

**CHAPTER 1**  
**INTRODUCTION**

# CHAPTER 1 : INTRODUCTION

## 1.1 The Study

### 1.1.1 Background to the Study

Since the 1997 economic crisis, the economy has recovered slowly and in 2000 it estimated that GDP growth was around 4.77% compared to its level a year ago. Whilst the ending of the authoritarian government of Suhartao provided an opportunity to move towards democracy, political uncertainty and a leadership crisis amongst the political elite, still remains. Under these circumstances, peoples' lives continue, including the farmers in the field; for many, their livelihood has remained unchanged or has worsened after the economic crisis and the subsequent financial reformation.

Irrigation in Indonesia developed rapidly under the New Order government as a result of the strong policy towards the achievement of self-sufficiency in food, especially rice, together with agricultural supporting programs such as BIMAS. The irrigated area of 3.9 million ha in 1976 expanded to 4.8 million ha in 1997. As a result of these initiatives, in 1984 the Government of Indonesia (the Government) declared that the country had achieved rice self-sufficiency. Self-sufficiency could not, however, be sustained due to rapid population growth and to fluctuations of natural conditions, such as those caused by El Niño. By the 1990s, the country once more became a rice importer. To reach rice sustainability once again, it will be necessary to increase the cropped area and cropping intensity and to improve yields through the application of improved cultivation methods.

To increase irrigation efficiency and to reduce Government expenditure on operation and maintenance (O&M) costs for irrigation, in 1987 the Government enacted the policy of turnover of the irrigation O&M to the water users' associations or WUA. It aimed to turnover the O&M of all irrigation systems below 500 ha to the WUAs by the year 2002, after having rehabilitated the existing irrigation facilities. It was expected that the schemes would be operated and maintained by the WUA, with an irrigation service fee (ISF) to be managed by themselves being collected from the beneficiaries. Based on this Irrigation Operation and Maintenance Policy (IOMP), to formulate the institutional framework for the turnover, and to develop the implementation procedures for the special maintenance and formulation of WUAs, some pilot projects were started under the Irrigation Sub-sector Project (ISSP) with financial assistance from IBRD. Many similar projects, with the objective of implementing the turnover of irrigation systems to WUAs, were financed by other institutions such as ADB. It is estimated that, by 1995, around 25 % of targeted WUAs had been established and the irrigation systems had been turned over. DGWRD reported that around 200,000 ha of irrigation area had been turned over to the WUAs by 1995; the remaining area was, by 1996, around 700,000 ha..

Under these circumstances, in response to the Government's request, the Government of Japan (GOJ) decided to conduct the Study of Irrigation Management and Empowerment of Water Users' Associations for Enhancement of Turnover Program (the Study) in accordance with relevant laws and regulations in force in Japan. Accordingly, the Japan International Cooperation Agency (JICA), the official agency responsible for implementation of technical cooperation programs of GOJ, dispatched a preparatory study team to Indonesia from September 20 to October 8, 1999 for the purpose of discussing and confirming the Scope of Work (S/W) for the Study. As a result of the discussions, the Government and the JICA preparatory team agreed on the S/W for the Study on September 30, 1999. The JICA Study Team, headed by Mr. MATSUMOTO Keiji of Pacific Consultants International (PCI)

conducted survey work in Indonesia from April 10 to November 4, 2000 as Phase I Study and January 29 to June 26, 2001 as Phase II Study.

### 1.1.2 Objectives and Components of the Study

#### (1) Objectives of the Study

To achieve sustainable irrigated agriculture, the objectives of the Study described in the S/W are as follows:

- Formulate detailed Action Plan(s) for the improvement of irrigation management and empowerment of Water Users' Associations (WUAs) for the enhancement of the turnover program, taking the irrigation management policy reform into account,
- Carry out the technology transfer to Indonesian counterpart personnel through on-the-job training during the course of the Study.

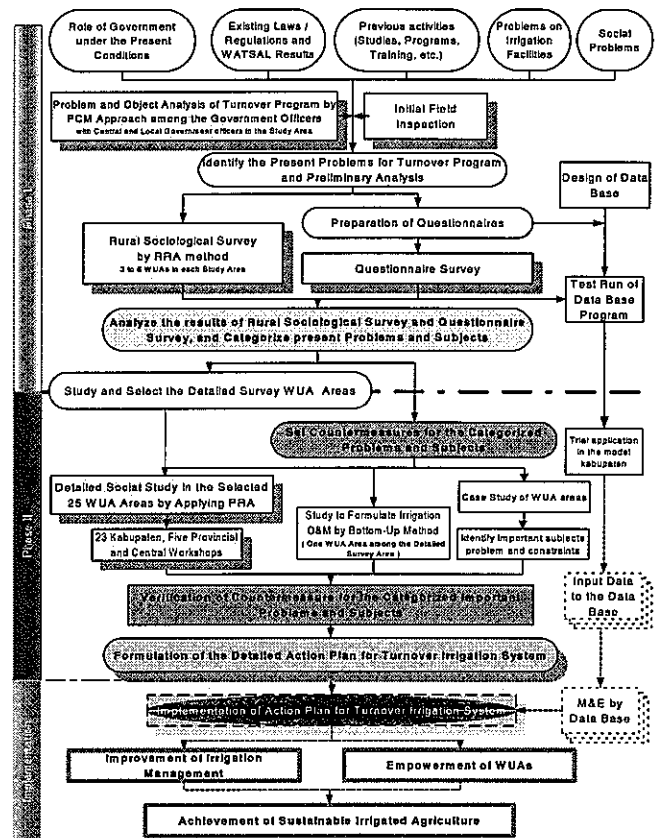
To achieve the said objectives, the Study consists of the following items; the general workflow is shown in figure below;

- Review previous Studies and Projects relevant to the turnover of the O&M of irrigation system to WUAs since 1987.
- Referring to the National Water Resources Policy (NWRP), especially on the new policies of irrigation O&M turnover program which were presented in the workshop in April 1999, identify and analyze the problems on the present turnover O&M of irrigation system.
- Formulate the action plan for the future implementation of the turnover program after clarifying the responsibility of farmers/WUAs, central and local government.

The Study will survey, scrutinize and analyze the present problems and constraints, identify the responsibilities of the central and local governments and the farmers/WUAs to implement the program and formulate the action plan under three conditions of WUA formation, namely No WUA (including those managed by traditional organizations), One WUA, Several WUAs/WUA Federation, through the application of a participatory approach.

#### (2) The Study Area

As stated in S/W of the Study, the Study Area covers the five provinces of West Sumatra, West Java, D.I.Yogyakarta, East Java and West Nusa Tenggara as stated in the Scope of Work (S/W), with total area of 157,000 km<sup>2</sup>, a total population of 80 million, an irrigated area of 1,911,000 ha and an estimated 18,000 existing WUAs.



Work Flow of the Study

### (3) Phase of the Study

The Study was to be conducted in two phases, as follows;

Phase I: Data collection and analysis of previous studies and projects of the turnover program, field survey in the Study Area to identify the presents problems and constraints of the Turnover Program, analysis and categorization of the problems and constraints;

Phase II: Based on the categorized problems and constraints, countermeasures would be hypothesized. These hypotheses would be examined and inspected through detailed survey in the field, to confirm the their effectiveness; thereafter, an action plan would be formulated for the irrigation O&M turnover program in Phase II.

Work items undertaken during the field survey, together with the other Study activities, are shown in Table 1.1.1

#### **1.1.3 Phase I Study Results**

As summarized in the Interim Report, the Phase I Study concentrated on an understanding of the present conditions and the identification of problems on the irrigation management faced by farmers and government institutions and by the irrigation management turnover program. During the Phase I Study period, a questionnaire survey at 300 WUAs and a rural sociological survey applying Rapid Rural Appraisal (RRA) techniques at 20 WUAs were conducted to gain an understanding of the present problems faced by farmers in the field. After the field survey, Provincial and Central workshops were held to discuss the results of field survey and to discuss the problems on irrigation management and turnover together with government officials and representative of farmers from study WUAs. Based on these field survey and workshops, the Study Team categorized and analyzed the problems on 1) Government role support, laws and regulations, 2) WUA management, institutional aspects, 3) Irrigation O&M and water management, and 4) Agriculture, economic and financial aspects using the Project Cycle Management (PCM) method.

#### **1.1.4 Phase II Study Results**

The Phase II Study is the last phase of the Study and its output is the Action Plan for the improvement of irrigation management and empowerment of WUAs for enhancement of turnover program within the framework of irrigation management policy which should be completed by WATSAL by the end of 2002.

Following the Phase I Study, the Phase II Field Study started with the discussion of the Interim Report between the Study Team and Government counterparts after the Study Team mobilization in Indonesia on January 29, 2001 (refer Appendix A of this Report). The Study Team studied and formulated the countermeasures and confirmed them through detailed field survey at 25 irrigation scheme area in the five Study Provinces applying Participatory Rural Appraisal (PRA) and through workshops which were conducted at Kabupaten, provincial and central levels. Based on the confirmation of countermeasures for the problems, these were converted into an Action Plan comprising 12 activities that will be a guideline of activities for government officials and farmers to assist them in achieving the final goal of sustainable irrigated agriculture.

## **1.2 Counterpart Agencies and Steering Committee**

### **1.2.1 Counterpart Agencies and Steering Committee**

#### **(1) Counterparts for the Study**

The counterpart agency was expected to be Directorate General of Water Resources of Ministry of Public Works (MOPW) as shown in S/W of the Study in September 1999. After reformation of government institutions under Abdurrahman Wahid Presidency, former MOPW was divided into two ministries, i.e. Ministry of Settlement and Regional Development (KIMBANWIL) and State Ministry of Public Works (MENEG PU), in October 1999. In Phase I Study, MENEG PU was appointed to be counterpart agency for the Study. During the Phase I Field Study, it was decided that the former counterpart agency of the Study would be the Ministry of Settlement and Regional Infrastructure (KIMPRSIWIL) after combining the previous KIMBANWIL and MENEG PU. KIMPRASIWIL officially started functioning from January 1, 2001, but it took until March 2001 to appoint all the staff of the new Ministry. At this time the Directorate of Water Resources Management (DPSDA), under the Directorate General Water Resources (DGSDA), appointed new counterparts headed by Dr. Rustam Syarief, Director of DPSDA, for the JICA Study in March 2001. Members are shown in Appendix D.

#### **(2) Steering Committee**

As agreed in the Minutes of Meeting (M/M) of S/W, a steering committee would be formulated comprising the ministry in charge of irrigation (ex-Ministry of Public Works (MOPW)), the Ministry of Agriculture (MOA), the Ministry of Home Affairs (MOHA), and BAPPENAS. DGWRD of MOPW was expected to be the counterpart agency.

The formulation of the Steering Committee for the Study was re-announced by the Director General of Water Resources of KIMPRASWIL by No. 14/KPTS/D/2001 dated April 30, 2001. The Steering Committee is chaired by the Director of Water Resources Management and 22 members comprising five (5) Directors of MOA, BAPPENAS, MOHA, three Sub-directors of KIMPRASWIL, MOA, MOHA in central government, and 15 chiefs of provincial BAPPEDA, Water Resource and Agriculture in five Study Provinces are appointed (see Appendix D).

Local government agencies in the Study provinces, particularly at the Kabupaten level, have had an important role in the Study and have collaborated with the Study Team throughout the field surveys during Phase I and Phase II.

### **1.2.2 WATSAL and the Study**

The Water Resources Sector Adjustment Loan Program (WATSAL) is currently reviewing present laws and regulations concerning the efficient O&M of water resources, and formulating the basic concepts for the irrigation water resources management reforms. The drafts of new laws and regulations are expected to be submitted by the end of December 2002. This Study is expected to formulate an Action Plan for enhancing the turnover of irrigation under the newly established regulations and laws to be prepared by WATSAL. The Study is expected, therefore, to supplement the WATSAL for the implementation of the Turnover Program and with this in mind has collaborated with the WATSAL working team during the field survey period.

Table 1.1.1 Work Items of the Study

Stage	No.	Work Items
PHASE I	Preparatory Work	[ 1 ] Collection and analysis of available data and information relevant to the Study
		[ 2 ] Formulation of the Study methodology and implementation plan
		[ 3 ] Preparation of Inception Report
		[ 4 ] Explanation and discussion on the Inception Report in Japan
	Field Survey (1)	[ 5 ] Explanation and discussion on the Inception Report
		[ 6 ] Preparatory works of the Field Survey (1)
		[ 7 ] Collection and analysis of additional data and information
		[ 8 ] Analysis of organizational and institutional aspects
		[ 9 ] Analysis of physical and social structural aspects
		[10] Analysis of operational aspects
		[11] Rural sociological survey of WUAs
		[12] Questionnaire survey of WUAs
		[13] Categorization of problems and constraints
		[14] Selection of detailed WUA survey areas
		[15] Design of data-base
		[16] Preparation of Progress Report I
		[17] Explanation and discussion on Progress Report I
	Work in Japan (1)	[18] Preparation of Field Survey Results Report (1)
		[19] Preparation of Interim Report
		[20] Preparation of the Field Survey (2)
PHASE II	Field Survey (2)	[21] Explanation and discussion on Interim Report
		[22] Formulation of the countermeasures for the categorized problems and constraints
		[23] Detailed survey of WUA areas
		[24] Case study of WUA areas
		[25] Identification of the important issues and analysis of the problems and constraints
		[26] Confirmation of problems by the participatory approach (inspection of important problems)
		[27] Preliminary formulation of irrigation O&M and management plan by bottom-up method (identification of countermeasures)
		[27'] Provincial and kabupaten workshops of detailed WUA survey areas
		[28] Evaluation of the countermeasure alternatives
		[29] Formulation of the Action Plan for the acceleration of the Irrigation Turnover Program
		[29'] Technical transfer of WUA database to counterparts and Study Provinces and trial of data input at Kabupaten Bandung
		[30] Preparation of Progress Report II
		[31] Explanation and discussion on Progress Report II
	Work in Japan (2)	[32] Report the results of Field Survey (2)
		[33] Preparation of draft Final Report
		[34] Preparation of seminar
	Field Survey (3)	[35] Explanation and discussion on the draft Final Report
[36] Conducting seminar on the results of Study		
Work in Japan (3)	[37] Preparation of Final Report	