

Table 3.1.2 Major Features of Completed/On-going SWIM projects (2/2)

Imple. No.	Agency	Name of Project	Region	Type of Dam	Dam Height (m)	Crest Length (m)	Dam Volume (cu.m)	Reserv. Area (ha)	Storage Capacity (cu.m)	Irrig. Area (ha)	Const. Cost (Peso T.)	Date Started	Date Complete	Period (Month)	Current Problem
1	DPEK	Pinsal Fall	I	Earthfill	11.4	275	98,300	22.0	930,000	272	18,377	Mar-86	May-89	39	Difficult land acquisition and frequent bogging down of equipment
2	DPEK	Jaro	VIII	Earthfill	29.3	115	230,000	9.5	630,000	1,950	62,723	Nov-84	Jul-89	57	Frequent typhoons and lack of man-power and equipment
3	FSDC	Sta. Maria	I	Earthfill	18.3	107	50,000	7.0	478,000	50	14,700	Jan-84	Mar-89	58	No fund available for additional works
4	FSDC	Lupao	III	Earthfill	27.5	129	215,437	20.0	1,760,000	200	37,354	May-84	?	?	Contractor abandoned after completing about 26%
5	FSDC	San Julian	VII	Earthfill	17.9	146	104,517	15.0	561,500	99	16,850	May-84	Dec-89	68	Only 3 months dry season recurring for past 4 years
6	RNS	Bingao	CAR	Check Dams	-	-	-	-	-	-	3,776	Jan-83	Dec-88	72	Untimely release of funds
7	RNS	Sinanayan	I	Check Dams	-	-	-	-	-	-	3,300	Feb-84	Dec-88	59	Untimely release of funds
8	RNS	Lawaan	IV	Check Dams	-	-	-	-	-	-	2,744	Feb-84	Dec-88	59	Untimely release of funds
9	RNS	Panacan	IV	Check Dams	-	-	-	-	-	-	3,604	Feb-84	Dec-88	59	Untimely release of funds
10	RNS	Apza	III	Check Dams	-	-	-	-	-	-	2,970	Apr-82	Dec-88	81	Untimely release of funds
11	BSWM	Bacsay	CR	Earthfill	11.8	92	37,890	1.2	7,000	60	1,203	Apr-83	?	?	Security condition in its locality
12	BSWM	Cagdarao	VIII	Earthfill	4.7	15	-	-	-	70	900	May-85	?	?	Security condition in its locality
13	BSWM	Cabanglasan	X	Earthfill	14.5	205	125,588	7.6	350,900	80	3,200	May-87	?	?	No fund available for additional works
14	BSWM	Redingilan	XII	Earthfill	6.0	110	15,246	4.1	82,800	50	1,257	Oct-84	?	?	Reservoir area privately owned and refused to donate
15	NEA	Kamalayang	IX	Rubble masonry	2.5	75	-	-	-	-	11,971	Jul-88	Apr-89	9	None at present
16	NEA	Miral	IX	Zoned Earthfill	27.0	80	148,300	5.1	390,000	1,550	37,000	Jan-88	Jan-90	24	Delayed fund release
17	NEA	Calango	VII	Zoned Earthfill	26.0	132	160,000	4.0	885,000	675	56,000	Jan-83	Jan-90	85	Delayed fund release

Note: ? : no data available.  
 - : not applicable.

Table 3.4.1 Major Features of 10 Completed Projects for Post-Evaluation Study

PROJECT NO.	No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8	No.9	No.10
PROJECT NAME	Ilinan	Darapidap	Malinao	Pasig Timbu	Mantayupan	Bacnotan	Porac	Kirong	San Ramon	Calangcapan
IMPLEMENTING AGENCY	NIA	BSWM	BSWM	FMB	NEA	FSDC	PHO-SWIM/DPWH	PHO-SWIM/DPWH	PHO-SWIM/DPWH	BSWM/DPWH/NIA
<b>PURPOSE</b>										
-Major	Irrigation -150ha	Irrigation -30ha	Irrigation -20ha	Watershed Mana. -7,440ha	Mini-hydro. -500 kW	Irrigation -199ha	Mini-hydro. -100 kW	Flood Control	Irrigation -50ha	Irrigation -100ha
-Incidental	Flood Control	Watershed Devel. Inland Fishery Flood Control	Watershed Devel. Inland Fishery	Flood Control	Irrigation	Flood Control	Irrigation Inland Fishery	Irrigation	Watershed Devel. Inland Fishery Flood Control	Inland Fishery Flood Control Water Supply
<b>PRESENT STATUS</b>										
-Dam	Functioning	Functioning	Functioning	No Monitoring	Functioning	Functioning	Washed away	Damaged	No functioning	Under Construct
-Irri./Power/Others	Functioning	Functioning	Not completed	No Monitoring	Functioning	Functioning	No functioning	No functioning	Not constructed	Not constructed
<b>BACKGROUND</b>										
-For F/S	Not prepared	1983, BSWM	1983, BSWM	?, FMB	1980, NEA	1978, FSDC	1981, DPWH	1983, DPWH	1983, BSWM	1983, BSWM
-For D/D	1980, NIA	1983, BSWM	1983, BSWM	1981, FMB	1981, NEA	1979, FSDC	1981, DPWH	1984, DPWH	1983, BSWM	1983, BSWM
-For Construction	1980-1983, NIA	1983-1984, BSWM	1983-1984, BSWM	1981-1984, FMB	1982-1984, NEA	1980-1986, FSDC	1982-1984, DPWH	1984-1987, DPWH	1987, DPWH	1987-present, DP
	1985, Repaired						1986, washed away			actually by NIA
<b>O&amp;M SYSTEM</b>										
-Dam	Association/NIA	Cooperative	Association	FMB Dist-Office	Cooperative	Association	Not managed	Not managed	Not organized	Not organized
-Irri./Power/Others	Association	Cooperative	Association	FMB Dist-Office	Cooperative	Association	Not managed	Not managed	Not organized	Not organized
<b>MAJOR DIFFERENCE OF PROJECT FEATURE</b>										
-Dam Height	Plan 23 m	12.9 m	6.6 m	-	2 m	24 m	25 m	-	13 m	17.5 m
	Actual 25 m	12.9 m	9 m	-	2 m	24 m	25 m	3 m	13 m	-
-Storage Capacity	Plan 700,000 m3	90,090 m3	50,000 m3	-	-	1,570,000 m3	672,500 m3	-	91,370 m3	390,500 m3
	Actual 775,000 m3	90,090 m3	76,800 m3	-	-	1,570,000 m3	672,500 m3	-	91,370 m3	-
-Irrigable Area	Plan 150 ha	30 ha	20 ha	-	-	199 ha	240 ha	-	50 ha	100 ha
-Wet Season	Actual 150 ha	30 ha	4 ha	-	-	155 ha	0 ha	-	0 ha	-
	Plan 150 ha	30 ha	4 ha	-	-	70 ha	120 ha	-	-	-
-Dry Season	Actual 100 ha	5 ha	0 ha	-	-	50 ha	0 ha	-	0 ha	-
-Installed Capacity	Plan -	-	-	-	500 kW	-	100 kW	-	-	-
	Actual -	-	-	-	500 kW	-	-	-	-	-
-Construction Period (Dam)	Plan 3.8 years	-	-	3 years	1 years	5.5 years	3 years	-	-	-
	Actual 3.5 years	10 months	1.7 years	3 years	2.3 years	-	-	3.5 months	5 months	-
-Construction Cost	Plan 810,963,837	P1,804,860	P2,238,000	P1,223,725	P12,563,000	P7,600,000	P8,212,000	-	-	P6,780,000
	Actual P13,379,543	-	-	P1,447,015	Cost: 0.97 P/kWh	-	P11,813,254	P1,180,678	P3,886,247	-
-Economic (IRR)	Plan 10.5%	3.0%	-	-	8.5%	14.2%	18.5%	-	-	49.5%
	Actual 10.5%	-	-	-	-	-	-	-	-	-

Table 3.4.2 Results of Post Evaluation Study (1/10)  
 -- Ilihan SWIP --

ENGINEERING AND TECHNICAL ASPECTS	
PROJECT NUMBER :	No.1
PROJECT NAME :	Ilihan SWIP
AGENCY :	National Irrigation Administration (NIA)
LOCATION :	Region VII, Bohol, Tubigon
PROJECT DESCRIPTION	
PURPOSE :	
Major :	Irrigation, Plan : 150 ha
Incidental :	Flood Control Actual : 150 ha
PRESENT STATUS :	
Dam :	Functioning well
Irrigation :	Functioning well
BACKGROUND :	
F/S :	Not prepared
D/D :	1980 by NIA Central Office
Construction :	1980-1983 by NIA Bohol Provincial Irrigation Office.
O&M :	Repaired in 1985 by NIA Bohol POI. Dam & Irrigation Tubigon Irrigators' Association
PRINCIPAL FEATURE :	
Dam Type :	Zoned Earthfill Zoned Earthfill
Dam Height :	23 m 25 m
Crest Length :	125 m 145 m
Embankment Volume :	95,000 m <sup>3</sup>
Reservoir Area :	21 ha 22 ha
Effective Storage Capacity :	700,000 m <sup>3</sup> 775,000 m <sup>3</sup>
Irrigation Area :	
Wet season :	150 ha 150 ha
Dry season :	150 ha 100 ha
Irrigation Canal :	8.0 km 8.0 km
Construction Period :	
Dam :	3.75 years 3.5 years
Irrigation :	2.33 years 2.17 years
Construction Cost :	
Dam :	P 8,784,534 P 8,626,772
Irrigation :	P 2,179,303 P 2,098,084
Total :	P 10,963,837 P 10,724,856
Repairing Cost of Dam :	P 2,654,687

1. During the first year of dam operation just after completion of the dam, seepage occurred at the upper part of downstream slope when the water level reached at EL 45.0 m. This would be caused by insufficient height and width of impervious core and its loose compaction. Considering the dam safety, the repair works to raise the height of impervious core and dam crest were conducted in 1985 at a cost of P2.66 Million.
2. During the construction, the spillway was relocated from the right abutment to the left abutment, considering the weak foundation (highly weathered rock) and the hauling of borrow materials for dam embankment.
3. Due to deterioration of slope of irrigation canals, rehabilitation of canals such as canal lining will be required.

SOCIO-ECONOMIC ASPECTS	
1. Due to shortage of irrigation water during the dry season, the cropping area of rice in the dry season is limited to 100 ha.	
2. The dam is almost functioning as planned, serving the irrigation area of 150 ha benefiting 460 farmers in the area. The project resulted in the increase of food production in the area thereby enhancing the economic condition of the farmers.	
3. EIRR is estimated at 10.5% on the present condition, but the project contributes to enhance farmers' living standards.	

O&M ASPECTS	
1. Irrigation fee is collected from the farmers at the rate of P 150/ha in 1988. Total irrigation fee of P 22,500 is used for O&M of the irrigation facilities. Other than the irrigation fee, the Association is subsidized the O&M cost of P3,000/annum from the NIA Central Office for O&M of the dam.	
2. The present O&M cost allocated from the NIA Central Office is not enough for safety monitoring and well maintenance of the dam.	
3. The access road leading to the damsite is not properly maintained.	

Table 3.4.2 Results of Post Evaluation Study (2/10)  
 --Darapidap SWIP--

PROJECT NUMBER : No.2  
 PROJECT NAME : Darapidap SWIP  
 AGENCY : Bureau of Soils and Water Management  
 LOCATION : Region II, Nueva Vizcaya, Aritao  
 PROJECT DESCRIPTION

PURPOSE :  
 Major : Irrigation, Plan : 30 ha  
 Actual: 30 ha  
 Incidental : Watershed Development  
 Inland Fishery  
 Flood Control

PRESENT STATUS :  
 Dam : Functioning well  
 Irrigation : Functioning well

BACKGROUND :  
 F/S : 1983 by BSWM Central Office  
 D/D : 1983 by BSWM Central Office  
 Construction : 1983-1984 by BSWM Central Office  
 O&M : Dam and Irrigation;  
 by Darapidap Water Impounding Service  
 Cooperative, Inc.

PRINCIPAL FEATURE :	Plan	Actual
Dam Type	Earthfill	Earthfill
Dam Height	12.9 m	12.9 m
Crest Length	130 m	130 m
Embankment Volume	70,257 m <sup>3</sup>	70,257 m <sup>3</sup>
Effective Storage Capacity	90,090 m <sup>3</sup>	90,090 m <sup>3</sup>
Irrigation Area		
Wet season	30 ha	30 ha
Dry season	30 ha	5 ha
Irrigation Canal	3 km	3 km
Construction Period		10 Months
Dam		
Irrigation		
Irrigation Cost		
Dam		P 1,804,860
Irrigation		
Total		P 1,804,860

ENGINEERING AND TECHNICAL ASPECTS

1. No serious technical problem is found out.
2. The slope land of the borrow area is eroded. Some vegetation measures are required.
3. Due to shortage of irrigation water especially in the dry season, the raising of the dam crest is required if water resource is available.

SOCIO-ECONOMIC ASPECTS

1. The irrigation area in the wet season is 30 ha; rice of 25 ha, upland crops of 5 ha. While, the irrigation area in the dry season is only 5 ha due to shortage of water to assure the water rights downstream of the dam. This is caused by insufficient investigation of the water rights in and around the dam during the planning stage.
2. After completion of the dam, 18,000 of fingerlings of Tilapia were supplied by BFAR in 1984 and 1985. Farmers caught 1 to 3 kg of Tilapia at intervals of about one month. Since 1986, supply of Tilapia fingerling from BFAR has been stopped when it attained its propagation level.
3. Reforestation has been conducted by FMB in cooperation with the Cooperative. Juvilina (or paper tree) planted has not grown well because of infertile soil and drought.
4. EIRR is estimated at 3.0%, but the project contributes to enhance farmers' living condition through increase of rice production.

O&M ASPECTS

1. The irrigation fee is collected from the farmers at the rate of P100/ha/cropping. This irrigation fee covers all the costs necessary for the O&M works managed by the Cooperative. However, the Cooperative encounters sometimes money shortage for proper O&M works.
2. In addition to the shortage of irrigation water due to the water rights, the operation efficiency of the dam is very low because a proper operation manual of the dam and irrigation facilities is not prepared.

Table 3.4.2 Results of Post Evaluation Study (3/10)  
 -- Malinao SWIP --

ENGINEERING AND TECHNICAL ASPECTS	
PROJECT NUMBER :	No.3
PROJECT NAME :	Malinao SWIP
AGENCY :	Bureau of Soils and Water Management
LOCATION :	Region VIII, Southern Leyte, Sogod
PROJECT DESCRIPTION	
PURPOSE :	
Major :	Irrigation, Plan : 20 ha Actual: 4 ha
Incidental :	Watershed Development Inland Fishery
PRESENT STATUS :	
Dam :	Functioning, but not fully completed
Irrigation :	Functioning
BACKGROUND :	
F/S :	1983 by BSWM Central Office
D/D :	1983 by BSWM Central Office
Construction :	1983-1984 by BSWM Central Office
O&M :	Dam and Irrigation; by Farmers' Association
PRINCIPAL FEATURE:	
Dam Type :	Homogeneous
Dam Height :	6.6 m
Crest Length :	176 m
Embankment Volume :	45,164 m <sup>3</sup>
Reservoir Area :	2.4 ha
Effective Storage Capacity :	50,000 m <sup>3</sup>
Irrigation Area :	50,000 m <sup>2</sup>
Wet season :	20 ha
Dry season :	4 ha
Irrigation Canal :	0 ha
Construction Period :	0.8 km
Construction Cost :	1.7 years
Dam :	P 2,238,000
Irrigation :	F
Total :	P 2,238,000

1. Sedimentation problem arises in the dam reservoir.

2. The sound design was done for the small scale dam in the height of 9 m;  
 Crest width : 4.0 m  
 Upstream slope : 1 : 3.0  
 Downstream slope: 1 : 2.0  
 Freeboard : 2.45 m

3. The irrigation facilities are not completed yet. The implementation plan should be set up soon to efficiently utilize water reserved by the dam.

SOCIO-ECONOMIC ASPECTS

1. Although the irrigation area was scheduled to be 20 ha of rice field in both wet and dry seasons, the present irrigation area is only 4 ha in the wet and none in the dry season due to no provision of irrigation facilities and uncontrol of reservoir operation.

2. After completion of the dam, some fingerlings of tilapia were released by BFAR. Since 1984, supply of fingerlings from BFAR has been stopped when it attained its propagation level.

3. Reforestation works have not been done. This work will be handled by FMB.

O&M ASPECTS

1. The irrigation fee is not fully collected from the farmers. Therefore, the Association encounters sometimes money shortage for proper O&M works.

2. The operation efficiency of the dam is very low because a proper operation manual of the dam and irrigation facilities is not prepared. The farmers open the gate in their own ways.

Table 3.4.2 Results of Post Evaluation Study (4/10)  
 -- Pasig Timbu Watershed Rehabilitation Project --

ENGINEERING AND TECHNICAL ASPECTS

1. The treatment should emphasize mostly on the biological/vegetative measures to stabilize slope land. The number of check dam should also be increased, which would prevent the movement of sediments in the stream going down to the flood plain. While, the retaining wall, bank protection and stream channelling or dredging of the stream bed are not appropriate and practical for the purpose of watershed management.
2. During the implementation of the project, lack of the necessary technical know-how by the field personnel was found out. The training program for them will be required.
3. In the formulation of the project, ecological and environmental aspects should be considered.
4. Manual for design and implementation of watershed management should be prepared.

SOCIO-ECONOMIC ASPECTS

1. The watershed management project do not bear the visual or direct benefits. However, during the implementation, local inhabitants were employed as labor and their incomes were improved.
2. Guideline for operation and management of a comprehensive watershed management project is necessary.
3. Accessibility from the existing roads to the watershed is very low. This results in lack of operation and maintenance works.

PROJECT NUMBER : No.4  
 PROJECT NAME : Pasig Timbu Watershed Rehabilitation Project  
 AGENCY : Forest Management Bureau (FMB)  
 LOCATION : Region III, Pampanga, Porac  
 PROJECT DESCRIPTION

PURPOSE :  
 Major : Watershed Management  
 Incidental : Flood Control  
 PRESENT STATUS :  
 Facility : No monitoring, partly damaged  
 Vegetation : No monitoring

BACKGROUND :  
 Identification : by FMB District Office  
 D/P : 1981 by FMB Central Office  
 Implementation : 1981-1984 by FMB District Office  
 O&M : Actually not organized specially for the Project but to be done by the FMB District Office

PRINCIPAL FEATURE :

	Plan	Actual
Watershed Area	7,440 ha	7,440 ha
Protection Area	2,090 ha	2,090 ha
Reforestation Area	1,200 ha	1,200 ha
No. of Check Dam	17 Nos.	-
No. of Retaining Wall	7 Nos.	-
Stream Channel Improvement	2 places	-
Wattling and Spot Planting	5 places	-
Construction Period	1 years	3 years
Construction Cost	P 1,223,725	P 1,447,015

Table 3.4.2 Results of Post Evaluation Study (5/10)  
 -- Mantayupan Fall SWIP --

PROJECT NUMBER : No.5  
 PROJECT NAME : Mantayupan Falls SWIP  
 AGENCY : National Electrification Administration  
 LOCATION : Region VII, Cebu, Barili  
 PROJECT DESCRIPTION  
 PURPOSE :  
 Major : Mini-hydropower(Plan: 500 kW, 2.144 MWh)  
 Incidental : Irrigation  
 Dam :  
 Power Plant : Functioning well  
 Present Status :  
 Dam : Functioning well  
 Power Plant : Functioning well  
 F/S : 1980 by NEA Central Office  
 D/D : 1981 by NEA Central Office  
 Construction : 1982-1984 by NEA Central Office  
 O&M : Dam and Mini-hydropower Plant;  
 by Cebu I Electric Cooperative, Inc.  
 (CEBECO I)

PRINCIPAL FEATURES:

	Plan	Actual
Type of Development	Run-of-river	Run-of-river
Diversion Dam Type	Ogee Concrete	Ogee Concrete
Dam Height	2 m	2 m
Crest Length	15 m	15 m
Crest Elevation	EL. 132 m	EL. 132 m
Tailrace Elevation	EL. 34 m	EL. 34 m
Gross Head	98 m	98 m
Net Head	95 m	95 m
Installed Capacity	500 kW	500 kW
Average Energy Generation	(250kW x 2nos.)	(250kW x 2nos.)
Design Discharge	2.144 MWh/year	1.719 MWh/year
Construction Period	0.73 m <sup>3</sup> /sec	0.73 m <sup>3</sup> /sec
Construction Cost	1 year	2.25 years
Dam		
Power Plant		P 1,230,206
Total		P11,352,794
O & M Cost		P12,583,000
Power Generation Cost	0.97 P/kWh	P 254,244/year 1.05 P/kWh

ENGINEERING AND TECHNICAL ASPECTS

- No serious technical problem on the dam and power plant was found.
- All electrical equipment were imported from the People's Republic of China.
- The power station is connected to the power grid of CEBECO I and generated power energy is efficiently used.

SOCIO-ECONOMIC ASPECTS

- Actual power generation since the commencement of the operation is as follows:  
 Generated Power : 545 kW - 100 kW  
 Generated Energy :  
 1985 (from July) 1,072 MWh  
 1986 1,871 MWh  
 1987 1,568 MWh  
 1988 (as of Sept.) 1,075 MWh  
 Total 5,586 MWh  
 Average Generated Energy: 1,719 MWh  
 Generation Cost : 1.05 P/kWh

Actual power generation is attained at about 80 % of the proposed generation, though the generation cost is a bit higher than the NPC generation rate of 0.92 P/kWh. The power tariff of CEBECO I in 1988 is as follows:

Public/Residence :	1.6 P/kWh
Commercial :	1.64 P/kWh
Industry :	1.58 P/kWh
Street :	1.41 P/kWh

- Water utilized for power generation is used for irrigation in the area downstream of the station.

- EIRR is estimated at 8.52 under the present condition.

O&M ASPECTS

- After completion of construction, the project was turned-over to the CEBECO I for O&M. The CEBECO I amortizes all investment costs to NEA within 15 years.
- The O&M of the project is made by one operator for power station and one inspector of the dam in three shift a day.

Table 3.4.2 Results of Post Evaluation Study (6/10)  
 -- Bacnotan SWIP --

ENGINEERING AND TECHNICAL ASPECTS

1. No technical serious problem on the dam was found.
2. The sound design was done for the dam. However, the followings should be considered:
  - (a) Considering the dam height of 24 m, berm and drainage gutter are required on the downstream slope for dam safety.
  - (b) To prevent bend of spindle of intake gate, the inclined-conduit type intake should not be placed on the embankment but on the sound foundation.
  - (c) The crest width of 8 m is not economical, because the crest is used only as maintenance road.

SOCIO-ECONOMIC ASPECTS

1. Although the irrigation area was scheduled to be 199 ha of rice field in the wet season and 70 ha of rice in the dry season, the present irrigation area is 150 ha in the wet and 70 ha in the dry season due to shortage of water. The Association plans crop diversification from rice to other upland crops.
2. After completion of the dam, the inland fishery was undertaken by the Association as planned. In addition, BFAR component of the project stocked Tilapia fingerlings in the reservoir.
3. The village people in and around the project could attain a self sufficiency in food.
4. The project could contribute to increase the farmers' incomes by at least 10% per year.
5. EIRR is estimated at 14.2%, and the project contribute to improve the nutritional condition in the vicinity of the project.

O&M ASPECTS

1. The irrigation fee is collected from the farmers at the rate of P450/crop/ha, but collection percentage is in the range of 80 to 85 % per annum due to insufficient irrigation.
2. There is shortage of skilled staff for further efficient utilization of the dam.

PROJECT NUMBER : No.6  
 PROJECT NAME : Bacnotan SWIP  
 AGENCY : Farm Systems Development Corporation  
 LOCATION : Region I, La Union, Bacnotan

PROJECT DESCRIPTION

PURPOSE :  
 Major : Irrigation, Plan : 199 ha  
 Actual: 155 ha  
 Incidental : Inland Fishery  
 Flood Control

PRESENT STATUS :

Dam : Functioning well  
 Irrigation : Functioning well

BACKGROUND :

F/S : 1978 by FSDC Central Office  
 D/D : 1979 by FSDC Central Office  
 Construction : 1980-1986 by FSDC Central Office  
 O&M : Dam and Irrigation:  
 by Bannuar Integrated Service Association

PRINCIPAL FEATURE :

	Plan	Actual
Dam Type	Zoned Earthfill	Zoned Earthfill
Dam Height	24 m	24 m
Crest Length	100 m	100 m
Embankment Volume	190,800 m <sup>3</sup>	190,800 m <sup>3</sup>
Effective Storage Capacity	1,570,000 m <sup>3</sup>	1,570,000 m <sup>3</sup>
Reservoir Area	18 ha	18 ha
Irrigation Area		
Wet season	199 ha	155 ha
Dry season	70 ha	50 ha
Irrigation Canal	- km	- km
Construction Period	-	6.5 years
Construction Cost		
Dam		P 6,500,000
Irrigation	P 1,000,000	P 900,000
Total		P 7,400,000
O & M Cost (in 1988)		
Amortization		P 45,000
Repair/Maintenance		P 12,000
Honoraria/Salaries		P 27,000
Office Supplies		P 1,000
Total		P 85,000



Table 3.4.2 Results of Post Evaluation Study (7/10)  
 -- Porac Dam and Reservoir Project --

ENGINEERING AND TECHNICAL ASPECTS	
PROJECT NUMBER : No. 7	1. In September 1986, the dam was washed away.
PROJECT NAME : Porac Dam and Reservoir Project	2. The reasons of collapse of the dam are conceived as follows:
AGENCY : PMO-SWIM/DPWH	(a) The bulk headgate of intake was accidentally shut down at 99 % completion of the dam in 1984 and the reservoir water level rose rapidly due to flood caused by typhoon. The gate was broken with dynamite and then rapid drawdown of water level occurred. At that time, some cracks occurred in the dam embankment and sliding occurred on the upper part of the upstream slope. Those made the dam body weak against flood.
LOCATION : Region III, Pampanga, Porac	(b) The spillway was not constructed properly on the rock foundation. The piping action occurred in the base of the spillway and the retaining wall of the spillway would be flushed out by flood.
PROJECT DESCRIPTION	(c) The wall connecting the dam body with the spillway was made with earthfill. This embankment portion was slided due to piping action. This wall should be made with concrete.
PURPOSE :	(c) The flood over the spillway capacity attacked the dam. The flood might overtop the dam embankment.
Major : Mini-hydropower (Plan; 100 kW)	
Incidental : Irrigation (Plan: 240 ha)	
	Inland Fishery
	Flood Control
PRESENT STATUS :	
Dam : Not functioning, Washed away	
Mini-hydropower : Not functioning	
BACKGROUND :	
F/S : 1981 by PMO-SWIM/DPWH	
D/D : 1981 by PMO-SWIM/DPWH	
Construction : 1982-1984 (at 99 % completion) by PMO-SWIM/DPWH.	
	The dam was washed away in 1986.
PRINCIPAL FEATURE	
Dam Type	Plan Actual
Dam Height	: Zoned Earthfill Zoned Earthfill
Crest Length	: 25 m 25 m
Embankment Volume	: 188 m 188 m
Effective Storage Capacity	: 106,600 m <sup>3</sup> 106,600 m <sup>3</sup>
Reservoir Area	: 672,500 m <sup>2</sup> 672,500 m <sup>2</sup>
Installed Capacity	: 12.8 ha 12.8 ha
Power Generation	: 100 kW - kW
Irrigation Area	: 548 MWh - MWh
Wet season	: 240 ha - ha
Dry season	: 120 ha - ha
Irrigation Canal	: - km - km
Construction Period	: 3 years -
Construction Cost	: P 7,596,000 P 11,146,233
Dam	
Electro-Mechanical/Power Plant	: P 616,000 P 667,021
Irrigation	
Total	: P 8,212,000 P 11,813,254
SOCIO-ECONOMIC ASPECTS	
	1. The beneficiaries of the dam are eager for reconstruction of the dam.
O&M ASPECTS	

Table 3.4.2 Results of Post Evaluation Study (8/10)  
-- Kirong Dam Project--

ENGINEERING AND TECHNICAL ASPECTS

1. After completion in 1985, the piping action occurred in the foundation of the weir and the weir suffered from overturning. Although the repair works of the weir for overturning were done in 1986-1987, the piping action was not stopped.
2. According to the results of hearing from the local people in Hermosa Municipality, the project is not functioning against the flood and the people suffers from flood damages sometimes a year.
3. The reasons for the above are envisaged as follows:

For piping and overturning:

- (a) Insufficient consideration of foundation treatment
- (b) Insufficient creep length
- (c) Inadequate construction of foundation

For diversion of flood:

- (a) Piping of water through the foundation
  - (b) Inadequate canal base elevation of the diversion canal
4. The improvement plans for the above are considered as follows:

For piping and overturning:

- (a) Placing of soil blanket on the upper apron
- (b) Grouting of the foundation
- (c) Rehabilitation of the lower apron

For diversion of flood:

- (a) Rehabilitation of the diversion canal

SOCIO-ECONOMIC ASPECTS

1. The beneficiaries of the project are eager for rehabilitation works of the project to mitigate the flood damages.

O&M ASPECTS

1. Nobody handles the O&M Works.

PROJECT NUMBER : No.8  
 PROJECT NAME : Kirong Dam and Reservoir Project  
 AGENCY : PMO-SWIM/DPWH  
 LOCATION : Region III, Bataan, Hermosa  
 PROJECT DESCRIPTION  
 PURPOSE :  
 Major : Flood Control  
 Incidental : Irrigation

PRESENT STATUS :  
 Dam (Weir) : Damaged and not functioning  
 Flood Control : Not functioning

BACKGROUND :  
 F/S : 1983 by District Office/DPWH  
 D/D : 1984 by PMO-SWIM/DPWH  
 Construction : 1984-1987 by PMO-SWIM/DPWH  
 Phase I : 1984-1985  
 Phase II : 1986-1987 (Repair Works)  
 O&M : Not organized yet

PRINCIPAL FEATURE:

Weir Type	: Concrete Diversion Weir	Actual
Weir Height	: 3 m	
Size of Sluice Gate Portion:	1.8m(W) x 1.8m(H) x 2nos..	
	1.8m(W) x 2.2m(H) x 1no.	
Diversion Canal		
Type	: Trapezoidal Earth Canal	
Side Slope	: 1:1.5	
Base Width	: 2 m	
Height	: 2 m	
Construction Period	: 3.5 months	
Repair Works	: 1.5 months	
Construction Cost		
Phase I	: P 734,396	
Phase II	: P 446,282	
Total	: P 1,180,678	

Note: The above feature of the weir is shown based on the results of the field investigation, because of no existing data available.

Table 3.4.2 Results of Post Evaluation Study (9/10)  
 -- San Ramon Dam and Reservoir Project --

-----  
 ENGINEERING AND TECHNICAL ASPECTS  
 -----

1. Before and during the construction of the dam, the following problems were encountered:
    - (a) right-of-way in the damsite and reservoir area
    - (b) selection of local labor
    - (c) far hauling distance to borrow area
    - (d) peace and order condition
- The above problems were successfully solved through good communication and public relations.
2. The dam crest elevation might be lower by 2 m than that designed. The dam crest elevation is also lower by 0.5 m than the floor elevation of the spillway. One of the reasons is the excess settlement of the dam embankment. Considering the dam safety against the flood, the dam crest will be required to be raised. The Municipality of Floridablanca prepared the repair plan of the dam embankment and submitted it to the DPMW Regional Office in 1988.

-----  
 PROJECT NUMBER : No.9  
 PROJECT NAME : San Ramon Dam and Reservoir Project  
 AGENCY : PMO-SWIM/DPWH  
 LOCATION : Region III, Pampanga, Floridablanca  
 -----  
 PROJECT DESCRIPTION  
 -----  
 PURPOSE :  
 Major : Irrigation, Plan : 50 ha  
 Actual: 0 ha  
 Incidental : Inland Fishery  
 Flood Control  
 Watershed Development  
 -----  
 PRESENT STATUS :  
 Dam : Constructed but not utilized  
 Irrigation : Not yet start construction  
 -----

-----  
 SOCIO-ECONOMIC ASPECTS  
 -----

1. Since completion of the dam in 1987, the reserved water is not utilized efficiently, because the irrigation canal is not constructed yet. After completion of the dam, the dam was formally turned-over to the BSMW who organize a farmers' association. The farmers' association will shoulder the construction of canals and other irrigation facilities.
2. The fingerlings of about 5,000 were released for aqua culture in this year but not produced yet.
3. The watershed development is not yet implemented.

-----  
 O&M ASPECTS  
 -----  
 1. The Farmers' Association is not firmly organized. Actually the Association is not activated.  
 -----

BACKGROUND :

F/S : 1983 by BSMW Central Office  
 D/D : 1983 by BSMW Central Office  
 Construction : Dam : 1987 by PMO-SWIM/DPWH  
 Irrigation : not constructed  
 O&M : to be undertaken by BSMW  
 Actually not organized

PRINCIPAL FEATURE:

	Plan	Actual
Dam Type	Homogeneous	Homogeneous
Dam Height	13 m	13 m
Crest Length	196 m	196 m
Embankment Volume	28,000 m <sup>3</sup>	28,000 m <sup>3</sup>
Effective Storage Capacity	91,370 m <sup>3</sup>	91,000 m <sup>3</sup>
Reservoir Area	5 ha	5 ha
Irrigation Area		
Wet season	50 ha	0 ha
Dry season	-	0 ha
Irrigation Canal	2.7 km	0 km
Construction Period (Dam)	-	5 months
Construction Cost		
Dam		P 3,886,247
Irrigation		P -
Total		P 3,886,247

Table 3.4.2 Results of Post Evaluation Study (10/10)  
 -- Calanggaman SWIP Phase I --

ENGINEERING AND TECHNICAL ASPECTS

1. The dam was originally formulated with a dam height of 12.5 m, serving water for irrigation area of 25 ha by BSWM. However, considering availability of water resources, the dam feature is revised so as to irrigate 100 ha of rice field with a dam height of 17.5 m. In the Phase I works, the dam was constructed up to the height of 12.5 m and in the Phase II works the dam will be raised up to 17.5 m. The construction fund of P 2.5 million for the Phase II works is requested to the DPWH. The construction works is suspended now. The Phase II works is scheduled to be done in 1999.
2. The development plan of the irrigation facilities is not set forth yet. This plan will be made by BSWM.

SOCIO-ECONOMIC ASPECTS

1. After completion of the Phase II works, the dam will serve water for irrigation area of 100 ha, benefitting at least 300 farmers.
2. The project will contribute an increase of agricultural production and enhancement of living standards of farmers.

O&M ASPECTS

1. Not operated yet.

PROJECT NUMBER : No.10  
 PROJECT NAME : Calanggaman SWIP Phase I  
 AGENCY : PMO-SWIM/DPWH  
 Bureau of Soils and Water Management  
 NIA (Bohol Provincial Irrigation Office)  
 Region VII, Bohol, Ubay  
 PROJECT DESCRIPTION  
 PURPOSE :  
 Major : Irrigation, Plan: 100 ha  
 Incidental : Inland Fishery  
 Flood Control  
 Water Supply

PRESENT STATUS :

Dam : Not yet completed  
 Irrigation : Not yet start construction  
 F/S : 1983 by BSWM Central Office  
 D/D : 1983 by BSWM Central Office  
 Construction : 1987-present, under-construction by PMO-SWIM/DPWH,  
 Actually being constructed by NIA Bohol  
 PIO (Phase I)  
 O&M : Not organized yet

PRINCIPAL FEATURE:

Dam Type	: Zoned Earthfill	Plan
Dam Height	: 17.5 m	
Crest Length	: 140 m	
Embankment Volume	: - m <sup>3</sup>	
Effective Storage Capacity	: 390,500 m <sup>3</sup>	
Reservoir Area	: - ha	
Irrigation Area	: 100 ha (detail unknown)	
Wet season	: - km	
Irrigation Canal	:	
Construction Cost	:	
Dam(Phase I)	: P 4,200,000	
Dam(Phase II)	: P 2,500,000	
Irrigation	: P	
Total	: P 6,700,000	

Table 3.5.1 Annual Budget of SWIM Projects (1982 - 1988)

(UNIT: Pesos 1,000)

Year	SWIM Fund			Total
	Construction	F/S & D/D	Mini-Dam	
1982	49,000	8,000	0	57,000
1983	35,435	0	0	35,435
1984	21,539	865	0	22,404
1985	18,000	0	7,000	25,000
1986	41,350	0	7,000	48,350
1987	61,100	0	0	61,100
1988	74,403	0	20,876	95,279
<b>Grand Total</b>	<b>300,827</b>	<b>8,865</b>	<b>34,876</b>	<b>344,568</b>

Source: Finance and Management Office of PMO-SWIM

Table 3.5.2 Actual Expenditures for Construction of SWIM Projects (1982 - 1988)

(UNIT: Pesos 1,000)

Implementing Agency	Total Expenditures for SWIM			Share in SWIM Fund (%)
	SWIM Fund	Own Budget	Total	
PMO-SWIM	103,387	0	103,387	45
NIA	24,765	2,116	26,881	11
BSWM	14,957	132	15,089	7
NEA	4,408	19,997	24,405	2
FMB	20,809	0	20,809	9
FSDC	59,418	8,374	67,792	26
<b>TOTAL</b>	<b>227,744</b>	<b>30,619</b>	<b>258,363</b>	<b>100</b>

Table 3.5.3 Actual Budgets and Expenditures of SWIM Projects by Implementing Agencies for the Period from 1982 to 1988 (1/2)

(UNIT: Pesos)

Implementing Agency Name of Projects	1982		1983		1984		1985		1986		1987		1988		Total	
	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure
Banabao	378,280	0	0	0	378,280	378,280	0	0	0	0	0	0	0	0	378,280	378,280
Pawa	15,022,510	7,042,094	5,087,616	5,087,616	957,800	957,800	965,000	965,000	970,000	0	0	0	0	0	15,022,510	14,052,510
Canikman	756,560	0	0	0	756,560	756,560	0	0	0	0	0	0	0	0	756,560	756,560
Krong	1,232,990	0	0	0	754,560	754,560	0	0	478,430	0	0	0	0	0	1,232,990	754,560
Dacquirao	1,898,700	0	0	0	0	0	0	0	1,898,700	1,898,700	0	0	0	0	1,898,700	1,898,700
San Ramon	1,812,340	0	0	0	0	0	0	0	1,812,340	2,661,680	0	0	0	0	1,812,340	2,661,680
Calagigaman	1,843,000	0	0	0	0	0	0	0	0	0	0	0	1,843,000	1,843,000	1,843,000	
Kaipuran	460,750	0	0	0	0	0	0	0	0	0	0	0	460,750	460,750	460,750	
Pinal Fall	24,228,300	0	0	0	965,000	965,000	3,309,950	3,309,950	9,525,850	9,506,000	9,506,000	9,506,000	921,500	34,090	24,228,300	23,321,040
Jaro	60,350,483	0	0	0	7,337,860	7,337,860	8,038,450	8,038,450	16,974,273	16,974,273	24,498,200	24,498,200	3,501,700	411,582	60,350,483	57,260,345
Sub-total	107,983,913	7,042,094	5,087,616	5,087,616	11,150,060	11,150,060	12,313,400	12,313,400	31,659,593	31,040,653	34,004,200	34,004,200	6,726,950	2,749,402	107,983,913	103,387,425

(2) NIA

Name of Projects	1982		1983		1984		1985		1986		1987		1988		Total	
	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure
Ihnan	10,771,000	0	0	0	0	0	0	0	0	0	0	0	0	0	10,771,000	10,771,000
Calango	36,000,000	0	0	0	0	0	0	0	0	0	3,800,000	0	6,450,000	0	10,250,000	0
Mirai	37,000,000	0	0	0	0	0	0	0	0	0	3,100,000	0	2,760,000	0	5,860,000	0
Sub-total	83,771,000	0	0	0	0	0	0	0	0	0	6,900,000	0	9,210,000	0	24,785,000	2,116,000

(3) BSWM

Name of Projects	1982		1983		1984		1985		1986		1987		1988		Total	
	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure	Budget	Expenditure
Panuncian	336,527	324,894	0	0	0	0	0	0	0	0	0	0	0	0	324,894	336,457
Calapan	157,002	151,231	0	0	0	0	0	0	0	0	0	0	0	0	151,231	157,002
Nagalawan	2,065,673	0	2,060,428	5,245	0	0	0	0	0	0	0	0	0	0	2,060,428	2,065,673
Dacpitan	1,895,167	0	1,890,742	4,425	0	0	0	0	0	0	0	0	0	0	1,890,742	1,895,167
Maitao	2,258,221	0	335,865	10,712	1,902,105	9,739	0	0	0	0	0	0	0	0	2,237,770	2,258,221
Aumbay	2,132,617	0	0	0	623,211	13,440	1,594,159	12,223	0	0	0	0	0	0	2,017,370	2,043,033
Bacay	1,219,304	842,358	0	0	0	0	0	0	0	0	0	0	1,170,613	7,967	25,663	2,028,906
Cagdano	909,107	0	153,800	3,036	63,685	3,035	583,500	3,035	0	0	0	0	0	0	801,005	91,071
Calagigaman	3,209,204	0	0	0	0	0	1,900,582	4,602	0	0	0	0	0	0	1,900,582	9,204
Kadiangan	1,281,772	0	279,138	8,108	604,045	8,107	677,078	8,107	0	0	0	0	0	0	1,560,261	24,322
Subtotal	15,464,594	1,318,483	25,282	4,719,773	31,528	3,192,966	4,555,419	27,967	0	0	0	0	0	0	14,957,254	131,666

Table 3.5.3 Actual Budgets and Expenditures of SWIM Projects by Implementing Agencies for the Period from 1982 to 1988 (2/2)

(UNIT: Pesos)

Name of Projects	1982		1983		1984		1985		1986		1987		1988		Total		
	PMO-SWIM	NEA	PMO-SWIM	NEA	PMO-SWIM	NEA	PMO-SWIM	NEA	PMO-SWIM	NEA	PMO-SWIM	NEA	PMO-SWIM	NEA	PMO-SWIM	NEA	Expenditure
Basak	11,790,776	0	1,087,959	0	1,799,378	0	5,003,146	0	0	0	0	0	0	0	0	0	7,890,483
Mansuyayan	7,533,577	0	2,399,267	657,436	320,342	657,436	0	0	0	0	0	0	0	0	1,314,872	5,830,652	7,145,524
Kurubaring	11,969,000	0	1,286,385	0	0	0	0	0	0	0	0	0	0	3,093,018	6,275,486	6,275,486	9,368,504
Subtotal	31,293,353	0	3,687,226	657,436	320,342	657,436	3,424,036	0	0	0	0	0	0	3,093,018	6,275,486	19,996,621	24,404,511

Name of Projects	1981/82		1983		1984		1985		1986		1987		1988		Total		
	PMO-SWIM	FMB	PMO-SWIM	FMB	PMO-SWIM	FMB	PMO-SWIM	FMB	PMO-SWIM	FMB	PMO-SWIM	FMB	PMO-SWIM	FMB	PMO-SWIM	FMB	Expenditure
Ambulabo-Binga	4,320,000	2,443,695	0	946,907	0	144,750	0	0	0	0	0	0	0	0	3,535,352	0	3,535,352
Sta. Fe	3,300,000	1,066,034	0	711,740	0	313,625	0	0	0	0	0	0	0	0	2,091,399	0	2,091,399
Pasig-Tambuli	1,500,000	949,130	0	284,885	0	193,000	0	0	0	0	0	0	0	0	1,447,015	0	1,447,015
Bangoo	3,776,000	0	0	864,154	0	241,250	0	176,468	0	432,617	0	776,000	0	960,300	0	3,450,789	
Binaruan	3,300,000	0	0	0	0	453,936	0	234,240	0	431,640	0	776,000	0	1,047,600	0	2,943,416	
Lawaan	2,744,250	0	0	0	0	386,000	0	236,724	0	289,620	0	950,600	0	846,810	0	2,699,764	
Panacan	2,603,500	0	0	0	0	337,750	0	172,101	0	284,000	0	950,600	0	826,350	0	2,570,801	
EPZA	2,970,000	0	0	712,216	0	356,857	0	230,727	0	0	0	247,156	0	2,070,756	0	2,070,756	
Subtotal	24,513,750	4,478,859	0	3,519,902	0	2,427,168	0	1,040,270	0	1,437,877	0	3,700,356	0	4,204,860	0	20,809,292	

Name of Projects	1981/82		1983		1984		1985		1986		1987		1988		Total		
	PMO-SWIM	FSDC	PMO-SWIM	FSDC	PMO-SWIM	FSDC	PMO-SWIM	FSDC	PMO-SWIM	FSDC	PMO-SWIM	FSDC	PMO-SWIM	FSDC	PMO-SWIM	FSDC	Expenditure
Maitik	500,000	0	0	0	0	0	0	0	0	0	0	0	0	0	500,000	0	390,085
Sta. Cruz	4,216,903	0	0	0	0	0	0	0	0	0	0	0	0	0	5,416,903	0	3,108,209
San Roque	6,486,518	0	0	0	0	0	0	0	0	0	0	0	0	0	6,316,518	0	6,109,245
F. Maguysay	15,530,816	0	0	0	0	0	0	0	0	0	0	0	0	0	15,220,201	0	13,593,314
Mansuyayan	3,201,773	0	0	0	0	0	0	0	0	0	0	0	0	0	2,555,023	347,960	2,902,983
Sta. Barbara	4,595,136	0	0	0	0	0	0	0	0	0	0	0	0	0	2,818,136	1,079,395	3,897,531
St. Ursula	7,820,725	0	0	0	0	0	0	0	0	0	0	0	0	0	6,820,725	61,037	6,881,762
Bacoran	8,284,900	0	0	0	0	0	0	0	0	0	0	0	0	0	9,268,658	0	7,788,085
Sta. Maria	6,204,159	0	0	0	0	0	0	0	0	0	0	0	0	0	4,393,923	1,627,522	6,021,445
Lapao	12,728,687	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,258,033	5,258,033
San Julian	9,306,473	0	0	0	0	0	0	0	0	0	0	0	0	0	6,007,810	0	5,798,026
Subtotal	78,876,090	0	0	0	0	0	0	0	0	0	0	0	0	0	59,417,889	8,375,947	61,748,713

SOURCE: PMO-SWIM and each of implementing agencies

Table 4.3.1 Major Features of Qualified SWIM Projects (1/6)

-- DPWH --

No.	AGENCY	PROJECT NAME	REGION	PROVINCE	PROJECT MAIN STATUS PURPOSE	INCIDENTAL PURPOSES	RUNOFF (mm)	RAINFALL (mm)	MEANT AREA (ha)	EFFECTIVE STORAGE CAPACITY (m <sup>3</sup> )	RESER. VOLUME (m <sup>3</sup> )	DAM HEIGHT (m)	EMBRASMENT AREA (ha)	GATION AREA (ha)	CAPACITY (M <sup>3</sup> )	WATER SUPPLY AREA (ha)	FISH PRODUCTION (ton)	ANNUAL SUPPLY (m <sup>3</sup> /day)	TOTAL BENEFIT (million pesos)	IRR (%)	ORIGINAL IRR (%)														
																						D/D	IR	FC, IF, MI	1	2	3	4	5	6	7	8	9	10	11
1	DPWH	1 SATEAN DAM & RESERVOIR SWIP	1	LA UNION	D/D	IR	FC, IF, MI	1,502	1,805	4	294,000	3	24	134,000	100	120	0	0	4-8	40.3	1.88	(0.3)	24.2												
2	DPWH	2 BULO DAM & RESERVOIR SWIP		CAN. KALINGA-APAYAO	D/D	IR	FC, IF, MI	1,687	3,678	19	1,400,000	26	17	167,200	430	178	0	0	41.6	47.7	9.70	17.1	32.6												
3	DPWH	3 SACRIFICE VALLEY DAM	2	BATAAN	F/S	WS	FC, IF, MI	1,166	2,326	6	182,000	5	19	46,690	0	105	409	8.0	27.2	0.77	7.0	51.9													
4	DPWH	4 PALAWAN TULAKUIN DAM & RESERVOIR	4	PALAWAN	D/D	MI	FC, IF, MI	2,410	1,604	32	1,910,000	29	25	197,000	0	600	1,235	46.4	88.1	5.80	5.3	16.0													
5	DPWH	5 BUNYAN DAM & RESERVOIR	4	QUEZON	D/D	IR	FC, IF, MI, MI	2,109	3,834	15	790,000	13	19	157,509	250	400	370	20.8	71.0	3.64	1.8	25.3													
6	DPWH	6 SAN JOSE DAM	4	RIZAL	D/D	IR	FC, IF	861	1,858	2	253,000	5	17	28,750	21	0	0	8.0	8.9	0.47	1.4	16.0													
7	DPWH	7 CORACUB DAM & RESERVOIR SWIP	4	RIZAL	D/D	IR	FC, IF, MI	2,179	2,847	10	402,000	6	28	102,424	450	0	0	9.6	47.0	6.08	11.0	n.d.													
8	DPWH	8 DESESAC DAM & RESERVOIR SWIP	5	MARICOR	F/S	MI	FC, IF, WS, IF, MI	1,851	2,851	28	2,350,000	49	22	132,610	200	350	1,855	890	78.4	74.8	7.97	12.1	34.3												
9	DPWH	9 SAN JUAN DAM	8	NORTHERN SAMAR	D/D	IR	FC, IF	1,705	3,312	1	1,700,000	20	20	111,550	210	0	0	32.0	23.5	4.19	15.0	12.6													
10	DPWH	10 GURMA DAM & RESERVOIR SWIP	12	LANGO DEL SUR	D/D	IR	FC, IF, MI, MI	2,679	2,800	3	488,100	12	16	26,880	60	90	112	0	19.2	13.1	1.79	15.0	33.1												
11	DPWH	11 MACTEL DAM & RESERVOIR SWIP	12	NORTH COTABATO	D/D	IR	FC, IF, MI, WS, MI	2,003	1,941	14	755,000	7	17	232,640	500	180	0	11.2	54.2	9.16	15.3	29.6													
12	DPWH	12 BANAYAL DAM & RESERVOIR SWIP	12	NORTH COTABATO	F/S	IR	FC, IF, MI, MI	1,808	1,986	36	1,070,000	15	24	92,250	450	300	363	24.0	79.3	10.82	13.0	17.0													
13	DPWH	13 ACOPI & RESERVOIR SWIP	1	PANGASINAN	Pre-F/S	IR	FC, IF	n.d.	2,388	9	414,000	6	12	31,950	200	0	0	9.6	14.2	3.31	19.1	21.5													
14	DPWH	14 CALITILAN DAM & RESERVOIR	1	PANGASINAN	Pre-F/S	IR	FC, IF	n.d.	2,388	12	765,000	8	21	138,088	150	0	0	12.8	32.3	3.27	7.5	13.7													
15	DPWH	15 KITA-KITA DAM & RESERVOIR	1	PANGASINAN	Pre-F/S	IR	FC, IF, MI	n.d.	2,388	9	351,000	10	12	25,789	150	0	95	0	16.0	10.6	2.97	28.8	12.8												
16	DPWH	16 SALVACION DAM & RESERVOIR SWIP	1	PANGASINAN	Pre-F/S	IR	FC, IF, MI	4,191	2,388	5	459,000	5	13	58,366	125	0	60	0	8.0	13.7	2.17	14.9	13.6												
17	DPWH	17 SAN ANGEL DAM & RESERVOIR	1	PANGASINAN	Pre-F/S	IR	FC, IF	7,515	2,388	9	261,000	10	13	35,640	150	0	0	16.0	12.0	3.02	20.8	24.6													
18	DPWH	18 LIGTOS SWIP	6	ILOILO	Pre-F/S	IR	FC, IF, MI	13,221	2,119	25	1,602,000	10	25	175,652	200	0	1,385	0	16.0	63.3	4.17	5.7	11.4												
19	DPWH	19 ASIAN SWIP	2	NEVA VIZCAYA	Pre-F/S	IR	FC, IF, MI	28,775	1,230	6	1,386,000	5	20	75,074	100	0	265	0	8.0	22.5	2.06	10.8	6.1												
20	DPWH	20 CATERMAN SWIP	2	ISABELA	Pre-F/S	IR	FC, IF, MI	4,470	1,926	5	292,500	7	11	35,494	130	0	278	0	11.2	18.1	2.84	21.2	8.4												
21	DPWH	21 MALALINTA SWIP	2	ISABELA	Pre-F/S	IR	FC, IF, MI	3,721	1,926	12	315,000	5	13	42,339	75	0	795	0	8.0	23.4	1.73	12.1	6.7												
22	DPWH	22 CALIBAYAN SWIP	4	OR. MINDORO	Pre-F/S	IR	FC, IF, MI	6,534	2,013	15	504,000	8	20	162,576	200	0	500	0	12.8	46.4	4.17	8.0	12.9												
23	DPWH	23 LIBASAN SWIP	11	DAVAO DEL NORTE	F/S	IR	FC, IF	n.d.	1,804	4	371,861	20	10	15,480	136	0	0	32.0	11.9	2.36	16.6	n.d.													

Note: F/S: Feasibility Study; D/D: Detailed Design; Pre-F/S: Pre-feasibility Study  
 IR: Irrigation; FC: Flood Control; IF: Inland Fishery; MI: Mini-hydropower WS: Water Supply;  
 MI: Watershed Management



Table 4.3.1 Major Features of Qualified SWIM Projects (2/6)  
-- NIA No.1 --

No. Agency No.	PROJECT NAME	REGION	PROVINCE	PROJECT STATUS	MAIN PURPOSE	ANNUAL RAINFALL (mm)				EFFECTIVE RESERVOIR CAPACITY (ha)				EMERGENT VEGETATION AREA (ha)				WATER SUPPLY (m <sup>3</sup> /day)	ANNUAL FISH PRODUCTION (ton)	PROJECT TOTAL COST (million pesos)	IRR (%)	ORIGINAL IRR (%)
						ANNUAL	INCIDENTAL	MINIMUM	RAINFALL	AREA	HEIGHT	VOLUME	AREA	AREA	AREA	AREA	AREA					
1	NIA 4 PANGALOG SWIP (SCHEME-I)	4	NOBILION	D/D	IR	FC, ME, IF, WM	735	2,138	37	2,800,000	51	21.0	168,000	500	225	842	0	82	81.3	8.3	8.7	10.9
2	NIA 6 POFOT SWIP (SCHEME-I)	5	MASBATE	D/D	IR	FC, ME, IF	n.d.	3,133	10	3,144,000	43	18.0	125,830	300	165	0	0	69	35.3	5.8	13.2	11.3
3	NIA 7 CARABAN SWIP	5	CAVARIABLES SUR	D/D	IR	FC, ME, IF, WM	1,824	3,145	23	586,000	20	14.8	65,645	350	240	1,000	0	32	48.4	7.2	16.4	N.D.
4	NIA 9 NASIG-ID SWIP	7	NEGROS ORIENTAL	D/D	IR	FC, IF, WM	1,433	1,275	10	466,000	6	30.0	160,900	500	0	482	0	10	122.8	10.0	4.9	12.0
5	NIA 11 TUCAS SWIP	7	BOHOL	D/D	IR	FC, IF	582	1,486	5	2,080,000	18	33.0	368,500	250	0	0	0	29	46.2	4.5	6.6	10.5
6	NIA 12 ILAWA SWIP	7	BOHOL	D/D	IR	FC, IF, WM	427	1,134	10	3,370,000	49	25.0	232,400	450	0	500	0	78	51.3	10.9	19.4	16.4
7	NIA 14 SAGSIDRON SWIP (SCHEME-I)	8	NORTHERN SAMAR	D/D	IR	FC, ME, IF	1,101	2,618	23	1,630,000	21	14.0	212,500	230	0	150	0	40	62.6	8.8	10.7	13.5
8	NIA 20 MALOTO SWIP	1	LA UNION	Pre-F/S	IR	FC, IF, WM	2,536	2,436	29	5,409,000	85	23.0	100,900	430	0	955	0	126	63.4	9.9	17.4	24.0
9	NIA 21 MAGSING SWIP	1	LA UNION	Pre-F/S	IR	FC, IF, WM	2,536	2,436	15	1,364,000	20	30.0	141,600	140	0	600	0	32	44.3	3.6	8.4	13.0
10	NIA 22 SAN FELIPE SWIP	1	LA UNION	Pre-F/S	IR	FC, IF, WM	2,536	2,436	15	1,364,000	20	30.0	141,600	140	0	600	0	32	44.3	3.6	8.4	13.0
11	NIA 23 MACARIBO SWIP	1	LA UNION	Pre-F/S	IR	FC, IF, WM	2,536	2,436	15	1,364,000	20	30.0	141,600	140	0	600	0	32	44.3	3.6	8.4	13.0
12	NIA 25 MASIDIM SWIP	1	PANGASINAN	Pre-F/S	IR	FC, IF, WM	2,504	2,319	12	1,957,000	28	30.0	82,000	440	0	380	0	45	43.0	6.8	17.4	21.7
13	NIA 26 OBOK-OBOK SWIP	1	PANGASINAN	Pre-F/S	IR	FC, IF, WM	2,504	2,319	5	1,792,000	23	25.0	200,900	60	0	120	0	37	36.4	1.7	1.1	8.8
14	NIA 27 VERA SWIP	1	PANGASINAN	Pre-F/S	IR	FC, IF, WM	2,504	2,319	14	4,269,000	76	22.0	51,000	100	0	520	0	122	30.1	3.8	16.6	15.4
15	NIA 28 ALIBENG SWIP	1	PANGASINAN	Pre-F/S	IR	FC, IF, WM	2,504	2,319	11	1,730,000	26	30.0	127,000	250	0	0	0	42	31.0	4.6	12.9	14.7
16	NIA 31 DIBET SWIP	1	PANGASINAN	Pre-F/S	IR	FC, IF, WM	1,138	2,319	1	71,000	4	10.0	14,550	40	0	49	0	6	6.2	0.5	8.2	2.0
17	NIA 32 DIBET SWIP	1	PANGASINAN	Pre-F/S	IR	FC, IF, WM	1,138	2,319	1	71,000	4	10.0	14,550	40	0	52	0	13	17.3	0.9	1.6	4.8
18	NIA 47 MALAYOT CIP	3	NEWA ECILIA	Pre-F/S	IR	FC, IF	1,092	1,900	1	18,000	5	2.0	1,515	5	0	0	0	8	0.4	0.2	57.9	27.0
19	NIA 48 SAN FELIPE CUS	3	NEWA ECILIA	Pre-F/S	IR	FC, IF	1,093	1,900	3	20,000	3	3.0	2,430	5	0	0	0	5	0.5	0.2	30.8	27.0
20	NIA 49 BANGS CUS	3	NEWA ECILIA	Pre-F/S	IR	FC, IF, WM	2,066	1,900	10	7,706,000	149	28.0	81,000	230	0	467	0	238	35.7	8.6	29.5	25.0
21	NIA 53 MANTEDIM CIP	3	NEWA ECILIA	Pre-F/S	IR	FC, IF, WM	1,094	1,900	3	1,184,000	55	10.0	21,000	75	0	60	0	88	7.8	2.5	33.0	34.7
22	NIA 55 DALAPAP SWIP	3	NEWA ECILIA	Pre-F/S	IR	FC, IF	1,157	1,843	1	9,500	3	20.0	48,900	55	0	0	0	5	9.1	0.4	(0.2)	5.2
23	NIA 56 ELISS II SWIP	3	PAMPANGA	Pre-F/S	IR	FC, IF	1,150	1,843	1	40,000	2	11.0	19,800	20	0	0	0	3	7.3	0.3	3.7	6.5
24	NIA 57 BIRIGUA CUS	3	PAMPANGA	Pre-F/S	IR	FC, IF, WM	1,156	2,098	4	439,000	77	22.0	45,500	200	0	161	0	123	21.1	3.3	17.8	11.3
25	NIA 58 TAMARANANG CIP	3	TARLAC	Pre-F/S	IR	FC, IF, WM	1,137	2,098	2	278,000	5	21.0	21,600	100	0	80	0	8	9.0	1.4	16.8	19.4
26	NIA 59 LAMCANGILAG CIP	3	TARLAC	Pre-F/S	IR	FC, IF	1,130	2,098	2	719,000	34	8.8	36,000	120	0	0	0	54	8.9	2.3	21.4	12.2
27	NIA 72 MATIKUY SWIP	4	LAGUNA	Pre-F/S	IR	FC, IF	632	1,897	3	447,000	7	30.0	136,100	100	0	0	0	11	25.0	1.2	0.8	7.4
28	NIA 98 BAYANGON CIP	5	MASBATE	Pre-F/S	IR	FC, IF	1,512	1,851	5	1,147,000	21	22.0	57,500	120	0	0	0	34	14.1	2.8	16.4	12.3
29	NIA 97 DOMEROG SWIP	5	MASBATE	Pre-F/S	IR	FC, IF	1,512	1,851	4	1,818,000	50	15.0	52,500	150	0	0	0	80	13.9	4.0	24.7	14.5
30	NIA 99 BAYANGON CIP	5	MASBATE	Pre-F/S	IR	FC, IF, WM	1,512	1,851	19	4,280,000	166	15.0	77,000	400	0	950	0	266	49.9	12.8	23.7	23.8
31	NIA 100 CABANGALAN CIP	5	MASBATE	Pre-F/S	IR	FC, IF, WM	1,512	1,851	28	12,465,000	231	22.0	70,700	200	0	1,530	0	370	59.8	9.9	22.9	22.3
32	NIA 101 FOSTAGON SWIP	5	MASBATE	Pre-F/S	IR	FC, IF, WM	1,512	1,851	7	4,928,000	95	22.0	89,000	250	0	160	0	152	30.8	7.4	23.9	17.1
33	NIA 102 PILI SWIP	5	MASBATE	Pre-F/S	IR	FC, IF, WM	1,512	1,851	4	727,000	36	10.0	49,000	80	0	0	0	58	11.7	2.6	29.9	34.2
34	NIA 103 RIVU SWIP	5	MASBATE	Pre-F/S	IR	FC, IF, WM	1,512	1,851	30	1,404,000	53	15.0	49,000	200	0	1,400	0	53	60.3	5.1	11.6	21.9
35	NIA 104 RIVU SWIP	5	MASBATE	Pre-F/S	IR	FC, IF, WM	1,512	1,851	4	2,479,000	21	22.9	65,200	120	0	192	0	34	21.9	2.5	14.3	14.4
36	NIA 106 BONTOLAN SWIP	5	MASBATE	Pre-F/S	IR	FC, IF, WM	1,512	1,851	2	2,505,000	36	25.0	73,400	100	0	105	0	58	16.2	2.5	16.5	19.9
37	NIA 107 BOKACAN SWIP	5	MASBATE	Pre-F/S	IR	FC, IF, WM	1,512	1,851	5	392,000	17	12.0	28,000	80	0	120	0	27	11.8	1.9	19.8	12.3
38	NIA 108 PANGKACAN SWIP	5	MASBATE	Pre-F/S	IR	FC, IF	1,512	1,851	12	14,066,000	198	30.0	143,000	250	0	0	0	317	31.5	9.5	25.2	16.9
39	NIA 109 PANGKACAN SWIP	5	MASBATE	Pre-F/S	IR	FC, IF, WM	2,290	2,561	6	1,460,000	18	30.0	172,000	460	0	238	0	29	44.1	7.7	17.1	17.9
40	NIA 111 PANGKACAN SWIP	5	SORSOGON	Pre-F/S	IR	FC, IF, WM	2,290	2,561	6	1,460,000	18	30.0	172,000	460	0	238	0	29	44.1	7.7	17.1	17.9

Note: F/S: Feasibility Study; D/D: Detailed Design; Pre-F/S: Pre-feasibility Study  
IR: Irrigation; FC: Flood Control; IF: Inland Fishery; ME: Mini-Hydro-power;  
WM: Watershed Management.

Table 4.3.1 Major Features of Qualified SWIM Projects (3/6)  
- NIA No.2 -

No.	AGENCY	PROJECT NAME	REGION	PROVINCE	PROJECT STATUS	MAIN PURPOSE	INCIDENTAL PURPOSES	KNOFF (mm)	ANNUAL RAINFALL (mm)	CATCH-MENT AREA (ha)	EFFECTIVE STORAGE AREA (ha)	RESERVOIR HEIGHT (m)	DAM VOLUME (m <sup>3</sup> )	EMBRANKMENT GATION AREA (ha)	PRE-INSTALLED CAPACITY (t/d)	WATER SUPPLY CAPACITY (m <sup>3</sup> /day)	ANNUAL FISH PRODUCTION (ton)	PROJECT COST (million pesos)	TOTAL BENEFIT (₱)	IRR (%)	ORIGINAL IRR (%)		
																						Pre-F/S	IR
41	NIA	112 BAGASICO SWIP	7	BOHOL	Pre-F/S	IR	FC, IF, IM	1,300	2,057	21	2,354,000	52	18.5	42,000	400	0	0	83	33.2	8.0	20.0	23.0	
42	NIA	119 BONOT-BONOT SWIP	7	BOHOL	Pre-F/S	IR	FC, IF, IM	1,300	1,792	13	11,693,000	173	30.0	105,000	300	0	680	0	277	45.5	10.8	27.5	22.0
43	NIA	120 CAIANGAN SWIP	7	BOHOL	Pre-F/S	IR	FC, IF, IM	1,300	1,792	3	833,700	13	30.0	78,000	100	0	120	0	21	16.7	2.2	14.2	14.4
44	NIA	121 MANDUG SWIP	7	BOHOL	Pre-F/S	IR	FC, IF, IM	1,300	1,792	3	1,122,000	13	30.0	104,000	140	0	157	0	21	23.1	2.9	13.0	15.0
45	NIA	122 ABEJILAN SWIP	7	BOHOL	Pre-F/S	IR	FC, IF, IM	1,300	2,057	12	202,000	3	30.0	102,000	30	0	55	0	5	19.2	0.7	(0.8)	9.4
46	NIA	128 LINGSODAN SWIP	7	BOHOL	Pre-F/S	IR	FC, IF, IM	1,300	2,057	1	277,000	15	9.0	8,100	30	0	32	0	24	6.5	0.9	29.1	18.6
47	NIA	130 CATUNGAN SWIP	7	BOHOL	Pre-F/S	IR	FC, IF, IM	1,300	2,057	4	774,000	13	25.0	77,000	130	0	560	0	21	24.3	3.0	15.6	16.3
48	NIA	131 LAPACAN SWIP	7	BOHOL	Pre-F/S	IR	FC, IF, IM	1,300	1,791	9	591,000	37	8.5	41,500	150	0	770	0	59	24.0	4.0	25.5	24.8
49	NIA	132 TANTAY SWIP	7	BOHOL	Pre-F/S	IR	FC, IF, IM	1,300	1,791	3	822,000	30	13.0	22,000	110	0	136	0	46	10.9	3.0	32.5	19.6
50	NIA	133 ABACA SWIP	7	BOHOL	Pre-F/S	IR	FC, IF, IM	1,300	1,555	5	1,749,000	27	23.0	70,000	200	0	180	0	43	26.0	5.1	20.2	22.0
51	NIA	136 ONDOL SWIP	7	BOHOL	Pre-F/S	IR	FC, IF, IM	1,300	1,555	5	3,692,000	68	22.0	83,000	200	0	225	0	109	26.8	6.1	24.4	21.8
52	NIA	138 SAN ISIDRO BANLASAN SWIP	7	BOHOL	Pre-F/S	IR	FC, IF, IM	1,300	1,555	7	2,786,000	95	20.0	61,000	300	0	159	0	152	25.3	8.9	32.2	22.5
53	NIA	139 BANLASAN SWIP	7	BOHOL	Pre-F/S	IR	FC, IF, IM	1,300	1,555	7	485,000	24	10.0	28,300	130	0	320	0	38	19.6	3.0	23.0	25.6
54	NIA	141 HIABAS SWIP	7	BOHOL	Pre-F/S	IR	FC, IF, IM	1,300	1,555	6	485,000	23	10.0	25,000	110	0	255	0	37	16.0	3.0	27.2	20.6
55	NIA	147 KANASTUAN CIP	7	CEBU	Pre-F/S	IR	FC, IF, IM	485	1,622	39	5,982,000	95	30.0	154,000	380	0	1,560	0	152	85.2	10.0	13.7	17.5
56	NIA	148 LIWANG CIP	7	CEBU	Pre-F/S	IR	FC, IF, IM	485	1,622	32	982,000	14	27.0	77,000	230	0	1,350	0	22	61.8	5.3	10.0	16.0
57	NIA	149 DAWAO CIP	7	CEBU	Pre-F/S	IR	FC, IF, IM	485	1,622	50	2,623,000	39	30.0	72,200	430	0	2,160	0	62	93.4	10.3	13.8	19.0
58	NIA	150 TONKOD CIP	7	CEBU	Pre-F/S	IR	FC, IF, IM	485	1,622	19	9,648,000	135	30.0	88,900	240	0	1,033	0	216	50.9	8.3	20.0	14.8
59	NIA	152 MAAYOG-TUBIG CIP	7	NEGROS ORIENTAL	Pre-F/S	IR	FC, IF, IM	1,595	1,932	8	1,435,000	37	25.0	78,600	190	0	0	0	59	18.8	4.8	23.2	17.2
60	NIA	154 MASAFID CIP	7	NEGROS ORIENTAL	Pre-F/S	IR	FC, IF, IM	1,595	1,932	5	2,273,000	27	30.0	78,000	130	0	240	0	43	21.5	3.6	19.4	13.0
61	NIA	157 NAGA-MANTONOP CIP	7	NEGROS ORIENTAL	Pre-F/S	IR	FC, IF, IM	1,595	1,932	11	2,483,000	34	30.0	219,000	250	0	465	0	54	57.9	6.3	11.4	12.2
62	NIA	158 SAN ANTONIO CIP	7	NEGROS ORIENTAL	Pre-F/S	IR	FC, IF, IM	1,595	1,932	9	351,000	7	30.0	118,300	120	0	363	0	11	38.5	2.4	6.4	11.5
63	NIA	163 TIGABAO CIP	7	SIGUOR	Pre-F/S	IR	FC, IF, IM	1,595	2,115	5	383,000	6	30.0	95,200	80	0	217	0	10	25.8	1.9	7.4	14.2
64	NIA	186 MAHAYAG SWIP	8	SOUTHERN LEYTE	Pre-F/S	IR	FC, IF, IM	1,818	2,761	7	221,000	4	30.0	117,000	335	0	204	0	6	36.8	7.3	19.3	18.5
65	NIA	187 BOCO-DONGAN SWIP	8	SOUTHERN LEYTE	Pre-F/S	IR	FC, IF, IM	1,818	2,761	13	4,405,000	58	30.0	150,000	260	0	555	0	93	47.1	6.4	14.6	14.4
66	NIA	188 LAW-AGAN SWIP	8	SOUTHERN LEYTE	Pre-F/S	IR	FC, IF, IM	1,818	2,760	3	3,003,000	45	30.0	141,000	110	0	0	0	72	20.0	3.3	13.8	9.9
67	NIA	190 KAMANSI-RIZAL SWIP	8	SOUTHERN LEYTE	Pre-F/S	IR	FC, IF, IM	1,818	2,760	30	6,031,000	76	30.0	160,000	345	0	0	0	122	52.8	8.9	14.0	15.0

Note: F/S: Feasibility Study; D/D: Detailed Design; Pre-F/S: Pre-feasibility Study  
IR: Irrigation; FC: Flood Control; IF: Inland Fishery; MI: Mini-hydropower  
IM: Watershed Management

Table 4.3.1 Major Features of Qualified SWIM Projects (4/6)  
-- BSWM No.1 --

No. AGENCY No.	PROJECT NAME	REGION	PROVINCE	PROJECT STATUS	MAIN PURPOSE	INCIDENTAL BENEFIT PURPOSES	ANNUAL RUNOFF (mm)	ANNUAL CATCH (mm <sup>2</sup> )	EFFECTIVE STORAGE CAPACITY (mm <sup>3</sup> )	RESERVOIR AREA (ha)	DAM HEIGHT (m)	DAM VOLUME (m <sup>3</sup> )	EQUIP. CAPACITY (MW)	INSTALL. CAPACITY (MW)	REPRODUCTION AREA (ha)	WATER SUPPLY CAPACITY (m <sup>3</sup> /day)	ANNUAL FISH PRODUCTION (t/yr)	PROJECT COST (million pesos)	TOTAL BENEFIT (Z)	IRR (%)	ORIGINAL IRR (%)		
																						IR	WI, IF, FC
1	ESAM 1	SUCSIQUEN SWIP	1 ILOOS NORTE	D/D	IR	WI, IF, FC	530	1,903	1.1	156,662	4	13.5	28,000	30	0	108	0	6.4	6.0	0.4	8.0	41.5	
2	ESAM 2	OLO-OLO I SWIP	1 ILOOS SUR	D/D	IR	WI, IF, FC	441	2,336	0.7	168,048	4	13.5	55,900	35	0	63	0	6.4	7.9	0.6	6.9	19.9	
3	ESAM 3	OLO-OLO II SWIP	1 ILOOS SUR	D/D	IR	WI, IF, FC	442	2,336	0.7	68,549	1	11.7	37,120	30	0	68	0	1.6	6.3	0.5	7.9	28.4	
4	ESAM 4	BALINDAO SWIP	1 ILOOS SUR	D/D	IR	WI, IF, FC	557	2,336	0.4	165,025	3	15.5	46,000	50	0	32	0	4.8	6.6	0.7	10.4	21.0	
5	ESAM 5	SAN CRISTOBAL SWIP	1 ILOOS NORTE	D/D	IR	WI, IF, FC	407	1,903	2.6	281,432	10	13.5	39,200	100	0	282	0	16.0	11.0	1.5	21.0	31.2	
6	ESAM 6	SAN AGUSTIN SWIP	1 ILOOS NORTE	D/D	IR	WI, IF, FC	559	1,903	1.4	90,882	3	10.0	24,750	32	0	74	0	4.8	5.2	0.5	9.8	28.8	
7	ESAM 7	BINGAO II SWIP	1 ILOOS NORTE	D/D	IR	WI, IF, FC	410	1,903	1.4	528,958	19	10.0	33,000	40	0	121	0	30.4	7.3	1.1	19.2	31.5	
8	ESAM 8	ODA SWIP	1 PANGASINAN	D/D	IR	WI, IF, FC	893	2,275	1.2	360,737	7	11.0	53,000	100	0	109	0	11.2	9.2	1.8	22.6	32.4	
9	ESAM 9	PICARD SWIP	1 PANGASINAN	D/D	IR	WI, IF, FC	480	2,275	0.9	195,995	12	6.5	10,000	75	0	78	0	19.2	5.3	1.1	47.8	47.8	
10	ESAM 10	PANARANIM SWIP	1 PANGASINAN	D/D	IR	WI, IF, FC	484	2,275	1.2	67,253	2	8.2	15,000	50	0	113	0	3.2	4.9	0.6	16.9	31.1	
11	ESAM 11	CAPARISPISAN SWIP	1 ILOOS NORTE	D/D	IR	WI, IF, FC	1,324	1,903	0.6	140,707	3	10.0	33,945	50	0	59	0	4.8	5.9	0.9	15.1	20.6	
12	ESAM 12	PAYONG SWIP	1 ILOOS SUR	D/D	IR	WI, IF, FC	444	2,336	0.9	109,554	4	15.5	38,000	100	0	86	0	6.4	7.6	0.9	12.5	23.1	
13	ESAM 13	SANAC SWIP	1 ILOOS NORTE	D/D	IR	WI, IF, FC	436	1,903	0.4	87,990	3	10.0	32,000	20	0	34	0	4.8	5.1	0.3	2.1	30.5	
14	ESAM 14	MARINI SWIP	1 PANGASINAN	D/D	IR	WI, IF, FC	647	2,275	1.0	159,683	2	10.0	13,000	80	0	100	0	3.2	5.8	1.0	20.2	27.6	
15	ESAM 15	SAN GONZALO SWIP	1 PANGASINAN	D/D	IR	WI, IF, FC	1,748	2,275	0.7	169,958	2	14.5	54,800	50	0	30	0	3.2	7.5	0.9	11.8	23.5	
16	ESAM 16	CAMPAGUNAN SWIP	1 PANGASINAN	D/D	IR	WI, IF, FC	483	2,275	0.7	56,984	2	8.0	13,375	55	0	40	0	6.4	4.3	0.8	22.6	40.1	
17	ESAM 17	PICAR SWIP	1 PANGASINAN	D/D	IR	WI, IF, FC	837	2,275	0.6	329,656	6	13.5	32,800	50	0	0	0	6.4	5.6	1.2	22.6	35.2	
18	ESAM 18	MALINDAN SWIP	1 PANGASINAN	D/D	IR	WI, IF, FC	826	2,275	2.6	169,869	6	9.7	23,500	100	0	127	0	9.6	8.9	1.2	21.4	39.7	
19	ESAM 19	VIGA SWIP	1 PANGASINAN	D/D	IR	WI, IF, FC	419	1,903	3.0	446,635	9	15.0	44,000	75	0	296	0	14.4	7.2	1.5	20.5	44.6	
20	ESAM 20	CABUSAN SWIP	1 ILOOS NORTE	D/D	IR	WI, IF, FC	396	1,903	0.4	126,887	4	12.0	31,000	30	0	51	0	6.4	4.6	0.4	8.6	24.0	
21	ESAM 21	MAGNANG SWIP	1 ILOOS NORTE	D/D	IR	WI, IF, FC	403	1,903	0.5	99,278	2	14.0	35,420	25	0	50	0	3.2	5.5	0.3	4.0	20.3	
22	ESAM 22	DAQUING II SWIP	1 ILOOS NORTE	D/D	IR	WI, IF, FC	408	1,903	1.1	105,048	2	16.0	60,705	40	0	109	0	3.2	9.1	0.5	3.5	14.3	
23	ESAM 23	SAN ANDRES SWIP	1 ILOOS NORTE	D/D	IR	WI, IF, FC	400	1,903	1.1	212,100	5	15.0	30,500	50	0	100	0	8.0	6.1	0.7	14.7	31.8	
24	ESAM 24	PANUNAN SWIP	1 ILOOS NORTE	D/D	IR	WI, IF, FC	544	2,275	0.7	192,277	1	11.7	26,000	25	0	68	0	1.6	3.4	0.2	4.7	19.0	
25	ESAM 25	SAN JUAN I SWIP	CAR. ABR	D/D	IR	WI, IF, FC	497	2,366	0.7	192,277	1	11.7	26,000	25	0	68	0	1.6	3.4	0.2	4.7	19.0	
26	ESAM 26	SAN JUAN II SWIP	CAR. ABR	D/D	IR	WI, IF, FC	550	2,366	0.8	56,921	1	0.5	17,700	100	0	74	0	1.6	5.6	1.2	22.1	27.1	
27	ESAM 27	MACARONAY SWIP	CAR. ABR	D/D	IR	WI, IF, FC	1,375	2,216	0.6	29,609	1	1.3	17,700	100	0	0	0	0	1.6	5.6	1.2	22.1	27.1
28	ESAM 28	BATA SWIP	2 CAGAYAN	D/D	IR	WI, IF, FC	1,047	2,038	0.6	102,242	3	9.5	10,498	100	0	96	0	4.8	5.8	1.3	25.4	41.9	
29	ESAM 29	BALAOIT SWIP	2 NUEVA VIZCAYA	D/D	IR	WI, IF, FC	1,391	2,038	1.8	234,120	12	7.0	30,600	70	0	168	0	19.2	7.8	1.5	27.7	43.2	
30	ESAM 30	CABANAGAN SWIP	2 ISABELA	D/D	IR	WI, IF, FC	892	1,746	1.9	371,049	8	12.0	34,341	100	0	177	0	4.8	10.7	1.7	19.8	37.8	
31	ESAM 31	MARANA SWIP	2 ISABELA	D/D	IR	WI, IF, FC	842	1,746	3.1	167,451	6	10.7	18,944	80	0	305	0	9.6	9.3	1.4	26.7	31.0	
32	ESAM 32	DIADI SWIP	2 NUEVA VIZCAYA	D/D	IR	WI, IF, FC	1,016	2,038	1.4	17,453	2	8.0	8,000	20	0	142	0	3.2	4.3	0.7	28.4	31.5	
33	ESAM 33	CHARULAN SWIP	2 CAGAYAN	D/D	IR	WI, IF, FC	889	1,746	0.6	193,694	4	10.5	37,887	60	0	59	0	6.4	6.8	1.1	16.2	17.6	
34	ESAM 34	MARANA SWIP	2 ISABELA	D/D	IR	WI, IF, FC	886	2,038	0.5	46,768	2	9.5	15,800	120	0	44	0	3.2	5.5	1.7	18.8	45.3	
35	ESAM 35	MARANA SWIP	2 NUEVA VIZCAYA	D/D	IR	WI, IF, FC	851	1,746	0.5	237,027	6	7.0	22,754	35	0	47	0	9.6	4.2	0.7	18.9	22.8	
36	ESAM 36	BALENG SWIP	2 CAGAYAN	D/D	IR	WI, IF, FC	941	2,038	0.8	198,235	5	10.2	41,140	100	0	80	0	8.0	7.5	1.9	27.4	42.0	
37	ESAM 37	KIRANG SWIP	2 NUEVA VIZCAYA	D/D	IR	WI, IF, FC	1,068	2,038	0.2	78,215	2	10.0	14,500	40	0	16	0	3.2	3.9	0.5	13.4	18.5	
38	ESAM 38	LANES SWIP	2 NUEVA VIZCAYA	D/D	IR	WI, IF, FC	1,065	2,038	2.6	140,487	5	9.0	37,000	50	0	254	0	8.0	9.5	1.0	16.3	20.7	
39	ESAM 39	SAN ANTONIO SWIP	2 ISABELA	D/D	IR	WI, IF, FC	955	2,038	0.8	373,000	7	11.0	24,990	70	0	68	0	11.2	5.5	0.6	13.3	21.6	
40	ESAM 40	ASIAN SWIP	2 ISABELA	D/D	IR	WI, IF, FC	1,374	2,216	0.4	79,574	2	11.0	38,437	50	0	41	0	3.2	6.0	0.6	8.3	21.3	
41	ESAM 41	TRINIDAD SWIP	2 CAGAYAN CLAVERIA	D/D	IR	WI, IF, FC	862	2,038	4.1	250,838	12	7.0	36,729	250	0	398	0	19.2	18.1	4.8	35.7	46.7	
42	ESAM 42	MALAM SWIP	2 ISABELA	D/D	IR	WI, IF, FC	1,066	2,038	0.5	102,550	3	10.3	15,800	40	0	43	0	4.8	3.6	0.8	24.7	34.9	
43	ESAM 43	ADAN SWIP	2 QUEPINO	D/D	IR	WI, IF, FC	1,089	2,038	0.8	111,035	4	11.2	26,000	70	0	72	0	6.4	5.5	1.2	23.6	37.8	
44	ESAM 44	ANNEX SWIP	2 QUEPINO	D/D	IR	WI, IF, FC	2,963	2,038	1.2	391,700	12	10.1	30,000	100	0	107	0	19.2	7.1	2.0	34.4	45.0	
45	ESAM 45	VICTORIA SWIP	2 ISABELA	D/D	IR	WI, IF, FC	1,012	2,038	0.2	58,040	3	6.5	4,333	15	0	22	0	4.8	1.4	0.3	28.9	30.9	
46	ESAM 46	SAN FRANCISCO SWIP	2 ISABELA	D/D	IR	WI, IF, FC	1,014	2,038	0.6	46,480	2	10.6	18,000	20	0	58	0	3.2	3.4	0.4	32.5	37.1	
47	ESAM 47	SAN MARCOS SWIP	2 ISABELA	D/D	IR	WI, IF, FC	997	2,038	0.9	213,300	5	13.0	41,040	55	0	80	0	8.0	7.0	1.1	17.3	32.1	
48	ESAM 48	STA FILIPE SWIP	2 ISABELA	D/D	IR	WI, IF, FC																	
49	ESAM 49	OLD SAN MARIANO	2 ISABELA	D/D	IR	WI, IF, FC																	
50	ESAM 50	YEBAN SWIP	2 ISABELA	D/D	IR	WI, IF, FC																	

Note: D/D: Detailed Design; IR: Irrigation; FC: Flood Control; IF: Inland Fishery; WI: Waterbed Management

Table 4.3.1 Major Features of Qualified SWIM Projects (5/6)  
-- BSWM No.2 --

No.	AGENCY	PROJECT NAME	REGION	PROVINCE	PROJECT STATUS	MAIN PURPOSE	ANNUAL RAINFALL				INCIDENTAL RUNOFF PURPOSES	ANNUAL RUNOFF (mm)	CATCHMENT AREA (km <sup>2</sup> )	EFFECTIVE STORAGE CAPACITY (m <sup>3</sup> )	RESERVOIR AREA (ha)	DIAMETER (m)	EMBRACEMENT VOLUME (m <sup>3</sup> )	GROUT AREA (ha)	INSTALLATION CAPACITY (M <sup>3</sup> /DAY)	FACTORY SUPPLY CAPACITY (m <sup>3</sup> /DAY)	WATER SUPPLY (m <sup>3</sup> /DAY)	ANNUAL FINE PRODUCTION (ton)	PROJECT COST (million pesos)	TOTAL BENEFIT (million pesos)	IRR (%)	IRR (%)
							W.I.F.	F.C.	W.I.F.	F.C.																
51	ESM	52 MINALLO SWIP	2	ISABELA	D/D	IR	W.I.F.	FC	989	2,038	0.7	365,775	10	13.6	46,000	50	0	60	0	16.0	9.6	1.0	10.5	25.6		
52	ESM	56 ARUNG DAGA SWIP	2	CAGAYAN	D/D	IR	W.I.F.	FC	932	1,746	1.3	421,600	8	14.0	50,000	80	0	117	0	12.8	9.2	1.1	13.9	24.2		
53	ESM	57 MASIN SWIP	2	CAGAYAN	D/D	IR	W.I.F.	FC	893	1,746	0.9	136,000	5	9.5	23,625	43	0	82	0	10.0	5.0	0.7	17.4	35.8		
54	ESM	58 CARALLANG SWIP	2	CAGAYAN	D/D	IR	W.I.F.	FC	1,024	2,216	0.4	133,412	4	12.6	30,000	38	0	36	0	6.4	6.7	0.6	12.5	17.2		
55	ESM	59 GANZANO SWIP	2	CAGAYAN	D/D	IR	W.I.F.	FC	1,026	2,216	1.0	250,369	6	13.4	50,740	40	0	89	0	9.6	7.9	1.2	17.6	25.0		
56	ESM	60 SAMPALOC SWIP	3	NEVA BELIA	D/D	IR	W.I.F.	FC	560	1,880	0.8	279,354	7	10.5	34,510	100	0	73	0	11.2	8.2	1.2	16.2	29.7		
57	ESM	61 STO. DOMINGO III SWIP	3	NEVA BELIA	D/D	IR	W.I.F.	FC	544	1,880	0.8	395,424	16	8.7	26,090	100	0	80	0	23.6	6.8	1.6	27.5	36.3		
58	ESM	62 MASUPE SWIP	3	BULACAN	D/D	IR	W.I.F.	FC	645	1,880	2.2	495,745	21	9.0	12,500	100	0	190	0	33.5	7.7	2.1	43.7	44.2		
59	ESM	63 VILLA RADO SWIP	3	NEVA BELIA	D/D	IR	W.I.F.	FC	518	1,880	0.8	212,799	6	11.0	15,500	100	0	69	0	9.6	5.7	1.5	29.9	29.8		
60	ESM	64 BUVID SWIP	3	NEVA BELIA	D/D	IR	W.I.F.	FC	511	1,880	0.7	96,078	6	10.2	22,000	100	0	85	0	17.6	5.4	0.4	7.7	25.6		
61	ESM	65 MANUONG SWIP	3	PALAU	D/D	IR	W.I.F.	FC	1,248	1,909	2.0	42,302	11	3.4	17,500	100	0	199	0	17.6	5.8	1.6	31.5	61.9		
62	ESM	66 VILLA ISLA SWIP	3	NEVA BELIA	D/D	IR	W.I.F.	FC	516	1,880	0.8	227,278	4	11.0	42,705	50	0	32	0	6.4	5.5	0.7	13.5	23.8		
63	ESM	67 STA. CATALINA SWIP	3	BULACAN	D/D	IR	W.I.F.	FC	507	1,880	0.4	154,717	4	11.0	42,705	50	0	71	0	6.4	6.8	0.8	11.6	22.1		
64	ESM	68 FELD SWIP	3	NEVA BELIA	D/D	IR	W.I.F.	FC	526	1,880	0.4	281,663	8	13.0	22,680	50	0	35	0	12.8	4.9	0.7	15.9	40.2		
65	ESM	69 STO DOMINGO II SWIP	3	NEVA BELIA	D/D	IR	W.I.F.	FC	589	1,880	0.6	190,049	9	11.0	46,538	100	0	277	0	14.4	11.6	1.4	15.8	24.9		
66	ESM	70 BITUNGOL SWIP	3	BULACAN	D/D	IR	W.I.F.	FC	542	1,880	2.4	267,690	9	11.0	46,538	100	0	56	0	8.0	7.6	0.8	10.4	14.9		
67	ESM	71 MASIN SWIP	3	NEVA BELIA	D/D	IR	W.I.F.	FC	526	1,880	0.4	281,663	8	13.0	22,680	50	0	35	0	12.8	4.9	0.7	15.9	40.2		
68	ESM	72 STO DOMINGO I SWIP	3	NEVA BELIA	D/D	IR	W.I.F.	FC	518	1,880	0.6	286,700	9	10.0	11,500	70	0	52	0	14.4	4.9	0.9	20.0	43.8		
69	ESM	73 WAKANG SWIP	3	NEVA BELIA	D/D	IR	W.I.F.	FC	473	1,880	0.5	201,132	5	10.5	44,000	80	0	693	0	43.2	24.8	5.4	34.3	51.9		
70	ESM	74 NUNALANDAN SWIP	3	NEVA BELIA	D/D	IR	W.I.F.	FC	687	1,880	7.2	1,098,613	27	19.0	30,200	400	0	334	0	9.6	10.9	1.1	16.9	25.5		
71	ESM	75 PAKISTIA SWIP	3	NEVA BELIA	D/D	IR	W.I.F.	FC	607	1,880	3.4	222,656	6	14.0	35,938	80	0	83	0	9.6	12.9	1.1	16.7	18.9		
72	ESM	76 BAMBALINGAO SWIP	4	ORIENTAL MINDORO	D/D	IR	W.I.F.	FC	552	1,880	0.9	365,540	5	12.3	38,600	50	0	20	0	8.0	5.4	0.8	13.9	18.9		
73	ESM	77 LACUNONG SWIP	4	ORIENTAL MINDORO	D/D	IR	W.I.F.	FC	1,713	1,835	0.3	219,182	3	10.0	28,000	75	0	23	0	4.8	5.8	1.1	17.5	21.7		
74	ESM	78 PAKAMA II SWIP	4	ORIENTAL MINDORO	D/D	IR	W.I.F.	FC	1,713	1,835	0.3	155,640	3	10.0	28,000	75	0	23	0	4.8	5.8	1.1	17.5	21.7		
75	ESM	79 BAYUNG SWIP	4	ORIENTAL MINDORO	D/D	IR	W.I.F.	FC	1,724	1,834	0.2	91,323	2	11.9	19,500	45	0	17	0	3.2	4.1	0.7	15.6	16.7		
76	ESM	80 CANTERAY SWIP	5	MASATE	D/D	IR	W.I.F.	FC	254	1,646	1.1	285,035	7	11.9	47,523	50	0	107	0	11.2	8.5	1.1	14.7	18.9		
77	ESM	82 BUENAVISTA SWIP	5	MASATE	D/D	IR	W.I.F.	FC	2,584	1,879	0.4	82,064	3	9.5	20,111	80	0	34	0	4.8	5.3	0.3	2.8	25.4		
78	ESM	83 BULOAO SWIP	5	CAPARINES NORTE	D/D	IR	W.I.F.	FC	3,059	3,443	0.5	64,180	2	9.0	20,885	100	0	49	0	3.2	5.7	0.7	11.9	34.1		
79	ESM	84 DALANG SWIP	5	CAPARINES NORTE	D/D	IR	W.I.F.	FC	2,486	3,443	0.5	76,545	3	9.0	15,300	50	0	47	0	4.8	4.6	0.9	20.9	32.8		
80	ESM	85 CAGAYAN	5	ALBAY	D/D	IR	W.I.F.	FC	2,329	3,175	0.8	153,007	9	6.0	15,458	100	0	67	0	14.4	6.1	0.9	16.2	25.4		
81	ESM	86 BURGOS SWIP	5	CATANDUANES	D/D	IR	W.I.F.	FC	2,979	4,029	0.3	13,990	1	7.0	20,700	25	0	32	0	1.6	4.4	0.6	13.1	15.8		
82	ESM	87 F. ANGCEL SWIP	6	AGLAN	D/D	IR	W.I.F.	FC	1,579	3,312	0.7	53,214	2	8.8	29,792	50	0	72	0	3.2	5.7	0.7	12.9	20.3		
83	ESM	88 FINNEY SWIP	6	AGLAN	D/D	IR	W.I.F.	FC	1,681	3,311	0.4	60,811	2	9.0	16,120	25	0	42	0	3.2	3.6	0.6	18.2	27.4		
84	ESM	89 SIBALIN-ITERALBA SWIP	6	AGLAN	D/D	IR	W.I.F.	FC	1,628	3,312	0.7	31,767	2	7.0	14,091	25	0	77	0	4.3	4.0	0.4	12.8	26.2		
85	ESM	90 ENAUGANGAN SWIP	6	ANTIPO	D/D	IR	W.I.F.	FC	1,888	3,749	0.2	14,205	2	12.0	24,200	50	0	16	0	3.2	4.3	0.6	12.4	22.4		
86	ESM	91 TRACIANO SWIP	6	CAPIZ	D/D	IR	W.I.F.	FC	1,803	2,212	0.6	18,412	1	10.0	11,800	50	0	64	0	1.6	4.3	0.6	15.7	31.7		
87	ESM	92 SAN ROQUE SWIP	6	AGLAN	D/D	IR	W.I.F.	FC	2,165	2,212	0.6	82,512	2	2.5	28,400	40	0	65	0	3.2	5.0	0.8	17.3	30.2		
88	ESM	93 ARANAG SWIP	6	AGLAN	D/D	IR	W.I.F.	FC	1,642	3,312	0.9	62,544	4	11.0	36,500	100	0	46	0	6.4	7.6	1.1	15.7	23.7		
89	ESM	94 BUENAVISTA SWIP	6	ANTIPO	D/D	IR	W.I.F.	FC	2,025	3,749	0.2	58,656	2	7.0	16,000	50	0	12	0	3.2	3.6	0.6	15.2	22.8		
90	ESM	95 DITA I SWIP	7	BOHOL	D/D	IR	W.I.F.	FC	1,569	1,244	0.5	119,321	4	13.5	23,200	50	0	44	0	6.4	6.1	1.0	17.0	21.1		
91	ESM	96 DITA II SWIP	7	BOHOL	D/D	IR	W.I.F.	FC	1,437	1,244	0.3	109,672	4	12.5	14,000	35	0	30	0	6.4	4.1	0.7	18.4	23.8		
92	ESM	97 SAN JOSE SWIP II	7	BOHOL	D/D	IR	W.I.F.	FC	1,568	1,244	0.6	35,679	2	9.8	11,900	30	0	59	0	3.2	4.8	0.7	16.2	28.8		
93	ESM	98 STO. NIÑO SWIP	7	BOHOL	D/D	IR	W.I.F.	FC	1,475	1,244	1.7	176,495	8	11.0	26,600	110	0	131	0	12.8	8.7	1.9	28.2	19.4		
94	ESM	99 NANOKA SWIP	7	NEGROS ORIENTAL	D/D	IR	W.I.F.	FC	1,435	1,782	0.2	71,336	1	15.6	26,000	35	0	21	0	1.6	4.5	0.6	12.3	17.6		
95	ESM	100 BAGTIC SWIP	7	NEGROS ORIENTAL	D/D	IR	W.I.F.	FC	1,476	1,215	2.5	17,359	2	13.5	19,500	100	0	247	0	3.2	3.8	2.2	37.2	43.9		
96	ESM	101 NANJONG SWIP	7	NEGROS ORIENTAL	D/D	IR	W.I.F.	FC	1,463	1,215	1.3	19,569	2	13.0	45,000	50	0	131	0	3.2	8.2	1.0	14.1	23.8		
97	ESM	102 BONG-BONG I SWIP	7	BOHOL	D/D	IR	W.I.F.	FC	1,481	1,244	1.0	79,439	4	7.0	8,800	100	0	96	0	6.4	5.7	1.9	39.5	25.8		
98	ESM	103 BONG-BONG II SWIP	7	BOHOL	D/D	IR	W.I.F.	FC	1,566	1,244	0.5	106,019	3	12.0	10,250	100	0	43	0	4.8	4.9	1.5	31.1	33.1		
99	ESM	108 JURASAN SWIP	8	NORTHERN SAMAR	D/D	IR	W.I.F.	FC	1,568	3,030	0.6	55,717	2	9.6	33,400	25	0	56	0	3.2	5.6	0.3	3.4	16.1		
100	ESM	109 CASAREHAN SWIP	8	WESTERN SAMAR	D/D	IR	W.I.F.	FC	3,415	2,912	0.5	75,320	6	6.0	36,600	100	0	46	0	9.6	7.1	1.3	17.9	42.3		

Note: D/D: Detailed Design.

IR: Irrigation; FC: Flood Control; IF: Inland Fishery; WF: Watershed Management

Table 4.3.1 Major Features of Qualified SWIM Projects (6/6)  
-- BSWM No.3 --

No. AGENCY No.	PROJECT NAME	REGION	PROVINCE	PROJECT STATUS	MAIN PURPOSE	INCIDENTAL FURROUSES	ANNUAL RAINFALL (mm)		CATCHMENT AREA (km <sup>2</sup> )	EFFECTIVE STORAGE CAPACITY (m <sup>3</sup> )	VOIR AREA (ha)	RESERVOIR AREA (ha)	DAM HEIGHT (m)	EMBRANKMENT VOLUME (m <sup>3</sup> )	ERRI-CATION AREA (ha)	INSTALLED CAPACITY (m <sup>3</sup> /day)	REFORMATION SUPPLY	WATER FISH PRODUCTION (ton)	TOTAL BENEFIT (P)	IBR	IBR	ORIGINAL IBR
							ANNUAL	RENERF														
101	ESM 110 INAGRAKAY SWIP	8	NOROTERN SAMAR	D/D	IR	W.I.F.C	1,393	3,030	0.3	114,866	4	10.0	31,000	50	0	24	0	6.4	5.9	0.9	15.5	34.8
102	ESM 111 STA. FE SWIP	8	EASTERN SAMAR	D/D	IR	W.I.F.C	1,710	4,020	0.7	191,491	3	8.0	15,323	125	0	63	0	4.8	6.4	2.1	34.3	43.5
103	ESM 112 CAPAIN SWIP	8	LEYTE	D/D	IR	W.I.F.C	2,154	2,130	0.5	396,065	9	10.0	16,800	58	0	36	0	14.4	4.8	1.0	23.8	49.4
104	ESM 113 LABON SWIP	8	SOUTHERN SAMAR	D/D	IR	W.I.F.C	2,849	3,906	0.2	59,845	2	10.0	17,200	25	0	16	0	3.2	3.2	0.5	14.6	28.5
105	ESM 114 POLANQUI SWIP	8	EASTERN SAMAR	D/D	IR	W.I.F.C	1,706	4,020	0.5	70,331	4	6.0	9,600	50	0	44	0	6.4	3.6	1.1	33.7	52.4
106	ESM 115 TABARAN SWIP	8	WESTERN SAMAR	D/D	IR	W.I.F.C	1,408	2,593	1.3	38,000	2	13.0	28,430	100	0	0	0	3.2	9.9	n.d.	20.4	20.4
107	ESM 117 WOOLAND SWIP	9	ZABOANGA DEL SUR	D/D	IR	W.I.F.C	1,694	2,996	2.0	66,389	4	11.0	12,400	100	0	193	0	6.4	8.3	1.6	29.8	28.5
108	ESM 118 SOMAYAT SWIP	9	ZABOANGA DEL SUR	D/D	IR	W.I.F.C	1,644	2,996	0.3	55,235	1	13.6	19,400	70	0	53	0	4.8	5.3	1.2	24.9	24.7
109	ESM 119 LINGNOT SWIP	9	ZABOANGA DEL SUR	D/D	IR	W.I.F.C	1,773	2,996	0.6	98,125	3	12.0	17,040	60	0	27	0	3.2	5.4	1.0	19.8	27.7
110	ESM 120 LAWRE I SWIP	9	ZABOANGA DEL SUR	D/D	IR	W.I.F.C	1,656	2,511	0.7	61,871	2	11.0	15,600	80	0	66	0	3.2	5.7	1.0	18.2	20.5
111	ESM 121 LAWRE II SWIP	9	ZABOANGA DEL SUR	D/D	IR	W.I.F.C	1,652	2,511	0.5	60,734	2	12.0	26,200	60	0	50	0	3.2	5.7	1.0	14.5	12.1
112	ESM 122 BERNARTEA SWIP	9	ZABOANGA DEL SUR	D/D	IR	W.I.F.C	2,001	2,511	0.5	60,204	2	12.5	20,200	100	0	50	0	3.2	6.7	1.0	17.4	34.3
113	ESM 123 GELING SWIP	9	ZABOANGA DEL SUR	D/D	IR	W.I.F.C	1,642	2,511	0.2	76,566	2	11.0	20,400	100	0	20	0	3.2	5.1	1.0	17.4	34.3
114	ESM 124 BALINGEN SWIP	10	EKIDIAN	D/D	IR	W.I.F.C	2,657	5,056	1.0	48,210	3	6.0	6,000	150	0	93	0	4.8	4.9	2.1	37.2	30.9
115	ESM 125 AUBELID SWIP	10	AGUSAN DEL NORTE	D/D	IR	W.I.F.C	1,579	2,316	0.7	78,549	4	8.0	20,000	105	0	63	0	6.4	6.1	1.3	22.8	24.4
116	ESM 126 BAITAYAN SWIP	10	SIRIGAO DEL NORTE	D/D	IR	W.I.F.C	3,361	3,906	0.7	48,210	1	13.0	41,200	80	0	67	0	1.6	7.8	1.0	13.0	16.2
117	ESM 127 AYLANG SWIP	10	BUNIDAN	D/D	IR	W.I.F.C	2,686	5,056	0.3	138,448	7	6.2	9,000	140	0	27	0	11.2	5.2	1.6	30.3	42.4
118	ESM 128 TALAO SWIP	10	AGUSAN DEL NORTE	D/D	IR	W.I.F.C	2,143	2,316	0.8	295,439	7	13.0	58,000	155	0	80	0	11.2	10.4	3.2	30.8	24.4
119	ESM 129 IMAALAN SWIP	10	AGUSAN DEL NORTE	D/D	IR	W.I.F.C	1,611	2,316	1.6	208,932	8	7.0	34,000	170	0	86	0	12.8	10.1	2.6	29.8	25.1
120	ESM 130 MINTO-OD SWIP	10	AGUSAN DEL NORTE	D/D	IR	W.I.F.C	2,360	2,316	0.8	118,557	4	7.0	25,676	100	0	75	0	6.4	6.3	2.1	25.5	43.5
121	ESM 131 MALANG SWIP	10	AGUSAN DEL NORTE	D/D	IR	W.I.F.C	1,609	2,316	0.8	63,430	2	9.0	10,900	200	0	74	0	3.2	7.5	2.2	29.6	46.2
122	ESM 132 TALAGNABO SWIP	10	AGUSAN DEL NORTE	D/D	IR	W.I.F.C	2,193	2,316	0.6	84,919	3	12.0	18,300	60	0	42	0	4.8	4.8	1.0	22.6	21.6
123	ESM 133 KITAO-TAO SWIP	10	EKIDIAN	D/D	IR	W.I.F.C	1,673	5,056	2.1	88,995	4	9.0	20,000	200	0	209	0	6.4	10.3	3.5	41.0	57.6
124	ESM 134 SAN RAFAEL SWIP	11	DAVAO ORIENTAL	D/D	IR	W.I.F.C	624	2,639	0.6	206,731	5	12.0	48,391	35	0	59	0	8.0	6.3	0.6	9.5	15.9
125	ESM 135 BUKAY-PAT SWIP	11	SOUTH COTABATO	D/D	IR	W.I.F.C	826	951	2.9	146,733	4	11.0	41,000	135	0	284	0	6.4	12.5	1.6	17.5	20.4
126	ESM 136 LIBRION SWIP	11	DAVAO ORIENTAL	D/D	IR	W.I.F.C	451	2,639	0.3	17,750	1	7.2	6,100	30	0	29	0	1.6	2.8	0.4	14.6	20.5
127	ESM 137 DONALD SWIP	11	SOUTH COTABATO	D/D	IR	W.I.F.C	546	951	2.5	68,848	2	11.0	2,400	40	0	241	0	3.2	8.1	0.7	13.9	18.2
128	ESM 138 LIBASAN SWIP	11	DAVAO DEL NORTE	D/D	IR	W.I.F.C	603	2,639	4.1	351,735	11	12.0	47,000	190	0	401	0	17.6	16.1	3.1	27.7	20.5
129	ESM 139 FLORIDA SWIP	11	DAVAO DEL NORTE	D/D	IR	W.I.F.C	629	2,639	0.5	134,163	4	12.2	12,695	40	0	139	0	12.8	9.7	2.7	31.7	29.4
130	ESM 140 DAIYAN SWIP	11	DAVAO DEL SUR	D/D	IR	W.I.F.C	456	2,639	2.8	111,316	4	11.0	39,400	80	0	46	0	6.4	4.0	0.5	14.5	13.8
131	ESM 141 SAN NICOLAS SWIP	11	DAVAO DEL SUR	D/D	IR	W.I.F.C	471	2,639	2.3	49,963	1	16.0	43,290	120	0	228	0	1.6	11.9	1.9	19.5	26.2
132	ESM 142 BELTON SWIP	12	NERE OTTABATO	D/D	IR	W.I.F.C	2,397	1,571	0.5	67,053	6	7.0	39,000	80	0	48	0	3.2	7.7	1.2	15.3	21.2
133	ESM 143 PETAAP SWIP	12	MAGUIWANO	D/D	IR	W.I.F.C	2,428	1,571	1.0	89,613	6	7.0	49,200	80	0	93	0	9.6	7.4	1.6	19.9	35.5
134	ESM 144 LOOK SWIP	12	NERE OTTABATO	D/D	IR	W.I.F.C	2,441	1,571	1.0	241,742	9	9.0	37,000	250	0	99	0	14.4	12.1	4.7	38.8	39.3
135	ESM 145 DALINGAYEN SWIP	12	NERE OTTABATO	D/D	IR	W.I.F.C	2,443	1,571	0.9	100,789	4	8.0	34,000	120	0	38	0	6.4	8.2	2.6	33.0	13.9
136	ESM 146 TINDIRAN SWIP	12	SULITAN KIBARAT	D/D	IR	W.I.F.C	2,314	1,256	0.8	78,125	2	14.0	19,000	100	0	75	0	3.2	6.4	1.3	22.3	31.0
137	ESM 147 BUSOK SWIP	12	SULITAN KIBARAT	D/D	IR	W.I.F.C	2,069	1,256	0.2	35,973	2	6.0	13,167	20	0	21	0	3.2	3.5	0.3	10.0	29.8
138	ESM 149 LANCEFA SWIP	12	SULITAN KIBARAT	D/D	IR	W.I.F.C	2,159	1,256	1.0	286,642	14	8.0	20,000	175	0	86	0	22.4	8.9	2.2	27.2	60.1
139	ESM 150 NEW CARMEN	12	NERE OTTABATO	D/D	IR	W.I.F.C	2,593	1,256	0.9	93,607	6	7.2	9,740	100	0	87	0	9.6	6.1	1.9	35.8	70.0

Note: D/D: Detailed Design  
IR: Irrigation; FC: Flood Control; IF: Inland Fishery; WF: Watershed Management

Table 4.4.1 Criteria of Priority Ranking (1/4)  
-- Project Rating (PR) --

$$PR = 30ZTS + 40ZEV + 30ZSE$$

Where,

TS = Merit Point of Technical Soundness

EV = Merit Point of Economic/Financial Viability

SE = Merit Point of Social/Environmental Impacts

Table 4.4.1 Criteria of Priority Ranking (2/4)  
 -- Merit Point of Technical Soundness (TS) --

$$TS(30) = 20ZRF(6) + 20ZSE(6) + 10ZCD(3) + 10ZCW(3) + 20ZFC(6) + 20ZTD(6)$$

Where,

RF = Water Resources Reliability Factor

SE = Storage Efficiency

CD = Unit Cost of Dam Construction

CW = Unit Cost of Reservoir Water

FC = Effect of Flood Control

TD = Degree of Technical Difficulties

FACTORS FOR EVALUATION	MERIT POINTS
(1) $RF = (\text{Drainage Area} \times \text{Annual Rainfall}) / \text{Storage Capacity}$	
(a) Less than 7 (too large dam)	50
(b) Between 7 and 12 (adequate scale)	100
(c) More than 12 (too small dam)	50
(2) $SE = \text{Effective Storage Capacity} / \text{Embankment Volume}$	
(a) Less than 5	50
(b) Between 5 and 30	$50 + ((SE - 5) \times 2)$
(c) More than 30	100
(3) $CD = \text{Dam Construction Cost} / \text{Embankment Volume} (\text{₱}/\text{m}^3)$	
(a) 200 and above	50
(b) Between 100 and 200	$100 - ((CD - 100) / 2)$
(c) Below 100	100
(4) $CW = \text{Dam Construction Cost} / \text{Storage Capacity} (\text{₱}/\text{m}^3)$	
(a) 30 and above	50
(b) Between 10 and 30	$100 - ((CW - 10) \times 2.5)$
(c) Below 10	100
(5) $FC = (\text{Reservoir Area at Full Water Level} \times \text{Overflow Depth}) / \text{Drainage Area (mm)}$	
(a) Less than 50	50
(b) Between 50 and 300	$50 + ((FC - 50) \times 0.2)$
(c) More than 300	100
(6) TD = Degree of Technical Difficulties for Construction Length of access road, availability of embankment materials, easiness of foundation treatment, diversion works and closure of river, etc. are considered.	
(a) High	50
(b) Medium	75
(c) Low	100

Table 4.4.1 Criteria of Priority Ranking (3/4)  
 --Merit Point of Economic/Financial Viability (EV) --

$$EV(40) = 40ZIR(16) + 10ZEO(4) + 10ZPB(4) + 30ZRB(12) + 10ZFR(4)$$

Where,

- IR = Economic Internal Rate of Return
- EO = Increase of Employment Opportunity
- PB = Number of Project Beneficiaries
- RB = Repayability of Beneficiaries
- FR = Annual Fund Requirement

FACTORS FOR EVALUATION	MERIT POINTS
(1) IR = Economic Internal Rate of Return (%)	
(a) Less than 10	50
(b) Between 10 and 20	50+((IR-10)x5)
(c) More than 20	100
(2) EO = ((Construction Cost of Dam) x 0.15)/100 (man-days) The number of employee is estimated.	
(a) Less than 5,000	50
(b) Between 5,000 and 10,000	50+((EO-5,000)x0.01)
(c) More than 10,000	100
(3) PB = Number of Project Beneficiaries (families) Estimated from irrigation area, generated power, etc., if not mentioned in the reports.	
(a) Less than 100	50
(b) Between 100 and 300	50+((PB-100)x0.25)
(c) More than 300	100
(4) RB = Increase of Annual Income / (Annual Amortization + Annual O&M Costs) Annual Amortization = (Cost for Irrigation Facilities)x0.9/25yrs Annual O&M Costs = (Cost for Irrigation Facilities)x0.025	
(a) Less than 10	50
(b) Between 10 and 20	50+((RB-10)x5)
(c) More than 20	100
(5) FR = Dam Construction Cost / Construction Period (P/year)	
(a) More than 6 million	50
(b) Between 2 million and 6 million	100-((FR-2)x12.5)
(c) Less than 2 million	100



Table 4.4.1 Criteria of Priority Ranking (4/4)  
 -- Merit Point of Social/Environmental Impacts (SE) --

$$SE(30) = 33ZDI(10) + 33ZRC(10) + 17ZLA(5) + 17ZEI(5)$$

Where,

- DI = Equitable Distribution of Income  
 RC = Relation with CARP  
 LA = Degree of Land Acquisition Problem  
 EI = Environmental Impacts

FACTORS FOR EVALUATION	MERIT POINTS
(1) DI = Income Class of Municipalities (Class I to VI)	
(a) Class I (more than ₱15 million)	30
(b) Class II (₱10 million to ₱15 million)	30
(c) Class III (₱5 million to ₱10 million)	65
(d) Class IV (₱3 million to ₱5 million)	65
(e) Class V (₱1 million to ₱3 million)	100
(f) Class VI (less than ₱15 million)	100
(2) RC = Relation with CARP (Comprehensive Agrarian Reform Program)	
(a) Priority Province in terms of Project Development and Implementation of the CARP Program	100
(b) Other Provinces	0
(3) LA = Existing Agricultural Land in the Proposed Reservoir Area (ha)	
(a) More than 10	50
(b) Between 5 and 10	75
(c) Less than 5	100
(4) EI = Reservoir Area (ha)	
(a) More than 100	50
(b) Between 5 and 100	$100 - ((EI - 5) / 1.9)$
(c) Less than 5	100

Table 5.3.1 Summary of Technical Assessment (1/4)

Agency No.	Present Status	Group of Tech.Assess.	Next Step and Major Review Works
DPWH	1	D/D	D-3 Review of project planning
DPWH	2	D/D	D-1 Ready to construction
DPWH	3 *	F/S	F-2 Modification of foundation treatment and review of project planning
DPWH	6	D/D	D-3 Review of project planning
DPWH	7 *	D/D	D-4 Modification of foundation treatment and raising dam height and review of project planning
DPWH	8 *	D/D	D-4 Modification zoning and review of project planning
DPWH	9 *	D/D	D-2 Modification of foundation treatment, raising dam height, modification of spillway type and diversion work
DPWH	11	F/S	F-1 Ready to detailed design
DPWH	13	D/D	D-1 Ready to construction
DPWH	14	D/D	D-1 Ready to construction
DPWH	15	D/D	D-1 Ready to construction
DPWH	16	F/S	F-1 Ready to detailed design
DPWH	17	Pre-F/S	P-1 Ready to feasibility study
DPWH	18	Pre-F/S	P-2 Review of pre-feasibility study
DPWH	19	Pre-F/S	P-1 Ready to feasibility study
DPWH	20	Pre-F/S	P-1 Ready to feasibility study
DPWH	21	Pre-F/S	P-1 Ready to feasibility study
DPWH	22	Pre-F/S	P-2 Review of pre-feasibility study
DPWH	25	Pre-F/S	P-1 Ready to feasibility study
DPWH	26	Pre-F/S	P-1 Ready to feasibility study
DPWH	27	Pre-F/S	P-1 Ready to feasibility study
DPWH	28	Pre-F/S	P-2 Review of pre-feasibility study
DPWH	33	F/S	F-3 Repeat from feasibility study
NIA	4 *	D/D	D-4 Modification of foundation treatment and review of project planning
NIA	6 *	D/D	D-2 Modification of design of diversion work
NIA	7 *	D/D	D-1 Ready to construction
NIA	9 *	D/D	D-4 Modification of foundation treatment and further study of diversion work, and review of project planning
NIA	11 *	D/D	D-4 Review of design of diversion work, and review of project planning
NIA	12	D/D	D-1 Ready to construction
NIA	14	D/D	D-1 Ready to construction
NIA	15 *	D/D	D-2 Modification of foundation treatment
NIA	20	Pre-F/S	P-1 Ready to feasibility study
NIA	21	Pre-F/S	P-1 Ready to feasibility study
NIA	22	Pre-F/S	P-2 Review of pre-feasibility study
NIA	23	Pre-F/S	P-2 Review of pre-feasibility study
NIA	25	Pre-F/S	P-1 Ready to feasibility study
NIA	26	Pre-F/S	P-2 Review of pre-feasibility study
NIA	27	Pre-F/S	P-1 Ready to feasibility study
NIA	29	Pre-F/S	P-1 Ready to feasibility study
NIA	31	Pre-F/S	P-2 Review of pre-feasibility study
NIA	32	Pre-F/S	P-2 Review of pre-feasibility study
NIA	47	Pre-F/S	P-1 Ready to feasibility study
NIA	48	Pre-F/S	P-1 Ready to feasibility study
NIA	49	Pre-F/S	P-1 Ready to feasibility study
NIA	53	Pre-F/S	P-1 Ready to feasibility study
NIA	55	Pre-F/S	P-2 Review of pre-feasibility study
NIA	56	Pre-F/S	P-2 Review of pre-feasibility study
NIA	57	Pre-F/S	P-1 Ready to feasibility study
NIA	58	Pre-F/S	P-1 Ready to feasibility study
NIA	59	Pre-F/S	P-1 Ready to feasibility study
NIA	72	Pre-F/S	P-2 Review of pre-feasibility study
NIA	97	Pre-F/S	P-1 Ready to feasibility study
NIA	98	Pre-F/S	P-1 Ready to feasibility study
NIA	99	Pre-F/S	P-1 Ready to feasibility study
NIA	100	Pre-F/S	P-1 Ready to feasibility study
NIA	101	Pre-F/S	P-1 Ready to feasibility study
NIA	102	Pre-F/S	P-1 Ready to feasibility study
NIA	103	Pre-F/S	P-1 Ready to feasibility study
NIA	104	Pre-F/S	P-1 Ready to feasibility study
NIA	106	Pre-F/S	P-1 Ready to feasibility study
NIA	107	Pre-F/S	P-1 Ready to feasibility study

Table 5.3.1 Summary of Technical Assessment (2/4)

Agency No.	Present Status	Group of Tech.Assess.	Next Step and Major Review Works
NIA 108	Pre-F/S	P-1	Ready to feasibility study
NIA 111	Pre-F/S	P-1	Ready to feasibility study
NIA 112	Pre-F/S	P-1	Ready to feasibility study
NIA 119	Pre-F/S	P-1	Ready to feasibility study
NIA 120	Pre-F/S	P-1	Ready to feasibility study
NIA 121	Pre-F/S	P-1	Ready to feasibility study
NIA 122	Pre-F/S	P-2	Review of pre-feasibility study
NIA 128	Pre-F/S	P-1	Ready to feasibility study
NIA 130	Pre-F/S	P-1	Ready to feasibility study
NIA 131	Pre-F/S	P-1	Ready to feasibility study
NIA 132	Pre-F/S	P-1	Ready to feasibility study
NIA 133	Pre-F/S	P-1	Ready to feasibility study
NIA 136	Pre-F/S	P-1	Ready to feasibility study
NIA 138	Pre-F/S	P-1	Ready to feasibility study
NIA 139	Pre-F/S	P-1	Ready to feasibility study
NIA 141	Pre-F/S	P-1	Ready to feasibility study
NIA 147	Pre-F/S	P-1	Ready to feasibility study
NIA 148	Pre-F/S	P-1	Ready to feasibility study
NIA 149	Pre-F/S	P-1	Ready to feasibility study
NIA 150	Pre-F/S	P-1	Ready to feasibility study
NIA 152	Pre-F/S	P-1	Ready to feasibility study
NIA 154	Pre-F/S	P-1	Ready to feasibility study
NIA 157	Pre-F/S	P-1	Ready to feasibility study
NIA 158	Pre-F/S	P-2	Review of pre-feasibility study
NIA 163	Pre-F/S	P-2	Review of pre-feasibility study
NIA 186	Pre-F/S	P-1	Ready to feasibility study
NIA 187	Pre-F/S	P-1	Ready to feasibility study
NIA 188	Pre-F/S	P-1	Ready to feasibility study
NIA 190	Pre-F/S	P-1	Ready to feasibility study
BSWM 1	D/D	D-3	Review of project planning
BSWM 2 *	D/D	D-4	Raising dam height and review of project planning
BSWM 3 *	D/D	D-4	Raising dam height and review of project planning
BSWM 4	D/D	D-1	Ready to construction
BSWM 5 *	D/D	D-2	Raising dam height
BSWM 6 *	D/D	D-4	Raising dam height and review of project planning
BSWM 7 *	D/D	D-2	Raising dam height
BSWM 8	D/D	D-1	Ready to construction
BSWM 9	D/D	D-1	Ready to construction
BSWM 10	D/D	D-1	Ready to construction
BSWM 11 *	D/D	D-2	Raising dam height
BSWM 12	D/D	D-1	Ready to construction
BSWM 13	D/D	D-3	Review of project planning
BSWM 14	D/D	D-1	Ready to construction
BSWM 15 *	D/D	D-2	No drawing
BSWM 16	D/D	D-1	Ready to construction
BSWM 17	D/D	D-1	Ready to construction
BSWM 18	D/D	D-1	Ready to construction
BSWM 19	D/D	D-1	Ready to construction
BSWM 20	D/D	D-1	Ready to construction
BSWM 21	D/D	D-3	Review of project planning
BSWM 23 *	D/D	D-4	Raising dam height and review of project planning
BSWM 24 *	D/D	D-4	Raising dam height and review of project planning
BSWM 25	D/D	D-1	Ready to construction
BSWM 26	D/D	D-3	Review of project planning
BSWM 27	D/D	D-3	Review of project planning
BSWM 28	D/D	D-3	Review of project planning
BSWM 29	D/D	D-1	Ready to construction
BSWM 30 *	D/D	D-2	Raising dam height
BSWM 31	D/D	D-1	Ready to construction
BSWM 32	D/D	D-1	Ready to construction
BSWM 33 *	D/D	D-2	No drawing, raising dam height
BSWM 34 *	D/D	D-2	Raising dam height
BSWM 35 *	D/D	D-2	Raising dam height
BSWM 36	D/D	D-1	Ready to construction
BSWM 37 *	D/D	D-2	Raising dam height
BSWM 38	D/D	D-1	Ready to construction
BSWM 39 *	D/D	D-2	Raising dam height

Table 5.3.1 Summary of Technical Assessment (3/4)

Agency No.	Present Status	Group of Tech.Assess.	Next Step and Major Review Works
BSWM 40	*	D/D	D-2 Raising dam height
BSWM 41		D/D	D-1 Ready to construction
BSWM 42		D/D	D-1 Ready to construction
BSWM 43	*	D/D	D-2 Raising dam height
BSWM 44	*	D/D	D-4 Raising dam height and review of project planning
BSWM 45	*	D/D	D-2 Raising dam height
BSWM 46		D/D	D-1 Ready to construction
BSWM 47		D/D	D-1 Ready to construction
BSWM 48		D/D	D-1 Ready to construction
BSWM 49		D/D	D-1 Ready to construction
BSWM 50		D/D	D-1 Ready to construction
BSWM 51	*	D/D	D-2 Raising dam height
BSWM 52		D/D	D-1 Ready to construction
BSWM 56		D/D	D-1 Ready to construction
BSWM 57		D/D	D-1 Ready to construction
BSWM 58		D/D	D-1 Ready to construction
BSWM 59		D/D	D-1 Ready to construction
BSWM 60	*	D/D	D-2 Raising dam height
BSWM 61		D/D	D-1 Ready to construction
BSWM 62	*	D/D	D-2 Raising dam height
BSWM 63		D/D	D-1 Ready to construction
BSWM 64		D/D	D-1 Ready to construction
BSWM 65		D/D	D-3 Review of project planning
BSWM 66		D/D	D-1 Ready to construction
BSWM 67		D/D	D-1 Ready to construction
BSWM 68		D/D	D-1 Ready to construction
BSWM 69	*	D/D	D-2 Raising dam height
BSWM 70		D/D	D-1 Ready to construction
BSWM 71	*	D/D	D-2 Raising dam height
BSWM 72		D/D	D-1 Ready to construction
BSWM 73		D/D	D-1 Ready to construction
BSWM 74		D/D	D-1 Ready to construction
BSWM 75		D/D	D-1 Ready to construction
BSWM 76		D/D	D-3 Review of project planning
BSWM 77		D/D	D-1 Ready to construction
BSWM 78		D/D	D-1 Ready to construction
BSWM 79		D/D	D-1 Ready to construction
BSWM 80	*	D/D	D-2 Raising dam height
BSWM 82	*	D/D	D-4 Raising dam height and review of project planning
BSWM 83	*	D/D	D-2 Raising dam height
BSWM 84		D/D	D-1 Ready to construction
BSWM 85	*	D/D	D-2 Raising dam height
BSWM 86		D/D	D-1 Ready to construction
BSWM 87	*	D/D	D-2 Raising dam height
BSWM 88	*	D/D	D-2 Raising dam height
BSWM 89	*	D/D	D-2 Raising dam height
BSWM 90		D/D	D-1 Ready to construction
BSWM 91		D/D	D-1 Ready to construction
BSWM 92	*	D/D	D-2 Layout of spillway
BSWM 93		D/D	D-1 Ready to construction
BSWM 94		D/D	D-1 Ready to construction
BSWM 95		D/D	D-1 Ready to construction
BSWM 96		D/D	D-1 Ready to construction
BSWM 97		D/D	D-1 Ready to construction
BSWM 98		D/D	D-1 Ready to construction
BSWM 99		D/D	D-1 Ready to construction
BSWM 100		D/D	D-1 Ready to construction
BSWM 101		D/D	D-1 Ready to construction
BSWM 102		D/D	D-1 Ready to construction
BSWM 103		D/D	D-1 Ready to construction
BSWM 108		D/D	D-3 Review of project planning
BSWM 109		D/D	D-1 Ready to construction
BSWM 110		D/D	D-1 Ready to construction
BSWM 111	*	D/D	D-2 Raising dam height
BSWM 112		D/D	D-1 Ready to construction
BSWM 113		D/D	D-1 Ready to construction
BSWM 114		D/D	D-1 Ready to construction

Table 5.3.1 Summary of Technical Assessment (4/4)

Agency No.	Present Status	Group of Tech.Assess.	Next Step and Major Review Works
BSWM 115	D/D	D-3	Review of project planning
BSWM 117	O/D	D-1	Ready to construction
BSWM 118	D/D	D-1	Ready to construction
BSWM 119	O/D	D-1	Ready to construction
BSWM 120	D/D	D-1	Ready to construction
BSWM 121	D/D	D-1	Ready to construction
BSWM 122	O/D	D-1	Ready to construction
BSWM 123	D/D	D-1	Ready to construction
BSWM 124	D/D	D-1	Ready to construction
BSWM 125	D/D	D-1	Ready to construction
BSWM 126	D/D	D-1	Ready to construction
BSWM 127	O/D	D-1	Ready to construction
BSWM 128	D/D	D-1	Ready to construction
BSWM 129	D/D	D-1	Ready to construction
BSWM 130 *	D/D	D-2	Raising dam height
BSWM 131	D/D	D-1	Ready to construction
BSWM 132	O/D	D-1	Ready to construction
BSWM 133	D/D	D-1	Ready to construction
BSWM 134 *	D/D	D-4	Raising dam height
BSWM 135	D/D	D-1	Ready to construction
BSWM 136	D/D	D-1	Ready to construction
BSWM 137	D/D	D-1	Ready to construction
BSWM 138	O/D	D-1	Ready to construction
BSWM 139	D/D	D-1	Ready to construction
BSWM 140 *	D/D	D-2	Raising dam height
BSWM 141	D/D	D-1	Ready to construction
BSWM 142	D/D	D-1	Ready to construction
BSWM 143	D/D	D-1	Ready to construction
BSWM 144	D/D	D-1	Ready to construction
BSWM 145	D/D	D-1	Ready to construction
BSWM 146	D/D	D-1	Ready to construction
BSWM 147	D/D	D-1	Ready to construction
BSWM 149 *	D/D	D-2	Raising dam height
BSWM 150	D/D	D-1	Ready to construction
BSWM 151	D/D	D-1	Ready to construction

Note: \* ; Projects of which modification of dam design is required.

Table 8.3.1 Implementation Schedule of SWIM Projects in 10 Year Action Program (1/6)

W/S: Study for Watershed Protection  
 REV: Review of Previous Study  
 \*: The implementation schedules will be determined under the DECF SWIM Project.

F/S: Feasibility Study  
 D/D: Detailed Design  
 P/N: Preparatory Work  
 CON: Construction

IMPLEMENTATION SCHEDULE

Rank	Agency No	Region	Name	1st Five Year					2nd Five Year				
				1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
No.			Province	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
<b>DPWH</b>													
<b>*A* Group</b>													
<b>(1) IRR-10%</b>													
21	1	DPWH	1 : PANGASINAN	F/S	D/D	P/N	CON	CON					
19	2	DPWH	1 : PANGASINAN		F/S	P/N	D/D	P/N					
26	3	DPWH	2 : ISABELA	F/S	D/D	P/N	CON						
27	4	DPWH	2 : ISABELA		F/S	P/N	D/D	P/N					
20	5	DPWH	1 : PANGASINAN		F/S	D/D	P/N	CON					
17	6	DPWH	1 : PANGASINAN		F/S	D/D	P/N	CON					
<b>OECD Projects</b>													
7	DPWH	2	CAR : WALANGA-APAYAO										
15	8	DPWH	12 : NORTH COTABATO										
9	DPWH	9	4 : RIZAL										
<b>*B* Group</b>													
<b>(1) IRR-10%</b>													
10	DPWH	13	8 : NORTHERN SAMAR				P/N	CON					
33	11	DPWH	11 : DAVAO DEL NORTE				F/S	D/D	P/N				
14	12	DPWH	12 : DAVAO DEL SUR				F/S	D/D	P/N				
25	13	DPWH	2 : NUEVA VIZCAYA				F/S	D/D	P/N				
11	14	DPWH	5 : MASBATE				D/D	P/N	CON				
16	15	DPWH	12 : NORTH COTABATO				D/D	P/N	CON				
<b>(2) IRR-10%</b>													
28	16	DPWH	4 : OR. MINDORO	REV			F/S	D/D	P/N	CON			
18	17	DPWH	1 : PANGASINAN	REV			F/S	D/D	P/N	CON			
22	18	DPWH	6 : ILOILO	REV			F/S	D/D	P/N	CON			
6	19	DPWH	4 : PALAWAN										
7	20	DPWH	4 : QUEZON		REV								
8	21	DPWH	4 : RIZAL										
3	22	DPWH	3 : BATAAN										
1	23	DPWH	1 : LA UNION										
<b>NIA</b>													
<b>*A* Group</b>													
<b>(1) IRR-10%</b>													
132	1	NIA	7 : BOHOL	F/S	D/D	P/N	CON						
136	2	NIA	7 : BOHOL	F/S	D/D	P/N	CON						
119	3	NIA	7 : BOHOL	F/S	D/D	P/N	CON						
49	4	NIA	3 : NUEVA ECCLIA	F/S	D/D	P/N	CON						
111	5	NIA	5 : SOCSOGON	F/S	D/D	P/N	CON						
112	6	NIA	7 : BOHOL	F/S	D/D	P/N	CON						
133	7	NIA	7 : BOHOL	F/S	D/D	P/N	CON						
12	8	NIA	7 : BOHOL	F/S	D/D	P/N	CON						
138	9	NIA	7 : BOHOL	F/S	D/D	P/N	CON						
141	10	NIA	7 : BOHOL	F/S	D/D	P/N	CON						
130	11	NIA	7 : BOHOL	F/S	D/D	P/N	CON						



Table 8.3.1 Implementation Schedule of SWIM Projects in 10 Year Action Program (3/6)

F/S: Feasibility Study  
 D/D: Detailed Design  
 P/M: Preparatory Work  
 CON: Construction

W/S: Study for Watershed Protection  
 REV: Review of Previous Study  
 \* : The implementation schedules will be determined under the DECF SWIM Project.

IMPLEMENTATION SCHEDULE

Rank No.	Agency No.	Region	Name of Province	1991		1992		1993		1994		1995		1996		1997		1998		1999		2000	
				1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
54	NIA 188	8	SOUTHERN LEYTE																				
55	NIA 148	7	CEBU																				
56	NIA 22	1	LA UNION																				
57	NIA 31	1	PANGASINAN																				
58	NIA 163	7	SIOUJOR																				
59	NIA 23	1	LA UNION																				
60	NIA 159	7	NEGROS ORIENTAL																				
61	NIA 9	7	NEGROS ORIENTAL																				
62	NIA 56	3	PAMPANGA																				
63	NIA 32	1	PANGASINAN																				
64	NIA 26	1	PANGASINAN																				
65	NIA 72	4	LAGUNA																				
66	NIA 55	3	PAMPANGA																				
67	NIA 122	7	BOHOL																				
68	NIA 8	1	PANGASINAN																				
69	NIA 35	2	ISABELA																				
70	NIA 19	1	PANGASINAN																				
71	NIA 45	2	ISABELA																				
72	NIA 17	1	PANGASINAN																				
73	NIA 144	12	MAGUINDANAO																				
74	NIA 74	3	NUOVA ECILJA																				
75	NIA 53	3	NUOVA ECILJA																				
76	NIA 51	2	ISABELA																				
77	NIA 16	1	PANGASINAN																				
78	NIA 37	2	ISABELA																				
79	NIA 127	10	BUKIDNON																				
80	NIA 102	7	BOHOL																				
81	NIA 72	3	NUOVA ECILJA																				
82	NIA 32	2	ISABELA																				
83	NIA 9	1	PANGASINAN																				
84	NIA 103	7	BOHOL																				
85	NIA 56	7	BOHOL																				
86	NIA 49	2	ISABELA																				
87	NIA 64	3	NUOVA ECILJA																				
88	NIA 138	11	DAVAO DEL NORTE																				
89	NIA 14	1	PANGASINAN																				
90	NIA 46	2	ODORHO																				
91	NIA 174	10	BUKIDNON																				
92	NIA 18	1	PANGASINAN																				



Table 8.3.1 Implementation Schedule of SWIM Projects in 10 Year Action Program (4/6)

F/S: Feasibility Study  
 D/D: Detailed Design  
 P/M: Preparatory Work  
 CON: Construction

W/S: Study for Watershed Protection  
 REV: Review of Previous Study  
 \* : The implementation schedules will be determined under the OECF SWIM Project.

IMPLEMENTATION SCHEDULE

Rank No.	Agency No	Region of Province	Name	1st Five Year				2nd Five Year												
				1st	2nd	1st	2nd	1st	2nd	1st	2nd									
27	BSMP 94	6	ANTIQUE																	
28	BSMP 97	7	BOHOL																	
29	BSMP 71	3	NUOVA ECLJA																	
30	BSMP 60	3	NUOVA ECLJA																	
31	BSMP 147	12	SULTAN KUDARAT																	
32	BSMP 95	7	BOHOL																	
33	BSMP 42	2	ISABELA																	
34	BSMP 31	2	ISABELA																	
35	BSMP 69	3	NUOVA ECLJA																	
36	BSMP 34	2	NUOVA VIZCAYA																	
37	BSMP 48	2	QUIRINO																	
38	BSMP 36	2	NUOVA VIZCAYA																	
39	BSMP 140	11	DAVAO DEL NORTE																	
40	BSMP 75	3	NUOVA ECLJA																	
41	BSMP 67	3	NUOVA ECLJA																	
42	BSMP 40	2	NUOVA VIZCAYA																	
43	BSMP 150	12	SULTAN KUDARAT																	
44	BSMP 59	2	CAGAYAN																	
45	BSMP 128	10	AGUSAN D. NORTE																	
46	BSMP 33	2	CAGAYAN																	
47	BSMP 130	10	AGUSAN D. NORTE																	
48	BSMP 66	3	NUOVA ECLJA																	
49	BSMP 3	1	ILOCOS SUR																	
50	BSMP 85	5	ALBAY																	
51	BSMP 120	9	ZAMBONIGA D. SUR																	
52	BSMP 83	5	CAPARINES NORTE																	
53	BSMP 114	8	EASTERN SAMAR																	
54	BSMP 82	5	WASGATE																	
55	BSMP 112	8	EASTERN SAMAR																	
56	BSMP 139	11	DAVAO DEL NORTE																	
57	BSMP 59	7	NEGIROS ORIENTAL																	
58	BSMP 80	4	OCCID. MINDORO																	
59	BSMP 91	6	CAPIZ																	
60	BSMP 141	11	DAVAO DEL SUR																	
61	BSMP 131	10	AGUSAN D. NORTE																	
62	BSMP 79	4	ORIENT. MINDOR																	
63	BSMP 133	10	BUKIDNON																	
64	BSMP 143	12	NORTH COTABATO																	
65	BSMP 135	11	SOUTH COTABATO																	
66	BSMP 77	4	ORIENT. MINDOR																	
67	BSMP 112	8	LEYTE																	
68	BSMP 145	12	NORTH COTABATO																	
69	BSMP 98	7	BOHOL																	
70	BSMP 73	3	NUOVA ECLJA																	

Table 8.3.1 Implementation Schedule of SWIM Projects in 10 Year Action Program (5/6)

F/S: Feasibility Study  
 D/D: Detailed Design  
 P/R: Preparatory Work  
 CON: Construction

W/S: Study for Watershed Protection  
 REV: Review of Previous Study  
 \* : The implementation schedules will be determined under the OECF SWIM Project.

IMPLEMENTATION SCHEDULE

Rank No.	Agency No.	Region	Name of Province	1991		1992		1993		1994		1995		1996		1997		1998		2000	
				1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
71	BSMR 88	6	AKLAN																		
72	BSMR 65	3	PAJALAC																		
73	BSMR 117	9	ZAMBOANGA D.SUR																		
74	BSMR 149	12	SULTAN KUDARAT																		
75	BSMR 90	6	ANTIQUE																		
76	BSMR 110	8	NORTHERN SAMAR																		
77	BSMR 134	11	DAVAO ORIENTAL																		
78	BSMR 62	3	BULACAN																		
79	BSMR 61	3	NUIEVA ECILJA																		
*B* Group																					
(1) IRR-10x																					
80	BSMR 109	8	WESTERN SAMAR																		
81	BSMR 20	1	ILOCOS NORTE																		
82	BSMR 100	7	NEGROS ORIENTAL																		
83	BSMR 5	1	ILOCOS NORTE																		
84	BSMR 84	5	COMARINES NORTE																		
85	BSMR 30	2	NUIEVA VISCAYA																		
86	BSMR 52	2	ISABELA																		
87	BSMR 10	1	PANGASIHAN																		
88	BSMR 146	12	NORTH COTABATO																		
89	BSMR 123	9	ZAMBOANGA D.SUR																		
90	BSMR 47	2	QUIRINO																		
91	BSMR 50	2	ISABELA																		
92	BSMR 39	2	CAGAYAN																		
93	BSMR 78	4	ORIENT. HINDOCO																		
94	BSMR 142	11	DAVAO DEL SUR																		
95	BSMR 86	5	CATANDUANES																		
96	BSMR 119	9	ZAMBOANGA D.SUR																		
97	BSMR 132	10	AGUSAN D.NORTE																		
98	BSMR 57	2	CAGAYAN																		
99	BSMR 11	1	ILOCOS NORTE																		
100	BSMR 151	12	NORTH COTABATO																		
101	BSMR 43	2	ISABELA																		
102	BSMR 38	2	NUIEVA VIZCAYA																		
103	BSMR 92	6	AKLAN																		
104	BSMR 7	1	ILOCOS NORTE																		
105	BSMR 25	1	ILOCOS NORTE																		
106	BSMR 125	10	AGUSAN D.NORTE																		
107	BSMR 29	2	CAGAYAN																		
108	BSMR 121	9	ZAMBOANGA D.SUR																		
109	BSMR 101	7	NEGROS ORIENTAL																		
110	BSMR 118	9	ZAMBOANGA D.SUR																		
111	BSMR 93	6	AKLAN																		
112	BSMR 129	10	AGUSAN D.NORTE																		
113	BSMR 113	8	SOUTHERN SAMAR																		

Table 8.3.1 Implementation Schedule of SWIM Projects in 10 Year Action Program (6/6)

IMPLEMENTATION SCHEDULE

F/S: Feasibility Study  
 D/D: Detailed Design  
 P/M: Preparatory Work  
 CON: Construction

W/S: Study for Watershed Protection  
 REV: Review of Previous Study  
 \* : The implementation schedules will be determined under the OECD SWIM Project.

:Rank :No.	: Agency No :No.	: Region : Province	: Name : of	: 1991		: 1992		: 1993		: 1994		: 1995		: 1996		: 1997		: 1998		: 1999		: 2000	
				: 1st	: 2nd	: 1st	: 2nd	: 1st	: 2nd	: 1st	: 2nd	: 1st	: 2nd	: 1st	: 2nd	: 1st	: 2nd	: 1st	: 2nd	: 1st	: 2nd	: 1st	: 2nd
: 114	BSM 137	: 11	: SOUTH COTABATO	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 115	BSM 87	: 6	: AKLAK	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 116	BSM 56	: 2	: CAGAYAN	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 117	BSM 58	: 2	: CAGAYAN	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 118	BSM 41	: 2	: NUEVA VISAYA	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 119	BSM 89	: 6	: AKLAK	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 120	BSM 4	: 1	: ILOCOS SUR	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 121	BSM 12	: 1	: ILOCOS SUR	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 122	BSM 126	: 10	: SURIGAO D. NORTE	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 123	BSM 136	: 11	: DANAO ORIENTAL	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 124	BSM 68	: 3	: BULAKAN	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 125	BSM 122	: 9	: ZAMBANGA D. SUR	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 126	BSM 70	: 3	: BULAKAN	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
:	(2) IRR-104	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 127	BSM 6	: 1	: ILOCOS NORTE	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 128	BSM 21	: 1	: ILOCOS NORTE	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 129	BSM 44	: 2	: CAGAYAN CLAYER	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 130	BSM 1	: 1	: ILOCOS NORTE	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 131	BSM 28	: CAR	: ABR	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 132	BSM 2	: 1	: ILOCOS SUR	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 133	BSM 76	: 3	: NUEVA ECLJA	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 134	BSM 26	: CAR	: ABR	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 135	BSM 23	: 1	: ILOCOS NORTE	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 136	BSM 24	: 1	: ILOCOS NORTE	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 137	BSM 108	: 8	: NORTHERN SAMAR	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 138	BSM 13	: 1	: ILOCOS NORTE	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 139	BSM 27	: CAR	: ABR	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
: 140	BSM 115	: 8	: WESTERN SAMAR	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

Table 9.2.1 Financial Cost Estimates of SWIM Projects

(Unit: Pesos 1,000)

Cost Items	DPWH Projects	NIA Projects	BSHM Projects	Total
<b>I. Direct Cost</b>				
1. Dam	384,761 ( 81,912 )	894,213 (129,205 )	384,997 ( 79,751 )	1,663,971 (290,868 )
2. Irrigation	71,811 ( 23,460 )	271,799 ( 36,592 )	184,127 ( 45,356 )	527,737 (105,408 )
3. Mini-Hydropower	52,923 ( 4,288 )	20,044 ( 20,044 )	0 ( 0 )	72,967 ( 24,332 )
4. Water Supply	5,324 ( 0 )	0 ( 0 )	0 ( 0 )	5,324 ( 0 )
5. Contractor's Tax	25,741 ( 5,483 )	59,303 ( 9,292 )	28,456 ( 6,255 )	113,500 ( 21,030 )
Sub-total	540,560 (115,143 )	1,245,359 (195,133 )	597,580 (131,362 )	2,383,499 (441,638 )
<b>II. Indirect Cost</b>				
1. Land Acquisition	3,772 ( 833 )	45,529 ( 3,780 )	10,179 ( 2,585 )	59,480 ( 7,198 )
2. General Administration	16,217 ( 3,454 )	37,361 ( 5,854 )	17,927 ( 3,941 )	71,505 ( 13,249 )
3. Engineering Services	73,785 ( 11,514 )	205,853 ( 19,513 )	59,758 ( 13,136 )	339,396 ( 44,164 )
(1) F/S	4,414 ( 0 )	27,106 ( 0 )	0 ( 0 )	31,520 ( 0 )
(2) D/D	15,315 ( 0 )	54,211 ( 0 )	0 ( 0 )	69,526 ( 0 )
(3) C/S	54,056 ( 11,514 )	124,536 ( 19,513 )	59,758 ( 13,136 )	238,350 ( 44,164 )
4. Physical Contingency	87,450 ( 13,094 )	267,696 ( 22,428 )	68,544 ( 15,102 )	423,691 ( 50,625 )
Sub-total	181,224 ( 28,896 )	556,438 ( 51,575 )	156,409 ( 34,765 )	894,071 (115,236 )
Total (I & II)	721,784 (144,039 )	1,801,797 (246,708 )	753,989 (166,127 )	3,277,570 (556,874 )
<b>III. Watershed Management</b>				
1. Study (F/S,D/D)	5,615 ( 220 )	20,062 ( 1,303 )	9,470 ( 1,943 )	35,147 ( 3,466 )
2. General Administration	18,064 ( 710 )	65,377 ( 4,278 )	32,433 ( 6,649 )	115,874 ( 11,637 )
3. Engineering Measuring Cost	29,381 ( 1,240 )	100,509 ( 5,090 )	39,033 ( 7,993 )	168,923 ( 14,323 )
4. Vegetative Measuring Cost	68,458 ( 2,660 )	248,495 ( 16,300 )	124,629 ( 25,511 )	441,582 ( 44,471 )
Total (III)	121,518 ( 4,830 )	434,443 ( 26,971 )	205,565 ( 42,095 )	761,526 ( 73,896 )
<b>IV. Cost for Review Work</b>	2,948 ( 377 )	4,124 ( 1,683 )	2,249 ( 377 )	9,320 ( 2,437 )
<b>V. Grand Total(I to IV)</b>	846,250 (149,246 )	2,240,364 (275,363 )	961,803 (208,598 )	4,048,417 (633,207 )

Note: 1; Figures in the parentheses show the costs for the OECF Projects.  
 2; The total may not equal the sum of individual figures due to rounding.

Table 9.2.2 Financial Cost Estimates of Each of SWIM Projects (1/5)

(Unit: 1,000 Pesos)

:No.	Agency	No	:Cost for:		:Cost for :		Construction Cost				: Total : Project : Cost :	:Financial: O&M : Cost :
			: Review : : Works :	Cost : :F/S&D/D :	:Study of : :Watershed:	:Dam & App.: :Structure :	:Irriga- : :tion :	:Mini-hyd: : :Power :	Water : :Supply :	:Watershed: :Pro.Works:		
: 1	DPWH	1	: 323 :	0 :	0 :	33,125 :	2,219 :	4,937 :	0 :	0 :	40,605 :	264 :
: 2	DPWH	2	: 0 :	0 :	0 :	32,556 :	9,541 :	5,596 :	0 :	0 :	47,693 :	413 :
: 3	DPWH	3	: 175 :	1,205 :	150 :	15,524 :	0 :	0 :	7,264 :	3,010 :	27,329 :	190 :
: 4	DPWH	6	: 560 :	0 :	830 :	48,497 :	0 :	21,548 :	0 :	17,180 :	88,615 :	597 :
: 5	DPWH	7	: 965 :	0 :	500 :	41,399 :	5,547 :	13,221 :	0 :	10,300 :	71,932 :	517 :
: 6	DPWH	8	: 140 :	0 :	0 :	8,309 :	542 :	0 :	0 :	0 :	8,991 :	42 :
: 7	DPWH	9	: 377 :	0 :	0 :	36,969 :	9,984 :	0 :	0 :	0 :	47,330 :	332 :
: 8	DPWH	11	: 0 :	2,766 :	920 :	35,175 :	4,639 :	12,305 :	0 :	18,960 :	74,765 :	439 :
: 9	DPWH	13	: 0 :	0 :	0 :	18,815 :	4,659 :	0 :	0 :	0 :	23,474 :	160 :
: 10	DPWH	14	: 0 :	0 :	138 :	5,749 :	1,331 :	3,062 :	0 :	2,858 :	13,138 :	105 :
: 11	DPWH	15	: 0 :	0 :	220 :	38,299 :	11,094 :	0 :	0 :	4,610 :	54,223 :	358 :
: 12	DPWH	16	: 0 :	3,488 :	460 :	46,080 :	10,438 :	9,344 :	0 :	9,537 :	79,347 :	531 :
: 13	DPWH	17	: 0 :	1,042 :	0 :	8,619 :	4,570 :	0 :	0 :	0 :	14,232 :	110 :
: 14	DPWH	18	: 110 :	2,370 :	0 :	26,266 :	3,631 :	0 :	0 :	0 :	32,377 :	155 :
: 15	DPWH	19	: 0 :	592 :	110 :	4,948 :	2,670 :	0 :	0 :	2,264 :	10,584 :	64 :
: 16	DPWH	20	: 0 :	882 :	75 :	8,304 :	2,856 :	0 :	0 :	1,534 :	13,651 :	79 :
: 17	DPWH	21	: 0 :	872 :	0 :	7,698 :	3,429 :	0 :	0 :	0 :	11,998 :	87 :
: 18	DPWH	22	: 165 :	3,562 :	685 :	40,068 :	4,841 :	0 :	0 :	14,162 :	63,483 :	225 :
: 19	DPWH	25	: 0 :	1,136 :	325 :	11,927 :	2,420 :	0 :	0 :	6,711 :	22,520 :	84 :
: 20	DPWH	26	: 0 :	804 :	330 :	7,076 :	3,147 :	0 :	0 :	6,770 :	18,126 :	80 :
: 21	DPWH	27	: 0 :	862 :	535 :	9,103 :	1,815 :	0 :	0 :	11,057 :	23,372 :	64 :
: 22	DPWH	28	: 133 :	2,877 :	337 :	31,431 :	4,841 :	0 :	0 :	6,950 :	46,569 :	195 :
: 23	DPWH	33	: 0 :	892 :	0 :	8,231 :	2,775 :	0 :	0 :	0 :	11,897 :	86 :
: Total (DPWH):			2,948 :	23,350 :	5,615 :	524,167 :	96,988 :	70,014 :	7,264 :	115,903 :	846,250 :	5,175 :
: 1	NIA	4	: 546 :	0 :	630 :	46,198 :	15,736 :	6,968 :	0 :	11,760 :	81,838 :	608 :
: 2	NIA	6	: 270 :	0 :	0 :	22,244 :	6,656 :	6,357 :	0 :	0 :	35,528 :	328 :
: 3	NIA	7	: 0 :	0 :	673 :	22,508 :	7,766 :	3,542 :	0 :	13,908 :	48,396 :	301 :
: 4	NIA	9	: 1,764 :	0 :	600 :	49,407 :	60,366 :	0 :	0 :	12,399 :	124,535 :	1,345 :
: 5	NIA	11	: 368 :	0 :	0 :	40,606 :	5,547 :	0 :	0 :	0 :	46,521 :	260 :
: 6	NIA	12	: 0 :	0 :	390 :	32,795 :	9,984 :	0 :	0 :	8,096 :	51,266 :	314 :
: 7	NIA	14	: 0 :	0 :	200 :	26,005 :	5,103 :	0 :	0 :	4,180 :	35,488 :	196 :
: 8	NIA	15	: 499 :	0 :	0 :	41,235 :	12,053 :	9,293 :	0 :	0 :	63,080 :	565 :
: 9	NIA	20	: 0 :	3,535 :	640 :	35,503 :	10,408 :	0 :	0 :	13,290 :	63,376 :	302 :
: 10	NIA	21	: 0 :	1,886 :	485 :	21,991 :	2,420 :	0 :	0 :	10,010 :	36,792 :	117 :
: 11	NIA	22	: 111 :	2,394 :	528 :	27,028 :	3,389 :	0 :	0 :	10,914 :	44,364 :	153 :
: 12	NIA	23	: 47 :	1,025 :	400 :	11,641 :	1,452 :	0 :	0 :	8,180 :	22,746 :	66 :
: 13	NIA	25	: 0 :	2,387 :	470 :	19,824 :	10,650 :	0 :	0 :	9,700 :	43,031 :	255 :
: 14	NIA	26	: 112 :	2,409 :	150 :	29,197 :	1,452 :	0 :	0 :	3,070 :	36,390 :	127 :
: 15	NIA	27	: 0 :	1,463 :	460 :	17,312 :	2,420 :	0 :	0 :	9,450 :	31,106 :	99 :
: 16	NIA	29	: 0 :	2,186 :	0 :	21,857 :	6,051 :	0 :	0 :	0 :	30,094 :	181 :
: 17	NIA	31	: 15 :	332 :	60 :	3,264 :	968 :	0 :	0 :	1,203 :	5,843 :	28 :
: 18	NIA	32	: 53 :	1,146 :	60 :	12,710 :	1,815 :	0 :	0 :	1,280 :	17,064 :	76 :
: 19	NIA	47	: 0 :	24 :	0 :	267 :	121 :	0 :	0 :	0 :	411 :	3 :
: 20	NIA	48	: 0 :	34 :	0 :	357 :	121 :	0 :	0 :	0 :	512 :	3 :
: 21	NIA	49	: 0 :	1,750 :	550 :	19,104 :	5,567 :	0 :	0 :	11,310 :	38,281 :	155 :
: 22	NIA	53	: 0 :	451 :	75 :	4,827 :	1,815 :	0 :	0 :	1,540 :	8,707 :	45 :
: 23	NIA	55	: 31 :	669 :	0 :	7,115 :	1,331 :	0 :	0 :	0 :	9,146 :	48 :
: 24	NIA	56	: 16 :	336 :	0 :	3,764 :	484 :	0 :	0 :	0 :	4,600 :	22 :

Table 9.2.2 Financial Cost Estimates of Each of SWIM Projects (2/5)

(Unit: 1,000 Pesos)

No.	Agency	No.	Cost for:		Construction Cost					Total Project Cost	Financial: O&M Cost	
			Review Works	for F/S&D/D	Study of Watershed	Dam & App. Structure	Irriga- tion	Mini-hyd: Power	Water Supply			Watershed: Pro.Works
25	NIA	57	0	1,162	200	11,129	4,841	0	0	4,170	21,502	119
26	NIA	58	0	502	100	3,976	2,420	0	0	2,050	9,048	56
27	NIA	59	0	651	0	5,886	2,905	0	0	0	9,442	70
28	NIA	72	81	1,741	0	19,567	2,420	0	0	0	23,810	111
29	NIA	97	0	1,036	0	10,474	2,905	0	0	0	14,414	86
30	NIA	98	0	981	0	9,593	3,631	0	0	0	14,204	94
31	NIA	99	0	2,656	580	26,660	9,682	0	0	13,190	52,768	253
32	NIA	100	0	2,737	1,030	33,680	4,841	0	0	21,300	63,588	189
33	NIA	101	0	1,890	200	19,390	6,051	0	0	4,040	31,571	168
34	NIA	102	0	524	75	5,282	1,936	0	0	1,535	9,353	50
35	NIA	103	0	2,637	940	28,860	4,841	0	0	19,490	56,768	184
36	NIA	104	0	1,112	240	11,438	2,905	0	0	4,905	20,600	90
37	NIA	106	0	942	130	10,053	2,420	0	0	2,680	16,225	76
38	NIA	107	0	590	150	5,766	1,936	0	0	3,070	11,512	53
39	NIA	108	0	2,293	0	26,309	6,051	0	0	0	34,653	186
40	NIA	111	0	2,734	290	23,518	11,134	0	0	6,089	43,764	277
41	NIA	112	0	2,424	0	21,678	9,682	0	0	0	33,784	243
42	NIA	119	0	2,364	460	25,536	7,261	0	0	9,465	45,086	206
43	NIA	120	0	967	150	9,947	2,420	0	0	3,070	16,555	77
44	NIA	121	0	1,366	190	14,021	3,389	0	0	4,016	22,982	108
45	NIA	122	57	1,238	70	14,865	726	0	0	1,405	18,362	65
46	NIA	128	0	186	40	1,892	726	0	0	820	3,664	18
47	NIA	130	0	1,172	380	11,814	3,147	0	0	7,795	24,308	96
48	NIA	131	0	920	520	8,592	3,631	0	0	10,715	24,377	92
49	NIA	132	0	530	170	4,523	2,663	0	0	3,480	11,365	61
50	NIA	133	0	1,538	220	14,961	4,841	0	0	4,610	26,171	136
51	NIA	136	0	1,513	280	15,382	4,841	0	0	5,750	27,766	135
52	NIA	138	0	1,603	180	13,228	7,261	0	0	3,720	25,993	173
53	NIA	139	0	773	400	6,997	3,147	0	0	8,180	19,497	78
54	NIA	141	0	641	315	5,803	2,663	0	0	6,518	15,940	66
55	NIA	147	0	4,514	1,050	49,185	9,198	0	0	21,699	85,646	328
56	NIA	148	0	3,082	909	33,393	5,567	0	0	18,785	61,736	214
57	NIA	149	0	4,537	1,450	47,246	10,408	0	0	30,044	93,685	346
58	NIA	150	0	2,615	695	29,454	5,809	0	0	14,365	52,938	197
59	NIA	152	0	1,261	0	12,146	4,357	0	0	0	17,764	117
60	NIA	154	0	1,126	278	11,470	3,147	0	0	5,745	21,766	94
61	NIA	157	0	3,303	575	36,030	6,051	0	0	11,877	57,836	231
62	NIA	158	90	1,940	450	21,578	2,905	0	0	9,337	36,300	126
63	NIA	163	65	1,397	285	15,707	1,936	0	0	5,890	25,280	89
64	NIA	186	0	2,278	250	21,120	8,109	0	0	5,207	36,963	214
65	NIA	187	0	2,727	439	28,986	6,293	0	0	9,079	47,524	209
66	NIA	188	0	1,463	0	16,520	2,663	0	0	0	20,646	102
67	NIA	190	0	3,890	0	41,856	8,351	0	0	0	54,097	289
Total (NIA)			4,124	97,580	20,062	1,302,270	375,786	26,160	0	414,381	2,240,364	11,767
1	BSWM	1	35	0	70	3,738	666	0	0	1,519	6,028	27
2	BSWM	2	109	0	47	6,086	777	0	0	970	7,989	38
3	BSWM	3	43	0	47	4,643	666	0	0	970	6,368	30
4	BSWM	4	0	0	27	4,877	1,109	0	0	553	6,566	40

Table 9.2.2 Financial Cost Estimates of Each of SWIM Projects (3/5)

(Unit: 1,000 Pesos)

: No.	Agency	No	:Cost for:		:Cost for :		Construction Cost				: Total Project Cost	:Financial: O&M Cost
			: Review Works	: for F/S&D/D	: Study of Watershed	: Dam & App. Structure	: Irriga- tion	: Mini-hyd: Power	: Water Supply	: Watershed: Pro-Works		
: 5	BSWM	5	: 57	: 0	: 175	: 5,006	: 2,219	: 0	: 0	: 3,617	: 11,074	: 61
: 6	BSWM	6	: 66	: 0	: 47	: 3,429	: 710	: 0	: 0	: 970	: 5,222	: 27
: 7	BSWM	7	: 42	: 0	: 95	: 4,415	: 888	: 0	: 0	: 1,950	: 7,390	: 34
: 8	BSWM	8	: 0	: 0	: 80	: 5,249	: 2,219	: 0	: 0	: 1,660	: 9,207	: 62
: 9	BSWM	9	: 0	: 0	: 60	: 2,325	: 1,664	: 0	: 0	: 1,260	: 5,309	: 40
: 10	BSWM	10	: 0	: 0	: 80	: 2,021	: 1,109	: 0	: 0	: 1,660	: 4,871	: 29
: 11	BSWM	11	: 40	: 0	: 40	: 3,955	: 1,109	: 0	: 0	: 837	: 5,981	: 36
: 12	BSWM	12	: 0	: 0	: 60	: 4,057	: 2,219	: 0	: 0	: 1,260	: 7,596	: 58
: 13	BSWM	13	: 36	: 0	: 27	: 4,113	: 444	: 0	: 0	: 553	: 5,172	: 24
: 14	BSWM	14	: 0	: 0	: 68	: 2,547	: 1,775	: 0	: 0	: 1,395	: 5,785	: 44
: 15	BSWM	15	: 52	: 0	: 47	: 5,412	: 1,109	: 0	: 0	: 970	: 7,590	: 42
: 16	BSWM	16	: 0	: 0	: 47	: 2,065	: 1,220	: 0	: 0	: 970	: 4,303	: 31
: 17	BSWM	17	: 0	: 0	: 40	: 3,606	: 1,109	: 0	: 0	: 837	: 5,592	: 35
: 18	BSWM	18	: 0	: 0	: 175	: 2,932	: 2,219	: 0	: 0	: 3,617	: 8,943	: 53
: 19	BSWM	19	: 0	: 0	: 54	: 2,348	: 1,553	: 0	: 0	: 1,116	: 5,071	: 39
: 20	BSWM	20	: 0	: 0	: 20	: 5,156	: 1,664	: 0	: 0	: 410	: 7,250	: 51
: 21	BSWM	21	: 32	: 0	: 27	: 3,397	: 666	: 0	: 0	: 558	: 4,680	: 26
: 22	BSWM	23	: 76	: 0	: 30	: 3,875	: 888	: 0	: 0	: 690	: 5,559	: 32
: 23	BSWM	24	: 121	: 0	: 70	: 6,430	: 1,109	: 0	: 0	: 1,519	: 9,249	: 46
: 24	BSWM	25	: 0	: 0	: 70	: 3,401	: 1,109	: 0	: 0	: 1,519	: 6,100	: 34
: 25	BSWM	26	: 26	: 0	: 7	: 2,680	: 555	: 0	: 0	: 145	: 3,412	: 21
: 26	BSWM	27	: 61	: 0	: 47	: 7,095	: 555	: 0	: 0	: 970	: 8,728	: 38
: 27	BSWM	28	: 36	: 0	: 54	: 3,197	: 1,331	: 0	: 0	: 1,116	: 5,735	: 38
: 28	BSWM	29	: 0	: 0	: 40	: 2,485	: 2,219	: 0	: 0	: 837	: 5,580	: 52
: 29	BSWM	30	: 35	: 0	: 60	: 2,218	: 2,219	: 0	: 0	: 1,260	: 5,792	: 51
: 30	BSWM	31	: 0	: 0	: 120	: 3,633	: 1,553	: 0	: 0	: 2,510	: 7,816	: 43
: 31	BSWM	32	: 0	: 0	: 20	: 2,262	: 666	: 0	: 0	: 410	: 3,358	: 21
: 32	BSWM	33	: 63	: 0	: 128	: 5,742	: 2,219	: 0	: 0	: 2,645	: 10,797	: 64
: 33	BSWM	34	: 52	: 0	: 377	: 5,069	: 1,442	: 0	: 0	: 7,790	: 14,730	: 47
: 34	BSWM	35	: 38	: 0	: 209	: 3,005	: 1,775	: 0	: 0	: 4,314	: 9,341	: 45
: 35	BSWM	36	: 0	: 0	: 95	: 1,768	: 444	: 0	: 0	: 1,950	: 4,257	: 15
: 36	BSWM	37	: 47	: 0	: 40	: 4,560	: 1,331	: 0	: 0	: 837	: 6,815	: 43
: 37	BSWM	38	: 0	: 0	: 33	: 2,086	: 2,663	: 0	: 0	: 687	: 5,469	: 59
: 38	BSWM	39	: 27	: 0	: 33	: 2,734	: 777	: 0	: 0	: 687	: 4,259	: 25
: 39	BSWM	40	: 50	: 0	: 54	: 4,077	: 2,219	: 0	: 0	: 1,116	: 7,516	: 58
: 40	BSWM	41	: 0	: 0	: 14	: 2,666	: 888	: 0	: 0	: 289	: 3,857	: 27
: 41	BSWM	42	: 0	: 0	: 175	: 4,623	: 1,109	: 0	: 0	: 3,618	: 9,525	: 39
: 42	BSWM	43	: 34	: 0	: 54	: 2,821	: 1,553	: 0	: 0	: 1,116	: 5,579	: 40
: 43	BSWM	44	: 87	: 0	: 27	: 4,345	: 1,109	: 0	: 0	: 553	: 6,122	: 38
: 44	BSWM	45	: 94	: 0	: 289	: 6,325	: 5,547	: 0	: 0	: 5,965	: 18,219	: 130
: 45	BSWM	46	: 0	: 0	: 33	: 1,969	: 888	: 0	: 0	: 687	: 3,576	: 24
: 46	BSWM	47	: 0	: 0	: 33	: 3,205	: 1,553	: 0	: 0	: 687	: 5,478	: 42
: 47	BSWM	48	: 0	: 0	: 80	: 3,094	: 2,219	: 0	: 0	: 1,660	: 7,053	: 54
: 48	BSWM	49	: 0	: 0	: 13	: 805	: 333	: 0	: 0	: 278	: 1,429	: 9
: 49	BSWM	50	: 0	: 0	: 40	: 2,111	: 444	: 0	: 0	: 835	: 3,430	: 16
: 50	BSWM	51	: 45	: 0	: 61	: 4,514	: 1,220	: 0	: 0	: 1,253	: 7,093	: 40
: 51	BSWM	52	: 0	: 0	: 47	: 7,489	: 1,109	: 0	: 0	: 972	: 9,617	: 49
: 52	BSWM	56	: 0	: 0	: 88	: 5,481	: 1,775	: 0	: 0	: 1,809	: 9,153	: 54
: 53	BSWM	57	: 0	: 0	: 61	: 2,712	: 954	: 0	: 0	: 1,253	: 4,979	: 28
: 54	BSWM	58	: 0	: 0	: 27	: 3,304	: 843	: 0	: 0	: 557	: 4,731	: 29

Table 9.2.2 Financial Cost Estimates of Each of SWIM Projects (4/5)

(Unit: 1,000 Pesos)

No.	Agency	No.	Cost for Review Works	Cost for F/S&D/D	Cost for Study of Watershed	Cost for Dam & App. Structure	Construction Cost Irrigation	Construction Cost Mini-hyd: Power	Construction Cost Water Supply	Construction Cost Watershed Pro. Works	Total Project Cost	Financial: O&M Cost
: 55	BSWM	59	0	0	65	5,575	888	0	0	1,352	7,880	38
: 56	BSWM	60	55	0	54	4,777	2,219	0	0	1,113	8,219	60
: 57	BSWM	61	0	0	54	3,457	2,219	0	0	1,113	6,843	55
: 58	BSWM	62	34	0	148	2,306	2,219	0	0	3,063	7,769	50
: 59	BSWM	63	0	0	54	2,347	2,219	0	0	1,113	5,733	51
: 60	BSWM	64	0	0	47	3,504	2,219	0	0	972	6,742	56
: 61	BSWM	65	0	0	61	3,003	1,109	0	0	1,264	5,438	33
: 62	BSWM	66	0	0	54	2,438	2,219	0	0	1,113	5,824	51
: 63	BSWM	67	0	0	27	3,803	1,109	0	0	557	5,496	36
: 64	BSWM	68	0	0	54	4,562	1,109	0	0	1,113	6,839	38
: 65	BSWM	69	34	0	27	3,160	1,109	0	0	557	4,888	33
: 66	BSWM	70	0	0	40	4,469	2,219	0	0	835	7,563	59
: 67	BSWM	71	65	0	160	5,953	2,219	0	0	3,309	11,706	65
: 68	BSWM	72	0	0	40	2,518	1,553	0	0	835	4,946	39
: 69	BSWM	73	0	0	34	4,754	1,775	0	0	696	7,259	52
: 70	BSWM	74	0	0	485	5,459	8,875	0	0	10,021	24,840	189
: 71	BSWM	75	0	0	229	4,138	1,775	0	0	4,732	10,875	49
: 72	BSWM	76	93	0	61	10,507	1,109	0	0	1,253	13,022	61
: 73	BSWM	77	0	0	20	3,826	1,109	0	0	417	5,372	36
: 74	BSWM	78	0	0	20	3,737	1,664	0	0	417	5,838	46
: 75	BSWM	79	0	0	13	2,813	998	0	0	278	4,102	30
: 76	BSWM	80	52	0	91	5,462	1,109	0	0	1,874	8,587	42
: 77	BSWM	82	37	0	27	2,892	1,775	0	0	557	5,288	45
: 78	BSWM	83	40	0	34	2,769	2,219	0	0	696	5,757	53
: 79	BSWM	84	0	0	34	2,716	1,109	0	0	696	4,555	31
: 80	BSWM	85	39	0	54	2,733	2,219	0	0	1,113	6,157	52
: 81	BSWM	86	0	0	20	3,458	555	0	0	417	4,449	24
: 82	BSWM	87	37	0	47	3,525	1,109	0	0	973	5,691	35
: 83	BSWM	88	24	0	27	2,493	555	0	0	557	3,656	20
: 84	BSWM	89	24	0	47	2,447	555	0	0	973	4,046	20
: 85	BSWM	90	0	0	13	2,851	1,109	0	0	278	4,251	32
: 86	BSWM	91	0	0	40	2,265	1,109	0	0	835	4,250	30
: 87	BSWM	92	33	0	40	3,269	888	0	0	835	5,065	29
: 88	BSWM	93	0	0	61	4,026	2,219	0	0	1,253	7,558	58
: 89	BSWM	94	0	0	13	2,175	1,109	0	0	278	3,576	29
: 90	BSWM	95	0	0	34	4,294	1,109	0	0	696	6,133	37
: 91	BSWM	96	0	0	20	2,877	777	0	0	417	4,091	26
: 92	BSWM	97	0	0	40	3,268	666	0	0	835	4,809	25
: 93	BSWM	98	0	0	114	3,802	2,441	0	0	2,365	8,722	61
: 94	BSWM	99	0	0	13	3,249	777	0	0	278	4,317	27
: 95	BSWM	100	0	0	168	2,951	2,219	0	0	3,479	8,817	54
: 96	BSWM	101	0	0	88	5,232	1,109	0	0	1,812	8,240	41
: 97	BSWM	102	0	0	67	1,976	2,219	0	0	1,394	5,656	50
: 98	BSWM	103	0	0	34	1,998	2,219	0	0	696	4,946	50
: 99	BSWM	108	37	0	40	4,135	555	0	0	835	5,602	26
:100	BSWM	109	0	0	34	4,163	2,219	0	0	696	7,110	58
:101	BSWM	110	0	0	20	4,340	1,109	0	0	416	5,885	38
:102	BSWM	111	43	0	47	2,592	2,773	0	0	974	6,429	63
:103	BSWM	112	0	0	34	2,821	1,287	0	0	696	4,837	35
:104	BSWM	113	0	0	14	2,308	555	0	0	280	3,156	19



Table 9.2.2 Financial Cost Estimates of Each of SWIM Projects (5/5)

(Unit: 1,000 Pesos)

No.	Agency	Cost for Review Works	Cost for F/S&D/D	Cost for Study of Watershed	Cost for Dam & App. Structure	Construction Cost	Mini-hyd: Power	Water Supply	Watershed Pro. Works	Total Project Cost	Financial: O&M Cost
:105	BSWM 114	0	0	34	1,739	1,109	0	0	696	3,578	28
:106	BSWM 115	64	0	88	5,746	2,219	0	0	1,809	9,925	64
:107	BSWM 117	0	0	135	3,135	2,219	0	0	2,784	8,273	54
:108	BSWM 118	0	0	20	2,960	1,553	0	0	416	4,949	41
:109	BSWM 119	0	0	40	3,088	1,331	0	0	835	5,294	37
:110	BSWM 120	0	0	47	2,611	1,775	0	0	974	5,407	44
:111	BSWM 121	0	0	34	3,622	1,331	0	0	696	5,683	39
:112	BSWM 122	0	0	34	3,713	2,219	0	0	696	6,661	57
:113	BSWM 123	0	0	14	2,635	2,219	0	0	280	5,147	52
:114	BSWM 124	0	0	0	1,581	3,328	0	0	0	4,909	70
:115	BSWM 125	0	0	47	2,762	2,330	0	0	974	6,113	55
:116	BSWM 126	0	0	47	5,048	1,775	0	0	974	7,845	53
:117	BSWM 127	0	0	20	1,614	3,106	0	0	416	5,156	65
:118	BSWM 128	0	0	54	5,830	3,439	0	0	1,112	10,435	88
:119	BSWM 129	0	0	108	3,973	3,772	0	0	2,227	10,080	87
:120	BSWM 130	41	0	54	2,916	2,219	0	0	1,112	6,342	53
:121	BSWM 131	0	0	54	1,909	4,438	0	0	1,112	7,513	92
:122	BSWM 132	0	0	40	2,618	1,331	0	0	835	4,825	35
:123	BSWM 133	0	0	141	2,775	4,438	0	0	2,922	10,277	95
:124	BSWM 134	43	0	40	4,667	777	0	0	835	6,362	32
:125	BSWM 135	0	0	195	5,090	2,995	0	0	4,036	12,316	77
:126	BSWM 136	0	0	20	1,739	666	0	0	416	2,841	19
:127	BSWM 137	0	0	168	3,533	888	0	0	3,479	8,067	30
:128	BSWM 138	0	0	276	5,908	4,216	0	0	5,706	16,107	103
:129	BSWM 139	0	0	101	4,215	3,328	0	0	2,088	9,732	79
:130	BSWM 140	26	0	34	2,422	888	0	0	696	4,064	26
:131	BSWM 141	0	0	189	4,694	1,775	0	0	3,897	10,555	52
:132	BSWM 142	0	0	154	5,946	2,663	0	0	3,182	11,945	74
:133	BSWM 143	0	0	34	5,214	1,775	0	0	696	7,719	54
:134	BSWM 144	0	0	0	5,482	1,886	0	0	0	7,368	57
:135	BSWM 145	0	0	67	5,058	5,547	0	0	1,394	12,066	125
:136	BSWM 146	0	0	61	4,238	2,663	0	0	1,253	8,214	67
:137	BSWM 147	0	0	54	3,027	2,219	0	0	1,112	6,413	54
:138	BSWM 149	23	0	14	2,752	444	0	0	280	3,511	18
:139	BSWM 150	0	0	67	3,528	3,883	0	0	1,394	8,872	87
:140	BSWM 151	0	0	61	2,530	2,219	0	0	1,253	6,062	52
:	Total (BSWM):	2,249	0	9,470	513,676	240,313	0	0	196,095	961,803	6,528
:	Grand Total :	9,320	120,931	35,147	2,340,113	713,088	96,174	7,264	726,379	4,048,417	23,471

Note: 1; The costs for contractors' tax, land acquisition, general administration, engineering services for construction supervision and physical contingency are included in construction cost for individual facilities.

2; The total may not equal the sum of individual figures due to rounding.

Table 9.4.1 Annual Fund Requirement of Total Project Cost

SUMMARY(Total Project Cost)													(Unit: Pesos 1,000)										
Item	Total		Total Cost	1st Five Year					2nd Five Year														
	1st Five Year	2nd Five Year		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000										
<b>1. SWIM Fund</b>																							
-Dam & App.Str. (OECF Projects)	1223692 480818	2246470 0	3470162 480818	129390 86138	223328 90849	259669 93854	300367 101168	310938 106812	338631 0	400167 0	430100 0	484773 0	572799 0										
-Watershed Pr. (OECF Projects)	421765 91681	696721 0	1118484 91681	42294 16424	72662 17323	93766 18277	98401 19290	114640 20367	115901 0	135230 0	140729 0	160316 0	144343 0										
-F/S & D/D (OECF Projects)	188947 0	162523 0	351469 0	31273 0	30117 0	38531 0	29558 0	59469 0	52789 0	46539 0	54512 0	8664 0	0 0										
Sub-total (OECF Projects)	1834402 572499	3105714 0	4940115 572499	202956 102560	326107 108172	391966 114131	428324 120458	485048 127178	507321 0	581958 0	645340 0	653752 0	717344 0										
<b>2. Specific Cost</b>																							
-Irrigation (OECF Projects)	479514 170684	541380 0	1020895 170684	55592 30577	88974 32250	103175 34027	109726 33913	122147 37917	90773 0	102314 0	103595 0	118404 0	126294 0										
-Mini-hydro (OECF Projects)	39400 39400	107979 0	147379 39400	7058 7058	7445 7445	7855 7855	8290 8290	8753 8753	13411 0	16644 0	7592 0	31295 0	39038 0										
-Water Supply (OECF Projects)	0 0	13197 0	13197 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	13197 0										
-Review Works (OECF Projects)	10727 3023	500 0	11227 3023	2463 542	4243 571	2367 603	982 636	672 672	233 0	169 0	99 0	0 0	0 0										
Sub-total (OECF Projects)	529641 213108	663056 0	1192697 213108	65113 38177	100561 60266	113397 42484	118999 44839	131571 47341	104417 0	119127 0	111285 0	149699 0	178528 0										
<b>TOTAL</b> (OECF Projects)	<b>2364042</b> <b>785607</b>	<b>3768770</b> <b>0</b>	<b>6132812</b> <b>785607</b>	<b>268069</b> <b>140737</b>	<b>426668</b> <b>148438</b>	<b>503363</b> <b>156615</b>	<b>547323</b> <b>165297</b>	<b>616619</b> <b>174519</b>	<b>611738</b> <b>0</b>	<b>701083</b> <b>0</b>	<b>756626</b> <b>0</b>	<b>803451</b> <b>0</b>	<b>895872</b> <b>0</b>										

Table 9.4.2 Annual Fund Requirement for DPWH Portion

SUMMARY(DPWH Portion)													(Unit: Pesos 1,000)									
Item	Total		Total Cost	1st Five Year					2nd Five Year													
	1st Five Year	2nd Five Year		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000									
<b>1. SWIM Fund</b>																						
-Dam & App.Str. (OECF Projects)	193971 133775	613235 0	807206 133775	23965 23965	31803 25276	38275 26669	42981 28147	56947 29717	73546 0	97484 0	131328 0	138507 0	172290 0									
-Watershed Pr. (OECF Projects)	37073 5992	151384 0	188457 5992	1440 1074	1261 1132	10321 1195	14318 1261	9732 1331	24201 0	31862 0	25644 0	40499 0	29178 0									
-F/S & D/D (OECF Projects)	118211 0	97282 0	215493 0	20270 0	20903 0	23493 0	23993 0	29550 0	34647 0	33508 0	27056 0	2071 0	0 0									
Sub-total (OECF Projects)	349256 139767	861900 0	1211156 139767	45675 25038	53987 26409	72091 27863	81293 29408	98229 31049	132394 0	162854 0	184028 0	181157 0	201468 0									
<b>2. Specific Cost</b>																						
-Irrigation (OECF Projects)	62092 37988	76599 0	138692 37988	6805 6805	9991 7178	12736 7573	13136 7993	19424 8439	15860 0	18207 0	21461 0	10700 0	10372 0									
-Mini-hydro (OECF Projects)	6943 6943	107979 0	114922 6943	1244 1244	1312 1312	1384 1384	1461 1461	1542 1542	13411 0	16644 0	7592 0	31295 0	39038 0									
-Water Supply (OECF Projects)	0 0	13197 0	13197 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	13197 0									
-Review Works (OECF Projects)	3463 468	0 0	3463 468	1159 84	1220 88	882 93	98 98	104 104	0 0	0 0	0 0	0 0	0 0									
Sub-total (OECF Projects)	72499 45399	197774 0	270274 45399	9208 8133	12523 8578	15003 9051	14895 9552	21070 10085	29271 0	34831 0	29052 0	41995 0	62606 0									
<b>TOTAL</b> (OECF Projects)	<b>421755</b> <b>185166</b>	<b>1059675</b> <b>0</b>	<b>1481430</b> <b>185166</b>	<b>54883</b> <b>33171</b>	<b>66490</b> <b>36987</b>	<b>87094</b> <b>36914</b>	<b>95989</b> <b>38960</b>	<b>117299</b> <b>41134</b>	<b>161664</b> <b>0</b>	<b>197705</b> <b>0</b>	<b>213080</b> <b>0</b>	<b>223151</b> <b>0</b>	<b>264074</b> <b>0</b>									

Note: The total may not equal the sum of individual figures due to rounding.

Table 9.4.3 Annual Fund Requirement for NIA Portion

SUMMARY (NIA Portion)			(Unit: Pesos 1,000)										
Item	Total		Total Cost	1st Five Year					2nd Five Year				
	1st Five Years	2nd Five Year		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1. SWIM Fund													
- Dam & App.Str. (OECF Projects)	682951 214377	1243164 0	1926114 214377	53521 38404	129474 40506	151233 42737	182667 45106	166034 47623	206798 0	240698 0	247320 0	239634 0	289513 0
- Watershed Pr. (OECF Projects)	216703 33462	430496 0	647199 33462	12566 5995	40904 6323	53718 6671	44938 7031	64576 7434	71637 0	79504 0	87539 0	98608 0	93191 0
- F/S & D/D (OECF Projects)	70735 0	65241 0	135976 0	11003 0	9214 0	15036 0	5562 0	29920 0	18142 0	13051 0	27456 0	6593 0	0 0
Sub-total (OECF Projects)	970389 247839	1738901 0	2709290 247839	77091 44399	179591 46829	220010 49408	233167 52147	260329 35036	296598 0	333253 0	362513 0	364832 0	381704 0
2. Specific Cost													
- Irrigation (OECF Projects)	225583 59252	326504 0	552087 59252	15053 10615	39637 11196	51294 11812	62573 12467	57025 13163	49548 0	53829 0	51250 0	76511 0	95366 0
- Mini-hydro (OECF Projects)	32457 32457	0 0	32457 32457	5814 5814	6133 6133	6470 6470	6829 6829	7210 7210	0 0	0 0	0 0	0 0	0 0
- Water Supply (OECF Projects)	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
- Review Works (OECF Projects)	4952 2088	0 0	4952 2088	739 374	2462 395	848 816	439 439	464 464	0 0	0 0	0 0	0 0	0 0
Sub-total (OECF Projects)	262991 93798	326504 0	589496 93798	21606 16803	48231 17723	58613 18699	69842 19736	64699 20837	49548 0	53829 0	51250 0	76511 0	95366 0
TOTAL (OECF Projects)	1233380 341637	2065405 0	3298786 341637	98697 61202	227823 64551	278623 68107	303009 71883	325228 75893	346145 0	387082 0	413764 0	441343 0	477071 0

Table 9.4.4 Annual Fund Requirement for BSWM Portion

SUMMARY (BSWM Portion)			(Unit: Pesos 1,000)										
Item	Total		Total Cost	1st Five Year					2nd Five Year				
	1st Five Years	2nd Five Year		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1. SWIM Fund													
- Dam & App.Str. (OECF Projects)	346770 132667	390071 0	736842 132667	51903 23766	62052 23067	70139 26448	74719 27914	87958 29471	38287 0	61985 0	71251 0	86352 0	111996 0
- Watershed Pr. (OECF Projects)	167987 52226	114841 0	282827 52226	28287 9356	30496 9868	29726 10412	39143 10989	40332 11602	20042 0	23865 0	27546 0	21211 0	22176 0
- F/S & D/D (OECF Projects)	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Sub-total (OECF Projects)	514757 184893	504912 0	1019669 184893	80190 33122	92548 34935	99865 36859	113864 38903	128290 41073	78330 0	85850 0	98798 0	107763 0	134172 0
2. Specific Cost													
- Irrigation (OECF Projects)	191839 73444	138277 0	330116 73444	33733 13157	39246 13877	39144 14641	34017 15453	43699 16315	25363 0	30278 0	30884 0	31193 0	20556 0
- Mini-hydro (OECF Projects)	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
- Water Supply (OECF Projects)	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
- Review Works (OECF Projects)	2311 467	500 0	2812 467	563 84	561 88	637 93	443 98	104 104	233 0	169 0	99 0	0 0	0 0
Sub-total (OECF Projects)	194150 73911	138777 0	332928 73911	34299 13241	39807 13965	39781 14735	34461 15551	45802 16419	25598 0	30447 0	30983 0	31193 0	20556 0
TOTAL (OECF Projects)	708907 258803	643690 0	1352397 258803	114489 46363	132353 48900	139646 51594	148325 54454	174092 57492	103928 0	116296 0	129781 0	138957 0	154728 0

Note: The total may not equal the sum of individual figures due to rounding.

Table 9.4.5 Annual Disbursement schedule of SWIM Projects (1/6)  
-- DPWH Projects --

DISBURSEMENT SCHEDULE OF PROJECT COST OF SWIM PROJECTS

SWIM Agency No. (Agency No.)	Name of Province	F/S	D/D	Pr. Work	Const. Study	Const. Schedule	Cost	1991		1992		1993		1994		1995		1996		1997		1998		1999		2000																		
								1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd													
<b>DPWH (Total)</b>																																												
<b>(1) IRRIGATOR</b>																																												
1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0															
2	1	1	1	1	1	1	1	197	395	100	7435	110	2706	0	10606	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
3	1	1	1	1	1	1	1	260	536	126	10096	330	8770	0	18156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
4	1	1	1	1	1	1	1	297	575	90	10828	535	11057	0	23137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
5	1	1	1	1	1	1	1	294	508	90	11070	75	1154	0	13451	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
6	1	1	1	1	1	1	1	347	695	100	13082	0	0	0	14222	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
<b>CEST PROJECTS</b>																																												
7	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
8	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
9	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
<b>1st Five Year</b>																																												
								1st	2nd	Total	1st	2nd	Total	1st	2nd	Total	1st	2nd	Total	1st	2nd	Total	1st	2nd	Total	1st	2nd	Total																
								524	100	624	180	762	942	324	376	700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
<b>(1) IRRIGATOR</b>																																												
10	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
11	1	1	1	1	1	1	1	297	575	90	10828	535	11057	0	23137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
12	1	1	1	1	1	1	1	197	395	100	7435	110	2706	0	10606	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
13	1	1	1	1	1	1	1	260	536	126	10096	330	8770	0	18156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
14	1	1	1	1	1	1	1	294	508	90	11070	75	1154	0	13451	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
15	1	1	1	1	1	1	1	347	695	100	13082	0	0	0	14222	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
<b>(2) IRRIGATOR</b>																																												
16	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
17	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
18	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
19	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
20	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
21	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
22	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
23	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0														
<b>Total</b>																																												
								337	695	100	69414	5615	11993	2948	94670	13483	16663	32706	16606	23020	39428	36607	16719	11326	29999	30442	64396	24073	64669	11137	83991	94428	56719	56210	111828	64172	49706	114478	51789	76112	129091	87807	59580	145367

Note: The total may not equal the sum of individual figures due to rounding.

Table 9.4.5 Annual Disbursement schedule of SWIM Projects (2/6)  
 -- NIA Projects No.1 --

DISBURSEMENT SCHEDULE OF PROJECT COST OF SWIM PROJECTS

NIA (Total)	NIA Group	Agency No	Agency Name	Province	F/S	D/D	Pr. Work Const.	Study Const.	Rehabil.	Cost	1997		1998		1999		2000		
											1st	2nd	1st	2nd	1st	2nd	1st	2nd	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43

Note: The total may not equal the sum of individual figures due to rounding.

Table 9.4.5 Annual Disbursement schedule of SWIM Projects (3/6)  
 -- NIA Projects No.2--

DISBURSEMENT SCHEDULE OF PROJECT COST OF SWIM PROJECTS

Item No.	Agency No	Name of Province	Name of	Type of	Facilities	Unsubsidized	Cost	1991		1992		1993		1994		1995		1996		1999		2000																				
								1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd																	
42	NIA	59	3	PAJALAC	167	335	96	6300	106	2050	0	0	0	0	0	0	0	0	0	0	0	0	0																			
43	NIA	186	8	SOUTHERN SAMBA	0	330	30770	280	4180	0	0	0	0	0	0	0	0	0	0	0	0	0	0																			
44	NIA	186	8	SOUTHERN LEVITE	759	1519	430	28598	250	5207	0	0	0	0	0	0	0	0	0	0	0	0	0																			
45	NIA	147	7	ICEBU	1505	3009	1710	56673	1050	21699	0	0	0	0	0	0	0	0	0	0	0	0	0																			
46	NIA	194	5	HASBATE	371	741	378	13965	240	4905	0	0	0	0	0	0	0	0	0	0	0	0	0																			
47	NIA	103	5	HASBATE	879	1758	598	33103	940	19490	0	0	0	0	0	0	0	0	0	0	0	0	0																			
48	NIA	190	8	SOUTHERN LEVITE	1297	2593	1350	48843	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																			
49	NIA	20	1	ILA UNION	1178	2357	1536	44334	640	13290	0	0	0	0	0	0	0	0	0	0	0	0	0																			
50	NIA	187	8	SOUTHERN LEVITE	909	1818	1044	34235	439	9039	0	0	0	0	0	0	0	0	0	0	0	0	0																			
51	NIA	157	8	SOUTHERN LEVITE	1101	2202	907	41474	575	11877	0	0	0	0	0	0	0	0	0	0	0	0	0																			
52	NIA	21	1	ILA UNION	629	1257	738	23574	445	10019	0	0	0	0	0	0	0	0	0	0	0	0	0																			
53	NIA	149	7	ICEBU	1512	3024	694	50561	1450	30444	0	0	0	0	0	0	0	0	0	0	0	0	0																			
54	NIA	186	8	SOUTHERN LEVITE	485	976	810	18373	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																			
55	NIA	145	7	ICEBU	1027	2055	758	38793	995	18785	0	0	0	0	0	0	0	0	0	0	0	0	0																			
(2)	IRABATI																																									
56	NIA	22	1	ILA UNION	798	1596	353	30084	548	10914	111	0	0	0	0	0	0	0	0	0	0	0	0																			
57	NIA	31	1	PANGASINAN	111	221	65	4167	50	1203	15	0	0	0	0	0	0	0	0	0	0	0	0																			
58	NIA	163	7	ICEBU	466	931	101	17543	285	5899	65	23280	65	0	0	0	0	0	0	0	0	0	0																			
59	NIA	23	1	ILA UNION	342	683	227	12867	400	8180	47	2746	0	0	0	0	0	0	0	0	0	0	0																			
60	NIA	158	7	ICEBU	647	1293	126	24357	450	9337	90	36300	90	0	0	0	0	0	0	0	0	0	0																			
61	NIA	9	1	ICEBU	0	0	165	109508	600	12399	1764	174535	1764	0	0	0	0	0	0	0	0	0	0																			
62	NIA	56	3	PAMPANGA	112	224	31	4217	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0																			
63	NIA	32	1	PANGASINAN	362	724	140	14385	60	1280	18	0	0	0	0	0	0	0	0	0	0	0	0																			
64	NIA	26	1	PANGASINAN	803	1606	407	30243	150	3079	53	17064	53	0	0	0	0	0	0	0	0	0	0																			
65	NIA	72	4	LAORNA	500	1000	172	21865	0	0	112	0	0	0	0	0	0	0	0	0	0	0	0																			
66	NIA	55	3	PAMPANGA	223	446	47	8399	0	0	31	9145	31	0	0	0	0	0	0	0	0	0	0																			
67	NIA	122	7	ICEBU	413	825	49	15542	70	1405	57	18382	57	0	0	0	0	0	0	0	0	0	0																			
(3)	Total				3227	6503	54128	162075	20062	41430	4124	224054	33049	54925	88612	46158	138171	194056	107463	117610	232009	109510	125620	231148	113460	101365	230005	27598	210543	237828	115951	11790	25174	123164	124158	254627	88125	187866	256915	118742	78834	82637

Note: The total may not equal the sum of individual figures due to rounding.

Table 9.4.5 Annual Disbursement schedule of SWIM Projects (4/6)  
 -- BSWM Projects No. 1--

DISBURSEMENT SCHEDULE OF PROJECT COST OF SWIM PROJECTS

Sl. No.	Name of Project	District	Type of Project	Study Cost	Review Cost	Cont.	1991		1992		1993		1994		1995		1996		1997		1998		1999		2000	
							1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
(1)	TRB-DK																									
1	BSM 6	1-PANAGASTHAN		0	0	116	1332	90	1668	0	9207	136	9012	9207	0	0	0	0	0	0	0	0	0	0	0	0
2	BSM 25	2-15ABELA		0	0	95	4685	289	4314	0	38	9341	38	304	341	0	0	0	0	0	0	0	0	0	0	0
3	BSM 1	1-PANAGASTHAN		0	0	63	3038	54	1116	0	0	5071	117	4954	5071	0	0	0	0	0	0	0	0	0	0	0
4	BSM 45	2-15ABELA		0	0	197	11675	299	5983	94	18219	94	485	579	17640	0	0	0	0	0	0	0	0	0	0	0
5	BSM 17	1-PANAGASTHAN		0	0	64	4652	40	307	0	0	5592	104	5489	5592	0	0	0	0	0	0	0	0	0	0	0
6	BSM 14	12-15ABELA		0	0	105	7163	0	0	0	0	2148	105	5084	5189	2179	0	0	0	0	0	0	0	0	0	0
7	BSM 74	12-15ABELA		0	0	45	12683	485	10821	0	0	24640	936	23904	24640	0	0	0	0	0	0	0	0	0	0	0
8	BSM 63	3-SHREYA ECLIA		0	0	102	4464	54	1113	0	0	5133	156	5572	5723	0	0	0	0	0	0	0	0	0	0	0
9	BSM 51	2-15ABELA		0	0	85	5690	61	1233	0	0	4033	45	145	191	6003	0	0	0	0	0	0	0	0	0	0
10	BSM 16	1-PANAGASTHAN		0	0	39	3747	47	970	0	0	47	104	151	6664	0	0	0	0	0	0	0	0	0	0	0
11	BSM 37	2-15ABELA		0	0	64	5877	40	83	0	0	52	60	132	5221	2127	7459	0	0	0	0	0	0	0	0	0
12	BSM 15	1-PANAGASTHAN		0	0	20	6480	47	970	0	0	52	7590	0	0	0	0	0	0	0	0	0	0	0	0	0
13	BSM 12	10-SHREYAS		0	0	100	4811	20	418	0	0	170	5027	5156	0	0	0	0	0	0	0	0	0	0	0	0
14	BSM 102	7-SHREYAS		0	0	68	4127	67	1384	0	0	5656	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	BSM 72	3-SHREYA ECLIA		0	0	184	3917	45	838	0	0	4946	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	BSM 32	2-15ABELA		0	0	48	2882	20	410	0	0	3256	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	BSM 9	1-PANAGASTHAN		0	0	193	3791	60	1280	0	0	5209	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	BSM 103	7-SHREYAS		0	0	57	4160	34	696	0	0	4946	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	BSM 96	2-SHREYA		0	0	61	3593	20	417	0	0	4991	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	BSM 49	2-15ABELA		0	0	48	1090	12	278	0	0	1429	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	BSM 64	3-SHREYA ECLIA		0	0	91	5432	47	972	0	0	6742	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	BSM 138	11-15ABELA		0	0	121	9943	276	5768	0	0	16107	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	BSM 74	2-PANAGASTHAN		0	0	39	4284	66	1395	0	0	5785	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	BSM 45	2-SHREYAS		0	0	54	2882	33	687	0	0	3528	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	BSM 124	10-SHREYAS		0	0	52	4858	0	0	0	0	4999	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	BSM 18	1-PANAGASTHAN		0	0	100	9051	175	3612	0	0	8943	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	BSM 94	6-SANTIDRE		0	0	36	3249	13	278	0	0	3576	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	BSM 97	7-SHREYA		0	0	29	3985	40	835	0	0	4808	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	BSM 71	3-SHREYA ECLIA		0	0	116	8828	160	3709	45	11749	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	BSM 60	3-SHREYA ECLIA		0	0	37	5709	54	1112	0	0	6413	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	BSM 147	12-SHREYAS		0	0	61	5343	34	696	0	0	6133	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	BSM 95	7-SHREYAS		0	0	30	5442	175	3610	0	0	9252	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	BSM 42	2-15ABELA		0	0	30	4998	120	2310	0	0	7818	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	BSM 21	2-15ABELA		0	0	95	4135	27	557	0	0	4888	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	BSM 69	3-SHREYA ECLIA		0	0	58	6453	317	7790	52	14730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	BSM 34	2-SHREYA ECLIA		0	0	194	5115	60	1466	0	0	1053	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	BSM 48	2-SHREYA ECLIA		0	0	33	2177	95	1950	0	0	4357	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	BSM 36	2-SHREYA ECLIA		0	0	61	3249	34	696	0	0	6064	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	BSM 140	11-SHREYAS		0	0	69	5814	299	4732	0	0	10375	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	BSM 75	3-SHREYA ECLIA		0	0	66	4946	22	557	0	0	5496	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	BSM 62	3-SHREYA ECLIA		0	0	70	6216	54	1118	0	0	7516	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	BSM 42	2-SHREYA ECLIA		0	0	210	7181	67	1394	0	0	8873	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	BSM 150	12-SHREYAS		0	0	101	6361	65	1352	0	0	7888	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	BSM 59	2-SHREYA		0	0	0	0	0	0	0	0	150	167	2115	0	0	0	0	0	0	0	0	0	0	0	0

Note: The total may not equal the sum of individual figures due to rounding.

Table 9.4.5 Annual Disbursement schedule of SWIM Projects (5/6)  
 -- BSWM Projects No.2--

DISBURSEMENT SCHEDULE OF PROJECT COST OF SWIM PROJECTS

Sl. No.	Bank Agency No	Name of Project	Province	F/S	D/D	Pr-Work	Const.	Study	Const.	Reformed	Cost for	1991		1992		1993		1994		1995		1996		1997		1998		1999		2000							
												1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
45	BSWM 128	10 JAGAWAN D. MORTLE		0	0	132	9157	54	1112	0	0	10435	0	0	0	0	0	0	156	168	1749	3083	10259	0	0	0	0	0	0	0	0	0	0				
46	BSWM 133	2 TAGAYAN		0	0	129	7832	126	2645	63	10797	0	0	0	0	0	0	63	257	370	10477	10477	0	0	0	0	0	0	0	0	0	0	0				
47	BSWM 130	10 JAGAWAN D. MORTLE		0	0	74	5061	54	1112	0	0	0	0	0	0	0	0	43	378	158	6174	6174	0	0	0	0	0	0	0	0	0	0	0				
48	BSWM 66	3 HEBWA ECLIA		0	0	183	4474	54	1113	0	5824	0	0	0	0	0	0	0	0	0	0	236	5627	5834	0	0	0	0	0	0	0	0	0				
OCIP Projects																																					
49	BSWM 3	1 ILLIGOS SW		0	0	20	5268	47	970	43	6368	637	637	637	637	637	637	637	637	637	637	637	637	637	637	637	637	637	637	637	637	637	637	637			
50	BSWM 85	5 SALAN		0	0	149	4003	54	1133	39	6152	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616			
51	BSWM 120	9 JAWANGA D. SUR		0	0	33	4933	47	974	0	5407	541	541	541	541	541	541	541	541	541	541	541	541	541	541	541	541	541	541	541	541	541	541	541			
52	BSWM 83	5 COMANCHE MORTLE		0	0	43	4445	34	698	46	5757	576	576	576	576	576	576	576	576	576	576	576	576	576	576	576	576	576	576	576	576	576	576	576	576		
53	BSWM 114	5 JAGAWAN D. MORTLE		0	0	43	2794	34	698	0	3538	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354		
54	BSWM 42	5 COMANCHE MORTLE		0	0	54	4655	47	974	37	5268	529	529	529	529	529	529	529	529	529	529	529	529	529	529	529	529	529	529	529	529	529	529	529	529		
55	BSWM 111	5 COMANCHE MORTLE		0	0	54	5709	47	974	0	6439	644	644	644	644	644	644	644	644	644	644	644	644	644	644	644	644	644	644	644	644	644	644	644	644		
56	BSWM 139	17 JAWANGA D. MORTLE		0	0	129	7832	126	2645	43	6737	673	673	673	673	673	673	673	673	673	673	673	673	673	673	673	673	673	673	673	673	673	673	673	673		
57	BSWM 99	3 HEBWA ECLIA		0	0	109	4007	13	2768	0	4137	413	413	413	413	413	413	413	413	413	413	413	413	413	413	413	413	413	413	413	413	413	413	413	413		
58	BSWM 60	4 JAWANGA D. MORTLE		0	0	15	3159	40	835	52	6507	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650	650		
59	BSWM 91	6 JAWANGA D. MORTLE		0	0	15	3159	40	835	0	4250	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425		
60	BSWM 181	11 JAWANGA D. MORTLE		0	0	61	4498	189	3892	0	10555	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055	1055		
61	BSWM 131	11 JAWANGA D. MORTLE		0	0	33	4933	47	974	0	3538	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	
62	BSWM 78	4 JAWANGA D. MORTLE		0	0	66	7147	141	2972	0	10372	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	1037	
63	BSWM 133	10 JAWANGA D. MORTLE		0	0	33	4933	47	974	0	7110	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	
64	BSWM 135	12 JAWANGA D. MORTLE		0	0	71	2034	156	4034	0	13316	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	
65	BSWM 71	4 JAWANGA D. MORTLE		0	0	76	4860	30	611	0	5372	537	537	537	537	537	537	537	537	537	537	537	537	537	537	537	537	537	537	537	537	537	537	537	537	537	
66	BSWM 112	8 JAWANGA D. MORTLE		0	0	156	3952	30	611	0	4832	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	
67	BSWM 145	11 JAWANGA D. MORTLE		0	0	124	3119	114	2302	0	17566	1756	1756	1756	1756	1756	1756	1756	1756	1756	1756	1756	1756	1756	1756	1756	1756	1756	1756	1756	1756	1756	1756	1756	1756	1756	
68	BSWM 98	7 JAWANGA D. MORTLE		0	0	86	3414	34	698	0	8222	822	822	822	822	822	822	822	822	822	822	822	822	822	822	822	822	822	822	822	822	822	822	822	822	822	822
69	BSWM 73	3 HEBWA ECLIA		0	0	22	4990	17	357	0	5428	542	542	542	542	542	542	542	542	542	542	542	542	542	542	542	542	542	542	542	542	542	542	542	542	542	542
70	BSWM 68	6 JAWANGA D. MORTLE		0	0	22	4990	17	357	0	4233	423	423	423	423	423	423	423	423	423	423	423	423	423	423	423	423	423	423	423	423	423	423	423	423	423	423
71	BSWM 65	3 HEBWA ECLIA		0	0	66	3768	135	2794	0	8273	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827	827
72	BSWM 117	9 JAWANGA D. MORTLE		0	0	66	3768	135	2794	0	3511	351	351	351	351	351	351	351	351	351	351	351	351	351	351	351	351	351	351	351	351	351	351	351	351	351	
73	BSWM 149	12 JAWANGA D. MORTLE		0	0	32	3929	10	418	0	4241	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	
74	BSWM 90	6 JAWANGA D. MORTLE		0	0	62	5388	20	418	0	5829	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582	582	
75	BSWM 110	6 JAWANGA D. MORTLE		0	0	76	5185	40	835	0	6326	632	632	632	632	632	632	632	632	632	632	632	632	632	632	632	632	632	632	632	632	632	632	632	632	632	
76	BSWM 134	11 JAWANGA D. MORTLE		0	0	32	4172	146	3683	0	5111	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511	511	
77	BSWM 67	3 HEBWA ECLIA		0	0	32	4172	146	3683	0	6043	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	
78	BSWM 61	3 HEBWA ECLIA		0	0	236	5479	54	1113	0	6043	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	604	
(1) Incur																																					
79	BSWM 109	8 HEBWA ECLIA		0	0	56	5385	34	698	0	7110	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	711	
80	BSWM 70	1 ILLIGOS MORTLE		0	0	158	6451	70	416	0	12																										





Table 9.5.1 Regional Distribution of Fund Requirement

SUMMARY(TOTAL)												
Region	Agency	Total Cost	1st Five Year					2nd Five Year				
			1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1	DPWH	123446	902	8150	4898	11182	25686	790	1724	23803	6066	40166
1	NIA	330805	1121	3605	30082	39667	2186	16004	19976	82310	58665	77188
1	BSWM	158094	25580	6901	23616	1274	1274	10435	25007	7414	23992	33401
SUB-TOTAL(1)		613145	27683	10656	58596	52123	29145	27229	46707	113527	89723	150756
2	DPWH	64018	598	662	18264	15409	8026	10574	10484	0	0	0
2	NIA	0	0	0	0	0	0	0	0	0	0	0
2	BSWM	193454	1199	30480	10240	24779	44796	16003	23224	20820	7938	5975
SUB-TOTAL(2)		257472	1797	39142	28504	40189	52822	26578	33709	20820	7938	5975
CAR	DPWH	47693	9539	9539	9539	9539	9539	0	0	0	0	0
CAR	NIA	0	0	0	0	0	0	0	0	0	0	0
CAR	BSWM	17875	36	26	61	0	0	0	0	0	80	17672
SUB-TOTAL(CAR)		65568	9575	9564	9600	9539	9539	0	0	0	80	17672
3	DPWH	27329	0	0	175	0	0	0	0	0	1442	25712
3	NIA	101649	2300	25996	10618	2686	28246	15651	2452	669	6262	6768
3	BSWM	144000	36034	10500	12797	41319	16018	0	0	119	14440	12773
SUB-TOTAL(3)		272977	38334	36496	23590	44004	44264	15651	2452	788	22143	45254
4	DPWH	263437	10159	10432	9606	9466	9466	3214	15221	29325	87059	79489
4	NIA	105847	16368	16368	16448	16368	16368	0	0	1741	11055	10933
4	BSWM	23901	3612	3612	3612	3612	3612	4109	1730	0	0	0
SUB-TOTAL(4)		392985	30139	30111	29667	29446	29446	7323	16951	31067	98114	90421
5	DPWH	74765	0	0	0	0	3686	35557	35522	0	0	0
5	NIA	453345	20407	36389	52294	91501	77613	75302	47245	52593	0	0
5	BSWM	26207	3440	3440	3440	3440	3440	7679	1325	0	0	0
SUB-TOTAL(5)		554317	23848	39029	55735	94941	84739	118539	84092	52593	0	0
6	DPWH	63483	165	0	0	0	0	0	4247	23736	35334	0
6	NIA	0	0	0	0	0	0	0	0	0	0	0
6	BSWM	30094	2431	2431	6807	2431	2431	0	115	10514	11731	0
SUB-TOTAL(6)		101577	2596	2431	6807	2431	2431	0	4363	34250	47066	0
7	DPWH	0	0	0	0	0	0	0	0	0	0	0
7	NIA	991120	36000	99395	103240	69311	95918	88204	106746	43645	188933	167728
7	BSWM	55731	2608	17301	7417	8741	2608	8817	0	5804	2436	0
SUB-TOTAL(7)		1046052	38608	116696	110657	78052	98526	97021	106746	49449	183369	167728
8	DPWH	23474	0	0	0	0	330	16201	6943	0	0	0
8	NIA	194718	0	0	0	0	3058	42671	75322	73667	0	0
8	BSWM	46524	4146	4146	4247	4146	4146	5016	2094	3156	73	15353
SUB-TOTAL(8)		264716	4146	4146	4247	4146	7534	63888	84360	76823	73	15353
9	DPWH	0	0	0	0	0	0	0	0	0	0	0
9	NIA	63080	12616	12616	12616	12616	12616	0	0	0	0	0
9	BSWM	41414	2736	2736	2736	2736	2736	5147	5294	10632	6661	0
SUB-TOTAL(9)		104494	15352	15352	15352	15352	15352	5147	5294	10632	6661	0
10	DPWH	0	0	0	0	0	0	0	0	0	0	0
10	NIA	0	0	0	0	0	0	0	0	0	0	0
10	BSWM	73495	3558	8714	8467	3892	20001	0	4825	13302	10735	0
SUB-TOTAL(10)		73495	3558	8714	8467	3892	20001	0	4825	13302	10735	0
11	DPWH	11897	0	0	0	0	892	11005	0	0	0	0
11	NIA	0	0	0	0	0	0	0	0	0	0	0
11	BSWM	81989	7793	7793	19205	12608	11737	8414	3531	8105	2803	0
SUB-TOTAL(11)		93886	7793	7793	19205	12608	12629	19419	3531	8105	2803	0
12	DPWH	146708	10845	10845	10845	10845	10845	17086	37786	37613	0	0
12	NIA	0	0	0	0	0	0	0	0	0	0	0
12	BSWM	60225	9848	6838	11072	4659	13532	5788	8488	0	0	0
SUB-TOTAL(12)		206933	20693	17683	21916	15504	24376	22874	46274	37613	0	0
TOTAL		4040417	224121	346915	391545	402227	430805	403667	439303	448970	467705	493158

Note: The total may not equal the sum of individual figures due to rounding.

Table 9.6.1 Repayment Capability of Beneficiaries (1/4)

Table 9.6.1 Repayment Capability of Beneficiaries (1/4)

No.	AGENCY	PROJECT NAME	INCREASE OF ANNUAL INCOME (Pesos) (A)	ANNUAL O&M COST (IRRIG) (Pesos) (B)	ANNUAL O&M COST (DAM) (Pesos) (C)	AMORTIZA- TION (IRRIG) (Pesos) (D)	INCOME/ EXPENCE RATIO (B+C+D)/A	DIFFERENCE INCOME EXPENCE A-(B+C+D)
	Name No.		(A)	(B)	(C)	(D)	(B+C+D)/A	A-(B+C+D)
1	DPWH 1	SAYTAN DAM & RESERVIOR SWIP	780,000	425,000	126,460	61,200	0.79	167,340
2	DPWH 2	BOLO DAM & RESERVIOR SWIP	6,015,750	182,750	122,760	263,160	0.09	5,447,080
3	DPWH 3	SACRIFICE VALLEY DAM	-	-	56,570	-	-	-
4	DPWH 6	TULARIQUIN DAM & RESERVOIR	-	-	183,895	-	-	-
5	DPWH 7	BURDEOS RIVER SWIP	1,218,750	106,250	157,965	153,000	0.34	801,535
6	DPWH 8	SAN JOSE DAM	280,800	10,375	31,325	14,940	0.20	224,160
7	DPWH 9	CUBACUB DAM & RESERVOIR SWIP	4,826,250	191,250	141,215	275,400	0.13	4,218,385
8	DPWH 11	DEBESMAC DAM & RESERVOIR SWIP	2,925,000	85,000	128,770	122,400	0.11	2,588,830
9	DPWH 13	SAN JUAN DAM	3,012,750	89,250	70,815	128,520	0.10	2,724,165
10	DPWH 14	GUMBRA DAM & RESERVOIR SWIP	877,500	25,500	21,265	36,720	0.10	794,015
11	DPWH 15	MAGPET DAM & RESERVOIR SWIP	7,312,500	212,500	145,585	306,000	0.09	6,648,415
12	DPWH 16	BANAYAL DAM & RESERVOIR SWIP	5,411,250	191,250	168,225	275,400	0.12	4,776,375
13	DPWH 17	ACOP & RESERVOIR SWIP	2,574,000	80,250	29,890	115,560	0.09	2,348,300
14	DPWH 18	CALITLITAN DAM & RESERVOIR	2,505,750	63,750	91,735	91,800	0.10	2,258,465
15	DPWH 19	KITA-KITA DAM & RESERVOIR	2,223,000	46,875	16,745	67,500	0.06	2,091,880
16	DPWH 20	SALVACION DAM & RESERVOIR SWIP	1,662,375	50,150	28,845	72,216	0.09	1,511,164
17	DPWH 21	SAN ANGEL DAM & RESERVOIR	2,262,000	60,200	26,400	86,688	0.08	2,088,712
18	DPWH 22	LIGTOS SWIP	3,198,000	85,000	118,260	122,400	0.10	2,872,340
19	DPWH 25	ABIAN SWIP	1,579,500	42,500	41,570	61,200	0.09	1,434,230
20	DPWH 26	CATTIBAGAN SWIP	2,174,250	55,250	24,405	79,560	0.07	2,015,035
21	DPWH 27	MALALINTA SWIP	1,311,375	31,875	31,650	45,900	0.08	1,201,950
22	DPWH 28	CALUBAYAN SWIP	3,237,000	85,000	109,870	122,400	0.10	2,919,730
23	DPWH 33	LIBASAN SWIP	1,524,900	57,800	27,770	83,232	0.11	1,356,098
TOTAL (DPWH)			56,912,700	2,177,775	1,901,990	2,585,196	0.12	50,247,739
1	NIA 4	PARPAGOJA SWIP (SCHEME-I)	4,504,500	301,425	172,810	434,052	0.20	3,596,213
2	NIA 6	POTOT SWIP (SCHEME-I)	2,847,000	127,500	78,895	183,600	0.14	2,457,005
3	NIA 7	CARAMDAN SWIP	4,762,875	148,750	84,330	214,200	0.09	4,315,595
4	NIA 9	NASIG-ID SWIP	7,985,250	1,156,300	188,645	1,665,072	0.38	4,975,233
5	NIA 11	TUGAS SWIP	3,363,750	106,250	153,980	153,000	0.12	2,950,520
6	NIA 12	ILAYA SWIP	7,868,250	191,250	122,540	275,400	0.07	7,279,060
7	NIA 14	SAGDURON SWIP (SCHEME-I)	3,656,250	97,750	98,360	140,760	0.09	3,319,380
8	NIA 15	BUCACAO SWIP	5,079,750	230,875	156,010	332,460	0.14	4,360,405
9	NIA 20	MALOYO SWIP	6,425,250	182,750	119,315	263,160	0.09	5,860,025
10	NIA 21	MAGSIPING SWIP	1,813,500	42,500	74,635	61,200	0.10	1,635,165
11	NIA 22	SAN FELIPE SWIP	2,515,500	59,500	93,675	85,680	0.09	2,276,645
12	NIA 23	MACABATO SWIP	1,033,500	25,500	40,085	36,720	0.10	931,195
13	NIA 25	MASIDEM SWIP	5,011,500	187,000	67,835	269,280	0.10	4,487,385
14	NIA 26	OBOY-OBOY SWIP	955,500	25,500	101,105	36,720	0.17	792,175
15	NIA 27	VEGA SWIP	1,618,500	42,500	56,005	61,200	0.10	1,458,795
16	NIA 29	ALIBENG SWIP	3,266,250	106,250	75,130	153,000	0.10	2,931,870
17	NIA 31	DIGAP SWIP	321,750	17,000	11,235	24,480	0.16	269,035
18	NIA 32	DIKET SWIP	560,625	31,875	44,140	45,900	0.22	438,710
19	NIA 47	MAYAMOT CIP	63,375	2,125	620	3,060	0.09	57,570
20	NIA 48	SAN FELIPE CIS	63,375	2,125	1,065	3,060	0.10	57,125
21	NIA 49	BAYOG CIS	4,065,750	97,750	57,610	140,760	0.07	3,769,630
22	NIA 53	MANATED CIP	940,875	31,875	13,490	45,900	0.10	849,610
23	NIA 55	DALAYAP SWIP	287,625	23,375	24,820	33,660	0.28	205,770
24	NIA 56	BLISS II SWIP	224,250	8,500	13,110	12,240	0.15	190,400
25	NIA 57	BIGBIGA CIS	1,150,500	85,000	34,215	122,400	0.21	908,885
26	NIA 58	TANGCARANG CIP	1,033,500	42,500	13,625	61,200	0.11	916,175
27	NIA 59	LAWACAMULAG CIP	1,209,000	51,000	18,500	73,440	0.12	1,066,060
28	NIA 72	MATIKIW SWIP	858,000	42,500	68,285	61,200	0.20	686,015
29	NIA 97	DOMROG SWIP	1,833,000	51,000	35,470	73,440	0.09	1,673,090
30	NIA 98	BATONGAN CIP	2,271,750	63,750	30,505	91,800	0.08	2,085,695
31	NIA 99	JAMORAYON CIP	7,176,000	170,000	83,105	244,800	0.07	6,678,095
32	NIA 100	CABANGCALAN CIP	3,510,000	85,000	103,690	122,400	0.09	3,198,910
33	NIA 101	POSTIAGON SWIP	4,163,250	106,250	62,075	153,000	0.08	3,841,925
34	NIA 102	PILI SWIP	1,443,000	34,000	16,300	48,960	0.07	1,343,740
35	NIA 103	BITO SWIP	3,471,000	85,000	99,250	122,400	0.09	3,164,350
36	NIA 104	RIZAL SWIP	1,716,000	51,000	38,840	73,440	0.10	1,552,720
37	NIA 106	BOVITOLAN SWIP	1,306,500	42,500	33,020	61,200	0.10	1,169,780
38	NIA 107	BORACAN SWIP	1,209,000	34,000	19,200	48,960	0.08	1,106,840
39	NIA 108	PINANGAKOGAN SWIP	3,890,250	106,250	79,865	153,000	0.09	3,551,135
40	NIA 111	IBINGAN SWIP	5,928,000	195,500	81,425	281,520	0.09	5,369,555
41	NIA 112	BAGASICO SWIP	5,460,000	170,000	72,870	244,800	0.09	4,972,330
42	NIA 119	BONOT-BONOT SWIP	5,440,500	127,500	78,720	183,600	0.07	5,050,680

Table 9.6.1 Repayment Capability of Beneficiaries (2/4)

Table 9.6.1 Repayment Capability of Beneficiaries (2/4)

No.	AGENCY Name No.	PROJECT NAME	INCREASE OF ANNUAL INCOME (Pesos) (A)	ANNUAL O&M COST (IRRIG) (Pesos) (B)	ANNUAL O&M COST (DAM) (Pesos) (C)	AMORTIZA- TION (IRRIG) (Pesos) (D)	INCOME/ EXPENCE RATIO (B+C+D)/A	DIFFERENCE INCOME EXPENCE A-(B+C+D)
43	NIA 120	CALUNASAN SWIP	1,569,750	42,500	34,135	61,200	0.09	1,431,915
44	NIA 121	MANDALUG SWIP	2,125,500	59,500	48,340	85,680	0.09	1,931,980
45	NIA 122	ABEJILAN SWIP	516,750	12,750	52,030	18,360	0.16	433,610
46	NIA 128	LINGSODA-AN SWIP	477,750	12,750	5,670	18,360	0.08	440,970
47	NIA 130	CATUNGAN SWIP	2,174,250	55,250	40,640	79,560	0.08	1,998,800
48	NIA 131	LAPACAN SWIP	2,544,750	63,750	27,820	91,800	0.07	2,361,380
49	NIA 132	TAYTAY SWIP	1,842,750	46,750	14,015	67,320	0.07	1,714,665
50	NIA 133	ARACA SWIP	3,627,000	85,000	50,825	122,400	0.07	3,368,775
51	NIA 136	ONDOL SWIP	3,627,000	85,000	49,695	122,400	0.07	3,369,905
52	NIA 138	SAN ISIDRO BANLASAN SWIP	5,401,500	127,500	45,190	183,600	0.07	5,045,210
53	NIA 139	BANLASAN SWIP	1,979,250	55,250	23,045	79,560	0.08	1,821,395
54	NIA 141	BIABAS SWIP	1,959,750	46,750	18,925	67,320	0.07	1,826,755
55	NIA 147	KANASUHAN CIP	6,259,500	161,500	166,720	232,560	0.09	5,698,720
56	NIA 148	LUYANG CIP	4,026,750	97,750	116,360	140,760	0.09	3,671,880
57	NIA 149	DANAO CIP	7,575,750	182,750	163,480	263,160	0.08	6,966,360
58	NIA 150	TUNGKOD CIP	4,134,000	102,000	94,900	146,880	0.08	3,790,220
59	NIA 152	MAAYOG-TUBIG CIP	3,217,500	76,500	40,295	110,160	0.07	2,990,545
60	NIA 154	MASAPLOD CIP	2,369,250	55,250	38,590	79,560	0.07	2,195,850
61	NIA 157	NAGA-MANTUYOP CIP	4,436,250	106,250	124,395	153,000	0.09	4,052,605
62	NIA 158	SAN ANTONIO CIP	1,844,700	51,000	75,335	73,440	0.11	1,644,925
63	NIA 163	TIGABAO CIP	1,443,000	34,000	54,805	48,960	0.10	1,305,235
64	NIA 186	MAHAYAHAY SWIP	5,866,575	142,375	71,955	205,020	0.07	5,447,225
65	NIA 187	BOGO-DONGAN SWIP	4,102,800	110,500	98,125	159,120	0.09	3,735,055
66	NIA 188	LAN-AGAN SWIP	1,784,250	46,750	55,170	67,320	0.09	1,615,010
67	NIA 190	KAMANSI-RIZAL SWIP	5,737,875	146,625	142,200	211,140	0.09	5,237,910
TOTAL (NIA)			202,948,200	6,794,975	4,471,065	9,784,764	0.10	181,897,396
1	BSWM 1	SUCSUQUEN SWIP	276,900	12,750	14,055	18,360	0.16	231,735
2	BSWM 2	OLO-OLO I SWIP	431,925	14,875	23,075	21,420	0.14	372,555
3	BSWM 3	OLO-OLO II SWIP	415,350	12,750	17,710	18,360	0.12	366,530
4	BSWM 4	BALINGOAN SWIP	536,250	21,250	18,510	30,600	0.13	465,890
5	BSWM 5	SAN CRISTOBAL SWIP	1,140,750	42,500	18,550	61,200	0.11	1,018,500
6	BSWM 6	SAN AGUSTIN SWIP	331,500	13,600	12,955	19,584	0.14	285,361
7	BSWM 7	BINGAO II SWIP	507,000	17,000	16,800	24,480	0.11	448,720
8	BSWM 8	ODA SWIP	1,365,000	42,500	19,665	61,200	0.09	1,241,635
9	BSWM 9	FUGARO SWIP	628,875	31,875	8,150	45,900	0.14	542,950
10	BSWM 10	PAMARANM SWIP	438,750	21,250	7,625	30,600	0.14	379,275
11	BSWM 11	CAPARISPISAN SWIP	633,750	21,250	14,935	30,600	0.11	566,965
12	BSWM 12	PATONG SWIP	655,200	42,500	15,315	61,200	0.18	536,185
13	BSWM 13	SAMAC SWIP	157,950	8,500	15,540	12,240	0.23	121,670
14	BSWM 14	MABINI SWIP	752,700	34,000	9,610	48,960	0.12	660,130
15	BSWM 15	SAN GONZALO SWIP	682,500	21,250	20,605	30,600	0.11	610,045
16	BSWM 16	CAMAGSINGALAN SWIP	628,875	23,375	7,765	33,660	0.10	564,075
17	BSWM 17	PATAR SWIP	867,750	21,250	13,570	30,600	0.08	802,330
18	BSWM 18	MALPIN SWIP	867,750	42,500	10,850	61,200	0.13	753,200
19	BSWM 19	VIGA SWIP	955,500	29,750	8,755	42,840	0.09	874,155
20	BSWM 20	CAHUOSAN	1,048,125	31,875	19,145	45,900	0.09	951,205
21	BSWM 21	MAGNANG SWIP	267,930	12,750	12,765	18,360	0.16	224,055
22	BSWM 23	DAQUIOAG II SWIP	236,145	17,000	14,750	24,480	0.24	179,915
23	BSWM 24	SAN ANDRES SWIP	372,840	21,250	19,485	30,600	0.19	301,505
24	BSWM 25	PANINAAN SWIP	497,250	21,250	12,710	30,600	0.13	432,690
25	BSWM 26	SAN JUAN I SWIP	180,375	10,825	10,165	15,300	0.20	144,285
26	BSWM 27	SAN JUAN II SWIP	218,400	10,625	27,055	15,300	0.24	165,420
27	BSWM 28	MACARCARMAY SWIP	331,500	25,500	12,190	36,720	0.22	257,090
28	BSWM 29	PATA SWIP	936,000	42,500	9,460	61,200	0.12	822,840
29	BSWM 30	BALAOUIT SWIP	1,008,150	42,500	8,330	61,200	0.11	896,120
30	BSWM 31	CABANNUNGAN SWIP	1,006,200	29,750	13,190	42,840	0.09	920,420
31	BSWM 32	MARANA SWIP	547,950	12,750	8,490	18,360	0.07	508,350
32	BSWM 33	CABULLAN SWIP	1,242,150	42,500	21,505	61,200	0.10	1,116,945
33	BSWM 34	DIADI SWIP	1,369,875	27,625	19,195	39,780	0.06	1,283,275
34	BSWM 35	NAGANACAN SWIP	1,031,550	34,000	11,150	48,960	0.09	937,440
35	BSWM 36	BALETE SWIP	521,625	8,500	6,640	12,240	0.05	494,245
36	BSWM 37	MINAGBAG	780,000	25,500	17,225	36,720	0.10	700,555
37	BSWM 38	KIRANG SWIP	1,365,000	51,000	7,875	73,440	0.10	1,232,685
38	BSWM 39	LANNAG SWIP	457,275	14,875	10,100	21,420	0.10	410,880
39	BSWM 40	SAN ANTONIO SWIP	1,462,500	42,500	15,315	61,200	0.08	1,343,485
40	BSWM 41	ABIAN SWIP	399,750	17,000	10,080	24,480	0.13	348,190

Table 9.6.1 Repayment Capability of Beneficiaries (3/4)

Table 9.6.1 Repayment Capability of Beneficiaries (3/4)

No.	AGENCY Name No.	PROJECT NAME	INCREASE OF ANNUAL INCOME (Pesos) (A)	ANNUAL O&M COST (IRRIG) (Pesos) (B)	ANNUAL O&M COST (DAM) (Pesos) (C)	AMORTIZA- TION (IRRIG) (Pesos) (D)	INCOME/ EXPENCE RATIO (B+C+D)/A	DIFFERENCE INCOME EXPENCE A-(B+C+D)
41	BSWM 42	TRINIDAD SWIP	731,250	21,250	17,365	30,600	0.09	662,035
42	BSWM 43	MALALAM SWIP	390,000	29,750	10,370	42,840	0.21	307,040
43	BSWM 44	APANG SWIP	425,100	21,250	16,520	30,600	0.16	356,730
44	BSWM 45	ANNEG SWIP	3,656,250	106,250	23,475	153,000	0.08	3,373,525
45	BSWM 46	VICTORIA SWIP	569,400	17,000	7,335	24,480	0.09	520,585
46	BSWM 47	SAN MARCOS SWIP	926,250	29,750	12,030	42,840	0.09	841,630
47	BSWM 48	SAN FRANCISCO SWIP	1,380,600	42,500	11,095	61,200	0.08	1,265,805
48	BSWM 49	STA FILMENA SWIP	223,275	6,375	2,900	9,180	0.08	204,820
49	BSWM 50	OLD SAN MARIANO	253,500	8,500	7,985	12,240	0.11	224,775
50	BSWM 51	YERAN SWIP	784,875	23,375	16,970	33,660	0.09	710,870
51	BSWM 52	MINALLO SWIP	645,450	21,250	28,040	30,600	0.12	565,360
52	BSWM 56	ARUSING DAGA SWIP	750,750	34,000	20,480	48,960	0.14	647,310
53	BSWM 57	MASIN SWIP	463,125	18,275	10,085	26,316	0.12	408,449
54	BSWM 58	CARALLANGAN SWIP	394,875	16,150	12,400	23,256	0.13	343,069
55	BSWM 59	GANZANO SWIP	882,375	17,000	20,970	24,480	0.07	819,925
56	BSWM 60	SAMPALOC SWIP	877,500	42,500	17,860	61,200	0.14	755,940
57	BSWM 61	STO. DOMINGO III SWIP	1,023,750	42,500	12,260	61,200	0.11	907,790
58	BSWM 62	MASAUPT SWIP	1,267,500	42,500	7,485	61,200	0.09	1,156,315
59	BSWM 63	VILLA BOADO SWIP	1,111,500	42,500	8,600	61,200	0.10	999,200
60	BSWM 64	BUTID SWIP	780,000	42,500	13,075	61,200	0.15	663,225
61	BSWM 65	MANINIOG SWIP	317,850	21,250	11,420	30,600	0.20	254,580
62	BSWM 66	VILLA ISLA SWIP	1,072,500	42,500	8,640	61,200	0.10	960,160
63	BSWM 67	STA. CATALINA SWIP	524,550	21,250	14,315	30,600	0.13	458,385
64	BSWM 68	FULO SWIP	536,250	21,250	17,230	30,600	0.13	467,170
65	BSWM 69	STO DOMINGO II SWIP	438,750	21,250	11,745	30,600	0.14	375,155
66	BSWM 70	BITUNGOL SWIP	575,250	42,500	16,780	61,200	0.21	454,770
67	BSWM 71	MAASIN SWIP	975,000	42,500	22,255	61,200	0.13	849,045
68	BSWM 72	STO DOMINGO I SWIP	526,500	29,750	9,055	42,840	0.16	444,855
69	BSWM 73	MANGANDINGAY SWIP	799,500	34,000	17,885	48,960	0.13	698,655
70	BSWM 74	NAJULANDAYAN SWIP	3,900,000	170,000	19,185	244,800	0.11	3,466,015
71	BSWM 75	PARISTA SWIP	774,150	34,000	15,475	48,960	0.13	675,715
72	BSWM 76	BALRALLINGAO SWIP	682,500	21,250	39,885	30,600	0.13	590,765
73	BSWM 77	LAGUNONG SWIP	536,250	21,250	14,370	30,600	0.12	470,030
74	BSWM 78	PAKALA II SWIP	804,375	31,875	14,115	45,900	0.11	712,485
75	BSWM 79	BAYUIN SWIP	506,025	19,125	10,650	27,540	0.11	448,710
76	BSWM 80	CAMBURAY SWIP	722,670	21,250	20,510	30,600	0.10	650,310
77	BSWM 82	BUENASUERTE SWIP	189,540	34,000	10,880	48,960	0.50	95,700
78	BSWM 83	BULNAO SWIP	528,450	42,500	10,445	61,200	0.22	414,305
79	BSWM 84	DALNAC SWIP	654,030	21,250	10,200	30,600	0.09	591,980
80	BSWM 85	GABAWAN	536,250	42,500	9,900	61,200	0.21	422,650
81	BSWM 86	BURGOS SWIP	463,125	10,625	13,200	15,300	0.08	424,000
82	BSWM 87	F.ARCANGEL SWIP	516,750	21,250	13,355	30,600	0.13	451,545
83	BSWM 88	PINONAY SWIP	453,375	10,625	9,415	15,300	0.08	418,035
84	BSWM 89	SIRALIW-TORALBA SWIP	291,525	10,625	9,215	15,300	0.12	256,385
85	BSWM 90	PANLAGANGAN SWIP	419,250	21,250	10,800	30,600	0.15	356,600
86	BSWM 91	TRACIANO SWIP	468,000	21,250	6,370	30,600	0.12	409,780
87	BSWM 92	SAN ROQUE SWIP	604,500	17,000	12,365	24,480	0.09	550,655
88	BSWM 93	ARANAG SWIP	817,050	42,500	15,170	61,200	0.15	698,180
89	BSWM 94	BUENAVISTA SWIP	419,250	21,250	8,195	30,600	0.14	359,205
90	BSWM 95	DITA I SWIP	742,950	21,250	16,220	30,600	0.09	674,880
91	BSWM 96	DITA II SWIP	513,825	14,875	10,790	21,420	0.09	466,740
92	BSWM 97	SAN JOSE SWIP II	534,105	12,750	12,410	18,360	0.08	490,585
93	BSWM 98	STO. NINO SWIP	1,417,260	46,750	14,090	67,320	0.09	1,289,100
94	BSWM 99	NANGKA SWIP	443,625	14,875	12,375	21,420	0.11	394,955
95	BSWM 100	BAGTIC SWIP	1,760,460	42,500	11,170	61,200	0.07	1,645,590
96	BSWM 101	NABILIG SWIP	780,000	21,250	19,920	30,600	0.09	708,230
97	BSWM 102	BONG-BONG I SWIP	1,462,500	42,500	7,310	61,200	0.08	1,351,490
98	BSWM 103	BONG-BONG II SWIP	1,150,500	42,500	7,435	61,200	0.10	1,039,365
99	BSWM 108	JUBASAN SWIP	212,550	10,625	15,715	15,300	0.20	170,910
100	BSWM 109	CASABAHAN SWIP	906,750	42,500	15,580	61,200	0.13	787,470
101	BSWM 110	INAMBURACAY SWIP	680,550	21,250	16,390	30,600	0.10	612,310
102	BSWM 111	STA. FE SWIP	1,647,750	53,125	9,715	76,500	0.08	1,508,410
103	BSWM 112	CAMPIN SWIP	674,700	24,650	10,210	35,496	0.10	604,344
104	BSWM 113	LABOON SWIP	336,375	10,625	8,690	15,300	0.10	301,760
105	BSWM 114	POLANQUI SWIP	788,970	21,250	6,415	30,600	0.07	730,705
106	BSWM 115	TABAWAN SWIP	0	42,500	21,915	61,200	-	-
107	BSWM 117	WOODLAND SWIP	1,375,140	42,500	11,750	61,200	0.08	1,259,690
108	BSWM 118	SUMADAT SWIP	765,375	29,750	11,260	42,840	0.11	681,525

Table 9.6.1 Repayment Capability of Beneficiaries (4/4)

Table 9.6.1 Repayment Capability of Beneficiaries (4/4)

No.	AGENCY Name No.	PROJECT NAME	INCREASE OF ANNUAL INCOME (Pesos) (A)	ANNUAL O&M COST (IRRIG) (Pesos) (B)	ANNUAL O&M COST (DAM) (Pesos) (C)	AMORTIZA- TION (IRRIG) (Pesos) (D)	INCOME/ EXPENCE RATIO (B+C+D)/A	DIFFERENCE INCOME EXPENCE A-(B+C+D)
109	BSWM 119	LUNGNOT SWIP	931,125	25,500	11,615	36,720	0.08	857,290
110	BSWM 120	LAMARE I SWIP	750,750	34,000	9,875	48,960	0.12	657,915
111	BSWM 121	LAMARE II SWIP	773,175	25,500	13,750	36,720	0.10	697,205
112	BSWM 122	BUENAVISTA SWIP	758,550	42,500	14,110	61,200	0.16	640,740
113	BSWM 123	GOLING SWIP	736,125	42,500	9,985	61,200	0.15	622,440
114	BSWM 124	LABUAGON SWIP	1,655,940	63,750	5,860	91,800	0.10	1,494,530
115	BSWM 125	ALUBLIJD SWIP	970,125	44,625	10,330	64,260	0.12	850,910
116	BSWM 126	BALIBAYON SWIP	812,175	34,000	19,285	48,960	0.13	709,930
117	BSWM 127	APULANG SWIP	1,170,000	59,500	5,765	85,680	0.13	1,019,055
118	BSWM 128	TALO-AO SWIP	2,481,375	65,875	21,905	94,860	0.07	2,298,735
119	BSWM 129	DUMALAGAN SWIP	1,940,250	72,250	14,715	104,040	0.10	1,749,245
120	BSWM 130	MINITU-OD SWIP	1,610,310	42,500	10,890	61,200	0.07	1,495,720
121	BSWM 131	MALAPONG SWIP	1,714,050	85,000	7,170	122,400	0.13	1,499,480
122	BSWM 132	TALAGANARAO SWIP	741,858	25,500	9,840	36,720	0.10	669,798
123	BSWM 133	KITAO-TAO SWIP	2,730,000	85,000	10,380	122,400	0.08	2,512,220
124	BSWM 134	SAN RAFAEL SWIP	492,375	14,875	17,580	21,420	0.11	438,490
125	BSWM 135	BUKAY-PAIT SWIP	1,204,125	57,375	19,225	82,620	0.13	1,044,905
126	BSWM 136	LIBUDON SWIP	302,250	12,750	6,595	18,360	0.12	264,545
127	BSWM 137	DUMADALIG SWIP	521,625	17,000	13,395	24,480	0.11	466,750
128	BSWM 138	LIBASAN SWIP	2,306,850	80,750	21,940	116,280	0.09	2,087,880
129	BSWM 139	FLORIDA SWIP	2,026,050	63,750	15,655	91,800	0.08	1,854,845
130	BSWM 140	DAIMAN SWIP	351,000	17,000	9,045	24,480	0.14	300,475
131	BSWM 141	SAN NICOLAS SWIP	1,204,125	34,000	17,750	48,960	0.08	1,103,415
132	BSWM 142	BOLTON SWIP	1,508,325	51,500	22,705	74,160	0.10	1,359,960
133	BSWM 143	PEDIAP SWIP	924,300	34,000	19,850	48,960	0.11	821,490
134	BSWM 144	LOOY SWIP	1,194,375	36,125	20,600	52,020	0.09	1,085,630
135	BSWM 145	DALINGAWEN SWIP	3,656,250	106,250	18,830	153,000	0.08	3,378,170
136	BSWM 146	TINIBTIRAN SWIP	2,022,150	51,000	15,980	73,440	0.07	1,881,730
137	BSWM 147	BUSOK SWIP	1,023,750	42,500	11,455	61,200	0.11	908,595
138	BSWM 149	LANCHETA SWIP	235,365	8,500	9,135	12,240	0.13	205,490
139	BSWM 150	NEW CARMEN	1,547,325	74,375	12,635	107,100	0.13	1,353,215
140	BSWM 151	MALAGAKIT SWIP	1,435,200	42,500	9,330	61,200	0.08	1,322,170
TOTAL (BSWM)			123,070,038	4,603,675	1,917,735	6,629,292	0.11	109,919,336
GRAND TOTAL			382,930,938	13,576,425	8,290,790	18,999,252	0.11	342,064,471

Table 10.2.1 EIRR of SWIM Projects in the First Five Years of 10 Year Action Program

Year	DPWH		NIA		ESWM		Total	
	Cost	Benefit	Cost	Benefit	Cost	Benefit	Cost	Benefit
	Balance	Balance	Balance	Balance	Balance	Balance	Balance	Balance
1991	-28,750	0	-72,040	0	-73,228	0	-174,019	0
1992	-36,010	0	-147,541	0	-82,497	7,715	-266,048	7,715
1993	-42,496	7,483	-170,200	19,445	-84,867	33,315	-297,563	60,243
1994	-43,732	13,649	-186,066	51,829	-80,458	49,430	-310,257	114,907
1995	-54,170	19,104	-158,504	91,686	-93,842	65,941	-306,517	176,732
1996	-1,446	30,198	-5,084	146,013	-3,645	90,599	-10,175	266,811
1997	-1,446	35,851	-5,084	165,078	-3,645	102,170	-10,175	303,099
1998	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
1999	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2000	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2001	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2002	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2003	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2004	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2005	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2006	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2007	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2008	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2009	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2010	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2011	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2012	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2013	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2014	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2015	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2016	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2017	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2018	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2019	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2020	-1,446	40,958	-5,084	176,863	-3,645	111,748	-10,175	329,569
2021	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0	0
2025	0	0	0	0	0	0	0	0

EIRR = 20.0%

Table 10.2.2 EIRR of SWIM Projects in the Second Five Years of 10 Year Action Program

Year	DPWH			NIA			BSWM			Total		
	Cost	Benefit	Balance	Cost	Benefit	Balance	Cost	Benefit	Balance	Cost	Benefit	Balance
	Unit: Pesos1,000											
1991	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0	0	0	0	0
1995	4,918	0	-4,918	-20,665	0	-20,665	0	0	0	-25,583	0	-25,583
1996	-74,689	0	-74,689	-176,817	0	-176,817	-54,619	0	-54,619	-306,124	0	-306,124
1997	-87,734	2,913	-84,822	-187,597	1,168	-186,428	-57,225	3,880	-53,346	-332,556	7,960	-324,596
1998	-95,548	14,023	-81,523	-189,989	46,062	-143,927	-60,651	18,815	-41,836	-346,188	78,902	-267,286
1999	-103,534	27,202	-76,332	-189,815	78,724	-111,091	-66,367	29,183	-37,185	-359,716	135,109	-224,607
2000	-125,941	35,810	-90,130	-201,539	106,753	-94,786	-71,235	43,875	-27,360	-398,715	186,438	-212,277
2001	-3,274	52,292	49,018	-5,648	134,321	128,673	-2,309	51,268	48,960	-11,230	237,881	226,651
2002	-3,274	54,256	50,982	-5,648	143,275	137,627	-2,309	54,760	52,452	-11,230	252,291	241,061
2003	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2004	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2005	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2006	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2007	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2008	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2009	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2010	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2011	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2012	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2013	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2014	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2015	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2016	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2017	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2018	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2019	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2020	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2021	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2022	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2023	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2024	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964
2025	-3,274	54,816	51,543	-5,648	148,749	143,101	-2,309	55,628	53,320	-11,230	259,194	247,964

EIRR = 12.8%



Table 10.2.3 EIRR of SWIM Projects in 10 Year Action Program

Year	DPWH		NIA		BSWM		Total	
	Cost	Benefit	Cost	Benefit	Cost	Benefit	Cost	Benefit
1991	-28,750	0	-72,040	0	-73,228	0	-174,019	0
1992	-36,010	0	-147,541	0	-82,497	7,715	-266,048	7,715
1993	-42,496	7,483	-170,200	19,445	-84,867	33,315	-297,563	60,243
1994	-43,732	13,649	-186,066	51,829	-80,458	49,430	-310,257	114,907
1995	-59,089	19,104	-179,169	91,686	-93,842	65,941	-332,100	176,732
1996	-76,135	30,198	-181,901	146,013	-58,264	90,599	-316,299	266,811
1997	-89,181	38,764	-192,680	166,246	-60,870	106,050	-342,731	311,060
1998	-96,994	54,982	-195,073	222,926	-64,296	130,563	-356,363	408,471
1999	-104,980	68,160	-194,899	255,588	-70,012	140,931	-369,891	464,678
2000	-127,387	76,768	-206,623	283,616	-74,880	155,623	-408,890	516,007
2001	-4,720	93,250	-10,732	311,184	-5,954	163,016	-21,405	567,450
2002	-4,720	95,213	-10,732	320,139	-5,954	166,508	-21,405	581,860
2003	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2004	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2005	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2006	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2007	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2008	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2009	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2010	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2011	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2012	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2013	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2014	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2015	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2016	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2017	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2018	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2019	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2020	-4,720	95,774	-10,732	325,613	-5,954	167,376	-21,405	588,763
2021	-3,274	54,816	-5,648	148,749	-2,309	55,628	-11,230	259,194
2022	-3,274	54,816	-5,648	148,749	-2,309	55,628	-11,230	259,194
2023	-3,274	54,816	-5,648	148,749	-2,309	55,628	-11,230	259,194
2024	-3,274	54,816	-5,648	148,749	-2,309	55,628	-11,230	259,194
2025	-3,274	54,816	-5,648	148,749	-2,309	55,628	-11,230	259,194

EIRR = 17.5%

## ***FIGURES***



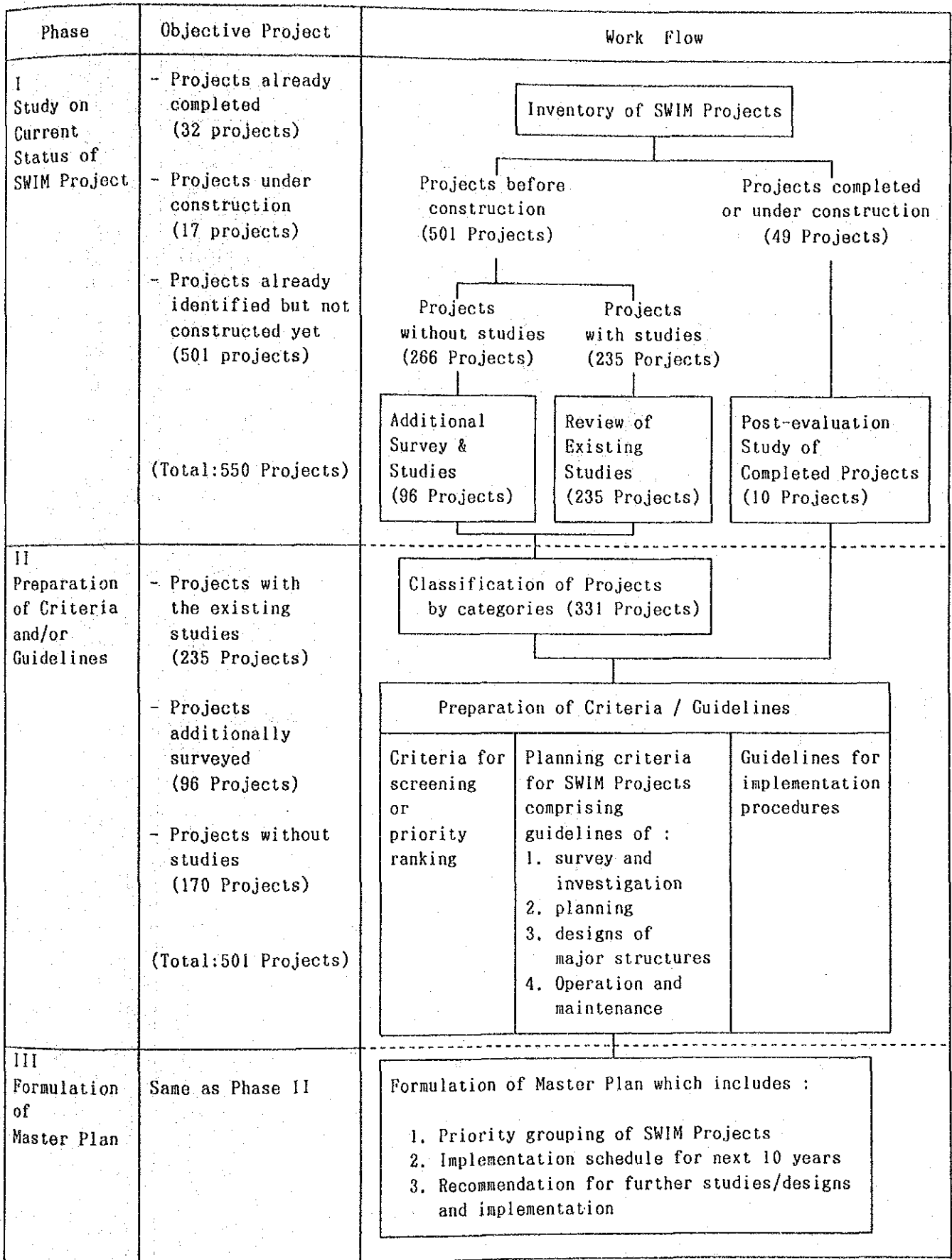
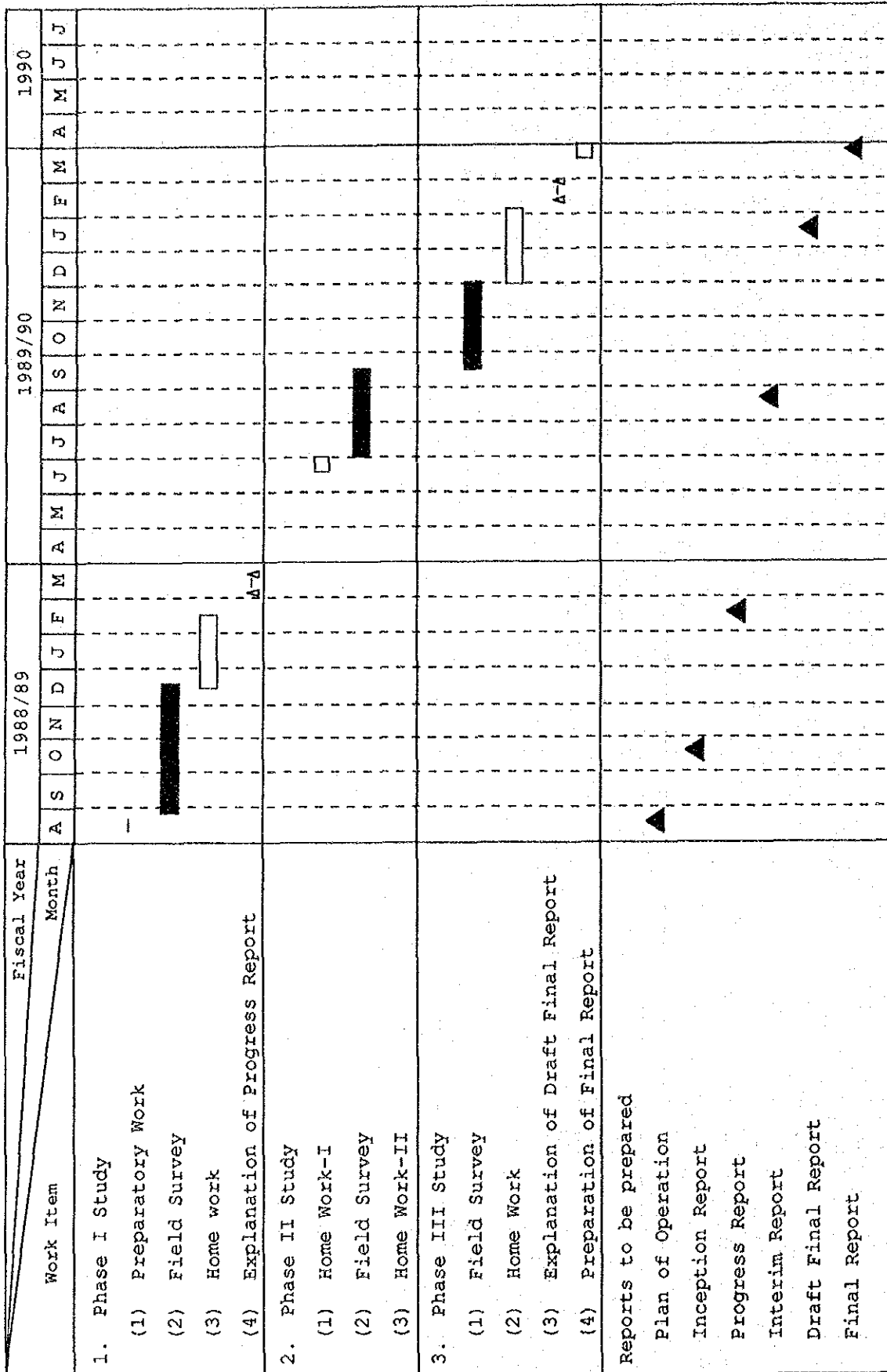
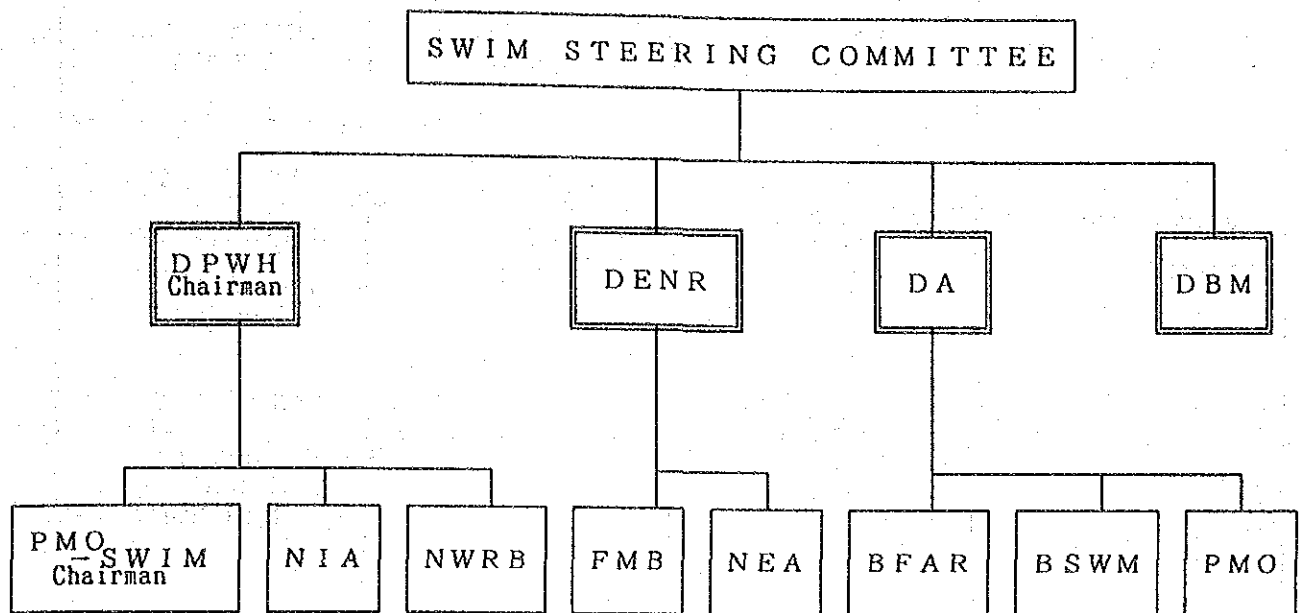


Fig.1.2.1 GENERAL WORK FLOW CHART FOR MASTER PLAN STUDY



Note: — Preparatory Work    ■ Field Survey    □ Home Work    △-△ Explanation of Reports

Fig.1.3.1 WORK SCHEDULE FOR MASTER PLAN STUDY



NOTE :

Members of SWIM Steering Committee

Members of Technical Working Group (TWG)

Implementing/Cooperating Agencies : PMO-SWIM, NIA, FMB, NEA, BSWM  
 Cooperating Agencies : NWRB, BFAR

- D P W H : Department of Public Works and Highways
- D E N R : Department of Environment and Natural Resources
- D A : Department of Agriculture
- D B M : Department of Budget and Management
- PMO-SWIM : Project Management Office for SWIM in DPWH
- N I A : National Irrigation Administration
- N W R B : National Water Resources Board
- F M B : Forest Management Bureau
- N E A : National Electrification Administration
- B F A R : Bureau of Fisheries and Aquatic Resources
- B S W M : Bureau of Soils and Water Management
- P M O : Project Management Office in DA (formerly FSDC)

Fig.2.4.1 ORGANIZATIONAL SET-UP FOR SWIM PROJECTS

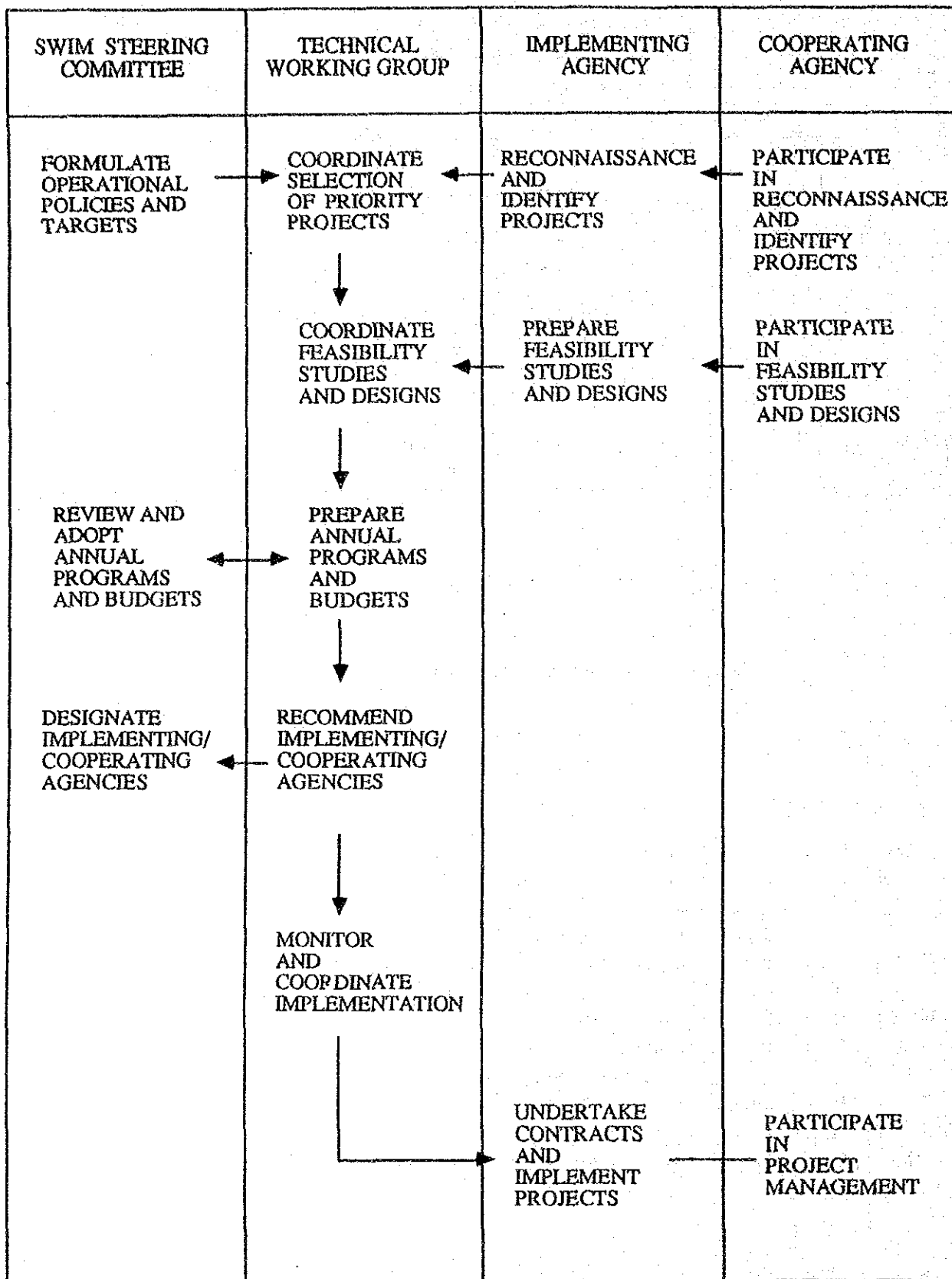
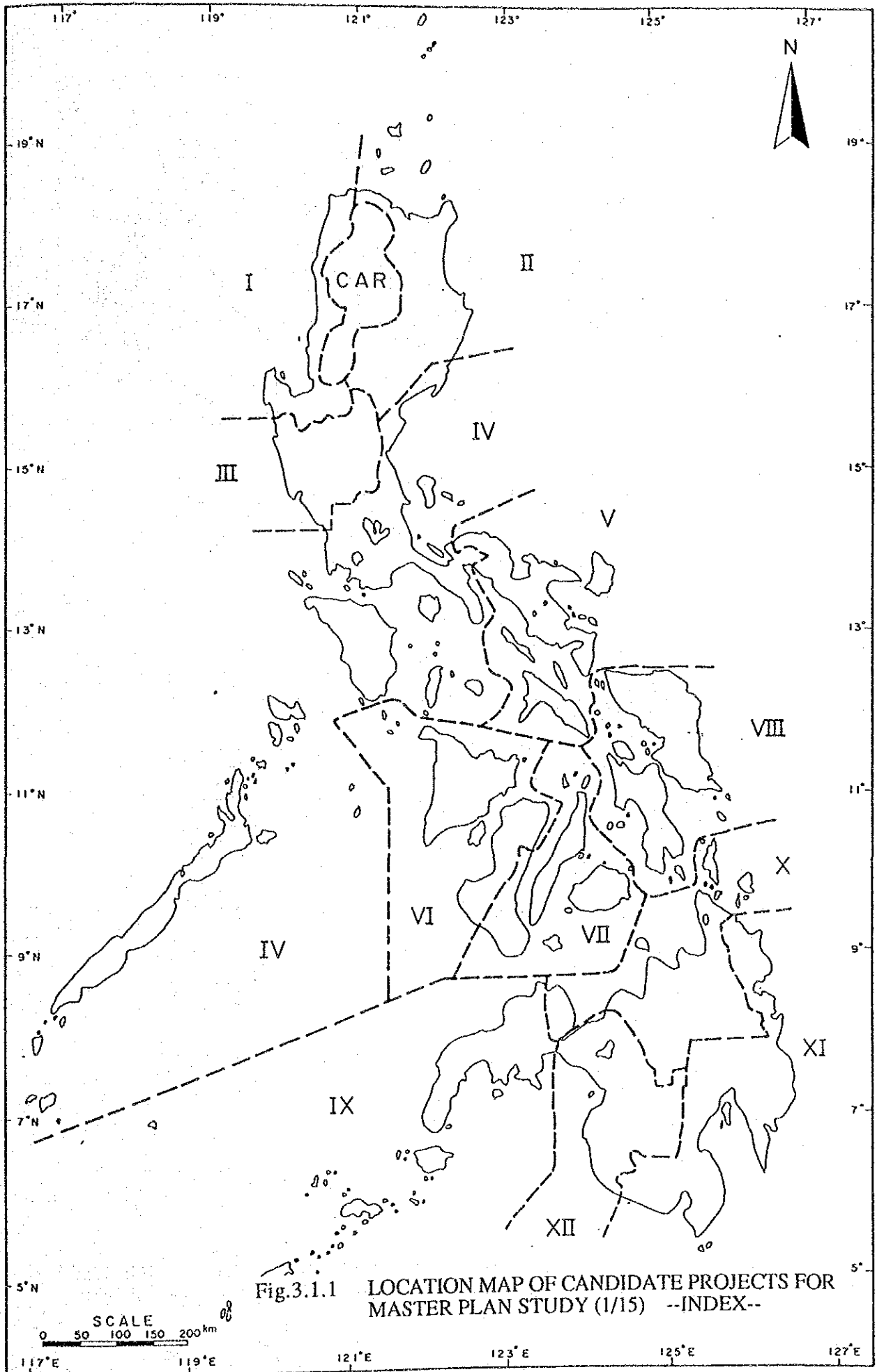


Fig.2.4.2 WORK FLOW FOR IMPLEMENTATION OF SWIM PROJECTS





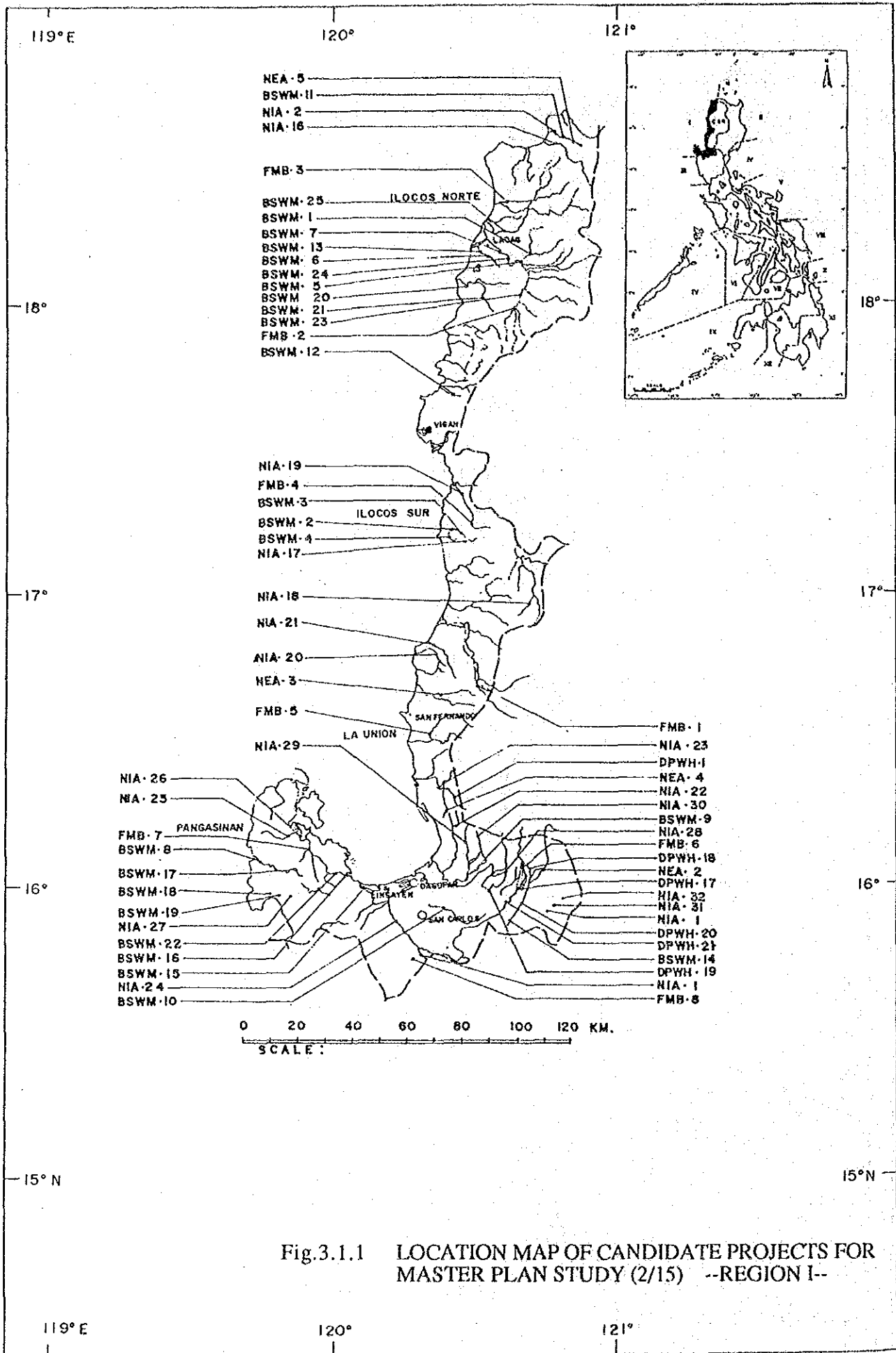


Fig.3.1.1 LOCATION MAP OF CANDIDATE PROJECTS FOR MASTER PLAN STUDY (2/15) --REGION I--

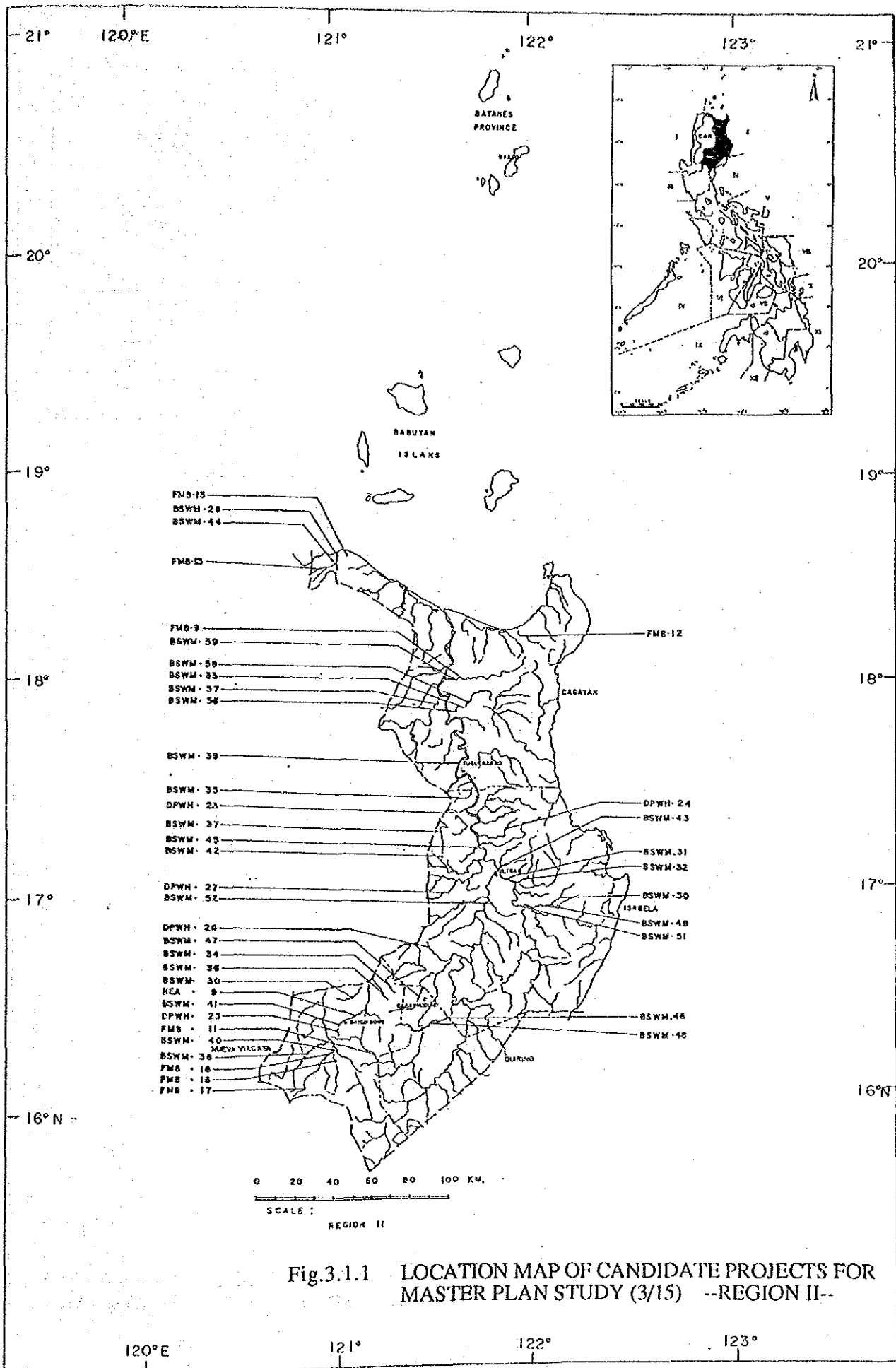


Fig.3.1.1 LOCATION MAP OF CANDIDATE PROJECTS FOR MASTER PLAN STUDY (3/15) --REGION II--

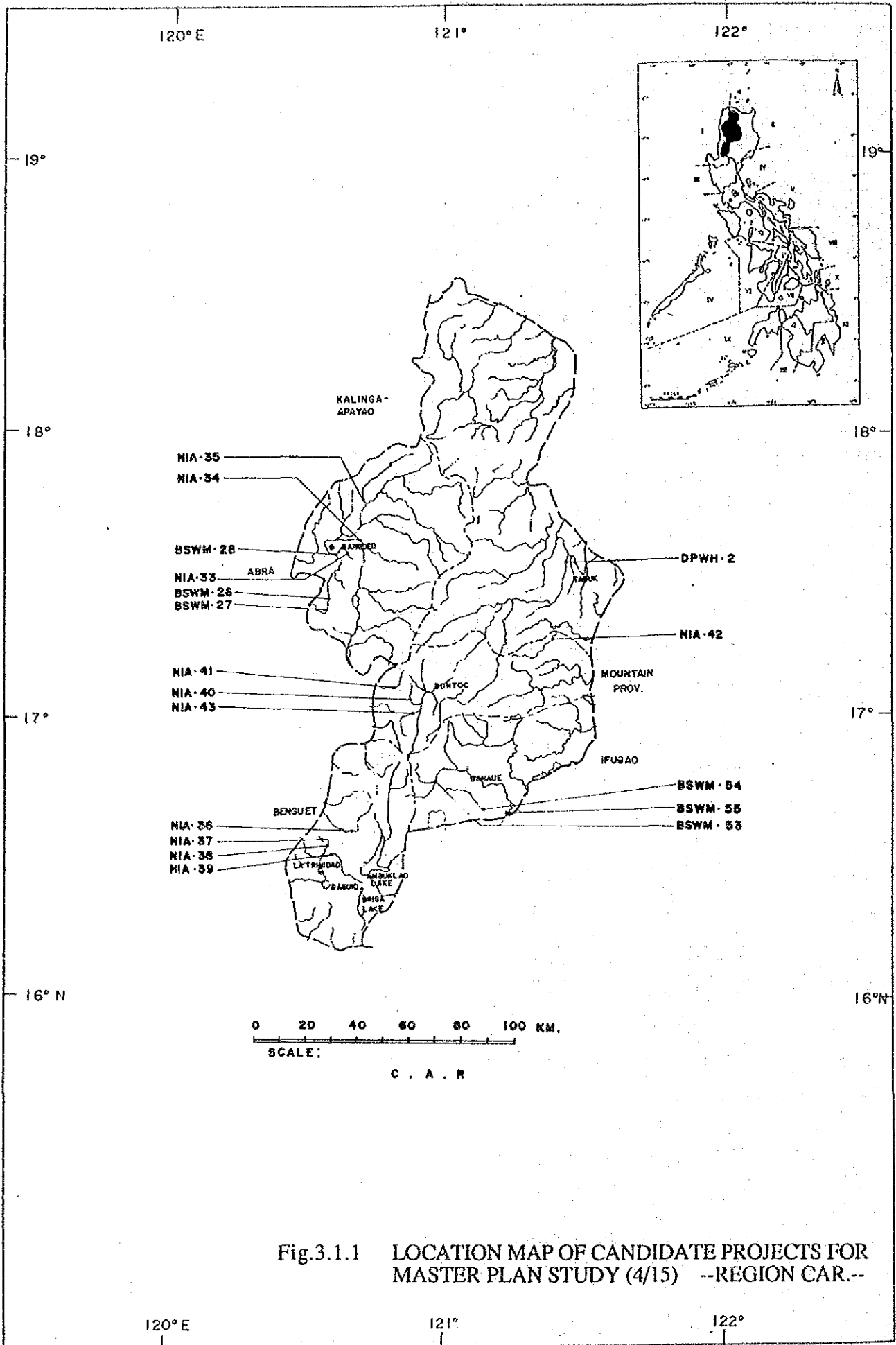


Fig.3.1.1 LOCATION MAP OF CANDIDATE PROJECTS FOR MASTER PLAN STUDY (4/15) --REGION CAR--

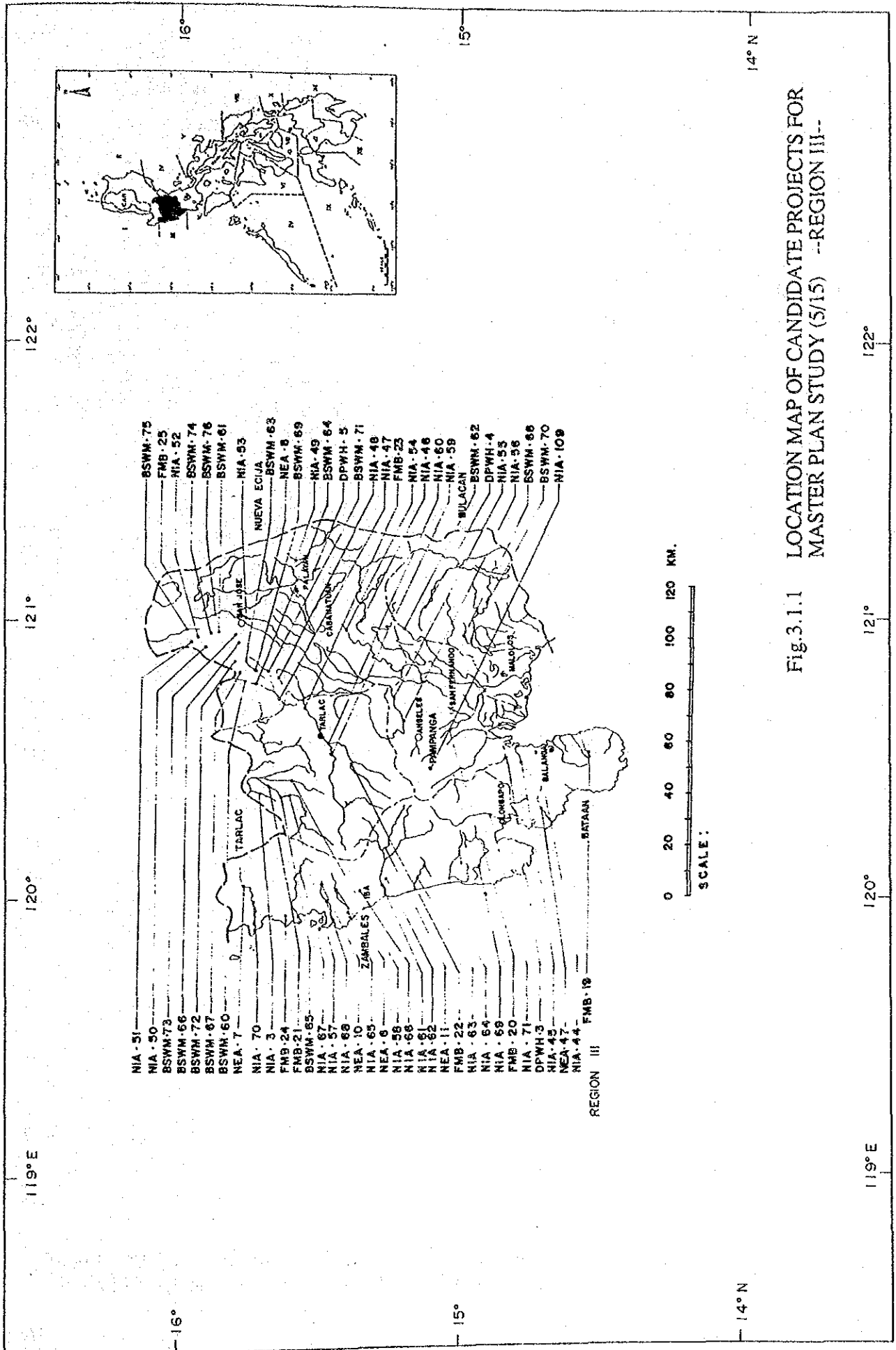


Fig.3.1.1 LOCATION MAP OF CANDIDATE PROJECTS FOR MASTER PLAN STUDY (5/15) --REGION III--

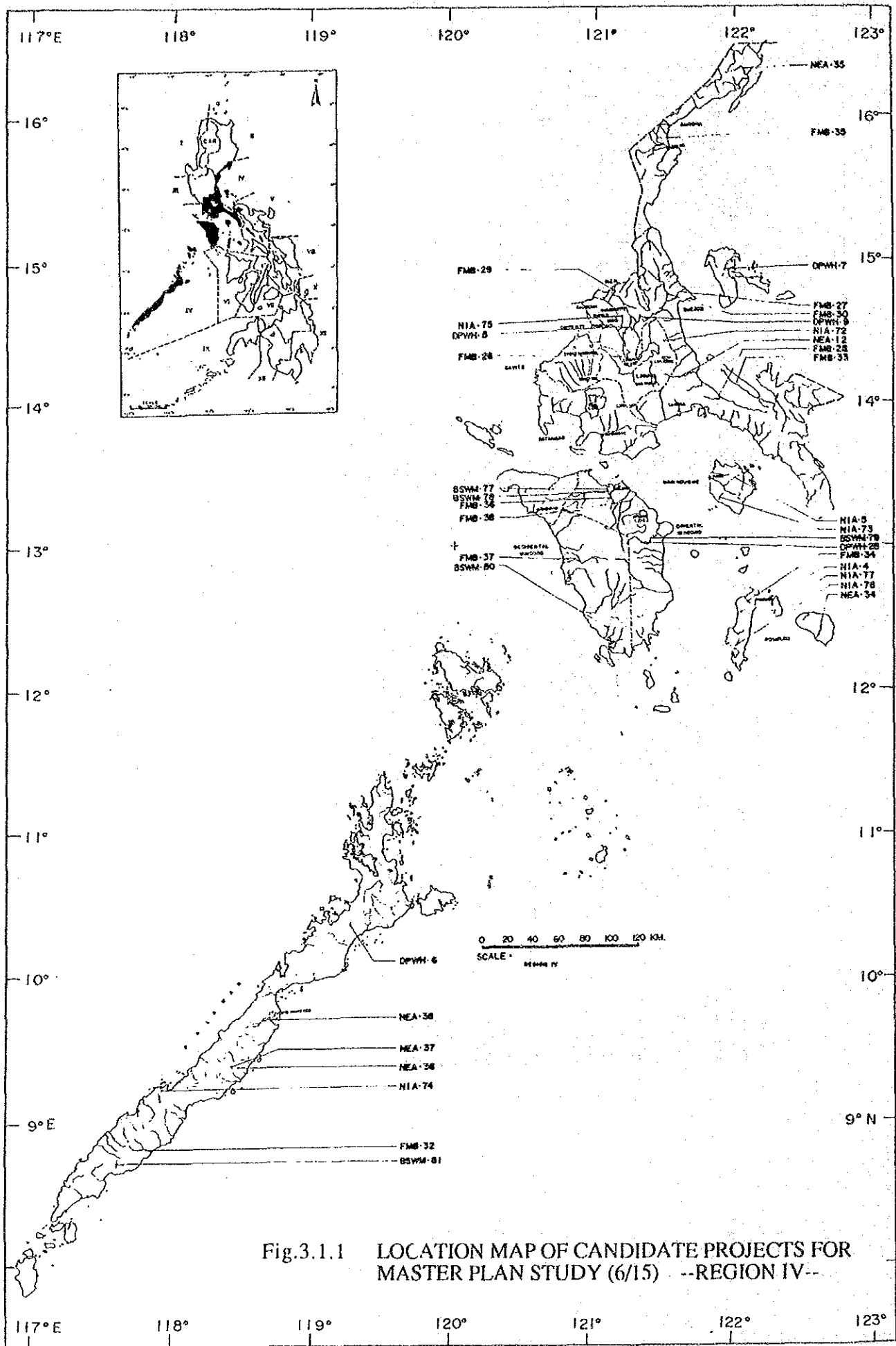


Fig.3.1.1 LOCATION MAP OF CANDIDATE PROJECTS FOR MASTER PLAN STUDY (6/15) --REGION IV--

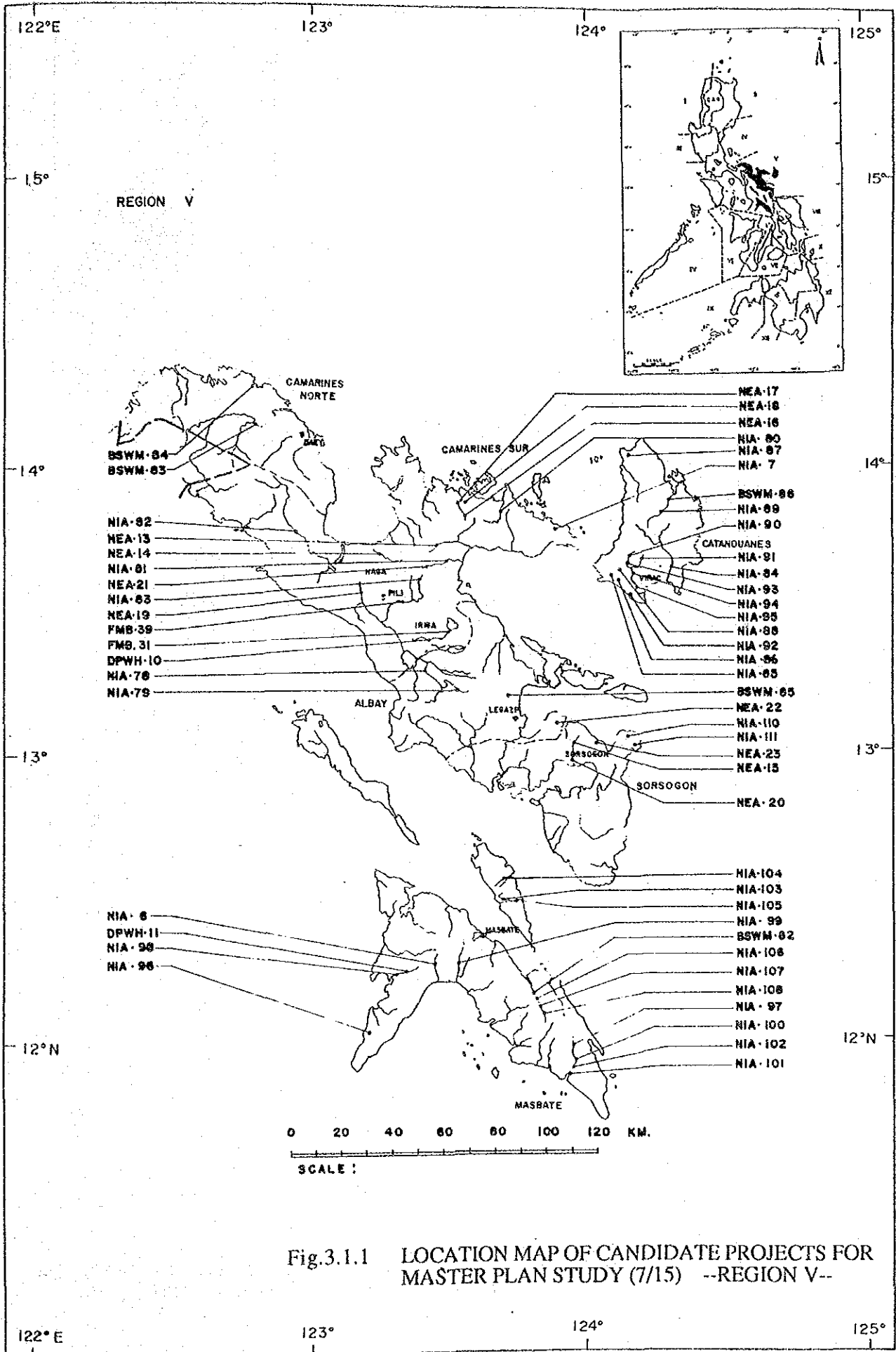


Fig.3.1.1 LOCATION MAP OF CANDIDATE PROJECTS FOR MASTER PLAN STUDY (7/15) --REGION V--

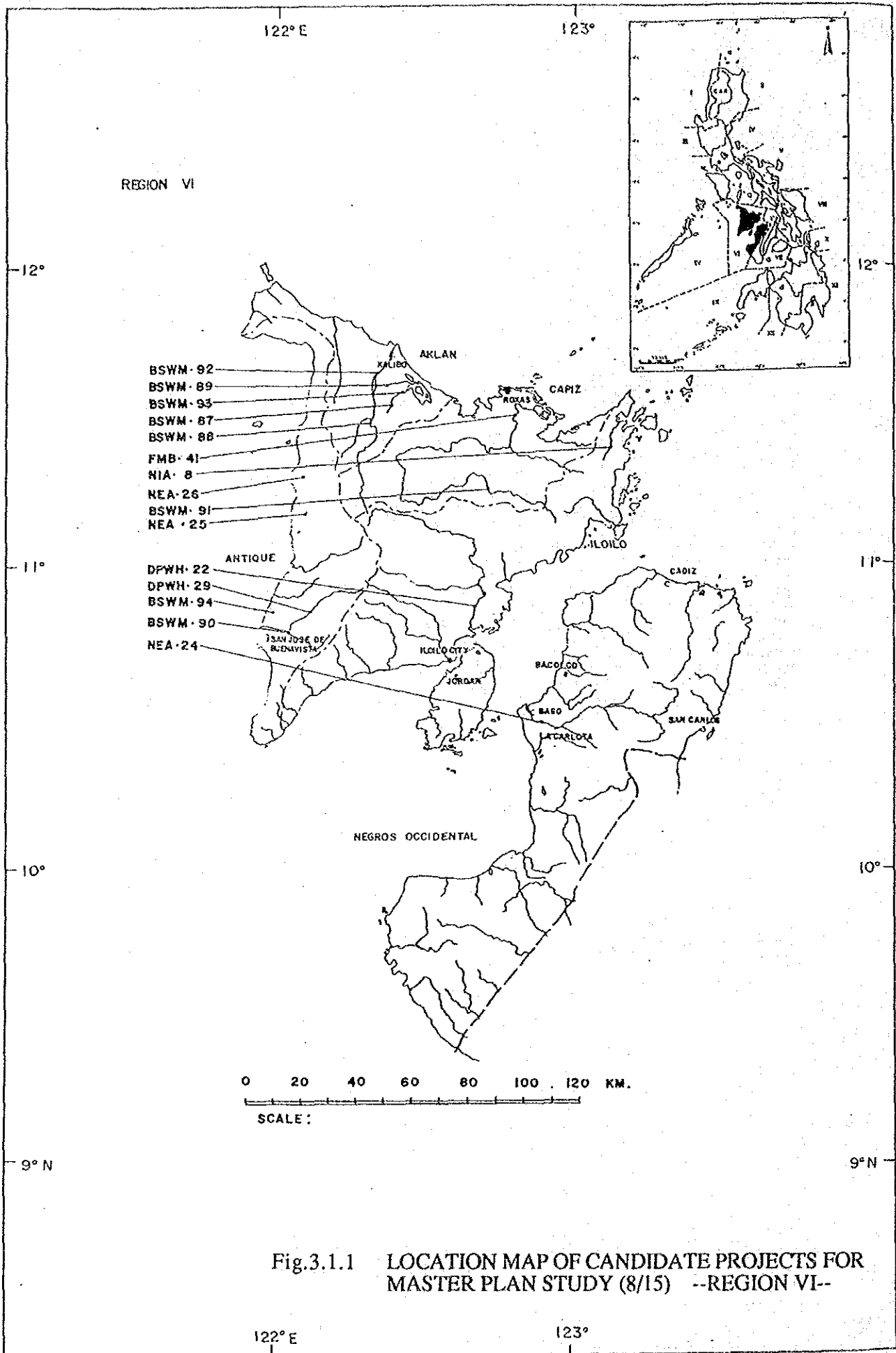


Fig.3.1.1 LOCATION MAP OF CANDIDATE PROJECTS FOR MASTER PLAN STUDY (8/15) --REGION VI--

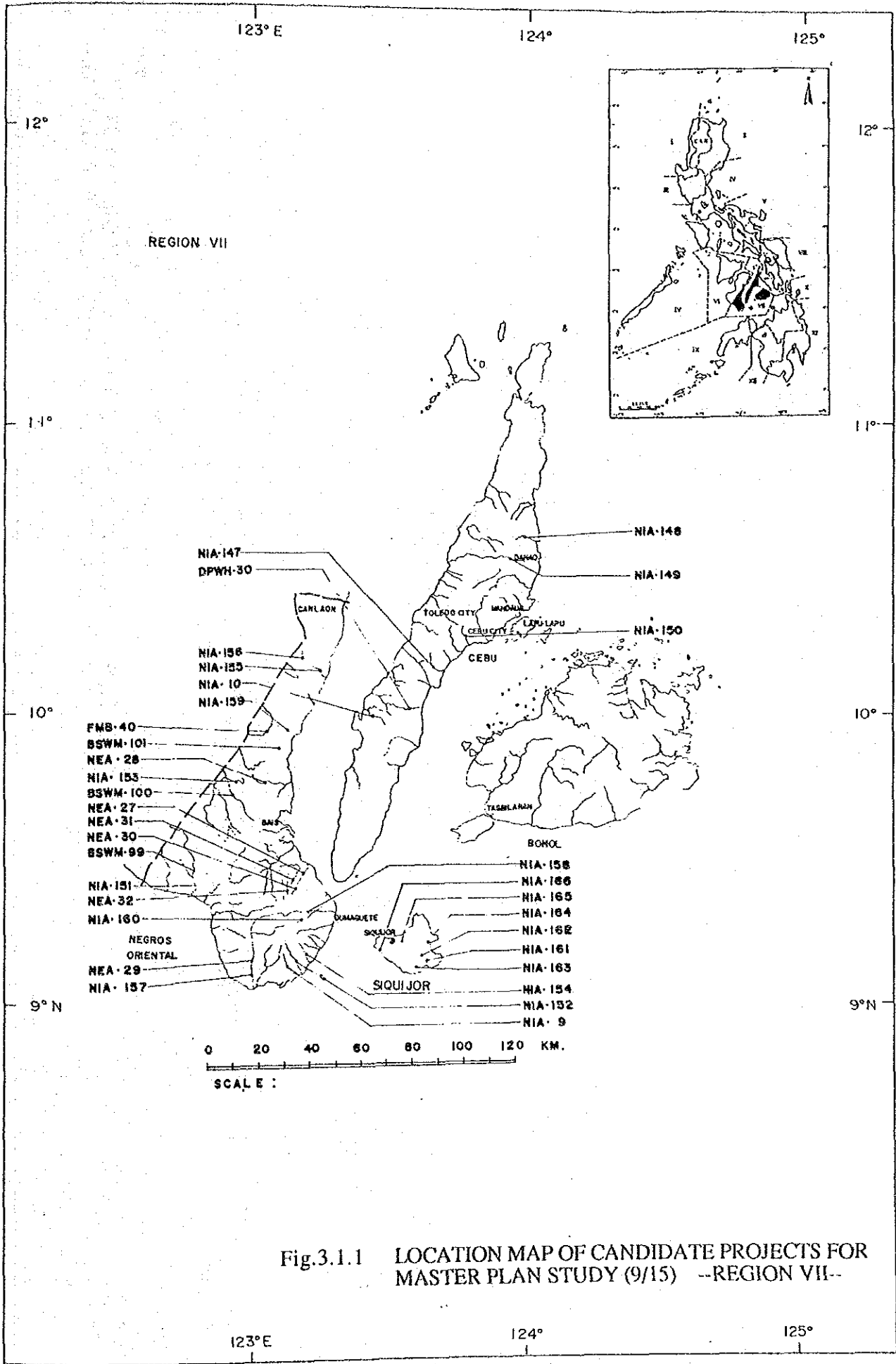


Fig.3.1.1 LOCATION MAP OF CANDIDATE PROJECTS FOR MASTER PLAN STUDY (9/15) --REGION VII--



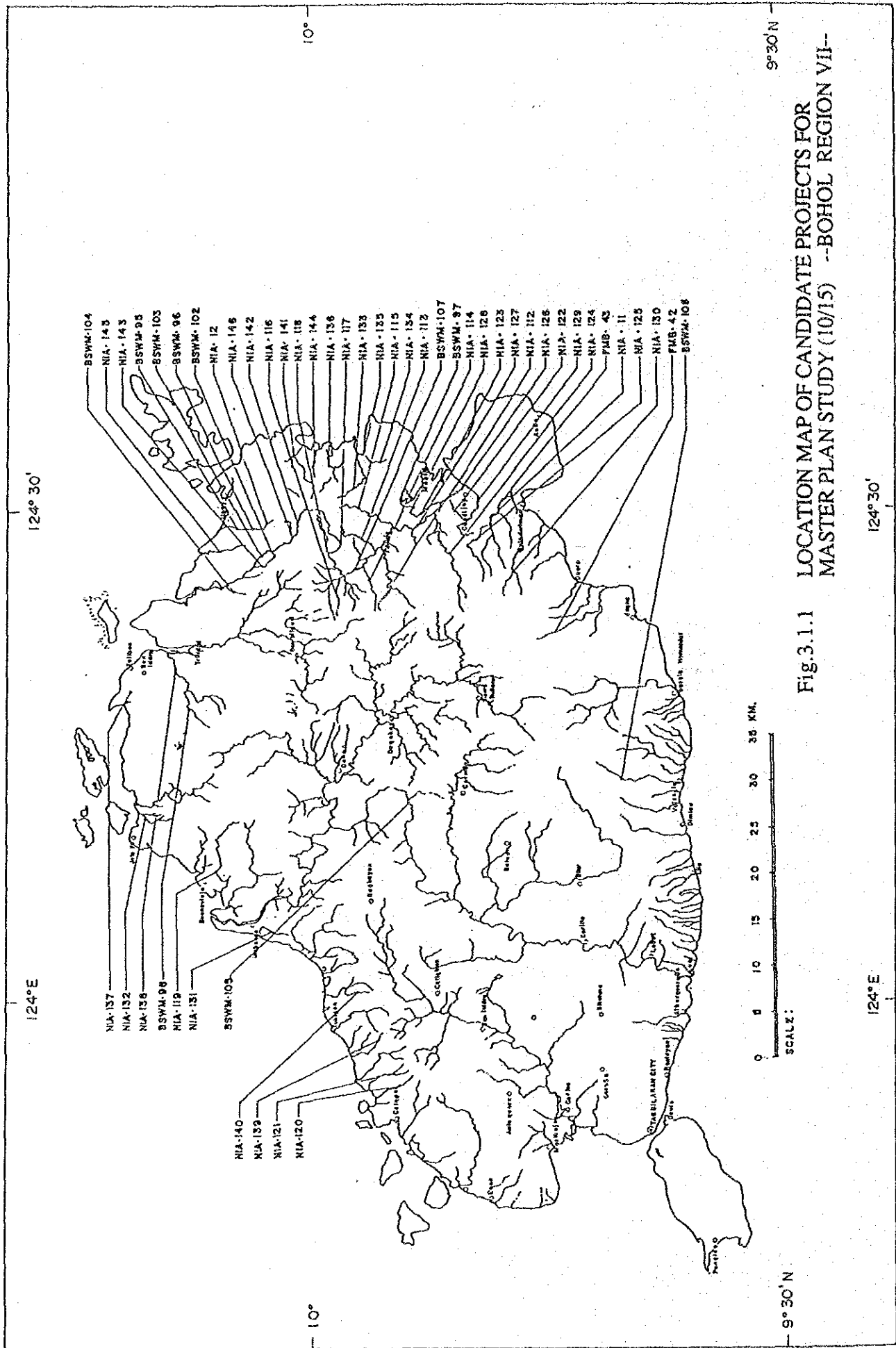


Fig. 3.1.1 LOCATION MAP OF CANDIDATE PROJECTS FOR MASTER PLAN STUDY (10/15) --BOHOL REGION VII--

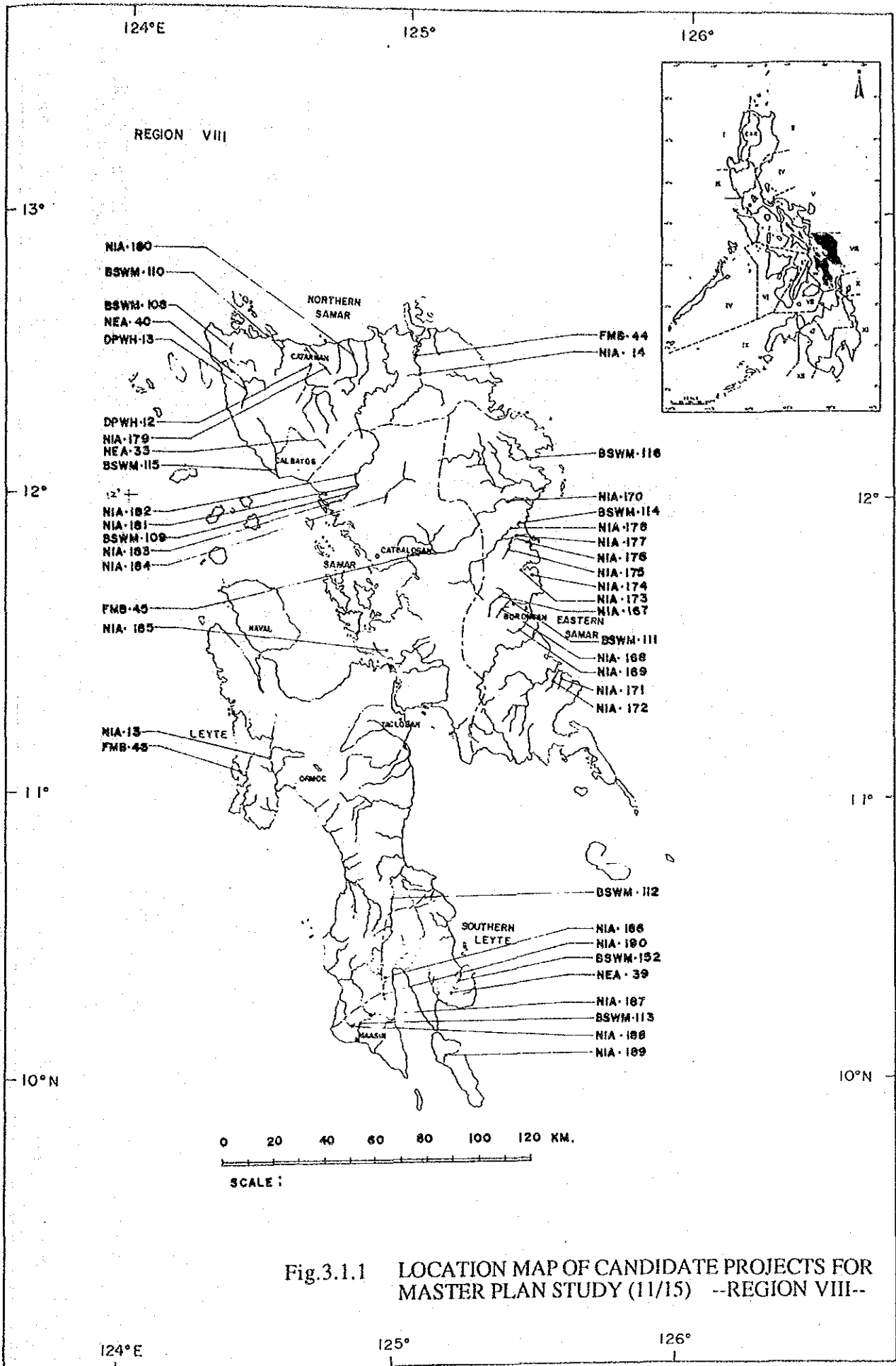


Fig.3.1.1 LOCATION MAP OF CANDIDATE PROJECTS FOR MASTER PLAN STUDY (11/15) --REGION VIII--

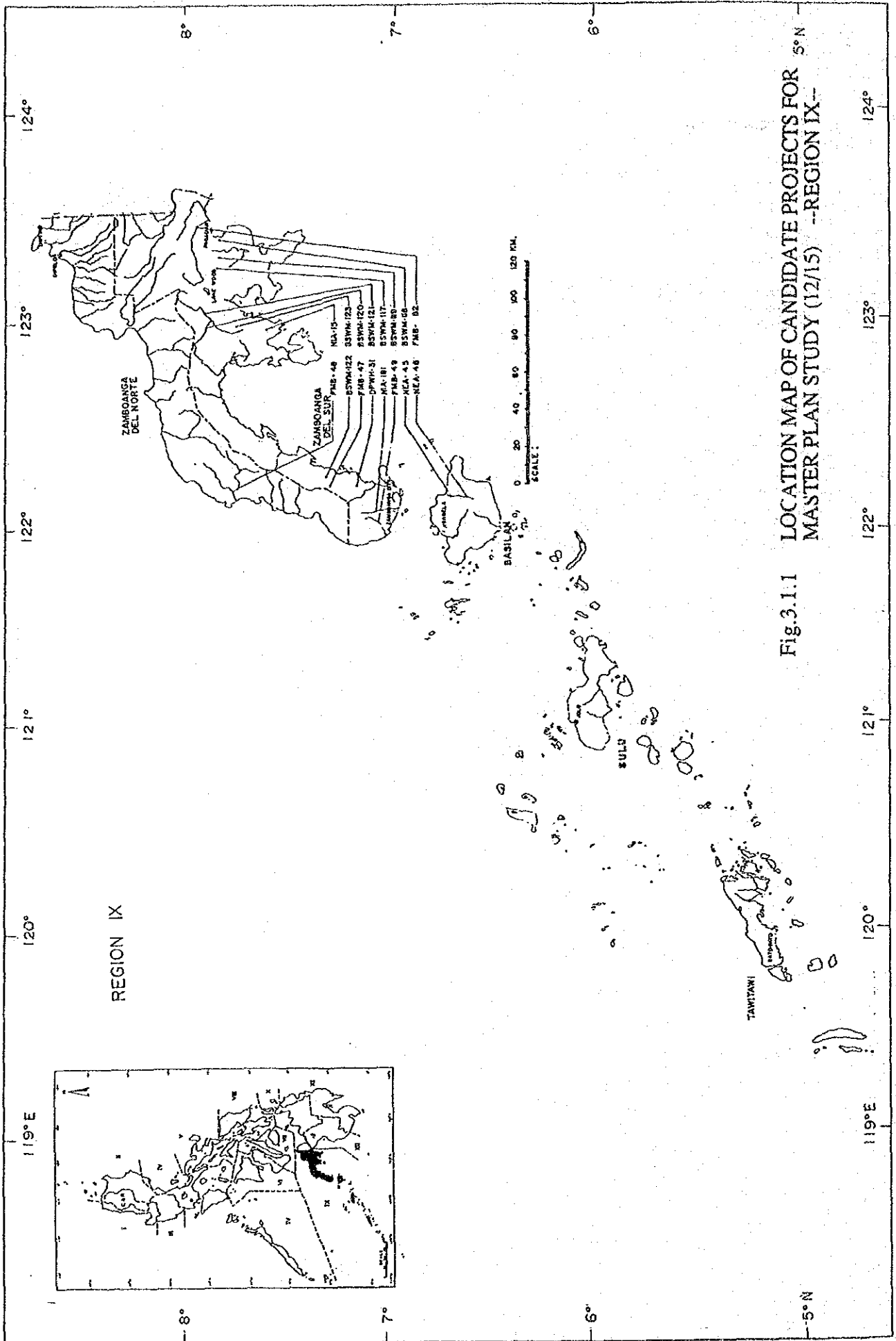


Fig.3.1.1 LOCATION MAP OF CANDIDATE PROJECTS FOR MASTER PLAN STUDY (12/15) --REGION IX--