

Fig.3.1.1 LOCATION MAP OF CANDIDATE PROJECTS FOR MASTER PLAN STUDY (13/15) --REGION X--

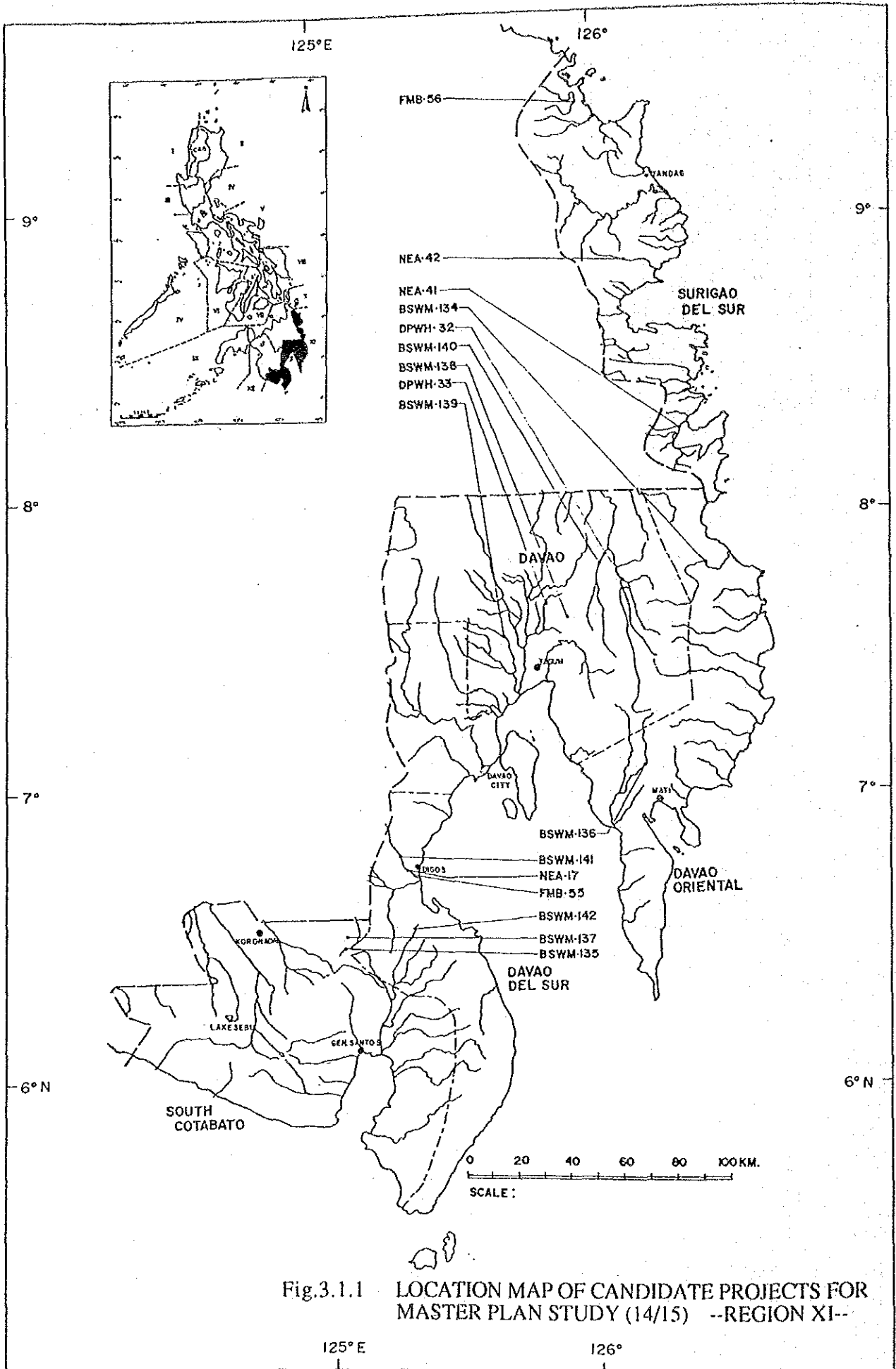


Fig. 3.1.1 LOCATION MAP OF CANDIDATE PROJECTS FOR MASTER PLAN STUDY (14/15) --REGION XI--

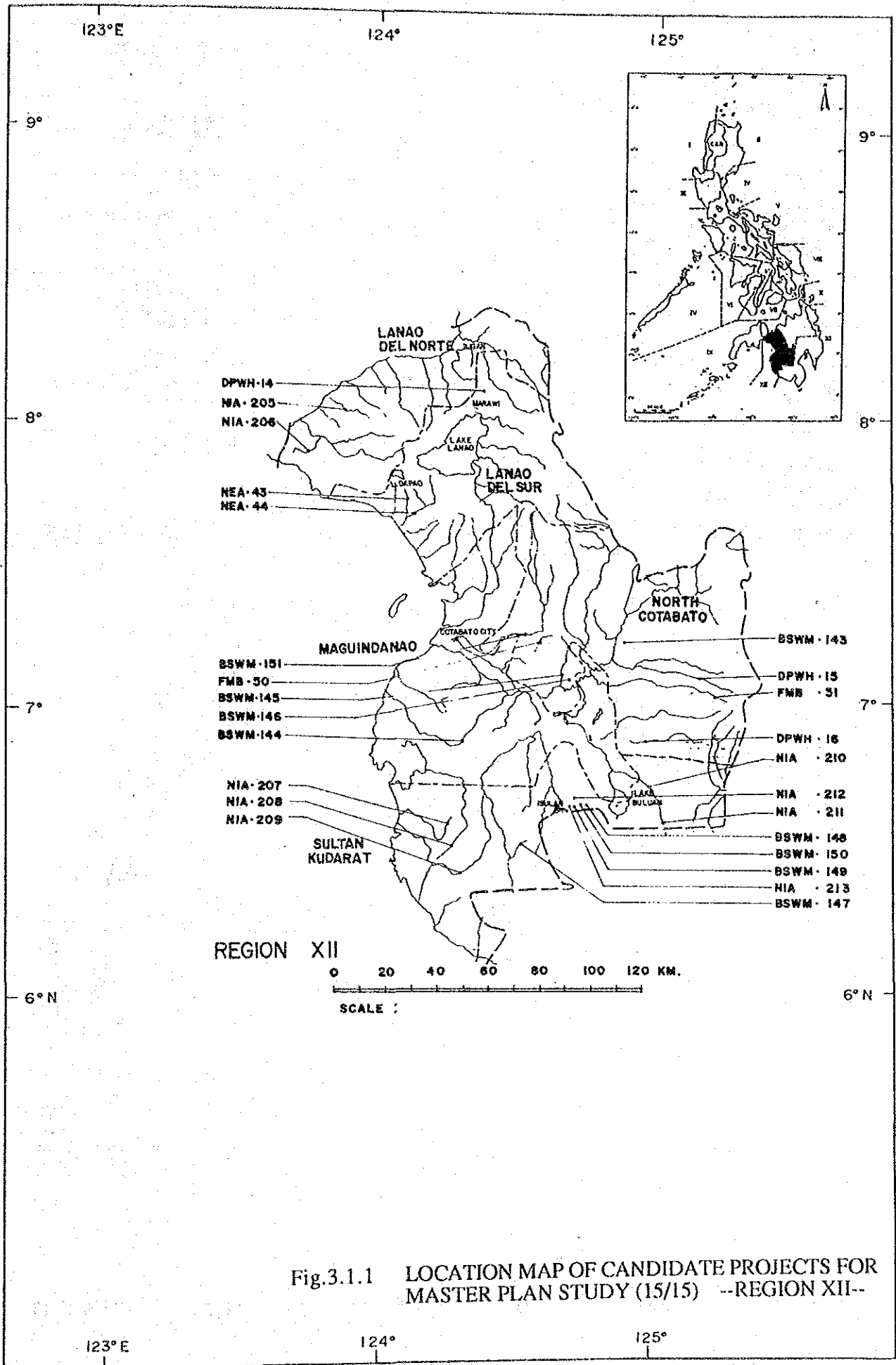


Fig.3.1.1 LOCATION MAP OF CANDIDATE PROJECTS FOR MASTER PLAN STUDY (15/15) --REGION XII--

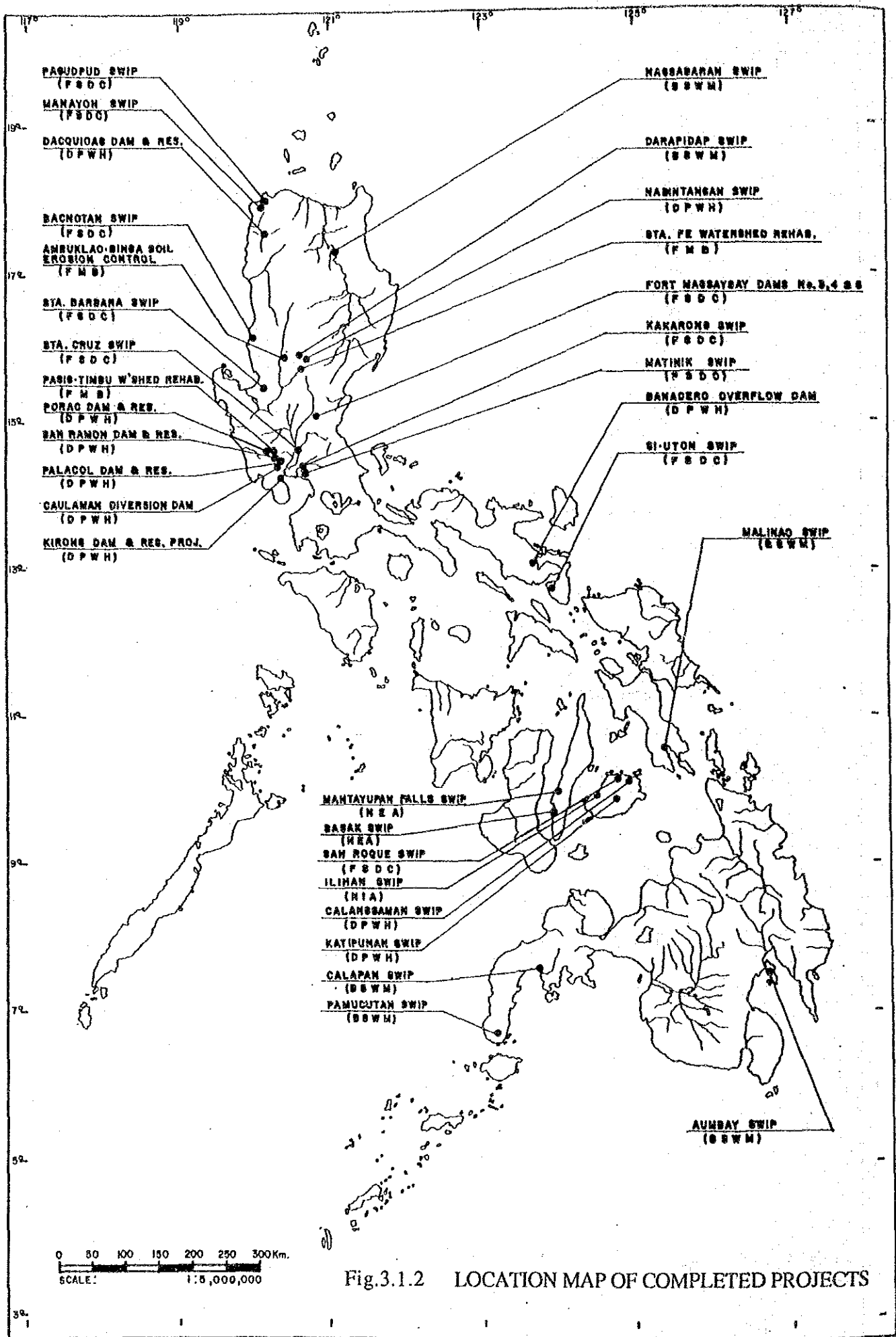


Fig.3.1.2 LOCATION MAP OF COMPLETED PROJECTS

Fig. 3.2.1 PROJECT FORMAT FOR THE REVIEW OF EXISTING DATA AND REPORTS

III. OUTLINE OF PROJECT FEATURES

IRIGATION		SOIL TYPE	
TOTAL AREA (ha)		LAND CAPABILITY	
BENEFICIARIES (Nos)			
LAND TENURE CONDITION			
CROPPING PATTERN (ha)			
WET SEASON	DRY SEASON	PRESENT LAND USE (ha)	
		(1) CROP LAND	
		(2) BUSHES / FOREST	
		(3) RESIDENTIAL	
		(4) OTHERS	
		(5) TOTAL	
CROP			
CROP YIELD (mt/ha)			
WET SEASON	DRY SEASON		
WATER REQUIREMENT (m ³ /ha/yr)			
DESIGN DISCHARGE (cu. mt/sec)			
TOTAL CANAL LENGTH (km)			
INTAKE METHOD:			
FLOOD CONTROL			
FLOOD PROTECTION AREA (ha)			
AGRICULTURAL LAND (ha)			
MUNICIPAL AREA (ha)			
PROBABILITY:			
MINI-HYDROPOWER			
INSTALLLED CAPACITY (kW)			
DESIGN DISCHARGE (cu. mt/sec)			
NET HEAD (m)			
ENERGY GENERATION (MWh)			
PLANT FACTOR (%)			
PRIMARY: SECONDARY:			
WATERSHED MANAGEMENT			
WATERSHED AREA (ha)			
NO. OF CHECK DAMS:			
RECREATION AREA (ha)			
REFORESTATION AREA (ha)			
TREE SPECIES			
WATER SUPPLY			
BENEFICIARIES (Nos)			
DESIGN SUPPLY CAPACITY (cu. mt/day)			
INLAND FISHERY			
FISH SPECIES			
ANNUAL PRODUCTION (mt/year)			
METHOD OF FISH CULTURE			
UNIT: paces			
IV. PROJECT COSTS (AS OF)			
PROJECT COSTS (FINANCIAL BASIS)		UNIT PROJECT COST	
DAM CONSTRUCTION		per cu. m of embankment	
IRRIGATION WORKS		per ha of embankment	
WATERSHED MANAGEMENT		per ha of embankment	
WATER SUPPLY		per cu. m of embankment	
WATER FISHERY		per cu. m of embankment	
OTHERS		per cu. m of embankment	
TOTAL			
CONSTRUCTION PERIOD (year)		REMARKS:	
V. PROJECT BENEFITS AND IRR (AS OF)			
PROJECT BENEFITS (FINANCIAL BASIS)		UNIT PROJECT BENEFITS	
IRRIGATION		per cu. m of embankment	
MINI-HYDROPOWER		per cu. m of embankment	
WATERSHED MANAGEMENT		per ha of embankment	
WATER SUPPLY		per cu. m of embankment	
INLAND FISHERY		per cu. m of embankment	
FLOOD CONTROL		per cu. m of embankment	
OTHERS		per cu. m of embankment	
TOTAL			

NO.	NAME OF PROJECT
	IMPLEMENTING AGENCY
I. PROJECT PROFILE	
LOCATION	REGION
LATITUDE	PROVINCE
LONGITUDE	MUNICIPALITY
SOCIO-ECONOMIC FEATURES OF MUNICIPALITY	
LAND AREA (ha)	POPULATION CLASS
POPULATION	SECURITY CONDITION
POPULATION DENSITY	REMARKS:
PRESENT STATUS	
LEVEL OF PROJECT PREPARATION:	1. RECONNAISSANCE 2. FS 3. DID ()
AVAILABILITY OF REPORTS:	1. NO REPORT 2. RECONNAISSANCE 3. FS 4. DID
SCALE OF MAP USED	DAM SITE RESERVOIR
PURPOSE OF PROJECT	
MAJOR:	1. IRRIGATION 2. MINI-HYDROPOWER 3. WATERSHED MANAGEMENT 4. WATER SUPPLY
INCIDENTAL:	5. INLAND FISHERY 6. FLOOD CONTROL 7. OTHERS.
	1. IRRIGATION 2. MINI-HYDROPOWER 3. WATERSHED MANAGEMENT 4. WATER SUPPLY
	5. INLAND FISHERY 6. FLOOD CONTROL 7. OTHERS.
II. OUTLINE OF DAM PLAN AND DESIGN	
NAME OF RIVER:	
WATER RESOURCES REGION:	
HYDROLOGY	ANNUAL RUNOFF (mm)
	DESIGN RAINFALL (mm)
	RETURN PERIOD (year)
	RETURN PERIOD (year)
METHODOLOGY	
	SEDIMENT YIELD (cu. mt/yr/year)
	RAINFALL (mm/year)
	EVAPORATION (mm/year)
CLIMATE TYPE	
	I. DAM AXIS
	II. RESERVOIR
	III. RESERVOIR
GEOLOGY	
DAM TYPE	
	CATCHMENT AREA (km ²)
	TOTAL STORAGE CAPACITY (cu. m)
	UPSTREAM SLOPE
	EFFECTIVE STORAGE CAPACITY (cu. m)
	DOWNSTREAM SLOPE
DAM DESIGN	DEAD STORAGE CAPACITY (cu. m)
	RESERVOIR AREA (ha)
	DAM HEIGHT (m)
	DAM CREST LENGTH (m)
	CREST WIDTH (m)
	EMBANKMENT VOLUME (cu. m)
FOUNDATION TREATMENT DESIGN	
DAM FOUNDATION	
TREATMENT METHOD	
SPILLWAY DESIGN	
TYPE	
DESIGN CAPACITY (cu. m/sec)	CREST LENGTH (m)
TYPE OF ENERGY DISSIPATER:	
OUTLET WORKS DESIGN	
TYPE	
DESIGN CAPACITY (cu. m/sec)	DURING CONSTRUCTION: AFTER CONSTRUCTION:

ATTACHMENTS

**Attachment - 1 Implementing Arrangement for the Master Plan
Study on the Small Water Impounding
Management (SWIM) Projects**

IMPLEMENTING ARRANGEMENT ON THE TECHNICAL COOPERATION

BETWEEN

JAPAN INTERNATIONAL COOPERATION AGENCY

AND

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS

FOR

MASTER PLAN

ON

SMALL WATER IMPOUNDING MANAGEMENT PROJECTS

IN

THE REPUBLIC OF THE PHILIPPINES


AGREED

BETWEEN

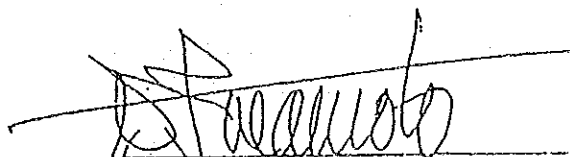
JAPAN INTERNATIONAL COOPERATION AGENCY

AND

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS



HON. TEODORO T. ENCARNACION
Undersecretary, DPWH
Chairman, SWIM



MR. SOTA IWAMOTO
Leader of the Preliminary
Study Team,
Japan International Cooperation
Agency

I. INTRODUCTION

In response to the request of the Government of the Republic of the Philippines (hereinafter referred to as "GOP"), the Government of Japan (hereinafter referred to as "GOJ") has decided to conduct the Master Plan Study on Small Water Impounding Management Projects in the Republic of the Philippines (hereinafter referred to as "the Study"), and exchanged the Note Verbales with Gop concerning the implementation of the Study.

Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of the technical cooperation programmes of GOJ, will undertake the Study, in accordance with the relevant laws and regulations in force in Japan.

On the part of GOP, Department of Public Works and Highways (hereinafter referred to as "DPWH") shall act as a counterpart agency to the Japanese study team and also as a coordinating body in relation with other governmental and non-governmental organizations concerned for the smooth implementation of the Study.

The present document constitutes the implementing arrangement between JICA and DPWH under the above mentioned Notes Verbales exchanged between two governments.

II. OBJECTIVE OF THE STUDY

The objective of the study is to formulate a master plan for the small water impounding management projects, aiming at orderly utilization of the nation's water and land resources.

III. STUDY AREA

The Study area covers the entire Philippines.

IV. SCOPE OF THE STUDY

The Study will consist of following three phases:

Phase I

- (1) Inventory of small water impounding management projects.
- (2) Review of previous studies.
- (3) Post-evaluation of the completed projects.

Phase II

- (1) Categorization of projects.
- (2) Preparation of guidelines for project implementation and management.

Phase III

(1) Formulation of the Master Plan.

1. Phase I

(1) An inventory of small water impounding management projects will be compiled by collecting existing data and information.

(2) The previous studies will be reviewed on the following items:

- a. Topography
- b. Meteorology and hydrology
- c. Geology
- d. Soil
- e. Agriculture
- f. Irrigation and drainage
- g. Flood control
- h. Electric power and water supply
- i. Aquaculture
- j. Watershed management and environmental aspects
- k. Design of major structure
- l. Construction materials
- m. Costs and benefits
- n. Impact/effect
- o. Others

(2) Post-evaluation of the completed projects will be made on the items listed above and the following aspects.

- a. Current status
- b. Prospect of operation and maintenance
- c. Benefits accrued from the projects

2. Phase II

(1) Based on the results of the Phase I Study, factors and elements grouping the projects will be identified and the projects will be grouped in accordance with these factors and elements.

(2) The following preliminary guidelines for project implementation and management will be prepared on the basis of the previous grouping.

- a. Design guidelines of major structures
- b. Screening (or qualification) guidelines
- c. Operation and maintenance guidelines

3. Phase III

(2) Based on the results of previous studies, the Master Plan of the projects will be formulated including:

- a. Recommendation of development sequence
- b. Preliminary estimate of the project cost and benefits

V. REPORTS

JICA shall prepare and submit the following reports in English to GOP:

1. Plan of Operation
Thirty (30) copies at the commencement of the Phase I Study
2. Inception Report
Thirty (30) copies at the middle of the Phase I Study
3. Progress Report
Thirty (30) copies at the end of the Phase I Study
4. Interim Report
Thirty (30) copies at the end of the Phase II Study
5. Draft Final Report
Thirty (30) copies at the end of the Phase III Study
• GOP shall provide JICA with its comments within one (1) month after the receipt of the Draft Final Report.
6. Final Report
Fifty (50) copies within two (2) months after the receipt of the Philippines Government's comments on the Draft Final Report.

VI. STUDY SCHEDULE

The tentative work schedule is shown in the Appendix.

VII. UNDERTAKING OF GOP

In accordance with the Notes Verbales exchanged between GOJ and GOP, GOP shall accord privileges, immunities and other benefits to the Japanese study team and, through the authorities concerned, take necessary measures to facilitate smooth conduct of the study.

1. GOP shall be responsible for dealing with claims which may be brought by third parties against the members of the Japanese study team and shall hold them harmless in respects of claims or liabilities arising in the course of, or otherwise connected with the discharge of their duties in the implementation of the study, except when such claims or liabilities arise from gross negligence or willful misconduct of the above-mentioned members.

2. DPWH shall, at its own expense, provide the Japanese study team with the following, if necessary, the cooperation with other agencies concerned:
 - (1) Available data and information related to the Study;
 - (2) Counterpart personnel;
 - (3) Suitable office space with necessary equipment in Metro Manila;
 - (4) Credentials or identification cards to the member of the Japanese study team;

3. DPWH shall make necessary arrangements with other governmental and non-governmental organizations concerned for the following:
 - (1) to secure the safety of the Japanese study team;
 - (2) to permit the members of the Japanese study team to enter, leave and sojourn in the Philippines for the duration of their assignment therein;
 - (3) to exempt the members of the Japanese study team from taxes, duties, fees and other charges of equipment, machinery and other materials brought into the Philippines for the conduct of the Study;
 - (4) to exempt the members of the Japanese study team from income tax and charges of any kind imposed on or in connection with any emolument or allowance paid to the members of the Japanese study team for their services in connection with the implementation of the Study;
 - (5) to provide necessary facilities to the Japanese study team for remittance as well as utilization of the funds introduced into the Philippines from Japan in connection with the implementation of the Study;
 - (6) to secure permission for entry into private properties or restricted areas for the conduct of the Study;
 - (7) to secure permission to take all data and documents (including photographs) related to the Study out of the Philippines to Japan by the study team;
 - (8) To provide medical services as needed and its expenses will be chargeable against the members of the Japanese study team.

VIII. UNDERTAKING OF GOJ

In accordance with the Notes Verbales exchanged between GOJ and GOP, through JICA, shall take the following measures for the implementation of the study:

1. to dispatch, at its own expense, study team to the Philippines;
2. to pursue technology transfer to the Philippine counterpart;
3. to provide necessary equipment for the implementation of the Study, which will remain the property of JICA unless otherwise agreed.

IX. CONSULTATION

JICA and DPWH shall consult with each other in respect of any matter that may arise from or in connection with the Study.

**Attachment - 2 Minutes of Meeting for Plan of Operation
dated on August 29, 1988**

MINUTES OF MEETING
ON
THE PLAN OF OPERATION
FOR
THE JICA MASTER PLAN STUDY ON THE SWIM PROJECTS

DATE : August 29, 1988

PLACE : Meeting Room at National Irrigation Administration

ATTENDANTS:

Technical Working Group

- | | |
|-------------------------|----------------|
| 1. Tomas L. Buen | PMO-SWIM, DPWH |
| 2. Raul E. Tubianosa | PMO-SWIM, DPWH |
| 3. Avelino S. Rivera | NIA |
| 4. I. R. Digal | NIA |
| 5. Clemente T. Alanano | NIA |
| 6. Melchia O. Baltazar | NWRB |
| 7. S. Abuan | FMB |
| 8. Leonora SP. Dalusong | NEA |
| 9. Lucio B. Casera | BSWM |
| 10. Rommel R. Juat | PMO-SWIM, DA |

JICA Colombo Plan Expert

- | | |
|---------------------|------|
| 1. Toshiki Kawakami | DPWH |
| 2. Yukinori Ouchi | NIA |

JICA

- | | |
|--------------------|-------------|
| 1. Motofumi Kohara | JICA, Tokyo |
|--------------------|-------------|

JICA Study Team

- | | |
|------------------------|------------------------------------|
| 1. Tadashi Sakamoto | Team Leader |
| 2. Motoyoshi Kawashima | Co-Leader/Water Impounding Planner |
| 3. Hironichi Sekine | Irrigation and Drainage Engineer |
| 4. Kenichiro Kondo | Hydrologist |

The meeting on the Plan of Operation for the JICA Master Plan Study on the SWIM Projects (the Study) was held among the Technical Working Group (TWG), JICA and JICA Study Team (the Team). The Team explained the work plan and work schedule for the Study. The Plan of Operation is generally accepted by the TWG. All the parties discussed and agreed upon the following items:


- (1) The SWIM Steering Committee (the Committee) consists of four departments such as the DPWH, DENR, DA and DEM. The Committee is chaired by the DPWH and Undersecretary Romulo M. del Rosario is Chairman of the Committee. The Committee will timely steer the SWIM Projects on the operational policy which occurs in the course of the Study.
- (2) The TWG is composed of eight agencies such as the PMO-SWIM, NIA and NWRB under the DPWH, FMB and NEA under the DENR, and BFAR, BSWM and PMO-SWIM under the DA. The TWG will act as the technically executing organization for the SWIM Projects. The regular meeting between the TWG and the Team will be held once a month.
- (3) Mr. Fernando S. Nabong, manager of PMO-SWIM is the Project Manager of the Study and the chief counterpart for the Team. All the official letters to be submitted by the Team will be addressed to him.
- (4) The final list of the candidate projects for the Study will be finalized by the PMO-SWIM and submitted to the Team by September 9, 1988.
- (5) The office for the Team will be provided by September 5, 1988 with necessary office equipment and facilities such as desks, chairs, cabinets, telephone and air-conditioner. The Team will use the office from September 1, 1988.

- (6) The counterpart for the Team will be dispatched as follows:

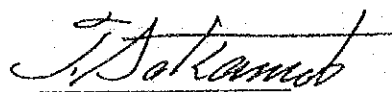
<u>Position</u>	<u>Candidate or Agency</u>
(a) Chief counterpart	Fernando S. Nabong
(b) Water Impounding Planner	Raul E. Tubianosa
(c) Structure Design Engineer	DPWH
(d) Geologist/Soil Mech. Engineer	BSWM
(e) Hydrologist	NIA
(f) Irrigation and Drainage Engineer	NIA
(g) Agronomist/Pedologist	BSWM
(h) Agro-economist/Economist	NIA
(i) Watershed Management Expert	FMB
(j) Hydropower Engineer	NEA
(k) Water Supply Expert	NWRB
(l) Inland Fisheries Expert	BFAR

The final member list for the above will be submitted to the Team from the PMO-SWIM by September 5, 1988. The counterparts such as chief counterpart, water impounding planner, hydrologist, and irrigation and drainage engineer will be assigned from September 1, 1988 and the other counterparts will be from September 5, 1988. They will attend the office for the Study until December 23, 1988. In addition to the permanent counterparts mentioned above, the part-time counterparts of water impounding planner will be assigned from each agency of the TWG. They will be selected from the member of the TWG.

August 29, 1988

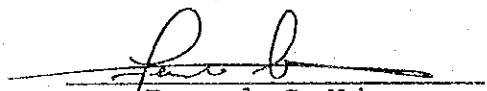


Tomas I. Buen
Project Engineer II
PMO-SWIM



Tadashi Sakamoto
Team Leader
JICA Study Team

Certified by:



Fernando S. Nabong
Project Manager of PMO-SWIM

**Attachment - 3 Minutes of Meeting for Inception Report
dated on October 24, 1988**

MINUTES OF MEETING
ON
THE INCEPTION REPORT
FOR
THE JICA MASTER PLAN STUDY ON THE SWIM PROJECTS

1. DATE : October 24, 1988
2:00p.m. to 4:30 p.m.
2. PLACE : Mayon Room at Century Park Sheraton, Manila
3. ATTENDANTS : See Attached Sheet
4. SUMMARY OF DISCUSSION

The meeting was held, in the presence of Mr. Romulo H. del Rosario, Undersecretary of DPWH and the Chairman of the SWIM Committee, between the SWIM-TWG and the JICA Study Team to discuss the draft Inception Report which was distributed to all the attendants on October 20, 1988. The meeting was presided by the Chairman of the Technical Working Group (TWG), Mr. Fernando S. Nabong. After all the attendants were introduced, Mr. Tadashi Sakamoto, the Leader of JICA Study Team explained the draft Inception Report to the attendants. The discussions were then made among the attendants and the both sides confirmed the following through a series of discussions:

- (1) The draft Inception Report was basically accepted by the SWIM-TWG. The Report will be finalized with minor modifications, incorporating with the comments by the SWIM-TWG members, and submitted to PHO SWIM by the end of October, 1988.
- (2) All the projects identified and/or studied by each agency concerned are listed in the Inception Report as the candidate projects for the master plan study. The number of the listed projects is 501 as indicated in ATTACHMENT-1. The list was accepted by the SWIM-TWG.
- (3) A total of 49 projects has been taken up under the SWIM program so far, of which 32 projects have already been constructed and 17 projects are still under construction. The post-evaluation study will be made only for the already constructed projects. The proposed list of the candidate projects for post-evaluation study was also accepted by the SWIM-TWG.

The number of the candidate projects for post-evaluation study is 10 in total as shown in ATTACHMENT-2.

- (4) The projects supported with the necessary data and reports totals only 239 which correspond to about 48% of the total number of projects under the Study. The JICA Study Team requested all the members of the SWIM-TWG that all the study reports and other pertinent documents relative to the listed projects be submitted through PMO-SWIM of DPWH to the Team by November 15, 1988.
- (5) JICA Study Team pointed out that 283 projects were listed in the category of "before F/S" and only 29 projects (10%) were supported with the data necessary for the master plan study, and asked all the members of the SWIM-TWG how the necessary data and information be collected for the remaining projects.

NIA who proposed a majority of such projects (198 projects or 78% of "before F/S" projects without data), said that the SWIM projects of NIA include development of irrigation facilities as well as dams and are rather large in size compared to those of other agencies. NIA also said that the proposed SWIM projects are identified by each regional office of NIA on the basis of the past experiences on construction of large dams and therefore these projects should be technically sound.

NIA emphasized the importance of SWIM projects for NIA that the proposed SWIM projects would directly support the existing communal irrigation systems which had been facing to unstable supply of irrigation water. NIA also expressed their difficulties of providing the data by November 15, 1988, due to current shortage of budget and also very limited time allowance for additional survey and investigation.

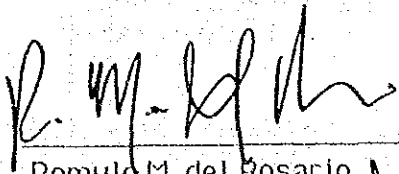
In the meeting, NIA requested Mr. Romulo M. del Rosario, Undersecretary of DPWH and the Chairman of the SWIM Committee to extend the financial support for fulfilling the requirement of JICA master plan study.

Mr. Romulo M. del Rosario requested the JICA Study Team to undertake the technical assistance regarding the required additional survey and investigation for all of the "before F/S Projects without data" which will be needed for formulation of master plan. The JICA Study Team said that the request would be conveyed to JICA office for further consideration.

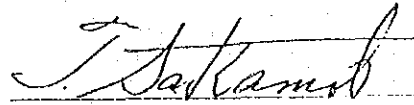
NIA also requested JICA Study Team that the deadline of data submission be postponed. The JICA Study Team agreed to wait the submission of data for "before F/S" projects until June 1989 when Phase-II Study be commenced.

- (6) PMO-SWIM pointed out the Importance of management aspects of the SWIM Projects and requested the JICA Study Team that an Institutional Expert be Included In the Study Team from Phase-II Study

October 26, 1988



Romulo M. del Rosario
Undersecretary, DPWH
and
Chairman of SWIM Committee



Tadashi SAKAIOTO
Leader
JICA Study Team

List of Attendants

SWIM Steering Committee

1. Romulo M. del Rosario

Undersecretary, DPWH,
Chairman of SWIM Steering
Committee

Technical Working Group (TWG)

1. Fernando S. Nabong

PMO-SWIM/DPWH, Chairman of
TWG

2. Tomas L. Buen

PMO-SWIM/DPWH

3. Raul E. Tubianoša

PMO-SWIM/DPWH

4. Sofia Santiago

Bureau of Design/DPWH

5. Pedro Razon

Bureau of

6. Jose Guanzon

Construction/DPWH

7. Luis M. Sosa

Planning Services/DPWH

8. Melchor Baltazar

Executive Director/NWRB

9. Francis Hilarie

NWRB

10. Avelino Rivera

NWRB

11. Isidro Digal

Project Development

12. Clemente Alanano

Department(PDD)/NIA

13. Conrado Martin

PDD/NIA

14. Lucio Casera

PDD/NIA

15. Sergio Abuan

Soil Conservation

16. Valeriano Infante

Division/BSWM

17. Demetrio Gracia

Soil Conservation

18. Rommel Juat

Division/BSWM

Watershed Management

Division/FMB

NEA

BFAR

PMO-SWIM/DA

JICA Advisory Committee

1. Katsuro Shioda

Leader of JICA Advisory
Committee

2. Hiroyuki Kutsuna

JICA, Head Office

JICA Colombo Plan Expert

1. Toshiki Kawakami

DPWH

2. Yasuhiko Mishima

NIA

JICA Study Team

1. Tadashi Sakamoto

Team Leader

2. Motoyoshi Kawashima

Co-Leader/Water Impounding
Plan

3. Naoki Ariga

Agro-economy/Project
Evaluation

4. Hirohisa Isogai

Geology/Soil Mechanics

5. Akira Honda

Structure Design

6. Hiromichi Sekine

Irrigation and Drainage

7. Ken-ichiro Kondo

Hydrology/Meteorology

8. Takashi Kimijima

Agriculture/Soil

9. Seiji Yakushiji

Watershed Management

SWIM PROJECTS FOR JICA MASTER PLAN STUDY (TOTAL NUMBER OF PROJECTS: 550)		PROJECTS UNDER CONSTRUCTION (NUMBER OF PROJECTS: 17)		PROJECTS CONSTRUCTED ALREADY (NUMBER OF PROJECTS: 32)	
PMO-SWIM	: 33 (17)	PMO-SWIM	: 2 (-)	PMO-SWIM	: 10 (4)
NIA	: 213 (13)	NIA	: 2 (-)	NIA	: 1 (1)
FMB	: 56 (19)	FMB	: 5 (-)	FMB	: 3 (3)
NEA	: 47 (43)	NEA	: 1 (-)	NEA	: 2 (2)
BSWM	: 152 (147)	BSWM	: 4 (-)	BSWM	: 6 (6)
FSDC	: - (-)	FSDC	: 3 (-)	FSDC	: 10 (1)
TOTAL	: 501 (239)	TOTAL	: 17 (-)	TOTAL	: 32 (17)
PROJECTS BEFORE F/S (NUMBER OF PROJECTS: 283)		PROJECTS F/S COMPLETED (NUMBER OF PROJECTS: 27)		PROJECTS D/D COMPLETED (NUMBER OF PROJECTS: 191)	
PMO-SWIM	: 15 (-)	PMO-SWIM	: 5 (5)	PMO-SWIM	: 13 (12)
NIA	: 198 (-)	NIA	: - (-)	NIA	: 15 (13)
FMB	: 56 (19)	FMB	: - (-)	FMB	: - (-)
NEA	: 14 (10)	NEA	: 22 (22)	NEA	: 11 (11)
BSWM	: - (-)	BSWM	: - (-)	BSWM	: 152 (147)
FSDC	: - (-)	FSDC	: - (-)	FSDC	: - (-)
TOTAL	: 283 (29)	TOTAL	: 27 (27)	TOTAL	: 191 (183)

The figures parenthesized means number of the projects for which relevant reports are presently available.

LIST OF CANDIDATE PROJECTS FOR POST-EVALUATION STUDY

Implementing Agency	Project Name	Region	Province	Location	Municipality	Present Status	Year of Completion	Purpose	Construction Cost (P=10%)	Dam Type	Dam Height (meter)	Reservoir Capacity (MCM)	Data #2
1. WIA	Ilihan SWIP	VII	Bobol	Bobol	Fubigon	A	1982	Irrigation (150ha)	5.000	Earthfill	22.0	0.85	D/D
2. BSWM	Darapdap SWIP	II	Nueva Vizcaya	Aritao	Aritao	A	1983	Irrigation (70ha) Fishery	1.804	Earthfill	12.9		F/S, D/D
3. BSWM	Kaliniao SWIP	VIII	Southern Leyte	Sogod	Sogod	A	1984	Irrigation	2.238		9.0		F/S, D/D
4. PWB	Pasig Tinub Watershed Rehab. Project	III	Pampanga	Porac	Porac	A	1984	Watershed Management	1.405				D/D
5. NBA	Mantayupan Falls SWIP	VII	Cebu	Cebu	Barili	A	1985	Mini-Hydropower	6.219	Concrete			F/S, D/D
6. PSDC	Bacnotan SWIP	I	La Union	Bacnotan	Bacnotan	A	1985	Irrigation	7.580	Earthfill			F/S
7. DPWH	Porac Dam	III	Pampanga	Pampanga	Porac	B	1984	Irrigation	11.828	Earthfill	18.0	1.005	F/S, D/D
8. DPWH	Kirong Dam & Reservoir Project	III	Bataan	Bataan	Bernosa	A	1985		1.181	Concrete			
9. DPWH	San Ramon Dam & Reservoir Project	III	Pampanga	Pampanga	Floridablanca	A	1987	Irrigation	2.558	Earthfill	13.7		F/S, C/D
10. DPWH	Calangasan SWIP Phase I	VII	Bobol	Bobol	Ubay	A	1988	Irrigation	3.160	Earthfill	12.5	0.1885	F/S

Note: #1: Present Status; #2: Available Data;

A: Constructed and functioning

B: Constructed but damaged

C: Under-construction

F/S: Feasibility Study Report

D/D: Detailed Design Engineering Report

C/D: Construction Drawings

**Attachment - 4 Minutes of Meeting for Progress Report
dated on March 8, 1989**

MINUTES OF MEETING
ON
THE PROGRESS REPORT
FOR
JICA MASTER PLAN STUDY ON THE SWIM PROJECTS

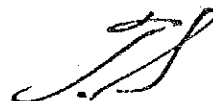
1. Date : March 8, 1989
1:00 P.M. - 2:45 P.M.
2. Place : Mayon Room at Century Park Sheraton,
Manila
3. Attendants : See Attached Sheet
4. SUMMARY OF DISCUSSIONS

The meeting was presided by Mr. Romulo M. del Rosario, Under-secretary of DPWH and Chairman of the SWIM Committee. At the request of the Chairman, Mr. Tadashi Sakamoto, the Leader of the JICA Study Team explained the outline of the "Progress Report" to the attendants. The Chairman asked each agency to make questions or comments on the Report and various discussions were made between the SWIM-TWG members and the JICA Study Team. Both sides confirmed the following through the discussions:

- (1) The Progress Report was fully accepted by the SWIM-TWG without any serious comments.
- (2) For priority ranking of the SWIM projects, the economic/financial viability would be of importance, however, it should not be over-emphasized and other factors governing the priority such as legal/social/technical/environmental aspects be properly taken into account.
- (3) The Chairman, in response to the strong request from all the members of SWIM-TWG, asked the JICA Study Team to undertake the technical assistance regarding the required additional survey and investigation for all of 170 projects which are not currently supported with adequate data. The request would be conveyed to JICA Office.

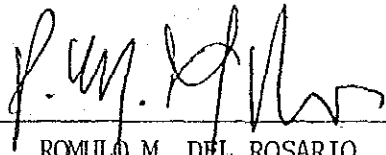


AT - 18

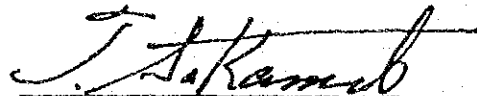


- (4) SWIM-TWG agreed to the work schedule of Phase II and Phase III as shown in Attachment - 1.

March 10, 1989



ROMULO M. DEL ROSARIO
Undersecretary, DPWH
and
Chairman of SWIM Committee



TADASHI SAKAMOTO
Leader
JICA Study Team

WORK SCHEDULE FOR SWIM PROJECTS

Description	1988					1989											1990						
	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	
PHASE I RP JAPAN	[Solid bar from Sep to Dec]							[Solid bar in Mar]															
	[Open box in Aug]					[Open box from Jan to Feb]																	
PHASE II RP JAPAN											[Solid bar from Jun to Aug]												
PHASE III RP JAPAN													[Solid bar from Sep to Nov]								[Solid bar in Mar]		
REPORT		↑ P/O		↑ IC/R				↑ P/R			↑ P/O		↑ IT/R							↑ DF/R		↑ F/R	

Work Schedule for the fiscal year of 1989/90 is tentative.

P/O: Plan of Operation IC/R: Inception Report P/R: Progress Report IN/R: Interim Report DF/R: Draft Final Report F/R: Final Report

LIST OF ATTENDANTSSWIM Steering Committee

- | | |
|---------------------------|--|
| 1. Romulo M. Idel Rosario | - Undersecretary, DPWH
Chairman of SWIM Committee |
|---------------------------|--|

Technical Working Group (TWG)

- | | |
|-----------------------------------|---|
| 1. Fernando S. Nabong | - PMO-SWIM/DPWH, Chairman of TWG |
| 2. Tomas L. Buen | - PMO-SWIM/DPWH |
| 3. Raul E. Tubianosa | - PMO-SWIM/DPWH |
| 4. Jose Guanzon | - Planning Service/DPWH |
| 5. Isabel Cruz (for Mr. Kawakami) | - Planning Service/DPWH |
| 6. Luis M. Sosa | - Executive Director/NWRB |
| 7. Melchor Baltazar | - Water Resource Staff Office/NWRB |
| 8. Francis Hilarie | - Water Resource Staff Office/NWRB |
| 9. Avelino Rivera | - Project Development Dept./NIA |
| 10. Clemente Alanano | - Project Development Dept./NIA |
| 11. Rodolfo Lucas | - Water Resources Mgt. Div. /BSWM |
| 12. Cesar Magadia | - Water Resources Mgt. Div. /BSWM |
| 13. Demetrio Gracia | - Aquaculture Division /BFAR |
| 14. Valeriano Infante | - Alternative Energy Development Office/NEA |
| 15. Hendrick Manegdeg | - Alternative Energy Development Office/NEA |
| 16. Sergio Abuan | - Watershed Management Division/FMB |

JICA

- | | |
|----------------|---------------|
| 1. Akira Kayao | - JICA, Japan |
|----------------|---------------|

JICA Colombo Plan Expert

- | | |
|---------------------|-------|
| 1. Yasuhiko Mishima | - NIA |
|---------------------|-------|

JICA Study Team

- | | |
|------------------------|--------------------------------------|
| 1. Tadashi Sakamoto | - Team Leader |
| 2. Motoyoshi Kawashima | - Co-Leader/Water Impounding Planner |
| 3. Naoki Ariga | - Agro-Economist/Project Evaluator |
| 4. Hiromichi Sekine | - Irrigation and Drainage Engineer |

**Attachment - 5 Minutes of Meeting for Plan of Operation
dated on July 6, 1989**

MINUTES OF MEETING
ON
THE PLAN OF OPERATION
FOR
JICA MASTER PLAN STUDY ON THE SWIM PROJECTS

1. Date : July 6, 1989
1:00p.m. - 3:00p.m.
2. Place : Grand Ballroom, Century
Park Sheraton, Manila
3. Attendants : See Attached List
4. Summary of Discussions :

The meeting was presided by Mr. Romulo M. del Rosario, Undersecretary of DPWH and Chairman of the SWIM Committee. The Chairman briefed the body about the activities conducted in the Phase-I of the Study. After his explanation, the Chairman requested Mr. Edmundo V. Mir, Undersecretary of DPWH, to preside over the meeting as the chairman will attend an urgent engagement. The Chairman requested Mr. Tadashi SAKAMOTO, Leader of the JICA Study Team, to present the contents of the "Plan of Operation". After the presentation of Mr. SAKAMOTO, Undersecretary Mr. Mir requested for comments from the body. The following were discussed:

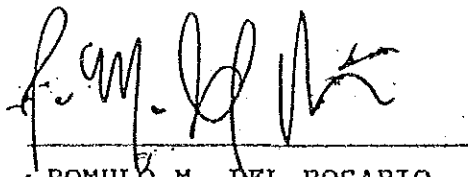
- (1) The "Plan of Operation" was basically accepted by the SWIM-TWG members. The JICA Study Team would proceed with the master plan study (Phase-II and Phase-III) in line with the agreed "Plan of Operation".
- (2) For priority ranking of the projects and preparation of the planning criteria, an environmental aspect of

the project would be examined in addition to the other aspects mentioned in the "Plan of Operation", but the depth of the study would be limited to the extent of availability of the existing data on this subject (refer to page 8 of the "Plan of Operation").

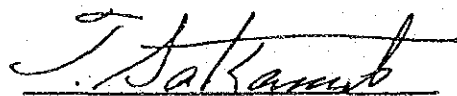
- (3) In preparation of the guidelines for project implementation (refer to page 14 of the "Plan of Operation"), the guideline of future monitoring system for project implementation would additionally be studied on a preliminary basis and the guideline of the standard system be recommended in the master plan.

At the end of the Meeting, Mr. Sota IWAMOTO, the Chairman of the Advisory Committee on the JICA Master Plan Study expressed his sincere thanks to the attendants for discussions as well as his keen interest on this Study and asked the attendants to extend their good cooperation to the Study Team.

July 7, 1989



ROMULO M. DEL ROSARIO
Undersecretary of DPWH and
Chairman of SWIM Committee



TADASHI SAKAMOTO
Leader
JICA Study Team

LIST OF ATTENDANTSSWIM Steering Committee

- | | | | |
|----|-----------------------|---|--|
| 1. | Romulo M. del Rosario | - | Undersecretary, DPWH
Chairman of SWIM Committee |
| 2. | Edmundo V. Mir | - | Undersecretary, DPWH |

Technical Working Group (SWIM-TWG)

- | | | | |
|-----|--------------------|---|---|
| 1. | Antonio A. Alpasan | - | PMO-MFC/SWIM, DPWH,
Chairman of SWIM-TWG |
| 2. | Rogelio Flores | - | PMO-MFC/SWIM, DPWH |
| 3. | Tomas Buen | - | PMO-MFC/SWIM, DPWH |
| 4. | Raul Tubianosa | - | PMO-MFC/SWIM, DPWH |
| 5. | Jose Guanzon | - | Planning Services, DPWH |
| 6. | Pedro Razon | - | Bureau of Construction, DPWH |
| 7. | Luis Sosa | - | Executive Director, NWRB |
| 8. | Francis Hilarie | - | Water Resource Staff Office, NWRB |
| 9. | Valeriano Infante | - | Alternative Energy Development
Office, NEA |
| 10. | Noel Hernandez | - | Alternative Energy Development
Office, NEA |
| 11. | Sergio Abuan | - | Watershed Management Division, FMB |
| 12. | Romeo Ocampo | - | Watershed Management Division, FMB |
| 13. | Rommel Juat | - | Project Manager, PMO-SWIM, DA |
| 14. | Demetrio Gracia | - | Aquaculture Division, BFAR |
| 15. | Rodolfo Lucas | - | Water Resources Management
Division, BSWM |
| 16. | Cesar Magadia | - | Water Resources Management
Division, BSWM |
| 17. | Avelino Rivera | - | Project Development Department, NIA |
| 18. | Isidro Digal | - | Project Development Department, NIA |
| 19. | Clemente Alanano | - | Project Development Department, NIA |

JICA Advisory Group

- | | | | |
|----|---------------|---|-------------|
| 1. | Sota Iwamoto | - | Chairman |
| 2. | Takahito Hino | - | JICA, Japan |

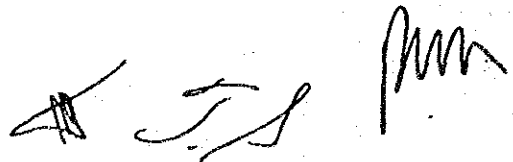
JICA Colombo Plan Expert

- | | | | |
|----|------------------|---|------|
| 1. | Toshiki Kawakami | - | DPWH |
| 2. | Sumio Oishi | - | NIA |

JICA Study Team

1. Tadashi Sakamoto
2. Motoyoshi Kawashima
3. Naoki Ariga
4. Hirohisa Isogai
5. Hiromichi Sekine
6. Kenichiro Kondo
7. Takashi Kimijima

- Leader
- Co-Leader/Water Impounding Planner
- Agro-Economist/Project Evaluator
- Structural Design Engineer
- Irrigation and Drainage Engineer
- Hydrologist
- Agriculturist/Soil Expert

Handwritten signatures in black ink, including a stylized signature on the left, a signature in the middle, and a signature on the right.

**Attachment - 6 Minutes of Meeting for Interim Report
dated on September 20, 1989**

**MINUTES OF MEETING
ON
THE INTERIM REPORT
FOR
JICA MASTER PLAN STUDY ON THE SWIM PROJECTS**

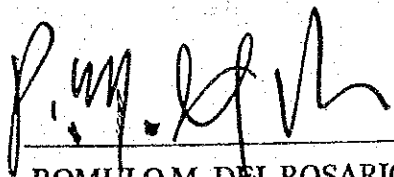
1. Date : September 20, 1989
1:00p.m. - 2:30p.m.
2. Place : Grand Ballroom,
Century Park Sheraton Hotel
3. Attendants : See Attached List
4. Summary of Discussion :

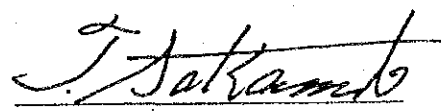
The meeting was presided by Mr. Romulo M. del Rosario, Undersecretary of DPWH and Chairman of the SWIM Committee. The Chairman explained to the body the purpose of the meeting. After the explanation, the Chairman requested Mr. Tadashi SAKAMOTO, Leader of the JICA Study Team, to present the contents of the "Interim Report". After the presentation of Mr. SAKAMOTO, the Chairman requested for comments from the body.

The following were discussed and confirmed:

- (1) The "Interim Report" was accepted by the SWIM-TWG members. The JICA Study Team will proceed with the Phase-III of the Study in line with the agreed work plan mentioned in the "Interim Report".
- (2) The master plan study shall include recommendation(s) for the conduct of surveys, investigations and studies of 170 projects, which are not supported with the studies.

September 21, 1989


ROMULO M. DEL ROSARIO
Undersecretary of DPWH
(Chairman of SWIM Committee)


TADASHI SAKAMOTO
Leader
JICA Study Team

ATTACHMENT

LIST OF ATTENDANTS

SWIM Steering Committee

1. Romulo M. del Rosario - Undersecretary, DPWH
Chairman of SWIM Committee

SWIM Technical Working Group(SWIM-TWG)

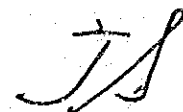
1. Antonio A. Alpasan - PMO-MFC/SWIM, DPWH
2. Tomas L. Buen - PMO-MFC/SWIM, DPWH
3. Jose C. Guanzon - Planning Services, DPWH
4. Pedro Razon - BOC, DPWH
5. Raul E. Tubianosa - PMO-MFC/SWIM, DPWH
6. Francis Hilarie - Water Resources Staff Office, NWRB
7. Sergio Abuan - Watershed Management Division, FMB
8. Rommel R. Juat - Project Manager, PMO-DA
9. Demetrio Gracia - Aquaculture Division, BFAR
10. Rudolfo Lucas - Water Resources Management
Division, BSWM
11. Avelino Rivera - Project Development Dept., NIA
12. Isidro Digal - Project Development Dept., NIA
13. Clemente Alanano - Project Development Dept., NIA
14. Melchor O. Baltazar - NWRB
15. Conrado D. Escobar - PMO-MFC/SWIM, DPWH
16. Lourdes Santiago - PMO-MFC/SWIM, DPWH

JICA Colombo Plan Expert

1. Toshiki Kawakami - DPWH
2. Sumio Oishi - NIA

JICA Study Team

1. Tadashi Sakamoto - Leader
2. Motoyoshi Kawashima - Co-leader/Water Impounding Planner
3. Naoki Ariga - Agro-economist/ Project Evaluation
4. Hirohisa Isogai - Structural Design Engineer
5. Hiromichi Sekine - Irrigation/Drainage Engineer
6. Akira Honda - Structural Planning Engineer
7. Kenichiro Kondo - Hydrologist
8. Takashi Kimijima - Agriculture/Soil Expert
9. Tadaharu Murono - Institutional Planner



**Attachment - 7 Minutes of First Monthly Progress Meeting
dated on October 12, 1988**

MONTHLY PROGRESS MEETING
BETWEEN
JICA MASTER PLAN STUDY TEAM
AND
SWIM TECHNICAL WORKING GROUP (TWG)

Series : 1
Date : October 12, 1988
Place : Meeting Room of JICA SWIM Project Office

ATTENDANCE :

TECHNICAL WORKING GROUP (TWG)

1. Tomas L. Buen	PMO-SWIM/DPWH
2. Raul E. Tubianosa	PMO-SWIM/DPWH
3. Melchor O. Baltazar	NWRB
4. Rommel R. Juat	FSDC-DA
5. Demetrio M. Gracia	BFAR
6. Valeriano Infante	NEA
7. Theodore C. Calma*	NIA
8. Jose C. Guanzon	PS/DPWH
9. Conrado R. Martin	BSWM
10. Gilberto S. Reyes**	BPD/DPWH
11. Francis B. Hilarie	NWRB

JICA-NATIONAL IRRIGATION ADMINISTRATION

1. Yasuhiko Mishima

JICA STUDY TEAM

1. Motoyoshi KAWASHIMA
2. Naoki ARIGA
3. Hirohisa ISOGAI
4. Takashi KIMIJIMA
5. Kenichiro KONDO
6. Hiromichi SEKINE
7. Akira HONDA
8. Seiji YAKUSHIJI

NOTE: * Representative of Mr. Clemente Alanano (NIA)
** Representative of Ms. Sofia Santiago (BOD/DPWH)

MINUTES OF MEETING

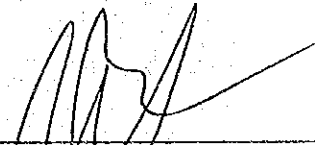
The meeting was presided by Mr. Tomas Buen in the absence of the Chairman, Mr. Fernando S. Nabong. JICA Study Team explained major activities made so far since their arrival on August 28, 1988. The Team also presented the lists of the SWIM projects proposed by each agency through DPWH (see ATTACHMENT-1) to the SWIM-TWG for discussion and comments. The lists comprise the following:

- (i) The candidate projects for the master plan study
- (ii) the candidate projects for post-evaluation study on the constructed projects.

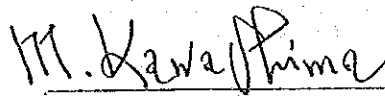
After a series of discussions, the following was confirmed:

- (1) All the projects proposed by each agency were listed as the candidate projects for the master plan study. The list was accepted by the SWIM-TWG with addition of two projects (Santol dam and Carmencita dam) identified by the Master Plan Study on the Cagayan River Basin Water Resources Development in 1987.
- (2) The list of the candidate projects for post-evaluation study on the constructed projects was finalized in the meeting. Porac SWIP and Kirong SWIP were included in the list in place of the Palacol Dam and Caulaman diversion dam proposed by the Team. FSDC proposed that the Fort Magsaysay dam should be taken up as one of the candidate projects for the post-evaluation study instead of the Bacnotan SWIP, if data and report would be made available. The Team agreed to the suggestion by FSDC. FSDC would look for the required data and report of the said project as early as possible.
- (3) The SWIM-TWG requested the Team to classify the projects by region, in order to confirm the equal distribution of the projects over the country.
- (4) Implementing agencies would not need to get any clearance from the JICA Study Team to undertake the study, design and implementation of the on-going projects. The implementing agencies were however requested to keep the close communication with the Team.
- (5) Revision of original plans and designs of the dams would not be undertaken by the Team. The Team would give general comments on engineering faults of the existing plans and designs, if any.

- (7) The Study would not go into details in any case in the field of development plans of the watershed areas and downstream areas of the dams.

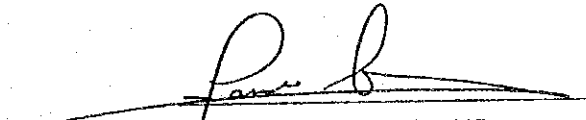


TOMAS L. BUEN
Project Engineer II
PMO-SWIM



MOTOYOSHI KAWASHIMA
Co-Team Leader
JICA Study Team

Certified by:



FERNANDO S. NABONG
Project Manager
PMO-SWIM

LIST OF CANDIDATE PROJECTS FOR THE JICA SWIM MASTER PLAN STUDY

⊗ : data available
x : not available

Agency		Project Name	Region	Province Name	Municipality Name	Present Status		
No.	No.					Pre-F/S	F/S	D/D
1	DPWH-1	Saytan Dan & Reservoir SWIP	I	La Union	Saytan, Pugo	⊗		
2	DPWH-2	Bolo Dan & Reservoir SWIP	CAR	Kalinga-Apayao	Tabuk	⊗	x	
3	DPWH-3	Sacrifice Valley Dan & Reservoir SWIP	III	Bataan	Hernosa	⊗		x
4	DPWH-4	Bulu Dan & Reservoir SWIP	III	Bulacan	Malibay, San Miguel	⊗		x
5	DPWH-5	Aulo River Multi-Purpose SWIP	III	Nueva Ecija	Palayan City	⊗		x
6	DPWH-6	Tulariquin Dan & Reservoir SWIP	IV	Palawan	Roxas	⊗		
7	DPWH-7	Burdeos River SWIP	IV	Quezon	Burdeos, Polillo Is.	⊗		x
8	DPWH-8	San Jose Dan & Reservoir SWIP	IV	Rizal	Morong	⊗		⊗
9	DPWH-9	Cubacub Dan & Reservoir SWIP	IV	Rizal	Pililla	⊗		x
10	DPWH-10	Nabua Dan & Reservoir SWIP	V	Camarines Sur	Iriga City	⊗		⊗
11	DPWH-11	Debesnac Dan & Reservoir SWIP	V	Masbate	Mandaon	⊗		
12	DPWH-12	Kacagtas Dan & Reservoir SWIP	VIII	Northern Samar	Catarnan	⊗		⊗
13	DPWH-13	San Juan Dan & Reservoir SWIP	VIII	Northern Samar	Hondragon	x		⊗
14	DPWH-14	Guimba Dan & Reservoir SWIP	XII	Lanao del Sur	Guimba, Marawi City	⊗		⊗
15	DPWH-15	Magpet Dan & Reservoir SWIP	XII	North Cotabato	Magpet	⊗		⊗
16	DPWH-16	Banayal Dan & Reservoir SWIP	XII	North Cotabato	Tulunán	⊗		
17	DPWH-17	Acop Dan & Reservoir	I	Pangasinan	Acop, Rosales	x		
18	DPWH-18	Calitlitan Dan & Reservoir	I	Pangasinan	Calitlitan, Umingan	x		
19	DPWH-19	Kita-Kita Dan & Reservoir	I	Pangasinan	Kita-Kita, Balungao	x		
20	DPWH-20	Salvacion Dan & Reservoir	I	Pangasinan	Salvacion, Rosales	x		
21	DPWH-21	San Angel Dan & Reservoir	I	Pangasinan	San Angel, Rosales	x		
22	DPWH-22	Ligtos SWIP	VI	Iloilo	Ligtos, Igbaras	x		
23	DPWH-23	Abian SWIP (FSDC)	II	Nueva Viscaya	Banbang	x		
24	DPWH-24	Catibagan SWIP (FSDC)	II	Isabela	Anig, Delfin Albano	x		
25	DPWH-25	Malalinta SWIP (FSDC)	II	Isabela	San Manuel	x		
26	DPWH-26	Calubayan SWIP (FSDC)	IV	Oriental Mindoro	Calubayan, Socorro	x		
27	DPWH-27	San Rafael SWIP (FSDC)	VI	Antique	San Remigio	x		
28	DPWH-28	Consolacion SWIP (FSDC)	VII	Cebu	Cansaga		x	x
29	DPWH-29	Lantawan SWIP (FSDC)	IX	Zamboanga del Sur	Wahayag	x		
30	DPWH-30	Bankerohan SWIP (FSDC)	XI	Davao del Norte	Montevista	x		
31	DPWH-31	Libasan SWIP (FSDC)	XI	Davao del Norte	Nabunturan	⊗	x	
32	NIA-1	Banila SWIP	I	Pangasinan	Umingan	⊗		⊗
33	NIA-2	Cabacanan SWIP	I	Ilocos Norte	Pagudpud	⊗		x
34	NIA-3	San Clemente SWIP	III	Tarlac	San Clemente	⊗		x
35	NIA-4	Parpagoja SWIP	IV	Ronblon	San Andres	⊗		x
36	NIA-5	Tagun-Angas SWIP	IV	Marinduque	Sta. Cruz	⊗		x
37	NIA-6	Potot SWIP	V	Masbate	Milagros	⊗		x
38	NIA-7	Caranoan SWIP	V	Camarines Sur	Caranoan	⊗		x
39	NIA-8	Alapasco SWIP	VI	Iloilo	Batad	⊗		x
40	NIA-9	Nasig-id SWIP	VII	Negros Oriental	Zamboanguita	⊗		x
41	NIA-10	Duanjug Ronda SWIP	VII	Cebu	Duanjug and Ronda	x		x
42	NIA-11	Tugas SWIP	VII	Bohol	Candijay	⊗		x
43	NIA-12	Ilaya SWIP	VII	Bohol	Ubay	x		x
44	NIA-13	Hibulangan SWIP	VIII	Northern Leyte	Katagob	⊗		x
45	NIA-14	Sagudsuron SWIP	VIII	Northern Samar	Catubig	⊗		x
46	NIA-15	Bucacao SWIP	IX	Zamboanga del Sur	Alicia	⊗		x
47	NIA-16	Dongdongla SWIP	I	Ilocos Norte	Bangui	x		
48	NIA-17	Bucong Balingaoan SWIP	I	Ilocos Sur	Candon	x		
49	NIA-18	Comillas Extension SWIP	I	Ilocos Sur	Cervantes	x		
50	NIA-19	Silag Pacang SWIP	I	Ilocos Sur	Sta. Maria	x		

LIST OF CANDIDATE PROJECTS FOR THE JICA SWIM MASTER PLAN STUDY

(X) : data available
x : not available

Agency		Project Name	Region	Province Name	Municipality Name	Present Status		
No.	No.					Pre-F/S	F/S	D/D
51	NIA-20	Naloyo SWIP	I	La Union	Balaoan		x	
52	NIA-21	Magsiping SWIP	I	La Union	Luna		x	
53	NIA-22	Maoasoas SWIP	I	La Union	Rosario		x	
54	NIA-23	Rizal SWIP	I	La Union	Tubao		x	
55	NIA-24	Bayasoas SWIP	I	Pangasinan	Aguilar		x	
56	NIA-25	Masiden SWIP	I	Pangasinan	Bani		x	
57	NIA-26	Oboy-Oboy SWIP	I	Pangasinan	Bani		x	
58	NIA-27	Vega SWIP	I	Pangasinan	Dasol		x	
59	NIA-28	Toboy SWIP	I	Pangasinan	San Manuel		x	
60	NIA-29	Alibeng SWIP	I	Pangasinan	Sison		x	
61	NIA-30	Labayug SWIP	I	Pangasinan	Sison		x	
62	NIA-31	Digap SWIP	I	Pangasinan	Uningan		x	
63	NIA-32	Diket SWIP	I	Pangasinan	Uningan		x	
64	NIA-33	Nagtupacan SWIP	CAR	Abra	Bucay		x	
65	NIA-34	Nagtipulan SWIP	CAR	Abra	Lagangilang		x	
66	NIA-35	Palsiguan SWIP	CAR	Abra	Lagayan		x	
67	NIA-36	Atok Central SWIP	CAR	Benguet	Atok		x	
68	NIA-37	Kapangan SWIP	CAR	Benguet	Kapangan		x	
69	NIA-38	Sagubo SWIP	CAR	Benguet	Kapangan		x	
70	NIA-39	Tublay Central SWIP	CAR	Benguet	Tublay		x	
71	NIA-40	Pandey SWIP	CAR	Mt. Province	Bagnen, Bauko		x	
72	NIA-41	Lake Danun SWIP	CAR	Mt. Province	Besao		x	
73	NIA-42	Burayok SWIP	CAR	Mt. Province	Palitud, Paracelis		x	
74	NIA-43	Bayangaoan SWIP	CAR	Mt. Province	Suyo, Sagada		x	
75	NIA-44	Labangan River SWIP	III	Bataan	Abucay		x	
76	NIA-45	Tangilad River SWIP	III	Bataan	Sawal		x	
77	NIA-46	Capalangan-Mahipon CIS	III	Nueva Ecija	Capan		x	
78	NIA-47	Mayaot CIP	III	Nueva Ecija	Guimba		x	
79	NIA-48	San Felipe CIS	III	Nueva Ecija	Guimba		x	
80	NIA-49	Bayog CIS	III	Nueva Ecija	Laur		x	
81	NIA-50	Agupalo Este CIP	III	Nueva Ecija	Lupao		x	
82	NIA-51	San Roque CIP	III	Nueva Ecija	Lupao		x	
83	NIA-52	Sta. Nino III CIP	III	Nueva Ecija	Lupao		x	
84	NIA-53	Mantedted CIS	III	Nueva Ecija	San Jose City		x	
85	NIA-54	Cabu CIP	III	Nueva Ecija	Sta. Rosa		x	
86	NIA-55	Dalayap SWIP	III	Pampanga	Arayat		x	
87	NIA-56	Bliss II SWIP	III	Pampanga	Nagalang		x	
88	NIA-57	Bigbiga CIS	III	Tarlac	Mayantoc		x	
89	NIA-58	Tangarang CIP	III	Tarlac	Mayantoc		x	
90	NIA-59	Lawacaulag CIP	III	Tarlac	Tarlac		x	
91	NIA-60	Western Barrios Impounding Irri. Proj.	III	Tarlac	Tarlac		x	
92	NIA-61	Pamalasan Creek SWIP	III	Zambales	Botolan		x	
93	NIA-62	Tutolanun Creek SWIP	III	Zambales	Botolan		x	
94	NIA-63	Nannel River SWIP	III	Zambales	Cabangan		x	
95	NIA-64	Tabao-Tabao River SWIP	III	Zambales	Cabangan		x	
96	NIA-65	Baculi Creek SWIP	III	Zambales	Iba		x	
97	NIA-66	Tagaleg Creek SWIP	III	Zambales	Iba		x	
98	NIA-67	Batang Creek SWIP	III	Zambales	Hasinloc		x	
99	NIA-68	Bato Creek SWIP	III	Zambales	Palauig		x	
100	NIA-69	Naglabusan Creek SWIP	III	Zambales	San Antonio		x	

LIST OF CANDIDATE PROJECTS FOR THE JICA SWIP MASTER PLAN STUDY

⊗ : data available
x : not available

Agency No.	Project Name	Region	Province Name	Municipality Name	Present Status Pre-P/S F/S D/D
101 NIA-70	Patogo River & Nayon River SWIP	III	Zambales	Sta. Cruz	x
102 NIA-71	Hapanaw Creek SWIP	III	Zambales	Subic	x
103 NIA-72	Natikiw SWIP	IV	Laguna	Pakil	x
104 NIA-73	Bahi CIP	IV	Marinduque	Gasan	x
105 NIA-74	Quinlogan River SWIP	IV	Palawan	Quezon	x
106 NIA-75	Singalong SWIP	IV	Rizal	Antipolo	x
107 NIA-76	Carolina SWIP	IV	Ronblon	Looc	x
108 NIA-77	Gabawan SWIP	IV	Ronblon	Odiongan	x
109 NIA-78	Inogna-Inaracting CIP	V	Albay	Libon	x
110 NIA-79	Allang CIP	V	Albay	Ligao	x
111 NIA-80	Mahulugan Pasig SWIP	V	Canarines Sur	Garchitorena	x
112 NIA-81	Rangas SWIP	V	Canarines Sur	Goa	x
113 NIA-82	Anib SWIP	V	Canarines Sur	Sipocot	x
114 NIA-83	Tinawagan SWIP	V	Canarines Sur	Tigaon	x
115 NIA-84	Guinobatan CIP	V	Catanduanes	Bato	x
116 NIA-85	Comacaycay CIP	V	Catanduanes	Calolbon	x
117 NIA-86	Paturuc CIP	V	Catanduanes	Calolbon	x
118 NIA-87	Canburo CIP	V	Catanduanes	Pandan	x
119 NIA-88	Palawig CIP	V	Catanduanes	San Andres	x
120 NIA-89	Binalwaan CIP	V	Catanduanes	Viga	x
121 NIA-90	Casuocan CIP	V	Catanduanes	Virac	x
122 NIA-91	Hawan CIP	V	Catanduanes	Virac	x
123 NIA-92	Karilima CIP	V	Catanduanes	Virac	x
124 NIA-93	Palta SWIP	V	Catanduanes	Virac	x
125 NIA-94	Patabig CIP	V	Catanduanes	Virac	x
126 NIA-95	Sinanla CIP	V	Catanduanes	Virac	x
127 NIA-96	Inbanuban CIP	V	Hasbate	Balud	x
128 NIA-97	Sta. Teresita CIP	V	Hasbate	Cataingan	x
129 NIA-98	Batongan CIP	V	Hasbate	Kandaon	x
130 NIA-99	Jauorawan CIP	V	Hasbate	Milagros	x
131 NIA-100	Cabangcalan CIP	V	Hasbate	Placer	x
132 NIA-101	Mahayag CIP	V	Hasbate	Placer	x
133 NIA-102	Pili CIP	V	Hasbate	Placer	x
134 NIA-103	Resurrecion CIP	V	Hasbate	San Fernando	x
135 NIA-104	Rizal CIP	V	Hasbate	San Fernando	x
136 NIA-105	Tigao SWIP	V	Hasbate	San Fernando	x
137 NIA-106	Bontolan CIP	V	Hasbate	Uson	x
138 NIA-107	Boracan CIP	V	Hasbate	Uson	x
139 NIA-108	Pinangakogan CIP	V	Hasbate	Uson	x
140 NIA-109	Babog Loreto SWIP	V	Sorsogon	Castilla	x
141 NIA-110	Botong CIP	V	Sorsogon	Prieto-Diaz	x
142 NIA-111	Ibingan SWIP	V	Sorsogon	Prieto-Diaz	x
143 NIA-112	Bagasico SWIP	VII	Bohol	Untaga, Alicia	x
144 NIA-113	Cabatang SWIP	VII	Bohol	Alicia	x
145 NIA-114	Camba-ol SWIP	VII	Bohol	Alicia	x
146 NIA-115	Cayacay SWIP	VII	Bohol	Cayacay, Alicia	x
147 NIA-116	Junas SWIP	VII	Bohol	Alicia	x
148 NIA-117	Progreso SWIP	VII	Bohol	Alicia	x
149 NIA-118	Untaga SWIP	VII	Bohol	Alicia	x
150 NIA-119	Bonot-Bonot SWIP	VII	Bohol	Buenavista	x

LIST OF CANDIDATE PROJECTS FOR THE JICA SWIN MASTER PLAN STUDY

Ⓢ : data available
x : not available

Agency		Project Name	Region	Province Name	Municipality Name	Present Status		
No.	No.					Pre-F/S	F/S	D/D
151	NIA-120	Calunasan SWIP	VII	Bohol	Calape		x	
152	NIA-121	Mandaug SWIP	VII	Bohol	Calape		x	
153	NIA-122	Abejilan SWIP	VII	Bohol	Candijay		x	
154	NIA-123	Boyo-an SWIP	VII	Bohol	Candijay		x	
155	NIA-124	Calamingaw SWIP	VII	Bohol	Candijay		x	
156	NIA-125	Caabane SWIP	VII	Bohol	Candijay		x	
157	NIA-126	Candijay SWIP	VII	Bohol	Candijay		x	
158	NIA-127	Gabayan SWIP	VII	Bohol	Canana, Candijay		x	
159	NIA-128	Lungsoda-an SWIP	VII	Bohol	Candijay		x	
160	NIA-129	Tubod SWIP	VII	Bohol	Candijay		x	
161	NIA-130	Catungawan SWIP	VII	Bohol	Guindulman		x	
162	NIA-131	Lapacan SWIP	VII	Bohol	Inabanga		x	
163	NIA-132	Taytay SWIP	VII	Bohol	Jetafe		x	
164	NIA-133	Abaca SWIP	VII	Bohol	Mabini		x	
165	NIA-134	Cabidian SWIP	VII	Bohol	Mabini		x	
166	NIA-135	Cabulao SWIP	VII	Bohol	Mabini		x	
167	NIA-136	Ondol SWIP	VII	Bohol	Mabini		x	
168	NIA-137	Talibon SWIP	VII	Bohol	Zenora, Talibon		x	
169	NIA-138	San Isidro Banlasan SWIP	VII	Bohol	Trinidad		x	
170	NIA-139	Banlasan SWIP	VII	Bohol	Tubigon		x	
171	NIA-140	Cabulihan SWIP	VII	Bohol	Tubigon		x	
172	NIA-141	Biabas SWIP	VII	Bohol	Ubay		x	
173	NIA-142	Benlin SWIP	VII	Bohol	Benlin, Ubay		x	
174	NIA-143	Bongbong SWIP	VII	Bohol	Ubay		x	
175	NIA-144	Dita SWIP	VII	Bohol	Ubay		x	
176	NIA-145	Lunangog SWIP	VII	Bohol	Ubay		x	
177	NIA-146	Tipolo SWIP	VII	Bohol	Ubay		x	
178	NIA-147	Kanasuhan CIP	VII	Cebu	Carcar		x	
179	NIA-148	Luyang CIP	VII	Cebu	Caraen		x	
180	NIA-149	Danao CIP	VII	Cebu	Danao City		x	
181	NIA-150	Tungkod CIP	VII	Cebu	Minglanilla		x	
182	NIA-151	Bayawan CIP	VII	Negros Oriental	Bayawan		x	
183	NIA-152	Maayog-Tubig CIP	VII	Negros Oriental	Davin		x	
184	NIA-153	Mabinay CIP	VII	Negros Oriental	Mabinay		x	
185	NIA-154	Masaplod CIP	VII	Negros Oriental	Davin		x	
186	NIA-155	Guihulngan CIP	VII	Negros Oriental	Guihulngan		x	
187	NIA-156	Guinobaan CIP	VII	Negros Oriental	Guihulngan		x	
188	NIA-157	Naga-Nantuyop CIP	VII	Negros Oriental	Siaton		x	
189	NIA-158	San Antonio CIP	VII	Negros Oriental	Sibulan		x	
190	NIA-159	Taobolan CIP	VII	Negros Oriental	Tayasan		x	
191	NIA-160	Valencia CIP	VII	Negros Oriental	Valencia		x	
192	NIA-161	Senona CIP	VII	Siquijor	Lazi		x	
193	NIA-162	Sinaacolong CIP	VII	Siquijor	Lazi		x	
194	NIA-163	Tigbao SWIP	VII	Siquijor	Lazi		x	
195	NIA-164	Lotlotan SWIP	VII	Siquijor	Maris		x	
196	NIA-165	Doanajog SWIP	VII	Siquijor	Siquijor		x	
197	NIA-166	Songcolan CIP	VII	Siquijor	Siquijor		x	
198	NIA-167	Balacdas CIP	VIII	Eastern Samar	Borongan		x	
199	NIA-168	Cati-an CIP	VIII	Eastern Samar	Borongan		x	
200	NIA-169	Sta. Fe SWIP	VIII	Eastern Samar	Borongan		x	

LIST OF CANDIDATE PROJECTS FOR THE JICA SWIM MASTER PLAN STUDY

ⓧ : data available
x : not available

Agency No.		Project Name	Region	Province Name	Municipality Name	Present Status		
No.	No.					Pre-F/S	F/S	D/D
201	NIA-170	Guibuangan CIP	VIII	Eastern Samar	Can-Avid		x	
202	NIA-171	Cantunco SWIP	VIII	Eastern Samar	Llorente		x	
203	NIA-172	Capatagan SWIP	VIII	Eastern Samar	Llorente		x	
204	NIA-173	Layog-Casoroy CIP	VIII	Eastern Samar	San Julian		x	
205	NIA-174	Surok-Nena CIP	VIII	Eastern Samar	San Julian		x	
206	NIA-175	Sta. Tomas SWIP	VIII	Eastern Samar	Sulat		x	
207	NIA-176	Nato CIP	VIII	Eastern Samar	Taft		x	
208	NIA-177	San Luis CIP	VIII	Eastern Samar	Taft		x	
209	NIA-178	Taft CIP	VIII	Eastern Samar	Taft		x	
210	NIA-179	Kacagtas SWIP	VIII	Northern Samar	Cataman		x	
211	NIA-180	Galutan SWIP	VIII	Northern Samar	Mondragon		x	
212	NIA-181	Jazmines CIP	VIII	Samar	Gandara		x	
213	NIA-182	Nacobi CIP	VIII	Samar	Gandara		x	
214	NIA-183	Rawis CIP	VIII	Samar	Gandara		x	
215	NIA-184	Blanca Aurora SWIP	VIII	Samar	San Jorge		x	
216	NIA-185	Sta. Rita CIP	VIII	Samar	Sta. Rita		x	
217	NIA-186	Mahayahay SWIP	VIII	Southern Leyte	Bontoc		x	
218	NIA-187	Bogo-Dongon SWIP	VIII	Southern Leyte	Maasin		x	
219	NIA-188	Laboon SWIP	VIII	Southern Leyte	Maasin		x	
220	NIA-189	Pasanon SWIP	VIII	Southern Leyte	San Francisco		x	
221	NIA-190	Kamansi-Rizal SWIP	VIII	Southern Leyte	Tomas Oppus		x	
222	NIA-191	Mercedez CIP	IX	Zamboanga City			x	
223	NIA-192	Basag CIS	X	Agusan del Norte	Basag Creek		x	
224	NIA-193	Bonbon CIS	X	Agusan del Norte	Bonbon Creek		x	
225	NIA-194	Amontay CIS	X	Agusan del Norte	Tagub Creek		x	
226	NIA-195	Kitcharao CIS	X	Agusan del Norte	Taytay-Oyos Creek		x	
227	NIA-196	Cabanglasan CIP	X	Bukidnon	Cabanglasan		x	
228	NIA-197	Dela Paz CIS	X	Misamis Occidental	Mohon Creek		x	
229	NIA-198	Tangub CIS	X	Misamis Occidental	Tangub River		x	
230	NIA-199	Balingasag CIP	X	Misamis Oriental	Balatuacan River		x	
231	NIA-200	Banglay CIP	X	Misamis Oriental	Banglay Creek		x	
232	NIA-201	Honopolan CIP	X	Misamis Oriental	Honopolan Creek		x	
233	NIA-202	Gumaod CIP	X	Misamis Oriental	Gumaod Lake		x	
234	NIA-203	Sta. Ana CIP	X	Misamis Oriental	Sta. Ana Creek		x	
235	NIA-204	Solana CIP	X	Misamis Oriental	Solana River		x	
236	NIA-205	Bulod SWIP	XII	Lanao del Norte			x	
237	NIA-206	Salug SWIP	XII	Lanao del Norte			x	
238	NIA-207	Busok SWIP	XII	Sultan Kudarat	Bagunbayan		x	
239	NIA-208	Marbol SWIP	XII	Sultan Kudarat	Bagunbayan		x	
240	NIA-209	Muno SWIP	XII	Sultan Kudarat	Bagunbayan		x	
241	NIA-210	Bila SWIP	XII	Sultan Kudarat	Colombio		x	
242	NIA-211	Cadedang SWIP	XII	Sultan Kudarat	Lutawan		x	
243	NIA-212	Kalandagan SWIP	XII	Sultan Kudarat	Tacurong		x	
244	NIA-213	Puti SWIP	XII	Sultan Kudarat	Tacurong		x	
245	PKB-1	Anburayan River Watershed Rehab.	I	Ilocos Sur, Benquet & La Union			ⓧ	
246	PKB-2	Laoag River Watershed Rehabilitation	I	Ilocos Norte	Espiritu, Nueva Era & Piddig		ⓧ	
247	PKB-3	Ilocos Norte Metropolitan Forest Reser.	I	Ilocos Norte	Pasuquin		ⓧ	
248	PKB-4	Lidlidda Watershed Forest Reserve	I	Ilocos Sur	Banayoyo, Lidlidda		ⓧ	

LIST OF CANDIDATE PROJECTS FOR THE JICA SWIN MASTER PLAN STUDY

(X) : data available
x : not available

Agency No.	Project Name	Region	Province Name	Municipality Name	Present Status Pre-F/S F/S D/D
249 FMB-5	Naguilian River Watershed Rehab.	I	La Union	Naguilian	(X)
250 FMB-6	Lower Agno River Watershed Rehab.	I	Benguet	Tuba	(X)
			Pangasinan	San Nicolas & San Manuel	
251 FMB-7	Alaninos Watershed Rehabilitation	I	Pangasinan	Alaninos	x
252 FMB-8	Mangataren Sub-Watershed Rehabilitation	I	Pangasinan	Mangataren	x
253 FMB-9	Dannun River Watershed Rehabilitation	II	Cagayan	Gattaran	x
254 FMB-10	Diadi River Watershed Rehabilitation	II	Cagayan	San Luis	x
			Isabela	Cordon	
			Nueva Vizcaya	Bagabag	
255 FMB-11	Kasibu River Watershed Rehabilitation	II	Nueva Vizcaya	Kasibu	x
256 FMB-12	Bawa and Mangag Watershed Rehab.	II	Cagayan	Gonzaga	(X)
257 FMB-13	Kilkiling Watershed Forest Reserve	II	Cagayan	Claveria	(X)
258 FMB-14	Barobob Spring Watershed Rehab.	II	Nueva Vizcaya	Barobob	(X)
259 FMB-15	Sta. Praxedes Watershed Rehabilitation	II	Cagayan	Sta. Praxedes	(X)
260 FMB-16	Casecnan Watershed Rehabilitation	II	Nueva Vizcaya	Dupax	(X)
261 FMB-17	Sinapaoan Sub-Watershed Rehabilitation	II	Nueva Vizcaya	Sta. Fe	x
262 FMB-18	Hanga River Watershed Rehabilitation	II	Nueva Vizcaya	Dupax del Norte	x
263 FMB-19	Nariveles Watershed Rehabilitation	III	Bataan	Orion, Bagac, Linay	x
264 FMB-20	Pasig-Timbu Potrero River Water. Rehab.	III	Panpanga	Porac, Bacolor	x
265 FMB-21	Tangbao Sub-Watershed Rehab.	III	Tarlac	Kayantoc	x
266 FMB-22	O'Donnell River Watershed Rehab.	III	Tarlac	Capas, Kayantoc, Tarlac	x
267 FMB-23	Balog-Balog Watershed Rehabilitation	III	Tarlac	Tarlac	(X)
268 FMB-24	Masinloc Watershed Rehabilitation	III	Zambales	Candelaria	(X)
269 FMB-25	Talavera Watershed Rehabilitation	III	Nueva Ecija	Carranglaan	(X)
270 FMB-26	Laguna de Bay Watershed Rehabilitation	IV	Laguna, Cavite		x
			Rizal, Batangas		
271 FMB-27	Agos River Watershed Rehabilitation	IV	Quezon	Infanta	x
272 FMB-28	Atimonan Watershed Forest Reserve	IV	Quezon	Atimonan	x
273 FMB-29	Kaliwa River Watershed Rehabilitation	IV	Quezon	Infanta	(X)
			Rizal	Hontalban-Teresa	
274 FMB-30	Kanan River Watershed Rehabilitation	IV	Quezon	Gen. Nakar-Infanta	(X)
275 FMB-31	Lake Buhi-Barit River Watershed Rehab.	V	Camarines Sur	Buhi	(X)
276 FMB-32	Narangas River Watershed Rehabilitation	IV	Palawan	Brookes Pt.	x
277 FMB-33	Alabat Watershed Rehabilitation	IV	Quezon	Alabat	x
278 FMB-34	Calatrava-San Andres-San Agustin Watershed Forest Reserve	IV	Ronblon	San Agustin-San Andres	(X)
279 FMB-35	Dipaculao Watershed Rehabilitation	IV	Quezon	Dipaculao	(X)
280 FMB-36	Dulangan Sub-Watershed Erosion Con.Proj.	IV	Oriental Mindoro	Baco	x
281 FMB-37	Sablayan Watershed Pilot Project	IV	Occidental Mindoro	Sablayan	x
282 FMB-38	Halvar Naujan Watershed Rehab. Project	IV	Oriental Mindoro	Naujan	x
283 FMB-39	Binasagan Yabo River Watershed Rehab.	V	Camarines Sur	Pili	x
284 FMB-40	Ilog-Nivarangan River Watershed Rehab.	VII	Negros Oriental	Ilog	x
285 FMB-41	Panay-Manbusao River Watershed Rehab.	VI	Capiz	Panay	x
286 FMB-42	San Pedro Ilaya & Cansohay River Water.	VII	Bohol	Duero	x
287 FMB-43	Candijay Watershed Rehabilitation	VII	Bohol	Candijay-Guindulman	x
288 FMB-44	Catubig River Watershed Rehab.	VIII	Northern Samar	Palapag, Laoang, Catubig	x
289 FMB-45	Candacan-Tinane-Ulot River Water. Rehab.	VIII	Eastern-Western Samar	Wright, Can-Avid	x
290 FMB-46	Palonpon Watershed Forest Reserve	VIII	Leyte	Palonpon	(X)
291 FMB-47	Curuan Watershed Rehabilitation	IX	Zamboanga del Sur	Curuan, Zamboanga City	x

LIST OF CANDIDATE PROJECTS FOR THE JICA SWIM MASTER PLAN STUDY

ⓧ : data available
x : not available

Agency No.	Agency No.	Project Name	Region	Province Name	Municipality Name	Present Status	Pre-F/S	F/S	D/D
292	FMB-48	Siocon Watershed Rehabilitation	IX	Zamboanga del Norte	Siocon	ⓧ			
293	FMB-49	Pasonanca Watershed Forest Reserve	IX	Zamboanga del Sur	Zamboanga City	ⓧ			
294	FMB-50	Ubungan River Watershed Rehabilitation	XII	North Cotabato	Widsayap	x			
295	FMB-51	Kulawan River Water. Forest Reser.Proj.	XII	North Cotabato	Kidapawan	x			
296	FMB-52	Labangan Watershed Rehab. Project	IX	Zamboanga del Sur	Labangan, Pagadian City	x			
297	FMB-53	Upper Salug watershed Rehab. Project	X	Misamis Occidental	Hanayog, Molave,	x			
298	FMB-54	Kinabjangan Watershed Rehabilitation	X	Agusan del Norte	Carmen	x			
299	FMB-55	Digos Riparan River Watershed Rehab.	XI	Davao del Sur	Digos	x			
300	FMB-56	Cantilan River Watershed Rehab.	XI	Surigao del Sur	Cantilan	x			
301	NEA-1	Baracbac River	I	Pangasinan	Kangataren	ⓧ			x
302	NEA-2	Cabalisian River	I	Pangasinan	San Nicolas	ⓧ			
303	NEA-3	San Gabriel River	I	La Union	San Gabriel	ⓧ			
304	NEA-4	Pogo River	I	La Union	Pogo	ⓧ			
305	NEA-5	Pansian River	I	Ilocos Norte	Pagudpud	ⓧ			x
306	NEA-6	Salaza River	III	Zambales	Palauig	ⓧ			
307	NEA-7	Cabaluan River	III	Zambales	Sta. Cruz	ⓧ			
308	NEA-8	Usulon River	III	Nueva Ecija	Bongabon	ⓧ			x
309	NEA-9	Udiawan Falls	II	Nueva Vizcaya	Solano	ⓧ			x
310	NEA-10	Sagsit River	III	Zambales	Palauig	ⓧ			
311	NEA-11	Bancal River	III	Zambales	Iba	ⓧ			
312	NEA-12	Kaapon River	IV	Quezon	Sampaloc	ⓧ			
313	NEA-13	Cagaycay River	V	Camariñes Sur	Goa	ⓧ			
314	NEA-14	Tignan River	V	Camariñes Sur	Calabanga	ⓧ			
315	NEA-15	Osiao River	V	Sorsogon	Bacon	ⓧ			x
316	NEA-16	Itbog Falls	V	Camariñes Sur	Buhi	ⓧ			
317	NEA-17	Sowong River	V	Camariñes Sur	Buhi	ⓧ			
318	NEA-18	Binahugan River	V	Camariñes Sur	Buhi	ⓧ			x
319	NEA-19	Inarihan River	V	Camariñes Sur	Naga City	ⓧ			
320	NEA-20	Ranggas River	V	Sorsogon	Sorsogon	ⓧ			
321	NEA-21	Ranggas River	V	Camariñes Sur	Goa	ⓧ			
322	NEA-22	Kanitoan River	V	Albay	Manito	ⓧ			
323	NEA-23	Sibulan River	V	Sorsogon	Bacon	ⓧ			x
324	NEA-24	Karagandang River	VI	Negros Occidental	Bago	ⓧ			x
325	NEA-25	Balanas River	VI	Antique	Barbaza	ⓧ			x
326	NEA-26	Tibiao River	VI	Antique	Tibiao	ⓧ			x
327	NEA-27	Silab #2 (Anlan River)	VII	Negros Oriental	Anlan	ⓧ			
328	NEA-28	Anulod River II	VII	Negros Oriental	Bindoy	ⓧ			
329	NEA-29	Balanan Lake	VII	Negros Oriental	Siaton	ⓧ			
330	NEA-30	Calo River #1	VII	Negros Oriental	San Jose	ⓧ			
331	NEA-31	Calo River #2	VII	Negros Oriental	San Jose	ⓧ			
332	NEA-32	Calo River #3	VII	Negros Oriental	San Jose	ⓧ			
333	NEA-33	Bugtong Falls	VIII	Samar	Calbayog City	ⓧ			x
334	NEA-34	Cantingas River SWIP	IV	Ronblon	San Fernando	ⓧ			
335	NEA-35	Calabgan River SWIP	IV	Aurora	Casiguran	x			
336	NEA-36	Estrella Falls SWIP	IV	Palawan	Narra	ⓧ			
337	NEA-37	Manalili River SWIP	IV	Palawan	Narra	ⓧ			
338	NEA-38	Tarabanan River SWIP	IV	Palawan	Puerto Princesa City	ⓧ			
339	NEA-39	Magcasa Falls SWIP	VIII	Southern Leyte	San Juan	ⓧ			
340	NEA-40	Kauo River SWIP	VIII	Northern Samar	San Isidro	ⓧ			
341	NEA-41	Tinuy-an Falls SWIP	XI	Surigao del Sur	Bislig	ⓧ			

LIST OF CANDIDATE PROJECTS FOR THE JICA SWIM MASTER PLAN STUDY

⊗ : data available
x : not available

Agency No.		Project Name	Region	Province Name	Municipality Name	Present Status		
No.	No.					Pre-F/S	F/S	D/D
342	NEA-42	Hubo River SWIP	XI	Surigao del Sur	San Agustin	x		
343	NEA-43	Kanapnapan Falls SWIP	XII	Lanao del Sur	Malabang	⊗		
344	NEA-44	Matling River SWIP	XII	Lanao del Sur	Malabang	⊗		
345	NEA-45	Tubungan River SWIP	IX	Basilan	Lamitan	x		
346	NEA-46	Hanican River SWIP	IX	Basilan	Lamitan	x		
347	NEA-47	Batalan River SWIP	III	Bataan	Morong	⊗		
348	BSWH-1	Sucsuguen SWIP	I	Ilocos Norte	Piddig		⊗	⊗
349	BSWH-2	Olo-olo I SWIP	I	Ilocos Sur	Santiago		⊗	⊗
350	BSWH-3	Olo-olo II SWIP	I	Ilocos Sur	Santiago		⊗	⊗
351	BSWH-4	Balingoan SWIP	I	Ilocos Sur	Candon		⊗	⊗
352	BSWH-5	San Cristobal SWIP	I	Ilocos Norte	Sarrat		⊗	⊗
353	BSWH-6	San Agustin SWIP	I	Ilocos Norte	San Nicolas		⊗	⊗
354	BSWH-7	Bingao II SWIP	I	Ilocos Norte	San Nicolas		⊗	⊗
355	BSWH-8	Oda SWIP	I	Pangasinan	Agno		⊗	⊗
356	BSWH-9	Pugaro SWIP	I	Pangasinan	Manaoag		⊗	⊗
357	BSWH-10	Paaaranum SWIP	I	Pangasinan	Kalasiqui		⊗	⊗
358	BSWH-11	Caparispisan SWIP	I	Ilocos Norte	Pagudpud		⊗	⊗
359	BSWH-12	Patong SWIP	I	Ilocos Sur	Magsingal		⊗	⊗
360	BSWH-13	Sanac SWIP	I	Ilocos Norte	San Nicolas		⊗	⊗
361	BSWH-14	Habini SWIP	I	Pangasinan	Balungao		⊗	⊗
362	BSWH-15	San Gonzalo SWIP	I	Pangasinan	Labrador		⊗	⊗
363	BSWH-16	Canagsingalan SWIP	I	Pangasinan	Sual		⊗	⊗
364	BSWH-17	Patar SWIP	I	Pangasinan	Habini		⊗	⊗
365	BSWH-18	Halimpin SWIP	I	Pangasinan	Dasol		⊗	⊗
366	BSWH-19	Viga SWIP	I	Pangasinan	Dasol		⊗	⊗
367	BSWH-20	Cabuosan SWIP	I	Ilocos Norte	Currimao		⊗	⊗
368	BSWH-21	Magnuang SWIP	I	Ilocos Norte	Batac		⊗	⊗
369	BSWH-22	Canagsingalan #2 SWIP	I	Pangasinan	Sual		⊗	⊗
370	BSWH-23	Daquioag II SWIP	I	Ilocos Norte	Marcos		⊗	⊗
371	BSWH-24	San Andres SWIP	I	Ilocos Norte	Sarrat		⊗	⊗
372	BSWH-25	Paninaan SWIP	I	Ilocos Norte	Bacarra		⊗	⊗
373	BSWH-26	San Juan I SWIP	CAR	Abra	Pilar		⊗	⊗
374	BSWH-27	San Juan II SWIP	CAR	Abra	Pilar		⊗	⊗
375	BSWH-28	Macarcaraay SWIP	CAR	Abra	Bangued		⊗	⊗
376	BSWH-29	Pata SWIP	II	Cagayan	Claveria		⊗	⊗
377	BSWH-30	Balacuit SWIP	II	Hueva Vizcaya	Villaverde		⊗	⊗
378	BSWH-31	Cabannungan SWIP	II	Isabela	Ilagan		⊗	⊗
379	BSWH-32	Marana SWIP	II	Isabela	Ilagan		⊗	⊗
380	BSWH-33	Cabuluan SWIP	II	Cagayan	Alcala		⊗	⊗
381	BSWH-34	Diadi SWIP	II	Hueva Vizcaya	Diadi		⊗	⊗
382	BSWH-35	Haganacan SWIP	II	Isabela	Sta. Maria		⊗	⊗
383	BSWH-36	Balete SWIP	II	Hueva Vizcaya	Diadi		⊗	⊗
384	BSWH-37	Mingbag SWIP	II	Isabela	Quezon		⊗	⊗
385	BSWH-38	Kirang SWIP	II	Hueva Vizcaya	Aritao		⊗	⊗
386	BSWH-39	Lanneg SWIP	II	Cagayan	Solana		⊗	⊗
387	BSWH-40	San Antonio SWIP	II	Hueva Vizcaya	Bambang		⊗	⊗
388	BSWH-41	Abian SWIP	II	Hueva Vizcaya	Bambang		⊗	⊗
389	BSWH-42	Trinidad SWIP	II	Isabela	Kallig		⊗	⊗
390	BSWH-43	Halalaa SWIP	II	Isabela	Ilagan		⊗	⊗
391	BSWH-44	Apang SWIP	II	Cagayan	Claveria		⊗	⊗

LIST OF CANDIDATE PROJECTS FOR THE JICA SWIN MASTER PLAN STUDY

(X) : data available
x : not available

Agency No.	Agency No.	Project Name	Region	Province Name	Municipality Name	Present Status		
						Pre-F/S	F/S	D/D
392	BSWN-45	Anneg SWIP	II	Isabela	Wagsaysay	(X)	(X)	
393	BSWN-46	Victoria SWIP	II	Quirino	Aglipay	(X)	(X)	
394	BSWN-47	San Marcos SWIP	II	Quirino	Cabarroguis	(X)	(X)	
395	BSWN-48	San Francisco SWIP	II	Quirino	Aglipay	(X)	(X)	
396	BSWN-49	Sta. Filomena SWIP	II	Isabela	San Mariano	(X)	(X)	
397	BSWN-50	Old San Mariano SWIP	II	Isabela	San Mariano	(X)	(X)	
398	BSWN-51	Yeban SWIP	II	Isabela	Benito Soliven	(X)	(X)	
399	BSWN-52	Minallo SWIP	II	Isabela	Naguilian	(X)	(X)	
400	BSWN-53	Baguinge SWIP	CAR	Ifugao	Kiangan	(X)	(X)	
401	BSWN-54	Halog SWIP	CAR	Ifugao	Nayon, Lanut	(X)	(X)	
402	BSWN-55	Paku SWIP	CAR	Ifugao	Nayon, Lanut	(X)	(X)	
403	BSWN-56	Afusing Daga SWIP	II	Cagayan	Alcala	(X)	(X)	
404	BSWN-57	Maasin SWIP	II	Cagayan	Alcala	(X)	(X)	
405	BSWN-58	Carallangan SWIP	II	Cagayan	Alcala	(X)	(X)	
406	BSWN-59	Ganzano SWIP	II	Cagayan	Gattaran	(X)	(X)	
407	BSWN-60	Saapaloc SWIP	III	Nueva Ecija	Talugtug	(X)	(X)	
408	BSWN-61	Sto. Domingo SWIP	III	Nueva Ecija	Lupao	(X)	(X)	
409	BSWN-62	Masalipit SWIP	III	Bulacan	San Miguel	(X)	(X)	
410	BSWN-63	Villa Boado SWIP	III	Nueva Ecija	Talugtug	(X)	(X)	
411	BSWN-64	Butid SWIP	III	Nueva Ecija	Talugtug	(X)	(X)	
412	BSWN-65	Maniniog SWIP	III	Tarlac	Kayantoc	(X)	(X)	
413	BSWN-66	Villa Isla SWIP	III	Nueva Ecija	Munoz	(X)	(X)	
414	BSWN-67	Sta. Catalina SWIP	III	Nueva Ecija	Talugtug	(X)	(X)	
415	BSWN-68	Pulo SWIP	III	Bulacan	San Rafael	(X)	(X)	
416	BSWN-69	Sto. Domingo II SWIP	III	Nueva Ecija	Talugtug	(X)	(X)	
417	BSWN-70	Bitungol SWIP	III	Bulacan	Horzagaray	(X)	(X)	
418	BSWN-71	Maasin SWIP	III	Nueva Ecija	Talugtug	(X)	(X)	
419	BSWN-72	Sto. Domingo I SWIP	III	Nueva Ecija	Talugtug	(X)	(X)	
420	BSWN-73	Kangandingay SWIP	III	Nueva Ecija	Munoz	(X)	(X)	
421	BSWN-74	Naupandayan SWIP	III	Nueva Ecija	Lupao	(X)	(X)	
422	BSWN-75	Parista SWIP	III	Nueva Ecija	Lupao	(X)	(X)	
423	BSWN-76	Balbalungao SWIP	III	Nueva Ecija	Lupao	(X)	(X)	
424	BSWN-77	Lagunlong SWIP	IV	Oriental Mindoro	Baco	(X)	(X)	
425	BSWN-78	Pakala II SWIP	IV	Oriental Mindoro	Baco	(X)	(X)	
426	BSWN-79	Bayuin SWIP	IV	Oriental Mindoro	Socorro	(X)	(X)	
427	BSWN-80	Canburay SWIP	IV	Occidental Mindoro	San Jose	(X)	(X)	
428	BSWN-81	Sayab SWIP	IV	Palawan	Batarata	x	x	
429	BSWN-82	Buenasuerte SWIP	V	Marbata	Uson	(X)	(X)	
430	BSWN-83	Bulhao SWIP	V	Canarines Norte	Labo	(X)	(X)	
431	BSWN-84	Dalnac SWIP	V	Canarines Norte	Paracale	(X)	(X)	
432	BSWN-85	Gabawan SWIP	V	Albay	Daraga	(X)	(X)	
433	BSWN-86	Burgos SWIP	V	Catanduanes	Viga	(X)	(X)	
434	BSWN-87	F. Arcangel SWIP	VI	Aklan	Balete	(X)	(X)	
435	BSWN-88	Pinonoy SWIP	VI	Aklan	Libacao	(X)	(X)	
436	BSWN-89	Sibalix SWIP	VI	Aklan	Toralba, Banga	(X)	(X)	
437	BSWN-90	Panlagangan SWIP	VI	Antique	Sibalon	(X)	(X)	
438	BSWN-91	Traciano SWIP	VI	Capiz	Dunaroo	(X)	(X)	
439	BSWN-92	San Roque SWIP	VI	Aklan	Malinao	(X)	(X)	
440	BSWN-93	Aranas SWIP	VI	Aklan	Balete	(X)	(X)	
441	BSWN-94	Buenavista SWIP	VI	Antique	Belison	(X)	(X)	

LIST OF CANDIDATE PROJECTS FOR THE JICA SWIK MASTER PLAN STUDY

⊗ : data available
x : not available

Agency		Project Name	Region	Province Name	Municipality Name	Present Status		
No.	No.					Pre-F/S	F/S	D/D
442	BSWK-95	Dita I SWIP	VII	Bohol	Ubay	⊗	⊗	
443	BSWK-96	Dita II SWIP	VII	Bohol	Ubay	⊗	⊗	
444	BSWK-97	San Jose SWIP	VII	Bohol	Mabini	⊗	⊗	
445	BSWK-98	Sto. Nino SWIP	VII	Bohol	Talibon	⊗	⊗	
446	BSWK-99	Nangka SWIP	VII	Negros Oriental	Bayawan	⊗	⊗	
447	BSWK-100	Bagtic SWIP	VII	Negros Oriental	Mabinay	⊗	⊗	
448	BSWK-101	Nabilog SWIP	VII	Negros Oriental	Ayungon	⊗	⊗	
449	BSWK-102	Bong-Bong I SWIP	VII	Bohol	Ubay	⊗	⊗	
450	BSWK-103	Bong-Bong II SWIP	VII	Bohol	Ubay	⊗	⊗	
451	BSWK-104	Calangganan I SWIP	VII	Bohol	Ubay	⊗	⊗	
452	BSWK-105	Katipunan SWIP	VII	Bohol	Carmen	x	x	
453	BSWK-106	Buyog SWIP	VII	Bohol	Valencia	x	x	
454	BSWK-107	Calinganay SWIP	VII	Bohol	Alicia	x	x	
455	BSWK-108	Jubasan SWIP	VIII	Northern Samar	Allen	⊗	⊗	
456	BSWK-109	Casabahan SWIP	VIII	Western Samar	Gandara	⊗	⊗	
457	BSWK-110	Inaamburacay SWIP	VIII	Northern Samar	Bobon	⊗	⊗	
458	BSWK-111	Sta. Fe SWIP	VIII	Western Samar	Borongan	⊗	⊗	
459	BSWK-112	Caapin SWIP	VIII	Leyte	Kahaplag	⊗	⊗	
460	BSWK-113	Laboon SWIP	VIII	Southern Leyte	Maasin	⊗	⊗	
461	BSWK-114	Polanqui SWIP	VIII	Eastern Samar	Taft	⊗	⊗	
462	BSWK-115	Tabawan SWIP	VIII	Western Samar	Tabawan, Calbayog City	⊗	⊗	
463	BSWK-116	Dau-Oras SWIP	VIII	Eastern Samar	Oras	x	x	
464	BSWK-117	Woodland SWIP	IX	Zamboanga del Sur	Begong, Dunalinao	⊗	⊗	
465	BSWK-118	Sunadat SWIP	IX	Zamboanga del Sur	Dunalinao	⊗	⊗	
466	BSWK-119	Lungaot SWIP	IX	Zamboanga del Sur	Dunalinao	⊗	⊗	
467	BSWK-120	Lanare I SWIP	IX	Zamboanga del Sur	Bayog	⊗	⊗	
468	BSWK-121	Lanare II SWIP	IX	Zamboanga del Sur	Bayog	⊗	⊗	
469	BSWK-122	Buenavista SWIP	IX	Zamboanga del Sur	Curuan	⊗	⊗	
470	BSWK-123	Goling SWIP	IX	Zamboanga del sur	Diplahan	⊗	⊗	
471	BSWK-124	Lubuandong SWIP	X	Bukidnon	Kibawe	⊗	⊗	
472	BSWK-125	Alubijid SWIP	X	Agusan del Norte	Buenavista	⊗	⊗	
473	BSWK-126	Balibayon SWIP	X	Surigao del Norte	Brgy. Rizal, Surigao	⊗	⊗	
474	BSWK-127	Apulang SWIP	X	Bukidnon	Kibawe	⊗	⊗	
475	BSWK-128	Talao-ao SWIP	X	Agusan del Norte	Buenavista	⊗	⊗	
476	BSWK-129	Dunalagan SWIP	X	Agusan del Norte	Butuan City	⊗	⊗	
477	BSWK-130	Hintu-od SWIP	X	Agusan del Norte	Buenavista	⊗	⊗	
478	BSWK-131	Malapong SWIP	X	Agusan del Norte	Buenavista	⊗	⊗	
479	BSWK-132	Talaganahao SWIP	X	Agusan del Norte	Buenavista	⊗	⊗	
480	BSWK-133	Kitao- tao SWIP	X	Bukidnon	Kitao- tao	⊗	⊗	
481	BSWK-134	San Rafael	XI	Davao Oriental	Cateel	⊗	⊗	
482	BSWK-135	Bukay-pait SWIP	XI	South Cotabato	Tantangan	⊗	⊗	
483	BSWK-136	Libudon SWIP	XI	Davao Oriental	Mati	⊗	⊗	
484	BSWK-137	Dumadilig SWIP	XI	South Cotabato	Tantangan	⊗	⊗	
485	BSWK-138	Libasan SWIP	XI	Davao del Norte	Nabunturan	⊗	⊗	
486	BSWK-139	Florida SWIP	XI	Davao del Norte	Capalong	⊗	⊗	
487	BSWK-140	Daunan SWIP	XI	Davao del Norte	Montevista	⊗	⊗	
488	BSWK-141	San Nicolas SWIP	XI	Davao del Sur	Digos	⊗	⊗	
489	BSWK-142	Bolton SWIP	XI	Davao del Sur	Malalag	⊗	⊗	
490	BSWK-143	Pedtap SWIP	XII	North Cotabato	Cabacan	⊗	⊗	
491	BSWK-144	Looy SWIP	XII	Haguindano	South Upi	⊗	⊗	

LIST OF CANDIDATE PROJECTS FOR THE JICA SWM MASTER PLAN STUDY

ⓧ : data available
 x : not available

Agency No.	Project Name	Region	Province Name	Municipality Name	Present Status		
					Pre-F/S	F/S	D/D
492 BSWK-145	Dalingawen SWIP	XII	North Cotabato	Pikit	ⓧ	ⓧ	
493 BSWK-146	Tinibtiban SWIP	XII	North Cotabato	Pikit	ⓧ	ⓧ	
494 BSWK-147	Busok SWIP	XII	Sultan Kudarat	Bagumbayan	ⓧ	ⓧ	
495 BSWK-148	Kalandagan SWIP	XII	Sultan Kudarat	Tacurong	ⓧ	ⓧ	
496 BSWK-149	Lancheta SWIP	XII	Sultan Kudarat	Tacurong	ⓧ	ⓧ	
497 BSWK-150	New Carraen SWIP	XII	Sultan Kudarat	Tacurong	ⓧ	ⓧ	
498 BSWK-151	Malagakit SWIP	XII	North Cotabato	Pigcawayan	ⓧ	ⓧ	
499 BSWK-152	San Juan Overflow Dam	VIII	Southern Leyte	San Juan			ⓧ

LIST OF CANDIDATE SWIP PROJECTS FOR POST-EVALUATION STUDY

Implementing Agency	Project Name	Region	Province	Location	Municipality	Present Status #1	Year of Completion	Purpose	Construction Cost (Peso 10*6)	Dam Type	Dam Height (meter)	Reservoir Available Capacity (MCM)	Data #2
1 NIA	Ilihan SWIP	VII	Bohol		Tubigon	A	1982	Irrigation (150ha)	5.000	Earthfill	22.0	0.85	D/D
2 DPWH	Palacol Dam & Reservoir	III	Pampanga		Floridablanca	B	1983	Irrigation (76ha)	1.500	Boulder Filled	1.5	0.002	
3 BSWK	Derapidap SWIP	II	Nueva Vizcaya		Aritao	A	1983	Irrigation (70ha) Fishery	1.804	Earthfill	12.9		F/S, D/D
4 BSWK	Malinao SWIP	VIII	Southern Leyte		Sogod	A	1984	Irrigation	2.238		9.0		F/S, D/D
5 PAB	Pasig Tinay Watershed Rehab. Project	III	Pampanga		Parac	A	1984	Watershed Management	1.405				D/D
6 NEA	Mantayupan Falls SWIP	VII	Cebu		Barili	A	1985	Mini-hydropower	6.219	Adobe Stone Masonry			F/S, D/D
7 FSDC	Bacnotan SWIP	I	La Union		Bacnotan	A	1985	Irrigation	7.560	Adobe Stone Masonry			F/S
8 DPWH	Caulaman Diversion Dam	III	Pampanga		Floridablanca	B	1985	Irrigation	0.720	Earthfill			
9 DPWH	San Ramon Dam & Reservoir Project	III	Pampanga		Floridablanca	A	1987	Irrigation	2.558	Earthfill	13.7		F/S, C/D
10 DPWH	Calanggeaan SWIP Phase I	VII	Bohol		Obay	A	1988	Irrigation	3.163	Earthfill	12.5	0.1885	F/S

Note: #1 : Present Status;

A: Constructed and functioning

B: Constructed but damaged

C: Under-construction

#2 : Available Data;

F/S: Feasibility Study Report

D/D: Detailed Design Engineering Report

C/D: Construction Drawings

**Attachment - 8 Minutes of Second Monthly Progress Meeting
dated on November 15, 1988**

MINUTES OF SECOND MONTHLY PROGRESS MEETING
BETWEEN
JICA MASTER PLAN STUDY TEAM
AND
SWIM TECHNICAL WORKING GROUP (TWG)


Series : 2
Date : November 15, 1988
Time : 2:00 p.m. to 4:30 p.m.
Place : Meeting Room, JICA SWIM Office
Perlas Bldg., Quezon Ave., Quezon City
Attendants : See attached list

Summary of Discussion

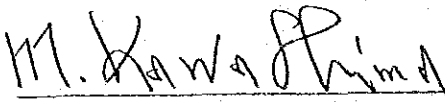
The meeting was held with the following agenda and presided by Mr. Rivera of NIA in the absence of the Chairman, Mr. Fernando S. Nabong.

- 1) Activities of JICA Study Team in November 1988
 - 2) Questionnaire on the SWIM Projects selected for Post Evaluation Study
 - 3) Candidate Projects for Construction under 14th OECF Loan
 - 4) Any other business.
1. On the first agenda, the JICA Study Team reported the major activities undertaken by the Team for the month of November, 1988. The Team likewise informed TWG about the on-going site inspection of SWIM Projects that would be intended for post-evaluation of the completed projects. The Chairman then requested the Team to report their findings to the Japanese Embassy with regards to security condition encountered during their field inspection.
 2. The JICA Study Team distributed the questionnaire on the SWIM Projects selected for post-evaluation study and requested each agency concerned to accomplish and submit these forms by the end of November 1988.

3. Mr. Tomas L. Buen of PMO-SWIM presented the list of candidate projects for construction under 14th OECF Loan. It was confirmed that all the candidate projects had been included in the present list of the JICA master plan study which comprised of 501 projects in the total. Mr. Buen requested the JICA Study Team to include these projects in the list for the master plan study until these projects would be finally decided for implementation under OECF Loan.
4. The Chairman requested the JICA Study Team to consider the overseas training of the TWG/Counterpart personnel during the course of the master plan study. The JICA Study Team pointed out that the training program was not included in the Implementation Arrangement for the Study. However, the Team said that the request would be conveyed to JICA Office.
5. The JICA Study Team said that none of the reports were additionally submitted after the Meeting on the Inception Report dated October 28, 1988; therefore, the review of the existing SWIM projects would be made for only 239 out of 501 candidate projects.
6. Both parties agreed on the date of next meeting which will be held on December 16, 1988 at 9:00 a.m.

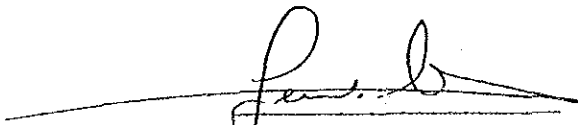


TOMAS L. BUEN
Project Engineer II
PMO-SWIM



MOTOYOSHI KAWASHIMA
Co-Team Leader
JICA Study Team

Certified by:



FERNANDO S. NABONG
Project Manager
PMO-SWIM

MONTHLY PROGRESS MEETING
BETWEEN
JICA MASTER PLAN STUDY TEAM
AND
SWIM TECHNICAL WORKING GROUP (TWG)

Series : 2
Date : November 15, 1988
Place : Meeting Room of JICA SWIM Project Office
ATTENDEES :

JICA STUDY TEAM:

1. Motoyoshi Kawashima
2. Kenichiro Kondo
3. Hiromichi Sekine
4. Seiji Yakushiji
5. Naoki Ariga

PMO-SWIM/DPWH

1. Tomas L. Buen

FSDC/DA

1. Rommel Juat

NIA

1. Avelino S. Rivera
2. Isidro R. Digal
3. Clemente T. Alanano

BFAR

1. Demetrio M. Gracia

NWRB

1. Luis M. Sosa
2. Melchor O. Baltazar
3. Francis Hilarie

DPWH/PS

1. Jose C. Guanzon

FMB

1. Sergio Abuan

Attachment - 9

**Minutes of Third Monthly Progress Meeting
dated on December 16, 1988**

MINUTES OF THIRD MONTHLY PROGRESS MEETING
BETWEEN
JICA MASTER PLAN STUDY TEAM
AND
SWIM TECHNICAL WORKING GROUP (TWG)

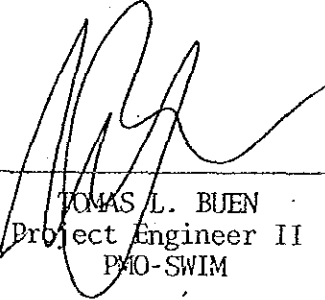
Series : 3
Date : December 16, 1988
Time : 9:30 a.m. to 11:00 a.m.
Place : Meeting Room, JICA SWIM Office
Perlas Bldg., Quezon Ave., Quezon City
Attendants : See attached list

Summary of Discussion

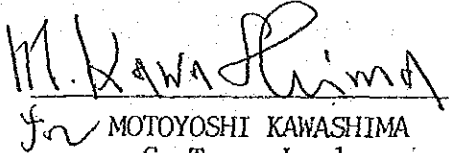
The meeting was held with the following agenda and presided by Mr. Luis M. Sosa of NWRB in the absence of the Chairman, Mr. Fernando S. Nabong.

- (1) Activities of JICA Study Team in Phase I Study period
 - (2) Major findings of field work in the Phase I Study
 - (3) Further work schedule in the Phase I Study
 - (4) Request to counterpart personnel during the absence of JICA Study Team
 - (5) Any other business.
1. JICA Study Team distributed a report titled "Field Note on Phase I Study" in the meeting and briefed the outline of the report to the attendants. The report included explanations on the above topics with statistical tables which were derived from computerized analysis of the existing data and information on the SWIM Projects.
 2. The Chairman asked each agency to comment on the report presented by the JICA Study Team. However, there was no serious comments on the report. The report was basically accepted by TWG-SWIM members.

3. The JICA Study Team was suggested to re-evaluate the cost and benefits on the completed projects under current economic situation and to reflect the updated ones on the post-evaluation study. The JICA Study Team pointed out, however, that the data and information required for such study were insufficient at present and such re-evaluation study would be very difficult to undertake properly under the present state of data availability, and said that the re-evaluation study would be made only for the projects sufficiently supported by data and information.
4. The JICA Study Team requested the agencies to study the report more in detail and to make comments, if any, by December 21, 1988.
5. The TWG-SWIM members from each agency agreed to assign the counterpart personnel to the Project continuously even during the absence of the Team from December 23, 1988. JICA Study Team would provide the counterpart personnel with the guidelines of further data collection and review of the existing data and reports on the SWIM Projects.

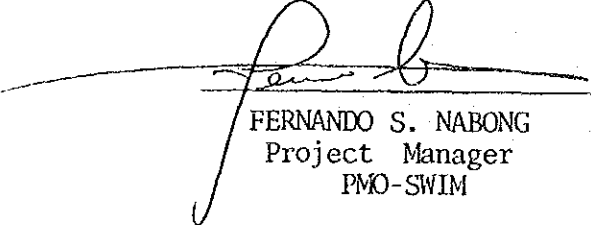


TOMAS L. BUEN
Project Engineer II
PMO-SWIM



for MOTOYOSHI KAWASHIMA
Co-Team Leader
JICA Study Team

Certified by:



FERNANDO S. NABONG
Project Manager
PMO-SWIM

LIST OF ATTENDANTS

Technical Working Group (TWG)

1. Luis M. Sosa (NWRB- Chairman)
2. Tomas L. Buen (PMO-SWIM)
3. Raul E. Tubianosa (PMO-SWIM)
4. Conrado Martin (BSWM)
5. Lucio Casera (BSWM)
6. Isidro Digal (NIA)
7. Clemente Alanano (NIA)
8. Valeriano Infante (NEA)
9. Hendrick Manegdeg (NEA)
10. Melchor Baltazar (NWRB)
11. Francis Hilarie (NWRB)
12. Sergio Abuan (FMB)
13. Demetrio Gracia (BEAR)
14. Rommel Juat (FSDC)
15. Aquilina Trinidad (PS/DPWH-for Mr. Guanzon)

JICA Study Team

1. Motoyoshi Kawashima
2. Takashi Kimijima
3. Naoki Ariga
4. Akira Honda
5. Hiromichi Sekine

**Attachment - 10 Minutes of Fourth Monthly Progress Meeting
dated on August 4, 1989**

MINUTES OF FOURTH MONTHLY PROGRESS MEETING
BETWEEN
JICA MASTER PLAN STUDY TEAM
AND
SWIM TECHNICAL WORKING GROUP (TWG)

Series : 4
Date : August 4, 1989
Time : 2:00 p.m. to 4:30 p.m.
Place : Meeting Room, JICA SWIM Office
Perlas Bldg., Quezon Ave., Q.C.
Attendants :

TECHNICAL WORKING GROUP (SWIM-TWG)

- | | | |
|-----|---------------------|--------------------------|
| 1. | Antonio A. Alpasan | DPWH MFC-SWIM (Chairman) |
| 2. | Jose C. Guanzon | DPWH Planning |
| 3. | Rogelio A. Flores | DPWH MFC-SWIM |
| 4. | Cesar M. Magadia | BSWM |
| 5. | Rommel R. Juat | FSDC |
| 6. | Romeo De. Ocampo | FMB |
| 7. | Clemente T. Alanano | NIA |
| 8. | Valeriano Infante | NEA |
| 9. | Francis B. Hilarie | NWRB |
| 10. | Raul E. Tubianosa | DPWH MFC-SWIM |
| 11. | Lourdes Santiago | DPWH MFC-SWIM |

JICA STUDY TEAM / COUNTERPART

1. Motoyoshi KAWASHIMA
2. Naoki ARIGA
3. Hirohisa ISOGAI
4. Hiromichi SEKINE
5. Takashi KIMIJIMA
6. Ken-ichiro KONDO

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SUMMARY OF DISCUSSION

The meeting was held with the following agenda and presided by Mr. Antonio A. Alpasan, the Chairman of SWIM-TWG.

- (1) Concept and definition of SWIM Projects
- (2) Guidelines for Screening or Qualification
- (3) Outline of Criteria for Priority Ranking
- (4) Outline of Basic Planing Criteria for SWIM Projects
- (5) Any other business

1. Concept and definition of SWIM Projects:

- (1) The Study Team explained the background of this issue to the body as follows:

In the Phase-I Study, 501 projects were listed as the candidate projects for further studies in Phase-II (Preparation of Criteria and Guidelines) and Phase-III (Formulation of Master Plan). These projects were submitted to the Study Team by different cooperating/implementing agencies through DPWH PMO-SWIM during the Phase-I Study.

The review conducted by the Study Team under Phase-I, indicates that these projects have a wide variety of functions and scale of development and are not always conforming to the present basic definition of SWIM Projects; i.e., those small scale water impounding dams with a structural height of not more than 30 m and/or a volume of storage not exceeding 50 MCM.

For preparation of criteria and guidelines, the Study Team, under Phase-II, proposed to the SWIM-TWG that the projects be categorized/classified into two i.e., Type-I with dam and reservoir and Type-II and Type-III, without dam and reservoir, as shown in ATTACHMENT-I.

- (2) The Study Team asked the SWIM-TWG, based on the above, whether the present definition shall be directly applied to the listed projects and then naturally some of those projects be

disqualified or the present definition be modified to qualify all of the listed projects as SWIM, and requested the SWIM-TWG to resolve this issue.

- (3) The SWIM-TWG have discussed the matters lengthily in a meeting held at the PMO-MFC/SWIM on August 3, 1989, and suggested the following to the Study Team in this meeting for further discussions:

Definition of SWIM Projects

The present definition of SWIM shall not be changed.

However, the following implementing guidelines shall be considered for qualifying the proposed projects:

- (1) The project shall preferably be a multi-purpose water resources development on a small scale and at the same time, provide a first line of defense against floods.
- (2) The project shall include small scale water-impounding dam which have structural height of not more than 30 m and/or a volume of storage not exceeding 50MCM.
- (3) The project shall include both engineering and vegetative protection works in the watershed area of the prospective dam and reservoir.
- (4) The watershed area to be protected shall not be more than 100 km².
- (5) The irrigation development area shall not be more than 500 ha.
- (6) The installed capacity of hydropower generation shall not be more than 5,000 KW.
- (7) The construction cost of dam and its appurtenant structures shall not exceed 50 million pesos (at 1989 constant price).

Note: In case of multi-purpose projects, the principal feature of the project should be properly identified in order to establish the priority of water utilization.

Classification of SWIM Projects

Only one type should be considered, adhering to the basic definition of SWIM Projects.

The above implementing guidelines shall be applied to those projects proposed by DPWH, NIA and BSWM. The projects that are not conformable to the above guidelines, shall not be qualified as SWIM, and those disqualified projects will be withdrawn from the candidate projects for the Master Plan Study.

- (4) The above suggestion was preliminarily discussed between the SWIM-TWG and the JICA Study Team. The JICA Study Team pointed out that in this case, a considerable part of the listed projects may not qualify as SWIM Projects.

The JICA Study Team said that the above initial result of discussion will be conveyed to the JICA office as it will require some changes in the agreed "Plan of Operation"

2. Guidelines for Screening or Qualification:

- (1) The agreed general guidelines for screening or qualification of SWIM projects are shown in ATTACHMENT-2.
- (2) The agreed guidelines will be incorporated in the "Basic Planning Criteria"

3. Criteria for Priority Ranking:

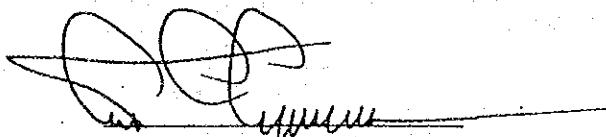
- (1) The agreed procedures for priority ranking are illustrated on ATTACHMENT-3.
- (2) The agreed procedures will however be modified if necessary after discussions with the JICA office on the concept and definitions of SWIM.

4. Basic Planning Criteria for SWIM Projects

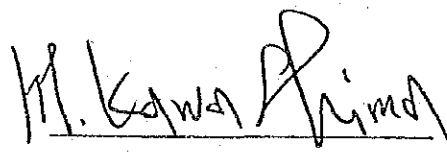
- (1) The outline of the "Basic Planning Criteria" proposed by the JICA Study Team was basically accepted by SWIM-TWG.
- (2) The agreed outline will however be modified if necessary after discussions with the JICA office on the concept and definitions of SWIM.

5. Others

- (1) Fifth monthly progress meeting between SWIM-TWG and the JICA Study Team will be held on August 17, 1989.



ANTONIO A. ALPASAN
Chairman of SWIM-TWG
DPWH MFC-SWIM




MOTOYOSHI KAWASHIMA
Co-Team Leader
JICA Study Team

ATTACHMENT--1

CLASSIFICATION OF SWIM PROJECTS

The present SWIM projects categorized into three types as follows:

BASIC OBJECTIVE : FLOOD CONTROL		
WITH DAM AND RESERVOIR	WITHOUT DAM AND RESERVOIR	
MAJOR OBJECTIVES		
RURAL DEVELOPMENT INCLUDING IRRIGATION, MINI-HYDROPOWER, INLAND FISHERIES, AND WATERSHED DEVELOPMENT	SOIL EROSION CONTROL AND WATER SHED PROTECTION AND MANAGEMENT	RURAL ELECTRIFICATION
IMPLEMENTING AGENCY		
DPWH NIA BSWM	FMB	NEA
TYPE-I	TYPE-II	TYPE-III

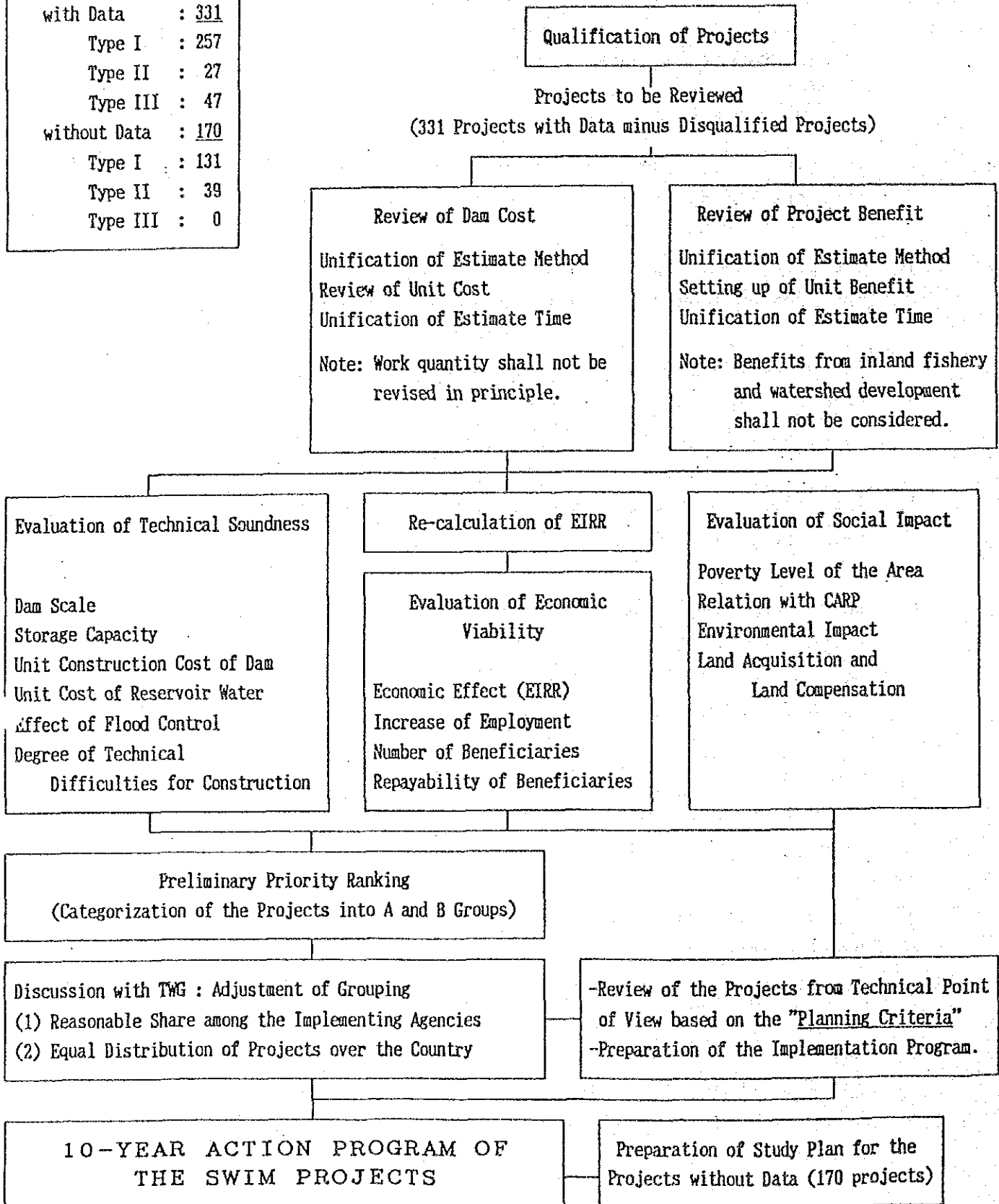
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GENERAL GUIDELINES
FOR
SCREENING OR QUALIFICATION
OF
SMALL WATER IMPOUNDING MANAGEMENT (SWIM) PROJECTS

1. The proposed project must be conformable to the definitions, purposes and objectives of the SWIM projects.
2. The proposed project must be conformable to the provisions of the "Philippines Water Code" regarding appropriation of water.
3. The proposed project should be supported by in depth technical studies which cover necessary study items, and must be verified to be technically sound for implementation.
4. The proposed project must show acceptable economic viability in terms of EIRR, B/C and NPV.
5. An environmental impact study must be carried out before the proposed project be implemented and must verify that the project should not give any serious environmental impacts to the surrounding areas.
6. The proposed project must be acceptable to the people of the areas to be influenced. In particular, the project should not have land acquisition problem.
7. The proposed project must be financially viable and the project beneficiaries can afford to pay the annual charges for operation and maintenance of the projects.
8. Any other projects that be considered necessary under special administrative requirement.

PROCEDURE FOR PRIORITY RANKING

Candidate Projects:	501
with Data	: 331
Type I	: 257
Type II	: 27
Type III	: 47
without Data	: 170
Type I	: 131
Type II	: 39
Type III	: 0



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**Attachment - 11 Minutes of Fifth Monthly Progress Meeting
dated on August 17, 1989**

MINUTES OF FIFTH MONTHLY PROGRESS MEETING
BETWEEN
JICA MASTER PLAN STUDY TEAM
AND
SWIM TECHNICAL WORKING GROUP (TWG)

Series : 5
Date : August 17, 1989
Time : 2:15 p.m. to 3:45 p.m.
Place : Meeting Room, JICA SWIM Office
Perlas Bldg., Quezon Ave., O.C.
Attendants :

TECHNICAL WORKING GROUP (SWIM-TWG)

1.	Antonio A. Alpasan	DPWH MFC-SWIM (Chairman)
2.	Luis Sosa	NWRB (Co-Chairman)
3.	Jose C. Guanzon	DPWH Flanning
4.	Rogelio A. Flores	DPWH MFC-SWIM
5.	Conrado D. Escobar	DPWH MFC-SWIM
6.	Pedro Razon	DPWH BOD
7.	Isidro Digal	NIA
8.	Clemente T. Alanano	NIA
9.	Rodolfo Lucas	BSSM
10.	Valeriano Infante	NEA
11.	Melchor Baltazar	NWRB
12.	Francis B. Hilarie	NWRB
13.	Romeo De. Ocampo	FMB
14.	Sergio Abuan	FMB
15.	Rommel R. Juat	FSDC
16.	Raul E. Tubianosa	DPWH MFC-SWIM
17.	Blesilda Gonzales	DPWH MFC-SWIM

JICA STUDY TEAM / COUNTERPART

1.	Motoyoshi KAWASHIMA
2.	Naoki ARIGA
3.	Hirohisa ISOGAI
4.	Hiromichi SEKINE
5.	Takashi KIMIJIMA
6.	Ken-ichiro KONDO
7.	Akira HONDA
8.	Tadaharu Murono
9.	Namio OYAMA

SUMMARY OF DISCUSSION

The meeting was started at 2:15 p.m. with Mr. Antonio A. Alpasan as the Chairman. The following was discussed:

- (1) Minutes of 4th Monthly Progress Meeting
- (2) Work schedule for preparation of Interim Report
- (3) Any other business

1. Minutes of 4th Monthly Progress Meeting:

- (1) The draft minutes of 4th monthly progress meeting was approved by all the members of SWIM-TWG as corrected.

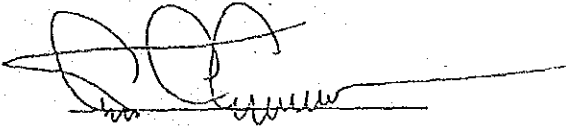
2. Work schedule for preparation of Interim Report:

- (1) The JICA Study Team presented the following work schedule to the body:

Aug. 20 (Sun)	:	M/S Kawasima/Ariga/Sekine leaving for Japan
Aug. 20 - 31	:	(1) discussion with JICA, Tokyo (M/S Kawasima/Ariga/Sekine) (2) Technical discussion with each implementing/cooperating agency on draft "Basic Planning Criteria" (other JICA Study Team members)
Sept. 06 (Wed)	:	Submitting "Interim Report (Draft)" to DPWH-MEC/SWIM
Sept. 11 (Mon)	:	Mr. Sakamoto (Team Leader) arriving at Manila
Sept. 13 (Wed)	:	Discussion with TWG on Interim Report
Sept. 17 (Sun)	:	Mr. Sakamoto leaving for Japan

- (2) The JICA Study Team will distribute a full set of the draft "Basic Planning Criteria" to each agency concerned on August 21, 1989. The JICA Study Team will visit each agency to discuss the said criteria in detail during the period of August 22 - 31. The



schedule of visits will be informed to each agency on August 18
and 21.



ANTONIO A. ALPASAN

Chairman of SWIM-TWG

DPWH MFC-SWIM



MOTOYOSHI KAWASHIMA

Co-Team Leader

JICA Study Team



**Attachment - 12 Minutes of Sixth Monthly Progress Meeting
dated on October 9, 1989**

MINUTES OF SIXTH MONTHLY PROGRESS MEETING

BETWEEN

JICA MASTER PLAN STUDY TEAM

AND

SWIM TECHNICAL WORKING GROUP (TWG)

Series : 6
Date : October 9, 1989
Time : 3:00 p.m. to 4:45 p.m.
Place : Meeting Room, JICA SWIM Office
Perlas Bldg., Quezon Ave., Q.C.
Attendants :

TECHNICAL WORKING GROUP (SWIM-TWG)

1. Antonio A. Alpasan	DPWH MFC-SWIM (Chairman)
2. Jose C. Guanzon	DPWH Planning
3. Rogelio A. Flores	DPWH MFC-SWIM
4. Conrado D. Escobar	DPWH MFC-SWIM
5. Raul E. Tubianosa	DPWH MFC-SWIM
6. Clemente T. Alanano	NIA
7. Ricarte A. Melchor	BSWM
8. G. Sondia	NEA
9. I. D. Penaranda	NWRB
10. Francis B. Hilarie	NWRB
11. Romeo de Ocampo	FMB
12. Sergio Abuan	FMB
13. Rommel R. Juat	FSDC
14. Demetrio M. Gracia	BFAR
15. Victor Villanueva	BSWM

JICA STUDY TEAM / COUNTERPART

1. Motoyoshi KAWASHIMA	Co-Leader
2. Naoki ARIGA	Project Evaluation
3. Hiromichi SEKINE	Irrigation / Drainage
4. Takashi KIMIJIMA	Agriculture / Soil
5. Akira HONDA	Structural Planning
6. Tadaharu MURONO	Institutional Planning

SUMMARY OF DISCUSSION

The meeting was started at 3:00 p.m. with Mr. Antonio A. Alpasan presiding as Chairman. The following were discussed:

- (1) Minutes of Previous Meetings
- (2) Institutional Studies on Implementing Procedures and Management for the SWIM Projects
- (3) Work Schedule of Phase-III
- (4) Other Matters

1. Minutes of Previous Meetings:

- (1) Copies of the minutes of the previous meetings were furnished the members of the TWG as follows:
 - (a) 5th Monthly Progress Meeting on August 17, 1989, and
 - (b) Interim Report Meeting on September 20, 1989

2. Institutional Studies on Implementing Procedures and Management for the SWIM Projects:

- (1) Mr. Tadaharu Murono, Institutional Planner of the JICA Study Team, presented and explained to the body the following topics:
 - (a) Procedures for implementation of the SWIM Projects
 - (b) Roles and responsibilities of the agencies concerned, and
 - (c) Organization and functions of beneficiaries' cooperatives

Copies of the brief reports on the above were distributed to all the TWG members through DPWH-MFC/SWIM on October 6, 1989.


- (2) The proposed concept and procedures in general were basically accepted by the body, with some comments/suggestions.
- (3) The JICA Study Team said that Mr. T. Murono will complete his field assignment on October 13, 1989 and suggestions/comments on the institutional aspects given by the body would be fully incorporated in the draft final report of the Study.

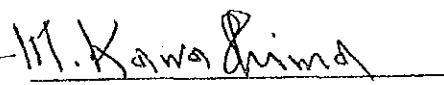
3. Work Schedule of Phase-III:

- (1) The proposed work schedule of Phase-III (See Attachment-1) was accepted by the body.
- (2) The JICA Study Team will prepare the "Explanatory Note on Preliminary Priority Ranking" by October 25, 1989, and will be discussed at the next 7th Monthly Progress Meeting to be held on November 6, 1989.
- (3) The JICA Study Team will also prepare the "Field Notes on Phase-III" which will comprise the initial results of the studies under Phase-III, by November 17, 1989, and it will be discussed at the 8th Monthly Progress Meeting to be held on November 27, 1989.

4. Other Matters:

- (1) The JICA Study Team requested FMB through the TWG to estimate the cost of watershed protection and management for each of the 230 qualified projects. The request was accepted by the body, and FMB said that the cost estimates will be completed before the Team will leave for Japan (by the end of November 1989).
- (2) The JICA Study Team reported to the body that Mr. H. Isogai (Structural Design Engineer) and Mr. K. Kondo (Hydrologist) completed their assignment and left on September 30, 1989.


ANTONIO A. ALPASAN
Chairman of SWIM-TWG
PMO-MFC/SWIM, DPWH


MOTOYOSHI KAWASHIMA
Co-Team Leader
JICA Study Team

Work Schedule for Phase III (Up to Nov.)

Work Items	Sept.	October	November
(1) Priority Ranking Study			
Preparation of Form	<u>29</u>		
Review of Construction Cost		<u>10</u>	<i>Cost for Watershed (FMB)</i>
Review of Benefit		<u>10</u>	
Estimation of IRR		<u>13</u>	
Preparation of Input Data		<u>13</u>	
Preliminary Priority Ranking and Preparation of Explanatory Note		<u>25</u>	
			▲ Submit
(2) Technical Evaluation(230 projects)			
Preparation of Standard	<u>29</u>		
Preparation of Form	<u>29</u>		
Technical Evaluation		<u>10</u>	
Development Sequence and Required Cost		<u>13</u>	
Preparation of Project Profile			
(3) Guideline for Project Implementation			
Review, and Proposed Plan Application to M/P		<u>12</u>	
(4) Preparation of Field Note			
Adjustment of Priority Ranking			<u>16</u> <u>6</u>
Preparation of Field Note			<u>17</u>
			▲ Submit
(5) Explanation of Field Note			<u>24</u> <u>30</u>
(6) Discussion with TWG			
Guideline for Project Implementation		<u>9</u>	<u>6</u>
Priority Ranking			<u>1</u>
Field Note			<u>27</u>
			▲

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**Attachment - 13 Minutes of Seventh Monthly Progress Meeting
dated on November 6, 1989**

MINUTES OF SEVENTH MONTHLY PROGRESS MEETING
 BETWEEN
 JICA MASTER PLAN STUDY TEAM
 AND
 SWIM TECHNICAL WORKING GROUP (TWG)

Series : 7
 Date : November 6, 1989
 Time : 2:00 p.m. to 4:10 p.m.
 Place : Meeting Room, JICA SWIM Office
 Perlas Bldg., Quezon Ave., O.C.
 Attendants :

TECHNICAL WORKING GROUP (SWIM-TWG)

- | | | |
|-----|---------------------|----------------------------------|
| 1. | Antonio A. Alpasan | DPWH MFC-SWIM (Chairman) |
| 2. | Luis Sosa | NWRB (Co-Chairman) |
| 3. | Toshiki Kawakami | JICA Flood Control Expert (DPWH) |
| 4. | Rogelio A. Flores | DPWH MFC-SWIM |
| 5. | Tomas L. Buen | DPWH MFC-SWIM |
| 6. | Jose C. Guanzon | DPWH Planning |
| 7. | Conrado D. Escobar | DPWH MFC-SWIM |
| 8. | Raul E. Tubianosa | DPWH MFC-SWIM |
| 9. | Lourdes Santiago | DPWH MFC-SWIM |
| 10. | Elpidio Avena | DPWH BOD |
| 11. | Isidro Digal | NIA |
| 12. | Clemente T. Alanano | NIA |
| 13. | Rodolfo Lucas | BSWM |
| 14. | Valeriano Infante | NEA |
| 15. | Melchor Baltazar | NWRB |
| 16. | Francis B. Hilarie | NWRB |
| 17. | Sergio Abuan | FMB |
| 18. | Demetrio M. Gracia | BFAR |

JICA STUDY TEAM / COUNTERPART

- | | | |
|----|---------------------|-----------------------|
| 1. | Motoyoshi KAWASHIMA | Co-Leader |
| 2. | Naoki ARIGA | Project Evaluation |
| 3. | Hikomichi SEKINE | Irrigation / Drainage |
| 4. | Takashi KIMIJIMA | Agriculture / Soil |
| 5. | Akira HONDA | Structural Planning |

SUMMARY OF DISCUSSION

The meeting was started at 2:00 p.m. with Mr. Antonio A. Alpasan presiding as the Chairman. The following were discussed:

- (1) Minutes of 6th Monthly Progress Meeting
- (2) "Explanatory Note on Preliminary Priority Ranking"
- (3) Other Matters

1. Minutes of Previous Meetings:

- (1) The Minutes of the 6th Monthly Progress Meeting was accepted by the member of SWIM-TWG.

2. "Explanatory Note on Preliminary Priority Ranking":

- (1) The JICA Study Team presented and explained to the body the following topics:
 - (a) Number of projects to be implemented during the plan period of 1991 - 2000
 - (b) Priority Ranking of SWIM projects
 - Allocation of merit points
 - Projects with less than 10% of EIRR
 - Classification of SWIM Projects into "A" and "B" Groups
 - (c) OECF-SWIM Candidate Projects
 - (d) Locally-funded SWIM projects for the year 1989-1990
 - (e) Regional Distribution of SWIM projects
 - (f) Total Fund Requirement
 - (g) Field Note and Schedule of 8th Monthly Progress Meeting
 - (h) Comments on "Explanatory Notes on Priority Ranking"

Copies of the "Explanatory Note on Priority ranking" were distributed to all the TWG members through DPWH-MFC/SWIM on October 27, 1989. The comments/questions on this "Explanatory Note" were submitted by NIA and NWRB to the JICA Study Team on

November 3, 1989. The JICA Study Team presented to the body an additional paper which dealt with the answers to these comments/questions. Discussions were made between the JICA Study Team and SWIM-TWG members in line with the papers the Study Team presented. The following were confirmed through discussions:

- (2) The JICA Study Team opined that all of 230 qualified SWIM projects can be implemented and completed within 10 years, in due consideration of the fund requirement and capability of agencies concerned. The Chairman said that he would look into the matter in consultation with the offices of planning and budgets, and would inform the Study Team accordingly within a week time.
- (3) Allocation of 10 points to administrative consideration which is construed as the "Relation with CARP" should be considered under the evaluation factor of "Social/Environmental Impacts", and additional 10 points would be given to the projects located in the priority provinces under infrastructure program of CARP for the purpose of ranking.
- (4) The projects with less than 10% of EIRR should be placed in the priority group of "B" and be re-studied during the initial stages of the 10 year period as suggested by the JICA Study Team.
- (5) Those projects with more than 10% of EIRR would be divided into two groups, "A" and "B", according to the total score calculated using agreed scoring system and half of the higher scored projects be grouped as "A" and the other half be grouped as "B"
- (6) The 230 projects under the JICA Master Plan Study include a total of 39 candidate projects for OECF-SWIM. For the purpose of master planning, these OECF-SWIM projects should be included in the JICA master plan study. However, the OECF-SWIM projects should be excluded from the project lists for priority ranking, because said projects will be reviewed and evaluated under the

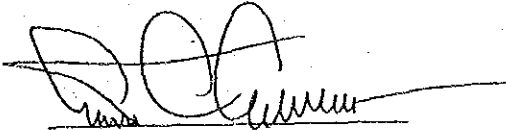
OECF program, and shall be included in the priority group of "A" of the master plan study.

- (7) Implementation schedule of locally-funded projects for the years 1989 - 1990 will not be considered in the master plan study.
- (8) Classification of SWIM projects will not be re-adjusted for equitable regional distribution of the projects, however, in the preparation of the implementation program, due consideration should be made to achieve balanced distribution of projects so that construction works could progress not only in a particular region but simultaneously all over the country.
- (9) The total fund requirements including the costs for watershed protection and management as well as price contingencies will be given in the "Field Note".
- (10) The "Field Note" will be submitted to PMO-MFC/SWIM by November 17, 1989 and be discussed with SWIM-TWG at the 8th monthly progress meeting which is tentatively scheduled on November 27, 1989 to be attended by the Chairman of SWIM Committee, Mr. Romulo M. del Rosario.
- (11) In estimating the project costs for the master plan study, the costs for engineering services will be calculated on the basis of the following guideline given by NEDA:

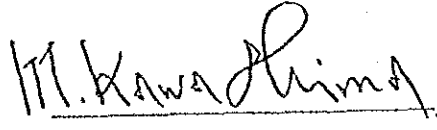
for feasibility study	:	3% of the direct cost
for detailed design	:	6% of the direct cost
for construction supervision	:	10% of the direct cost

3. Other Matters:

- (1) The project coordinator, Mr. Raul E. Tubianosa, explained to the body the field inspection schedule for period of November 7 - 14, 1989.



ANTONIO A. ALPASAN
Chairman of SWIM-TWG
DPWH MFC-SWIM



MOTOYOSI KAWASHIMA
Co-Team Leader
JICA Study Team

**Attachment - 14 Minutes of Eighth Monthly Progress Meeting
dated on November 27, 1989**

MINUTES OF EIGHTH MONTHLY PROGRESS MEETING
BETWEEN
JICA MASTER PLAN STUDY TEAM
AND
SWIM TECHNICAL WORKING GROUP (TWG)

Series : 8
Date : November 27, 1989
Time : 1:00 p.m. to 2:20 p.m.
Place : Mayon Room at Century Park Sheraton, Manila

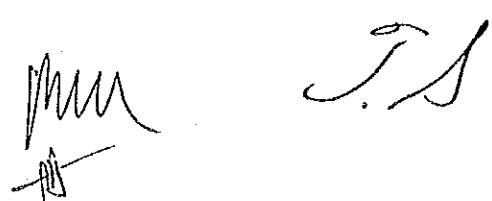
Attendants :

TECHNICAL WORKING GROUP (SWIM-TWG)

1.	Romulo M. del Rosario	Undersecretary, DPWH (Chairman)
2.	Antonio A. Alpasan	DPWH MFC-SWIM
3.	Rogelio A. Flores	DPWH MFC-SWIM
4.	Tomas L. Buen	DPWH MFC-SWIM
5.	Jose C. Guanzon	DPWH Planning
6.	Conrado D. Escobar	DPWH MFC-SWIM
7.	Raul E. Tubianosa	DPWH MFC-SWIM
8.	Lourdes Santiago	DPWH MFC-SWIM
9.	Isidro Digal	NIA
10.	Clément T. Alanano	NIA
11.	Sumio Oishi	NIA (Expert)
12.	Rodolfo Lucas	BSWM
13.	Rommel Juat	FSDC/DA
14.	Melchor Baltazar	NWRB
15.	Francis B. Hilarie	NWRB
16.	Romeo de Ocampo	FMB
17.	Sergio Abuan	FMB
18.	Roberto Aquda	FMB
19.	Demetrio M. Gracia	BFAR

JICA STUDY TEAM / COUNTERPART

1.	Tadashi SAKAMOTO	Team Leader
2.	Motoyoshi KAWASHIMA	Co-leader
3.	Naoki ARIGA	Project Evaluation
4.	Hikomichi SEKINE	Irrigation / Drainage
5.	Takashi KIMIJIMA	Agriculture / Soil
6.	Akira HONDA	Structural Planning

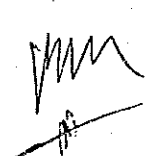


SUMMARY OF DISCUSSION

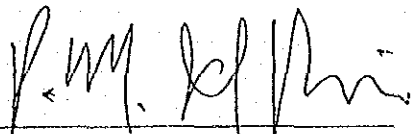
The meeting was presided by Mr. Romulo M. del Rosario, Undersecretary of DPWH and Chairman of the SWIM Committee. The Chairman explained to the body the purpose of the meeting. After the explanation, the Chairman requested Mr. Tadashi SAKAMOTO, Leader of the JICA Study Team, to present the contents of the "Field Note on Phase-III". After the presentation of Mr. SAKAMOTO, the Chairman requested for comments from the body.

The following were discussed and confirmed:

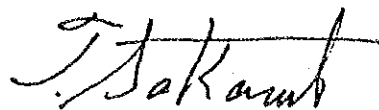
- (1) Initial results of the Phase-III study described in the "Field Note" were fully accepted by the SWIM-TWG.
- (2) All of 230 qualified SWIM projects are scheduled to be implemented and completed within 10 year period under the Study.
- (3) The "Draft Final Report" will be submitted to PMO-MFC/SWIM by February 19, 1990. The discussion on the "Draft Final Report" will be held between the Team and SWIM-TWG during the period of February 19 - 25, 1990.
- (4) In the "Draft Final Report", the JICA Study Team will indicate the annual fund requirement of each implementing /Cooperating agency for implementation of the works for their specific purposes. The Team will also describe the role and responsibility of the cooperating agencies in the "Draft Final Report".
- (5) Based on the request from the SWIM-TWG, the Chairman asked the JICA Study Team of the possibility of receiving some more trainees particularly among the TWG members under the



JICA Training Program in Japan during the remaining study period until March 1990. The JICA Study Team said that the request would be conveyed to the JICA Office.



Romulo M. del Rosario
Chairman of SWIM Committee
Undersecretary, DPWH



Tadashi SAKAMOTO
Team Leader
JICA Study Team

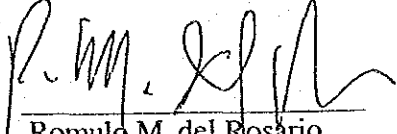
**Attachment - 15 Minutes of Meeting for Draft Final Report
dated on February 22, 1990**

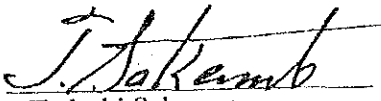
MINUTES OF MEETING
ON
DRAFT FINAL REPORT
FOR
MASTER PLAN STUDY ON THE SWIM PROJECTS

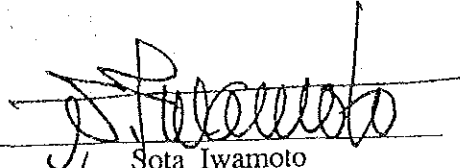
1. DATE : February 21, 1990
1:00 p.m. to 2:30 p.m.
2. PLACE : Mayon Room at Century Park Sheraton, Manila
3. ATTENDANTS : See Attached Sheet
4. SUMMARY OF DISCUSSION:

The meeting was presided over by Mr. Romulo M. del Rosario, Undersecretary of DPWH and Chairman of the SWIM Committee. The Chairman explained to the body the purpose of the meeting. After the explanation, the Chairman requested Mr. Tadashi SAKAMOTO, Leader of the JICA Study Team, to present the contents of the "Draft Final Report" which was distributed to the SWIM-TWG members on 19-20 February, 1990. After the presentation of Mr. SAKAMOTO, the Chairman requested for comments from the body and various discussions were made between the JICA Study Team and the SWIM-TWG. The following were confirmed through discussions:

- (1) The "Draft Final Report" in principle is acceptable to the SWIM-TWG.
- (2) The SWIM-TWG members will review in detail the "Draft Final Report" and the PMO-MFC/SWIM will submit the consolidated comments/suggestions to the JICA Study Team through the JICA Philippine Office on or before March 15, 1990. The JICA Study Team will prepare the Final Report, incorporating the comments/suggestions of the SWIM-TWG, by the end of April, 1990.


Romulo M. del Rosario
Undersecretary, DPWH and
Chairman of SWIM Committee


Tadashi Sakamoto
Leader
JICA Study Team


Sota Iwamoto
Chairman of JICA Advisory Committee

February 22, 1990

List of Attendants

SWIM Committee

- | | |
|--------------------------|--|
| 1. Romulo M. del Rosario | Undersecretary, DPWH, and Chairman of SWIM Committee |
| 2. Edmundo V. Mir | Undersecretary, DPWH |

Technical Working Group (TWG)

- | | |
|------------------------|-------------------------------|
| 1. Antonio A. Alpasan | PMO-MFC/SWIM, Chairman of TWG |
| 2. Rogerio A. Flores | PMO-MFC/SWIM, |
| 3. Tomas L. Buen | PMO-MFC/SWIM, |
| 4. Raul E. Tubianosa | PMO-MFC/SWIM, |
| 5. Lourdes Santiago | PMO-MFC/SWIM, |
| 6. Luis M. Sosa | NWRB, Co-chairman of TWG |
| 7. Melchor Baltazar | NWRB |
| 8. Francis Hilarie | NWRB |
| 9. Isidro Digal | PDD/NIA |
| 10. Clemente Alanano | PDD/NIA |
| 11. Sumio Oishi | JICA Expert/NIA |
| 12. Romeo de Ocampo | WMD/FMB |
| 13. Roberto Aguda | WMD/FMB |
| 14. Demetrio Gracia | BFAR |
| 15. Rommel Juat | PMO-SWIM/DA |
| 16. Joseph Reytana | PMO-SWIM/DA |
| 17. Rodolfo Lucas | SCD/BSWM |
| 18. Cesar Magadia | SCD/BSWM |
| 19. Noel G. Hernandez | NEA |
| 20. Romeo B. Indiongco | NEA |
| 21. Jose Guanzon | Planning Services/DPWH |

JICA Advisory Committee

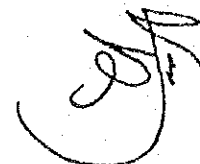
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|---------------------|-------------------------------------|
| 1. Sota Iwamoto | Chairman of JICA Advisory Committee |
| 2. Atsushi Hanatani | JICA, Head Office |

JICA Study Team

- | | |
|---------------------|-------------------------|
| 1. Tadashi Sakamoto | Team Leader |
| 2. Naoki Ariga | Project Evaluation |
| 3. Hiromichi Sekine | Irrigation and Drainage |

 AT - 73





JICA