

69
RADP-29

29

2011-12

ADP No- 29

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

Sureswar Flood Control, Drainage and Irrigation Project.

Directorate of Planning-1
BWDB, 6th Floor,
WAPDA BHABAN.
Motijheel C/A, Dhaka.

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

PROJECT COMPLETION REPORT : IMED 04/2003 (Revised)

A. PROJECT DESCRIPTION :

01. Name of the Project : **Sureswar Flood Control, Drainage and Irrigation Project**
02. Administrative Ministry/Division : **Ministry of Water Resources**
03. Executing Agency : **Bangladesh Water Development Board**
04. Location of the Project :

Upazilla	District
Shariatpur Sadar, Janjira, Bhedorganj, Noria, Damudya & Goshairhat	Shariatpur

04. Objective of the Project :

The specific objectives of the study are as follows:

- To review existing flooding and drainage system of inside and outside the project area.
- To review existing siltation problem of the area.
- To protect the project area from salinity intrusion to improve crop production.
- To protect the area from tidal flooding and drainage congestion to increase agricultural production
- To study and suggest possible remedy for siltation problem within and outside the project area.
- To study the current agricultural situation and suggest measures for possible improvement.
- To develop agriculture, fisheries, transport of the proposed area by integrated water management during dry season.
- To examine the feasibility of providing flood control in the project area with all options.
- To review the existing irrigation system.
- To study and suggest possible interventions for surface water availability in the project area.
- To identify the areas to be suitable for fish culture (with and without Shrimp culture).
- To study of the Environment Impact Assessment (EIA) of the project.
- To study of the Social Impact Assessment (SIA) of the project.
- To improve farm incomes and employment opportunities by improving the water resources facilities.
- To reduce poverty level within the project area.
- To assess the implemented incomplete projects during the 1988-99 to 2000-01 and to integrate on the proposed project.

9.2 Utilization of Project Aid/Grant : Not applicable

(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

9.3 Re-imbursible Project Aid (RPA): Not Applicable

(In lakh Taka)

R P A Amount		Amount Spent	Amount Claimed	Amount Re-imbursed	Remarks
As per PP	As per Agreement				
1	2	3	4	5	6

B. IMPLEMENTATION POSITION

01. Implementation Period :

Implementation Period as per PP		Actual Implementation period	Time Over-run (% of original implementation period)	Remarks
Original	Latest Revised			
1	2	3	4	5
May,2010-April,2011	May,2010-June,2012	May,2010-June,2012	-	-

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	155.951	155.951	140.132	N/A	-
TAKA	155.951	155.951	140.132	-	-
PA	-	-	-	-	-

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
Md.Azharul Islam Director 25750-1000X8-33750	-	Yes	Yes	29-01-2008	24-01-2011	The Project Director is the Team Leader stationed at Head quarter office in Dhaka.
Md Abdul Mannan Director 25750-1000X8-33750	-	Yes	Yes	25-01-2011	14-03-2011	
Md. Sarafat Hossain Khan Director 25750-1000X8-33750	-	Yes	Yes	15-03-2011	Till Project end	

07. Procurement of Transport (in Nos.) : Nil

Type of transport	Number as per P.P.	Procured with date	Transferred to Transport Pool with date	Transferr ed to O & M with date	Condemned/ damaged with date	Remarks
1	2	3	4	5	6	7
Car						
Jeep						
Microbus						
Minibus						
Bus						
Pick-up						
Truck						
Motor Cycle						
By-cycle						
Speed Boat						
Launch						
Others with name						

09. Construction/Erection/Installation Tools & Equipment : Not Applicable

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

C. FINANCIAL AND PHYSICAL PROGRAMME :

01. (a) Original and revised schedule as per PP/PSP :

(In lakh Taka)

Financial Year	Financial provision & physical target as per original PP/PSP				Financial provision & physical target as per latest revised PP/PSP			
	Total	Taka	P.A.	Physical %	Total	Taka	P.A.	Physical %
1	2	3	4	5	6	7	8	9
2009-2010	0.00	0.00	-	-	0.00	0.00	-	-
2010-2011	155.951	155.951	-	100 %	77.00	77.00	-	45%
2011-2012					78.951	78.951		55%

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 -10	0.00	0.00	-	-	0.00	0.00	-	-	0.00
2010 -11	77.00	77.00	-	45%	77.00	54.867	54.867	-	45%
2011 -12	85.584	85.584		55%	85.584	85.265	85.265		55%

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) Incremental Agricultural Benefit.	Lac. tk	15828.78	Since it is a study project so, actual quantity will be known after completion of the project.
(b)			
(c)			
(d)			

02. Cost / Benefit : (Selected Option-2)

Item	Estimated	Actual
(1) Benefit cost ratio of the project		Since it is a study project so, actual figure will be known after completion of the project.
(i) Financial	1.13 : 1.00	
(ii) Economic	1.50 : 1.00	
(2) Internal Rate of Return		
(i) Financial	13.80	
(ii) Economic	18.45	
(3) Net present value		
(i) Financial	5767.50 lac tk.	
(ii) Economic	15949.20 lac tk.	

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

F. MONITORING AND AUDITING

0.1 Monitoring: Since it is a Study project so, monitoring is not being done at this stage. Monitoring will be done during implementation period of the project.

Name & designation of the inspecting official	Date of Inspection	Identified Problems	Recommendations
1	2	3	4

(a) Ministry / Agency:

(b) IMED :

(c) Others: (Please specify)

Gross benefited area of the Project is 77,600 hectare and net area of the Project is 62,000 ha. The whole project area is lowland situated at the Ganges Flood Plain, as a result during monsoon flooding about 70% area become inundated by 1.0 metre flood water. Consequently, during pre-monsoon period, the crop production is seriously hampered and damaged caused by flooding becomes very acute. Monsoon flooding enters the project area through the connecting khals of Padma River and damages the crop seriously. Though local farmers cultivate Boro rice during dry period giving irrigation from khal/ river but there is shortage of irrigation water due to siltation of the existing channel. In some channels water is available only during high tide. Quick recession of flood water during post-monsoon is causing draught strain to aman crops.

The Project originally conceived under the BWDB Master Plan of 1963. The first feasibility study was carried out by EPWAPDA (now BWDB) in 1970 through ECI (Denver) and ECA (Pakistan) in three polders (Upper Polder, Middle Polder & Lower Polder) for an area of 77,600 ha. This was conceived as a major flood control, double lift irrigation and pump drainage project with the main objective for increasing agricultural production in the area. But it could not be implemented due to the paucity of the funds. During that feasibility study, impacts of FCD interventions on fisheries, wetland habitats, navigation and environment were not taken into consideration.

Therefore a pre-feasibility study was again carried out by BWDB in 1996 to reformulate the project features. The study observed that the double lift pumping irrigation was expensive, risky due to bank instability and complicated due to high maintenance cost and recommended for carrying out a feasibility study for assessment of different options for development and a pilot project that could be implemented within two years. As per recommendations of the study, BWDB took steps for another study namely "Feasibility Study/ Survey of Sureswar Pilot Project" in 1997 that could be executed within a period of two years.

The study recommended a Pilot Project of 10,000 to 15,000 ha with a cost of Tk. 247.50 million. The Sureswar Pilot Project (part of lower polder of Sureswar FCDI Study Project) was taken up for implementation during 1998-99 to 2000-01 at a PP cost of Tk. 987.00 lakh. But the project was declared completed after PP provision of 987.00 lakh is spent up with some key component remaining incomplete. As such no project benefit was achieved as targeted. However in quest of such a project, the consultants had discussions with the project officials and beneficiaries and ultimately came to the conclusion that instead of an area of 10,000 to 15,000 ha the entire project would be developed. In this case the gross project will be increased.

At the moment the the People and Public representatives demand of the Sureswar FCDI Study Project comprising of Upper, Middle and Lower Polder. Accordingly a fresh Project Proposal sent to Directorate of Planning-1, BWDB from field office vide memo no: 6S.1/1520, dated 03-06-2009 for conducting the feasibility study of the Project. Based on the proposal a Proforma for Study Proposal has been prepared for approval from the competent authority. Accordingly ToR of Main Consultants, Mathematical Modelling Study & EIA, SIA have been prepared.

A meeting of the project Evaluation Committee was held on 14/01/2010 in the MoWR under the chairmanship of the secretary of MoWR to discuss on the project proposal. Several decisions regarding the project had been taken in the committee and the proposal had been recast incorporating the decisions taken in the committee. The total estimated cost of has been revised at Tk.155.951 lakh during 1st recast instead of Previous estimated cost Tk.163.81 lakh.

A meeting of the Divisional Project Evaluation Committee (DPEC) was held on 18/02/2010 in the MoWR under the chairmanship of the secretary of MoWR to discuss further on the project proposal. Decisions regarding the project had been taken in the committee has been incorporating in the recast PSP (Proforma for Study Proposal). The total estimated revised cost of the study proposal is Tk.155.951 lakh.

The sectoral objectives of water resources development during the Three Years Rolling Programme are:

- i To alleviate poverty and generate employment opportunities;
- ii To ensure ecological balance;
- iii To promote water conservation for irrigation and other uses;
- iv To enhance conveyance capacity of water courses through desiltation;
- v To protect towns, commercial centres, agricultural lands etc. from the erosion of inland and border rivers;
- vi To control flush flood during pre-monsoon;
- vii To reduce intensity of flush flood, damages of crops, properties and human sufferings etc;
- viii To augment agricultural productivity and accelerate other economic works;
- ix To reduce the drainage congestion during post monsoon;
- x To create navigational facilities in the river & khals;
- xi To explore the possibility of providing irrigation facilities;
- xii To promote culture fisheries in the completed projects, establishment of fish sanctuary and culture pink pearl in the haors and rivers.
- xiii To promote optimum use of available flows of the common rivers in domestic, agricultural, fisheries, navigation and industrial sectors;
- xiv To fulfill the need of irrigation for achieving food grain self-sufficiency by ensuring year-round sustainable irrigation through conjunctive use of surface and ground-water thus avoiding over-extraction of sub-surface water;
- xv To control floods to protect crops, lives and properties and promote both HYV rice and fish through controlled flooding;
- xvi To prevent saline intrusion;
- xvii To ensure active people's participation in planning implementation and maintenance of water sector projects; and
- xviii To carry out studies on future water resources development projects.
- xix To strengthening of training capacity of Training Institute of BWDB at different places in Bangladesh.
- xx To dissemination of knowledge, experience and insights obtained from projects undertaken in Bangladesh in the past and present, like the FAP, SP, EIP, LRP, DDP, CERP and alike.

One crop season, Kharif-II, remains almost idle because of flood water. Drainage efficiency of khal/rivers in deteriorating overtime as a result of siltation. As a result, irrigation of Boro/Rabi crops is hampered. The situation will further deteriorate in future. Besides the problem of flood, drainage and irrigation, there are problems of riverbank erosion, siltation of off takes of important distributaries of the Padma and navigation. Though all these problems are important for the area, the SFCDIP addresses the problem of FCDI development, improvement of Kritinasha-Palong distributary of the Padma and river bank protection works at most vulnerable areas partly. The other problems especially those related to river bank protection on a comprehending scale, problems of char areas in the Padma river like Noapara, Char Atra, Kachikata, etc., need to be addressed through separate projects. Char areas are quite large, but isolated from main land. People residing in these chars are affected by flood, river erosion, and loss of livelihood means, lack of socio-economic infrastructure.

Justification of Option-2

Technical aspect:

Partial flood control does not involve empoldering of an area by a circuit embankment all around and hence, more acceptable from environment and social point of view.

However, there are some exceptions; In unit 5 full flood control compartment is possible, here partial flood protection will not work; embankment facing the padma is not possible in unit no 1 as the approach road of padma bridge passes through the unit with opening to allow a part of flood discharge to pass overland; partial flood control is possible for unit 2 & 3; Embankment has not been proposed for Unit no-4 considering active morphological behavior of the Padma and lower Megna; Only sub compartments/small polders are possible. Therefore going unit by unit, it is found that full flood control compartment is not a common solution for the project area; rather partial flood control is more acceptable.

Social aspect:

The majority of local stakeholders across a range of livelihood groups, the common problem they face is the one associated with the scarcity of water rather than the excess of it. They attach high value to dry season surface water irrigation.

- The commonly regarding flood, has developed its cropping mechanism with diversification in crop and alternative source of livelihood during lean season of flood.
- Inter connectivity of rivers and khals has proved to be lifeline for the area.

Economic Analysis:

Item	Estimated	Comments
(1) Benefit cost ratio of the project :		
(i) Financial	1.13 : 1.00	Results of Financial and Economic parameters shows that the project is
(ii) Economic	1.50 : 1.00	
(2) Internal Rate of Return :		fessible for implementation
(i) Financial	13.80 %	
(ii) Economic	18.45 %	
(3) Net present value :		
(i) Financial	5767.50 lac tk.	
(ii) Economic	15949.20 lac tk.	

So, the proposed option-2 is viable in respect of Technical, Social and economic aspect and can be taken-up for implementation.

4.5	Transfer of Technology and Institutional Building through the project	Transfer of Technology and Institutional Building capacity through formation of Water users group (WUG) in the project area.
4.6	Employment generation through the project.	22,32,274 Mandays
4.7	Possibility of Self employment.	Positive
4.8	Possibility of women-employment opportunity.	positive
4.9	Women's participation in development.	positive
4.10	Probable Impact on Socio-Economic activity.	positive
4.11	Impact on environment.	positive
4.12	Sustainability of the project.	Proper implementation & cooperation of stake holders will ensure the project sustainability.
4.13	Contribution to poverty alleviation/reduction	Poverty will be reduced due to income generation.
4.14	Opinion of the public representatives, local elite, local administration, teachers, religious leaders, women's representatives etc..	Highly recommended to implement the project
4.15	Contribution of Micro-credit programmes and Comments on overlapping with any NGO activities.	Not related

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

5.1	Project Management	5.12	Project aid disbursement and reimbursement
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		
Time over runed without cost increase hence the time has extended for 14 month.			