IMED: 04/2003 (Revised)



BANGLADESH WATER DEVELOPMENT BOARD

PROJECT COMPLETION REPORT **IMED: 04/2003 (Revised)**

Name of Project: Protection of Right Bank Of The Jamuna River In Bogra District.

Name of Division : Bogra O&M Division, BWDB, Bogra

Name of Circle

: Bogra O&M Circle, BWDB, Bogra.

Name of Zone

: North Western Zone, BWDB, Rajshahi.

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

: Protection of Right Bank of the Jamuna River

in Bogra District.

02. Administrative Ministry/Division

: Ministry of Water Resources

03. Executing Agency

: Bangladesh Water Development Board (BWDB)

04. Location of the Project

: Upazila-Sariakandi & Dhunat, District-Bogra.

05. Objective of the Project

:

To Save Kamalpur, Boroitoli, Pukuria and adjacent area under Sariakandi & Dhunat Upazilla in Bogra District from erosion of right bank of the Jamuna River.

06. Estimated Cost

(In lakh Taka)

	Original	Latest Revised		
(a) Total	21446.34	23474.08		
(b) Taka	21446.34	23474.08		
(c) Foreign Currency	0.00	0.00		
(d) Project Aid	0.00	0.00		
(e) RPA	0.00	0.00		

07. Date of Approval : PCP PP

(a) Original

10 April, 2012

(b) Latest Revised

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08 November, 2015

08. Implementation Period

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	Date of Commencement	Date of Completion
(a) Original	July 2012	June 2016
(b) Latest Revised	July 2012	June 2016
(c) Actual	July 2012	June 2016





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/	Date of Agreement	Date of Effective -ness	Date of Closing	
			credit)			Origina l	Revised
1	2	3	4	5	6	7	8
			Not Applica	able			

b) GOB:

(In lakh Taka)

Total amount	Loan	Grant	Cash Foreign Exchange
1	2	3	4
23474.08	-	23474.08	-

9.2 Utilization of Project Aid : (Source wise)

(In million)

Source (s)	Total	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	

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. <u>IMPLEMENTATION POSITION</u>

01. Implementation Period :

Implementation Period as per PP		Actual Implementation	Time Over-run (% of original	Remarks
Original	Latest Revised	period	implementation period)	
1	2	3	4	5
July-2012 to June-2016	July-2012 to June-2016	July-2012 to June-2016	0.00%	

02. Cost of the Project :

(In lakh Taka)

Description Estimated Co		nated Cost	Actual expenditure	Cost over-run (% of original cost)	Remarks		
	Original	Latest revised					
1	2	3	4	5	6		
TOTAL	21446.34	23474.08	22511.11	4.96%	The project cost is increased due to the		
TAKA	21446.34	23474.08	22511.11	4.96%	morphological		
PA					changes of the rivers.		

03. Project Personnel:

Sanctioned	Manpower	Status of the existing manpower Manpower					
strength as	employed	Manpower Existing Others		Employed			
per PP	during	requirement for manpower					
	execution	O&M as per pp	for O & M				
1	2	3	4	5	Male	Female	
Officer (s)	Existing man	power of the implemen	iting agency wei	e deployed	during ex	xecution of	
Staff(s)	the project. No	separate manpower is	enganged for the	e project.			
Total:							

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

Field of	Provision :	as per PP	Actu	Remarks				
Training /Study tour/workshop/ Seminer etc.	Number of person	Man - months	Number of person	Man - months				
1	2	3	4	5	6			
a. Foreign		Not Applicable						
b. Local		Not Applicable						



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

(In lakh Taka)

Itama of moule		Tanget (as man DD)	A =4===1		III lakii Taka)
Items of work		Target (as per PP)	Actual	Progress	Reasons for deviation (±)
(as per PP)	Unit	Financia 1	Physical (Quantity)	Financial	Physical (Quantity)	
1	2	3	4	5	6	7
a. Revenue Component:						
Petrol and Lubricant	1 Item	5.00	1 Item	4.99	1 Item	Planned task is done with the money Spent
Stationery, Seal, Stamp etc	1 Item	2.00	1 Item	2.00	1 Item	with the money spent
Printing & Publication	1 Item	2.00	1 Item	2.00	1 Item	
Survey and Investigation	1 Item	10.00	1 Item	10.00	1 Item	
Repair of existing Transport & Vehicles (2 Nos. Jeep & 5 Nos. Motor Cycle)	1 Item	10.00	1 Item	10.00	1 Item	
Sub Total (A):		29.00		28.99		
b. Capital Component						
Motor Cycle (125CC)	2 Nos.	3.00	2 Nos.	2.99	2 Nos.	Planned task is done with the money Spent
Digital Echo Sounder with transducer	1 Set	17.45	1 Set	17.45	1 Set	
Sight Sooner Machine	1 No.	0.00	1 No.	0.00	1 No.	
Leveling Instrument with accessoriecs	3 Sets	3.00	3 Sets	3.00	3 Sets	
Hand GPS	2 Nos.	0.40	2 Nos.	0.40	2 Nos.	
Office Equipment (Phtocopier& Multimedia)	1 Item	5.20	1 Item	5.20	1 Item	
Bank Revetment Work	6.0 Km	23376.04	6.0 Km	22423.61	6.0 Km	Planned task is done
			(100%)		(100%)	with the money Spent
	1 Item	40.00	1 Item	29.47	1 Item	Planned task is done
O & M during construction						with the money Spent
Sub Total (B):		23445.08		22482.12		
Total (A+B):		23474.08	100%	22511.11	100%	

06. Information regarding Project Director (s):

Name &	Full time	Part time	Responsible	Dat	Date of	
Designation with pay			for more than	Joining	Transfer	
Scale.			one project			
1	2	3	4	5	6	7
Mr. Sardar Sirajul Haque,		Part time	Yes	10-04-2012	11-10-2012	
Superintending Engineer						
Scale: 25750-33750 Tk						
Mr. AKM Momtaz Uddin,		Part time	Yes	11-10-2012	25-06-2015	
Superintending Engineer						
Scale: 25750-33750 Tk						
Mr. Babul Chandra Shil,		Part time	Yes	25-06-2015	30.06.2016	
Superintending Engineer						
Scale: 50000-71200 Tk						





07. Procurement of Transport (in Nos.):

Type of transport	Number as per P.P.	Procured with date	Transferred to Transport Pool with date	Transferr ed to O & M with date	Condemned/d amaged with date	Remarks
1	2	3	4	5	6	7
Motor Cycle	2 Nos.	August/2013				
(125cc)						

Equipment: Survey Instrument.

Type of transport	Number as per P.P.	Procured with date	Transferred to Transport Pool with date	Transferr ed to O & M with date	Condemned/d amaged with date	Remarks
1	2	3	4	5	6	7
Digital Echo Sounder with transducer	1 set	June/2013				
Leveling Instrument with accessories	3 sets	June/2013				
Hand GPS	2 nos.	June/2013				

Equipment: Office Equipment.

Type of transport	Number as per P.P.	Procured with date	Transferred to Transport Pool with date	Transferr ed to O & M with date	Condemned/d amaged with date	Remarks
1	2	3	4	5	6	7
Multimedia (Projector with screen & stand)	1 no	June/2013				
Photocopier	1 no	June/2013				



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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		Tender/Bid/Proposal Cost (in crore Taka)		Bid/Proposal	Date of co of works/ and sup goo	services oply of
/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
Bank Revetment work (from km.130.800 to km. 131.400=600.00m) in Upazilla Sariakandi District Bogra during the year 2015-2016. (Package No. RBP-Bog-01)	2398.69	2254.94	09.08.15	22.12.15	30.06.16	30.06.16
Bank Revetment work (from km.131.400 to km. 132.000= 600.00m) in Upazilla Sariakandi District Bogra during the year 2015-2016. (Package No. RBP-Bog-02)	2399.33	2350.43	09.08.15	22.12.15	30.06.16	30.06.16
Bank Revetment work (from km.132.000 to km. 132.300 = 300.00 m) in Upazilla Sariakandi District Bogra during the year 2015-2016. (Package No. RBP-Bog-03)	1203.51	1109.84	14.10.15	13.12.15	30.06.16	30.06.16
Bank Revetment work (from km. 138.400 to km. 138.800 =400.00 m) in Upazilla Dhunat District Bogra during the year 2015-2016. (Package No. RBP-Bog-04.a)	1613.85	1522.25 (Revised)	14.10.15	13.12.15	30.06.16	30.06.16
Bank Revetment work (from km. 138.800 to km. 139.200 =400.00m) in Upazilla Dhunat District Bogra during the year 2015-2016. (Package No. RBP-Bog-04.b)	1570.92	1479.32 (Revised)	14.10.15	13.12.15	30.06.16	30.06.16
Bank Revetment work (from km. 139.200to km. 139.600=400.00m) in Upazilla Dhunat District Bogra during the year 2015-2016. (Package No. RBP-Bog-04.c)	1570.92	1446.69 (Revised)	14.10.15	13.12.15	30.06.16	30.06.16





Bank Revetment work (from km.134.150 to km. 134.750 = 600.00m) in Upazilla Sariakandi District Bogra during the year 2014-2015 & 2015-2016. (Package No. RBP-Bog-05)	1926.94	1886.94 (Revised- 1926.89)	28.04.14	24.07.14	25.03.16	22.06.16
Bank Revetment work (from km.139.600 to km. 139.900 = 300.00m) with 150m end Termination in Upazilla Dhunat District Bogra during the year 2014-2015 & 2015-2016. (Package No. RBP-Bog-06)	1959.37	1959.37	28.04.14	24.07.14	25.03.16	30.06.16
Bank Revetment work(from km.139.900 to km. 140.300 = 400.00m) in Upazilla Dhunat District Bogra during the year 2014-2015 & 2015-2016. (Package No. RBP-Bog-07)	1240.16	1240.16	28.04.14	20.08.14	25.03.16	30.06.16
Bank Revetment Work (from km 141.000 to km 141.600= 600.00 m) in Upazila Dhunat, Dist: Bogra (Package No. RBP-Bog-08)	2219.65	2219.65	26.08.13	03.12.13	28.05.15	30.06.15
Bank Revetment Work (from km 141.600 to km 142.200= 600.00 m) in Upazila Dhunat, Dist: Bogra (Package No. RBP-Bog-09)	2219.68	2219.68	26.08.13	03.12.13	28.05.15	30.06.15
Bank Revetment Work (from km 142.200 to km 142.400= 200.00 m) in Upazila Dhunat, Dist: Bogra during the year 2012-2013 & 2013-2014 Package No. RBP-Bog-10 (Lot No. 01/02)	771.83	771.82	16.09.12	15.01.2013	20.06.14	30.06.14
Bank Revetment Work (from km 142.400 to km 142.600= 200.00 m) in Upazila Dhunat, Dist: Bogra during the year 2012-2013 & 2013-2014 Package No. RBP-Bog-10 (Lot No. 02/02)	791.27	791.26	16.09.12	19.02.13	18.06.14	30.06.14
Bank Revetment Work (from km 142.600 to km 142.800= 200.00 m) in Upazila Dhunat, Dist: Bogra during the year 2012-2013 & 2013-2014 Package No. RBP-Bog-11 (Lot No. 01/02)	757.17	757.17	16.09.12	15.01.13	20.06.14	30.06.14
Bank Revetment Work (from km 142.800 to km 143.000= 200.00 m) in Upazila Dhunat, Dist: Bogra during the year 2012-2013 & 2013-2014 Package No. RBP-Bog-11 (Lot No. 02/02)	732.75	732.75	23.10.12	12.02.13	12.06.14	30.06.14





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

Name of the Field	Approve	d man month	Actual man month utilised	Remarks			
	As per PP As per contract						
1	2	3	4	5			
a) Foreign	Not Applicable						
b) Local	Not Applicable						

09. Construction/Erection/Installation Tools & Equipment :

Description of items	Quantity (as per PP)	Quantity procured with date	Transferre d to O & M with date	Disposed off as per rule with date	Balance	Remarks	
1	2	3	4	5	6	7	
Not Applicable							

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

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

(In lakh Taka)

Financial	Financia	al provisio	n & ph	ysical target	Financia	l provision	& physic	cal target as
Year		as per or	PP	per latest revised PP				
	Total	Taka	P.A.	Physical %	Total	Taka	P.A.	Physical %
1	2	3	4	5	6	7	8	9
2012-13	2191.72	2191.72	-	10.22	1497.94	1497.94	-	6.38
2013-14	6410.37	6410.37	-	29.89	4100.00	4100.00	-	17.47
2014-15	6420.37	6420.37	-	29.94	4341.51	4341.51	-	18.49
2015-16	6423.87	6423.87	-	29.95	13534.63	13534.63	-	57.66





01. (b) Revised ADP allocation and progress:

(In lakh Taka)

Financial	Revis	ed Alloca	tion &	target	Taka	Expenditure & physical progress			
Year	Total	Taka	P.A.	Physical	release	Total	Taka	P.A.	Physical
				%					%
1	2	3	4	5	6	7	8	9	10
2012-13	1500.00	1500.00		6.99	1500.00	1497.94	1497.94		7.48
2013-14	4100.00	4100.00		19.11	4100.00	4100.00	4100.00		19.70
2014-15	4342.00	4342.00		20.24	4342.00	4341.51	4341.51		19.17
2015-16	12702.00	12702.00		53.65	12701.48	12571.66	12571.63		53.65

D. ACHIEVEMENT OF OBJECTIVES OF THE PROJECT:

Objectives as per PP	Actual achievement	Reasons for shortfall, if any
To protect Kamalpur, Boroitali, Pukuria, Baniazan and adjacent area of Sariakandi & Dhunat Upazilla in the district of Bogra from Right Bank erosion of of the Jamuna river by execution of 6.00 km. revetment works along the vulnerable river bank.	6.00 km. revetment works is completed along the vulnerable river bank near Kamalpur, Boroitali, Pukuria, Baniazan and adjacent area of Sariakandi & Dhunat Upazilla in the district of Bogra.	No Shortfall
To safeguard segment of existing Brahmaputra Right Bank Flood Control Embankment (BRE) and vast area of land potential for agricultural production as well as valuable establishments in the area from devastating erosion of the Jamuna river.	The existing Brahmaputra Right Bank Flood Control Embankment (BRE), agricultural land and other establishments adjacent to project area is now safe from devastating erosion of the Jamuna river.	
To reduce environmental degradations due to erosion in the area.	Environmental degradations due to erosion in the area is reduced and huge public and private properties dispersed around the erosion prone area are saved from river bank erosion.	



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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).
6000.00 meter bank revetment work at Kamalpur, Boroitoli, Pukuria and adjacent area of Sariakandi & Dhunat Upazill of Bogra district.	m	6000.00 m	6000.00 m

02. Cost / Benefit:

Item	Estimated	Actual
(1) Benefit cost ratio of the project (i) Financial (ii) Economic	(i) 1.38 : 1.00 (ii) 1.63 : 1.00	Will be evaluated later by BWDB's concerned office & IMED.
(2) Internal Rate of Return (i) Financial	(i) 17. 75%	
(ii) Economic	(ii) 21. 02%	

02. Please give reasons for shortfall, if any, between the estimated and actual benefit:

No shortfall found between the estimated and actual benefit.

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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:			
(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	

2.2. External Audit:

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





G. <u>DESCRIPTIVE REPORT</u>

1. General Observations/Remarks of the Project on:

1.1 Background:

The Brahmaputra-Jamuna River system is the largest and most important in Bangladesh. This river is braided with frequently shiftings of channels. Along the Brahmaputra-Jamuna River, average erosion rate is 100m/year, but sometimes increases to as high as 800m/year in case of severe floods. The bank erosion along this river system has deleterious social and economic impacts leading to loss of land and property, environmental degradation and human hazards.

Flood control embankment (known as Brahmaputra Right Embankment-BRE) was constructed parallel to the right bank during the sixties and early seventies stretching from Teesta down to the Hurasagar confluence to protect floods and bank-line erosion. Later on, appropriate measures were taken at different important locations i.e. construction of hard points, groyne, and spurs etc. to mitigate devastating bank erosion and breaching of BRE. About 140.00 km out of total length of 220.00 km had to be retired over last 20 years since erection of BRE due to bank-line erosion. Hence erection of bank protection at several locations (27 strategic locations, ref: BRTS) was completed to stop westward migration of the river and prevent the possibility of merger of the Bangali & Jamuna Rivers and thus ensure protection of BRE.

Apart from above circumstances, a separate project entitled as "Spur construction project at Hasnarpara, Chandanbaisa, Shaharabari & Baniazan for erosion protection of the Jamuna River" was initiated in FY: 2000-2001. Out of total 6 Nos. erected spurs, erection of 2 Nos. spurs were accomplished at Bhandarbari union of Dhunat upazilla in 2001-2002 (1 No. at Shaharabari in BRE km: 136.00 and 1 No. at Baniazan in BRE km:137.700). The immediate resultant effect has been safety of vast area in between BRE Km: 135.000 km: 137.700 ensured from the extent of erosion trened of the river. However, severe erosion occurred in 2000 post-monsoon period at the downstream of said erected spurs. Set back distance at this vulnerable segment was 287.00 metre in 2001 pre-monsoon period. Afterwards severity of erosion again became jeopardized in 2001 monsoon period and set back distance at this segment reduced to 104.00 metre.

Erosion trend at this vulnerable segment became further imperilled in 2002 post-monsoon period. With continuation of such erosion trend, 1.200 km BRE Embankment (from km: 140.800 to km: 142.00) was engulfed into the river. In the situation retired embankment at a length of 3.076 km (from BRE km: 139.924 to km: 143.000) dispersed in Bhandarbari union was erected in order to restore effectiveness of BRE. Considering present erosion trend at said vulnerable location from year 2000 to 2004, it is being contemplated that further erection of retired embankment would be in vain unless proper mitigation against erosion occurrence to be taken up. At present due to continuation of river bank erosion at

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said location, notable morphological changes with channel avulsion being emerged. Hence a new form of natural hazard in conjunction increasing erosion trend emerged at this vulnerable location.

In the year 2009 and 2010, the erosion of the area Kamalpur, Boroitali, Pukuria and adjacent area under Sariakandi & Dhunat Upazila were severe. As a result, part of BRE had already been engulfed into the river Jamuna.

In the circumstances, it is apprehended to further extend intensity of erosion in ensuing monsoon season. In this context there had been a long standing social demand for taking up immediate protective measures against devastating river erosion. The matter was discussed at higher policy level and opined for initiating immediate sustainable solution against devastating river erosion to safeguard lives, properties and natural environment. Accordingly, this project had been formulated for immediate erection of 6.00 km. bank protective work dispersed in Kamalpur, Boroitali, Pukuria and adjacent area under Sariakandi & Dhunat Upazila in the district of Bogra.

1.2 Justification/Adequacy:

Bangladesh is a riverine country and bank line erosion of different rivers has been a recurrent effect. River bank erosion in alluvial lands of Bangladesh is a complex and dynamic thrust of nature due to strong onrush of water and major variation in between normal water flow and surges of inflow during monsoon & post-monsoon period in each year. The monsoon discharge of the major rivers is so large that there is recurrence of floods every year. Sometimes it become very severe and causes immense damages impacted by occurrence of devastating river erosion. This has significant social and economic impacts. The loss of land, crop and property has led to landlessness and impoverishment of thousands of dwellers living within banklines.

The large seasonal variation in river flow results in varying sediment transportation capacity and causes river-bank erosion, migration of river-banks and meandering river channels. Recent Satellite Image Studies of the Ganges-Brahmaputra-Middle Meghna rivers show that 106,300 ha. of land were lost to erosion, while only 19,300 ha. were accreted over the period 1982-1992. The net area of 87,000 ha. lost to erosion is equivalent to an annual erosion rate of 8,700 ha.

In this context, there have been a growing concern and reassessment of the economic and socio-political benefits of protecting important towns, infrastructure, hats and bazars as well as agricultural land. The issue has been given due importance in the national planned documents for water sector and prioritized strategic locations of river banks have been stressed for phased implementation of river bank protection programme at the apex level.





In this backdrop, the project is executed with commencement in FY: 2012-2013 and completion in FY: 2015-2016. The overall objective of the project is to reduce environmental degradations & human hazards due to river erosion with ensuring safety of lives & properties around the project area. Throughout the erection of bank revetment works, safety of vast tract of agricultural lands and other immovable properties total worth of Tk. 81285.00 lakh is ensured against river erosion.

1.3 Objectives:

The main objective of the project is to protect Kamalpur, Boroitali, Pukuria and adjacent area under Sariakandi & Dhunat Upazila in the District of Bogra from Right Bank erosion of the Jamuna River by erection of 6000 metre revetment works along the vulnerable river bank. Another important objective of the project is to safeguard segment of existing Brahmaputra Right Bank Flood Control Embankment (BRE) and vast arable lands potential for agricultural production as well as valuable establishments in the area from devastating erosion of the river Jamuna. The overall objective is to reduce environmental degradations due to river erosion in the area. Huge public and private properties dispersed around the said erosion prone area with approximate total worth of Tk. 81285.00 lakh is suppose to be saved from river bank erosion by virtue of proper implementation of the project.

However, the specific objectives & targets of the project are as follows:

- To sustain the agricultural and fisheries development by mitigating the risk of river bank erosion and embankment breaches;
- To contribute in poverty reduction by ensuring that future economic benefits area achieved;
- To provide substantial employment opportunities and cash income for landless, poor and vulnerable people, both men and women, during construction and
- To provide stable environment for development in the areas adjacent to protected river banks.

1.4 Project revision with reasons:

DPP entitled "Protection of Right bank of the Jamuna River under Bogra District", costing Tk. 21446.34 lakh was approved by ECNEC meeting held on 10-04-2012 in the Planning Commission. The main objective of the project was to protect the severe right bank erosion of Jamuna river at Kamalpur area for a length of 2800 m, at Boroitoli and adjacent area for a length of 700 m under Sariakandi Upazilla and also to protect Pukuria and adjacent area under Dhunat Upazilla for a length of 2000 m, i.e to protect the total length of 5500 m eroded bank.

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The Project was targated to complete within 2012-2013 to 2015-2016. The total allocation for the financial year 2012-2013, 2013-2014, 2014-2015 and 2015-2016 was Tk. 1497.94 lakh, Tk. 4100.00 lakh, Tk. 4341.51 lakh and Tk. 5000.00 lakh respectively.

In the original approved DPP, it was targeted to implement total 5500 m length of bank revetment work in 11 Packages. During the FY 2013-14, 2000 m (From BRE Km. 141.00 to BRE Km. 143.00) of bank revetment work was completed at Pukuria of Dhunat Upazila under 4 Packages (Package No. RBP-Bog-08, RBP-Bog-09, RBP-Bog-10 and RBP-Bog-11). Then during the FY 2014-15 protective work under the Package No. RBP-Bog-05 (From BRE Km. 134.150 to BRE Km. 134.750) at Kamalpur of Sariakandi and 700 m (From BRE Km. 139.60 to BRE Km. 140.30) at Boroitoli of Dunat under Package No.RBP-Bog-06 & 07 started.

After the flood of 2014, due to the morphological change of River Jamuna, a high char has been developed in Boroitoli area of Sariakandi. As a result, the river course has been shifted towards the east. In this situation it seems that the bank revetment work for a length of 800 m (From BRE Km. 133.35 to BRE Km. 134.15) of DPP provision is no more required at that moment. On the other hand though there was a provision in the approved DPP to implement bank revetment work for a length of 1400 m(From BRE Km. 130.80 to BRE Km. 132.20) at kamalpur of Sariakandi, it seems that at that situation additional 100 m(From BRE Km. 132.20 to BRE Km. 132.30) of bank revetment work was essential, other wise the down stream portion of the revetment work at this location may be damaged.

During the flood of 2014, the end portion (50.00 m) of RCC part of Baniazan Spur was damaged and engulfed into the river. As a result, the down stream of Baniazan Spur(From BRE Km. 138.40 to BRE Km. 139.60=1200m), the river course shifted towards the right bank and severer bank erosion started. In that situation the ongoing 700 m revetment work (From BRE Km. 139.60 to BRE Km. 140.30) at Boroitoli of Dunot under Package No. RBP-Bog-06 & 07 was about to engulfed into the river. The existing BRE embankment, various establishments, crop land etc. were under the threat of serious erosion. To protect the massive damge, temporary emergency measure was taken. Then, it is very essential to take permanent measure through implementing bank revetment work at that location.

Due to the morphological change of River Jamuna, 800 m (From BRE Km. 133.35 to BRE Km. 134.15) length of bank revetment work was not so much essential to implement. To achieve a fruitful benefit from this project, rather it was essential to include 1300.00m (From BRE Km. 138.40 to BRE Km. 139.60=1200 m and From BRE Km. 132.20 to BRE Km. 132.30=100 m) length of bank revetment work in the DPP. In this connection BWDB formed a technical committee (Chief Planning,BWDB, Dhaka's office memo no: Chief plan/645, Date: 14-09-2015) . On the basis of the recommendation of the technical committee, this revised DPP has been prepared costing Tk. 23474.08 lac .

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

Kamalpur, Boroitali, Pukuria and adjacent area under Sariakandi & Dhunat Upazila in the District of Bogra was under the threat of Bank erosion of the Jamuna River. Most of the inhabitants of these are had already shifted there house several times due to the erosion problem. Local people became frustrated. The socio-economic condition was deteriorating day by day. There was no other way to stop the erosion except Bank revetment works because many previously constructed structured failed to tackle the erosion problem. It was also necessary to protect the existing Brahmaputra Right Bank Flood Control Embankment (BRE) from devastating erosion of the river Jamuna.

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

Project Identification:

The Project is located along the left bank of Jamuna River.

• Project Preparation:

Due to the severe erosion problem in Kamalpur, Boroitali, Pukuria and adjacent area at Sariakandi & Dhunat Upazila in Bogra District, many cultivable lands, villages, infrastructures are engulfed in Jamuna river. The BRE flood control embankment has been breached several times due to the erosion of Jamuna River. To mitigate the erosion problem of the area and to save the BRE flood control embankment the project inevitable.

♦ Appraisal:

IWM provided a study report on the project area in 2005.

• Credit Negotiation: Not Applicable

• Credit Agreement: Not Applicable

• Credit Effectiveness: Not Applicable

Loan Disbursement : Not Applicable

♦ Loan Conditionalities: Not Applicable

Project Approval.:

The project was approved on 10-04-2012 & and subsequent revision was approved on 08-11-2015.

• Others (if any).: Nill

y by

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

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

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

The stack holders are directly taking advantages of the created facilities of the project.

4.3 O & M programme of the project.:

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

4.4 Impact of the project -

4.4.1 Direct:

- Protection of houses, educational institution, mosques, roads, agricultural lands from river bank erosion.
- Protection of BRE flood control embankment from being breached due to erosion.

4.4.2 Indirect:

- 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.:

A large number of skilled/unskilled workers were employed during construction period.

4.7 Possibility of Self employment :

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

4.8 Possibility of women-employment opportunity:

Yes, there is possibility of women-employment through the project.

4.9 Women's participation in development:

Yes.

4.10 Probable Impact on Socio-Economic activity. :

By protecting the river bank erosion, various infrastructures are saved from the erosion. As a result socio-economic balance in the locality is enhanced.

4.11 Impact on environment:

Environmental enhancement is achieved through the implementation of the project.

4.12 Sustainability of the project:

The project is sustainable but requires periodic maintenance.





4.13 Contribution to poverty alleviation/reduction:

- Huge public and private properties dispersed around the said erosion prone area with approximate total worth of Tk. 81285.00 lakh is saved from river bank erosion by the implementation of the project.
- It generated employment for skilled/unskilled workers during construction period and also in annual O&M phase. Also better employment access in business sector is enhanced.
- Natural security against river bank erosion is restored.
- 4.14 Opinion of the public representatives, local elite, local administration, teachers, religious leaders, women's representatives etc.

Positive remarks regarding the project.

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 5.2	Project Management Project Director	5.12	Project aid disbursement and reimbursment
5.3	Land Acquisition	5.13	Mission of the development partners.
5.4	Procurement	5.14	Time & Cost Over-run
5.5	Consultancy	5.15	Project Supervision/Inspection
5.6	Contractor	5.16	Delay in Decision
5.7	Manpower	5.17	Transport
5.8	law & Order	5.18	Training
5.9	Natural clamity	5.19	Approval
5.10	Project financing, allocation and	5.20	Others.
	release.		
5.11	Design formulation/approval		

No problems encountered during implementation of the project regarding the above facts.

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6. Remarks & Recommendations of the Project Director:

The river Jamuna is the most erosion prone river in Bangladesh. Sariakandi and Dunot upazilla were highly affected by the right bank erosion of the river. Many people became shelterless. Many Government and Non-Government establishment, educational institutions, mosques, roads and agricultural land have been engulfed in the river. To protect the further erosion of Kamalpur, Boroitoli, Pukuria and adjacent areas from the right bank erosion, "Protection of Right Bank of the Jamuna River in Bogra District" project was approved in ECNEC held on 10-04-2012... After the successful

implementation of this project, the project area has been protected from severe erosion of the river Jamuna. The safety of flood control embankment along the right bank of Jamuna River (Brahmaputra Right Embankemt) has been increased and the adverse effect due to climate change will be reduced. The socio-economic condition of the people has been improved. Scope of new jobs & works have been created. The safety Human livelihood and properties have also been improved. The project will also contribute to attain national self sufficiency in food grains. Proper monitoring and regular maintenance of the revetment works and others necessary components should be continued to ensure the sustainability of the project. Otherwise the benefit of the project may be hampered.
Date: 6-09-2016 Signature and seal of the Project Director/Manager
BABUL CHANDRA SHIL Superintending Engineer 7. Remarks/Comments of Agency Head Bogra O & M Circle
BWDB, Bogra.
Kamalpur, Borcoitoli, Pukuria, Baniazar and adjacent areas under Sorciakandi and
Dhunat upatilla of Bogna district have been protected from devontating environ of Jamuna river through this project. Also this project provider safeguard to the segment of existing BRE embankment and many valuable but vulnerable establishments on the project area. Moreover, the project has been completed without any time extension of original DPP. Hence, this project is a succen based or physical output & institutional practice.
Date: Signature and Seal (Md. Jahangir Rabir) Director General
8. Remarks/Comments of the officer in- charge of the Ministry/Division BWDB, Dhaka.

Date:

Signature and Seal