

# BANGLADESH WATER DEVELOPMENT BOARD



## PROJECT MONITORING FORM-IMED-04/2003(Revised)

### PROJECT COMPLETION REPORT

**Name of Project :** Protection of bank from erosion of Atrai River in 3(three) nos. area in Upazila-Patnitala and Re-excavation of Polashbari Khal in Upazila-Manda under Naogaon District (1<sup>st</sup> Revised).

**Project Implementation Period :** May 2016 to June 2018

**Name of Division :** Naogaon O&M Division, BWDB, Naogaon.

**Name of Circle :** Rajshahi O&M Circle, BWDB, Rajshahi.

**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 bank from erosion of Atrai River in 3(three)nos. area in Upazila-Patnitala and Re-excavation of Polashbari Khal in Upazila-Manda under Naogaon District (1<sup>st</sup> Revised).

02. **Administrative Ministry/Division** : Ministry of Water Resources

03. **Executing Agency** : Bangladesh Water Development Board (BWDB)

04. **Location of the Project** : District: Naogaon; Upazilla: Patnitala and Manda.

05. **Objective of the Project** :

- Protection the right & left bank embankment of Atrai River from erosion of the river.
- Protection of property and lives of the project areas of "Construction of right bank embankment of Atrai river project", "Patnitala Sub-project" and Naogaon Polder-1 Sub-Project from flood damage.
- Protection of Mamudpur forest, Mahashashan & Polipara area at Najipur Municipality in Upazila Patnitala, District Naogaon on left & right bank from the erosion of Atrai river.
- Improved the Drainage/Flushing and Irrigation facilities in Naogaon Polder-1 Sub-Project area by re-excavation of Khal.
- Boost up the agricultural productivity, spread up employment and accelerate economic growth in the existing projects area by re-excavation of Khal.
- Avoid environmental imbalance due to river bank erosion in the area. Save valuable immovable properties from the river bank erosion due to implementation of the project.
- Enhance socio-economic development in the project area by reducing the intensity of river erosion.

06. **Estimated Cost** :

**(In lakh Taka)**

	<b>Original</b>	<b>Latest Revised</b>
<b>(a) Total</b>	2409.36	2143.34
<b>(b) Taka</b>	2409.36	2143.34
<b>(c) Foreign Currency</b>	0.00	0.00
<b>(d) Project Aid</b>	0.00	0.00
<b>(e) RPA</b>	0.00	0.00



07. Date of Approval	:	PCP	PP
(a) Original	:		24 May, 2016
(b) Latest Revised	:		26 June, 2018

08. Implementation Period :

	Date of Commencement	Date of Completion
(a) Original	May 2016	June 2018
(b) Latest Revised	May 2016	June 2018
(c) Actual	May 2016	June 2018

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 Effectiveness	Date of Closing	
						Original	Revised
1	2	3	4	5	6	7	8
Not Applicable							

b) GOB :

(In lakh Taka)

Total amount	Loan	Grant	Cash Foreign Exchange
1	2	3	4
2143.34	-	2143.34	-

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
Not Applicable						

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
Not Applicable					

## **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
May 2016 to June 2018	May 2016 to June 2018	May 2016 to June 2018	-	-

### **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
<b>TOTAL</b>	2409.36	2143.34	2071.77	-	-
<b>TAKA</b>	2409.36	2143.34	2071.77	-	-
<b>PA</b>	-	-	-	-	-

### **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
<b>Officer (s)</b>	Existing manpower of the implementing agency were deployed during execution of the project. No separate manpower was engaged for the project.					
<b>Staff(s)</b>						
<b>Total :</b>						

### **04. Training of Project Personnel (Foreign/Local) : No provision of training in the project.**

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	Not Applicable				
b. Local	Not Applicable				

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**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	Physical (Quantity)	Financial	Physical (Quantity)	
1	2	3	4	5	6	7
<b>(a) Revenue Component</b>						
Petrol & Lubricant	1 item	4.00	1 item	3.97	1 item	
Printing & Publication	1 item	1.00	1 item	0.96	1 item	
Stationery, Seal & Stamps	1 item	3.00	1 item	2.99	1 item	
Hydrological & Morphological Study	1 item	2.25	1 item	0	1 item	This item was done by the technical committee constituted by BWDB
Honorarium for PSC, PIC, TEC	1 item	4.00	1 item	2.04	1 item	
Mid Term Evaluation	1 item	4.00	1 item	3.92	1 item	
Survey & Investigation	1 item	2.75	1 item	2.74	1 item	
Repair & maintenance of existing Vehicles (Jeeps 3 Nos.)	1 item	5.00	1 item	3.50	1 item	
<b>Sub-Total (a)</b>		<b>26.00</b>		<b>20.12</b>		
<b>(b) Capital Component</b>						
<b>(i) Acquisition of asset</b>						
Laptop & Computer (1No. Laptop, 1No. Compute, 1No. printer & 2Nos UPS	Nos	2.00	2 Nos	2.00	2 No	
<b>(ii) Contruction of Works</b>						
River Bank protection work from km 0.000 to km 0.700= 700.00m at Mamudpur along the right bank of Atrai river.	Km	1189.99	0.700 km	1172.05	0.700 km	
River Bank protection work from km 8.100 to km 8.320= 220.00m at Mahashohan and from km 9.150 to km 9.530=380.00 m at Polipara, total length= 600.00 m along the left bank of Atrai river.	Km	889.91	0.600 km	861.38	0.600 km	
Re-excavation of Palashbari Khal from Trimohoni to Jalalabad (km.0.015 to km 2.201=2.186 km) length=2.186 km	Km	26.76	2.186 km	16.22	2.186 km	Planned task was done by the money Spent
Dredging of Atrai River at Mamudpur forest area (200m)	Km	8.68	0.200 km	0	-	This item was not executed as per recommendaton of the technical committee.
<b>Sub Total (b)</b>		<b>2117.34</b>		<b>2051.65</b>		
<b>Sub-Total (a+b)</b>		<b>2143.34</b>		<b>2071.77</b>		
<b>(c) PhysicalContingency</b>		0.00		0.00	-	
<b>(d) Price Contingency</b>		0.00		0.00	-	
<b>Grand Total (a+b+c+d)</b>		<b>2143.34</b>	<b>100.00%</b>	<b>2071.77</b>	<b>98.65%</b>	

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**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
Nasrin Razia Akhter Jahan Executive Engineer Office of the Chief Engineer, North-Western Zone BWDB, Rajshahi. scale : 43,000-69,850/-	Yes	-	No	14-11- 2016	Till 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	-	-	-	-	-	There was no provision of vehicle procurement in the approved DPP .
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 services above 100.00 lakh:**

Description of procurement (goods/works /consultancy) as per bid document	Tender/Bid/Proposal Cost (in CroreTaka)		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
River Bank protection work at Mamudpur from km 0.00 to km 0.700 equal to 700m along the Right Bank of the Atrai river in Upazila- Patnitola District-Naogaon under Naogaon O&M Division BWDB Naogaon during the FY 2016-17.	11.90	11.90	18-01- 2017	28-05-2017	30-05- 2018	30-05- 2018

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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
River Bank protection work at Mahashasan from km 8.100 to km 8.320 equal to 220.00 m & at Polipara from km 9.150 to km 9.530 equal to 380.00 m Total Length 600.00 m along the Left Bank of the Atrai river in Upazila Patnitola District-Naogaon under Naogaon O&M Division BWDB Naogaon during the FY 2016-2017.	8.90	8.90	18-01-2017	24-05-2017	25-05-2018	25-05-2018
Re-excavation of Polashbari khal from Trimohoni to Jalalabad Km 0.015 to Km 2.201 equal to 2.186 Km in connection with "Protection of bank from erosion of Atrai River in 3(three) nos. area in Upazila-Patnitola and Re-excavation of Polashbari Khal in Upazila-Manda under Naogaon District" in Upazila Manda District Naogaon under Naogaon O&M Division BWDB Naogaon.	0.27	0.27	09-08-2017	19-12-2017	19-06-2018	19-06-2018

## 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			N/A	
b) Local			N/A	

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

Description of items	Quantity (as per PP)	Quantity procured with date	Transferred to O & M with date	Disposed off as per rule with date	Balance	Remarks
1	2	3	4	5	6	7
N/A						

10/1



**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 PP			
	Total	Taka	P.A.	Physical %	Total	Taka	P.A.	Physical %
1	2	3	4	5	6	7	8	9
2015-16	6.80	6.80	-	0.28%	0.00	0.00	-	0.00%
2016-17	1237.61	1237.61	-	51.37%	187.73	187.73	-	8.76%
2017-18	1164.95	1164.95	-	48.35%	1955.61	1955.61	-	91.24%
<b>Total=</b>	<b>2409.36</b>	<b>2409.36</b>	<b>-</b>	<b>100.00%</b>	<b>2143.34</b>	<b>2143.34</b>	<b>-</b>	<b>100.00%</b>

**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
2015-16	0.00	0.00	-	0.00%	0.00	0.00	0.00	-	0.00%
2016-17	200.00	200.00	-	8.76%	200.00	187.73	187.73	-	8.76%
2017-18	1920.00	1920.00		91.24%	1919.50	1884.04	1884.04		89.89%
<b>Total =</b>	<b>2120.00</b>	<b>2120.00</b>	<b>-</b>	<b>100%</b>	<b>2119.50</b>	<b>2071.77</b>	<b>2071.77</b>	<b>-</b>	<b>98.65%</b>

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**D. ACHIEVEMENT OF OBJECTIVES OF THE PROJECT:**

Objectives as per PP	Actual achievement	Reasons for shortfall, if any
(a) To protect the right & left bank embankment of Atrai River from devastating erosion.	(a) The existing Flood Control Embankment at the right & left bank of Atrai River adjacent to project area is now safe from erosion of the Atrai river.	(a) No shortfall.
(b) To protect project property and lives of the project areas of "Construction of right bank embankment of Atrai river project", "Patnitala Sub-project" and Naogaon Polder-1 Sub-Project from flood damage.	(b) As a result of the implementation of the project, it has been possible to keep the internal resources of the existing three sub-project areas free from the flood damage.	(a) No shortfall.
(c) To protect Mamudpur forest, Mahashashan & Polipara area at Najipur Municipality in Upazila Patnitala, District Naogaon from the erosion of left & right bank of Atrai river.	(c) By implementation of 1.30 km revetment works, the vulnerable three areas (Mamudpur, Mahashashan & Polipara) on left & right bank are now protected from the erosion of Atrai river.	(a) No shortfall.
(d) To facilitate the Drainage/Flushing and Irrigation facilities in Naogaon Polder-1 sub-project area by re-excavation of Khal.	(d) By re-excavation 2.186 km of Palashbari Khal; drainage, flushing and irrigation facilities inside the existing Naogaon polder-1 sub-project area has improved.	(a) No shortfall.
(e) To boost up the agricultural productivity, spread up employment and accelerate economic growth in the existing projects area by re-excavation of Khal.	(e) The implementation of the project has made it possible to increase agricultural production, create employment opportunities and increase economic growth.	(a) No shortfall.
(f) To avoid environmental imbalance due to river bank erosion in the area. Valuable immovable properties will be saved from the river bank erosion due to implementation of the project.	(f) Due to the implementation of the project, prevention of river erosion, elimination of environmental degradation, preservation of valuable properties has been achieved.	(a) No shortfall.
(g) To enhance socio-economic development in the project area by reducing the intensity of river erosion.	(g) The socio-economic development of the project area has increased.	(a) No shortfall.

## 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).
(a) Forest Office saved from erosion	Nos	1 No	1 No
(b) Forest land saved	ha	9.70	9.70
(c) Dak Bungalow saved	Nos	1No	1No
(d) College saved	Nos	1No	1No
(e) High School saved	Nos	2Nos.	2Nos.
(f) Primary School saved	Nos	4 Nos.	4 Nos.
(g) Private Clinic saved	Nos	4 Nos.	4 Nos.
(h) Shops in market saved	Nos	100 Nos	100 Nos
(i) Mosque saved	Nos	10 Nos.	10os.
(j) Mondir saved	Nos	5 Nos.	5 Nos.
(k) Food Godown saved	Nos	1 Nos.	1 Nos.
(l) Register office saved	Nos	2 Nos.	2 Nos.
(m) Eid-Gha saved	Nos	2 Nos.	2 Nos.
(n) Kacha Bari saved	Nos	150 Nos.	150 Nos.
(o) Pucca Bari saved	Nos	100 Nos.	100 Nos.
(p) Police Station saved	Nos	1 No	1 No
(q) Office Building (Government/Semo-Govt.) saved	Nos	3 Nos	3 Nos
(r) Grave yard saved	Nos	3 Nos.	3 Nos.
(s) Embankment saved	Km	10.00 km.	10.00 km.
(t) Food production improved	mTon/year	5100.00	5100.00
(u) drainage/flushing capacity increased	ha	1100	1100
(u) Road saved	Km	10.00 km.	10.00 km.
(v) Bridge saved	Nos	1 No	1 No

**02. Cost / Benefit:**

Item	Estimated	Actual
(1) Benefit cost ratio of the project (i) Financial (ii) Economic  (2) Internal Rate of Return (i) Financial (ii) Economic	(1) Benefit cost ratio of the project (i) Financial = 1.65 : 1 (ii) Economic = 1.95 : 1  (2) Internal Rate of Return (i) Financial = 23.85% (ii) Economic = 29.11%	Actual Cost / Benefit Will be evaluated later by BWDB's concern office & IMED.

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

No Shortfall Found.

**F. MONITORING AND AUDITING****0.1 Monitoring:**

Name & designation of the inspecting official	Date of Inspection	Identified Problems	Recommendations
1	2	3	4
<b>Ministry / Agency:</b>			
Md. Nayeb Ali Mondol, Joint Secretary(admin-1), MoWR.	11-5-2018 to 12-5-2018	No major problems identified.	Project progress was satisfactory.
Md. Jane Alam, Deputy Chief, MoWR.	23-12-2017	No major problems identified.	
Abu Yousuf Mohammad Rasel, Senior Assistant Chief, MoWR.	23-12-2017	No major problems identified.	The project is small but effective.
Mohammad Ali Chief Engineer, North-Western Zone, BWDB, Rajshahi.	Several times	No major problems identified.	Instructed to follow approved designs for construction works and to complete within the stipulated time.
Musa Nurur Rahman Superintending Engineer, Design Circle-6, BWDB, Dhaka.	12-11-2017	In the flood of 2017, river bank and embankment have been damaged. Also river bed has been scoured.	Design data of damaged/ scoured portion must be submitted quickly. As per design data revised design may be needed





Name & designation of the inspecting official	Date of Inspection	Identified Problems	Recommendations
1	2	3	4
Mir Mosarraf Hossain Superintending Engineer, Rajshahi O&M Circle	Several times	No major problems indentified.	Not Available.
<b>IMED :</b>			
Md. Mahmudul Hassan Assistant Director	04-3-2018 to 05-03-2018	No major problems indentified.	The revised DPP needs to be approved.
<b>Other :</b>			
Abdul Azim Choudhury, Joint Chief, Planning commission.	23-12-2017	No major problems indentified.	If the DPP needs correction, it was instructed to take immediate action.
Nikhil Kumar Das Deputy Chief, Planning commission.	23-12-2017	No major problems indentified.	

## 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
No internal audit done during the project implementation period.			

### 2.2. External Audit:

Audit period	Date of submission of Audit Report	Major findings/ objections	Whether objections Resolved or not.
1	2	3	4
2016-17	07-02-2018	চুক্তিকৃত কাজের বিপরীতে ইস্যুরেঙ্গ না করায় ইস্যুরেঙ্গ ভ্যাট বাবদ ৩,০৩,১২৪/- টাকা রাজস্ব ক্ষতি।	Not resolved but under process

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## **G. DESCRIPTIVE REPORT**

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

#### **1.1 Background:**

The river Karotoa-Atrai is a border river. This river originates in India and enters in Bangladesh through Bhojonpur union of upazila Tatulia of Panchagorth district. Then it passes through Tentulia, Panchagorth Sadar, Bodha, Debiganj, Birganj and Khansama. Afterward, it gets the name 'Atrai' at Malijol of upazila Birganj and enters again in India by flowing through Dinajpur Sadar.

Later on, the Atrai river enters Bangladesh at Shimultali of Upazila Dhamuirhat of Naogaon district and falls into Hurasagar river at Potazia union of upazila Shahajadpur of Sirajganj district. The Atrai river is meandering in nature. Its length is 269.00 km, and average width is 177.00 m. The average flow of the river in the dry and rainy season is 3.59 m<sup>3</sup>/s and 3110.00 m<sup>3</sup>/sec respectively. The average maximum and minimum water level is 18.65 m(PWD) and 12.96 m(PWD). In the years past, due to meandering and morphological changes of the Atrai river, the chars develop into the Atrai river. As a result, the main flow (Thalwag) changes that causes the left and right bank erosion of the river Atrai.

In the recent past, severe erosion occurred along the right bank at Mamudpur forest area and along the left bank of the Atrai River at Mahashashan and Polipara areas in upazila Patnitala, district Naogaon. It can be mentioned that 5.45 acre forest land out of 29.41 acre has already been engulfed by the river Atrai due to severe erosion. So it deems that the vast area of the forest will be smashed into the river if any bank protection measure has not taken up immediately.

“Construction of right bank embankment project of the Atrai River (2006-2010)” and “Patnitala sub-project(1991-95) “ are on right & left bank of Atrai river. After completion of these FCDI projects, the lives, properties and crops of the project area is being protected from the flood of Atrai river. Agricultural productivity in the project area increases highly due to implementation of various water controlling structures such as regulator, inlets, sluice etc. But the purpose of the completed project hampers seriously due to severe erosion in the project area.

Re-excavation of Palashbari khal in upazila Manda, district Naogaon is essential with respect to agricultural productivity in Hamidpur and Katfor Votulia beels in the dry season in the project area. This khal is about 12.04 km long and 40-45 m in width. Total cultivable land of Hamidpur and Katkhour, Vutulia beels is about 4500.00 ha. and 3500.00 ha. respectively. The Khal is also used as water way and for fish production. A two vent regulator was constructed during the implementation of Naogaon poldar-1 sub-project(1986-94) for the purpose of Drainage/Flushing. The bed level of the Khal has been silted up for long time as no programme of Khal re-excavation has been taken up in



the recent past years. At present the bed level of the Khal is 1.93 m (m) above than the bed level of the Atrai river and (10.75 m PWD) is higher than the Sill level (9.20 m PWD) of the regulator and bed level (8.82 m PWD). As such, in the dry season flushing of water from river to Khal faces obstruction. Furthermore, water communication and commodity transportation is not possible in the dry season. Consequently, irrigation facilities hampers highly as the local people are not getting irrigation water as per requirement.

**1.2 Justification/Adequacy:** The project has been executed with commencement in FY 2015-2016 and completion in FY 2017-2018. The overall objective of the project was to reduce environmental degradation and human hazards due to river erosion & flood damages with ensuring safety of lives & properties around the project area. Also ensured to increase agricultural production in the project area by improved drainage, flushing and irrigation facilities.

Throughout the implementation of bank revetment works, safety of vast tract of agricultural lands, forest, embankment and other immovable public & private properties approximate total worth of approximate Tk.14650.00 lakh. be ensured against river erosion.

### **1.3 Objectives:**

The main objectives of the project are as follows:

- To protect the right & left bank embankment of Atrai River from devastating erosion.
- To protect project property and lives of the project areas of "Construction of right bank embankment of Atrai river project", "Patnitala Sub-project" and Naogaon Polder-1 Sub-Project from flood damage.
- To protect Mamudpur forest, Mahashashan & Polipara area at Najipur Municipality in Upazila Patnitala, District Naogaon from the erosion of left & right bank of Atrai river.
- To facilitate the Drainage/Flushing and Irrigation facilities in Naogaon Polder-1 Sub-Project area by re-excavation of Khal.
- To boost up the agricultural productivity, spread up employment and accelerate economic growth in the existing projects area by re-excavation of Khal.
- To avoid environmental imbalance due to river bank erosion in the area. Valuable immovable properties will be saved from the river bank erosion due to implementation of the project.
- To enhance socio-economic development in the project area by reducing the intensity of river erosion.





#### 1.4 Project revision with reasons:

The original DPP of “Protection of Bank from erosion of Atrai River in 3 (Three) nos. area in Upazila-Patnitala and Re-Excavation of Polashbari Khal in Upazila-Manda under Naogaon District” has been approved by Hon’ble Minister, Ministry of Planning. The estimated cost of the original approved DPP was Tk.2409.36 lakh. The approval of the Project (DPP) has been circulated by the planning commission vide Memo No. 20.357.014.01.04.163.2015-56 dated 29-05-2016. The administrative approval of the project (DPP) has been issued by the Ministry of Water Resources vide Memo No. 42.00.0000.042.14.011.14-176 dated 21-06-2016. The expenditure up to June, 2017 was Tk.187.73 lakh and Physical Progress was 7.79% and up to March-2018, cumulative expenditure was Tk. 1654.50 lakh and physical progress was 77.00% (as per original DPP).

The main physical works under this Project were River bank protection work= 1.300 km., Re-excavation of Palashbari khal = 12.010 km., Dredging of Atrai River = 2.620 km as per original approved DPP.

During the DPP approving period, 9.824 km khal was excavated by BMDA & LGED. So, the 9.824 km khal was not required to re-excavate by BWDB. But remaining 2.186 km khal re-excavation has been executed by BWDB under this project.

As per approved original DPP, total length of dredging was 2.620 km, which cost was 113.66 lakh. A technical committee has been constituted by BWDB to take decision about the adequacy of the dredging work. The committee has visited the dredging site and an opinion has been given that the small scale dredging will not be effective. Further, they have said that dredging work should be done in large scale. It may be mentioned here a DPP has been prepared “To rehabilitate 3 nos FCDI Project and dredging of Atrai river with both bank protection at Damuirhat, Patnitala & Mahadevpur Upozila of Naogaon District” having a dredging length about 28 km in the adjacent area. For this reason, as per recommendation of technical committee the 2.620 km length of dredging has been added with that length to make the dredging effective. So, the dredging work of a length of 2.620 km is not implemented under this project.

The river bed & bank has been scoured & eroded during the flood/2017 on right bank of Atrai. Out of 700 meter 248 meter has been damaged badly of one package of bank protection work. The cross section of the river in this length has been changed. As per circumstances, the design of this length has required to change. According to the revised approved design, the cost of the package has increased which was adjusted from the savings amount of the component "River Bank Protection Work" and "Re-excavation of Palashbari khal". This matter was discussed with Mid Term Evaluation Committee members during their site visit on dated 23-12-2017. It has been also discussed in 1st PSC meeting held on dated 01-02-2018 at MoWR.

After that RDPP has been recasted according to the decision of the rationalization meeting held on 20-5-2018 at Ministry of Water Resources. The administrative approval of revised DPP of the project has been issued by the Ministry of Water Resources vide Memo No. 42.00.0000.042.14.011.14-218 dated 26-06-2018.



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

Bangladesh is a densely populated with poor natural resources base. Lack of Industrialization and vulnerability to natural disasters, like flooding, river bank erosion, saline inundation and cyclones etc. made Bangladesh as one of the undeveloped countries in the world. The major problems responsible for poverty includes flooding, drainage congestion, high level of landless due to river bank erosion (i.e. population displacement and potential erosion damages and losses to productive agricultural and urban land and severe damage to property and infrastructure), unemployment, illiteracy and malnutrition. The population of the project area is very dense and land less is about 60%. Socio-economic development of the people through agriculture and business generation development providing of flood control support, removal of drainage congestion and protection of potential lands, infrastructure of the project areas from erosion damages is the main objective to alleviate poverty of the area. The proposed project is placed in environmental screening category. Identifiable adverse impacts would be confined to the implementation period and occur primarily in two or three construction seasons each lasting several month. As such the proposed intervention by providing the project work has very little impacts or no negative impacts in and around the area. The proposed project would be helpful for effective flood control, mitigation of drainage congestion and irrigation of the project area of Patnitala and Manda Upazila in Naogaon District. It would also prevent severe flood damage to crops, property and infrastructure.

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

### **◆ Project Identification :**

The project was initially identified by local politicians, local elites, etc. Those stakeholders earnestly requested the Honourable Whip of Parliament for addressing the problem of river erosion from Atrai River and also the Honourable Minister for Ministry of Textile and Jute, member of Parliament of 49-Naogaon-4. for improving drainage problem in the catchment area of Polashbari khal.

### **◆ Project Preparation :**

The site was visited by the Director General of BWDB, Dhaka instructed to take necessary action to reduce the threat of damage Atrai river. Later on, a Technical Committee was formed by BWDB. On the basis of Technical Report submitted by Committee, the project was prepared.

### **◆ Appraisal :**

PEC meeting was held on 12/08/2015 in Planning Commission and decision was taken to incorporate dredging work along the alignment where khas land is available. Technical Committee of the project also recommended the alignment where khas land is available as the dredging work will be more sustainable. As per decision of PEC, Hon'ble Planning Minister approved the project on 24 May 2016.





- ◆ **Credit Negotiation** : Not applicable
- ◆ **Credit Agreement** : Not applicable
- ◆ **Credit Effectiveness** : Not applicable
- ◆ **Loan Disbursement** : Not applicable
- ◆ **Loan Conditionality** : Not applicable
- ◆ **Project Approval** : The project was approved on 24/05/2016 & subsequent revision was approved on 26/06/2018.
- ◆ **Others (if any)** : Nil

**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 stakeholders 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:**

- Forest Office with land, Dak Bunglow, College, High School, Primary School, religious place, Cremation ground & other govt. and non-govt. properties located at Nozipur in Patnitala Upazila have been saved from river erosion.
- Right & left bank embankment of Atrai river has been protected.
- Drainage/flushing capacity has been increased and irrigation facilities has been improved around 1100 ha land in Polashbari Khal area of Manda Upazila.
- Properties Valued at approx.146.50 crore have been saved from river bank erosion.

**4.4.2 Indirect:**

Environmental enhancement from river erosion hazards.  
Sustainable socio-economic enhancement.

**4.5 Transfer of Technology and Institutional Building through the project:** Not Applicable

**4.6 Employment generation through the project :** Employment generation for skilled/unskilled during construction period is more than 20000 man-days.

**4.7 Possibility of Self-employment:** There are possibilities of self-employment as existing commercial and business centers 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:**

Protecting the river bank erosion & re-excavating khal various infrastructures are saved from the erosion, flood damage & drainage problem . The impact of socio-economic is balanced in the locality.

**4.11 Impact on environment:**

Environmental enhancement is achieved through the implementation of the Project. Bank erosion hazards of environment are eradicated.

**4.12 Sustainability of the project:**

The project is sustainable but requires periodic maintenance.

**4.13 Contribution to poverty alleviation/reduction:**

The project fulfilled the following benefits in compatible strategic goal i.e., a) reduction of vulnerability to water related disaster, b) manage erosion of river and protect towns and villages, c) increase productivity of poverty alleviation as per SDG:

- 1) The project ensures immovable properties of total worth of approximately Tk. 14650 lakh.
- 2) It generated employment for skilled/unskilled during construction period and also in annual O&M phase in project performance. Also better employment access in business tertiary sectors is enhanced.
- 3) Natural security against river bank erosion is resorted.

**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	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		

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

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

Mamudpur, Mahashasan & Polipara areas at Najipur Municipality of Patnitola Upazila in the District of Naogaon were under the threat of right and left bank erosion of Atrai river. The lands of forest, government food godown, land office, school, madrasa, religious place, Cremation ground, government-privet establishment etc. were at risk. The flood control embankment on both side of Atrai river of FCDI projects ("Construction of right bank embankment of Atrai river project" and "Patnitola Sub-project") was also at risk from flood damage which could make these projects ineffective. The Palashbari khal is a component of Naogaon Pldar-1 sub project which implemented in 1986. The reason for not excavation long time Palashbari khal was silted up. For this circumstances to prevent the erosion, bank revetment work was necessary. And re-excavation khal was need to improve the drainage, flushing and irrigation facilities.

The project "Protection of bank from erosion of Atrai River in 3(three)nos. area in Upazila-Patnitola and Re-excavation of Polashbari Khal in Upazila-Manda under Naogaon District (1st Revised)" was approved in planneing commission on 24-05-2016. The project has been completed in time. After the successful implementation of this project, the project area has been protected from right and left bank erosion of the Atrai river. The safety of flood control embankment of exsisting FCDI projects ("Construction of right bank embankment of Atrai river project" & "Patnitola Sub-project" ) along the right and left bank of Atrai river has been increased.

After completion of the project about 2097 ha agricultural land on the right and left bank of the river Atrai along with Govt. & Non Govt. establishment, forest, cremation ground, lives & properties in the project area worthing approximate Tk.14650 lac have been saved. It has also improved drainage or flushing and irrigation facilities around 1100 ha. land in the project area of exsisting Naogaon Polder-1 Sub-Project.

The socio-economic condition of the people has been improved. Scopes of new jobs & works have been created. The safety of human livelihood and properties has also been improved. The project will also contribute in attaining national self-sufficiency in food grains.

The implementation of dredging component was not required as per recommendation of the technical committee and it will not hinder the desired benefit of the project.

Proper monitoring and regular maintenance of the khal, the revetment works and other necessary components should be continued to ensure the sustainability of the project. Otherwise, the benefit of the project may get hampered.

Date:

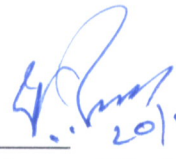
  
(Nasrin Razia Akhter Jahan)  
Project Director  
&  
Executive Engineer  
Office of the Chief Engineer,  
North-Western Zone  
BWDB, Rajshahi.



7. Remarks/Comments of Agency Head

After implementation of the project, Atrai River left and right bank embankment, Patnitola sub-project and Naogaon Polder-1 sub-project area have been protected from erosion of Atrai River. 9.70 Ha. area of Mahmudpur forest has been protected. Apart from that, re-excavation of Polashbari Khal has improved drainage capacity on adjacent areas. Net property savings through this project is as much as 146 crore taka. This project has been completed in due time and it is a successful project.

Date:

  
20/02/2015  
Signature and Seal  
(Md. Mahfuzur Rahman)  
Director General  
BWDB, Dhaka.

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

Date:

Signature and Seal



