

**GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
MINISTRY OF WATER RESOURCES**

PROJECT COMPLETION REPORT: IMED 04/2003 (Revised)

**RE-EXCAVATION OF BHADRA & SALTA RIVER FOR REMOVAL OF DRAINAGE
CONGESTION IN KHULNA DISTRICT (1st Revised).**

Name of Division : Khulna O & M Division-1, BWDB, Khulna.
Name of Circle : Jashore O & M Circle, BWDB, Khulna.
Name of Zone : South - Western Zone, BWDB, Khulna.

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 work : Re-Excavation of Bhadra & Salta River for Removal of Drainage Congestion in Khulna District (1st Revised).
02. Administrative Ministry : Ministry of Water Resources.
03. Executing Agency : Bangladesh Water Development Board.
04. Location of the work : Upazila: Dumuria District:-Khulna.

05. Objective of the Project :

The main objective of the project is remove drainage congestion of Dumuria Upazila of Khulna District & it's adjacent area. The gross benefited area is 49184 hectare and net benefited area is 39346 hectare.

06. Estimated Cost :

(In lakh Taka)

	Original	Latest Revised
(a) Total	7600.25	4298.47
(b) Taka	7600.25	4298.47
(c) Foreign Currency	-	-
(d) Project Aid	-	-
(e) RPA	-	-

07. Approval :

Date of Approval	:	PCP	DPP
(a) Original	:	-	06-09-2016
(b) Latest Revised	:	-	30-06-2019

08. Implementation Period

	Date of Commencement	Date of Completion
(a) Original	01-07-2016	30-06-2019
(b) Latest Revised	01-07-2016	30-06-2019
(c) Actual	-	-

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
N/A							

b) GOB :

(In lakh Taka)

Total amount	Loan	Grant	Cash Foreign Exchange
1	2	3	4
4298.47	-	4298.47	-

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
N/A						

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
N/A					

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
July, 2016 to June, 2019	July, 2016 to June, 2019	July, 2016 to June, 2019	-	The Project has been completed successfully on 30-06-2019 within the targeted completion date 30.06.2019 in DPP .

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	7600.25	4298.47	4141.80	-	Construction of 2nos Regulator didn't required as per approved RDPP
TAKA	7600.25	4298.47	4141.80	-	
PA	-	-	-	-	

03. Project Personnel : The project implementation was carried out by existing manpower of Khulna O&M Division-1, BWDB Khulna according to DPP provision. Seperate irregular labour was engaged according to DPP provision.

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)	10	9	5	-	9	01
Staff(s)	15	15	15	-	14	01
Total :	25	24	20	-	23	02

04. Training of Project Personnel (Foreign/Local) : There were no permission of training in this 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	N/A				
b. Local	N/A				

05. Component-wise Progress (As per inter-item adjustment approved PP) :

(In lakh Taka)

(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	
A. Revenue Component :-						
Petrol & Lubricant	1 item	8.00	100.00%	7.29	91.13%	

(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	
Printing, Publication	1 item	4.00	100.00%	4.00	100.00%	
Seal & stamps	1 item	5.00	100.00%	5.00	100.00%	
Others Stationary	1 item	2.00	100.00%	2.00	100.00%	
Irregular Labor Wage	1 item	22.00	100.00%	22.00	100.00%	
Detailed Feasibility Study with Mathematical model Study	1 item	263.23	100.00%	214.93	81.65%	
Honourium/Fee/ Remuneration of Different committee such as Project Steering committee (PSC), Tender Evaluation Committee (TEC) etc.	1 item	8.00	100.00%	2.36	29.50%	
Survey & Investigation	1 item	10.00	100.00%	10.00	100.00%	
Computer accessories	1 item	3.00	100.00%	3.00	100.00%	
Repairs, Maintenance and Rehabilitation						
Repair & maintenance of existing vehicles (Jeep 3 Nos & Motor Cycle 3 Nos)	No	6.00	3+3	5.97	3+3	
(A) Sub-total-		331.23	100.00%	276.55	94.53%	
B. Capital Component :-						
Jeep (below 2700 CC 1 No) (Manufacture by PRAGATI)	Nos	95.00	1	92.48	1	
Photocopier (1 No) (For Planning wing-4 of MoWR)	Nos	2.00	1	2.00	1	
Levelling Machine with stand (02 Nos)	Nos	3.00	2	2.99	2	
Desktop computer (Brand-3 nos.) and Laser printer (03 nos) with Scanner & UPS (One Desktop computer with Scanner and UPS for Planning wing-4 of MoWR)	Nos	2.50	3 (set)	2.50	3 (set)	
Sub-total Acquisition of Assets		102.50	100.00%	99.97	83.49%	
Construction and Works						
Re-Excavation of Bhadra River by Excavator (From Dumuria to Teligati, 9.900 km) (EW : 19.47 lakh cum)	km	2765.95	9.900 km (19.47 lakh cum)	2694.71	9.900 km (19.47 lakh cum)	
Re-Excavation of Bhadra River by Excavator (From Dumuria to Digholia, 11.738 km) (EW : 9.10 lakh cum)	km	930.54	11.738 km (9.10lakh cum)	929.49	11.738 km (9.10lakh cum)	

Re-Excavation of Salta River by Excavator (From Dumuria to Tiabunia, 9.000 km) (EW : 1.33 lakh cum)	km	138.25	9.000 km (1.33 lakh cum)	134.13	9.000 km (1.33 lakh cum)	
Construction of Drainage cum flashing Sluice(10-Vent, 1.50m x 1.80m) over Bhadra river at Digholia.	No	-	-	-	-	There was no provision in RDPP
Construction of Drainage cum flashing Sluice(10-Vent, 1.50m x 1.80m) over Bhadra river at Teligati.	No	-	-	-	-	There was no provision in RDPP
O&M during Construction	1-item	30.00	100.00%	6.95	16.47%	
(b) Sub-total Capital Component		3967.24		3865.25	100.00%	
Total cost (a+b)		4298.47		4141.80	100.00%	
(c) Physical Contingency		0.00				
(d) Price Contingency		0.00				
Grand Total (a+b+c+d) :		4298.47	100.00%	4141.80	100.00%	

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
Mr.A. K. M. Wahed Uddin Chowdory Additional Chief Engineer (56500-74400)	Full time	-	Yes	03-11-2016	03-12-2017	
Mr. Md. Lutfor Rahman Additional Chief Engineer (Current Charge (50000-71200)	Full time	-	Yes	03-12-2017	19-02-2019	
Mr. Md. Siddiqui Rahman Additional Chief Engineer (Current Charge (50000-71200)	Full time	-	Yes	19-02-2019	To date	

07. Procurement of Transport (in Nos.):

Type of transport	Number as per D.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	-		-	-	-	-

Jeep (Not below 2700 C.C.) (Manufactured by Pragati Industries Ltd.)	1 no	30-06-2019	-	30-06-2019	-	Applied for Registration and using in good condition by Chief Engineer, South-Western zone, BWDB, Khulna.
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 :

Procurement of Works

Description of procurement (goods/works /consultancy) as per bid document	Tender/Bid/Propo al Cost (in crore Taka)		Tender/Bid/Proposal		Date of completion of works/services and supply of goods	
	As per RDPP	Contract value	Invitation date	Contract signing/ L.C opening date	As per contract	Actual
1	2	3	4	5	6	7.
2.1 Bhadra River Dumuria to Teligati						
2.1(a) Re-Excavation of Bhadra River Dumuria to Teligati by Excavator From km. 0.000 to km.1.250=1.25 km in connection Re-excavation of Bhadra-Salta river for removal of drainage congestion in khulna district under Khulna O&M Division-1 during the year 2016-17 & 2017-18. Package no-RBT-01, e-GP tender id no-85378.	5.64	5.59	30.01.2017	06.06.2017	25.04.19	18.03.19

Description of procurement (goods/works /consultancy) as per bid document	Tender/Bid/Propo sal Cost (in crore Taka)		Tender/Bid/Proposal		Date of completion of works/services and supply of goods	
	As per RDPP	Contract value	Invitation date	Contract signing/ L.C opening date	As per contract	Actual
1	2	3	4	5	6	7
2.1(b) Re-Excavation of Bhadra River Dumuria to Teligati by Excavator From km. 1.250 to km.2.500 = 1.25 km in connection Re-excavation of Bhadra-Salta river for removal of drainage congesation in khulna district under Khulna O&M Division-1 during the year 2016-17 & 2017-18. Package no-RBT-02, e-GP tender id no-85379.	4.64	4.54	30.01.2017	06.06.2017	25.06.18	24.06.18
2.1(c) Re-Excavation of Bhadra River Dumuria to Teligati by Excavator From km. 2.500 to km.3.750 =1.25 km in connection Re-excavation of Bhadra-Salta river for removal of drainage congesation in khulna district under Khulna O&M Division-1 during the year 2016-17 & 2017-18. Package no-RBT-03, e-GP tender id no-85380.	4.27	4.18	30.01.2017	05.06.2017	25.06.18	24.06.18
2.1(d) Re-Excavation of Bhadra River Dumuria to Teligati by Excavator From km. 3.750 to km.5.000 = 1.25 km in connection Re-excavation of Bhadra-Salta river for removal of drainage congesation in khulna district under Khulna O&M Division-1 during the year 2016-17 & 2017-18. Package no-RBT-04, e-GP tender id no-85381.	4.70	4.30	30.01.2017	11.06.2017	25.06.18	24.06.18

Description of procurement (goods/works /consultancy) as per bid document	Tender/Bid/Propo sal Cost (in crore Taka)		Tender/Bid/Proposal		Date of completion of works/services and supply of goods	
	As per RDPP	Contract value	Invitation date	Contract signing/ L.C opening date	As per contract	Actual
1	2	3	4	5	6	7
2.1(e) Re-Excavation of Bhadra River Dumuria to Teligati by Excavator From km. 5.000 to km.6.250 = 1.25 km in connection Re-excavation of Bhadra-Salta river for removal of drainage congesation in khulna district under Khulna O&M Division-1 during the year 2016-17 & 2017-18. Package no-RBT-05, e-GP tender id no-85382.	5.28	5.28	30.01.2017	06.06.2017		10.11.18
2.1(f) Re-Excavation of Bhadra River Dumuria to Teligati by Excavator From km. 6.250 to km.9.800 = 3.550 km in connection Re-excavation of Bhadra-Salta river for removal of drainage congesation in khulna district under Khulna O&M Division-1 during the year 2016-17 & 2017-18. Package no-RBT-06, e-GP tender id no-85383.	3.13	3.09	30.01.2017	06.06.2017	25.06.18	10.06.18
2.2 Bhadra River Dumuria to Digholia						
2.2(a) Re-Excavation of Bhadra River Dumuria to Digholia by Excavator From km. 0.000 to km.4.250 = 4.250 km in connection Re-excavation of Bhadra-Salta river for removal of drainage congesation in khulna district under Khulna O&M Division-1 during the year 2016-17 & 2017-18. Package no-RBT-07, e-GP tender id no-83950.	4.90	4.78	22.01.2017	06.06.2017	25.06.18	12.06.18

Description of procurement (goods/works /consultancy) as per bid document	Tender/Bid/Propo sal Cost (in crore Taka)		Tender/Bid/Proposal		Date of completion of works/services and supply of goods	
	As per RDPP	Contract value	Invitation date	Contract signing/ L.C opening date	As per contract	Actual
1	2	3	4	5	6	7
2.2(b) Re-Excavation of Bhadra River Dumuria to Dhigholia by Excavator From km. 4.250 to km.9.250 = 5.000 km in connection Re-excavation of Bhadra-Salta river for removal of drainage congession in khulna district under Khulna O&M Division-1 during the year 2016-17 & 2017-18. Package no-RBT-08, e-GP tender id no-83951.	4.868	3.82	20.01.2017	05.06.2017	25.06.18	20.06.18
Re-excavation of Salta River by Excavator (from Dumuria to Tiabunia) From km. 0.00 to km.9.00 = 9.000 km in connection Re-excavation of Bhadra-Salta river for removal of drainage congession in khulna district under Khulna O&M Division-1 during the year 2017-18 & 2018-19. Package no-01/VSP/2017-18/k-1, e-GP tender id no-141956.	1.382	1.382	26-11-2017	15-02-2018	25-06-19	25-06-19
<u>Procurement of Consaltancy</u>						
Fesibility study for restoration of Bhadra and Salta River along with Adjacent Polder (25, 26, 27/1, 27/2, 28/1 & 29) to removal of Drainage Congession of Khulna District including Environmental and Social Impact Assessment (EISA)	2.78	2.149	13.08.2017	23.10.2017	22.08.2018	02.12.2018

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

Name of the Field	Approved man month		Actual man month utilised	Remarks
	As per DPP	As per contract		
1	2	3	4	5
a) Foreign :	N/A	N/A		
b) Local : Fesibility study for restoration of Bhadra and Salta River along with Adjacent Polder (25, 26, 27/1, 27/2, 28/1 & 29) to removal of Drainage Congession of Khulna District including Environmental and Social Impact Assessment (EISA)		10 man month	10man month	

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
N/A						

FINANCIAL AND PHYSICAL PROGRAMME :**1. (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
2016-17	1568.34	1568.34	-	20.63%	14.60	14.60	-	0.34%
2017-18	2815.84	2815.84	-	37.05%	2899.57	2899.57	-	67.46%
2018-19	3216.07	3216.07	-	42.32%	1384.30	1384.30		32.20%
Total	7600.25	7600.25	-	100.00%	4298.47	4298.47		100.00%

01. (b) Inter-item adjustment 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
2016-17	200.00	200.00	-	0.34%	125.00	14.60	14.60	-	2.00%
2017-18	3000.00	3000.00	-	67.46%	2968.38	2899.58	2899.58	-	65.80%
2018-19	1316.00	1316.00	-	32.20%	1316.00	1227.62	1227.62	-	32.20%
Total	4516.00	4516.00	-	100%	4409.38	4141.80	4141.80	-	100.00%

C. ACHIEVEMENT OF OBJECTIVES OF THE PROJECT :

Objectives as per DPP	Actual achievement	Reasons for shortfall, if any
To remove drainage congestion of Dumuria Upazila of Khulna District & it's adjacent area. The gross benefited area is 49184 hectare and net benefited area is 39346 hectare. i) To improve drainage facilities & reduce drainage congestion of adjacent polder area of Bhadra & Salta River. ii) To facilitate fish production. iii) To protect the Environmental impact. iv) To reduce poverty level within the project area.	• Re-excavation of Bhadra and salta River has been completed. • Improved drainage facilities & reduce drainage congestion of adjacent polder Ensured flood free healthy environment through removal of drainage congestion. • Development of fish production. • Development of communication, roads, beautification along the river side and local tourism. • Living Standard have been improved.	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 1 st year of operation at full capacity (or during, real production for newly completed project).
i) Re-excavation of Bhadra river by Excavator from Dumuria to Teligati)	Km.	9.900	Total length of completed river re-excavation is 30.638km. The gross benefited area is 49184 hectare and net benefited area is 39346 hectare. Objective-wise and output expectancy wise, the project is 100% accomplished.
ii) Re-excavation of Bhadra river by Excavator from Dumuria to Digholia)	Km	11.738	
iii) Re-excavation of Salta river by Excavator from Dumuria to Tiabunia)	Km.	9.000	

02. Cost / Benefit :

Item	Estimated	Actual
(1) Benefit cost ratio of the project		
(i) Financial	3.67:1.00	Will be evaluated later by concern Directorate of BWDB & IMED.
(ii) Economic	4.41:1.00	
(2) Internal Rate of Return		
(i) Financial	41.69%	
(ii) Economic	47.50%	

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

No shortfall.

F. MONITORING AND AUDITING

01. Monitoring:

Name & designation of the inspecting official	Date of Inspection	Identified Problems	Recommendations
1	2	3	4
(a) <u>Ministry / Agency:</u>		-	
i) Mr. Mahmudul Islam Additional Secretary(Admin) ii) Mr. Md. Siddiquir Rahman Assistant Chief, MoWR	26.01.2019	-	Recommended to complete the project in due time including all nessary items of work
i) Mr. Mantu Kumar Biswas, Joint Chief, MoWR ii) Mr. Md. Siddiquir Rahman Assistant Chief, MoWR	06.02.2018	-	Recommended to complete the project in due time including all nessary items of work
i) Mr. Howladar Zakir Hossain, Deputy Secretary, MoWR.	16.11.2017 and 06.02.2018	-	Recommended to complete the work in due time.
i) Mst. Nurjahan Begum, Deputy Secretary, MoWR	26.04.2018	-	Recommended to complete the work in due time.
i) Mr. Khondaker Khalequzzaman,, Additional Director General (West Region), BWDB, Dhaka.	13.07.2018	-	ADG (WR) appreciated the quality of work . Instruct all concern official to complet the work in due time.
b) <u>IMED :</u>	-	-	-
i) Mr. Md. Afzal Hossan , Director, IMED, Dhaka. ii) Mst Lasmi Chakma Assistant Director IMED, Dhaka	11.04.2018	-	Recommended to complete the work in due time.
a) <u>Others:</u>	12.06.2019	-	-
i) Mr. Salehin Ahmed ADC (Rev.) . Khulna		-	
b) MR. Narayan Chondro Chondo, MP, Honourable Ex. Minister, Ministry of Fisharies and Livestock	Several dayes In the period of 25.06.18 to 30.06.2019	610nos Unauthorised houses, Stuctures and Brick fields on river alignment	Instructed UNO, Dumuria to remove all Unauthorised houses, Stuctures and Brick fields to implement the project in due time

02. Auditing during and after Implementation:-

2.1. Internal Audit : No internal audit has been conducted.

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

2.2. External Audit :-

Audit period	Date of submission of Audit Report	Major findings/ objections	Whether objections resolved or not.
1	2	3	4
2016-17	20-10-2017	No objection found	-
2017-18	13.05.2019	1 no	Reply submitted-1no
2018-19	-	-	-

G. DESCRIPTIVE REPORT

1. General Observations/Remarks of the Project on :-

1.1 Background :-

The project area is mostly consists the Polders 25, 26, 27/1, 27/2, 28/1 and 29 in the southwest region of Bangladesh. The major rivers of the area are Bhadra, Salta, Upper Solmari, Lower Salta, Lower Sholmari and Hori-Teligati-Gangrail. The project area is bounded by the Hori-Teligati-Gangrail to the Southwest and Lower Bhadra-Lower Salta- Lower Solmari to the southeast. The Khulna-Dumuria Highway passes through the middle of the area. The Bhadra river is the drainage route of Polder 25, 27/1 is located at the north side of Khulna-Dumuria Highway which is almost non-functioning. On the other hand Polder 26, 27/2 and 29 is situated at the south of this highway and drains through the Salta-Lower Salta-Lower Bhadra river system. Hamkura river is originated from Beel Dakatia and met the Bhadra river at the west of Dumuria Upazila headquarter.

Salta and Bhadra rivers have been silted up over the years and caused drainage congestions in the adjacent polders. These rivers are the main drainage route of Polder-25, Polder-26 and part of Polder-27 and Polder 29. Currently drainage of these polders is restricted significantly due to deposition of sediment on river bed. The area has been experiencing prolong drainage congestion causing enormous sufferings of local communities. Local communities repeatedly placed their demand to remove the drainage congestions. Before 1990 the Bhadra River was a flowing river and during 2000 the river became a dead river naturally and local people built different infrastructure on the river since it becomes a filled land. Salta River is a flowing river but it has also been experiencing siltation from 1990.

Riverbed siltation by tidal pumping and during monsoon flooding and salinity intrusion are the typical problems in the south-west region of Bangladesh. Before implementation of Coastal Embankment Project,

the tidal river system of the southwest region was in a dynamic equilibrium condition in terms of discharge & sediment inflow & outflow in the area. The low lying areas of the Khulna, Jessore, Satkhira and Bagerhat districts suffered by flooding in the wet season and salinity in the dry season. As a result vast area of this region remained agriculturally unproductive. But a natural process of land development due the deposition of silt was active in each year during dry season. Due to the increasing demand of the growing population for productive lands, attempts were made by the local people to protect low lying areas (beels) from flood & saline water intrusion by construction of dwarf embankment to bring their lands under agricultural production. Sometimes they became successful if the flood had come later and sometimes they failed when the flood had come earlier before harvesting of Boro paddy.

This was enhanced by Bangladesh Water Development Board, in the 60s and started to build series of peripheral embankment around the beels commonly known as polders in the coastal area under the Coastal Embankment Project (CEP).

Due to construction of Polders these two major problems (i) flooding during monsoon season and (ii) intrusion of saline water during dry season were solved and thereby agricultural production was doubled (or tripled in some places) in the coastal region for the next 15 to 20 years. The economic condition of the local people boosted up rapidly and continued up to 1975-'16.

During implementation of CEP i.e. construction of polders, the natural process of incoming silt during high tide in the dry season remained unaddressed. Due to construction of embankment at the both banks of a river for poldering, no space remained left for deposition of incoming silt except in the river bed. This caused the drainage routes to be silted up to create drainage congestion in course of time in the South-East region.

1.2 Justification/Adequacy:-

The project is technically viable since implementation of interventions will reduce vulnerability of water logging and drainage congestion in Dumuria upozila and adjacent area. Routine O & M work will ensure sustainability of project.

The project plays positive and active role against environmental degradation through protect the water congestion. It ensure extension of re-excavation of related rivers such as Hamkura river, Joykhali river/Khal and other related drainage khals to improve more effective drainage facilities. Regular O & M works will make the Re-excavation work sustainable.

The project is socially most desirable to mitigate vulnerability of water congestion and save the crop production, fish culture and other facilities of Navigation communication. Also better income and employment access in agriculture, fishery and tertiary will be enhanced.

1.3 Objectives:-

To remove drainage congestion of Dumuria Upazila of Khulna District & it's adjacent area. The gross benefited area is 49184 hectare and net benefited area is 39346 hectare.

- i) To improve drainage facilities & reduce drainage congestion of adjacent polder area of Bhadra & Salta River.
- ii) To facilitate fish production.
- iii) To protect the Environmental impact.
- iv) To reduce poverty level within the project area.

1.4 Project revision with reasons :

The main feature of the revision of the project is:

- (i) According to recommendation of Study report of IWM of this project, Provision for Construction of Drainage cum Flushing Sluice (10 vent, 1.50m x 1.80m) over Bhadra river at Digholia and Teligati has been avoided due to circulated water flow. Due to this reason amount of Taka 3301.78 lac has been reduced.
The revised cost of this project(1st RDPP) is Tk. 4298.47 lakh. As per above reason Tk. 3301.78 lac has been reduced from the original DPP is Tk. 7600.25 lac.
- (ii) Cost for re-excavation of Bhadra River (From Dumuria to Teligati) is increased due to physical condition of field, Changing of Alignment of re-excavation and Providing additional shifting of Excavated earth.
- (iii) Cost for re-excavation of Bhadra River (Dumuria to Digholia,) is decreased due to physical condition of field.
- (iv) Cost for re-excavation of Salta River is increased due to increase of earth volume for siltation on river bed.
- (v) Cost for Jeep purchase (Not below 2700 C.C.) (Manufactured by Pragati industries ltd.) =1No is increased due to increasing rate of Pragati Industries Limited.

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

It seems important to remove drainage congestion of Dumuria Upazila of Khulna District & it's adjacent area. The Project has been formulated with objective to remove drainage congestion of Dumuria Upazila by Re-excavation of Bhadra and salta River. After completion of the project, it will remove drainage congestion and increases the facilitate fish production and reduce poverty level within the project area.. The project design seems sufficient as per on field necessity and timing of implimentation of the project has made the project cost effective.

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

- ◆ Project Identification: - The project has been taken up on request from Local communities.
- ◆ Project Preparation:- The project has been prepared after taking the opinion from the affected locality people and its necessity. A technical committee was formed by BWDB & DPP of the project was prepared on recommendation of the technical report formed by that committee.
- ◆ Appraisal: - The project appraisal meeting on planing commission was held on 29-02-2016
- ◆ Credit Negotiation :- N/A
- ◆ Credit Agreement:- N/A
- ◆ Credit Effectiveness:- N/A
- ◆ Loan Disbursement:- N/A
- ◆ Loan Conditionalities:- N/A
- ◆ Project Approval :- The project has been approved by ECNEC on 06-09-2016.
- ◆ Others (if any).

3. 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 : N/A
- 4.3 O & M programme of the project : Post project necessary O&M works will be arranged from O & M allocation of BWDB.
- 4.4 Impact of the project :
 - 4.4.1 Direct :-
 - * After implementation of the project, Bhadra- salta River & adjacent area were saved from erosion of Bhairab river. This project also helps to implement navigation, Fishing, Removing drainage condition and local people are very much satisfied.
 - * Saved public and private properties from river bank erosion.
 - * Road communication system was developed.

4.4.2 Indirect :-

- * Socio economic condition of the project area has been increased to a good extent.

4.5 Transfer of Technology and Institutional Building through the project :- N/A

4.6 Employment generation through the project :- The employment of poor/landless people have already been generated through the project during its implementation phase.

4.7 Possibility of Self employment: - The facilities of self employment has already been generated to favourable condition of agriculture, industrial and commercial growth.

4.8 Possibility of women-employment opportunity: - Employment opportunity for women has been enhanced at the implementation phase of the project.

4.9 Women's participation in development: - The women of the area have already participated in the implementation work.

4.10 Probable Impact on socio-economic activity: - The socio-economic condition of the project has already been developed to a good extent.

4.11 Impact on environment :- There will be no adverse impact on environment.

4.12 Sustainability of the project: - The project will sustain through regular O & M work whenever required.

4.13 Contribution to poverty alleviation/reduction: - The project will contribute in reducing/alleviation poverty.

4.14 Opinion of the public representatives, local elite, local administration, teachers, religious leaders, women's representatives etc : The project is river bank protection type. Hence it is excepted and appreciated by the stakeholders.

4.15 Contribution of Micro-credit programmes and Comments on overlapping with any NGO activities: - No.

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

5.1 Project Management	Did not arise	5.12 Project aid disbursement and re-imbursment	Did not arise
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. : Illegal occopency along the river alignment.	
5.10 Project financing, allocation and release.			
5.11 Design formulation/approval			

6. Remarks & Recommendations of the Project Director :

- (a) The Project has been completed successfully as per recommendation of Detail feasibility study with mathematical model study report as per DPP provision. The study was done by IWM. The project has been completed as per approved 1st RDPP, approved design and specification within stipulated time on 30.06.2019. After successfully re-excavation of Bhadra and Sulta River of 30.638km the drainage congestion of Dumuria upazila of Khulna district and its adjacent area has removed. For this reason net benefited area about 39346hac. has been increased. Main item of the recommendation of IWM study report is to maintain "Free tidal movement through Middle Bhadra and Bhadra/Joykhali rivers. There is no recommendation for construction of 2 nos Drainage regulator.
- (b) The quality and quantity of works was checked by BWDB Taskforce team several times. Also high official of Ministry of Water resources, BWDB, IMED, and local official was visited the project several times. They observe the benefit of project.
- (c) As per recommendation of IWM report the project was completed successfully. 2nd phase of this project (DPP) with the provision for re-excavation of Hamkura river & Drainage khals, construction of Bridges and other structure according to recommendation of study report has been submitted to the higher Authority to successfully completed the drainage Congestion of entire river link system.

Date : 26.09.19

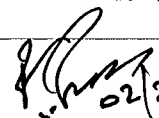
Signature and seal of the Project Director/Manager

Md Siddiqur Rahman
Chief Engineer
South-Western Zone
BWDB, Khulna.

7. Remarks/Comments of Agency Head :

The project achieved it's objective of removing water congestion of Dumuria Upazilla of Khulna District and adjacent area by re-excavation of Bhadra and Sakta River. Improved drainage facilities have been provided to a net area of 39346 hectares. Living standard of stakeholders has been raised due to reduction of drainage congestion, increased fish production and improved communication. Thus the project can be regarded as a successful one.

Date :

 02/10/2022

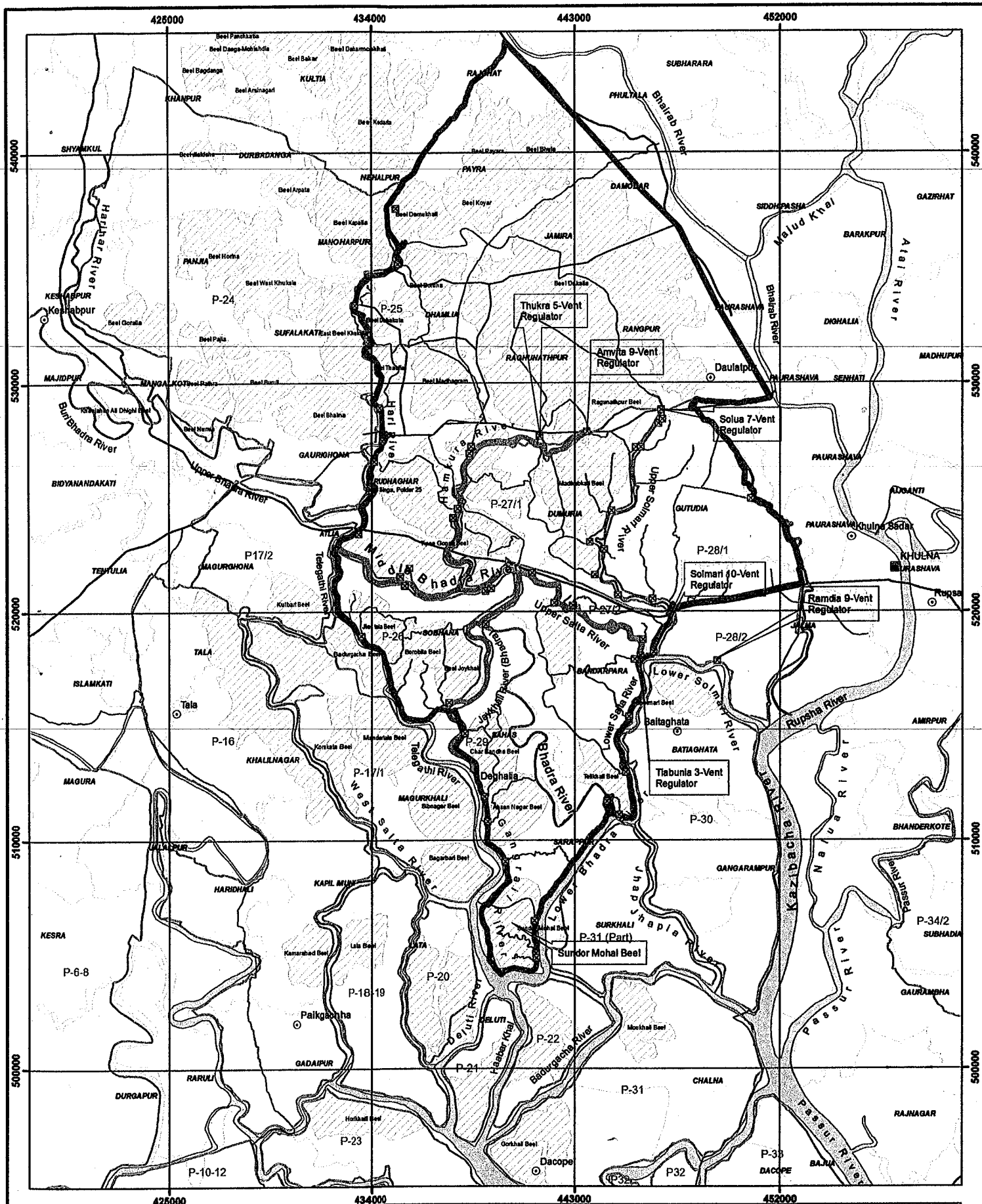
Signature and Seal

(Md. Mahfuzur Rahman)
Director General
BWDB, Dhaka.

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

Date :

Signature and Seal



Legend

- Regulator/Sluice
- Upazila HQ
- District HQ
- Project Boundary
- Dead River
- Road
- River
- Union Boundary
- Thana Boundary
- District Boundary

Project Area Map

Projection: Bangladesh Tranverse Mercator



8



Bhadra river (Digholia part)



Bhadra and Salta river confluence point at Dumuria Bazar.

Bhadra River(Teligati Part)

