), some morphological changes of rivers had been occurred. On the basis of data of rivers, specific design and estimate for 43 sub-projects had been prepared, which caused increase of cost.
- In preparing the original DPP, the schedule of rates were considered for the year 2005-2006. Later on, due to increasing trend of prices of construction materials and labour, the schedule of rates have been increased which caused increase of cost.

## Reason for 2<sup>nd</sup> revision:

The two main reasons for 2<sup>nd</sup> revision of RDPP were:-

- to allow for the increased cost of main component- river bank protection works and
- to allow the adoption of a realistic time requirement for implementation of the remaining project works. The detailed reasons for 2<sup>nd</sup> revision are stated below:-
- a) Cost increase of river bank protection works as requires under prevailing conditions of erosion of rivers:



The 1<sup>st</sup> RDPP was prepared for river bank protection work of 78 sub-protects costing for Tk. 16993.92 lakh during 2008-2009 considering

- i) the estimated cost for 43 sub-projects as per approved design and
- ii) the cost for 35 sub-projects as of the original DPP because there was no specific design for these 35 sub-projects.

The original estimated cost was based on the cost for similar works under taken in Bangladesh during the years prior to 2005 as well as using standard schedule of rates prevalent in the year 2005-2006. The time lapse between preparation of estimate in 2005 and execution of works in 2010-2011 (after 5 years) gave rise to cost variations over DPP cost for which 2<sup>nd</sup> revision of 1<sup>st</sup> RDPP is needed.

## b) Actual volume of works required has increased

As per survey and investigation as conducted and as per practical immediate requirement and also due to the morphological changes of the rivers the volume works for the remaining sub-projects has been increased which causes increase of cost following the approved design for which 2nd revision of 1<sup>st</sup> RDPP is needed.

## c) Enhancement of project cost

There was no approved design for 35 sub-projects. Now on the basis of the present morphological positions of rivers, design have been approved for these 35 sub-projects. So as per approved designs for the remaining sub-projects and considering the contract values of the ongoing 43 sub-projects, cost estimates have been prepared. The total cost estimate comes to Tk. 19926.77 lakh which is more higher than the cost of 1<sup>st</sup> RDPP resulted in overall cost increase of the project. For which 2<sup>nd</sup> revision of the 1<sup>st</sup> RDPP was needed.

## d)Excessively enhancement of unit rates of works:

Unit costs increased marketly for both materials & labours. In preparing the original DPP, the schedule of rates were considered for the year 2005-2006. At present situation of increasing trend of prices of construction materials and labour, the schedule of rates have been increased. Thus due to increase rate of prices of current schedule of rates, the cost has been increased for the remaining sub-projects.

A market survey by STIFF-2 project in Mid 2007 and in recent time indicated increase market prices over base year 2004-2005 as below:

- MS steel (60 Grade)	:	75%
- Potland Cement	:	80%
- 1 <sup>st</sup> Class Bricks	:	80%
-Sand	:	75%
- Stone Chips	:	75%
- Skilled labour	:	80%
- Un skilled labour	:	80%
- Mason	:	75%

The above reasons enhanced the costs and resulted in overall cost increase. So for execution of the remaining works 2nd revision 1st RDPP was needed.

- e) Decision of DPEC meeting held on 20.01.2009 in the Ministry of Water Resources 1st revision of the DPP was done considering:-
- (a) the estimated cost of 43 sub-projects on the basis of approved design & schedule of rates of 2008 and
- (b) considering the cost of remaining 35 sub-projects as of the original DPP, because design of 35 sub-projects were not prepared then.

This was discussed in the DPEC meeting held on 20.01.2009 in the Ministry of Water Resources. In that meeting it was also discussed that as per approved design of the remaining 35 sub-projects the project cost would be re-assessed and the DPP would be revised accordingly (2nd revision). As per decision in that DPEC meeting, the DPP was again revised (2nd revision).

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

River bank erosion in alluvial lands of riverine Bangladesh is a complicated and dynamic thrust in nature due to strong rush of water and has major variation in between normal water flow and surges of inflow during the period of monsoon and post- monsoon each year. River bank erosion leads a serious loss to both Govt. and private properties as well as to the habitation. Consequently, numerous affected people at grass root level are concentrating in the slums of big cities, shaking shelter and employment. It results in human living for these rootless people in slums, causing severe pollution to the overall civic atmosphere of the cities. The resultant long-term impact is that overall country's environmental balance is being hampered.

There was long standing social demand raised by the vulnerable people for taking up immediate protective measures at some specific important locations for mitigating vulnerability of human lives, properties and environmental considerations to continuous bank erosion. The present comprehensive project for riverbank protection/development and town protection had been considered as widely accepted programme. Utmost effort and activities of Govt., especially in Poverty Reduction Strategy (PRS) is continuing in order to achieve welfare of the people through alleviating poverty and to provide protection of lives and properties from detrimental conditions.

This project, during implementation and operation period, created labour intensive job opportunities to the poor in the rural area as well as created unperturbed and anxiety free live to the common people. And thus, helped covering the objectives of Govt. much deliberated initiatives i.e. Poverty Reduction Strategy (PRS). This block project containing 75 sub-projects had been implemented in continuation of the success of other bank protective projects and had the linkage and conformity with policies and directives of National Water Policy, National Water Management Plan and PRS. The GoB,s programme to protect riverbank for various socioeconomic and political reasons continues to get priority in the plan objectives.

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

- Project Identification: The project was initiated with a view to protect important towns, valuable Govt. and non-Govt. installations, religious and historical places.
- Project Preparation: The project was prepared by Project Director, Town Protection Project Phase-1, BWDB.
- ♦ Appraisal : Planning Commission.
- ♦ Credit Negotiation : Not applicable.
- ♦ Credit Agreement: Not applicable.
- ♦ Credit Effectiveness: Not applicable.
- Loan Disbursement: Not applicable.
- ♦ Loan Conditionalities: Not applicable.
- Project Approval:

The original DPP of the project was prepared in 2006 and was approved by ECNEC on 19.06.2008(memo no. pari/ecnec-1/go-27/2007-2008(8<sup>th</sup> meet)/125 dt:19.6.2008) administrative approval was issued on 30,06.2008 from the Ministry of Water Resources(memo no.mowr/p-3/12/2001(part-2)/75 dt:30.6.2008). The implementation period of the project was scheduled for 3 (three) years-from 2008-2009 to 2010-2011. The estimated cost was Tk..15450.00 lakh.

The 1st revised DPP was approved and administrative approval was issued by the Ministry of Water Resources on 02.03.2009(memo no.mowr/p-3/12/2001(part-4)/16 dt:2.3.2009) . The implementation period of the project was scheduled for 3 (three) years-from 2008-2009 to 2010-2011 .The estimated cost was Tk. 16993.92 lakh. The

The 2<sup>nd</sup> revised DPP was approved and administrative approval was issued by the Ministry of Water Resources on 08.05.2011(memo no. 42.041.014.01.05.012.2010-86 dt:8.5.2011). The implementation period of the project was scheduled for 4 years-from 2008-2009 to 2011-2012. The estimated cost was Tk. 19133.81 lakh.

The 1st Time extention was accorded to the project without increase in cost and administrative approval was issued on 26.6.2012(memo no. 20.358.014.01.08.246.2006.257 dt:26.6.2012). The implementation period of the project was scheduled for 5(five) years-from July 2008 to June 2013. The 2<sup>nd</sup> Time extention was accorded to the project without increase in cost and administrative approval was issued on 29.09.2013(memo no.20.358.014.01.08.246.2006/100 dt:29.9.2013). The implementation period of the project was scheduled for 6(six) years-from July 2008 to June 2014. The 3<sup>rd</sup> and final Time extention without increase in cost was accorded to the project for additional administrative issued vear approval was on 03.02.2015(memo no.42.041.014.01.05.012.2010(part-6)-32 dt:3.2.2015) The implementation period of the project was scheduled for 7 (seven) years-from July 2008 to June 2015.

♦ Others (if any).:- Aided by GOB fund.

# 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 of the project have clear knowledge about the Target/ Objectives of the project.
- 4.2 Programme for use of created-facilities of the project: Not applicable.

#### 4.3 O & M programme of the project. :

After completion of the project, major repair/ rehabilitation works will be accomplished from regular O & M budget of BWDB. Annual O & M works will be done by BWDB's existing manpower.

## 4.4 Impact of the project -

**4.4.1 Direct:** The project "River Bank Protection & Development and Town Protection Project, Phase-IV" has protected the important towns, valuable govt. and non-government installations, religious and historical places, households etc. from the erosion of different rivers.

#### 4.4.2 Indirect: Positive.

- 4.5 Transfer of Technology and Institutional Building through the project: Not applicable.
- **4.6** Employment generation through the project.: During execution of the project, Project activities created employment opportunities .

## 4.7 Possibility of Self employment :

Self-employment in agriculture sector, business centre has been created due to improvement of socio-economic condition.

4.8 Possibility of women-employment opportunity: Not applicable.

#### 4.9 Women's participation in development:

Woman are most vulnerable to any types of disaster. Post-project condition has improved drainage and minimize flood hazards. Thus ultimately created safe and healthy environment for woman . Also, employment opportunity for woman was enhanced at the construction phase of the project. Thus project had positive impact on woman.

4.10 Probable Impact on Socio-Economic activity.: Socio-Economic activity has been improved. The present completed project had mitigated the vulnerability of human lives, properties. This project

has contribution to the welfare of the people through economic activity by providing protection of lives and properties from river erosion.

## 4.11 Impact on environment:

River bank erosion caused tremendous decrease of land every year. River erosion damaged human habitats and properties. As such serious impact on settlement was being experienced every year. This completed project had restored safety of land, human habitats, natural habitats of plants and animal and other properties. Besides, overall condition of flood, drainage congestions had been improved after implementation of the project. Also, migration of the distress people from rural to urban area had been reduced. After completion of the project, plantation programme may been made over the embankment through social organization, forest department which improved the physical and social environment of the area. And thus the completed project has created positive impact on environment like land, water, biodiversity etc.

**4.12 Sustainability of the project:** The River bank protection project has met goals while maintaining the ability of natural systems to continue to provide the natural resources and ecosystem services upon which the economy and society depend without undermining the "integrity, stability and beauty" of natural biotic systems. So the project is sustainable.

# 4.13 Contribution to poverty alleviation/reduction:

River bank erosion caused a serious loss to both Govt. and private land and properties as well as to the habitation. Consequently, numerous affected people at grass root level became homeless and poor. It resulted in human living for these rootless people in slums.

The present completed project for riverbank protection/development and town protection had mitigated the vulnerability of human lives, properties. This project has contribution to the welfare of the people through alleviating poverty and to provide protection of lives and properties from river erosion.

This project, during implementation and operation period, created labour intensive job opportunities to the poor in the rural area.

- 4.14 Opinion of the public representatives, local elite, local administration, teachers, religious leaders, women's representatives etc.: N/A.
- 4.15 Contribution of Micro-credit programmes and Comments on overlapping with any NGO activities.: Not applicable.
- 5. Problems encountered during Implementation (with duration & steps taken to remove those)
- 5.1 Project Management
- 5.2 Project Director
- 5.3 Land Acquisition
- 5.4 Procurement
- 5.5 Consultancy
- 5.6 Contractor
- 5.7 Manpower
- 5.8 law & Order
- 5.9 **Natural clamity:** Due to Morphological changes of the river, cost was increased. For this Morphological changes, in-time completion of the project was also hampered.
- **5.10 Project financing, allocation and release.:** Reduced ADP allocation hampered the timely execution of the project.

- **5.11 Design formulation/approval:** During approval of the project, cost estimate should have been up-to-date.
- 5.12 Project aid disbursement and reimbursment
- 5.13 Mission of the development partners.
- 5.14 Time & Cost Over-run
- 5.15 Project Supervision/Inspection
- 5.16 Delay in Decision
- 5.17 Transport
- 5.18 Training
- 5.19 Approval
- 5.20 Others.

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

Date :.....

River bank erosion is one of the major natural disasters of Bangladesh. It causes loss of land, crops and property along the banks of rivers. Due to completion of the project, towns, important places, households, etc., have been protected from erosion of river. The project has positive effects on lives of tens of thousands of people by protecting them from erosion.

Considering above, it is suggested that	similar type of projects can be taken in future.
Date: 20.9.15	MUSA NORUR RAHMAN) Signature and seal of the Project Director প্রকল্প পরিচালক শহর রক্ষা প্রকল্প, ফেজ-৪ বাপাউবো, ঢাকা।
7. Remarks/Comments of Agency Head:	· · · · · · · · · · · · · · · · · · ·
It is a cluster project has protected many four properties of the project along the river banks. To stakeholders has been imp	t comprising of 75 sub-projects. This pro- ns, howeholds, lands, public and private area by decreasing the extent of erusion he socio-economic condition of the owned remarkably.
Date:	Signature and Seal  (MD. ISMAIL HOSSAIN)  Director General  BWDB, Dhaka,  charge of the Ministry/Division:

Signature and Seal

Annexure-A

Reasons for deviation(ref. B. Implementation position, Table no.05, page no.-4)

1. The progress of the project could not be geared up due to less ADP allocation. For example: during year

2008-2009 financial target as per DPP was Tk.7303.00 lakh but the ADP allocation was Tk.1800.00 lakh

only.

2. The project period was extended up to June, 2015 on 4th quarter of FY 2014-15. Also the project got

financial allocation on RADP during April, 2015. So, to complete the remaining works within last 3 months

of fiscal year wasn't possible. Also, during this period, BWDB's schedule rate of work items got increased.

So deployed contractors showed hesitation and little interest to perform works according to contracted rate.

This has hampered progress of sub-projects implemented during FY 2014-15.

3. The sub-project of sl no. 10 could not be completed due to major morphological changes of river and

increase in cost of sub- project.

4. The work of the sub-project of sl no.18 was done partially completed by the contractor and he did not

made any further progress as per target. BWDB cancelled that contract and invited re-tender. At that

moment, the previous contractor made a court case against invitation of re-tender. The court issued

"injunction" on that work for six months. By this time the project completion time had come to end. So the

remaining work of that sub-project could not be completed.

5. The work of the sub-project of sl no.61& 72 was dropped due to location changes of site (sl no.61) as per

MP's D.O. letter from approved RDPP(2<sup>nd</sup> Revised).

6. The work of the sub-project of sl no.71& 75 was partially completed due to morphological changes of

river.

(Musa Nurur Rahman)

Project Director

# List of sub-projects of "River Bank Protection & Development and Town Protection Project, Phase-IV (2<sup>nd</sup> Revised)"

Zone: Southeastern, Chittagong.

SI.	Sub-	Name of Sub-Project	Loc	ation
No.	Proj.		Upa-zilla	District
	Sl. No			
1	1.	Protection of Senior Madrasa, Etimkhana, Mazar, Mosque, Primary school and Pucca road from the erosion of Shikalbaha khal.	Patiya	Chittagong
2	2.	Protection of Godown Ghat Bridge from the erosion of South bank of the Karnafuly River at Sarafvata	Rangunia	Chittagong
3	3.	Protection of Beer Srestha Shahid Munshi Md. Abdur Rauf Graveyard and Monument from the erosion of the Kaptai Lake.	Naniarchar	Rangamati
4	4.	Protection of Kowkhali Govt. High School and adjacent area from the erosion of the Kawkhali -Ichamati river.	Kowkhali	Rangamati
5	5.	Protective work at Matarbari-Rajaghat in Polder No-70 from the erosion of the Matarbari Channel.	Moheskhali	Cox's Bazar
6	6.	Protection of Purba Meher Rupali Bazar, Uzantila Launchghat in Ploder No-64/2B from the erosion of the Matamuhuri river.	Pekua & Moheskhali	Cox's Bazar
7	7.	Protection of Right bank of the Halda river at Garduara and Dakhin Madarsha.	Hathajari	Chittagong
8	8.	Protection of Dighinala Upazilla Town from the erosion of the Maini river.	Dighinala	Khagrachari
9	9.	Protection of Vuruakhali river bank at Dhawnkhali Madrasha area and Khrushkul of polder 66/1. from the erosion of the Bharua khali river.	Cox's Bazar Sadar	Cox's Bazar
10	10.	Protection of Right Bank of the Halda river at Guman-Mardan, Langalmora, Chipatali, Mekhal Union area.	Hathajari	Chittagong
11	11.	Protection of Left Bank of the Halda river at West Aburkhil area.	Raujan	Chittagong
12	12.	Protection of different locations from S.M Ghat to changkhula area from the erosion of the Bakkhali river.	Ramu and Cox's Bazar Sadar	Cox's Bazar
13	13.	Protection of right bank of the Little Feni river in Musapur in Companyganj.	Companyganj	Noakhali
14	14.	Protection of Lopang Dudukchari BOP from the erosion of the Chengi river at Azoddha area under Matiranga Upazilla.	Panchari	Khagrachari
15	15.	Protective work at the Upstream and Downstream of Farhadnagar Groyne from erosion of the river Feni.	Feni Sadar	Feni
16	16.	Protection of Dipkala area/ Shikalbaha union at both bank of Shikalbaha khal at the confluence of the Karnafully river.	Patiya	Chittagong
17	17.	Protective work at right Bank at Sagachar Village and Left Bank at Kathgar from terosion of the Sangu river.	Chandanaish	Chittagong
18	18.	Protective work at L/B at of Sangu River in Amilaish area	Satkania	Chittagong
19	19.	Protective work at L/B of the Tankaboti river at Kanuram Bazar	Lohagara	Chittagong
Zone	: North	-Eastern, Comilla		
20	21.	Protection of right bank at Alepur in Kamalganj Pourasava area from the erosion of the Dhalai river.	Kamalganj	Moulvi Bazar
21	23.	Protection of the land of Bangladesh from the crosion of the Juri river.	Kulaura	Moulvi Bazar
22	26.	Protection of Fenchuganj Town from the erosion of the Kushiyara river.	Fenchuganj	Sylhet
23	27.	Protection of Gachbari bazaar, Surma Dyke, Darpon Nagar and Charipara from the erosion of the Surma river.	Kanaighat	Sylhet
24	28	Protection of Balaganj Town from the erosion of the Kushiyara river.	Balaganj	Sylhet
25	29	Protection of Jamalganj Town from the erosion of the Surma river.	Jamalganj	Sunamganj
26	30	Protection of School, Madrasha and Mosque from the erosion of the	Chandpur	Chandpur

		Dakatia river at Bara Ragunathpur area in Chandpur.	Sadar	
27	31	Protection Work at Dharar Gaon – Brahman Gaon L/B) of the Surma River	Sunamganj Sadar	Sunamganj
28	32	Protection Work at LB/RB of Gumti River of Debidar, Muradnagar and Titas Upa-zilla	Debidar, Muradnagar Daudkandi	Comilla
29	34	Protection of Bangladesh Territory from the erosion of the Kushiyara river near the bifurcation at Amalshid	Zakiganj	Sylhet
30	35	Protection of the Ibrahimpur Village from wave action of the Surma river.	Sunamganj Sadar	Sunamganj
31	36	Protection of South Manik Nagar of Kalakandi union from the erosion of the river Gomti (R/B)	Titas	Comilla

# Zone: Central Zone, Dhaka

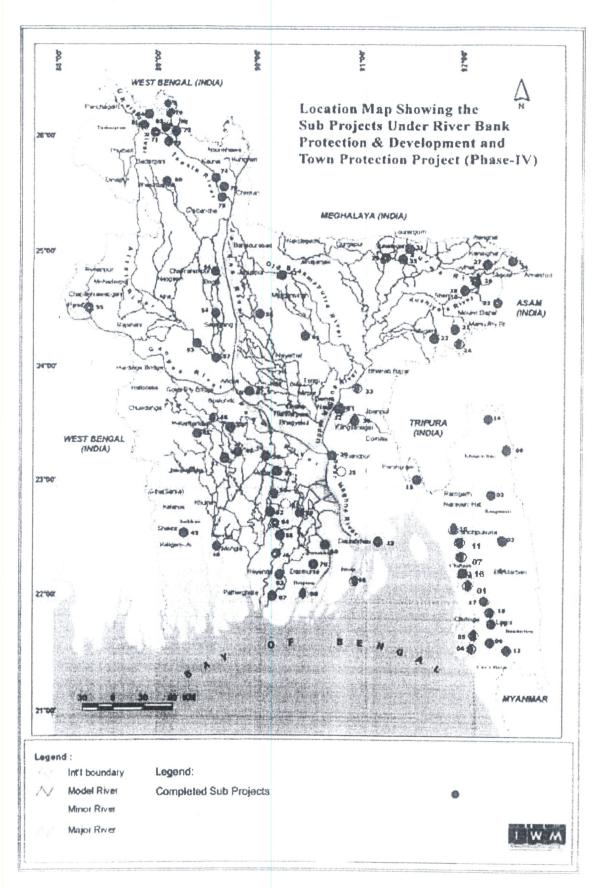
SI.	Sub-	Name of Sub-Project	Location		
No.	Proj. Sl.		Upa-zilla	District	
22	No	Detection Children Landon Distriction and Children			
32	37.	Protection of Right Bank of Old Dhaleswari river to protect Ghior high school, Govt. College and Ghior U.P Headquarter.	Ghior	Manikganj	
33	38.	Protection of Kalihati Upazilla H/Q from the erosion of Jhinai river.	Kalihati	Tangail	
34	41.	Protection of Datter Bazar area from the erosion of the Old Brahmaputra River	Gafargaon	Mymensing	
Zone:	South	-Western, Faridpur			
35	42	protection of Jamalpur-Mymensingh road at Hamidpur and Hamidpur bazar from the erosion of the river Brahmaputra.	Jamalpur	Jamalpur	
36	43.	Protection of Langalbandh Bazar and embankment and irrigation canal of G.K Project from the erosion of the Gorai river.	Sripur	Magura	
37	44.	Protection of Left Bank of the Gorai river at Dumain, Nishchintapur and Tarapur of Modhukhali Upazilla.	Modhukhali	Faridpur	
38	48.	Protection of Left Bank of the Gorai river at Narua and Jungal areas in Baliakandi Upazilla.	Baliakandi	Rajbari	
39	49.	Protection of Shamsul Ulum Madrasa and down stream of modhukhali regulator from erosion of the Kumar River in Faridpur Town.	Faridpur sadar	Faridpur	
40	50.	Protection of PTI of Madaripur and east Nagardi Nora-Narayan Seba-Asram Mandir of Rajoir from the erosion of the Kumar River	Madaripur Rajoir	Madaripur	
41	51	Protection of Mahiser char Darul-ulum Madrasha (right bank) from the erosion of the Arial kha river.	Madaripur	Madaripur	
42	52.	Protection of Jhama Bazar and adjoining area from the erosion of the Madhumoti River.	Mohammadpur	Magura	
Zone	: North	nwestern, Rajshahi			
43	53.	Protection of Chachkoir bazar and Santoshpur from the erosion of the Atrai and Tulshi river.	Gurudaspur	Natore	
44	54.	Protection of L/B of the Nagore river at Singra Pourasava area.	Singra	Natore	
45	55.	Protection of Police line from the erosion of the left bank of	Chapaina-	Chapainawab	
		Mohananda river at sadar Upazilla in Chapainawabganj district.	wabganj sadar	anj	
46	56.	Protection of Mohishaban High school and Union Parishad from the erosion of Garidaha khal in Bogra district.	Gabtoli	Bogra	
47	57.	Protection of Astomonisha Bazar of Bhangura Upazilla and Mirzapur Bazar of Chaumohar Upazilla from the erosion of the Gumani-Atrai River	Bhangura Chatmohar	Pabna	
South	-Weste	ern Khulna			
48	45.	Protection of School, Madrasa and other important installation from the erosion of the Betna river at Uttar Chapra. in polder –2.	Ashashuni	Satkhira	
	46.	Protection of Cyclone Shelter and other infrastructure from the	Kayera	Khulna	

Zone	: Sout	hern, Barisal		
50	58.	Protection of Kuakata sea beach from wave action of the Bay of Bengal.	Kalapara	Patuakhali
51	59.	Protection of Paisarhat Bandar from the erosion of Paisha river.	Agoiljhara	Barisal
52	60.	Protection of Kalaiya Bandar from the erosion of the Kalaiya river.	Baufall	Patuakhali
53	61.	Protection of Bakerganj Town from the erosion of Bakerganj river.	Bakerganj	Barisal
54	62.	Protection of Sharshina Kamil Madrasa, Darbarsharif and Udaykathi Bazar from the erosion of the Sandha river.	Sarupkhati	Pirojpur
55	63.	Protection of Tushkhali and Shafa Bandar from the erosion of the Boleswar river.	Mathbaria	Pirojpur
56	64.	Protection of the west bank of the Sandha river at Sharupkathi, north bank of the Indurkhathi (Miarhat) at Kaurikhara BSCIC Industrial area.	Pirojpur sadar	Pirojpur
57	65.	Protection of the riverbank of Kaliganga at Shantirhat, Kutubia.	Borhanuddin	Bhola.
58	66.	Protection of Nalsity Town from the erosion of the Sugandha river.	Nalsity	<b>Jh</b> alokath
59	67.	Protection of Kackchira Bandar at Patharghata upazilla from the erosion of the Bishkhali river.	Pathar-ghata	Barguna
60	68.	Protection of Hadua Peer Shaheber Mazar and Hadua Bandar from the erosion of the Bishkhali River	Nalchity	Jhalakati
61	69.	Protection of Barisal Airport from the erosion of the Sugandha river.	Barisal	Barisal
62	70.	Protection of Hospital, Launchghat, School, Mosque etc at Muradia Rastermatha in Polder Muradia-Kalagachia from the erosion of the river Lohalia.	Dumki	<b>Pa</b> tuakhali

# Zone: Northern, Rangpur

SI.	Sub-	Name of Sub-Project	Location	
No.	Proj. Sl. No		Upa-zilla	District
63	71.	Protection of the left bank of the Teesta river in Parulia Bandar.	Hatibanda	Lalmonirhat
64	72.	Protection of the left bank of the Teesta river at Votemari.	Kaliganj	Lalmonirha
65	73.	Slope protection of Tessta main canal under Teesta Barrage Project 1 <sup>st</sup> phase.	Dimla , Jahldhaka, Kishorgonj	Nilphamari
66	74.	Protection of Kurigram F.C. embankment from the erosion of the Teesta river at Thutapaikar.	Rajarhat & Ulipur	Kurigram
67	75.	Protection Patgram Municipal area from the erosion of the Dharla river.	Patgram	Lalmonirhat
68	76.	Protection of the river bank of Teesta at Angarpota-Dahogram.	Patgram	Lalmonirhat
69	77.	Protection of Indo-Bangaldesh-Bhutan International road and Burimari-Lalmonirhat Rail road from the erosion of the Teesta river (L/B).	Hatibanda	Lalmonirhat
70	78.	Protection of right bank of the Dharla river at Jaykumar	Rajarhat.	Kurigram
71	79.	Protection of the left bank of the Teesta river from Bozra senior Madrasa of Ulipur Upazilla in Kurigram Dist. to Lakhiarpara of Sundarganj upazilla in Gaibanda District.	Ulipur, Sudarganj,	Kurigram Gaibanda
72	80.	Protection of Pakuria Sharif Mazar complex from the erosion of the Ghagot River	Gangachara	Rangpur
73	81.	Protection of Gomnati and Panga of Domar Upazilla and Paschim Satjan of Dimla from the erosion of Buriteesta River	Domar Dimla	Nilphamari
74	83.	Protection of Left Guide Bund(D/S of Right Guide Bund of Flood By Pass) of Teesta Barrage	Hatibandha	Lalmonirhat
75	84.	Protection of Teesta right bank embankment in between KM.5.60 to KM. 7.50 at mauza Jharsingheswar.	Dimla	Nilphamari





Project Map

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