

BANGLADESH WATER DEVELOPMENT BOARD



Project Completion Report of

Meghna-Tentulia River Bank Erosion Protection Project (Phase-II, Daulatkhan Area)

Zone : Southern Zone, BWDB, Barisal.

Circle : Bhola O & M Circle, BWDB, Barisal.

Division : Bhola O & M Division-I, BWDB, Bhola.

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

PROJECT COMPLETION REPORT : IMED-04/2001 (REVISED)

A. PROJECT DESCRIPTION :

01. **Name of the Project** : Meghna-Tentulia River Bank Erosion Protection Project (Phase-II, Daulatkhan Area).
02. **Administrative Ministry/Division** : Ministry of Water Resources.
03. **Executing Agency** : Bangladesh Water Development Board.
04. **Location of the Project** : (a) Upazila-Daulatkhan
(b) District-Bhola.
05. **Objective of the Project** : The main object of the Project is to protect the immovable public and private properties of Daulatkhan Upazilla from the erosion of the Meghna river.
06. **Estimated Cost** :

(In Lakh Taka)

	Original	Latest Revised
(1)	(2)	(3)
a) Total	1573.50	1573.50
b) Taka	1573.50	1573.50
c) Foreign Currency	-	-
d) Project Aid	-	-
e) RPA	-	-

07. **Date of approval** :
- | | |
|-----|-----|
| PCP | DPP |
|-----|-----|
- a) Original : 22-10-2006
- b) Latest Revised : 04-01-2010

08. **Implementation Period** :

	Date of Commencement	Date Completion
(1)	(2)	(3)
a) Original	2006-07	2007-08
b) Latest Revised	2006-07	2009-10
c) Actual	2007-08	2009-10

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

9.1 **Status of Financing :**

a) **Foreign Financing :**

Sources	Currency as per Agreement	Amount in US\$ (Million)	Nature (Loan/Grant supplier's/credit)	Date of Agreement	Date of Effectiveness	Date of Closing	
						Original	Revised
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Does not arise.							

b) **GOB :**

(In Lakhs)

Total Amount	Loan	Grant	Cash Foreign Exchange
(1)	(2)	(3)	(4)
1573.50	-	-	-

9.2 **Utilization of Project Aid : (Source-wise)**

(In millions)

Sources	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 **Reimbursable Project Aid (RPA) :**

(In Lakhs)

RPA Amount		Amount Spent	Amount Claimed	Amount Reimbursed	Remarks
As per DPP	As per Agreement				
(1)	(2)	(3)	(4)	(5)	(6)
Does not arise.					

B. PROJECT POSITION :**01. Implementation Period :**

Implementation Period as per DPP		Actual Implementation	Time over run (% of Original Implementation Period)	Remarks
Original	Latest Revised			
(1)	(2)	(3)	(4)	(5)
2006-2007 to 2007-2008	2006-2007 to 2009-2010	2007-2008 to 2009-2010	2 years (100%)	

02. Cost of the Project :

(In lakhs of Rs)

Description	Estimated Cost		Actual Expenditure	Cost over-run (% of Original Cost)	Remarks
	Original	Latest Revised			
(1)	(2)	(3)	(4)	(5)	(6)
Total	1573.50	1573.50	1442.50	-	
Taka	1573.50	1573.50	1442.50	-	
PA	-	-	-	-	

03. Project Personnel :

Sanctioned Strength as per DPP	Man Power Employed during execution	Status of the Existing Man Power			Man Power Employed	
		Man Power Requirement for O & M as per DPP	Existing Man Power for O & M	Others	Male	Female
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Officer (s)	-	6	6	-	-	-
Staff (s)	-	14	14	-	-	-
Total	-	20	20	-	-	-

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

Field of Training/Study Tour/ Workshop/Seminar etc.	Prevision as per DPP		Actual		Remarks
	Man Power of person	Man month	Number of person	Man month	
(1)	(2)	(3)	(4)	(5)	(6)
a) Foreign	Nil	=	Nil	-	
b) Local	Nil	=	Nil	-	

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

Sl. No.	Items of work (As per DPP)	Unit	Target (As per PP)		Actual Progress		Reasons for deviation (+)
			Financial	Physical (Quantity)	Financial	Physical (Quantity)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
01.	Survey and Investigation (L. S)	L. S.	1.50	1 Item	1.39	100%	
02.	Petrol and Lubricant	L. S.	5.00	1 Item	3.07	100%	
03.	Stationary and Tender Document	L. S.	5.00	1 Item	4.92	100%	
04.	Bank Protection Work by C. C. Blocks and Geo-bag (1.262 km)	Km	1254.60	1.262 km	1167.64	1.262 km (100%)	
05.	Slope Protection Work of Embankment (1.000 km)	Km	193.56	1.000 km	185.20	1.000 km (100%)	
06.	End Termination by C. C. Block and Geo-bag (0.075 km)	Km	113.84	0.075 km	80.28	0.075 km (100%)	
Total =			1573.50	100%	1442.50	99.83%	

06. Information regarding Project Director (s) :

Sl. No.	Name & Designation with pay scale	Full Time	Part Time	Responsibility	Date of		Remarks
					Joining	Transfer	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
01.	Mr. Md. A. T. Khandaker Superintending Engineer	Full	-	Monitoring	01-09-05	25-01-06	-
02.	A. K. M. Mukhlesur Rahaman Superintending Engineer	Full	-	Monitoring	29-01-06	05-01-09	-
03.	Mr. Md. Sheikh Farid Superintending Engineer	Full	-	Monitoring	11-01-09	-	-

07. Procurement of Transport (If Nos.) :

Type of Transport	Number as per DPP	Procured with date	Transferred to Transport Pool with date	Transferred to O & M with date	Condemned/damaged with date	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Does not arise			

08. Procurement of Goods, Works and Consultancy Services :

8.1 Goods & Works of the Project costing above Tk. 100.00 lakh and Consultancy above Tk. 50.00 lakh

Description Procurement (Goods/works/ Consultancy) as per Bid document	Tender/Bid Proposal Cost		Tender/Bid Proposal Cost		Date of Completion of work / services and supply of goods	
	As per DPP	Contracted	Invitation date	Contract Signing/LC opening date	As per Contract	Actual
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bank Protection work by C. C. Block and Geo-bag from km 28.200 to km 28.600 = 0.400 km in connection with "Meghna-Tentulia River Bank Erosion Protection Project (Phase-II, Daulatkhan Area)" at Daulatkhan Upazilla in the District of Bhola under Bhola O & M Division-I, BWDB, Bhola during the year 2007-2008 (Package No. Dau-W1BP).		328.12	08-10-07	17-01-08	15-05-08	15-05-08
Bank Protection work by C. C. Block and Geo-bag from km 28.600 to km 29.000 = 0.400 km in connection with "Meghna-Tentulia River Bank Erosion Protection Project (Phase-II, Daulatkhan Area)" at Daulatkhan Upazilla in the District of Bhola under Bhola O & M Division-I, BWDB, Bhola during the year 2007-2008 (Package No. Dau-W2BP).	1086.50	322.62	08-10-07	17-01-08	15-05-08	15-05-08
Bank Protection work by C. C. Block and Geo-bag from km 29.000 to km 29.200 = 0.200 km in connection with "Meghna-Tentulia River Bank Erosion Protection Project (Phase-II, Daulatkhan Area)" at Daulatkhan Upazilla in the District of Bhola under Bhola O & M Division-I, BWDB, Bhola during the year 2007-2008 (Package No. Dau-W3BP).		167.10	08-10-07	17-01-08	15-05-08	15-05-08
Supplying of Geo-Textile Bag for Bank Protection & End Termination from km 29.200 to km 29.462 = 0.262 km in connection with "Meghna-Tentulia River Bank Erosion Protection Project (Phase-II, Daulatkhan Area)" at Daulatkhan Upazilla in the District of Bhola under Bhola O & M Division-I, BWDB, Bhola during the year 2009-2010 (Package No. Dau-S6GB).		201.86	27-08-09	18-02-10	05-04-10	05-04-10
Bank Protection work by C. C. Block and Geo-bag from km 29.200 to km 29.462 = 0.262 km in connection with "Meghna-Tentulia River Bank Erosion Protection Project (Phase-II, Daulatkhan Area)" at Daulatkhan Upazilla in the District of Bhola under Bhola O & M Division-I, BWDB, Bhola during the year 2009-2010 (Package No. Dau-W7BP).	475.50	125.39	27-08-09	18-02-10	29-06-10	29-06-10

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

Name of Field	Approved man month		Actual man month utilized	Remarks
	As per PP	As per Contract		
(1)	(2)	(3)	(4)	(5)
a) Foreign				
b) Local		Nil		

09. Construction/Erection/Installation Tools/Equipment :

Description of Items	Quantity (As per DPP)	Quantity Procured with date	Transferred to O & M with date	Disposed off as per rule with date	Balance	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Does not arise						

C. FINANCIAL AND PHYSICAL PROGRAMME :

01. a) Original and Revised Schedule as Per DPP :

(In Lakh Taka)

Financial Year	Financial Provision & Physical Target as per Original DPP				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)
2006-2007	1220.64	1220.64	-	77.58%	-	-	-	-
2007-2008	352.86	352.86	-	22.42%	697.30	697.30	-	44.31%
2008-2009	-	-	-	-	398.50	398.50	-	25.33%
2009-2010	-	-	-	-	477.70	477.70	-	30.36%
Total :	1573.50	1573.50		100%	1573.50	1573.50		100%

b) Revised ADP Allocation and Progress :

(In Lakh Taka)

Financial Year	Revised Allocation & Target				Taka Released	Expenditure & Physical Progress			
	Total	Taka	P. A.	Physical		Total	Taka	P. A.	Physical
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2006-2007	-	-	-	-	-	-	-	-	-
2007-2008	700.00	700.00	-	63.75%	700.00	697.38	697.38	-	63.75%
2008-2009	400.00	400.00	-	12.47%	400.00	390.12	390.12	-	12.30%
2009-2010	375.00	375.00		23.78%	355.00	355.00	355.00	-	23.78%
Total :	1475.00	1475.00	-	100%	1455.00	1442.50	1442.50	-	99.83%

D. ACHIEVMENT OF OBJECTIVES OF THE PROJECT

Objectives as per DPP	Actual Achievement	Reasons for shortfall, if any
(1)	(2)	(3)
1. Survey and Investigation (L. S)	100%	—
2. Petrol and Lubricant	100%	—
3. Stationary and Tender Document	100%	—
4. Bank Protection Work by C. C. Blocks and Geo-bag (1.262 km)	100%	—
5. Slope Protection Work of Embankment (1.000 km)	100%	—
6. End Termination by C. C. Block and Geo-bag (0.075 km)	100%	—

E. BENEFIT ANALYSIS**01. Annual Output :**

Items of Output	Unit	Estimated Quantity Expected at full Capacity	Actual Quantity of Output during the 1 ST year of Operation at full Capacity (or during real production for newly Completed Project)
(1)	(2)	(3)	(4)
a)			
b)			
		Does not arise	
c)			
d)			

02. Cost / Benefit :

Items	Estimated	Actual
(1)	(2)	(3)
a) Benefit Cost Ratio of the Project		
i) Financial	2.49 : 1.00	2.49 : 1.00
ii) Economic	2.88 : 1.00	2.88 : 1.00
b) Internal Rate of Return		
i) Financial	33.65%	33.65%
ii) Economic	38.30%	38.30%

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

Does not arise.

F. MONITORING AND AUDITING**01. Monitoring :**

Name & Designation of the Inspecting Official	Date of Inspection	Identified Problems	Recommendations
(1)	(2)	(3)	(4)
Ministry / Agency :			
1. Md.Gulzer Hossain, Chief Engineer Southem Zone BWDB,Barisal.	18-03-2010 07-05-2010		
2.			
3.			
IMED :			
1. Mr.Rabindranath Bôrmon, Director, IMED	05-08-2010		

02. Auditing during and after Implementation :**2.1 Internal Audit :**

Period of Audit	Date of Submission	Major findings / Objections	Whether Objections Resolved not
(1)	(2)	(3)	(4)
-	-	-	-

2.2 External Audit :

Audit Period	Date of Submission of Audit Report	Major findings / Objections	Whether Objections Resolved not
(1)	(2)	(3)	(4)

G. DESCRIPTIVE REPORT

01. General Observation/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. Bhola district surrounded by the Meghna and Tentulia River is the largest island in Bangladesh. The population of mainland of the district is about 14.00 lakh. During sixties Polder No. 56/57 was erected under "Costal Embankment Project (Phase-I)" that encompassed the whole boundary of this island. Vast area of this island has been saved from flood/tidal surge and saline water intrusion due to erection of this polder embankment. Different sections of the embankment constructed under Polder No. 56/57 were affected and engulfed in the river due to continued bank erosion of the area. Most of the embankment and sluices partially or fully damaged due to cyclone and tidal surge occurred in 1970 on 12th November. Construction of 250.00 km embankment and 23 sluices under Polder No. 56/57 was completed in 1980. Main land of Bhola district is surrounded by this 250.00 km embankment. In addition, Daulatkhan Upazila area is within the area of Bhola Irrigation Project (Phase-I).

The proposed Project is a Honorable Prime Minister's committed priority project. In this respect Memo No. 14.25.17.00.00.01.2005-1273, dated : 04-12-2005 of Prime Minister's Office is enclosed in Appendix-'D'.

Mathematical model study of the project has been conducted by the Institute of Water Modelling (IWM). In the final report of the study, Institute of Water Modelling (IWM) recommended Bank protective work from km 27.000 to km 31.500 (4.50 km) and Slope protection work of embankment at vulnerable areas. Bank protective work from km 27.000 to km 28.200 = 1.200 km has already been completed under "Meghna-Tentulia River Bank Erosion Protection Project (Phase I, Daulatkhan area)". On the basis of this study conducted by the Institute of Water Modelling (IWM), this project proposal has been prepared to implement 1.000 km of Bank protective work (from km 28.200 to km 29.200) and 1.000 km of embankment Slope protection work (km 29.150 to km 30.150).

Objectives & Targets :

In order to avoid potential losses of fertile agricultural land, infrastructure and livelihoods mitigation measures is urgently required at Daulatkhan Upazilla of Bhola district against severe bank erosion of Shabazpur channel in Meghna estuary.

Thus, the overall objectives of the project are to provide safety to human lives, properties and infrastructure and to maintain and improve economic activities, commerce and trade against river erosion.

The specific objectives of the project are as follows :

- to sustain the agricultural and fisheries development by mitigating the risk of river bank erosion and from embankment breaches;
- to contribute to poverty alleviation by ensuring that future economic benefits are achieved;
- to improve social and economic conditions of destitute families living along the embankment and
- to provide substantial employment opportunities and cash income for landless, poor and vulnerable people, both women and men, during construction to provide a stable environment for development in areas adjacent to protected river banks.

03. Brief description on planning and financing of the Project and its applicability :
- | | | |
|------------------------|---|---|
| Project Identification | : | Erosion Protection. |
| Project Preparation | : | Prepared by field personnels. |
| Appraisal | : | Does not arise. |
| Credit Negotiation | : | Does not arise. |
| Credit Agreement | : | Does not arise. |
| Credit Effectiveness | : | Does not arise. |
| Loan Disbursement | : | Does not arise. |
| Loan Conditional ties | : | Does not arise. |
| Project Approval | : | Approved by the Minister in charge of the Planning and Finance. |
| Other (if any) | : | Does not arise. |
04. 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/Objective of the Project : Yes.
- 4.2 Programme for use of created-facilities of the Project : Facility is fixed as erosion protection.
- 4.3 O & M programme of the Project : Post project recurrent O & M works will be arranged from regular O & M allocation.
- 4.4 Impact of the Project
- Direct : Direct impact will be achieved from bank protection.
- Indirect : Local people will feel safe encouraging business flourishing.
- 4.5 Transfer of Technology and Institutional Building through the Project : Does not arise.
- 4.6 Employment generation through the Project : During implementation of the project employment opportunity was generated
- 4.7 Possibility of Self-employment : Does not arise.
- 4.8 Possibility women-employment opportunity : During O & M Period women of the area will be able to get them employed beside there male partners.
- 4.9 Women's participation in development
- 4.10 Probable Impact on Socio-Economic activity : Economic activities will be increased due to protection from natural calamite.
- 4.11 Impact on environment : No negative impact on environment and bio-diversity.
- 4.12 Sustainability of the Project : Will be sustained as designed.
- 4.13 Contribution to poverty alleviation/reduction : Does not arise.
- 4.14 Opinion of the public representatives, local elite, local administration, teachers, religious leader, women's representatives etc. : All are satisfied.
- 4.15 Contribution Micro-credit programme and Comments on overlapping with any NGO activities : Does not arise.
05. Problems encountered during Implementation (with duration & steps taken to remove those)
- | | | |
|--|---|---|
| 5.1 Project Management | : | Does not arise. |
| 5.2 Project Director | : | Does not arise. |
| 5.3 Land Acquisition | : | Does not arise. |
| 5.4 Procurement | : | Does not arise. |
| 5.5 Consultancy | : | Does not arise. |
| 5.6 Contractor | : | Does not arise. |
| 5.7 Manpower | : | Does not arise. |
| 5.8 Law & Order | : | Does not arise. |
| 5.9 Natural Calamity | : | Created problem to main time schedule which was removed through adjustment. |
| 5.10 Project financing, allocation and release | : | Does not arise. |
| 5.11 Design formulation/approval | : | |

5.12 Project aid disbursement and reimbursement	:	Does not arise.
5.13 Mission of the development partners	:	Does not arise.
5.14 Time & Cost Over-run	:	Does not arise.
5.15 Project Supervision/Inspection	:	Does not arise.
5.16 Delay in Decision	:	Does not arise.
5.17 Transport	:	Does not arise.
5.18 Training	:	Does not arise.
5.19 Approval	:	Does not arise.
5.20 Others	:	Does not arise.

Prepared and submitted by :

MD. MAHFUZUR RAHMAN 31.08.10

(MD. MAHFUZUR RAHMAN)
Executive Engineer
Bhola O & M Division-I
BWDB, Bhola

06. Remarks & Recommendations of the Project Director :

The objectives of the Project have been achieved fully.

Dated :

MD. SHEIKH FARID 27/06/2010

(MD. SHEIKH FARID)
Superintending Engineer
Bhola O & M Circle
BWDB, Bhola
and
Project Director.

07. Remarks/Comments of Agency Head :

Dated :

Signature and Seal

08. Remarks/Comments of the Officer-in-charge of the Ministry/Division :

Dated :

Signature and Seal

Rationale :

The progressive bank line shifting of Shahbazpur channel of Meghna estuary along the eastern side of Bhola island by about 4 km during last few decades has endangered the flood control embankment in many places including at Daulatkhan Upazilla. Without immediate erosion mitigation measures further retirement of embankment and loss of land cannot be stopped.

Failure of embankment due to river erosion will have social, economic and environmental impacts. At present 4.5 km of riverbank in Daulatkhan (Km 27.00 to km 31.50) is under active erosion. It is anticipated that if the erosion continues huge land at this Upazilla will be eroded over the next coming years. In such situation substantial losses of properties and infrastructures will be incurred. The Daulatkhan Upazilla Headquarter will also be affected in the long run. In addition, breaches of embankment will result significant damages to crop, properties and infrastructures.

Thus there is a rationale to implement erosion mitigation measures at Daulatkhan Upazilla immediately.