

Government of the people's Republic of Bangladesh
Ministry of Planning
Implementation Monitoring and Evaluation Division



BANGLADESH WATER DEVELOPMENT BOARD

PROJECT COMPLETION REPORT
(IMED 04/2003 (Revised))

CAPITAL (PILOT) DREDGING OF RIVER SYSTEM IN BANGLADESH

SEPTEMBER 2017

Government of the people's Republic of Bangladesh
Ministry of Planning
Implementation Monitoring and Evaluation Division

PROJECT COMPLETION REPORT : IMED O4/2003 (Revised)

A. PROJECT DESCRIPTION :

01. **Name of the Project** : Capital (Pilot) Dredging of River System in Bangladesh.
02. **Administrative Ministry** : Ministry of Water Resource.
03. **Executive Agency** : Bangladesh Water Development Board.
04. **Location of the Project** :

Division	District	Upazilla
1	2	3
Dhaka	Tangail	Bhuapur, Gopalpur, Kalihati
	Jamalur	Sarisabari.
Rajshahi	Sirajganj	Sirajganj Sadar, Belkuchi, West thana of Bangabandhu Bridge

05. Objective of the Project :

- i. Implementation of pilot/Capital dredging at two locations of the Jamuna River;
- (a) Jamuna River from upstream of Sirajganj Hard Point(through Bangabandhu Bridge) to near Dhaleswari Offtake: To divert the flow from the east channel into a mid channel to reduce the risk of failure of Sirajganj Hard Point and to guide the flow along the middle of the existing char through the Bangabandhu Bridge to near Dhaleswari Offtake. It will reduce the risk of riverbed scour along the Sirajganj hard point and also reduce the erosion of right guide bundh of Bangabandhu Bridge.
- (b) Nalin Bazar near Bhuapur-Takandi Embankment: To protect the existing Bhuapur- Tarakandi road embankment by diverting the flow through dredging of the river Jamuna near Nalin Bazar, this is the only road communication between Jamuna Fertilizer Factory and other districts of the country.
- (ii) Sustainable River Management.
The main objective of the study for Sustainable river Management is to find out a 15 years investment plan. The study will be composed of capital dredging, river training works, sustainable maintenance dredging module, spoil management, a forestation, navigation, land development, fisheries development, environmental management plan and monitoring etc. for sustainable river management. The specific objectives of the study are to devise river management plan of major rivers and distributaries for flood and erosion management, to improve navigability and to augment dry season flow in the distributaries considering capital dredging and river training works. This strategy and action plan will identify the conceptual framework on Capital Dredging with flood and erosion management, explore financial options and formulate conditions for implementation.
- (iii) Land Reclamation from the River Jamuna.
To reclaim land by depositing the dredged Spoil on the flood plain land adjacent to the river bank at upstream and downstream of Sirajganj Hard point and constructing cross bar (providing with necessary protective work) with the dredged spoil at suitable location. This reclaimed land will be the extension of Sirajganj District. This reclaimed land will be developed for the public and private use like housing settlement, business centre, industrial park, tourist spot, farming etc. This land reclamation process will be exhibit as a pilot scheme and if this process appears flourishing and cost effective, further land reclamation project will be taken through river dredging.

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06. Estimated Cost

(In lakh Taka)

Description	Original	Latest Revised
a) Total	102812.34	102211.44
b) Taka	102812.34	102211.44
c) Foreign Exchange	N/A	N/A
d) Project Aid	N/A	N/A
e) RPA	N/A	N/A

07 Date of Approval

PCP	PP
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(a) Original	-	06-04-2010
(b) Latest Revised	-	29-07-2013

08. Implementation Period

Description	Date of Cmmencement	Date of Cmpletion
a) Original	March, 2010	June, 2012
b) Latest Revised	March, 2010	June, 2017
c) Actual	March, 2010	June, 2017

09. Financing Arrangement (source wise) :

9.1 Status of Loan/Grant

a) Foreign Financing

(In Million)

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
-----Nil-----							

b) GoB

(In lakh Taka)

Total Amount	Loan	Grant	Cash Foreign Exchange
1	2	3	4
102211.44	-	102211.44	-

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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
GoB	-	10221.14	-	9933.76	-	287.38

9.3 Reimbursible Project AID (RPA) :

(In lakh Taka)

RPA Amount		Amount Spent	Amount Claimed	Amount Reimbursed	Remarks
As per PP	As per Agreement				
1	2	3	4	5	6
-----Nil-----					

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
March, 2010 to June, 2012	March, 2010 To June, 2017	March, 2010 To June, 2017	214.29%	New Work has been included by subsequent DPP revision

② A

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	102812.34	102211.44	99337.58487	N/A	-
Taka	102812.34	102211.44	99337.58487	N/A	-
PA	-	-	-	-	-

03. Project Personnel :

Sanctioned Strength as per PP	Mannpower employed during execution	Status of the existing Manpower			Manpower employed	
		Manpower requirement for O & M as per PP	Existing manpower for O & M	Others	Male	Female
1	2	3	4	5	6	7
Officer (s) :- 23	23	O & M of this project will be carried out by the existing manpower of BWDB	O & M of this project will be carried out by the existing manpower of BWDB	-		
Staff (s) :- 23	17			-		
Total :- 46	41			-		

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

Field of Training/ Study tour/ workshop/ Seminer etc.	Provision as per PP		Actual		Remarks
	Number of person	Man - months	Number of person	Man -months	
1	2	3	4	5	6
1.River System Management	8		8	-	Tk 222.99 lakh has been spent for training of 15 Nos official
2. Planning, Monitoring and Evaluation of Capital Dredging.	7		7	-	

 

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
(a) REVENUE COMPONENT						
Supplies and Services (4800)						
1. Office rent (4000 sft) (Code-4806)	Months	4.00	36 Months	0.00	0.00	not required
2. Telephone/Telegram/Teleprinter/Intercom system (20 lines) (Code-4816)	1 item	8.00	1 item	5.40609	20 lines	-
3. Gas and Fuel (Code-4822)	1 item	30.00	1 item	18.43044	1 item (p)	-
4. Petrol and Lubricant for Vehicles (Code-4823)	1 item	30.00	1 item	9.00276	1 item (p)	-
5. Printing, Publication (Code-4827)	1 item	10.00	1 item	5.59961	1 item (p)	-
6. Office Stationeries (Code-4828)	1 item	16.00	1 item	15.99616	1 item	-
7. Audio, Video/ Film Production (Project documentation) (Code-4831)	1 item	10.00	1 item	0.00	0.00	not required
8. Training (Code-4840)	Nos	225.00	2 Nos	222.99	2 Nos	-
9. Seminar and Conference (Code-4842)	1 item	5.00	1 item	0.00	0.00	not required
10. Procurement Specialist (Code-4874)	Months	18.00	18.00 Months	13.80	13.80 Months	-
11. IT Specialist (Code-4874)	Months	12.00	18.00 Months	0.00	0.00	not required
12. Study for Sustainable River Management (Expatriate International 46mm & Local 564mm) (Code-4874)	mm	2738.34	610 mm	2646.3901	610 M month	-
13. Honorarium of the member of TEC, TOC and SC (Code-4883)	1 item	4.00	1 item	3.858	1 item	-
14. Survey (Code-4886)	1 item	70.00	1 item	69.99748	1 item	-
15. Quality Control, Monitoring & Impact Assessment of Pilot Dredging of the Jamuna River at 2 locations from Sirajganj hard point to Dhaleswari offtake (20 km) & near Nalin Bazar (2km) (Code-4886)	1 item	512.36	1 item	500.71002	1 item	-
16. Computer Accessories (Code-4888)	Nos	12.00	9 Nos	12.00	1 item	-
17. Other Expenses (Code-4899)	Months	55.00	51 Months	54.97919	1 item	-
Repairs, Maintenance and Rehabilitation (Code-4900)						
18. Maintenance of Vehicles (Code-4901)	1 item	12.00	1 item	11.99	1 item	-
19. Furniture and Fixture (Code-4906)	1 item	8.00	1 item	0.49995	1 item (p)	not required
20. Office Building (Code-4921)	1 item	18.00	1 item	15.36987	1 item	-
Sub Total of Revenue Component		3797.70		3607.01967	3.63%	-

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(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) Capital Component						
Acquisition of Assets (6800)						
1. Purchase of Vehicles (Jeep-1 no, pickup- 2 Nos) (Code-6807)	Nos	90.00	3 Nos	90.00	3 Nos	-
2. Machinery & other equipment (Code-6813)	1 item	15.00	1 item	13.98255	1 item (p)	
Construction and Works (Code-7000)						
Capital Dredging :						
3. Pilot dredging of the River Jamuna near Sirajganj hard point- EW :10.00 lakh cum(By bwdb own Dredger) (Cde-7041)	Cum	1463.00	10 lakh cum	1463.00	100% (10 lakh cum)	-
4. Capital dredging of the River Jamuna from Sirajganj hard point to Dhaleswari offtake (20 km) & near Nalin Bazar (2 km) (by out sourcing) (Code-7041)	Cum	42957.46	198.95 lakh cum	42369.12	100% (198.95 lakh cum)	-
Maintenance Dredging :						
5. Maintenance dredging of the River Jamuna from Sirajganj hard point to Dhaleswari offtake (20 km) & near Nalin Bazar (2 km) (by out sourcing) (Code- 7041)	Cum	15696.57	86.60 lakh cum	15231.17	100% (86.60 lakh cum)	-
6. Maintenance dredging of the River Jamuna from Sirajganj hard point to Dhaleswari offtake (20 km) & near Nalin Bazar (2 km) (by BWDB own Dredger/out sourcing) (2 nd year)(Code-7041)	Cum	9469.71	51.96 lakh cum	9469.70574	100% (51.96 lakh cum)	-
7. Protective Works of Cross Bars, Reclaimed Land and Adjacent area. (Code-7081)	meter	25422.00	5700.00 meter	24535.46691	100% (6521 Meter)	-
8. Emergency Temporary Protective Works for Cross Bar and Adjacent area. (Code- 7081)	meter	3000.00	2652.00 meter	2558.12	100% (2652.00 Meter)	-
Sub Total of Capital Component :		98113.74	-	95730.5652	99.02%	-
Grand Total (a+b)		101911.44	-	99337.58487	99.65%	-
c) Price Contingency	1 item	200.00	1 item	0.00	-	-
d) Physical Cntingency	1 item	100.00	1 item	0.00	-	-
Grand Total (a+b+c+d)		102211.44	-	99337.58487	99.65%	-

06. Information regarding Project Director (s):

Name & Designation with pay scale	Full Time	Part time	Responsible for more than one Project	Date of		Remarks
				Joining	Transfer	
1	2	3	4	5	6	7
1. Mr. Sawkat Ali Project Director (Addl.Charge)/ Superintending Engineer Grade-4 (29000.00-35600.00)	-	√	√	07-07-2010	04-10-2010	
2. Mr. A.K.M. Mukhlesur Rahman Project Director (Addl.Charge)/ Superintending Engineer Grade-4 (29000.00-35600.00)	-	√	√	04-10-2010	14-10-2010	
3. Mr Jati Das Kundu Project Director/Superintending Engineer, Grade-4 (29000.00-35600.00)	√	-	-	14-10-2010	05-01-2013	
4. Mr. A.K.M. Muazzem Hossain Project Director/Addl Chief Engineer Grade-3 (33500-39500)	√	-	-	06-01-2013	29-12-2014	
5. Mr Jati Das Kundu Project Director/Addl. Chief Engineer(Addl charge)Grade-3 (33500- 39500)	-	√	√	29-12-2014	09-02-2015	
6. Mr Kudrat Ali Project Director/Superintending Engineer Grade-4 (25750.00-32750.00)	√	-	-	09-02-2015	17-02-2015	
7. Mr. K. M Humayun Kabir Project Director/ Addl Chief Engineer Grade-3 (33500-39500)/(56500-74400)	√	-	-	17-02-2015	30-06-2017	

07. Procurement of Transport (in nos):

Type of Transport	Number as per PP	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	1 No	01-12-2010	-	01-07-2017	-	-
Microbus	-	-	-	-	-	-
Minibus	-	-	-	-	-	-
Bus	-	-	-	-	-	-
Pick-up	2 Nos	20/06/2011	03/07/2017 16/08/2017	-	-	-
Truck	-	-	-	-	-	-
Motor Cycle	-	-	-	-	-	-
By-Cycle	-	-	-	-	-	-
Speed boat	-	-	-	-	-	-
Launch	-	-	-	-	-	-
Others with name	-	-	-	-	-	-

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08. Procurement of Goods, Works and Consultancy services:

8.1 Goods & Works of the Project costing above Tk 200.00 lakh and consultancy above Tk 100.00 lakh:

Description of Procurement (gds/wrks/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	Contract Value	Invitation date	Contract signing/L.C opening date	As per Contract	Actual
1	2	3	4	5	6	7
1. Pilot dredging of the River Jamuna near Sirajganj hard point (By BWDB own dredger)	14.63 (original 14.66)	14.63	Implemente d by BWDB's own Dredger,	N/A	25-06- 2010	20-06- 2017
2. Dredging of the River Jamuna (2.00km) near Nalin Bazar Upazila-Gopalpur, District-Tangail.	42957.46 (original 619.50)	39.0156	26-10- 2010	06-02-2011 (W/O Date 10-02-2011)	02-02- 2012	23-05- 2012
3. Capital Dredging of the River Jamuna from Sirajganj hard point to near Bangabandhu Bridge (Total length 7.0 km) By International Tenderer (Lot-01) during 2011-2012		153.648	05-06- 2011	12-10-2011 (Amended Contract signed 02-12-2013)	31-05- 2012	31-05- 2012
4. Capital Dredging of the River Jamuna from Sirajganj hard point to near Bangabandhu Bridge (Total length 7.0 km) By International Tenderer (Lot-02) during 2011-2012.		152.658	05-06- 2011	12-10-2011 (Amended Contract signed 02-12-2013)	31-05- 2012	30-05- 2012
5. Capital Dredging of the River Jamuna near Bangabandhu Bridge to Dhaleswari offtake (Total length 2.00 km) By National Tender (Lot-01)		72.02	09-06- 2011	03-01-2012 (W/O Date 05-01-2012)	09-10- 2013	07-06- 2012
6. Capital Dredging of the River Jamuna near Bangabandhu Bridge to Dhaleswari offtake (Total length 2.00 km) By National Tender (Lot -02)		47.55	09-06- 2011	03-01-2012 (W/O Date 05-01-2012)	09-10- 2013	10-06- 2012
7. Capital Dredging of the River Jamuna near Bangabandhu Bridge to Dhaleswari offtake (Total length 2.00 km) By National Tender (Lot-03)		65.14	09-06- 2011	03-01-2012 (W/O Date 05-01-2012)	09-10- 2013	19-05- 2012
8. Maintenance dredging of the River Jamuna from Sirajganj hard point to near Bangabandhu Bridge (Total length 7.00 km) By International Tender (Lot-01) with during 2102-2013	156.96 (original 346.92)	79.278	05-06- 2011	12-10-2011 (Amended 02-12-2013)	31-05- 2013	25-05- 2013
9. Maintenance dredging of the River Jamuna from Sirajganj hard point to near Bangabandhu Bridge (Total length 7.00 km) By International Tender (Lot-02) with during 2102-2013		78.549	05-06- 2011	12-10-2011 (Amended 02-12-2013)	31-05- 2013	29-05- 2013

10. Maintenance Dredging of the River Jamuna from Sirajganj hard point to near Bangabandhu Bridge (Total length 7.00 km) 2 nd year maintenance dredging (Lot-01)	94.70	47.348	DPM	12-10-2011 (Amended 02-12-2013)	30-06-2014	25-06-2014
11. Maintenance Dredging of the River Jamuna from Sirajganj hard point to near Bangabandhu Bridge (Total length 14.00 km) 2 nd year maintenance dredging (Lot-02)		47.348	DPM	12-10-2011 (Amended 02-12-2013)	30-06-2014	30-06-2014
12. Protective Work of 4 nos Cross-Bar, Reclaimed Land and adjacent area.	254.22	251.44	04-02-2014	12-06-2014 (Amended 30-05-2016)	30-06-2015 (30-06-2017 Approved)	30-06-2017
13. Emergency Temporary Protective Work for Cross-Bar no-3 (Closure-1) (inbetween 300m to 1720+100m=1010m) under Capital (Pilot) dredging of river system in Bangladesh (Package no-CDRSB/SRJ/TP-01) during 2012-2013 FY	30.00	5.208	08-04-2013 (e-Tender)	June/2013	01-11-2013	01-11-2013
14. Emergency Temporary Protective Work for Cross-Bar no-3 (Closure-1) (inbetween 300m to 1720+100m to 1720+550m=450m) under Capital (Pilot) dredging of river system in Bangladesh (Package no-CDRSB/SRJ/TP-02) during 2012-2013 FY		6.019	08-04-2013 (e-Tender)	June/2013	24-10-2013	27-09-2013
15. Emergency Temporary Protective Work for Cross-Bar no-1 (Sailabari) in connection with Capital (Pilot) dredging of river system in Bangladesh (Package no-CDRSB/SRJ/TP-03) during 2012-2013		7.035	08-04-2013 (e-Tender)	June/2013	12-10-2013	12-10-2013
16. Emergency Temporary Protective Work for Cross-Bar no-4 (Bawoitara) at BRE km 175.00 in connection with Capital (Pilot) dredging of river system in Bangladesh (Package no-CDRSB/SRJ/TP-04) during 2012-2013		3.874	08-04-2013 (e-Tender)	June/2013	04-11-2013	01-11-2013
17. Emergency Temporary Protective Work of Cross-Bar no-2 at Khksabari BRE km 165.00 in connection with Capital (Pilot) dredging of river system in Bangladesh (Package no-CDRSB-02) during 2012-2013 FY (Done by BRE Div)		2.911	08-04-2013 (e-Tender)	18-07-2013	30-09-2013	18-09-2013
18. Emergency Temporary work in 4 Cross-bar by DPM (25 groups) during 2011-2012		5.85	June/2012	June/2012	Dec/2012	Dec/2012

 

19 .Consultancy Services of quality Control, Monitoring and Impact Assesment of Pilot Dredging of Jamuna River at 2 locations from Sirajganj hard point to Dhaleswari offtake (20km) & near the Nalin Bazar (2km)	512.36	2.201	21-10-2010	09-01-2011	08-08-2012	08-08-2012
20 .Consultancy Services of quality Control, Monitoring and Impact Assesment of Pilot Dredging of Jamuna River at 2 locations from Sirajganj hard point to Dhaleswari offtake (2 nd year maintenance dredging during 2012-2013)		1.370	28-08-2012	19-11-2012 (Revised 30-09-2013)	03-09-2012 (Time ext. approved)	03-07-2013
21. Consultancy Services of quality Control, Monitoring and Impact Assesment of Pilot Dredging of Jamuna River at 2 locations from Sirajganj hard point to Dhaleswari offtake (2 nd year maintenance dredging during 2013-2014)		1.418	31-10-2013	01-11-2013	31-12-2014	31-12-2014
22. Consultancy Services for Mathmatical Modelling and Investigation in connection with sustainable river management plan for main rivers, distributaries, tribaries in Bangladesh.	2738.34	4.782	15-12-2010	08-02-2011	07-02-2013	07-02-2013
23. Consultancy Services for Geo-Morphological and planform studies with Environmental and Socio Impact Assesment on Capital Dredging and sustainable river management in Bangladesh.		3.00	15-12-2010	28-02-2011	27-02-2013	27-02-2013
24. Feasibility Study of Capital Dredging and Sustainable River Management in Bangladesh.		19.572	09-09-2010	04-09-2011	03-09-2013	30-09-2015 (Time ext. approved upto Sept. 2015)

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	46	46	46	-
b) Local	189	192	19	-

09. Construction/Erection/Installation Tools and 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-----						

A. 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
2009-2010	1746.00	1746.00	-	1.70	-	-	-	-
2010-2011	51948.50	51948.50	-	50.53	-	-	-	-
2011-2012	49117.84	49117.84	-	47.77	-	-	-	-
Achieved Upto June, 2012	-	-	-	-	10336.34	10336.34	-	10.11
2012-2013	-	-	-	-	56315.97	56315.97	-	55.10
2013-2014	-	-	-	-	27646.86	27646.86	-	27.05
2014-2015	-	-	-	-	7912.27	7912.27	-	7.74
2015-2016	-	-	-	-	-	-	-	-
2016-2017	-	-	-	-	-	-	-	-
Total =	-	-	-	100%				100%

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
2009-2010	0.00	0.00	-	1.43	0.00	0.00	0.00	-	1.43
2010-2011	3880.00	3880.00	-	3.78	3880.00	3837.46	3837.46	-	3.73
2011-2012	6500.00	6500.00	-	33.35	6500.00	6498.88	6498.88	-	35.44
2012-2013	30600.00	30600.00	-	21.19	30600.00	30336.90	30336.90	-	20.93
2013-2014	31410.00	31410.00	-	13.20	31410.00	30959.94	30959.94	-	12.45
2014-2015	12385.00	12385.00	-	12.27	12384.04	10167.07796	10167.07796	-	10.40
2015-2016	9078.00	9078.00	-	7.33	9036.8475	9028.14265	9028.14265	-	7.83
2016-2017	9308.00	9308.00	-	7.45	9298.89	8509.18426	8509.18426	-	7.44
Total =			-	100%		99337.58487	99337.58487	-	99.65%

D. ACHIEVEMENT OF OBJECTIVES OF THE PROJECT :

Objectives as per PP	Actual achievement	Reasons for shortfall, if any
(a) To divert the flow from the east channel into a mid channel to reduce the risk of failure of Sirajganj Hard Point and to guide the flow along the middle of the existing char through the Bangabandhu Bridge to near Dhaleswari Offtake. It will reduce the risk of riverbed scour along the Sirajganj hard point and also reduce the erosion of right guide bundh of Bangabandhu Bridge.	Due to the dredging of Jamuna river from upstream of Sirajganj Hard Point to upstream of Bangabandhu Bridge in the year 2012, 2013 & 2014, the risk of riverbed scouring along the Sirajganj hard point has reduced and the river has been flowing along the mid channel. Hence, the erosion of right guide bundh of Bangabandhu Bridge has reduced remarkably.	N/A
(b) To protect the existing Bhuapur-Tarakandi road embankment by diverting the flow through dredging of the river Jamuna near Nalin Bazar, that is the only road communication between Jamuna Fertilizer Factory and other districts of the country.	Dredging of Jamuna river near Nalini bazaar and construction of closure by depositing the dredged earth adjacent to the bank line has increased the siltation near the eroded bank. For this reason, existing Bhuapur-Tarakandi road embankment has been saved from the erosion and the road communication remains alive.	N/A

© The main objective of the study for Sustainable river Management is to find out a 15 years investment plan. The study will be composed of capital dredging, river training works, sustainable maintenance dredging module, spoil management, a forestation, navigation, land development, fisheries development, environmental management plan and monitoring etc. for sustainable river management. The specific objectives of the study are to devise river management plan of major rivers and distributaries for flood and erosion management, to improve navigability and to augment dry season flow in the distributaries considering capital dredging and River Training works.	Feasibility Study of Capital Dredging and Sustainable River Management in Bangladesh (FSCD&SRMB) had been carried out by engaging national and international consultants. Under this study 24 nos major rivers named (1) Atrai, (2) Ganges, (3) Ghagot, (4) Teesta, (5) Dudhkumar, (6) Dharla, (7) Brahmaputra-Jamuna, (8) Hurasagar, (9) Tongi Khal, (10) Padma, (11) Old Brahmaputra, (12) Sitalakhya, (13) Juri, (14) Dhanu, (15) Dhalai, (16) Bhogai-Kangsho, (17) Manu, (18) Karnafuli, (19) Dakatia, (20) Titas (NarsingdhiSadar-Bancharampur), (21) Meghna (Upper), (22) Ghasiakhali, (23) MadaripurBeel Route, and (24) Lower Meghna have been studied. The consultants have devised river management plan of these rivers for mitigation of flood and erosion management, to improve navigability and to augment dry season flow in the distributaries. They have also prepared a 15 years investment plan. The final report has been approved by the competent authority, that is composed of capital dredging, river training works, sustainable maintenance dredging module, spoil management, channelization of the main rivers, afforestation, navigation, land development, fisheries development, environmental management plan and monitoring, etc. for sustainable river management. It is to be menton here that the recommendation of this study is incorporated in the country's Dredging Master plan.	N/A
(d) To reclaim land by depositing the dredged Spoil on the flood plain adjacent to the river at upstream and downstream of Sirajganj Hard point and constructing cross bar (providing with necessary protective work) with the dredged spoil at suitable locations. This reclaimed land will be the extension of Sirajganj District town. This reclaimed land may be developed for the public and private use like housing settlement, business centre, tourist spot, farming etc. This land reclamation process will be exhibited as a pilot scheme and if this process appears thriving and cost effective, then further land reclamation projects may be taken through extensive river dredging and proper protective work.	4(four) numbers Cross Bars were constructed over the flood plain of the river by closing of some of anabranch of the Jamuna. It was done by dumping the dredged spoils, while implementing the dredging works in the year 2012, 2013 and 2014. This facilitated in reclaiming valuable land of about 16 square ilometers formed by siltation at upstream and downstream of cross bars. Necessary protective work has been implemented to safeguard the Cross Bars from grasp of the mighty River Jamuna.	N/A

E. BENEFIT ANALYSIS :

01. Annual Output

Items of output	Unit	Estimated quantity expected at full capacity	Actual quantity of output during the 1 st year of operation at full capacity (or during real production for newly completed project)
(a) Erosion reduced in Jamuna River near Sirajganj town and the west guide bundh of Bangabandhu	Soft benefit Intangible	-	After the implementation of the project, the risk of riverbed scour along the Sirajganj hard point has reduced and the river has been flowing along the mid channel. Hence, the erosion of the up-stream of the hard point of sirajganj and right guide bundh of Bangabandhu Bridge has reduced remarkably.
(b) Land reclaimed (16.00 sqkm or 4000 acre)	Monetary Worth in Crore	4000.00 Crore (approx)	Due to the dredging of Jamuna River there reclaiming valuable land of about 16 square-kilometer formed by siltation at upstream and downstream of cross bars and developing for public use.
© Production of Crops	Monetary Worth in Crore	20.00 Crore (approx)	It is possible to produce crops in the 16 sq km reclaimed land whose estimated value could be about 20.00 Crore taka per anum
(d) Quality of life	Soft benefit Intangible	-	Necessary protective work has implemented to safeguard the Cross Bars from grasp of mighty River Jamuna and thereby protect the reclaimed land and
(e) Environmental Enhancement	Soft benefit Intangible	-	Remarkable positive change in case of environmental indicators such as land productivity increases due to reclaimed land, tree plantation.
(f) Economic Zone.	Soft benefit Intangible	-	Honorable Prime Minister gave her kind consent to BEZA for the construction of industrial econmic zone.

02. Cost/Benefit :

Item	Estimated	Actual
(1) Benefit cost ratio of the project		Financial analysis will be done by the Concern Directorate of BWDB and IMED
(i) Financial	1.74 : 1.00	
(ii) Econmic	1.87 : 1.00	
(2) Internal Rate of Return		
(i) Financial	49.36%	
(ii) Econmic	56.54%	

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

F. MONITORING AND AUDITING

01. Monitoring :

Name & designation of the inspecting official	Date of Inspection	Identified Problem	Recommendation
1	2	3	4
(a) Ministry/Agency:			
Mr. Ramesh Chandra Sen, Honorable Minister, Ministry of Water Resource.	17-05-2011		
Mr. Shaik Altaf Ali, Secretary, Ministry of Water Resource.	17-11-2011		
Mr. Ramesh Chandra Sen, Honorable Minister, Ministry of Water Resource.	20-04-2012	Complaints of taking out of spoil earth (sand) by grabber	Grabber should be defended with the help of local administration. Spoil earth should be used only for construction of Cross Bars and land reclamation.
Mr. Md. Mahabubur Rahman, Honorable State Minister, Ministry of Water Resource	22-11-2012	Cross Bars, no. 3, are found vulnerable due to erosion	Permanent protective work should be done to protect the Cross Bar 3 in order to erosion control and reclaim land.
Mr. Md. Afzal Hossain, Additional Director General (West Region), BWDB.	11-05-2013	Cross Bars, specially no. 3, are found vulnerable due to erosion	Emergency temporary Protective work should be done during rainy season by dumping of Geo Bags to protect Cross Bars
Mr. Mohammad Nazrul Islam (Bir Pratik), Honorable State Minister, Ministry of Water Resource.	17-04-2014		
Mr. Mohammad Nazrul Islam (Bir Pratik), Honorable State Minister, Ministry of Water Resource.	11-08-2014		
1) Mr. Mohammad Nazrul Islam (Bir Pratik), Honorable State Minister, Ministry of Water Resource. 2) Mr. Md Belayet Hossain, Additional Director General (West Region), BWDB.	07-10-2015		
1) Mr. Md Belayet Hossain, Additional Director General (West Region), BWDB. 2) Mr. Motahar Hossain, SE Design Circle-6, BWDB, Dhaka	29-10-2015		
Mr. Kazi Tofail Hossain, SE, Design Circle-2, BWDB, Dhaka & Conveynor Task Force Mr. Md Aminul Haque, PD, RMIP Project, BWDB	04-11-2015		
Mr. Momtaz Uddin, Chief Engineer, North-Western Zone, Rajshahi.	08-11-2015		
Mr. Md Kazi Tofail Hossain, SE, Design Circle-2, BWDB, Dhaka & Conveynor Task Force	17-12-2015		
Mr. Anisul Islam Mahmood, Honorable Minister, Ministry of Water Resource.	21-01-2016		
1) Mr. Md. Masud Ahmed, DG, BWDB. 2) Mr. Momtaz Uddin, Chief Engineer, North-Western Zone, Rajshahi.	16-04-2016		

1) Mr. Mahfuzur Rahman, ADG (Planning), BWDB. 2) Mr. Momtaz Uddin, Chief Engineer, North-Western Zone, Rajshahi.	21-05-2016		
1) Mr. Nandita Sarker, DS, Ministry of Water Resource. 2) Mr. Rasel, Asstt. Chief, Ministry of Water Resource	05-10-2016		
Mr. Abdul Hye Baki, Addl. Director General (West Region), BWDB Mr. Kazi Tofel Hossain, Chief Monitoring, BWDB.	21-10-2016		
2) Mr. Motahar Hossain, PD, Ganges Barrage Project. (Addl. Chief Engineer), BWDB, Dhaka.	14-11-2016		
Mr. Md Kazi Tofail Hossain, Chief Monitoring, BWDB.	15-12-2016		
Mr. Musa Nurur Rahman, SE Design Circle-6, BWDB, Dhaka	23-02-2017	Some scouring is observed outside of launching apron near bell mouth of Cross Bars 3	Advised to dump additional quantity of hard rock from stock pile and also advised to take bathymetry at regular interval for close monitoring.
Dr. Mohamad Ali Khan, NDC, Addl. Secretary, Ministry of Water Resource	25-05-2017		
(b) IMED :			
Mr. Rabindra Nath Barman, Director, IMED, Planning commission.	24-11-2011		
Mr. Md. Mezba uddin, Secretary, IMED, Planning Commission,	04-09-2013		
Mr. Md. Sahidullah mia, Secretary, IMED, Planning Commission	28-08-2015		
Mr. Faruk Hossain, DG, IMED, Planning Commission	04-11-2015		
Dr. Samsul Alam, Member, Planning Commission	31-12-2015		
Mr. Faruk Hossain, DG, IMED, Planning Commission	06-02-2016		
Mrs Lasmi Chakma, Assistant Director, IMED.	24-02-2016		

Indepth Monitoring by IMED (Planning Commission) (Consultants: Kranti Associates Ltd.)	June 2016	Problems not identified	1. Before going to Capital Dredging, technical feasibility i.e detailed engineering study is desired. Partial Dredging may be avoided. Dredging along with protective work is a better option for river management 2. Maintenance Dredging following Capital Dredging is indispensable for uninterrupted result. Dredging should be done phase by phase. 3. Industrial or economic zone may be established on the reclaimed land. 4. Dredging is needed in Jamuna River from Sirajganj to Paturia
© Others (Please specify) :			
Mr. Ramesh Chandra Sen, MP & Chairman, Parlimentary Committee for Ministry of Water Resource	05-08-2016		
BEZA Delegate	30-12-2015		

02. 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-----			

2.2 External Audit:

Period of Audit	Date of submission of Audit Report	Major findings/ objections	Whether objections resolved or not
1	2	3	4
2010-2014	27-10-2014	7 Nos	Resolved
2013-2015	29-10-2015	1 NO	Not Resolved but under process
2014-2015	20-12-2015	5 Nos	Resolved

G. DESCRIPTIVE REPORT:

1. General Observation/Remarks of the project on:

1.1 Background

All the major rivers of Bangladesh carry huge sediment loads, estimated to be about 1.0 to 1.1 billion tons annually, from the large catchments of the Ganges-Brahmaputra-Meghna basins. The recent raise in river bed levels due to the huge sediment inflow on the major river system of Bangladesh. That initiates widening of many of the rivers, engulfing several hundred square kilometers of floodplain during the last decades and resulted displacement of several million people. Frequent riverbank erosion and damage to existing bank protection works, especially during the recession, prolonged flood periods. Reduction of navigability, especially in the distributaries, and closure of off-takes of the distributary channels in the (critical) dry season are the major issues of concern.

To restore the navigability of the rivers, reducing flood by increasing drainage capacity of the river and to mitigate river bank erosion the Government of Bangladesh has given importance on capital dredging work. But Bangladesh has lack of adequate practical experience and insufficient study on capital dredging. Before implementation of capital dredging of major rivers in Bangladesh, it needs to assess the total dredging volume required and ascertain the implementation process for sustainability of capital dredging work. Under these circumstances, Bangladesh Water Development Board (BWDB) has initiated a project titled 'Capital (Pilot) Dredging of the River System of Bangladesh' to devise river management plan of major rivers and distributaries in next fifteen years for flood and erosion management, to improve navigability and to augment dry season flow in the distributaries considering capital dredging and river training works.

1.2 Justification/Adequacy

Before starting dredging of dynamic rivers like Ganges, Brahmaputra-Jamuna and the other major rivers in Bangladesh, it is necessary to study those rivers for the sustainability of all the proposed interventions. The National Water Policy also stressed on dredging and river training works for sustainable river management. For this reason, the project has been formulated with both physical work component as well as study component. The study components were; Component-1: Feasibility Study of Capital Dredging and Sustainable River Management in Bangladesh (FSCD&SRMB); Component-2: Mathematical Morphological Modelling and Investigation in connection with the Sustainable River Management Plan of Main Rivers, Distributaries and Tributaries in Bangladesh; Component-3: Geo-morphological and Planform Studies including Environmental and Social Impact Assessment and Resettlement in connection with the Study of Capital Dredging and Sustainable River Management in Bangladesh; and Component-4: Quality Control, Monitoring and Impact Assessment of Pilot Dredging of Jamuna River at Sirajganj and near Nalin Bazar, Tangail. The physical components were, dredging of (a) 20 km Jamuna Channel from upstream of Sirajganj Hard Point (SHP) to Dhaleswari off-take and (b) 2 km Jamuna Channel near right bank at Nalin Baza (c) Protective work of Cross Bars to protect reclaimed land by spoil earth and adjacent area.

1.3 Objectives

(i) Objective of Capital Component:

(a) To divert the flow from the east channel into a mid channel to reduce the risk of failure of Sirajganj Hard Point and to guide the flow along the middle of the existing char through the Bangabandhu Bridge to near Dhaleswari Offtake. It will reduce the risk of riverbed scour along the Sirajganj hard point and also reduce the erosion at the right guide bundh of Bangabandhu Bridge.



b. Dredging of Jamuna River at Nalin Bazar near Bhuapur-Tarakandi Embankment: To protect the existing Bhuapur-Tarakandi road embankment by diverting the flow through dredging of the River Jamuna near Nalini Bazar, which is the only road communication between Jamuna Fertilizer Factory and other districts of the country.

(c) Land Reclamation from the River Jamuna: To reclaim land by depositing the dredged material and constructing cross bars over the low lying flood plain adjacent to the river bank at upstream and downstream of Sirajganj Hard Point. This reclaimed land will be the extension of Sirajgonj District town. This land may be developed for the public and private use. This land reclamation process will be exhibited as a pilot scheme and if this process appears flourishing and cost effective, further land reclamation project will be taken through river/sea dredging.

(ii) Objective of Study Component:

a. Sustainable River Management: The main objective of the study is to find out a fifteen year investment plan for Sustainable River Management. The study will be composed of capital dredging, river training works, sustainable maintenance dredging module, spoil management, afforestation, navigation, land development, fisheries development, environmental management plan and monitoring etc. for sustainable river management. The specific objectives of the study are to devise river management plan of major rivers and distributaries for flood and erosion management, to improve navigability and to augment dry season flow in the distributaries considering capital dredging and river training works. This strategy and action plan will identify the conceptual framework on capital dredging with flood & erosion management, explore financial options and formulate situation for implementation.

1.4 Project revision with reasons:

The project required revision due to increase of scope of work. In the original approved DPP, there was no provision to make the dredged channel sustainable and to protect the closure and reclaimed land, protective works as well as emergency temporary protective work (O&M during Construction) for Cross Bar and adjacent area. As per decision of the Technical Committee and Steering Committee for this project, Closure-1 (Cross Bar-3) constructed with the dredged spoil during 1st year capital dredging need to be protected to reclaim land (Approx. Area 8 Sq. Km.) successfully and the Technical Committee also instructed to complete the protective work as early as possible as it is under the threat of heavy currents of the river Jamuna. The main reasons for the revision are given below:

a) To include/make provision of some essential new capital component to have the dredging works and reclaim land sustainable like Emergency Temporary Protective Work/ Protective work of Cross Bars, Reclaimed Land and Adjacent Area etc in the Project.

b) To include/make provision of Maintenance dredging of the River Jamuna from Sirajgonj Hard Point to Dhaleswari Offtake (20 km) & near Nalini Bazar (2.00 km) for 2nd Year (2013-14 FY).

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

For improving the sediment transport capacity, navigability and reduce the risk of bank erosion of major rivers in Bangladesh, dredging of rivers was found a potentially effective measure. However, no organization in Bangladesh had experience of dredging in major rivers of Bangladesh. So, to gather experience and find the effectiveness of dredging, location for pilot dredging was needed to be identified. During the project formulation, it was found that heavy erosion in river Jamuna was going on near Bhuapur-Tarakandi road embankment at Nalin Bazar and Sirajganj Hard Point. So, location of pilot dredging were fixed in those location that would give experience of dredging in the mighty river like Jamuna and at the same time would reduce the risk of bank erosion. All the design of physical works had

been done by the concern design offices of BWDB in consultation with external consultants and stakeholders. The project implementation period had been revised several times due to prevailing field conditions, increase in scope and inclusion of new works in the project.

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

Project Identification: The project was financed by GoB.

Project Preparation: A meeting was held, presided over by the Hon'ble Prime Minister in May 2009, took a decision to prepare a package programme for dredging of all the major rivers and land reclamation programmes. DPP costing Tk.144550.58 lakh was discussed in the DPP rationalization meeting held on 23.12.2009 in the Ministry of Water Resources and as per decisions, DPP was recast in January, 2010 1st time. Again, DPP costing Tk.124889.96.72 lakh was discussed in the PEC meeting held on 10.03.2010 in Planning Commission and as per decision of the meeting DPP was recast in March 2010 for the 2nd time. Finally the DPP of the project was approved by the ECNEC on 06.04.2010 with the cost of Tk.102812.34 lakh.

Appraisal: Ministry of water resources and Planning commission has evaluated the project proposal before agreeing to financing of the project.

Credit Negotiation: Project cost has been discussed and revised several time in different stages of project approval.

Credit Agreement: The DPP of the project was approved by the ECNEC on 06.04.2010 with cost of Tk.102812.34 lakh. After approval of the DPP, during execution of works it was observed that there were some mistakes/anomalies between economic code and code description in the approved DPP. To correct those anomalies, 1st Re-Appropriation of the DPP was approved vide MoWR memo no-42.041.014.01.01.023.2001-111, Date 06/08/2012. Afterwards, project cost has been reduced to Tk. 102211.44 lakh for practical grounds and got administrative approval on 29/07/2013 as 1st revision following the ECNEC approval on 06.04.2010.

Project Implementation period has also been extended for successive 02 (Two) years i.e. upto June 2014, vide MoWR memo no-42.040.014.01.01.009.2009-112, Dated 07/08/2012 followed by the approval from Planning Commission. Again, the DPP has been revised up to June 2015 vide MoWR memeo no: 42.040.014.01.009.2009-237 dated 29-07-2013. For the interest of the work and on practical ground, again the project period has been extended for consecutive 2 years i.e. up to June 2017 vide MoWR memo no. 42.040.014.01.01.009.2009-23 dated 11-03-2015 and 42.00.00000.039.14.010.15-261 dated 11-08-2016 respectively.

Credit Effectiveness : N/A

Loan Disbursement : N/A

Loan Conditionalities : N/A

Project Approval : The DPP of the project was approved by the ECNEC on 06.04.2010. Again, the DPP has been revised (1st revision) up to June 2015 vide MoWR memeo no: 42.040.014.01.009.2009-237 dated 29-07-2013.

Others (if any) : N/A



4.1 Whether the beneficiaries of the project have clear knowledge about the Target/ Objectives of the project:

Yes, the beneficiaries of the project have clear knowledge about the objectives of the project. Consultant of IMED, for indepth monitoring of this Project, Kranti Associates Ltd. have been arranged 9 FGD meeting and workshops with the beneficiaries such as farmers, stakeholders, local leaders, Imam, businessmen, teachers, union parisdad Personnel, NGO representatives, social elites and concerned officials of the project area. 1248 nos. beneficiaries gave their interview and took their opinion in that FGD meeting. In this way, the beneficiaries gathered knowledge about the objectives of the project

4.2 Programme for use of created-facilities of the project.

Under this project, around 16 sq. Km of land has been reclaimed from the Jamuna river. This land will be treated as the extension of sirajgonj district town. This land has already been created new scope for construction of Sirajgonj Industrial Park. BEZA has already got permission from Prme Minister's office to make it Industrial Park. Besides, land that has reclaimed and protected due to construction of 4 cross bars and dredging work, is being used for crop production as well. Moreover, due to the dredging of the Jamuna river, the flow pattern in upstream of Bangabandhu Bridge has been changed which facilitates navigation, fishing and other benefits from the water resources.

4.4 Impact of the project:

4.4.1 Direct:

a) Due to Dredging and construction of Cross bars, the west channel of the river jamuna adjacent to Sirajgong could be diverted to the east at the upstream of the Bangabandhu Bridge. Due to this shift, the risk of river erosion near Sirajgonj Hard point and adjacent area has been reduced. Also, the risk of erosion of right guide bundh of Bangabandhu Bridge has reduced remarkably.

b) Due to dredging of the River Jamuna near Nalini Bazar, Tangail, the flow has been diverted from the bank and that protect the existing Bhuapur-Tarakandi road embankment from erosion; which is the only road communication between Jamuna Fertilizer Factory and to other districts of the country.

c) Due to construction of Cross bars and execution of protective work, the reclaimed land become protected from erosion and that has created great scope for housing, Industrial park etc.

e) Feasibility study of capital dredging and sustainable river management has been done for 23 major rivers in Bangladesh. Fifteen years investment plan could have been formulated; that is composed of capital dredging, river training works, sustainable maintenance dredging module, spoil management, afforestation, navigation, land development, fisheries development, environmental management plan and monitoring etc.

4.4.2 Indirect:

Due to dredging, flood and erosion risk of sirajgonj hard point and along the right guide bundh of Bangabandhu Jamuna brdge has been reduced remarkably. Navigability and augmentation of dry season flow has been increased. Moreover, scope for agriculture, fishing, housing and water resources utilization has increased.

4.5 Transfer of Technology and Institutional Building through the Project:

Project officials and stakeholders have been trained for execution of dredging work, spoil management and land reclamation.

4.6 Employment generation through the Project:

Peoples from different expertise field had been employed during execution of physical and study components of projects. Also, employment opportunity has been generated in the field of agriculture, fisheries, livestock, afforestation, navigation etc. due to Dredging and land reclamation.

4.7 Possibility of Self employment:

There is a scope of self-employment in the project locations, specilly at Sirajgonj pont, in the field of agriculture, fishing, tourism etc. Moreover, by proper use of reclaimed land; there would be an ample scope of self employment in the field cottagge industry, housing, business etc.

4.8 Possibility of women-employment opportunity:

There is a scope of women employment in the field of agriculture, tourism, cottage industry etc. Moreover, BEZA proposed industrial park in the reclaimed land could be a great income hub for the women.

4.9 Women's participation in development:

Women have worked in different phase of the project both in construction and study.

4.10 Probable Impact on Socio-Economic activity:

Impacts on socio-economic activities have already been observed, especially in the field of tourism. With time, this will increase multifold with the establishment of industrial park.

4.11 Impact on environment:

There found no negative impacts on environment. On the other hand, positive impacts have been observed e.g. erosion control etc.

4.12 Sustainability of the project: Project would be sustainable if proper O & M activities are crried out. But there is no provision in DPP. So, O & M activities could be crried out from revenue budget to make the project sustainable.

4.13 Contribution to poverty alleviation/reduction:

Scope for agriculture, fishing, navigation, tourism has been improved which facilitates poverty alleviation/reduction.

4.14 Opinion of the public representatives, local elite, local administration, teachers, religious leaders, wmen's representatives etc.:

Their opinion showed positive sign as observed from in depth montoring of IMED, June 2016.

4.15 Contribution of Micro-credit programnme and comments on overlapping with any NGO activities: Not applcable



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

- | | | |
|-----|--------------------|-------------------|
| 5.1 | Project Management | : Not Applicable. |
| 5.2 | Project Director | : Not Applicable. |
| 5.3 | Land Acquisition | : Not Applicable. |
| 5.4 | Procurement | : Not Applicable. |
| 5.5 | Consultancy | : Not Applicable. |
| 5.6 | Contractor | : Not Applicable. |
| 5.7 | Manpower | : Not Applicable. |
| 5.8 | Law & Order | : Not Applicable. |

5.9 Natural calamity:

Early flood in the river Jamuna during 2015 & 2016 and force majeure like prolonged road blocked by opposition political party hamper to some extent to the implementation of the Project.

- | | | |
|------|---|-------------------|
| 5.10 | Project financing, allocation and release | : Not Applicable. |
| 5.11 | Design formulation/approved | : Not Applicable. |
| 5.12 | Project aid disbursement and re-imbursement | : Not Applicable. |
| 5.13 | Mission of the development partners | : Not Applicable |

5.14 Time & Cost over-run:

No cost over-run but time over-run was there due to Inclusion of a new component through DPP revision and the reasons as described in sub-clause 5.9.

- | | | |
|------|--------------------------------|-------------------|
| 5.15 | Project Supervision/Inspection | : Not Applicable. |
| 5.16 | Delay in decision | : Not Applicable. |
| 5.17 | Transport | : Not Applicable. |
| 5.18 | Training | : Not Applicable. |
| 5.19 | Approval | : Not Applicable. |
| 5.20 | Others | : Not Applicable. |

6. Remarks & Recommendation of the Project Director:

Capital Dredging is a new inclusion in Bangladesh, especially, in the mighty river, like Jamuna. Though the dredging were done in pilot basis with limited length and section, even its overall observed performance is found better. "Capital (pilot) Dredging of river system in Bangladesh" project has three main components viz. i) Capital (pilot) Dredging and subsequent Maintenance Dredging ii) study for sustainable river management and iii) Construction of 4 nos. of cross bars (by utilizing dredged spoil earth) and its protection to protect the reclaim land and adjacent area. More or less we could achieve our objective/goal by implementing this project. We could have managed to reclaim about 16 sq. km. of land through implementing this project. That land has already been planned for industrial use by Bangladesh Economic Zone Authority (BEZA). Findings and recommendations of study component is being included in the ongoing Dredging Master Plan.



This project is a major breakthrough in this area. Project officials and stakeholders got trained in execution of dredging work, spoil management, land reclamation etc. Also, lessons were learnt in this respect. We could understand that only Dredging or only protective work is not the solution for river management. Dredging coupled with protective work would be the best option for river management.

We do recommend that such type of project may be replicated to both banks of the river Jamuna or other mighty river for land reclamation and overall river management.

Date :

Signature and seal of the Project Director/Manager

(কে,এম ছায়ায়ন করিম)
প্রকল্প পরিচালক
(অতিরিক্ত প্রধান প্রকৌশলী)
সিভিল ইঞ্জিনিয়ারিং বিভাগ
বাপাউরো, ঢাকা।

7. Remarks/Comments of Agency Head :

Capital (pilot) dredging is a landmark project in BWDB. It has unlocked the scope for river management in Bangladesh by combining river dredging, land reclamation and bank protection by constructing 4 nos of cross bars - all in a single project. Apart from reclaiming 16 sq km land of immense industrial value, this project has also contributed study for dredging on 24 major rivers of the country. Thus this project has opened door for future projects on river management ~~the~~ including dredging.

Date :

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