



PROJECT COMPLETION REPORT : IMED 04/2003 (Revised)

**Name of the Project : Southwest Area Integrated Water Resources Planning
and Management Project (SWAIWRPMP).**

Administrative Ministry/Division : Ministry of Water Resources.

Executing Agency : Bangladesh Water Development Board.

September 2015

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** : **Southwest Area Integrated Water Resources Planning and Management Project (SWAIWRPMP).**
02. **Administrative Ministry/Division** : **Ministry of Water Resources.**
03. **Executing Agency** : **Bangladesh Water Development Board (BWDB).**
04. **Location of the Project** :

Division	District	Upazila
Khulna	Narail	Narail Sadar, Kalia, Lohagara
	Jessore	Abhoynagar
	Satkhira	Kaligonj, Shyamnagar
	Khulna	Dakop
Dhaka	Gopalganj	Kashiani

05. **Objective of the Project** :

The project has three specific objectives, being:

- Objective A** Participatory Integrated Water Management Plans (IWMP) for the selected Hydrological units (previous implemented FCD/I schemes);
- Objective B** Enhanced livelihood and livelihood opportunities impacted by integrated water resources management to increase user's participation and improved decentralized service delivery and also to promote both crop & non-crop sub sectors through implementation of IWRM plans;
- Objective C** Strengthened institutional and project management capacities for planning, implementation, operation & maintenance. Sustainable O&M of the project through handing over the water management infrastructures to the stakeholders for improving economic growth & reducing poverty.

The overall objective of this rehabilitation are to enhance economic growth and reduce poverty in the selected areas; broadly to increase agricultural production, farm income and employment opportunities by improving water management facilities and capabilities to the beneficiaries to mage water infrastructure facilities.

06. Estimated Cost :

(In lakh Taka)

Description	Original	Latest Revised (3 rd revision)
(a) Total	26025.00	29425.53
(b) Taka (BDT)	6518.40	5000.51
(c) Foreign Currency	-	-
(d) Project Aid	19506.60	24425.02
(e) RPA	13702.40	20355.54

07. Date of Approval :

	PCP	DPP
(a) Original		13/10/2005
(b) Latest Revised		16/11/2014

08. Implementation Period :

	Date of Commencement	Date of Completion
(a) Original	April 2006	June 2013
(b) Revised as per MTR recommendation- (First revision)	April 2006	June 2013
(c) Second Revised (2 nd revision)	April 2006	June 2014
(d) Latest Revised (3 rd revision)	April 2006	June 2015
(e) Actual	April 2006	June 2015

09. Financing Arrangement (Source-wise):

9.1 Status of Loan/Grant

a) Foreign Financing :

Source (s)	Currency as per Agreement in US \$	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
Asian Development Bank	20100000	20.10	Loan	10/05/2006	23/08/2006	June 2013	June 2015
Government of The Netherlands	12500000	12.50	Grant	27/04/2006	23/08/2006	June 2013	June 2015

b) GOB :

(In lakh Taka)

Total amount	Loan	Grant	Cash Foreign Exchange
1	2	3	4
5000.51	-	-	5000.51

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
Asian Development Bank	21.24 ^a	1493.27 ^b	20.35 ^c	1454.76 ^c	0.89	38.51
Government of The Netherlands	12.50	949.23	12.50 ^d	916.58 ^d	0.00	00.00

a. At the time loan signing, the loan amount of ADB portion was SDR 13863000.00 which is equivalent of US\$20.10 million (1SDR=US\$1.45). But at present ADB loan portion becomes US\$21.24 million because of SDR rate increment (1SDR=US\$1.53).

b. In 3rd revised DPP the \$ conversion rate was considered as flat rate\$1=75.28BDT, but actually from the very beginning the USD was re-imbursed according to present market rate (such as in the year 2006 USD conversion rate was 68.58BDT but at the end of the project the USD conversion rate become 77.40).

c. Up to 11th August 2015 ADB HQ deducted US \$774432.00 as of interest charge which is included in actual expenditure of US\$ but not included in actual expenditure of BDT as it was not actually re-imbursed.

d. Dutch grant US \$250000.00 deducted by ADB HQ as Miscellaneous Grant Admin and Support Costs which is included in actual expenditure of US\$ but not included in actual expenditure of BDT as it was not actually re-imbursed.

9.3 Reimbursable Project Aid (RPA) :

(In lakh Taka)

RP A Amount		Amount Spent	Amount Claimed	Amount Re-imbursed	Remarks
As per PP	As per Agreement				
1	2	3	4	5	6
20355.54	20355.54	19915.07	19915.07	19915.07	

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
2005-2013	2005-2015	2005-2015	27.59%	Including one year extension (2014-15)

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	26025.00	29425.53	28710.73	10.31	At the time loan signing, the loan amount of ADB portion was SDR 13863000.00 which is equivalent of US\$20.10 million (ISDR=US\$1.45). But at present ADB loan portion becomes US\$21.24 million because of SDR rate increment (ISDR=US\$1.53).
TAKA	6518.40	5000.51	4997.37		
PA	19506.60	24425.02	23713.36		

03. Project Personnel:

Sanctioned strength as per PP	Manpower employed during execution	Status of the existing manpower			Manpower Employed	
		Manpower requirement for O&M as per PP	Existing manpower for O&M	Others	Male	Female
1	2	3	4	5		
Officer (51 Nos)	22	O&M of this project will be carried out by existing man power of BWDB.	O&M of this project will be carried out by existing man power of BWDB.			
Staff (154 Nos)	116					
Total : 205 Nos	138					

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					
Study Tour (Philippine)	-	-	08 (Year 2010)	-	According to the DPP cost (Tk. 105.29 lakh), Total 51 nos Officials have taken Training/Study tour.
Field Visit (China)	-	-	03 (Year 2010)	-	
Training & Study Tour (Philippine & Indonesia)	-	-	18 (Year 2012)	-	

Training (Thailand & Bali, Indonesia)	-	-	22 (Year 2015)	-	
b. Local					
WMO	-	-	29,028	-	According to the DPP cost total 52380 nos stack holders has been taken Training.
FFS	-	-	9,690	-	
FSF	-	-	9,120	-	
Staff	-	-	3,372	-	

a. Local-

a. Training

- i. O & M = 2472 persons (3days)
- ii. Agriculture = 4092 persons (3days)
- iii. Fishery = 6219 persons (3days)
- iv. Livelihood = 16245 persons (3days)

b. Agriculture

- i. FFS = 323 nos (each no 30 persons)
- ii. Demos = 303 nos.

c. Fishery

- i. FSF = 304 nos (each no 30 persons)
- ii. Demos = 151 nos.
- iii. Nursery = 01 nos.
- iv. Sanctuary = 04 nos.
- v. Fingerlings = 10 (beel stocking)

d. Livelihood Enhancement

Supply of Goods

- a. Goats = 71 nos
- b. Ducks = 14390 nos
- c. Sewing Machine = 34 nos
- d. Others = 01 (forest nursery)

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						
Survey/Study and investigation	Item	1018.95	1 Item	966.80	1 Item	
TA/DA	Item	236.20	1 Item	235.97	1 Item	
Telephone	Item	11.29	1 Item	9.67	1 Item	
Water	Item	5.00	1 Item	4.96	1 Item	
Electricity	Item	21.00	1 Item	17.76	1 Item	
Gas & fuel	Item	14.98	1 Item	14.86	1 Item	
Petrol and Lubricant	Item	171.34	1 Item	170.39	1 Item	
Printing & Publication	Item	22.70	1 Item	21.40	1 Item	
Office supplies & Stationery	Item	33.50	1 Item	33.11	1 Item	
Advertisement	Item	8.30	1 Item	8.27	1 Item	

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
Hiring of office for PMO & Consultant at Narail/Jessore	Item	25.74	1 Item	24.33	1 Item	
Hiring of joint sub-office for PMO & Consultant at Dhaka	Item	0.00	1 Item	0.00	1 Item	
Staff Training	Item	423.79	1 Item	423.75	1 Item	
WMO Training	Item	2492.70	1 Item	2492.70	1 Item	
Social Mobilization for WMO formation	Item	779.52	1 Item	746.04	1 Item	
Consultancy-IWMP	mm	441.00	86	441.00	86	
Consultancy-ISPM (601 m-m)	mm	2706.50	601	2699.63	601	
Consultancy - Design & construction Supervision	mm	180.00	40	180.00	40	
Consultancy-Aila-2009	mm	285.60	180	285.59	180	
VAT & Tax	Item	1183.09	1 Item	1181.69	1 Item	
Testing fee	Item	1.12	1 Item	1.12	1 Item	
Other expenditure	Item	3.00	1 Item	3.00	1 Item	
O & M Vehicle	Item	102.58	1 Item	102.49	1 Item	
O & M Equipment	Item	25.70	1 Item	25.57	1 Item	
O & M Furniture	Item	5.40	1 Item	5.25	1 Item	
O & M Computer & Office equipment	Item	9.10	1 Item	8.82	1 Item	
Other repair	Item	17.97	1 Item	17.92	1 Item	
O & M of Office Building	Item	28.26	1 Item	28.22	1 Item	
Sub Total of Revenue:		10254.33		10150.31		
b)Capital Component						
Acquisition of Assets						
a. Vehicle						
i.Jeep 4WD	nos	138.58	7	138.58	7	
ii.Motorcycle	nos	49.11	40	49.11	40	
b)Development Import duty & VAT	Item	0.00	1 Item	0.00	1 Item	
c)Monitoring & Survey Equipment	nos	59.63	15	59.63	15	
Office Equipment	nos	15.34	15	15.34	15	
Furniture	LS	32.73	LS	32.73	LS	
Computer & Accessories	nos	25.25	32	25.25	32	
Acquisition/Purchase of Land & Landed Properties of Assets						
Land acquisition & Resettlement	ha	257.35	53.41	257.35	53.41	
A) Civil works (ChenchuriBeel Sub-project)						
a. Embankment Resectioning/Construction	km	518.09	17.20	518.09	17.20	

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. Khal Excavation	km	1564.15	127.30	1564.12	125.20	
c. Rehabilitation of Regulator	nos	237.62	6	237.62	6	
d. Construction of Regulators	nos	415.86	2	415.86	2	
e. Check Structures /Culverts/Foot Bridge (16 Nos.)	nos	568.06	16	568.06	16	
f. Water Retention Structure	nos	88.90	2	88.90	2	
g. Inlet & Outlet Structure	nos	126.27	7	126.27	7	
h. River Bank Protection Work	km	2117.22	3.10	2048.33	2.80	
i. Irrigation Scheme	Item	451.85	1 Item	451.71	1 Item	
j. Deep Tubewell for Drinking Water	nos	115.00	90	113.09	90	
k. Construction of WMA/WMG Training Center	nos	151.20	13	149.41	13	
B) Civil works (Narail Sub-project)						
a. Embankment Resectioning/Construction	km	224.27	13.00	224.27	13.00	
b. Khal Excavation	km	833.99	130.00	833.91	124.37	
c. Rehabilitation of Regulator	nos	292.40	9	292.40	9	
d. Construction of Regulators	nos	429.01	3	429.01	3	
e. Check Structures /Culverts/Foot Bridge	nos	1155.00	21	1102.67	20	Stakeholder denied the requirement later.
f. Water Retention Structure	nos	204.56	3	204.56	3	
g. Inlet & Outlet Structure	nos	87.00	6	87.00	6	
h. Deep Tubewell for Drinking Water	nos	41.53	32	41.53	32	
i. Construction of WMA/WMG Training Center	nos	221.01	19	209.76	19	
C) Civil works (Aila-2009)(1 Item)	Packages	4324.24	29	4324.24	27	
D) Civil works (Other Sub-Project)						
a. River Bank Protection Work	km	715.03	0.788	715.03	0.788	
E) Geo-textile Protection Materials(14.50 lac)	lac	1319.87	14.50	1319.87	14.50	
F) Upgrading of Rural Roads	km	994.88	17.48	994.88	17.48	
2. Project Management						

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
(i)Office Space (PMO, SMO)	nos	101.70	2	101.70	1	
3. Development Import Duty and Vat						
CDST+VAT in Capital	LS	608.57	1 Item	608.57	1 Item	
O&M During Construction		0.00		0.00		
a.O&M During Construction (ChenchuriBeel Sub-Project)	LS	148.38	LS	148.02	LS	
b.O&M During Construction (Narail Sub-Project)	LS	63.55	LS	63.55	LS	
c.O&M During Construction (Other Sub-Project)		0.00		0.00		
d.O&M During Construction (Aila-2009 rehabilitation)		0.00		0.00		
Interest During Implementation		474.00		0.00		
Physical Contingency		0.00		0.00		
Price Contingency		0.00		0.00		
Sub Total of Capital:		19171.20		346.38		
Total		29425.53	100.00	28710.73	99.00	

06. Information regarding Project Director (s):

Name & Designation with pay Scale.	Full time	Part time	Responsible for more than one project	Date of		Remarks
				Joining	Transfer	
1	2	3	4	5	6	7
Dhali Abdul Qaium Director, Planning-II/SE 25750-1000×8-33750/-		Part time	Yes	23-08-2006	24-04-2007	
Md. ZiaurRahman Superintending Engineer/SE 25750-1000×8-33750/-	Full time	-	-	24-04-2007	03-03-2010	
Zahirul Islam (i)Superintending Engineer/SE 25750-1000×8-33750/- (ii)Addl. Chief Engineer 29000-1100×6-35600	Full time	-	-	(i) 03-03-2010 (ii)31-01-2011	(i)30-01-2011 (ii)10-08-2011	
Md. KamalurRahmanTalukder (i)Superintending Engineer 25750-1000×8-33750/- (ii)Addl. Chief Engineer/PD 29000-1100×6-35600	Full time	-	-	(i)10-08-2011 (ii)08-04-2015	(i)07-04-2015 Till now	

07. Procurement of Transport (in Nos) :

Type of transport	Number as per P.P.	Procured with date	Transferred to Transport Pool with date	Transferred to O & M with date	Condemned/damaged with date	Remarks
1	2	3	4	5	6	7
Car	01*	01(Nov 2009)				All types of transport will be transferred to newly approved 2 nd Phase of the Project.
Jeep	07	04(April 2009) 03(June 2013)				
Microbus	01*	01(June 2011)				
Minibus						
Bus						
Pick-up	02*	02(Nov 2009)				
Truck						
Motor Cycle	40	14 (Nov 2008) 10 (May 2010) 10(June 2010) 02(June 2011) 02(July 2012) 02(Nov 2012)				
By-cycle	Nil					
Speed Boat	Nil					
Launch	Nil					
Others with name	Nil					

*In the contract of Consultant's there was provision of 1no car, 1no microbus & 2no Pick-up which was directly purchased by consultant.

08. Procurement of Goods, Works and Consultancy Services:

08.1 Goods & Works of the Project costing above Tk. 200.00 lakh and Consultancy above Tk. 100.00 lakh:

Description of procurement (goods/works /consultancy) as per bid document	Tender/Bid/Proposal Cost (in crore Taka)		Tender/Bid/Proposal		Date of completion of works/services and supply of goods	
	As per PP	Contracted value	Invitation date	Contract signing/ L.C opening date	As per contract	Actual
1	2	3	4	5	6	7
a. Procurement of Works	22.20	22.20	24-02-09 to 01.09.13	24.06.09 to 17.12.13	30.10.10 to 01.03.14	31.05.11 to 12.05.14

b. Procurement of Goods (Empty geo textile bag)	10.00	10.00	20-10-2008 to 02-07-2009	22-12-2008 to 02-09-2010	20-03-2009 to 31-12-2010	13-03-2009 to 25-12-2010
c. Consultancy						
Institutional Strengthening & Project Management Support	26.08	26.08	Invited by ADB	15 Jan 2007	17 Feb 2014	17 Feb 2014
Feasibility Study of Additional Sub-Project & Institutional Strengthening and Project Management supporting water management groups with integrated water resources management.	5.55	5.55	Invited by ADB	01 Aug 2012	30 June 2014	30 June 2014
“Aila” damaged rehabilitation Consultant	2.87	2.87	Invited by EDDRP	6 June 2010	30 June 2011	30 June 2011
Study on KJDRP	1.77	1.77	18 Feb 2011	30 th June 2011	28 December 2013	28 December 2013

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

Name of the Field	Approved man month		Actual man month utilized	Remarks
	As per PP	As per contract		
1	2	3	4	5
a) Foreign	72.00	70.18	69.56	
b) Local	770.00	769.83	767.83	

09. Construction/Erection/Installation Tools & Equipment: N/A

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
NOT APPLICABLE						

C. FINANCIAL AND PHYSICAL PROGRAMME :

01. (a) Original and revised schedule as per DPP :

(in lakh Tk.)

Financial Year	Financial provision & physical target as per original DPP				Financial provision & physical target as per latest revised 3 rd Revision DPP			
	Total	Taka	P.A.	Physical %	Total	Taka	P.A.	Physical %
1	2	3	4	5	6	7	8	9
2005-2006	360.80	131.10	229.70	1.38%	0.00	0.00	0.00	0.00%
2006-2007	5346.50	1630.80	3715.70	20.54%	271.39	2.62	268.77	0.92%
2007-2008	6192.30	1457.40	4734.90	20.79%	493.16	93.33	399.83	1.67%
2008-2009	5365.50	1161.00	4205.50	20.62%	1528.72	254.78	1274.94	5.20%
2009-2010	3927.50	769.60	3157.90	15.09%	1889.92	501.93	1387.99	6.42%
2010-2011	1630.80	461.20	1169.60	6.27%	7066.31	1401.61	5664.70	24.00%
2011-2012	1597.80	449.50	1148.30	6.14%	4590.41	656.12	3934.29	15.60%
2012-2013	1603.80	457.80	1146.00	6.16%	6108.16	969.72	5138.44	20.75%
2013-2014	00	00	00	0.00%	5003.30	782.49	4220.81	17.00%
2014-2015	00	00	00	0.00%	2474.16	337.91	2136.25	8.40%
Total	26025.00	6518.40	19507.60	100.00	29425.53	5000.51	24426.02	100.00

01. (b) Revised ADP allocation and progress :

(In lakh Taka)

Financial Year	Revised Allocation & target				Taka release	Expenditure & physical progress			
	Total	Taka	PA	Physical %		Total	Taka	PA	Physical %
1	2	3	4	5	6	7	8	9	10
2005-06									-
2006-07	4400.00	400.00	4000.00			271.25	2.62	268.63	3.00%
2007-08	2895.00	515.00	2380.00			493.30	93.34	399.96	6.00%
2008-09	2135.00	465.00	1670.00	4.05%	2129.00	1,534.29	254.52	1279.77	4.00%
2009-10	2964.00	764.00	2200.00	10.00%	717.41	1912.86	502.84	1410.02	7.00%
2010-11	9000.00	1500.00	7500.00	31.77%	7400.00	7,066.35	1401.60	5,664.75	32.00%
2011-12	6500.00	1000.00	5500.00	21.18%	5397.66	4589.16	656.14	3,933.02	18.00%
2012-13	6400.00	1000.00	5400.00	16.00%	6077.98	6,108.14	969.61	5,138.53	14.00%
2013-14	5210.00	800.00	4410.00	14.00%	5209.14	5,003.99	782.50	4,221.52	13.00%
2014-15	1979.00	317.00	1662.00	3.00%	1781.41	1,712.54	308.66	1,403.88	2.00%
Total	41483.00	6761.00	34722.00	100.00	28712.6	28,691.19*	4971.83	23,720.08	99.00

* Excluding bank charges (LC commission & others for Geo-textile bags and vehicle imported) 19.54 lakh tk.

D. ACHIEVEMENT OF OBJECTIVES OF THE PROJECT:

Objectives as per PP/FS Report	Actual achievement	Reasons for shortfall, if any
(a) Agriculture	See IMED updated Evaluation Report vide IMED memo no: 21.121.006.00.00.24.2015-151; dated:17 June 2015 & Mid-term Evaluation Report vide IMED memo no: 21.122.014.42.00.004.2010-06; dated:11 February 2014.	
(b) Fisheries	-do-	
(c) Livelihood	-do-	

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) Quality of life	Soft benefit non-monetary	-	After the implementation of the project the stakeholders are getting increased production, economic benefit from the agriculture/fisheries etc (due to khal re-excavation, construction of water control structure & embankment construction). The stakeholders now are getting increased educational facilities, communication facilities (road, bridge & culvert) & getting safe drinking water due to installation of deep tubewell.
(b) Poverty Reduction	Soft benefit non-monetary	-	Before project income per household was Tk 3107 & after implementation of project the income of per household is Tk 4294. Increment of income is Tk.1187.
(c) Empowerment of women	Soft benefit non-monetary	-	In 102nos Water Management Group (WMG) the total number of WMG member is 25070 among them female members are 9853 (39% against target of 30%). They are now enthusiastic in committing for more work and process are raising their social position and receiving positive appreciation from the community.
(d) Environmental Enhancement	Soft benefit non-monetary	-	Remarkable positive changes in case of environmental indicators such as land productivity, fish availability, tree plantation, number of livestock, poultry and

			human disease. Out of migrated households started returning home due to generation of work opportunities in the project areas.
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02. Cost/Benefit:

Item	Estimated	Actual
(1) Benefit cost ratio of the project		
(i) Financial	-	2.66:1
(ii) Economic	1.71: 1.00	3.63 : 1.00
(2) Internal Rate of Return		
(i) Financial	-	29.76%
(ii) Economic	19.37%	35.74%

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

There is no shortfall.

F. MONITORING AND AUDITING

0.1 Monitoring:

Name & designation of the inspecting official	Date of Inspection	Identified Problems	Recommendations
1	2	3	4
(a) Ministry / Agency:	Different dates	Formation of WMG/WMO	
(b) IMED :	Project evaluation during June, 2013 and Dec, 2014.	No problem was found remarkable, Benefits in Rice & Fish Production rise in Income per HH.	To continue further effort to the advancement of WMG/WMA activities with project extension time.
(c) Others: ADB-EKN Joint Review Mission	Regular EKN-ADB Joint Review Mission:	Mission visited, monitored and emphasized action on Key Agreed issues.	Collective Action Plan to strengthen WMG/WMAs, and raise their income, Introduction of HYV & High Value crops, Modern Fisheries to raise production of fish with higher yields.
(d) Regular monthly and quarterly performance review workshops	Workshops were held to evaluate Collective Action Plan achievements, detect deficiencies and upgrade performance of Facilitators engaged for WMO development.	The problems identified in the performance workshops were discussed openly with suggestions for further development of CAP, well managed WMGs	Proceedings were prepared by Consultants and disseminated to all concerned for taking corrective measures.
(e) Monitoring of WMG activities by ISPMC WMO Monitors	Regular monitoring of WMGs offices in different dates.	Find out deficiencies and advise to take proper action by the employers.	For disseminating the findings with proper advise by publishing findings /results in Six Monthly Reports.

0.2. Auditing during and after Implementation:

2.1. Internal Audit:

Period of Audit	Date of submission of Audit Report	Major findings/ objections	Whether objections resolved or not.
1	2	3	4
As Foreign Aided Project Audit Directorate (FAPAD) audited this project regularly in every financial year. FAPAD's audit report was also closely monitored by ADB and it fulfills the ADB's as well as government's audit requirement.			

2.2 External Audit:

Audit period	Date of submission of Audit Report	Major findings/ objections		Whether objections resolved or not.
1	2	3		4
		Para	Title	
2006-07	31-12-2007	2.01	Value added Tax and Income Tax Tk. 1,18,11,922.00 not deducted from consultants bill	Resolved
		2.02	RPA fund (Initial deposit) Tk. 2,61,98,798.00 not deposited by donor as per agreement	Resolved
2007-08	31-12-2008	1.01	Vat & IT amounting Tk. 48,09,004.00 was not deducted from consultants bills	Resolved
		1.02	Penalty of Tk. 9,49,690.00 was not imposed on and recovered from the contractors for delay in completion of work.	Resolved
		2.01	Govt. sustained loss of Tk. 1,34,388.00 for not conducting insurance coverage as per condition of contract .	Resolved
		2.02	Faulty formation of TEC by violation PPR-2003. Amount involved Tk. 19,42,308.00	Resolved
		2.03	Loss of project money of Tk. 46,900.00 for repair and maintenance of the vehicle not belonging to the project.	Resolved
2008-09	31-12-2009	1.01	Non realization of IT & VAT for Tk. 54,45,599.13 from the consulting firm.	Resolved
		2.01	Insurance coverage not provided by the consultant & the contractor as per condition of contract.	Resolved
2009-10	31-12-2010	1.01	Purchase of vehicles amounting to Tk. 24,89,776.00 under beyond Contract Agreement	Resolved
		1.02	Bank interest amounting to Tk. 17,94,561.00 was not deposited into Govt. account.	Resolved
		1.03	Refund of deducted VAT & IT amounting to Tk. 2,11,628.00 to the NGO not in order	Resolved
		2.01	VAT amounting to Tk. 1,61,633.00 was less deducted from contractor/surveyors bills.	Resolved
		2.02	Retention money was less deducted	Resolved
		2.03	Work awarded to the contractor by unfair practices.	Resolved
2010-11	31-12-2011	1.01	Bank interest amounting Tk. 38,78,707.00 not deposited into Govt account.	Resolved

Audit period	Date of submission of Audit Report	Major findings/ objections		Whether objections resolved or not.
1	2	3		4
		1.02	Unspent balance Tk. 98,10,000.00 not refunded.	Resolved
2011-12	31-12-2012	1.01	Forfeited Bank Guarantee amounting to Tk. 27,29,200.00 not encashed.	Resolved
2012-13	31-12-2013	2.01	Loss of project fund amounting Tk. 15,75,448.00 for unnecessary procurement of Geo-Textile bag.	Resolved
		2.02	Unspent Balance of CD/VAT amounting Tk. 15,05,236.00 was not deposited into Govt. Account.	Resolved
2013-14	31-12-2014	2.01	Excess expenditure of Tk. 61,925.00 paid to the contractor by showing excess CC blocks laying.	Resolved
		2.02	Excess payment made to the contractor Tk. 1,30,385.16 showing the volume of Geo-Textile than the volume of CC Block volume.	Resolved
		2.03	Unutilized 95,365 Nos Geo-Bags valued Tk. 95,32,685.00 stored in the Go-down.	Resolved
		2.04	IT amounting to Tk. 9,10,000.00 not deducted from the consultancy firm.	Resolved

G. DESCRIPTIVE REPORT

1. General Observations/Remarks of the Project on :

1.1 Project Background

The South West Water Area Resources Development Project (SWAWRDP) is one of the five regional FAP studies (FAP-4) completed in 1993. The present project was prepared through a Project Preparatory Technical Assistance (PPTA) under ADB TA finance (TA No.4079). The project aimed to improve the productivity and sustainability of the existing Flood Control & Drainage/Irrigation schemes in the south-west region of Bangladesh with strengthening the relevant institutions delivering appropriate services to the stakeholders.

The southwest area comprises the hydrological regions of South-west & South-central regions representing about 27% (40,450 km²) of the area of the country. The area is bounded on the west by the border with India, in the north by the Ganges/Padma river, in the east by the Lower- and to the south by the Bay of Bengal. About 10% is occupied by Sundarban Reserve Forest (an internationally recognized international Heritage&Ramsar site. Surface water and Beels account for 13% while the remaining 77% are mainly arable lands & settlements. Water resources of the area originate from three separate but largely interlinked sources: surface water flows from Trans boundary rivers, viz, the Ganges/Padma& the Lower-Meghna.

The Project implementation is needed demonstrate and institutionalize the way to enhance and sustains the performance of medium and large FCD/I sub-projects. It was envisaged to cover a total of 100,000 hectares (ha) FCD/I sub-project area, including 57,000 ha (Revised to 40,000 ha while preparing SIP excluding the area already taken up by LGED) area of flood control drainage/irrigation areas (in two representative sub-project area: CBSP & NSP) where integrated water management plans were prepared under the project preparatory technical assistance (PPTA) and remaining sub-projects (11 nos. of sub-projects covering an area of 43,000 ha will be selected. However, in 2009, cyclone AILA occurred in the southwestern Bangladesh that seriously damaged infrastructure of coastal area, fund was diverted for emergency repair of 4 nos polders, 5 & 15 in Satkhira and 31 & 32 in Khulna districts, to protect an area of about 80,000 ha. As such the remaining subprojects could not be taken for IWMP & their implementation. The vulnerable area left out for which feasibility study was carried out for seven sub-project and together with 4 nos. sub-projects, considered by ADB as straight forward projects totalling 9 no. sub-projects covering a gross area of about 84,000 ha planned to be implemented under second phase through additional financing by ADB. The project area included selected areas in the southwest areas of Bangladesh, covering the districts of Faridpur, Gopalganj, Jessore, Magura, Narail, Rajbari.

1.2 Justification/Adequacy

The project was planned to enhance the effectiveness of water sector operations through implementing key policy principles, improving sector governance, and furthering reform actions:

- i. The Project would operationalize key principles of the NWP, in the particular participatory and integrated planning, development and management of water resources to address diverse stakeholder interests, environmental concerns; and other local development constraints for

- agriculture, fishery, and livelihood activities in the FCD/I hydrological areas, as embodied in IWMPs and SIPs. Pro-poor focus is pursued with due representation of vulnerable poor in WMAs and targeted delivery of support.
- ii. It would institutionalize sustainable O&M for medium and large FCD/I schemes, with joint management (of main structure) with and management transfer (of local structures) to WMAs, another key NWP principle. This follows good practices and lessons proven effective in small FCD/I schemes being assisted by ADB to establish O&M facilities transferred to WMAs.
 - iii. It would operate stringent quality control systems, by clearly stipulating process-wise and impact targets in SIPs, and progressively implementing subprojects/subunit works by confirming the achievement of the pre-defined targets at each step, with improved internal recording, reporting and auditing system institutionalized with the support of the TA. The project will also support broad institutional actions to enhance sector governance in coordination with other externally assisted programs.
 - iv. It would strengthen WMAs as responsible agents to provide self-help efforts for facility O&M, and empower them to take lead roles in subprojects decision making, and monitor the program delivery, thereby transforming line agency role to enterprise provider from implementer. Progressing WMAs are also trained as local enterprise managing microfinance with collected shares and savings, and to facilitate farmer communication with service providers with collective power.

While preparing participatory Sub-unit Implementation Plan (SIP) all the above issues were taken into account respecting requirements of the local people the project could be satisfactorily implemented with involvement of the beneficiaries. According to project evaluation conducted by IMED during 2013 and 2014, the benefit already achieved in rice, fishery and livelihood income showed very encouraging figures.

1.3 Objectives

The goal of the project is to reduce poverty incidence measured in terms of incomes and nutritional status of the beneficiary population, and to institutionalize effective mechanisms for enhancing and sustaining the performance of FCD/I systems. Its specific objective is to enhance productivity and sustainability of the poverty. This will be measured in terms of (i) economic indicators including increased agriculture and fishery production incomes and employment in the subprojects areas, and (ii) institutional indicators associated with sustainable O&M (including sound WMA and joint management institutional establishment and adequate O&M), and improved service delivery agency performance.

The project has been designed to fulfill three immediate objectives as follows:

- ❖ Immediate objective A: Participatory Integrated Water Management Plans (IWMP) for the selected Hydrological units (previous implemented FCD/I schemes);
- ❖ Immediate objective B: Enhanced livelihood and livelihood opportunities impacted by integrated water resources management to increase user's participation and improved decentralized service delivery and also to promote both crop & non-crop sub sectors through implementation of IWRM plans;
- ❖ Immediate objective C: Strengthened institutional and project management capacities for planning, implementation, operation & maintenance. Sustainable O&M of the project through handing over the water management infrastructures to the stakeholders for improving economic growth & reducing poverty.

1.4 Project revision with reasons

Project was revised particularly in formation of WMGs/WMAs after MTR in preparation of SIP and formation of WMGs/WMAs through recruiting Facilitators instead of through NGOs. This helped the project in gaining momentum in both the issues. As a participatory project, addressing reasonable demand of the beneficiaries, beneficial structures like WMG Training center cum office, Bridges/Culverts/Inlet/outlet structures etc. were taken up beyond original plan. This had a good boost to the people/beneficiaries and helped in undertaking interventions..

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

While operational NWP with sound O & M which still remains a challenge, useful lessons were learned during the process of interventions carried out in planning and implementing water resources FCD/I sub-projects. First is the need for integrated planning, development and management of water to address diverse needs and concerns, and for careful and sufficient provision of services to address other local production constraints. Second, sufficient time, resource and management are critical for WMA formation, with clear measurable targets that should be achieved prior to physical works. O & M requirements should be agreed at this stage with upfront cash contribution and follow-on field training. Third, quality control requires rigorous attention with particular care for poor peoples' interests. Fourth, well-managed local infrastructures provide a basis for WMAs to start addressing social agendas with participation of the poor, and taking on active roles in leading local development process.

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

- ◆ **Project Identification:** Through ADB loan 4079, PPTA was conducted by ADB and agreed to finance implementation of the project under ADB Loan 2200 Ban (SF) as recommended in the PPTA reports identifying that needed rehabilitation in view of the projects are located in the most poverty affected areas second Northwestern regions of Bangladesh. .
- ◆ **Project Preparation:** The Project Preparation Technical Assistance (PPTA) was carried out under Contract No. COCS (03/737) dated 5th August, 2003 between the Asian Development Bank (ADB) and Halcrow Group Ltd to undertake ADB Technical Assistance (TA) number 4079-BAN (hereafter referred to as the TA), titled "Southwest Area Integrated Water Resources Management Project".

The assignment was carried out by Halcrow Group Ltd. of the UK, in association with DHI Water and Environment, Denmark; Engineering and Planning Consultants Ltd, Bangladesh; Kranti Associates Ltd, Bangladesh and Halcrow Bangladesh Ltd. Halcrow had overall responsibility for the assignment and were responsible for liaison with the Client and Bangladeshi authorities.

The Consultants submitted the Final Report in June 2014 comprising Main Report along with 11 nos. Annexes as follows:

Annex-A: Regional Study.

Annex-B: Water Management Infrastructure.

Annex-C: Water Supply Pilot Project for Arsenic Mitigation.

Annex-D: Fisheries.

Annex-E: Agriculture.

Annex-F: Institutional Agenda.

Annex-G: Economic & Financial Analysis.

Annex-H: Poverty and Social Assessment.

Annex-I: Environmental Impact Assessment.

Annex-J: Socio-Economic Survey.

Annex-K: Resettlement Plan.

The technical assistance was provided to the Water Resources Planning Organisation (WARPO) and Bangladesh Water Development Board (BWDB) under the Ministry of Water Resources (MOWR) in the design of a project to improve the management of water resources from an integrated perspective in the hydrological units of the selected districts in the Southwest area, including Faridpur, Jessore, Magura, Narail, and Rajbari districts.

The Study was executed in 2 inter-related Phases: Phase 1 consisted of a review of the regional perspective of water management in the Southwest, in parallel with district-level studies and framework IWRM planning in the selected 5 districts. Phase 1 was executed from September 8th, 2003 to March 31st, 2004.

Phase 2 commenced at the beginning of June, 2004 after discussions between Government and ADB with respect to the possible scope of subsequent work to be executed. Activities under this Phase concentrated on the design of a suitable investment project, developing further selected IWRM plans emerging from Phase 1. Based on the contents of these plans, feasibility level studies were undertaken of those components selected as a result of participatory consultations with stakeholders. The findings of these feasibility studies formed the basis of the prospective investment project

The Phase 1 review of the regional strategy was based on an extensive review of available documentation, in particular the National Water Management Plan, wherein a framework regional plan for the Southwest was presented. This information was complemented by review of other past and ongoing studies, discussions with concerned organizations and due consideration of past and present stakeholder consultations.

District level framework plans were developed as a result of an extensive campaign of participatory discussions among stakeholders in the 5 districts and incorporate, to the extent possible, the perceptions and aspirations of these people with respect to their future economic and social development. Emphasis was placed on understanding the perceived constraints to development and the particular needs of the poor and disadvantaged groups.

Taking the detailed IWRM plans developed for selected sub-projects feasibility level studies were prepared in Phase II, following ADB guidelines for social, environmental and economic analyses. These feasibility studies incorporated a second round of stakeholder consultation, on a compartment basis together with a socio-economic survey of a sample of the potential project beneficiaries. Based on the responses from the wide-ranging stakeholder consultations, sub-project and smaller scale internal infrastructure for water management schemes was designed.

To enhance the pro-poor targeting of the project, additional studies were carried out to assess the necessary agricultural and fisheries support that these groups would require.

Since it is well known that arsenic contamination of groundwater is a major problem in the study area, the project investigated the possible modalities for assisting in the mitigation of the effects of this on the rural communities, having regard to the existing and planned initiatives in the same sub-sector by others.

The selected sub-projects would provide an opportunity to field test appropriate parts of the water sector legal and policy framework. An institutional review was carried out to assess the extent to which the project could contribute to the ongoing restructuring, particularly from the perspective of sub-projects.

- ◆ **Appraisal:** It was done by ADB before agreeing to financing of the project.
- ◆ **Credit Negotiation:** 20 & 21 October, 2005
- ◆ **Credit Agreement:** 10 May 2006
- ◆ **Credit Effectiveness:** 23 August, 2006
- ◆ **Project Approval:** November, 2005 (from ADB Board)
- ◆ 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:** Subunit Implementation Plan (SIP) were prepared in a participatory way, down-top, and annual plan was prepared jointly and particularly as per resolution of WMGs/WMA.

4.3 **O& M Programme of the project:** This was and is being planned as per WMG/WMA resolution comprising the beneficiaries.

Impact of the project -

4.4.1 **Direct:** Increase in Rice, Fish production and increase in livelihood income per HH. See evaluation report of IMED during June, 2014 and December, 2014 (Table-1 & Table-2 attached)

4.4.2 **Indirect:** Ownership of the sub-project infrastructure, Capacity building of WMG members, modern agriculture & Fishery concept, concept of IPM/ICM, organic fertilizer, social bonding, collective action plan through income generation could be achieved, use of Bio-gas etc..

4.4 **Transfer of Technology and Institutional Building through the project:** Modern agriculture practices, optimum use of water, and fertilizers, HYV crops and High value crops, compost fertilizers, IPM, use of Guti Urea, Proper dose of fertilizer by testing top soil used for agriculture. In case of fisheries, proper pond preparation, fish food, sanctuary, Use of arsenic free drinking water for better health, use of silencer into the mixer machine to lower noise pollution during mixing of concrete for better health atmosphere, nursery, horticulture, goat & Duck rearing, Value chain to get better price of the products.

4.5 **Employment generation through the project:** With more agricultural and fisheries activities, more people be engaged in those activities. Introduction of IPM will invite more farmers to be employed. For management of increased production, more businessmen and retailers will be employed.

4.6 **Possibility of Self employment:** With further involvement in Collective Action Plans (CAP) some entrepreneurs have already been self employed and with time the numbers are expected to increase further..

4.7 Possibility of women-employment opportunity: The project falls under GEN (Gender equity theme project) and special and in all affairs the presence and involvement of minimum 30% women have been ensured. So, women are getting favorable employment opportunity in affairs like Goat and Duck rearing, horticulture, use of sewing machine for raising income etc.

4.8 Women's participation in development: In all activities the presence of 30% women have been ensured as per project concept.

4.9 Probable Impact on Socio-Economic activity: There have been good impact on socio-economic activities already observed. With time this will increase.

4.10 Impact on environment: There are no negative impacts on environment as observed. Rather through use of more surface water in irrigation purposes by using tidal energy/high water level into the khal system, the use ground water which is detrimental to sub-surface water have shown a positive gain.

4.11 Sustainability of the project: Through organizing training in classes, in demonstration etc. and handing over the sub-project to different WMAs, developing ownership by the WMG members/beneficiaries, training them to operate and maintain different infrastructures, already collecting the fund required for O & M activities, it can be concluded that the sustainability of the project will be ensured.

4.12 Contribution to poverty alleviation/reduction: Many goods like, Goat, Duck, Sewing machine etc. along with training and supporting the destitute, plus support in the agriculture and Fisheries, Poverty rate have already shown to have decreased due to increase in the HH income. This has been reflected in IMED evaluation report (Table-1 & 2)

4.13 Opinion of the public representatives, local elite, local administration, teachers, religious leaders, women's representatives etc.: The opinion of the public, visitors who interviewed the WMG members showed positive sign.

4.14 Contribution of Micro-credit programmes and Comments on overlapping with any NGO activities.

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

6. Remarks & Recommendations of the Project Director:

The current project demonstrated that the integrated participatory approach can improve the water resources management of large FCDI schemes. Renovation of water management infrastructure in the two targeted sub project areas has been substantially completed with satisfactory achievement of anticipated target. In total 116 WMOs, consisting of 102 Water Management Group (WMG) & 14 higher tier Water Management Associations (WMA). Socially disadvantaged groups like landless farmers & destitute women are benefited from this project. Capacity enhancement activities for WMOs are demonstrating visible vitalization of WMG activities in agricultural, fisheries, livestock & collective livelihood actions. Small scale Operations & Maintenance of structures have been handed over to WMOs. As a result of the project the rice production nearly doubled & fisheries production increased by 30% in the project area.

BWDB acquired knowledge & experience of participatory water resources planning & management through the project.

The successful experience of the current project can be expended to nearby geographical areas in the southeast are of the country aiming at enhance in the livelihood of the rural population by improving the productivity & sustainability of existing underperforming flood control drainage/irrigation (FCD/I) schemes.

Date : 21/9/15

21/9/2015

Signature and seal of the Project Director
Project Director
Southwest Area Integrated Water Resources
Planning & Management Project
BWDB, Jessore

6. Remarks/Comments of Agency Head

The project has been implemented effectively & successfully adopting the community driven development approach & developing management of water uses among agriculture, fisheries and associated livelihood activities. For the first time in Bangladesh, a network of WMI's has been effectively undertaken the O&M of FCD/FCDI infrastructures leading to sustainability of FCD/FCDI and enhancing institutional capacity of BWDB. In this connection, cooperation has been developed among the beneficiaries (the users) and with other line agencies (Agriculture extension, fisheries etc.). As a result, optimum use of water resources occurs.

Date :

Signature and Seal

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

(MD. ISMAIL HOSSAIN)
Director General
BWDB, Dhaka.

22/9/2015

Date :

Signature and Seal