

# **ANNEX 11**

## **MANUALS AND CAMPAIGN TOOL FOR IA STRENGTHENING**

**THE STUDY  
ON  
THE IRRIGATORS ASSOCIATION STRENGTHENING PROJECT  
IN  
NATIONAL IRRIGATION SYSTEMS**

**ANNEX 11**

**MANUALS AND CAMPAIGN TOOLS FOR  
IA STRENGTHENING**

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## ANNEX 11 MANUALS AND CAMPAIGN TOOLS FOR IA STRENGTHENING

### 1 Manuals

#### 1.1 Framework of Manuals

The existing manuals and modules of 45 sets prepared by IDD, SMD, Project Offices of previous irrigation development projects, and other donor agencies were collected, reviewed and examined (Annex 1, Preliminary Manual). Most manuals were prepared for the use of NIA's staff and trainers. There were little materials on the manuals for the utilization of IAs and farmers, and generally there were none for specific strengthening of IA's activities.

A need assessment, taking into consideration the weaknesses of both NIA and IA was made. This was supplemented with bilateral discussions with NIA counterparts. As a result of this process, the target manual users for IA strengthening were identified for both NIA and IA farmer members. The composition and contents of the manuals were designed as follows:

- (a) IA Strengthening Module (for trainers use)
  - Introduction
  - NISO-IA management module
  - Guide for Project Cycle Assistance for IA strengthening
  - Directory of existing manuals and modules
- (b) Steward of Water, A guide for Farmers (for IA member farmers)
  - Stewardship of water
  - Farmer's guide to managing the irrigation system
  - Attachment (key forms and references)
- (c) Maintenance and Rehabilitation Guide for Irrigators Association Members (for IA member farmers)
  - First step in implementing maintenance and rehabilitation
  - Maintenance
  - Rehabilitation
  - Important basic tips on construction works

#### 1.2 Manual Contents

Most of the contents, with the exception of the reference materials, of one set for trainers and two sets for IA farmer members were drafted during the field survey. These manuals were verified and finalized, applying the comments from NIA's field staff and IA members during.

### 1.2.1 IA Strengthening Module (for trainers use, Ref. Table 1.1)

The manual covers the whole spectrum of activities in pre-irrigation, irrigation and post-irrigation during the entire cropping seasons (wet and dry seasons). The activities of the NISOs and IAs are inter-related, and different level of organizations and persons that need to be closely coordinated are involved in the implementation of the activities. At the IA level, the hierarchy starts from federation of IA (FIA) as the apex organization. This moves down at the secondary level, comprising several IAs, and finally at the tertiary level are TSAGs and their members. Each level's input becomes an output at a higher level, and the process is repeated to continuously maintain uninterrupted flow of each step to achieve effective water delivery and distribution, thus ensuring higher yields and collection of ISF.

The module focused on the flow of IA management, comprising stepwise activities as shown in Figure 1.1. The step-by-step process was guided by the following contents:

- Objectives
- Outputs with respective reference material
- Procedural activities referred by each output
- Input requirement
- Pre-conditions
- Technical information for key issues
- Source of further information (reference)

The NIA staff and trainers are expected to apply the module for technically assessing IA activities and diagnosing weaknesses of IA management.

Guide for Project Cycle Assistance for IA strengthening is aimed at applying participatory assessment of IA activities using PCM method. The guide covers among others, a brief on PCM, guiding instruction for facilitation, and monitoring and evaluation through IA functionality survey.

Directory of existing manuals and modules is a list of manuals and modules with brief contents and comments. The directory answers further technical requirement for NIA staff and trainers.

### 1.2.2 Steward of Water, A guide for Farmers, Ref. Table 1.2)

The IA guidebook is an informative medium detailing specifically the roles and responsibilities of being an IA member. The responsibilities focus, among others, on water conservation, protection and maintenance of systems, payment of dues and other water fees, and participation in O&M activities. Illustrations were made to simplify presentations.

### 1.2.3 Maintenance and Rehabilitation Guide for Irrigators Association Members (for IA member farmers, Ref. Table 1.3)

The manual presents in a simple way on how an IA member can perform his/her role in maintenance and rehabilitation works. Definition of technical terms was simplified for easy understanding and procedures for actual maintenance and rehabilitation were localized for ease in application. Illustrations were included to enhance the learning process.

## 2. Campaign Video Programs

Three (3) sets of campaign video programs were prepared in the Study. Based on discussions with NIA counterparts, an introduction video of a progressive IA was produced in Phase 1 field survey. This will be used as a campaign tool in the second field survey. The contents of the two (2) other video programs were based on enhancing NIA-IA partnership in irrigation system management (Video Program No. 2) and approaches to strengthening irrigators associations (Video Program No. 3).

### 2.1 A Day in the Life of Mang Conrado ( A success story, featuring a member of Badagoy Irrigators Association, Video Program No. 1)

The Badagoy IA was selected as the introduction video of a progressive IA. It is a CIS-IA organized in 1960. The service area is about 2,050 ha covering 1,350 member farmers. The Badagoy IA was awarded with distinction as outstanding IA for three consecutive years.

The video program covered an introduction of Badagoy's history, activities and informative features that led to its success. The video is intended to motivate other IAs to become strong and self-reliant organizations. The outline of the video program is summarized as follows:

1. Intro: Mang Matias on a typical day
2. Badagoy: the irrigation system and the association
3. How it all began (A bit of history)
4. The brave 18 (1949)
  - The long journey
    - PALOMAR 1 and the New Ilocos Balatukan CIS
    - PALOMAR 2 and the Badagoy Communal Irrigation System
    - The merger and the Badagoy Irrigation Association, Inc. (1959)
    - NIA assistance: institutionalization and construction (1985)
5. What's been done
  - Awards and commendations
  - Irrigated area and cropping intensity
  - ISF collection efficiency without service fees collectors (80-96%)
  - Equity generation (P500,000 raised 1968-1978); IA has no loan

- Solvency and diversified income sources
    - Water service fees
    - Drying and storage fees
    - Water rental from expansion areas
    - Penalties and fines
    - Permit fees
    - Certification fees
    - Interest on deposits
  - Membership growth (200 to 1,350)
  - Regular meetings with high turnout at meetings (96-100%)
  - Monitoring functions successfully devolved to 15 districts
  - Support for livelihood projects (tilapia and hito fishpond), duck and egg production, vegetable garden
  - Special assistance to members
    - Mutual/Mortuary aid
    - Donation of materials for tomb construction
    - Rat campaign
  - Assistance to communities: Chapel improvement, road construction, setting up of potable water facilities, participation in community functions such as fiestas and town anniversaries, loaning of furniture
  - Satisfied membership (consistently Outstanding functionality survey results (93-111% in 1996-2000)
6. How they do it (Operating features)
- Cropping calendar
  - Water distribution scheme
  - ISF collection
  - Meetings
  - Rewards and penalties
  - Repair and maintenance
  - Complete documentation and record-keeping
  - Continuous institutional development
7. People make a difference (The organization responsible)
- The officers
    - President
    - Secretary
    - Treasurer
    - Auditor
  - The members

## 2.2 Enhancing NIA-IA Partnership in Irrigation System Mangement (Video Program No. 2)

The video describes the NIA and IAs as entities sharing the responsibility of managing irrigation systems successfully. It explains the respective roles and responsibilities of the organizations, discusses issues and problems related to irrigation management, and presents the NIA-IA partnership as a strategy to achieve sustainable irrigation systems. The outline of the video is summarized as follows:

1. Introduction: Importance of irrigation in increasing farm productivity
2. NIA and IAs: Sharing the responsibility for developing sustainable irrigation system
3. Sustainability issues and problems in irrigation
  - Costs and unrealized benefits
  - Problems
    - poor O&M
    - poor service
    - low ISF collection
    - consequences of the vicious cycle problem

4. Confronting the issues and problems
  - Indicators of success
  - Dynamic NIA-IA partnership
    - Partnership structure and functions
    - Envisioned impact
5. Closing message: creed for successful NIA-IA partnership

### 2.3 Approaches to Strengthening Irrigators' Associations in National Irrigation System (Video Program No. 3)

The video discusses recommended measures to strengthen irrigators associations. It explains the concepts and describes the basic steps involved. It features presentation by trainers as well as testimonials of IA leaders who have experienced implementation of specific approaches. The outline of the video is summarized as follows:

1. Introduction: Results of IA functionality survey in the last 3 years
2. Strengthening IA members' critical thinking: project cycle management (PCM)
3. Steps in conducting PCM workshop
  - Participation analysis
  - Problem analysis
  - Objective analysis
  - Alternative analysis
  - Project design matrix
  - Operational plan
4. Recommended concepts for strengthening IA
  - Synchronized irrigation farming management
  - Farmland trust
  - Assembly market
5. Conclusion: The challenge of building irrigational strength

## 3. Campaign Posters

A campaign poster, enticing IAs to become strong organizations, was designed for use at representative NISs and IAs during the second field survey. Taking into consideration the present situation of IAs, roles of IAs in countryside development, and suggestions from workshop participants, the JICA Study Team prepared some campaign slogans. The draft campaign posters as shown in Figure 3.1 to 3.3 was submitted together with the Interim Report and used as campaign tool in the second field survey. Based on the comments from NISs and IAs, the draft campaign poster was refined for mass production as shown in Figure 3.4.

## 4. Homepage

The Study Team prepared and discussed with NIA counterparts regarding the contents and schedule for introducing the JICA study through the NIA web site. Opening a homepage of JICA Study on the NIA web site was agreed by NIA and the



information on the JICA Study was presented as follows:

(a) Year 2002

- August : Background, objectives, approach, schedule and methodologies of the study
- December : Study results on classification of NISs and IAs, and summary of Interim Report

(b) Year 2003

- January : Survey activities and findings at the model project sites for formulation of IA strengthening action plan
- February : Introduction of GIS and database systems on NISs and IAs
- March : Introduction of Action Plan for IA strengthening

Front page of JICA NIS-IA Strengthening Study are shown in Figure 4.1. The Electric Data Processing (EDP), under the Corporate Planning Staff maintains the NIA homepage. The EDP is now revising NIA web site to integrate it with the DA web site according to the DA's recommended guidelines. The NIA web site, leasing the server of CYBERSPACE in 2002, was integrated with DA's national information network in 2003.

**Table 1.1 Contents, IA Strengthening Module (for trainers use)**

<b>Part I Introduction</b>
<b>Part II National Irrigation System Office (NISO) -Irrigators Association (IA) Management Module</b>
1. Guideline
2. Pre-Irrigation Period
Step 1.1 Business Planning, NISO
Step 1.2 Business Planning, FIA (Federation of Irrigators Association)
Step 1.3 Business Planning, IAs (Irrigators Associations)
Step 1.4 Business Planning, TSAGs (Turnout Service Area Group)
Step 2.1 Annual Maintenance, NISO
Step 2.2 Annual Maintenance, FIA
Step 2.3 Annual Maintenance, IAs
Step 2.4 Annual Maintenance, TSAGs
Step 3.1 Announcement of Irrigation Water Delivery Schedule, NISO
Step 3.2 Announcement of Irrigation Water Delivery Schedule, FIA
Step 3.3 Announcement of Irrigation Water Delivery Schedule, IAs
Step 3.4 Announcement of Irrigation Water Delivery Schedule, TSAGs
3. Irrigation Period
Step 4.1 System Operation, NISO
Step 4.2 System Operation, FIA
Step 4.3 System Operation, IAs
Step 4.4 System Operation, TSAGs
Step 4.5 System Operation, Members
Step 5.1 Monitoring Farming Status, Members
Step 5.2 Monitoring Farming Status, TSAGs
Step 5.3 Monitoring Farming Status, IAs
Step 5.4 Monitoring Farming Status, FIA
Step 5.5 Monitoring Farming Status, NISO
Step 6.1 Scheduling Water Delivery, NISO
Step 6.2 Scheduling Water Delivery, FIA
Step 6.3 Scheduling Water Delivery, IAs
Step 6.4 Scheduling Water Delivery, TSAG
Step 7.0 Seasonal Repair, NISO
Step 8.1 Preparation, Confirmation and Distribution of ISF Bills, TSAG
Step 8.2 Preparation, Confirmation and Distribution of ISF Bills, IA
Step 8.3 Preparation, Confirmation and Distribution of ISF Bills, FIA
Step 8.4 Preparation, Confirmation and Distribution of ISF Bills, NISO
4. Post Irrigation Period
Step 9.1 ISF Collection, Members
Step 9.2 ISF Collection, TSAGs
Step 9.3 ISF Collection, IAs
Step 9.4 ISF Collection, FIA
Step 9.5 ISF Collection, NISO
Step 10.1 ISF Sharing, NISO
Step 10.2 ISF Sharing, FIA
Step 10.3 ISF Sharing, IAs
Step 10.4 ISF Sharing, TSAGs

**Table 1.1 Contents, IA Strengthening Module (for trainers use)**

- Step 11.1 Seasonal Evaluation for O&M Performance, Members
- Step 11.2 Seasonal Evaluation for O&M Performance, TSAG
- Step 11.3 Seasonal Evaluation for O&M Performance, IA
- Step 11.4 Seasonal Evaluation for O&M Performance, FIA
- Step 11.5 Seasonal Evaluation for O&M Performance, NISO
- Step 12.1 Pre General Assembly Meeting, TSAGs
- Step 12.2 General Assembly Meeting, IAs
- Step 12.3 FIA General Assembly Meeting, FIA

**REFERENCE A RECORD FORMS**

Reference A-1 Masterlist of Farmers

- A1-1 Masterlist of Farmers
- A1-2 IA Summary of Masterlist of Farmer Beneficiaries
- A1-3 FIA Summary of Masterlist

Reference A-2 Farming Information Record

- A2-1 Calendar for Irrigation for Crop Year 2002 - 2003
- A2-2 Individual Farmers Record

Reference A-3 TSAG Operations Plan & Record

- A3-1 Calendar for Irrigation for Crop Year 2002 - 2003
- A3-2 TSAG O & M PLAN
- A3-3 TSAG Maintenance and Repair Records
- A3-4 TSAG Record of Daily Discharge
- A3-5 TSAG Record of Farming Information and Farming Activities
- A3-6 TSAG Projected and Actual Cropping Calendar and  
Pattern of Planting
- A3-7 TSAG Weekly Record of Required and Actual Discharges
- A3-8 TSAG List of Irrigated and Planted Area (LIPA)
- A3-9 TSAG List of Lots Requesting for Exemption
- A3-10 Request for Exemption
- A3-11 Certificate of Exemption
- A3-12 TSAG Amendments to List of Lots Planted
- A3-13 TSAG List of Bills Served
- A3-14 Sample Irrigators Association (IA) Official Receipt
- A3-15 NIA Official Receipt
- A3-16 FIA Billing and ISF Collection Performance
- A3-17 IA ISF Collection and Sharing Record
- A3-18 TSAG Summary of Production and Farming Performance
- A3-19 TSAG Seasonal O & M Report
- A3-20 TSAG Action Plan

Reference A-4 IA Operations Plan & Record

- A4-1 Calendar for Irrigation for Crop Year 2002 - 2003
- A4-2 IA O & M Plan
- A4-3 IA Water Distribution Plan
- A4-4 IA Maintenance and Repair Records
- A4-5 IA Record of Daily Discharge
- A4-6 IA Record of Farming Information and Farming Activities
- A4-7 IA Projected and Actual Cropping Calendar and  
Pattern of Planting
- A4-8 IA Weekly Record of Required and Actual Discharges
- A4-9 IA Summary of Irrigated and Planted Area

**Table 1.1 Contents, IA Strengthening Module (for trainers use)**

A4-10	IA List of Lots with Total Crop Failure
A4-11	IA Amendments to List of Lots Planted
A4-12	IA Summary of Bills Served
A4-13	IA Billing and ISF Collection Performance
A4-14	IA ISF Collection and Sharing Record
A4-15	IA Summary of Production and Farming Performance
A4-16	IA Seasonal O & M Report
A4-17	IA Action Plan
Reference A-5	FIA Operations Plan & Record
A5-1	Calendar for Irrigation for Crop Year 2002 - 2003
A5-2	FIA O & M Plan
A5-3	FIA Water Distribution Plan
A5-4	Sample Program of Works & Statement of Estimated Cost (POWSEC)
A5-5	FIA Maintenance and Repair Records
A5-6	FIA Record of Daily Discharge
A5-7	Farming Information and Crop Area-Growth Stage Projection
A5-8	FIA Projected and Actual Cropping Calendar and Pattern of Planting
A5-9	FIA Weekly Record of Required and Actual Discharges
A5-10	FIA Summary of Irrigated and Planted Area
A5-11	FIA Summary of Request for Exemption
A5-12	FIA Summary of Amendments to List of Lots Planted
A5-13	FIA Summary of Bills Served
A5-14	FIA Billing and ISF Collection Performance
A5-15	FIA ISF Collection and Sharing Record
A5-16	FIA Summary of Production and Farming Performance
A5-17	FIA Seasonal O & M Report
A5-18	FIA Action Plan
Reference A-6	General FIA/IA Policies on O&M and Other Activities
A6-1	Regular Office Duties and Honoraria
A6-2	Operations
A6-3	Water delivery and Distribution Plan
A6-4	Maintenance and Repairs
A6-5	Finances and Funds for O&M
Reference A-7	FIA/IA Annual Report
A7-1	Annual Report Contents
A7-2	Annual Accomplishment Report
A7-3	Statement of Income and Expenses
A7-4	Balance Sheet
A7-5	Action Plan for Next Crop Year
Reference AN-1	System Operations Plan & Record
AN1-1	Calendar for Irrigation for Crop Year 2003 - 2003
AN1-2	Performance Targets
AN1-3	Target Cropping Calendar and Pattern of Planting
AN1-4	Water Distribution Plan
AN1-5	Anticipated Implementation Problems
AN1-6	SMC Integrated Plan
AN1-7	Individual Program of Work
AN1-8	List of POW Submitted
AN1-9	Status of NISO Projects
AN1-10	NISO Record of Daily Discharge
AN1-11	Farming Information and Crop Area-Growth Stage Projection

**Table 1.1 Contents, IA Strengthening Module (for trainers use)**

AN1-12	Required and Actual Discharges at Turnouts and IA/FIA Headgate
AN1-13	Projected and Actual Cropping Calendar and Pattern of Planting
AN1-14	Lists of Irrigation Facilities / Structures and Repairs Needed
AN1-15	Lists of Accomplished Repair Works
AN1-16	NISO Summary of Irrigated and Planted Area
AN1-17	NISO Summary of Bills Served
AN1-18	NISO Summary of Billed Area and Actual ISF Collection
AN1-19	NISO ISF Collection and Sharing Record
Reference AN-2	Systems Report O&M Mid and Post Season Assessment
AN2-1	Basic Information
AN2-2	Target and Actual Cropping Calendar and Pattern of Planting by IA/FIA Area
AN2-3	Implementation Problem
AN2-4	Anticipated Next Season Implementation Problems
Reference AN-3	Systems Report O&M Crop Year Evaluation
AN3-1	Basic Information
AN3-2	Actual Cropping Calendar and Pattern of Planting by IA/FIA Area
AN3-3	Summary of Crop Year Implementation Problems
<b>Reference B Technical Procedure</b>	
Reference B-1	Determination of Percolation and Evapotranspiration Rates <sup>1</sup> - 1
B1-1	Percolation
B1-2	Measurement
B1-3	Observation, Recording and Analysis
Reference B-2	Determination of Seepage Rates
B2-1	Seepage
B2-2	Measurement
B2-3	Observation, Recording and Analysis
Reference B-3	Determination of Irrigation Water Losses
B3-1	Irrigation Water Loss
B3-1	Measurement
Reference B-4	Computation of Irrigation Water Requirements
B4-1	Irrigation Water Requirement
B4-2	Computing Irrigation Water Requirement
Reference B-5	Development of Unit Area Discharge Irrigation Network
B5-1	Unit Area Discharge Irrigation Network
B5-2	Data and Information Needed
B5-3	Procedures
Reference B-6	Preparation of Irrigation Delivery Schedules
B6-1	Irrigation Delivery Schedules
B6-2	Preparation
Reference B-7	Preparation of Schedule of Rotational Irrigation
B7-1	Rotational Irrigation
B7-2	Fixed Time-Variable Discharge Method
B7-3	Variable Time-Fixed Discharge Method
Reference B-8	Discharge or Rate of Flow Measurement
B8-1	Discharge or Rate of Flow
B8-2	Parshall Flume
B8-3	Double-gated Turnout
B8-4	Calibrated Staff Gages
B8-5	Measuring Weir

**Table 1.1 Contents, IA Strengthening Module (for trainers use)**

Reference B-9	Meteorological Measurements
	B9-1 Meteorological Measurement
	B9-2 Rainfall
	B9-3 Evaporation
Reference B-10	Evaluation of Irrigation Operations
	B10-1 Evaluation of Irrigation Operations
Reference B-11	Technical Pointers in the Preparation of Operation Maps
	B11-1 Operation Maps
Reference B-12	Preparation of Operation Bulleting Board
Reference B-13	Deriving Crop Area-Growth Stage Information
Reference B-14	Development of Cropping Calendar
	B14-1 Cropping Calendar
	B14-2 Development of Calendar for Rice Crop
Reference B-15	Requesting Exemption for the Payment of Irrigation Fee

### **PART III Guide for Project Cycle Assistance for IA Strengthening**

#### Chapter I Introduction

- 1.1 Background
- 1.2 Project Cycle Management (PCM)
- 1.3 Contents of the Guide<sup>3</sup>

#### Chapter II Step by Step Guide in Problem Analysis

- 2.1 Prepare a list of all the problems that give rise to the IA situation
- 2.2 Group similar or related problem statements
- 2.3 Give indications of the criticality, severity, urgency, or importance of each of the problem
- 2.4 Establish the priority of each problem on the basis of the criteria
- 2.5 Identify the possible causes of the Core or Starter Problem
- 2.6 Identify the effects of the core problem and then group them

#### Chapter III Step by Step Guide in Objective Analysis

- 3.1 Transpose or convert core problem into an objective statemen
- 3.2 Convert the projected negative effects into positive results
- 3.3 Convert the causes below the core problem into means by which the objective shall be met

#### Chapter IV Step by Step Guide in Alternative Analysis

- 4.1 Group the means
- 4.2 Establish the criteria for choosing which of the means will be pursued

**Table 1.1 Contents, IA Strengthening Module (for trainers use)**

Chapter V Step by Step Guide in Preparing Project Design Matrix (PDM)

- 5.1 Present the Project Design Matrix Form
- 5.2 Fill in the First Column, First Row of the Matrix
- 5.3 Fill in the Second Row, First Column of the Matrix
- 5.4 Fill in the Third Row, First Column of the Matrix
- 5.5 Fill in the Fourth Row, First Column and Fourth Row, Fourth Column of the Matrix
- 5.6 Fill up the rest of the Fourth Column of the Matrix
- 5.7 Fill up the Second and Third Column of the Matrix

Chapter VI Step by Step Guide in Preparing the Plan of Operation

- 6.1 Construct the Project Work Breakdown Structure
- 6.2 Assign resources to the project activities, estimate the durations, and state assumptions about external factors that could affect the project

Chapter VII Monitoring and Evaluation

**Part IV Directory of Existing Manuals and Modules  
Useful for IA Strengthening**

**Table 1.2 Contents, Steward of Water, A Guide for Farmers**

**Part I Stewarship of Water**

- Chapter 1 Water sustains life  
Water  
Quantity  
Quality
- Chapter 2 Harnessing and protecting our water resource  
The Irrigation System is man's means  
The Irrigation System is Physical  
The Irrigation System is also a Socio-economic Structure
- Chapter 3 Being stewards of our water resource  
You and your Irrigator's Association  
The Heart of the Steward  
A Steward of water is a Man or Woman of Authority and Responsibility  
To whom much is given much is required  
Am I; Are We?  
Partners Towards Productive and Effective Operation and Maintenance of  
Irrigation Systems

**Part II Farmer's Guide to Managing the Irrigation System**

- Chapter I Preparing to manage our irrigation system  
Let Us Plan as a Team  
We Must Agree on
- What is a Cropping Calendar?
  - What is a Water Distribution Plan?
  - What is a Repair and Maintenance Plan?
  - What is an ISF Collection Schedule?
- Chapter 2 Keeping our Irrigation System in the best condition  
Our Irrigation System is like our rice field  
Before Planting  
Before our cleaning day  
During the cleaning day  
Our Irrigation System is Interconnected
- Chapter 3 Distributing water for the best use of the most number of farmers  
In our Association, we are not just members, we are one community
- Chapter 4 Operating the Irrigation System  
How the Irrigation System Works
- Chapter 5 Keeping watch farm  
I am the Manager of my rice field
- Chapter 6 Using irrigation water wisely  
Water is a Precious Resource  
Wet Season  
Dry Season  
The Rotation Period
- Chapter 7 Day to day care of my irrigation canal  
Our Irrigation System is Interconnected
- Chapter 8 Setting aside my contribution to my Irrigation System  
I should know the Irrigation Service Fee is all about
- Chapter 9 Taking time to Record Critical Farm Information and My Observations and Self-Assessment  
Record and List
- Chapter 10 Paying my Irrigation Service Fee  
So When I think of ISF
- Chapter 11 Being Aware of our Financial Status
- Chapter 12 Taking time out together to assess: How well did we care for our Irrigation System  
The Season comes to an end



**Table 1.3 Contents, Maintenance and Rehabilitation Guide  
for Irrigators Association Members**

**Chapter I First Step Before Implementing and Rehabilitation**

I am joining the IA because  
If I do not join the IA  
Basic Information on What, Where, Who and How of System Maintenance

**Chapter II Maintenance**

Boundary of IA responsibility on maintenance  
Product of Good Maintenance  
Before and During the Cropping Season  
During the Maintenance Planning Season  
My role and the IA role  
What's Routine Maintenance?  
What's Periodic Maintenance?  
Maintenance Needs of Irrigation Structures  
Maintenance Need of Access Roads  
Patrol  
Important Things to consider on Walk-Through  
On Drains

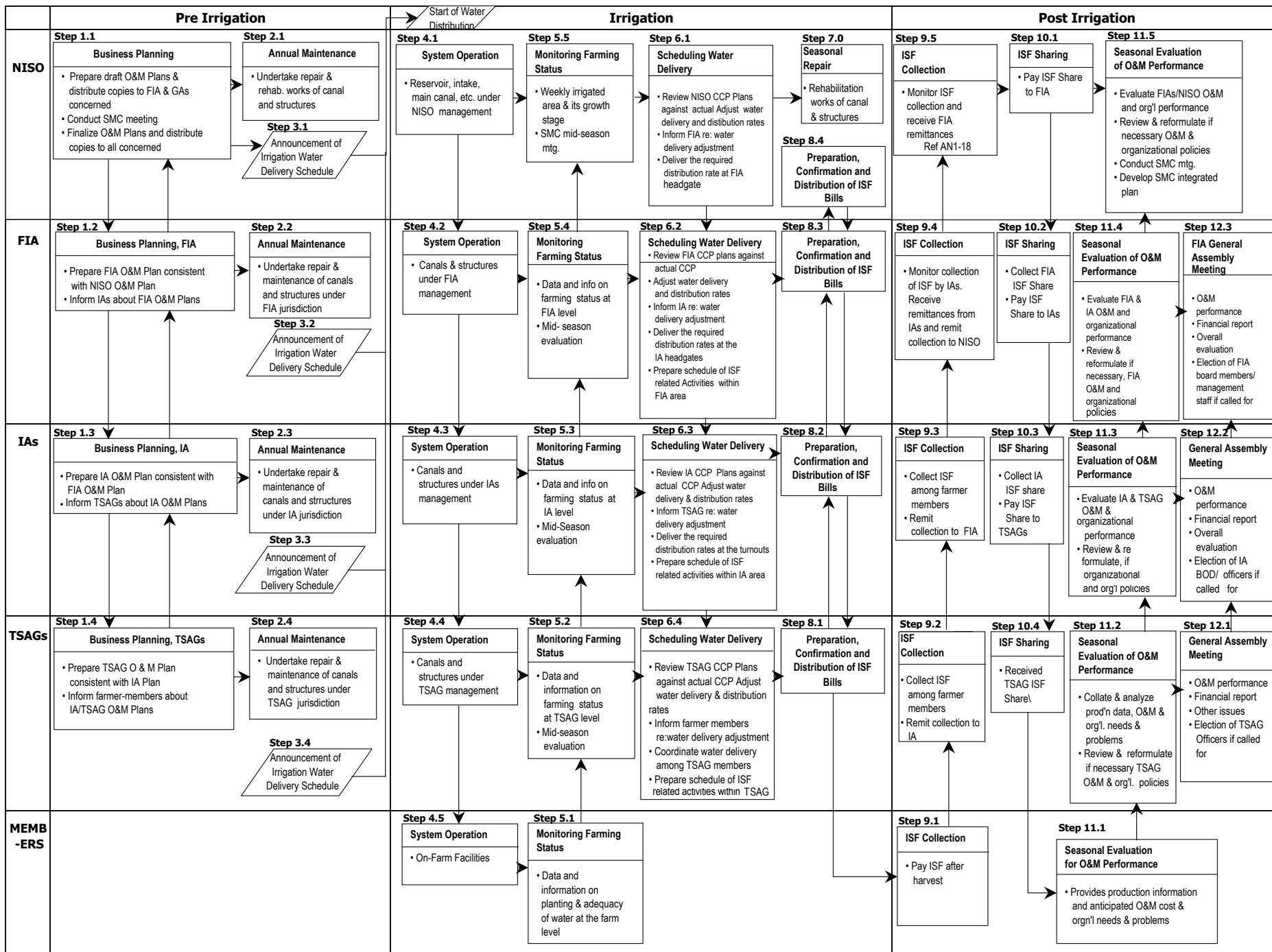
**Chapter III Rehabilitation**

Planning the Rehabilitation  
Prioritization  
Accomplishing Forms  
Preparing the Detailed Plan  
Program of Work and Statement of Estimated Cost  
Identifying Work for IA and Work for NIA  
Flow of Activities for Rehabilitation Works for IA  
Works to be Undertaken by NIA  
Provisional Policies on IMT  
Damaged by Disaster

**Chapter IV Important basic tips on Construction Works**

Earth Works (Canal farm ditch, service road)  
Embankment  
Desilting  
Masonry Works  
Concrete Works  
CHB Lining  
Metal Reinforcement  
How Many people need  
Sample for Estimating Equipment

Figure 1.1 Flow Diagram on IA Management



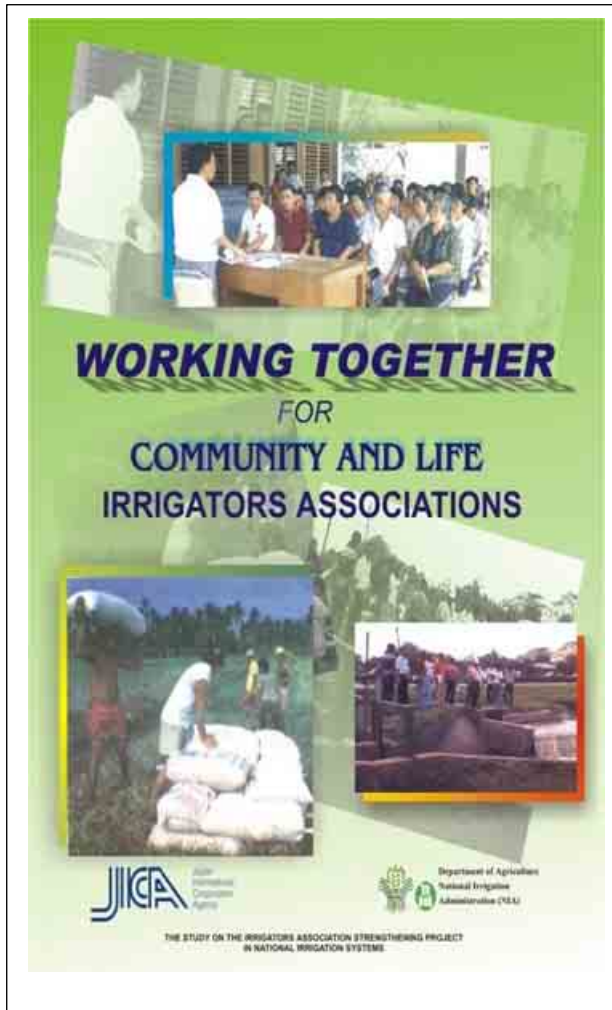


Figure 3.1 Campaign Poster No. 1

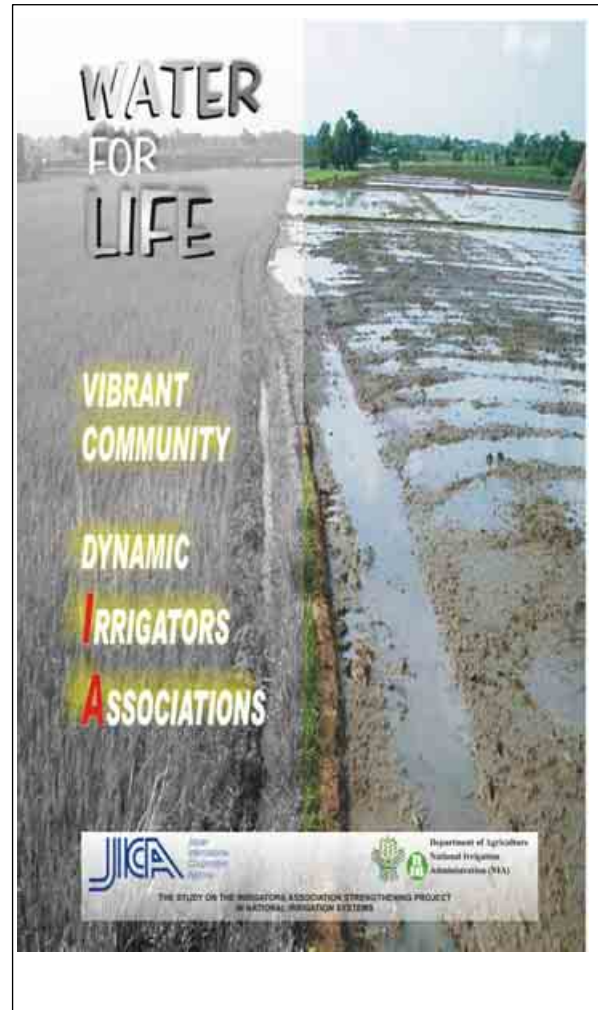


Figure 3.2 Campaign Poster No. 2

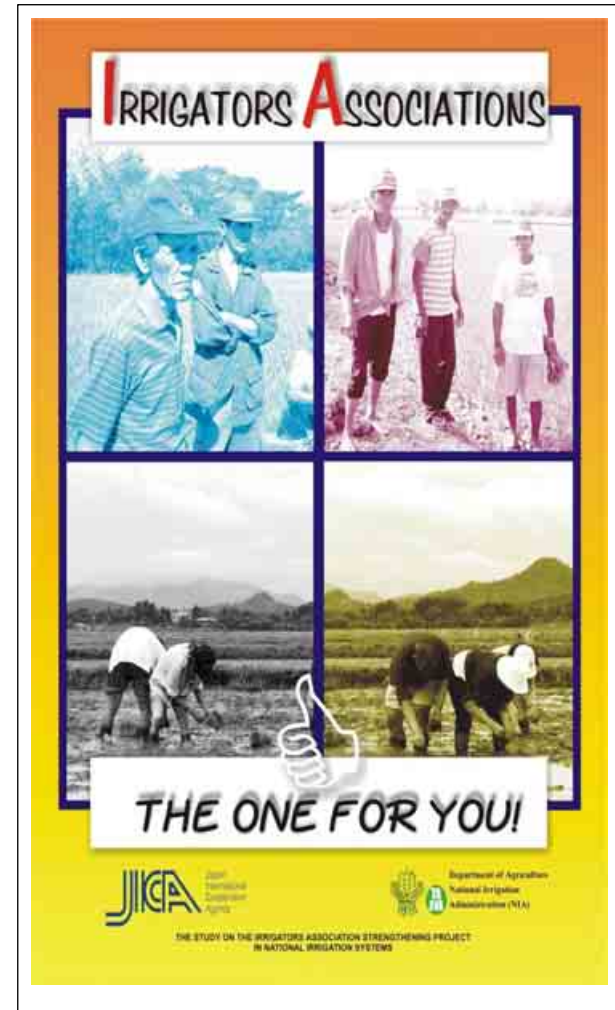


Figure 3.3 Campaign Poster No. 3

Figure 3.4 Final Campaign Poster

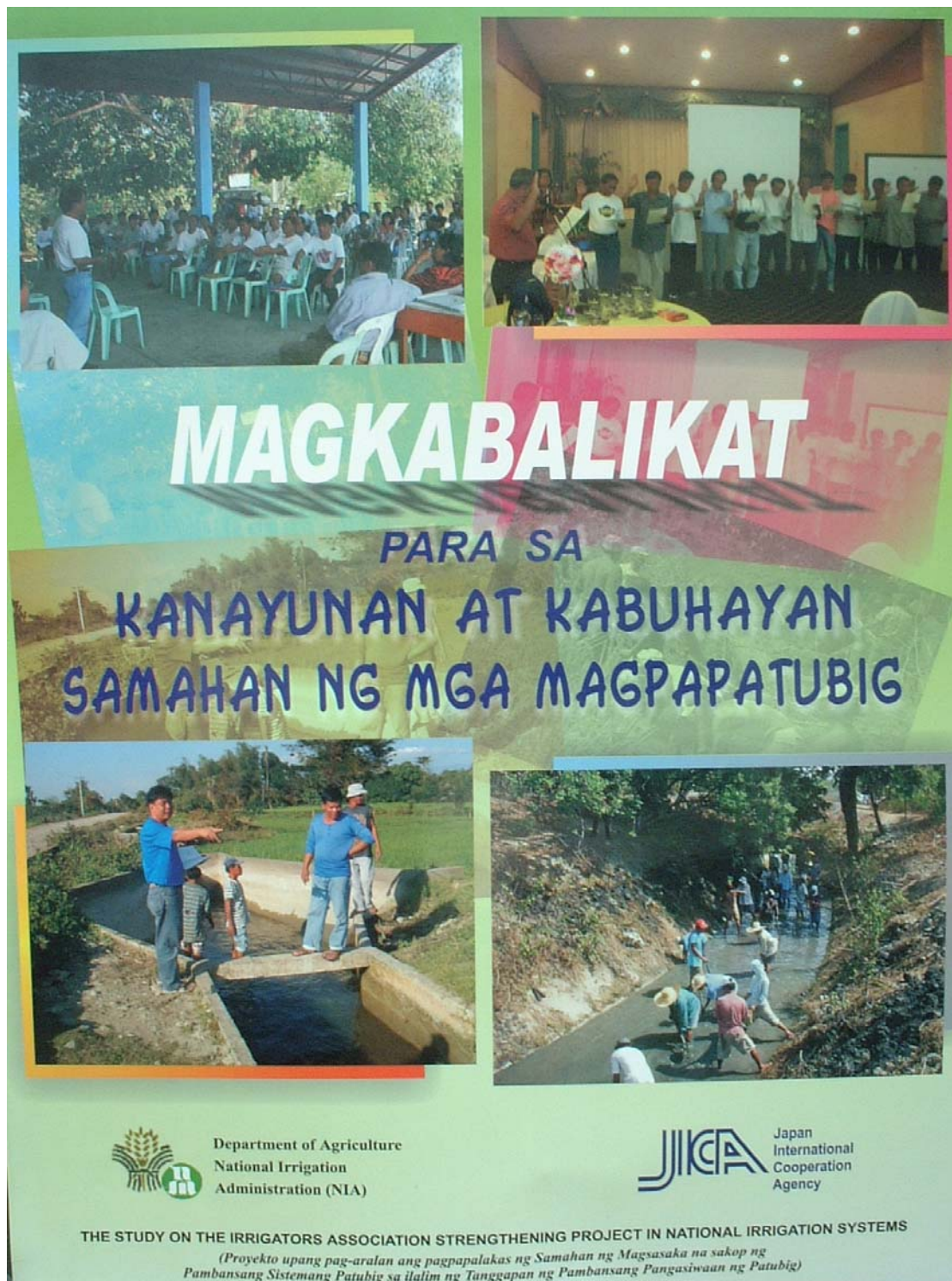


Figure 4.1 JICA NIS-IA Strengthening Study Home Page



Figure 4.1 JICA NIS-IA Strengthening Study Home Page

efficiently the system, and implement properly the IMT; and

2. to transfer technology to counterpart personnel and IA members on planning procedure and methodology.

### 3. TARGET OF THE STUDY

The Study Target consists of two groups:

1. Phase I : Around 1,200 IAs in 196 NISs all over the country; and
2. Phase II : Selected NISs and related IAs and some highly-functional IAs in the Communal Irrigation Systems (CISs).

### 4. PROCEDURE OF THE STUDY

The Study will be carried out in two phases. Phase I is the first field work, primarily data gathering and analysis, and the outcome of which will be an interim report presenting constraints and analysis of IAs, classification of IAs, draft action plan framework and related manuals and campaign tools. Phase II consists of two field works and two home works. The detailed activities for each phase are as follows:

#### 1. Phase I

##### a. 1st Field Work

- discuss inception report
- identify international partnership assistance projects/programs
- identify and analyze present conditions and constraints on NISs and IAs
- classify NISs and IAs and select representative NISs and IAs
- formulate action plan framework
- prepare interim report

#### 2. Phase II

##### a. 2nd Field Work

- discuss interim report
- carry out detailed investigation and study on representative NISs and IAs
- formulate action plan
- prepare implementation program of action plan and evaluate outputs of action plan
- present overall assessment and recommendation

##### b. 1st Home Work

- prepare draft final report
- discuss and compile draft final report
- produce campaign tools and materials for dissemination seminar

##### c. 3rd Field Work

- discuss draft final report
- hold dissemination seminar

##### d. 2nd Home Work

- prepare final report

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Interagency Projects | NCIA | JICA Study Team |  
PNC-ICID | NIAConsult, Inc. | All Government  
Agency

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