

IMED-04
September-/2014

Government of the People's Republic of Bangladesh

Ministry of Water Resources

**Project Completion Report (IMED-04)
Of
TECHNICAL ASSISTANCE PROJECT
On**

**Main River Flood and Bank Erosion Risk Management Program
(MRFRERP)
(TA-8054)**



Bangladesh Water Development Board.

Project Director
PMO-FRERMIP, BWDB, Dhaka

Government of the People's Republic of Bangladesh

Ministry of Planning

Implementation Monitoring and Evaluation Division

PROJECT COMPLETION REPORT : IMED 04/2014.

A. PROJECT DESCRIPTION :

01. Name of the Project : **TECHNICAL ASSISTANCE PROJECT**
On
Main River Flood and Bank Erosion Risk Management
Program (MRFRERMP), (TA-8054)

02. Administrative Ministry/Division : Ministry of Water Resources (MoWR)

03. Executing Agency : Bangladesh Water Development Board

04. Location of the Project :

Division	District	Upazila
1	2	3
Rajshahi	Pabna	Bera
	Sirajganj	Shahjadpur
		Chaouhali
Dhaka	Manikganj	Zafarganj
		Harirampur

05. Objective of the Project : The project has several objectives.

- The objectives of this PPTA is to ensure long term planning horizon and reach-wise protection activities and to establish more effective linkages among structural and non structural measures, and to enhance capacity of the executing agency to achieve it. The Consultants under PPTA will study the scope of Erosion Protection reaches along Jamuna river from Down Stream (D/S) of Jamuna bridge to Aricha, Ganges river from D/S of Proposed Ganges barrage to Aricha and Padma river from Aricha to U/S of Meghna
- The main task of the Study is to prepare and recommend a detail Feasibility Report for formulation of an Investment Project.

06. Estimated Cost :

(In lakh Taka)

	Original	Latest Revised
(a) Total	1569.69	1569.69
(b) Taka (GOB)	549.10	549.10
(c) Foreign Currency	-	-
(d) Project Aid	1020.59	1020.59
(e) PA (RPA)	1020.59 (-)	1020.59 (-)

07	Date of Approval	:	PCP	TPP
	(a) Original	:	-	08-05-2012
	(b) Latest Revised (Re-appropriation)	:	-	03-07-2013

08. Implementation Period :

	Date of Commencement	Date of Completion
(a) Original	April/2012	June/2013
(b) Latest Revised	April/2012	June/2014
(c) Actual	April/2012	June/2014

09. Financing Arrangement (Source-wise) :

9.1 Status of Loan/Grant

a) Foreign Financing :

Source (s)	Currency as per Agreement	Amount in US \$ (Million)	Nature (Loan/Grant/ supplier's/ credit)	Date of Agreement	Date of Effective -ness	Date of Closing	
						Original	Revised
1	2	3	4	5	6	7	8
ADB (JFPR)	US\$	US\$ 1.20	Grant	29 May 2012	29 May 2012	30 June 2014	30 June 2014

b) GOB :

(In lakh Taka)

Total amount	Loan	Grant	Cash Foreign Exchange
1	2	3	4
549.10 (In kind 503.95)	-	549.10	-

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
ADB (JFPR)	1.20	102.059	1.098	93.38	0.102	8.679

1US \$=85.00 (As per approved TPP).

9.3 Re-impossible 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
-	-	-	-	-	-

B. IMPLEMENTATION POSITION

01. Implementation Period:

Implementation Period as per PP		Actual Implementation period	Time Over-run (% of original implementation period)	Remarks
Original	Latest Revised			
1	2	3	4	5
April, 2012 to June, 2013	April, 2012 to June, 2014	April, 2012 to June, 2014	100.00 %	-

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	1569.69	1569.69	1482.90	-	-
Taka	549.10	549.10	549.10 (In kind 503.95)	-	-
PA	1020.59	1020.59	933.80	-	-

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)= 12	9	-	-	-	-	-
Staff(s) = 20	11	-	-	-	-	-
Total : 32	20	-	-	-	-	-

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

Field of Training /Study tour/workshop/Seminar etc.	Provision as per PP		Actual Number of person		Remarks
	Number of person	Man - months	Number of person	Man - months	
1	2	3	4	5	6
Not Applicable					

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

						(In lakh Taka)
Items of work (as per PP)	Unit	Target (as per PP)		Actual Progress		Reasons for deviation (±)
		Financial	Physical (Quantity)	Financial	Physical (Quantity)	
1	2	3	4	5	6	7
A. Revenue Item:-						
Salaries & allowances	1 item	373.96	1 item	373.96	1 item	(In kind 373.96)
Consultancy Services (International)	mm	636.33	22.50 mm	590.64	22.450 mm	Engaged and administered by ADB.
Consultancy Services (National)	mm	384.26	35.00 mm	343.16	36.00 mm	
Office Maintenance	L.S	31.14	1 item	31.00	1 item	
Survey and Monitoring works	item	134.00	1 item	134.00	1 item	(In kind 130.00)
Contingencies	L.S	10.00	L.S	10.00	L.S	
Total Revenue Item:		1569.69		1482.76		
B. Capital Item:-						
Acquisition of Assets		-	-	-	-	
Total Capital Item		-	-	-	-	
Grand Total (a+b)		1569.69		1482.76	100%	

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
1. Md. Abdul Quddus a) Project Director/SE Scale: 25750-1000x8- 33750	✓	-	-	28-2-2010	20-04-2014	
2. A.M. Aminul Haque a) Project Director/SE Scale: 25750-1000x8- 33750	✓	-	-	21-04-2014	up to date	

07. Procurement of Transport (in Nos.) :

Type of transport	Number as per P.P.	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
Car	-	Not Applicable as no transport purchased				No transport purchased
Jeep	-					
Microbus	-					
Minibus	-					
Bus	-					
Pick-up	-					
Truck	-					
Motor Cycle	-					
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 Cost		Date of completion of works/services and supply of goods	
	As per PP	Contracted value	Invitation date	Contract signing/LC opening date	As per contract	Actual
1	2	3	4	5	6	7
CONSULTANCY						
1. Consultancy services for Technical Assistance Project on Main River Flood and Bank Erosion Risk Management Program(MRFRERMP)	10.2059	10.2059	28/11/11	15/08/12	14/08/13	31/03/14

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

Name of the Field	Approved man month		Actual man month utilized	Remarks
	As per PP	As per contract		
1	2	3	4	5
1. Consultancy Services				
Foreign	22.50 mm	22.50 mm	22.45 mm	
Local	35.00 mm	35.00 mm	36.00 mm	

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
No Construction/Erection/Installation Tools & Equipment etc were procured						

C. FINANCIAL AND PHYSICAL PROGRAMME :

01. (a) Original and Revised schedule as per RTPP :

(In lakh Taka)

Financial Year	Financial provision & physical target as per original TPP				Financial provision & physical target as per latest revised RTPP			
	Total	Taka	P.A.	Physical %	Total	Taka	P.A.	Physical %
1	2	3	4	5	6	7	8	9
2011-12	392.42	137.28	255.15	25%	-	-	-	-
2012-13	1177.27	411.83	765.44	75%	1548.39 (In kind 503.95)	543.10 (In kind 503.95)	1005.29	89
2013-14	-	-	-	-	21.30	6.00	15.30	11
Total:	1569.69	549.10	1020.59	100	1569.69 (In kind 503.95)	549.10 (In kind 503.95)	1020.59	100

01.(b) Revised ADP allocation and progress :

Financial Year	Revised Allocation & target				Taka Release	Expenditure & physical progress			
	Total	Taka	P.A.	Physical %	Release	Total	Taka	P.A.	Physical %
1	2	3	4	5	6	7	8	9	10
2011-12	-	-	-	-	-	-	-	-	-
2012-13	835.00	39.00	796.00	89	39.00	645.32	33.32	612.00	89
2013-14	344.00	12.00	332.00	11	11.68	333.48	11.68	321.80	11
Total:	1179.00	51.00	1128.00	100	50.68	978.80	45.00	933.80	100

D. ACHIEVEMENT OF OBJECTIVES OF THE PROJECT:

Objectives as per PP	Actual achievement	Reasons for shortfall, if any
i) The objectives of this PPTA is to ensure long term planning horizon and reach-wise protection activities and to establish more effective linkages among structural and non structural measures, and to enhance capacity of the executing agency to achieve it. The Consultants under PPTA will study the scope of Erosion Protection reaches along Jamuna river from Down Stream (D/S) of Jamuna bridge to Aricha, Ganges river from D/S of Proposed Ganges barrage to Aricha and Padma river from Aricha to U/S of Meghna. ii) The main task of the Study is to prepare and recommend a detail Feasibility Report for formulation of an Investment Project.	★ The PPTA Consultant studied reach wise protection activities along Jamuna river from Down Stream (D/S) of Jamuna bridge to Aricha, Ganges river from D/S of Proposed Ganges barrage to Aricha and Padma river from Aricha to U/S of Meghna and identified 13 priority sub reaches. ★ The complete feasibility study report had been submitted by PPTA consultants which was approved by BWDB. ★ On the basis of the recommendation of the feasibility report, an Investment Program titled name "Flood and Riverbank Erosion Risk Management Investment Program (FRERMIP)" the DPP has been prepared and approved by ECNEC.	No short fall

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).
Not Applicable		N/A	N/A

02. Cost / Benefit :

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

03. Please give reasons for shortfall, if any, between the estimated and actual benefit: Not Applicable

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			
1. Md. Abdul Quddus, Project Director. JMREMP	Several times	Not found	Whatever issues were found during visits, solved during project period
2 .Mr. A. M. Aminul Haque SE, JMREMP,BWDB, Dhaka	Several times	Not found	Whatever issues were found during visits, solved during project period
3. Mr. Md. Amir Faisal E.E. JMREMP,BWDB, Dhaka	Several times	Not found	Whatever issues were found during visits, solved during project period
4. Ms. Natsuko Tatsuka Water Resources Specialist, ADB, Manila, Philippines	Several times	Not found	Whatever issues were found during visits, solved during project period
5. Mr. M. Jamilur Rahman Staff Consultant, ADB	Several times	Not found	. Whatever issues were found during visits, solved during project period
c) Others (Please Specify) :	N/A	N/A	N/A

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
Not applicable			

2.2. External Audit:

Period of Audit	Date of submission of Audit Report	Major findings/ objections	Whether objections resolved or not.
1	2	3	4
Not yet audited			

G. DESCRIPTIVE REPORT

1. General Observations/Remarks of the Project on :

1.1 Background :

Pabna Irrigation and Rural Development Project (PIRDP) and Meghna Dhonagoda Irrigation Project (MDIP) were implemented in-collaboration with ADB assistance. The two projects were threatened by the erosion of river Jamuna and Meghna. To mitigate this erosion Jamuna Meghna River Erosion Mitigation Project (JMREMP) were launched by ADB assistance. The Project's specific objective was to sustain the incomes and poverty reduction of people of PIRDP & MDIP areas through establishing a cost-effective and sustainable Riverbank Erosion Management Systems (REMS). The Project would provide a reliable and cost effective mitigation measures through adaptive riverbank protection works.

On successful implementation of JMREMP, GoB requested ADB to take-up further bank protective works project. ADB also desired to implement such projects but in reach-wise approach. With longer term perspectives of stabilization of riverbank in Bangladesh, instead of reactive sporadic protection works.

In continuation of above circumstances a Consultation Mission from ADB was fielded from 18-28 March 2011. The Mission aimed to initiate the PPTA of the proposed Project. In this connection the Mission visited the ongoing JMREMP and other potential erosion affected sites along main rivers. The Mission discussed with the different related agencies and delivered ADB's view in implementing the project in a wrap-up meeting held on 28 March 2011 in the Ministry of Water Resources.

1.2 Justification/Adequacy:

Riverbank erosion along the main rivers is one of the prominent problems in Bangladesh, and is a perennial phenomenon caused by dynamic channel shifting of the rivers flowing through the unconsolidated sediments of the floodplain. Such erosions frequently destroy lands, assets and existing infrastructures. Recurrent flooding also causes a repeated threat of loss of people's lives and assets. The main rivers, such as the Jamuna, the Padma, and the Ganges, are major contributors of these issues, which have been restricting the development in large areas behind the rivers as the national poverty map indicates. Though a substantial embankment system and river bank erosion protection has been developed along the main rivers, destructive flood water of recurrent flooding and progressive river bank erosion has been threatening the protections. With the continuous increase of population and steep economic growth of the country, more sustainable and stable flood and riverbank erosion protection measures have been increasingly demanded.

1.3 Objectives:

The objectives of this PPTA is to ensure long term planning horizon and reach-wise protection activities and to establish more effective linkages among structural and non structural measures, and to enhance capacity of the executing agency to achieve it. The Consultants under PPTA will study the scope of Erosion Protection reaches along Jamuna river from Down Stream (D/S) of Jamuna bridge to Aricha, Ganges river from D/S of Proposed Ganges barrage to Aricha and Padma river from Aricha to U/S of Meghna. The main task of the Study is to prepare and recommend a detail Feasibility Report for formulation of an Investment Project.

1.4 Project revision with reasons:

Total TPP cost was Tk.1569.69, out of which GoB was Tk. 549.10 lac (Cash Tk.45.14, in kind Tk. 503.95) and PA (RPA) was Tk. 1020.59(-). The TPP was revised once keeping the original cost same. A small amount of consultancy services as well as office maintenance were proposed to be extended and some topographical as well as bathymetric survey proposed to be included for the year 2013-14 in the revised TPP. The revision of TPP was agreed in the aide Memoire of 04-11 Feb, 2013 TA review mission. The justifications of revision of TPP are as follows:

a) Feasibility Report Approval :

-Feasibility Report is to be approved by BWDB. Final Feasibility Report is scheduled to be submitted by late-June, 2013. Review of the report before approval needs sometime. All these works will have to be performed after June, 2013.

b) DPP Finalization:

As per contract the PPTA Consultant would prepare the DPP. DPP preparation would have to be completed after approval of F/S report by the BWDB. Since approval of F/S report by BWDB may require sometime after June, 2013, the PPTA Consultant would have to work after June i.e. (2013-2014). The contract Agreement with PPTA consultant is upto 15 August, 2014. As such some Tk. 15.30 lac is proposed for 2013-2014.

c) Bridging Period:

As per schedule DPP would be approved in October/November, 2013. The ADB's loan is scheduled to be effective after Agreement signing with ADB in March, 2014. Though the ADB's loan is scheduled to be effective in March, 2014, due to budgetary provision, the loan would not be effective before June, 2014. So virtually from July, 2013 to March, 2014, there will be no work. Some preparatory works like topographical and bathymetric survey is proposed to be done during July, 2013- March, 2014. This will expedite the physical and other works of the project. Tk. 4.00 lac saving amount from Office Maintenance (economic code 4827, 4828) is proposed for using in topographical and bathymetric survey during 2013-2014. v

d) Office Maintenance and Contingency:

As ADB loan is scheduled to be effective after March 2014, Tk. 2.00 lac is proposed for office maintenance and contingency cost during 2013-2014 to cope up the extended work of PPTA Consultants.

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

BWDB implemented two projects namely Meghna-Dhonagoda Irrigation Project and Pabna Irrigation and Rural Development Project in 1989 and 1992 respectively with financial assistance from ADB. The objective of the project was to support in increasing agricultural production by providing irrigation facilities in those area. Afterwards Command Area Development Project (CADP) was implemented (1996-2003) with financial assistance from the same donor to improve the irrigation infrastructures in both projects for proper operation and management of these two big projects. In the mean time the progressive erosion of Jamuna & Meghna river threatened the two said project. Accordingly JMREMP was launched and upon successful implementation of the project a cost effective and innovative erosion mitigation measure was developed and established.

The concept of the TA project was based on replication of a full cost-effective erosion mitigation system as developed by JMREMP. This concept is largely based on the use of sand-filled Geo-textile bags for under water protection. The project has progressed towards that concept and laid the formulation for adaptive management. The area of investigation encompasses the erosion prone locations of both banks of jamuna, ganges and Pandma Rivers. In jamuna, the area extends from Bangabondhu Bridge to aricha, in Ganges from proposed Ganges barrage to Aricha and in Padma from Aricha to chandpur at confluence with meghna.

3. Brief description on planning and financing of the project and its applicability: Not applicable.

- ◆ Project Identification
- ◆ Project Preparation
- ◆ Appraisal
- ◆ Credit Negotiation
- ◆ Credit Agreement
- ◆ Credit Effectiveness
- ◆ Loan Disbursement
- ◆ Loan Conditionalities
- ◆ Project Approval.
- ◆ Others (if any).

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

- 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): Not applicable.

5.1	Project Management	5.12	Design formulation/approval
5.2	Project Director	5.13	Project aid disbursement and re-imbursment
5.3	Land Acquisition	5.14	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 calamity	5.19	Approval
5.10	Project financing, allocation and release	5.20	Others.

6. Remarks & Recommendations of the Project Director:

The feasibility study under titled “Main River Flood and Bank Erosion Risk Management Program” was conducted to formulate an investment program for addressing acute riverbank erosion and related flood issues. The study area was from downstream of Bangabandhu Bridge to Aricha along Jamuna River, downstream of proposed Ganges barrage to Aricha along Ganges River and from Aricha to Chandpur along Padma River. The said study was started on April, 2012 and ended on December, 2013. A TPP was prepared and approved by the competent authority of the government with a estimate cost of Tk. 1569.69 lac of which GoB is Tk. 549.10 lac (cash Tk 45.14 and in kind 503.95) and PA is Tk. 1020.59 lac. The original TPP was revised once keeping the total estimated cost unchanged. Only a small consultancy Services as well as office Maintenance were proposed to be extended. Also some topographical as well as bathymetric survey were proposed to be included for the year 2013-14 in the revised TPP. ADB conducted this PPTA with financing (grant) from the Japan Fund for Poverty Reduction (JFPR).

The suggested investment Program “Flood and Riverbank Erosion Risk Management Investment Program (FRERMIP)” will be implemented from July, 2014 until June 2023. The total program cost is approximately US\$ 375.00 Million of which ADB will finance up to US\$ 255.00 Million in three loan tranches under Multi-tranche financing facility (MFF). The Government of the Netherlands will provide US\$ 15.30 Million as grant financing during the first tranche.

The Investment Program includes structural measures, extensive non-structural activities and institutional strengthening. The program will be implemented in three Tranches and each Tranche will have separate DPP. The suggested investment program commences during the first Tranche with three priority reaches along the lower Jamuna and upper Padma Rivers.

The riverbank protection approach in the investment project extends technical principles established under the successful JMREMP. The First Tranches includes river stabilization along the whole reach and land recovery study and also the feasibility of Tranche 2 & 3.

The Steering Committee and Technical Committee formed for the said study reviewed the suggested report and finally approved the report. On the basis of this feasibility report a DPP for the first tranche with estimated cost of Tk. 82856.00 lac (GoB Tk. 18616.00 lac and PA Tk. 64240.00 lac) has been approved by ECNEC. I strongly believe that after implementation of the Investment Program the project objective will be fulfilled by sustaining economic growths, poverty reduction and livelihoods of people, living in the areas threatened by riverbank erosion.

In this occasion, I would like to convey my thanks and gratitude to Asian Development Bank and JFPR of Japan Government for their kind support, to carry out this feasibility study. On behalf of the project, I also gratefully acknowledge the guidance and cooperation of concerned government official, officials of MoWR, Planning Commission, Economic Relation Division, IMED and BWDB for successful Completion of the study project.

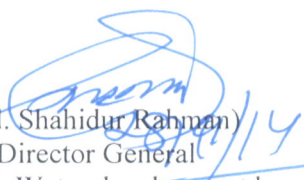

(A.M. Aminul Haque)
Project Director 02/09/2014
PMO-FRERMIP
BWDB, Dhaka.

Dated:

Signature and seal of the Project Director/Manager

7. Remarks/Comments of Agency Head:

The study of Jamuna-Padma river flood and bank erosion risk management report has been approved by BWDB. On the basis of the study, a DPP for a new investment program has been approved by ECNEC.


(Md. Shahidur Rahman)
Director General
Bangladesh Water development board
Dhaka.

Dated: 28-09-2014

Signature and Seal
(Md. Shahidur Rahman)
Director General
BWDB, Dhaka.

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

Dated:

Signature and Seal