

2008-09
Appsl. No. 06



BANLADESH WATER DEVELOPMENT BOARD

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

Name of Project: Protection of Fucchari Head Quarter and
Kamarjani Bazar from erosion of the River
Jamuna.

Name of Division : Gaibandha O&M Division, BWDB, Gaibandha.
Name of Circle : Rangpur O&M Circle-I, BWDB, Rangpur.
Name of Zone : Northern Zone, BWDB, Rangpur.

August-2009

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 Fulchari Head Quarter and Kamarjani Bazar from erosion of the River Jamuna.
02. Administrative Ministry/Division : Ministry of Water Resources
03. Executing Agency : Bangladesh Water Development
04. Location of the Project :

05. Objective of the Project:

Main objective of the project is to protect 2,500 ha. area of land at Fulchari & Shaghata upazila and 2,000 hac. area of land at Gaibandha Sadar from the flood of the River Brahmaputra including safeguard of existing homesteads, hat, bazar, shops, public and private buildings, roads, rail line, industry workshops, structures, agriculture lands etc. by protection of Brahmaputra Right Bank through erosion control of the River Brahmaputra. In addition, the project has created employment opportunities for landless people etc. including socio-economic development of the area and to ensure not increase land less people and eliminate monga in the area. By implementation of the project, the economic sustainability of the localities has been ensured.

06. Estimated Cost :

(In lakh Taka)

	Original	Latest Revised
(a) Total	4053.13	4794.26
(b) Taka	4053.13	4794.26
(c) Foreign Currency	-	-
(d) Project Aid	-	-
(e) RPA	-	-

07. Date of Approval :

	PCP	DPP
(a) Original	-	23.03.2004
(b) Latest Revised	-	13.02.2006

08. Implementation Period:

	Date of Commencement	Date of Completion
(a) Original	2003-2004	2005-2006
(b) Latest Revised	2003-2004	2006-2007
(c) Actual (approved)	2003-2004	2008-2009

09. Financing Arrangement (Source-wise): GOB (Government of Bangladesh)

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 Closing	
						Original	Revised
1	2	3	4	5	6	7	8
Does not arise							

b) GOB:

(In lakh Taka)

Total amount	Loan	Grant	Cash Foreign Exchange
1	2	3	4
4794.26	-	4794.26	-

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
Does not arise						

9.3 Re-imbursible Project Aid (RPA):

(In lakh Taka)

R P A Amount		Amount Spent	Amount Claimed	Amount Re-imbursed	Remarks
As per PP	As per Agreement				
1	2	3	4	5	6
Does not arise					

B. IMPLEMENTATION POSITION

01. Implementation Period:

Implementation Period as per DPP		Actual Implementation Period	Time Over-run (% of original Implementation period)	Remarks
Original	Latest Revised			
1	2	3	4	5
2003-2004 to 2005-2006	2003-2004 to 2006-2007	2003-2004 to 2008-2009	200%	

02. Cost of the Project:

(In lakh Taka)

Description	Estimated Cost		Actual expenditure	Cost over-run (% of original cost)	Remarks
	Original	Latest revised			
1	2	3	4	5	6
TOTAL	4053.13	4794.26	4497.52	110.96%	
TAKA	4053.13	4794.26	4497.52		
PA					

03. Project Personnel:

Sanctioned Strength as per PP	Manpower employed during execution	Status of the existing manpower			Manpower Employed	
		Manpower requirement for O&M as per pp	Existing manpower for O & M	Others		
1	2	3	4	5	Male	Female
Officer (s)						
Staff(s)	Project is implemented by existing manpower					
Total:						

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

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

a. Foreign

Does not arise

b. Local

Does not arise.

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

(In lakh Taka)

Items of work (as per PP)	Unit	Target (as per PP)		Actual Progress		Reasons for deviation (±)
		Financial 1	Physical (Quantity) 4	Financial 5	Physical (Quantity) 6	
1	2	3	4	5	6	7
a) Revenue component						
Survey & investigation (including mathematical model study)	1 Item	55.00	100%	55.00	100%	
Contingency	1 Item	36.32	100%	27.23	100%	
Repair & maintenance of existing vehicle and fuel	1 Item	8.00	100%	8.00	100%	
Overhead	1 Item	290.53	56.55%	164.30	56.55%	
(a)Sub-Total of Revenue:		389.85		254.53	5.50%	
b) Capital component:						
Acquisition of assets and equipment:						
a) Photocopier	2 Nos.	2.38	100%	2.38	100%	
b) Amonia printing Machine	1 No.	3.10	100%	0.00	0.00%	DPP target could not achieved due to price escalation of the item.
c) Computer (including printer etc)	4 Nos.	2.70	100%	2.70	100%	
d) Levelling Machine (including stand)	2 Nos.	0.92	100%	0.92	100%	
e) cutting Machine & spiral binder.	2 Nos.	0.40	100%	0.40	100%	
Sub-total of Acquisition of assets and equipment:		9.50				
Land acquisition (including Stamps, duty, Registration fee & others.	0.81 ha	6.00	100%	5.39	58.02%	0.34 hac. land did not required due to the shifting of the river course.
Physical Works:						
River bank protection work at Fulchhari (including 80m end protection & 200m completed work under this project	720m	1286.00	100%	1283.45	100%	
River Bank protection work at Kamarjani (including 80m end protection)	1180m	2177.93	100%	2036.79	87.63%	DPP target could not achieved due to escalation of the item.
Emergency protective work done during 2001-02 & 2002-03 at Fulchhari & Kamarjani.	1 Item	67.83	100%	61.00	100%	
FDR/2004 component						
River bank protection at U/S of Fulchhari Upazila head Quarter	200m	283.55	100%	282.54	100%	
River bank protection at D/S of Fulchhari Upazila head Quarter	280m	500.00	100%	498.78	100%	DPP target could not achieved due to escalation of the item.
O&M during construction.	1 Item	70.00	100%	65.52	100%	
Procurement of Motor cycle	2 Nos	3.60	100%	3.12	100%	
b) Sub-Total of capital component:		4404.41		4242.99		
Grand total (a+b) :		4794.26		4497.52	94.26%	

06. Information regarding Project Director (s):

Name & Designation with pay Scale.	Full time	Part time	Responsible for more than one project	Date of		Remarks
				Joining	Transfer	
1	2	3	4	5	6	7
Md. Akhtar Hossain Tk.9500-260x10- 12100	-	Yes	Yes	19.08.2000	03.08.2002	
Md. Mokhlesur Rahman Tk.9500-260x10- 12100	-	Yes	Yes	03.08.2002	04.08.2005	
Babul Chandra Shil Tk. 13750-550x10- 19250	-	Yes	Yes	04.08.2005	27.09.2007	
Abu Md. Shafiul Azam Tk13750-550x10- 19250	-	Yes	Yes	27.09.2007	30.03.2009	
Mir Mosharrof Hossain Tk13750-550x10- 19250	-	Yes	Yes	30.03.2009	-	

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/ damaged with date	Remarks
1	2	3	4	5	6	7
Car	-	-	-	-	-	-
Jeep	-	-	-	-	-	-
Microbus	-	-	-	-	-	-
Minibus	-	-	-	-	-	-
Bus	-	-	-	-	-	-
Pick-up	-	-	-	-	-	-
Truck	-	-	-	-	-	-
Motor Cycle	2	2005-06 & 2006-07	-	2008-09	-	
By-cycle	-	-	-	-	-	-
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 /consultancy) as per bid document	Tender/Bid/Proposal Cost (in crore Taka)		Tender/Bid/Proposal		Date of completion of works/services and supply of goods	
	As per PP	Contracted value	Invitation date	Contract signing/ L.C opening date	As per contract	Actual
1	2	3	4	5	6	7
Construction of Bank Revetment work at Kamarjani Bazar in between BRE Km 55.00 to Km 57.00 (Previously Spur No.1) in Upazila-Gaibandha Sadar, Dist. Gaibandha during the year 2004-2005-06. (M-0.00 to M-515 and M-1050 to M-1095 = 560m)	258.34	258.34	(Tender Notice No. 04-G/2000-2001, Rangpur O&M Circle-1, BWDB, Rangpur, Group No. K-01)	30.06.01	15.06.2001	30.06.2006
Construction of Bank Revetment work at Kamarjani Bazar in between BRE Km 55.00 to Km 57.00 (Previously Spur No.2) in Upazila-Gaibandha Sadar, Dist. Gaibandha during the year 2004-2005-2006. (M-515.00 to M 1050.00 & M 1095.00 to M 1141.00 = 581m)	150.28	150.28	(Tender Notice No. 04-G/2000-2001, Rangpur O&M Circle-1, BWDB, Rangpur, Group No. K-02)	30.06.01	07.06.2001	30.06.2006
Construction of Bank Revetment work at Fulchari in between M 266.00 to M 440.00 with 80m end protection = 254 m (Previously Spur No.2) in Upazila-Fulchari, Dist. Gaibandha during the year 2004-2005-2006.	4.37	4.17	(Tender Notice No. 04-G/2000-2001, Rangpur O&M Circle-1, BWDB, Rangpur, Group No. F-01)	30.06.01	28.06.2001	30.06.2006

** Contract agreement had been declared null and void based on visiting report of Mr. Md. Abdul Halim, Deputy Secretary, Ministry of Water resource on dated 28.05.2007.

Description of procurement (goods/works /consultancy) as per bid document	Tender/Bid/Proposal Cost (in crore Taka)		Tender/Bid/Proposal		Date of completion of works/services and supply of goods	
	As per PP	Contracted value	Invitation date	Contract signing/ L.C opening date	As per contract	Actual
1	2	3	4	5	6	7
Construction of Bank Revetment work at Fulchari in between M 0.00 to M 266.00 = 266 m (Previously Spur No.1) in Upazila-Fulchari, Dist. Gaibandha during the year 2004-2005-2006.	4.38	4.38	(Tender Notice No. 04-G/2000-2001, Rangpur O&M Circle-I, BWDB, Rangpur, Group No. F-02)	30.06.01	10.06.2001	30.06.2006
Construction of Bank revetment work at D/S of Fulchari Upazila complex from M 122.00 to M 242.40 = 120.40 m	2.98	2.98	Tender No. 2G/2006-07 Package No. Ful-03/2006-07	01.03.2007	28.06.2007	21.05.2008
River Bank Revetment Work at Kamarjani Bazar from Km. 0.107 to Km. 0.255 = 148.00 Metre (Full) and km. 0.255 to Km. 0.515 = 260.00 Metre (Partial) in Upazila Gaibandha Sadar, District. Gaibandha during the year 2007-2008.	5.68	5.68	(Tender No. 05-G/2007-2008, Package No. K-09/2007-2008.)	20-02-2008	21-02-2008	28-06-2009
River Bank Revetment Work at Kamarjani Bazar from Km 0.680 to Km 0.888 = 208.00 Metre (Full) and Km 0.515 to Km 0.680 = 165.00 Metre (Partial) in Upazila Gaibandha Sadar, District. Gaibandha during the year 2007-2008.	5.78	5.78	(Tender No. 05-G/2007-2008, Package No. K-10/2007-2008.)	17-02-2008	19-02-008	28-06-2009
River Bank Revetment Work at Kamarjani Bazar from Km 0.00 to Km 0.107 = 107.00 Metre (including 80 metre end protection) in Upazila Gaibandha Sadar, District. Gaibandha during the year 2007-2008.	2.08	2.08	(Tender No. 06-G/2007-2008, Package No. K-11/2007-2008.)	16.04.2008	20.04.2008	28-06-2009
River Bank Revetment Work at Kamarjani Bazar from Km 0.888 to Km 1.034 = 146.00 Metre in Upazila Gaibandha Sadar, District. Gaibandha during the year 2007-2008.	2.93	2.93	(Tender No. 06-G/2007-2008, Package No. K-12/2007-2008.)	16.04.2008	20.04.2008	28-06-2009

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 contract		
1	2	3	4	5

a) Foreign: Does not arise.

b) Local: Does not arise.

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
a) Photocopier	2 Nos.	2 Nos.	2008-2009	-	-	
b) Computer (including printer etc)	4 Nos.	4 Nos.	2008-2009	-	-	
c) Levelling Machine (including stand)	2 Nos.	2 Nos.	2008-2009	-	-	
d) Cutting Machine & spiral binder.	2 Nos.	2 Nos.	2008-2009	-	-	

C. FINANCIAL AND PHYSICAL PROGRAMME :

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

(In lakh Taka)

Financial Year	Financial provision & physical target as per original PP				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
2003-2004	1494.42	1494.42	-	36.87	424.40	424.40	-	8.85
2004-2005	1492.09	1492.09	-	36.81	908.86	908.86	-	18.96
2005-2006	1066.62	1066.62	-	26.32	2127.74	2127.74	-	44.38
2006-2007	-	-	-	-	1333.26	1333.26	-	27.81

01. (b) Revised ADP allocation and progress:

(In lakh Taka)

Financial Year	Revised Allocation & target				Taka release	Expenditure & physical progress			
	Total	Taka	P.A.	Physical %		Total	Taka	P.A.	Physical %
1	2	3	4	5	6	7	8	9	10
2001-2002	150.00	150.00	-	6.05	74.40	74.40	74.40	-	3.70
2002-2003	-	-	-	-	-	-	-	-	-
2003-2004	350.00	350.00	-	10.90	350.00	350	350	-	9.20
2004-2005	1000.00	1000.00	-	21.12	1000.00	983.60	983.60	-	20.54
2005-2006	940.00	940.00	-	27.15	940.00	958.29	958.29	-	13.98
2006-2007	956.00	956.00	-	22.15	668.61	399.68	399.68	-	15.11
2007-2008	1100.00	1100.00	-	25.03	1098.21	1056.97	1056.97	-	17.58
2008-2009	825.00	825.00	-	17.36	825.00	674.57	674.57	-	11.57

D. ACHIEVEMENT OF OBJECTIVES OF THE PROJECT:

Objectives as per PP	Actual achievement	Reasons for shortfall, if any
(a) Main objective of the project is to save hat, Bazar, homesteads, shops, public and private important installation, roads, rail line, industry workshops, structures, agriculture lands of 2500 ha area of Fulchhari upazila and shaghata upazila and also 2000 ha area of Gaibandha Sadar upazila by protection of bank erosion of the river Brahmaputra.	Successfully 2,500 ha. area of Fulchhari & Shaghata upazila and 2,000 ha area of land at Gaibandha Sadar upazila have been protected from the bank erosion of the River Brahmaputra. By implementation of the project existing hat, Bazar, homesteads, shops, public and private buildings, roads, rail line, industry, workshops, structures, school, college etc have also been safeguarded from engulfing of the river.	There is no short fall and the objective of the project has been achievement.
(b) In addition the project will provide agriculture development, fisheries development and creation of employment opportunities for landless people etc. including socio-economic development of the area.	By implementation of the project huge land, including agriculture land, pond, khal, low laying area have been saved by protection of bank erosion of the river Brahmaputra. Due to this, sustainability of agriculture development and fisheries development have been ensured. This project has created employment opportunities of landless people which also improved socio-economies condition of the localities.	There is no short fall.

E. BENEFIT ANALYSIS

01. Annual Out-put: Post evaluation not yet done.

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).
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02. Cost /-Benefit: Post evaluation not yet done.

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

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

F. MONITORING AND AUDITING

0.1 Monitoring:

Name & designation of the inspecting official	Date of Inspection	Identified Problems	Recommendations
1	2	3	4
1 Md. Abdul Halim Deputy Secretary/ Ministry	28.05.2007	Slow progress of the work of running contractor.	Recommended for taking legal action against the contractor. ** Action had been taken as per recommendation.
(b) IMED: 1. Daya Nanda Assistant chief	14.03.2006	Deviation from the system of Project preparation, processing, approval, execution & financial rules of regulation	Recommended for maintaining those system. ** Action had been made as per recommendation.
1. Md. Rezaul Karim Deputy Chief,	12.10.2006	Slow progress of the work.	Recommended to take necessary measure for executing the work within stipulated time. ** Necessary measure had been taken.
(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
2002-2007	23/03/2008	No Major finding/Objection	Resolved
2007-08	10/05/2009	-do-	Resolved

2.2. External Audit:

Audit period	Date of submission of Audit Report	Major findings/ objections	Whether objections resolved or not.
1	2	3	4
2003-2006	31-08-2006	No Major findings	Resolved
2006-2007	26-11-2007	Work order have been declared null and void as the time extension do not approved	Resolved
2007-2008	12-03-2009	No Major findings	Resolved

G. DESCRIPTIVE REPORT

1. General Observations/Remarks of the Project on:

1.1 Background:

Bangladesh is a riverine country and bank line erosion of different rivers has been a recurrent effect to provide flood control facilities to about 2,34,000 hac. of land from river Teesta & Brahmaputra under Rangpur, Gaibandha, Bogra & Sirajgonj District. Construction of 217.00 Km flood control embankment from Kaunia of Rangpur District to Berakhola of Sirajgonj District was completed during the year 1963-64 to 1967-68 under IDA credit NO 139-PAK. Afterwards the embankment became under threat by bank erosion at different places and embankment started to engulf. Annual average bank erosion occurred about 1.50 Km and as a result vast area with important hat, bazar, bondar, Govt. and private installations, homsteads, agricultural lands were engulfed by right bank erosion of Teesta & Brahmaputra and ultimately up to 1991 only 70.00 Km embankment could be saved. Remaining 147.00 Km embankment was seriously eroded and at some places retired embankment were constructed 4 to 5 times. To solve the problem FAP study report recommended under 1st phase to implement Hard point at Jamalpur, Betil, Sirajgonj, Shimla, Kazipur, Chandanbaisha, Mathurapara, Sariakandi, Fulchari, Kamarijani, Haripur, Belka, Sundargonj, Tambulpur & Pinalghat on priority basis. Out of these 7 Nos permeable groynes have been constructed at Baguria of Gaibandha district under 1st phase and others recommended places were untouched. A separate project named "River Bank Protection Project (Phase-II)" has been taken to implement 6 nos. more hard point at different places in the year 1999-2000 but Fulchari and Kamarjani area were not included and remained untouched. As a result most of the area of Fulchari Upazila head quarter & Kamarjani bazar have already been engulfed in the River Jamuna during 2000 flood. Later on GOB financed project named "Protection of Fulchari Head Quarter & Kamarjani bazar from erosion of the river Jamuna" came up for discussion in the Pre-ECNEC meeting held on 14-08-2001 with provision of 4 Nos Spurs and 200 metre revetment of PCP costing to Tk. 4816.90 lakh. As per decision of Pre-ECNEC meeting, Mathematical Model Study was done by the IWM. Bank revetment work of 720 metre at Fulchari and 1180 metre at Kamarjani area were recommended instead of Spurs construction by the study. Accordingly, PCP of costing Tk. 5563.23 lakh has been re-cast providing bank revetment work by C.C blocks and discussed this project further in the Pre-ECNEC meeting held on 02-08-2003 and recommended for approval to the competent authority. As per instruction of the honourable Minister for Faineance & Planning, a Per-ECNEC meeting was further held in the Planning commission on 20.10.2003 to rationalize cost and decided to reduce cost of the project to Tk. 1500.00 lakh. Accordingly, PCP has also been re-cast again reducing cost of the project from Tk. 5563.23 lakh to Tk. 4053.13 providing hard rock instead of C.C block at the launching apron. The recast PCP of costing 4053.13 lakh has been approved in the ECNEC meeting held on 15.11.2003.

FDR and other Works:

Protection of Fulchari Head Quarter and Kamarjani bazar from the erosion of Jamuna river was originally commenced in FY 2003-04 and schedule for completion in FY 2005-06. The original PP Cost of the approved project was Tk. 405.313 million. The major project components in the original approved PP are bank Revetment work of 1900 metre at Fulchari and Kamarjani, emergency protective work of 480 metre at Fulchari which were completed during the year 2001-2002, 2002-2003 & O&M during construction. A devastating Flood has occurred in 2004 during implementation period of the project. By the devastating flood, the morphology of the river has been changed, which affected the running project. Due to this situation, a need assessment Mission of the world Bank and Asian Development Bank visited jointly the project area under 2004, flood damage reformation programme. In this perspective, 200 metre bank revetment work at upstream of Fulchari Upazila complex from Km 0.44 to 0.64 and 280 metre bank revetment work at downstream of Fulchari upazila complex from Km 0.00 to Km 0.28 have been done under this programme of FDR, 2004 component at a cost of Tk. 78.355 million. In the regards, the DPP of the Project has also been again revised for including this cost of Tk. 78.355 million of FDR, 2004 component. So, final revised PP cost of the project has stood Tk. 479.426 million.

1.2 Justification/Adequacy

The design of the spurs construction were prepared on the basis of 2000-2001 post-monsoon morphological condition of the Jamuna River based on favorable location of chars and shallow channel adjacent to riverbank. In said design, it was indicated to complete spur construction work by 2001 pre-monsoon dry season. It was also mentioned that design needed to be reviewed due to morphological changes and in fact, rapid morphological changes occurred in 2001 post-monsoon period. The PCP of the project was considered to discuss in the Pre-ECNEC meeting held on 18-08-2001. Mathematical Model Study was conducted by IWM as per decision of this Pre-ECNEC meeting whose final report was published in October, 2002. The model study was mainly confined with number, length and distance of spurs. In the other hand, it was specifically mentioned in the study that subsequent model study will be needed unless erection of spurs could not be accomplished prior to 2002 pre-monsoon flood. In the situation spurs erection could not be possible in 2002 and also in the mean time, morphology has been changed in the area during 2002 monsoon and post-monsoon period. Due to these morphological changing scenario, proposed spurs construction places as determined by model study recommendation were changed, i.e. depth of river channel increased and favorable conditions of adjacent chars were also changed. In courses of time, considering nature, velocity, motion of river as well as viability of erected spurs at other places, it was technically seemed viable for construction of revetment works in lieu of spurs at Kamarjani and Fulchari area since spur erection seemed to be most riskful.

In this backdrop, further Mathematical Model Study was conducted by IWM on the basis of latest morphological condition and design has been prepared for revetment works at Kamarjani area of length 1,000 metre (including 80m end protection) and at Fulchari area of length 520 metre (including 80m end protection). It was recommended in final report of model study for construction of 1,180 metre revetment works in lieu of 920 metre at slight downstream in Kamarjani area. The matter was also discussed by concerned design office of BWDB and reviewing the model study report. In view of the above modification of previous design, construction of 1,180 metre revetment works (including 80 metre end protection) has been included in lieu of 1000.00 metre. It is noteworthy to mention here that no significant changes in design is supposed to be held except to increase the length of revetment.

In view of the above, as per recommendation of latest model study report, March, 2003 and recommendation of BWDB design office, PCP was recast containing revetment works as per approved design at Fulchari area of length of 720 metre (including 80 metre end protection) and at Kamarjani area of 1,180 metre (including 80 metre end protection)

1.3 Objectives:

Main objective of the project is to protect important hat, Bazar, Govt. and private installations, homesteads, road, rail line, workshop, school, college including valuable land of 2,500 ha. area of Fulchari & Shaghata upazila and 2,000 ha area of Gaibandha Sadar from the erosion of rivers Brahmaputra. By saving the agriculture land from the bank erosion, it is possible to ensure to sustain agriculture development, fisheries development. By taking over the project, it is possible to create employment opportunities of land less people and also sustainable socio-economic development of the localities.

1.4 Project revision with reasons

Protection of Fulchari upazila Head Quarter and Kamarjani bazar from erosion of the river Jamuna was originally commenced in FY: 2003-2004 and scheduled for completion in FY: 2005-2006. The original PP Cost of the approved project was Tk. 405.313 million. The major project components of the approved PP are bank revetment work of 1900 metre at Fulchari and Kamarjani, emergency protective work 480 metre at Fulchari upazila head quarter which was completed during 2001-02, 2002-2003 and O&M during construction.

A devastating flood occurred in 2004 during implementation span of the project. During this severe floods, about 40% area of the country was inundated. It caused major damages to infrastructure of BWDB throughout the country.

In view of the above circumstances, an emergency work under FDR/2004 component to Taka 78.355 million has to be done which was incorporated in the revised DPP. So, the final DPP cost stands to Tk. 479.426 million.

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

Bangladesh is 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 inflow at 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 landless and impoverishment of thousand of dwellers living within bank lines.

In this context, threat of bank erosion has been a growing concern and reassessment of the economic and socio-political benefits of protecting important towns, infrastructure, hats and bazaars as well as agriculture 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, present project thus has been proposed to be executed on emergency basis. 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 area. Throughout the construction of proposed bank revetment works, safety of establishment worth value of Tk. 100.00 million has been ensured to save from the erosion of the river Brahmaputra.

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

◆ Project Identification

Bangladesh is a riverine country and bank line erosion of different rivers has been a recurrent effect to provide flood control facilities to about 2,34,000 hac. of land from river Teesta & Brahmaputra under Rangpur, Gaibandha, Bogra & Sirajgonj District. Construction of 217.00 Km flood control embankment from Kaunia of Rangpur District to Hurasagor of Sirajgonj District has been completed during the year 1963-64 to 1967-68 under IDA credit NO 139-PAK. Afterwards the embankment became threaded due Bank erosion at different places and embankment also started to be engulfed. Annual average bank erosion occurred about 1.50 Km and as a result vast area with homesteads, agricultural lands were engulfed by right bank erosion of Teesta & Brahmaputra and ultimately upto 1991 only 70.00 Km embankment could be saved. Remaining 147.00 Km embankment was seriously eroded and at some retired embankment were constructed 4 to 5 times. To solve the problem FAP study report recommended under 1st phase to implement Hard point at Jamalpur, Betil, Sirajgonj, Shimla, Kazipur, Chandanbaisha, Mathurapur, Sariakandi, Fulchari, Kamarijani, Haripur, Belka, Sundargonj, Tambulpur & Pinalghat on priority Basis. Out of 7 Nos permeable Groynes taken in 1st phase 1 No permeable groyne constructed at Baguria of Gaibandha District and others recommended places were untouched. To implement more 6 nos of hard point a separate project named as River Bank protection project (Phase-II) was included in the ADP of 1999-2000 in which Fulchari & Kamarjani not be included for protection. As a result most of the nearly area of Fulchari & Kamarjani bazar has already been engulfed in the River Jamuna during 2000 flood. Later on GOB financed project named “ Protection of Fulchari Head Quarter & Kamarjani bazar from erosion of the river Jamuna” came up for discussion in the Pre-ECNEC meeting held on 14-08-2001 with provision 4 Nos of Spurs and 200 metre revetment, costing Tk. 4816.90 lakh included in the PCP. As per decision of Pre-ECNEC meeting Mathematical Model Study done by the IWM and Ultimately recommended for construction of bank revetment work 720 metre at Fulchari and 1180 metre at Kamarjani area instead of Spur construction. Accordingly providing bank revetment work by C.C block recast PCP costing Tk. 5563.23 lakh prepared and discussed in the Further Pre-ECNEC meeting held on 02-08-2003 and recommended for approval by the competent authority. As per instruction of the honorable Minister for Faineance & Planning further cost rationalization Per-ECNEC meeting held on 20.10.2003 in the Planning commission and decided to reduce cost of the project Tk. 15.00 crore. Accordingly recast PCP prepared reducing cost of the project from Tk. 5562.23 lakh to Tk. 4053.13 lakh providing hard rock instead of C.C block at the apron of revetment work. The same has been approved in the ECNEC meeting held on 15.11.2003.

◆ Project Preparation

The design of the spur construction was prepared on the basis of 2000-2001 post-monsoon morphological condition of the Jamuna River i.e. based on favorable location of char and shallow channel adjacent to riverbank. In said design, it was indicated to complete spur construction work by 2001 pre-monsoon dry season. Other said, it was mentioned that design needed to be reviewed due to morphological changes and in fact, rapid morphological changes occurred in 2001 post-monsoon period. The said PCP was considered in the Pre-ECNEC meeting held on 18-08-2001 and as per decision of said Pre-ECNEC meeting Mathematical Model Study was conducted by IWM whose final report was published in October, 2002. The said model study was mainly confined with number, length and distance of spurs. In the other hand, it was specifically mentioned that subsequent model study needed to be conducted unless creation of spurs could not be accomplished prior to 2002 pre-monsoon flood. In the situation spur erection could not be possible even in 2002 and also morphological changes occurred in the area during 2002 monsoon and post-monsoon period. Due to these morphological changing scenario, proposed spur construction places as determined by model study recommendation, proposed spur construction places as determined by model study recommendation, were changes, i.e depth of river channel increased and favorable conditions of adjacent chars were also changed. in courses of time, considering nature, velocity, motion of river as well as viability of erected spurs at other places and revetment works, it was technically seemed viable for construction of revetment works in lieu of spurs at Kamarjani and Fulchari area since spur erection seemed to be most risk full.

In this backdrop, further Mathematical Model Study was conducted by IWM on the basis of latest morphological condition and design preparation for revetment works at Kamarjani area revetment at a length of 1,000 metre (including 80m end protection, and at Fulchari area revetment works in addition to 520 metre at downstream of executed revetment works at a length of 200m under this project (during 2000-01 & 2001-02) in compatible with 300 metre revetment works execute under "Fulchari Thana Headquarter Protection Sub-Project". The said model study final report, it was recommended for construction of 1,100 metre revetment works in lieu of 920 metre at slight downstream in Kamarjani area (Option-3). The matter was discussed by concerned design of BWDB and reviewing said model study report, concerned BWDB design engineers agreed with said recommendations. In view of the above modification of approved design by reviewing previous design in underway for construction of 1,180 metre revetment works (including 80 metre end protection). It is noteworthy to mention here that no significant change in design is supposed to be held except the increased length of revetment.

In view of the above, as per recommendation of latest model study report (March, 2003) and recommendation of BWDB design office, PCP was recast containing revetment works as per approved design at Fulchari area at a length of 720 metre (including 80 metre end protection) and at Kamarjani area at length of 1,180 metre (including 80 metre end protection)

◆ **Project Approval.**

Originally PCP of the project costing Tk 4816.90 lakh with provision of spur construction came up for discussion in the Pre-ECNEC meeting held on 14-08-2001 and decided to to Model Study. As per decision of the said Pre-ECNEC meeting. Mathematical Model Study done by the Institute of Water Modeling (IWM) and ultimately recommended for construction of bank revetment work instead of spurs. Accordingly providing bank revetment work by C.C block recast PCP costing Tk. 5562.23 lakh is discussed in the further Pre-ECNEC meeting held on 02-08-2003 and recommended for approval by the competent authority. As per instruction of the honorable Minister for Finance & Planning further cost rationalization Pre-ECNEC meeting held on 20-10-2003 in the Planning Commission and decided to reduce cost of the project by 15.00 crore. Accordingly recast PCP prepared reducing cost of the project from Tk. 5562.23 lakh to Tk. 4053.13 lakh providing hard rock instead of C.C block at the apron of revetment work. The same has been approved in the ECNEC meeting held on 04-11-2003.

The PP of the Project costing had been prepared in the light of the approved PCP and submitted to the Ministry of Water Resources on 15-02-2004. The PP of the project costing Tk. 4053.15 lakh came up for discussion of DPEC meeting held on 25-02-2004. The same has been recommended for approval in the said DPEC meeting & is approved on 23.03.2004.

A devastating flood occurred in 2004 during implementation span of the project. During that severe floods, about 40% area of the country was inundated. This caused major damages to infrastructure of BWDB throughout the country. In this circumstance, a emergency FDR/2004 component around Taka 78.355 million is included in the revised DPP & revised DPP with cost of Tk. 479.426 million is approved on 13-02-2006.

4. Analysis of the Post-Implementation situation and result of the project : Not yet done.

- 4.1 Whether 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
- 4.3 O & M programme of the project.
- 4.4 Impact of the project -
 - 4.4.1 Direct
 - 4.4.2 Indirect
- 4.5 Transfer of Technology and Institutional Building through the project
- 4.6 Employment generation through the project.
- 4.7 Possibility of Self employment
- 4.8 Possibility of women-employment opportunity
- 4.9 Women's participation in development
- 4.10 Probable Impact on Socio-Economic activity.
- 4.11 Impact on environment
- 4.12 Sustainability of the project
- 4.13 Contribution to poverty alleviation/reduction
- 4.14 Opinion of the public representatives, local elite, local administration, teachers, religious leaders, women's representatives etc.
- 4.15 Contribution of Micro-credit programmes and Comments on overlapping with any NGO activities.

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

- | | |
|---|---|
| 5.1 Project Management | 5.12 Project aid disbursement and re-imbursment |
| 5.2 Project Director | 5.13 Mission of the development partners. |
| 5.3 Land Acquisition | 5.14 Time & Cost Over-run |
| 5.4 Procurement | 5.15 Project Supervision/Inspection |
| 5.5 Consultancy | 5.16 Delay in Decision |
| 5.6 Contractor | 5.17 Transport |
| 5.7 Manpower | 5.18 Training |
| 5.8 law & Order | 5.19 Approval |
| 5.9 Natural calamity | 5.20 Others. |
| 5.10 Project financing, allocation and release. | |
| 5.11 Design formulation/approval | |

5.9 Natural calamity: The Project was originally commenced in FY: 2003-2004 and scheduled for completion in FY: 2005-2006. A devastating flood occurred in 2004 during implementation span of the project. During that severe flood, about 40% area of the country was inundated. This caused major damages to infrastructure of BWDB throughout the country and also of the project. In this circumstance, a emergency FDR component around Taka 78.355 million is included in the revised DPP and revised DPP was approved on 13.02.2006.

5.17 Transport: A 8.00 Km Kacha Road (From Dariapur Bazar to Kamrjani bazar) is only the feeder road for Transportation of Hard materials to the Project site. It was under construction for time to time during the implementation span of the project. It is hampered the execution of project in several times.

6. Remarks & Recommendations of the Project Director:

The Project was originally commenced on FY 2003-2004 and scheduled to complete on FY 2005-2006 of DPP costing to Tk 405.313 million. During the implementation of the project, a devastating flood 2004 has been occurred on the year 2004 and changed the morphology of the greatest river Brahmaputra. To keep the bank line intake and save the Fulchari upazila Head quarter from the erosion of the mighty river Brahmaputra, 280m revetment work had to be constructed in FDR, 2004 component at down stream of the upazila Head Quarter and 200m revetment work at upstream of upazilla Head Quarter. So, the DPP of the project was required to revise. The revised DPP of the project was approved on 13.03.2006 to incorporate the original DPP items of bank revetment work of 1180m at Kamarjani, 720m at Fulchari and 480 metre revetment work at Fulchari upazila Head Quarter in FDR, 2004 component. The programme of 720 metre revetment work under the revised DPP at Fulchari point has successfully been completed and 1034m revetment work at Kamarjani in lieu of 1180 metre has also been completed. The rest of DPP length 146 metre revetment work at Kamarjani has not possible to complete due to price escalation as because the project work had been executed since a long period. Due to this reasons, the physical progress of the project stands 94.26% but the objectives of the project have successfully been achieved. The Fulchari upazila Head Quarter and adjacent hat, bazar and important Govt. and private installations, school, college valuable land and also hat, bazar, bondar and valuable land of Kamarjani area have been protected from the erosion of river Brahmaputra, though the full DPP length of revetment work at Kamarjani area has not possible to complete but the objectives of the Kamarjani area has fully achieved. The objectives of the project is to protect the two location one is Fulchari Upazila Head quarter and another is Kamarjani bazar area, bondor has successfully achieved and insured the sustainable socio-economic development, agriculture and fisheries development. In these regards, undersigned has recommended to declare successfully completion of the project.

Date :

Signature and seal of the Project Director/Manager

7. Remarks/Comments of Agency Head

(Mir Mosharraf Hossain)
Executive Engineer
Gaibandha O&M Division
BWDB, Gaibandha

19.08.09

Date :

Signature and Seal

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

Date:

Signature and Seal