

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

PROJECT COMPLETION REPORT: IMED 04

FOR

REMOVAL OF DRAINAGE CONGESTION FROM KOBADAK RIVER BASIN(PHASE-I)
(1ST REVISED)

BANGLADESH WATER DEVELOPMENT BOARD

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 : Removal of Drainage Congestion from Kobadak river basin(Phase-I) (1st Revised)
02. Administrative Ministry : Ministry of Water Resources.
03. Executing Agency : Bangladesh Water Development Board.
04. Location of the work : District: Jessore, Shatkhira & Khulna, Upazilla: Monirampur, Keshebpur, Tala & Paikgacha.
05. Objective of the Project : 1. Removal of Drainage Congestion.
2. Flood Control.
3. Irrigation and Fisheries Development.
4. Sustainable Sediment Management by installing & Operating TRM.

06. Estimated Cost

	Original	1st Revised	(In lakh Taka) Inter-item adjustment
(a) Total	26154.83	28611.50	28611.50
(b) Taka	26154.83	28611.50	28611.50
(c) Foreign Currency	-	-	-
(d) Project Aid	-	-	-
(e) RPA	-	-	-

07. Date of Approval	:	PCP	PP
(a) Original	:		13/09/2011
(b) 1st Revised	:		23/04/2015
(c) Inter item adjustment	:		26/12/2016

08. Implementation Period

	Date of Commencement	Date of Completion
(a) Original	2011-2012	2014-2015
(b) 1st Revised	2011-2012	2015-2016
(c) Inter item adjustment	2011-2012	2016-2017
(c) Actual	2011-2012	2016-2017

09. Financing Arrangement (Source-wise) : GoB

9.1 Status of Loan/Grant

a) Foreign Financing : Does not arise.

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
28611.50	-	28611.50	-

9.2 Utilization of Project Aid : (Source wise)

Source (s)	Total Amount		Actual Expenditure		(In million) Unutilized Amount	
	In US \$	In Local Currency	In US \$	In Local Currency	In US \$	In Local Currency
	2	3	4	5	6	7
N/A						

9.3 Re-imbursible Project Aid (RPA):

R P A Amount		Amount Spent	Amount Claimed	Amount Re-imbursed	(In lakh Taka) 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 Implement ation period	Time Over-run (% of original implementation period)	Remarks
Original	Latest			
1	3	4	5	6
2011-2012 to 2014-2015	2011-2012 to 2016-2017	2011-2012 to 2016-2017	50%	The project was targeted for completion in the year 2014-15. But it could not be completed by 2015 due to public resistance against implementation of TRM (Tidal River Management) which is a most important component of the project for the sustainability of the project benefits. Kobadak river re-excavation was also the dependent part of TRM. That means after implementation of TRM, Kobadak re-excavation work should be started. Hence, delay start of TRM, delayed the project.

02. Cost of the Project:

Description	Estimated Cost		Actual expenditure	Cost over-run (% of original cost)	Remarks
	Original	Latest			
1	2	4	5	6	7
TOTAL	26154.83	28611.50	26601.45	Increase 1.71%	DPP cost was increased due to increase of crop compensation & TRM maintenance cost.
TAKA	26154.83	28611.50	26601.45	Increase 1.71%	
PA	-	-	-	-	

(In lakh Taka)

03. Project Personnel : The project implementation was carried out with existing manpower of Jessore O&M Division. Clarification according to DPP.

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)	21	21	8	-	20	01
Staff(s)	27	27	23	-	25	02
Total :	48	48	31	-	45	03

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

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

05. Component-wise Progress (As per inter-item adjustment 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
A. Revenue Component :-						
Development of WMO's people's participation & motivational works by BWDB Extension personel. (1 item)	1 item	10.00	100%	3.66	(40.00%)	Implementation of TRM and operation of TRM were delayed by 2 years. That delayed this work and also reduced the expenditure.
Petrol & lubricants (for transport, vehicles & excavators) (1 item)	1 item	45.00	100%	43.26	(99.71%)	As per requirement
Stationary supply(1 item)	1 item	12.00	100%	11.99	(100%)	
Publicity & Advertisement(1 item)	1 item	11.00	100%	11.00	(100%)	
Survey & Investigation(1 item)	1 item	13.00	100%	13.00	(100%)	
Crop compensation for Pakhimara beel TRM basin(1 item)	1 item	2262.00	100%	2262.00	(100%)	

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

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
Excavation of Gajessree khal & construction of embankment on both bank. (Earth : 220502.00 cum)11.000 Km.	km	227.20	11.00 km (100%)	227.20	11.00 km (100%)	N/A
Excavation of khals connecting to beels. (Earth : 1990166.00 Cum, 76.00 km)	km	1173.80	76.00 km (100%)	963.26	76.00 km (99.21%)	Contract price was lower than estimated price.
Construction of embankment on the both bank of Kobadak river. (Earth : 192536.00 Cum) (21.50 km)	km	272.48	21.50 km (100%)	270.48	21.50 km (99.81%)	Contract price was lower than estimated price.
Construction of Baily bridge over link canal of TRM (Including Shifting Cost)(1 No)	No	265.00	1 No (100%)	265.00	1 No (100%)	
Construction Box outlet structure across the embankment. (14 Nos)	Nos	800.00	14 Nos (100%)	664.87	14 Nos (100%)	Contract price was lower than estimated price.
Repair of Existing regulator(10 Nos)	Nos	100.00	10 Nos (100%)	67.30	10 Nos (97.50%)	Contract price was lower than estimated price.
Construction & removal of closure-dam (3 Nos)	Nos	86.22	3 Nos (100%)	77.82	3 Nos (100%)	Contract price was lower than estimated price.
Acquisition of Assets.						
Transport Vehicle (Jeep,4 WD,5 door,7 seater -1 no, Tk 57 00 lakh & pickup , double cabin - 1 no)(2 Nos)	Nos	86.00	2 Nos (100%)	86.00	2 Nos (100%)	N/A
Digital survey instruments : (GPS-2 nos & levelaning machine- 1 No)	Nos	5.00	3 Nos (100%)	5.00	3 Nos (100%)	N/A
Laptop (2 nos) & Desktop Computer (1no)	Nos	1.70	3 Nos (100%)	1.70	3 Nos (100%)	N/A
Exacavator , Long boom type with accessories (1 No)	No	179.75	1 No (100%)	179.75	1 No (100%)	N/A
Exacavator , Amphibious type with accessories (1 No)	No	199.70	1 No (100%)	199.70	1 No (100%)	N/A
Photocopier machine(digital) (1 No for Joint Chief Planning, BWDB) (3 Nos)	No	4.50	3 Nos (100%)	4.50	3 Nos (100%)	N/A
Acquisition of Land (5.00 ha.)	Ha	80.00	5 ha (100%)	80.00	5 ha (100%)	N/A
(B) Sub-total-		26032.5		24191.9		
(C) Physical Contingency		50.00	100%	-	-	
(D) Price Contingency		100.00	100%	7.00	7.00%	
Total : (A+B+C+D)		28611.50		26601.45	98.71%	

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

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
Repair of transport & Vehicles(1 item)	1 item	6.62	100%	6.62	(100%)	
Monitoring of Sedimentation salinity, Tide & flood in river system & TRM basin(1 item)	1 item	69.38	100%	51.02	(88.02%)	As per bill submitted by IWM.
(A) Sub-total-		2429.00		2402.55		
B. Capital Component :-						
Construction of Peripheral Embankment. (Earth: 503100 Cum) including maintenance.(12.87 Km.)	km	703.24	12.87 km (100%)	644.05	1287 km (99%)	Contract price was lower than estimated price.
Re-excavation of Shalikha khal for TRM at Pakhimara beel (Earth : 1152000.00 cum) (12.50 Km.)	km	1205.63	12.50 km (100%)	1166.70	12.50 km (97.08%)	Contract price was lower than estimated price.
Construction of pipe out let Structure (18 Nos- 6.00 m dia pipe outlet , 3 Nos- 9.00 m dia pipe outlet).	Nos	400.00	21 Nos (100%)	130.05	19 Nos (100%)	Two nos of pipe outlet were not constructed due to shortage of time and high tide of TRM basin.
Excavation of link Channel by dreger (Earth : 375000 Cum) & Maintance (1.50 km)	km	330.00	1.50 km (100%)	260.67	1.50 km (100%)	Contract price was lower than estimated price.
Protective work of TRM link canal and peripheral embankment (6.00 km)	km	900.00	6.00 km (100%)	869.73	6.00 km (100%)	Contract price was lower than estimated price.
Re-excavation of River/Khal:						
Re-excavation of Kobadk river by excavator (Km. 142.00/ 142.00 to Km. 160.00/157.200 Earth 3682838.00 Cum) including re-excavating a pilot channel from km. 142.00 to km. 157.00, (15.20 km and pilot chanel 15 km)	km	4603.00	15.20 km (100%)	4050.46	15.20 km (99.70%)	Contract price was lower than estimated price.
Re-excavation of Kobadak river Mechanically (Km.75.00 to Km. 142.00) and Construction of Embankment on both bank of the river with the excavated earth carried by manual Labour Total Earth work : 10403823.50 Cum (67.00 Km.)	Km	13898.37	67.00 km (100%)	13597.64	67.00 km (100%)	Contract price was lower than estimated price.
Maintenance dredging of Kobadak river. Earth : 703200.00 Cum)(10.00 Km.)	km	10.91	-	-	-	Due to positive impact of TRM, maintenance dredging item was not necessary.
Re-excavation of Buri Bhadra river (Earth: 602331.00 Cum) (20.00 Km.)	km	500.00	20.00 km (100%)	380.02	20.00 km (79.66%)	

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. Dipok Kumar Sarkar (22250-900×10-31250)	Full time	-	No	03-07-2011	24-07-2014	
Mr. Zulfikar Ali Howlader (50000-71200)	Full time	-	Yes	08-09-2014	20-07-2017	

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/d amaged with date	Remarks
1	2	3	4	5	6	7
Car	-	-	-			
Jeep	1 No (Jeep, 4wd, 5 door, 7seater)	15/09/2011	-	01/07/2017	-	-
Microbus						
Minibus						
Bus						
Pick-up	1 No(Double cabin pickup)	15/09/2011	-	01/07/2017	-	-
Truck						
Motor Cycle						
By-cycle						
Speed Boat						
Launch						
Others with name						

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/Proposal Cost (in lac 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
Re-excavation of Kobodak river from km 75.600 to 77.75, km 77.750 to km 80.50, km 81.10 to km 83.250, km 83.90 to km 86.10, km 87.10 to km 90.10 (DPM No-01/2014-15.	2160.53	2160.29	25/09/14	26/02/15	26-7-15	30/06/17
Re-excavation of Kobodak river from km 91.10 to km 94.100 (Package No-JW-05 /2014-15)	461.74	461.74	29-9-14	15/11/14	26/06/17	26/06/17
Re-excavation of Kobodak river from km 94.10 to km 97.100 (Package No-JW-04 /2014-15)	419.44	419.44	28-9-14	30/12/14	29/5/15	26/06/17
Re-excavation of Kobodak river from km 98.10 to km 101.100 (Package No-JW-03 /2014-15)	362.12	362.12	28/9/14	30/12/14	29/5/15	26/06/17
Re-excavation of Kobodak river from km 102.10 to km 105.100 (Package No-JW-02 /2014-15)	490.56	490.500	28/9/14	15/11/14	29/5/15	26/06/17

Description of procurement (goods/works /consultancy) as per bid document	Tender/Bid/Proposal Cost (in lac 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
Re-excavation of Kobodak river from km 128.750 to km 130.00 (Package No-JW-06,Lot No-01/2012-13)	353.35	353.29	14/1/13	30/07/13	27/12/13	30/06/15
Re-excavation of Kobodak river from km 130.00 to km 131.250 (Package No-JW-06,Lot No-02/2012-13)	392.88	392.86	14/1/13	30/07/13	27/12/13	30/06/15
Re-excavation of Kobodak river from km 131.250 to km 132.450 (Package No-JW-06,Lot No-03/2012-13)	372.88	372.39	14/1/13	30/07/13	27/12/13	30/06/15
Re-excavation of Kobodak river from km 132.750 to km 134.100 (Package No-JW-07,Lot No-01/2012-13)	391.82	391.77	14/1/13	30/07/13	27/12/13	30/06/15
Re-excavation of Kobodak river from km 134.100 to km 135.450 (Package No-JW-07,Lot No-02/2012-13)	398.68	398.68	14/1/13	30/07/13	27/12/13	30/06/15

Description of procurement (goods/works /consultancy) as per bid document	Tender/Bid/Proposal Cost (in lac 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
Re-excavation of Kobodak river from km 106.10 to km 109.100 (Package No-JW-01/2014-15)	507.21	507.20	28/9/14	30/12/14	29/5/15	26/06/17
Re-excavation of Kobodak river from km 123.250 to km 124.450 (Package No-JW-04/2012-13)	306.45	306.43	14/1/13	30/07/13	27/12/13	30/06/15
Re-excavation of Kobodak river from km 124.750 to km 126.00 (Package No-JW-05, Lot No-01/2012-13)	314.37	314.11	14/1/13	30/07/13	27/12/13	30/06/15
Re-excavation of Kobodak river from km 126.00 to km 127.250 (Package No-JW-05, Lot No-02/2012-13)	337.32	337.01	14/1/13	30/07/13	27/12/13	30/06/15
Re-excavation of Kobodak river from km 127.250 to km 128.450 (Package No-JW-05, Lot No-03/2012-13)	342.39	342.30	14/1/13	30/07/13	27/12/13	30/06/15

Description of procurement (goods/works /consultancy) as per bid document	Tender/Bid/Proposal Cost (in lac 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
Re-excavation of Kobodak river from km 135.450 to km 136.75 (Package No-JW-07,Lot No-03/2012-13)	406.22	406.19	14/1/13	30/07/13	27/12/13	30/06/15
Re-excavation of Kobodak river from km 137.650 to km 139.10 (Package No-JW-24,Lot No-01/2012-13)	507.15	507.04	3/6/13	18/11/13	10/04/14	30/06/15
Re-excavation of Kobodak river from km 139.100 to km 140.55 (Package No-JW-24,Lot No-02/2012-13)	513.77	513.48	3/6/13	18/11/13	10/04/14	25/06/17
Re-excavation of Kobodak river from km 140.550 to km 142.00 (Package No-JW-24,Lot No-03/2012-13)	547.51	547.29	3/6/13	18/11/13	10/04/14	25/06/17
Re-excavation of Kobodak river from km 145.600 to km 142.00 (Package No-JW-10,Lot No-05/2014-15)	872.00	871.33	8/1/15	30/03/15	30/6/16	30/06/16

Description of procurement (goods/works /consultancy) as per bid document	Tender/Bid/Proposal Cost (in lac 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
Re-excavation of Kobodak river from km 149.200 to km 145.600 (Package No-JW-9,Lot No-04/2014-15)	914.79	831.21	22/4/15	23/07/15	20/12/15	20/06/17
Re-excavation of Kobodak river from km 152.800 to km 156.400 (Package No-JW-7,Lot No-02/2014-15)	995.83	882.27	23/4/15	23/7/15	28/06/17	28/06/17
Re-excavation of Kobodak river from km 160.00 to km 156.400 (Package No-JW-06,Lot No-01/2014-15)	863.00	862.56	23/4/15	23/7/15	28/06/17	28/06/17
Protective work of Pakhimara TRM Link channel both bank total 960.00 m	700.00	698.84	8/12/15	02/08/16	28/06/17	28/06/17
Construction of Baily bridge over link canal of TRM (Including Shifting Cost)(1 No)	265.00	265.00	15/07/14	15/08/14	15/02/15	15/02/15

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						

C. FINANCIAL AND PHYSICAL PROGRAMME :

1. (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 Inter-item adjustment PP			
	Total	Taka	P.A.	Physical%	Total	Taka	P.A.	Physical %
1	2	3	4	5	6	7	8	9
2011-12	2837.62	2837.62	-	10.85%	1373.64	1373.64	-	4.80%
2012-13	11465.79	11465.79	-	43.84%	1499.93	1499.93	-	5.24%
2013-14	10263.26	10263.26	-	39.24%	2499.74	2499.74	-	8.74%
2014-15	1588.16	1588.16	-	6.07%	5499.82	5499.82	-	19.22%
2015-16	-	-	-		7215.33	7215.33	-	25.23%
2016-17	-	-	-		10523.04	10523.04	-	36.77%
Total	26154.83	26154.83		100.00%	28611.50	28611.50		100.00%

01. (b) Inter-item adjustment 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
2011-12	1373.64	1373.64	-	10.00%	1385.00	1373.65	1373.65	-	7.00%
2012-13	1499.93	1499.93	-	10.00%	1500.00	1499.94	1499.94	-	9.00%
2013-14	2499.74	2499.74	-	8.68%	2500.00	2499.72	2499.72	-	4.54%
2014-15	5499.82	5499.82	-	21.03%	5500.00	5499.82	5499.82	-	28.67%
2015-16	7215.33	7215.33	-	22.00%	7230.00	7215.33	7215.33	-	22.50%
2016-17	10523.04	10523.04	-	28.29%	9835.00	8512.99	8512.99	-	27.00%
Total	28611.50	28611.50	-	100%	27950.00	26601.45	26601.45	-	98.71%

D. ACHIEVEMENT OF OBJECTIVES OF THE PROJECT:

Objectives as per DPP	Actual achievement	Reasons for shortfall, if any
(a) Operation of tidal river management (TRM) in the Beels adjacent to Kobadak river to ensure sustainability of drainage through the Kobadak river at the downstream.	12.87 km out of 12.87km Beel Area 620 ha.	N/A
b) Development of additional drainage route by re-excavation of Shorulia khal from Kobadak river to Betna river and construction of Out-let structure for lateral drainage facilities, re-excavation of Buri-Bhadra river to connect Kobadak river with Upper Bhadra river and construction of Out-let structure for lateral drainage facilities & re-excavation of Gajassree khal to connect Kobadak river to Harihar river & construction of out-let structure for lateral drainage facilities.	135 km out of 139km and out let 19 nos out of 21 nos.	Rexcavation of khals and construction of out let were done as per actual field requirements.
c) Re-excavation of Kobadak river by Mechanically/Manual labours from Parkhajura under Jessore district to Boalia at Paikgacha of Khulna district in connection with drainage improvement of Kobadak river basin.	82.20 km out of 82.20km	N/A
d) Construction of Dwarf embankment at Specific location on the both bank of Kobadak River to protect the adjoining lands from flooding.	12.87 km out of 12.87km	N/A
e) Re-excavation of 17 No khals connecting with low-lying beels to Kobadak river for smooth drainage facilities.	135 km out of 139km	As per actual field requirements.
f) Construction of Baily Bridge over link canal to facilitate road communication of the area.	1(one) out of 1(one)	N/A

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) Removal of Drainage Congestion	Ha.	Net Area 75000 ha.	Actual Evaluation will be done after one yaer.
(b) Increamental production of food grain.	Mt.	88685 mt.	
(c) Development of Fisheries.	mt.	Not quantified now.	
(d) Navigation Route..	km	82.20 km of Main river and 135 km of small rivers and khals have been re-excavated. These are being used as local navigation route. People are crossing the river at different locations by boat. Before implementation of the project for the last 20 years it was dream to them.	
(e) Livelihood environment, socio-economic sector.	-	Intangible. Livelihood, Environment and socio-economic condition have been improved significantly due to implementation of the project.	
(f) Afforestation	-	Afforestation will be done by Ministry of Forest on both side newly constructed embankments. Process is being done.	
(g) Communication	km	Communications have been developed along the newly constructed embankment on both side of river.	

02. Cost / Benefit :

Item	Estimated	Actual
(1) Benefit cost ratio of the project		Will be evaluated later by concern directorate of BWDB and IMED.
(i) Financial	4.06:1.00	
(ii) Economic	4.01:1.00	
(2) Internal Rate of Return		
(i) Financial	29.41%	
(ii) Economic	35.15%	

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

F MONITORING AND AUDITING

0.1 Monitoring:

Name & designation of the inspecting official	Date of Inspection	Identified Problems	Recommendations
1	2	3	4
(a) <u>Ministry / Agency:</u>			
ii. Mr. Md. Motahar Hossain Deputy Secretary, MoWR	01/04/2017	Progress of excavation work is very slow.	1. To expedite the work progress

(b) <u>IMED :</u>	-	-	-
Ms. Lasmi Chakma Assistant Director, IMED	02/04/2015	1# Lack of willinness of people living the both side of Kobadak towards project. 2# Lack of available land to pile up spoil earth from the Shalikha Khal excavation. 3# Land owner of TRM basin putting protest against TRM. 4# Lack of ADP Budget allocation.	1# Monitoring from MoWR Should be Strenthend to execute the project within time & quality should be ensured. 2# To adapt techniques so the stake holder face free to join with project implementation. 3# Spoil earth from river & khal excavation should be well managed to keep ecological balance. 4# To implement afforestation programme along the embankment to restore stability of embenkment & to keep ecological balance.
(c) <u>Others:</u>	-	-	-

0.2. Auditing during and after Implementation:

2.1. Internal Audit: No internal audits were not 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
2012-13	26-04-2014	Unschedule work	Not resolved
		Improper way of land acquisition	Not resolved
2013-14	27-04-2015	Excess package no.	Not resolved
2014-15	04-04-2017	15% VAT as premier is not collected	Not resolved

G. DESCRIPTIVE REPORT

1. General Observations/Remarks of the Project :

1.1 Background:- The drainage congestion and sedimentation have been major issues over the years in the Kabodak river basin area. Kabodak river has been experiencing huge siltation over a long stretch that reduces the drainage capacity of the river and causes prolonged drainage congestion. It affects every sphere of life including cultivable lands, employment opportunities and income of rural people, culture fish production, grazing land, bio-diversity and live stocks.

River bed/ natural channel siltation has become serious, natural problem in Bangladesh. A significant part of total sediment load since entering Bangladesh across the border from the upstream partially conveyed to the Bay of Bengal and partially deposited on the river bed. The suspended sediment load of fine silt and clay from the Bay of Bengal again enters in the tidal rivers and their tributaries during high tide of dry season, when the upstream flow and water pressure become negligible. The saline and silty water entering to the rivers and khals during high tide is deposited on the river bed when velocity becomes zero at the beginning of ebb tide. This phenomenon occurs twice a day causing gradual raising of bed level of the rivers and khals. Again the problem is compounded by this raised river bed which creates further obstruction to the low velocity flows. As a result drainage congestion is created in the river and whole basin area is gradually water logged by spilling over the river banks during rainy season. This phenomenon is more explicit and aggressively prevailing in Kabodak basin, i.e, in the districts of Satkhira, Khulna and Jessore. Kabodak basin and Bhabadaha area are two well known large water logged areas in Bangladesh and a great challenge for the government to remove the said drainage congestion and to save the public lives and properties of the area.

More than a hundred years ago, River Kobadak lost its fresh water connection from river. Mathabanga north of Taherpur and became a mere seasonal and tidal river. As a result, the flushing flow from upstream has been reduced which expedite siltation process. In the early sixties the tidal flow of the Kobadak river used to flood and deposit the sediment on the adjacent flood plain during high tide. Human intervention such as encroachment of river by constructing bridge, houses, cultivable area and construction of polders restricts the tidal flooding of flood plain. As a consequence, the river experiences huge siltation and many of the river /channels / khals in the area lost its conveyance causing severe drainage congestion. The Kobadak river flows through Jessore, Satkhira and Khulna districts. Total length of the Kobadak river is 240 km. (upper & lower) from Taherpur to Niamatkati at the end of Kholpetua river. Total catchment area of Kobadak river is 1,02,000 ha (upper & lower Kobadak).

An effective programme was needed to remove drainage congestion from the area in a meaningful way BWDB with the technical and financial assistance from ADB has developed and practiced a method called TRM (Tidal River Management) which proved in Beel Kedaria and Beel Khukshia to be a very efficient and economic in order to remove drainage congestion of the Bhabadaha area. The method produces two benefits one is elevate low lying beel areas and another is desilted stream in the river which virtually provides manifold benefits in the areas of agriculture, environment, communication, water resources development and land development. Proposed project will also apply TRM method which should include desiltation works (b) excavation of rivers and khals (c) diversion of flow by lateral khals to reduce flow in the main river and (e) sustainability of dredging and excavation by operation of TRM in Pakhimara Beel. For sustainability, TRM operation will be continued simultaneously in i) Rajapur-Harinkhola Beel; ii) Harihornagar-Baruli Beel; and iii) Delua Beel.

The project area lies between latitude 22°45' to 23°2' N and longitude 88°49' to 89°15' E. in the southwest region of Bangladesh covering vast floodplains of the districts viz. Satkhia, Khulna, Jessore, Jhenaidah, Chuadanga, Meherpur and -Kushtia. The project area is bounded by Indo-Bangladesh borderline

in the west and Jessore-Khulna Drainage Rehabilitation Project and Arol beel area in the east. Sonamukhi-Banmander Beel Drainage Project, Kalaroa Drainage Project, Tala Irrigation Project, Polder No. 6-8, 9, 16 & 17/2 are within the catchment area at the downstream of the Kobadak river which are vulnerable to inundation during rainy season.

The local people and their elected representatives in association with Kobadak revival movement group created strong movement and demonstration for alleviation and relief of sufferings of the people from the inundation problem. The problem and suffering was focused in the electronic and print media to draw attention of the concerned agencies and policy makers. The issue was duly emphasized and it was decided in the higher policy level to conduct feasibility study prior to its implementation. Accordingly, full-scale feasibility study was carried on by the engagement of local consulting firms IWM (Institute of Water Modeling) & CEGIS (Center for environment and Geographical Information Services). The consultants IWM & CEGIS conducted field investigation, surveys, collected relevant data/information from various sources. IWM was then assigned to check the suitability of the latest approved design for re-excavation works within present ground conditions to ensure immediate relief of drainage congestion to the area. IWM carried-out surveys & preliminary model simulation and discussed with BWDB concerned design engineers. Based on these, the consultant identified causes of the problems and recommended Solutions in the Final Report for removal of drainage congestion of the area.

As per contract the consultant submitted final detail study report in July, 2010 (Appendix). As per demand of the local people their representatives and MPs the BWDB has taken up this issue i.e. to solve the drainage problem of the Kobadak Basin. The Honourable Prime Minister, the people's Republic of Bangladesh has also committed this project for implementation.

As per recommendation of the Feasibility study report, a DPP costing TK. 26154.83 has been prepared for onward approval.

1.2 Justification/Adequacy :- The project conceived TRM execution, Kobadak river re-excavation, Buribhadra river re-excavation, connecting khals re-excavation and water drainage structure as its main component. The project will be technically viable since implementation of proposed interventions will reduce vulnerability of drainage congestion in the Kobadak river basin.

The project will play positive and active role against environmental degradation through desiltation of tidal rivers. Further more continuous operation of TRM in Pakhimara beel will eventually restore drainage and conveyance capacity of Kobadak river and other connecting drainage bodies. This will enhance fresh water storage capacity of natural water bodies. Activities of Geo diversities and activities of flora and fauna will be increase. As fresh water contain after implementing of this project has been increase, this will reduce the risks of salinity.

The project is socially most desirable to mitigate vulnerability of drainage congestion in the area. Human lives, properties and crop damage will be reduced to considerable extent. Afterwards project's implementation, annual incremental paddy production of 88685.00 m.t (approximately) costing TK. 17737.00 lakh and incremental fish production of approximately 3500.00 tons amounting TK. 10500.00 lakh will be achieved. Also better income and employment access in agriculture, fishery and tertiary will be enhanced.

1.3 Objectives :-

Main objectives of the project are to provide flood control, drainage improvement and extension of irrigation facilities as well as fisheries development by the re-excavation of Kobadak river, re-excavation of alternate drainage roots & operation of TRM. Through the execution of these integrated water management program, crops losses as well as loss of properties, infrastructures and human sufferings will be reduced to a great extent by mitigating annual monsoon floods and also post

monsoon drainage congestion will be removed in the project area which will contribute the poverty reduction strategy and environmental upgradation. Total 102000.00 ha gross and 75000.00 ha net area under Jessore, Satkhira and Khulna districts will be benefited after implementation of this project. Flood control and drainage improvement facilities will be provided by execution of the following activities:

- Operation of tidal river management (TRM) in the Beels adjacent to Kobadak river to ensure sustainability of drainage through the Kobadak river at the downstream.
- Development of additional drainage route by re-excavation of Shorulia khal from Kobadak river to Betna river and construction of Out-let structure for lateral drainage facilities, re-excavation of Buri-Bhadra river to connect Kobadak river with Upper Bhadra river and construction of Out-let structure for lateral drainage facilities & re-excavation of Gajassree khal to connect Kobadak river to Harihar river & construction of out-let structure for lateral drainage facilities.
- Re-excavation of Kobadak river by Mechanically/Manual labours from Parkhajura under Jessore district to Boalia at Paikgacha of Khulna district in connection with drainage improvement of Kobadak river basin.
- Construction of Dwarf embankment at Specific location on the both bank of Kobadak River to protect the adjoining lands from flooding.
- Re-excavation of 17 No khals connecting with low-lying beels to Kobadak river for smooth drainage facilities.

1.4 Project revision with reasons :-

The DPP "Removal of Drainage congestion from Kobadak river basin(Phase-I)" duly approved by the ECNEC, was circulated vide Ministry of Water Resources memo.no. 42.039.014.01.00.053.2010 – 285 dated 14-11-2011. As per approved DPP total cost was Tk. 26154.83 lakh and scheduled implementation period was from July, 2011 to June, 2015. As per approved (1st revised) DPP total cost is Tk. 28611.50 lakh and scheduled implementation period is from July, 2011 to June, 2016.

The project has been delayed due to fund constraint and short working period. In addition to that, local sabotaged group always created hurdles against the execution of TRM. Specially, the Gher owners work against the TRM as it revolves around the illegal occupation of huge government khas land. Ultimately, that party went to the Honorable High court with a complain against execution of TRM. Honorable high court had ordered an injunction on execution of TRM. Eventually, the execution of the components of TRM got stopped with that order. Until the Honorable Appellate Division of Honorable Supreme court has vacated the order on June/2015.

The river and khal excavation works were scheduled and planned only after the execution of TRM. Thus, these dependent works also got stucked.

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

Bangladesh is a densely populated with poor natural resources based country. Lack of industrialization and vulnerability of natural disaster, like flood, cyclone etc, made Bangladesh one of the poorest countries of the world. The major problem responsible for poverty includes high level of landlessness, unemployment, illiteracy and malnutrition. The population of the project area is very dense (about 750 per square kilometer) and landless population is about 30%. Socio-economic development of the people through agricultural development is the main objective to alleviate poverty of the area. The proposed project will have remarkable positive impacts on socio-economic and environmental sector. The project will create new employment through improved agricultural productivity, enhancement of fisheries and forestry activities, trade and employment for construction works and O&M activities.

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

- ◆ Project Identification: - Due to the prolonged water logging in Kobodak River Basin there was a movement named Kobodak revival movement by the people of that area. This was published in print and electronic media. As such Prime Minister of the people's republic of Bangladesh declared in a public meeting held in Jessore Town in the year of 2012 that there would not be any drainage congestion in Kobodak River Basin. We are going to take a big project there. Then a comprehensive feasibility study was conducted by IWM. As per their recommendation this project was taken up.
- ◆ Project Preparation:- As per recommendation of the feasibility DPP was prepared. It was checked by concern official of BWDB and MOWR. Then incorporating their observation DPP was sent to Planning Commission.
- ◆ Appraisal: - Project appraisal was conducted before pre-ECNEC. DPP was recast as per observation of Appraisal meeting.
- ◆ 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 the competent authority (ECNEC) on date- 13/09/2011.
- ◆ Others (if any).

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 : N/A
- 4.3 O & M programme of the project : O&M of the project will be adapted under on BWDB regular annual O&M budget.
- 4.4 Impact of the project : One of the important components of this project is to implement TRM activities in Pakhimara beel. TRM is being operated in Pakhimara beel since July/2015. Due to operation drainage capacity of the Kobadak river has already been increase.

Due to re-excavation of Kobadak river, Buribhadra river and adjacent khals fresh water restoration capacity has been increase. This has directly provided the lifeline to the agricultural, fisheries activities in catchment area. Construction of embankment and drainage structure on both bank of Kobadak river has ensured the safety of surrounded area from cyclone, high tide and flood like natural calamities.

4.4.1 Direct :-

- * Rivers & khals were ex-cavated. Thus, those natural water bodies got full drainage capacity.
- * Execution of TRM and operation of TRM in Beel Pakhimara kept the silt out of the river system and deposited the same onto Beel Pakhimara.
- * Local communication system were developed through embankment.
- * Drainage capacity of catchment area has been increase against susceptible flood inundation and drainage congestion risk.
- * Fresh water contain after implementing of this project has been increase. This will reduce the risks of salinity.

4.4.2 Indirect :-

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

* Activities of Geo diversities and activities of flora and fauna will be increase.

4.5 Transfer of Technology and Institutional Building through the project :- Under this project TRM has being implemented in Pakhimara Beel and TRM is in operation for last two years. During this period silt from the river has been sedimented into TRM basin and conveyance capacity of the river has been increased substantially. TRM poeration on river basin is totally non-interventional, environmental friendly, socially acceptable and economically feasible. So, the knowledge and experience of Pakhimara TRM can be replicated into Bhabodah area for removal of drainage congestion.

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

4.7 Possibility of Self employment :- The project has created huge potentially for same employment through agriculture, pisciculture and afforestation.

4.8 Possibility of women-employment opportunity :- Employment opportunity for women has been enhanced at the construction phase of the project. Further more, women have been empowered in agriculture and fisheries activities.

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

4.10 Probable Impact on Socio-Economic activity :- Due to implementation of this project huge area of Maniramour, Keshabpur, Tala, Kolaroa and Paikgasa Upazilla came out of drainage congestion problem. This has increase of the safety and stability of social structure, livelihood and business activities of the catchment area. Good and healthy food, safe drinking water and green land have been ensured in the project area. Economics activities among the people of different profession have been increased upto credintial level.

4.11 Impact on environment :- There will be no adverse impact on environment rather the environmental friendly situation has been restored .

4.12 Sustainability of the project :- The project will be Sustainable as apart from river or khal excavation TRM operation has been started to manage silt load.

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

4.14 Opinion of the public representatives, local elite, local administration, teachers, religious leaders, women's representatives etc :- The project itself is a Flood control and drainage improvement project. So, public perception and evaluation towards the project outcome is very positive.

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	Does not aries	5.12 Project aid disbursement and re-imbursment	Does not aries
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			

6. Remarks & Recommendations of the Project Director :

82.20km of main river and 135 km of khals and small river were excavated and also a TRM Basin was constructed covering 620 ha of land by constructing 12.87 km of peripheral embankment. under this project. Net 75000ha area is now free from prolonged water logging problem. Agriculture ,fisheries livelihood,socio-economic,environment, navigation and communication have been developed significantly in the project area. There also created an opportunity for huge afforestation on both bank of the river.During the lean period, the Kobadak river carries huge amount of sediment , Implementation & Operation of TRM on Pakhimara beel is arresting sediment out of water on the TRM basin and it is settling down there. Hence, the execution of TRM on the tidal river to manage sediment load is environmental friendly, economically viable and socially acceptable. Simultaneous operation of TRM and river & khal excavation have turned the Kobadak river basin flood free and drainage congestion free. So, operation of TRM in Kobadak river basin on other suitable beels is essential for sustainability of this project.

Date :

Signature and seal of the Project Director/Manager

(Akhil Kumar Biswas)
Superintending Engineer
Jessore O&M Circle
BWDB, Khulna

7. Remarks/Comments of Agency Head

The main objective of this project was to remove water congestion and flooding on Kobadak river basin and this project is already a success. Due to this project, net 7500 Ha area nearby Kobadak river basin on Jessore and Satkhira district have got drainage facilitated. On very recent monsoon season, no notable flood or drainage congestion on that basin. Due to these implemented facilities, incremental production of ^{food} grain have raised to 88685 MT from pre-project condition. This project also facilitates navigation through excavated water bodies, fisheries, livelihood and many more socio-economic development to the stakeholders.

Date :


26/10/2019
(Md. Mahfuzur Rahman)
Director General
BWDB, Dhaka.

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

Date :

Signature and Seal