

Farmers Managed Irrigation Systems Promotion



FMIS Dialogue Series # 1  
October 1999

IRRIGATION MANAGEMENT IN ASIA:  
FARMER AGENCY INTERFACE FROM A  
PROPERTY RIGHTS PERSPECTIVE

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## FOREWORD

We are pleased to present this "Dialogue Series-I" on FMIS promotion and development. This series is a part of FMIS Promotion Trust' documentation. Particularly it is focused on farmer-agency interface from a property rights perspective with reference to irrigation management in Asian countries like Pakistan, Bangladesh, Sri Lanka and the Philippines. There is an underlying situation of farmer- agency interface in these countries where farmers and the FMIS have been facing numerous problems from the government agencies. Thus to avoid the situation and for smooth functioning in the FMIS of such countries this paper has stressed on the development of different mechanisms such as coordination, negotiation, re-orientation, and accountability.

Hopefully, the information of this dialogue series will be useful to professionals, researchers and institutions of Nepal and abroad working in the field of FMIS promotion and development. For the Trust itself this type of work is new and at the early stages. I would therefore, like to request the readers to make comments and suggestions for future improvement in this sort of documentation.

I would like to take this opportunity to express my sincere thanks to Dr. Upendra Gautam, Vice-Chairman and Mr. Rajan Subedi, Member-Secretary of the Trust for their initiatives of organizing series of FMIS dialogue and undertaking documentation tasks. Similarly, I would like to appreciate the efforts of Mr. Dharendra B. Parajuli, Sociologist of the Trust for his hard work in undertaking and completing the assignment relating to workshop organization and documentation.

October, 1999

Dr. Prachanda Pradhan  
Chairman  
FMIS Promotion Trust

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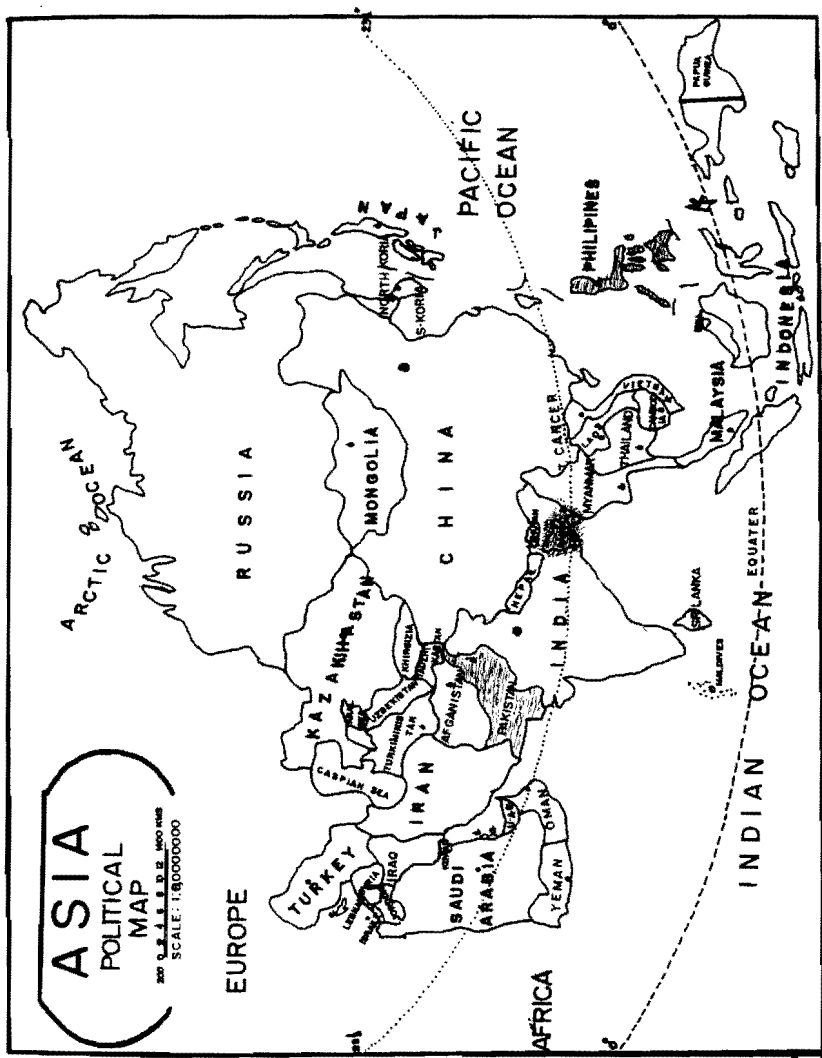
- Annex - I : List of Workshop Participants  
 Annex - II : Photographs

## **List of Acronyms**

BCCA	-	Branch Cannel
CA	-	Catchment Area
DW	-	Diversion Weir
IMT	-	Irrigation Management Transfer
O&M	-	Operation and Maintenance
PCA	-	Project Command Area
PIM	-	Participatory Irrigation Management
UCA	-	Unit Command Area
UOs	-	Users' Organizations

# ASIA POLITICAL MAP

200 0 100 200 300 400 500 600 700 800 900 1000 KILOMETERS  
SCALE: 1:80000000



## **1. INTRODUCTION**

FMIS Promotion Trust as a non-profit, non-partition and non-governmental professional organization was established in 1998. Since its establishment, it has been working for the promotion of Nepal FMIS. One of the main objectives of the Trust is to provide a forum for national and international dialogue on FMIS. The Trust, therefore, among other various plans and programs, organizes series of talk programs/dialogues on FMIS related issues inviting the professionals having national and international experiences and fame in the areas concerned. The Trust has realized that information dissemination and networking is highly required for sharing the information of knowledge and experiences. Keeping this ground reality in mind, the Trust disseminates the information on FMIS both abroad and within Nepal through different media including its periodical publications. In this context, the Trust had organized a talk program and the details of the program are described below.

### **1.1 Theme of the Talk Program**

The theme of the talk program was 'Irrigation Management in Asia: Farmer Agency Interface From a Property Rights Perspective'.

### **1.2 Time and Venue of the Talk Program**

The talk program was organized from 3:00 to 5:00 PM on 15 November 1998 at the FMIS Promotion Trust Office, Kathmandu, Nepal.

### **1.3 Participants of the Talk Program**

A total 22 participants from national and international, government and non-government organizations had participated the talk program. The list of the participants and their associated institutions is given in *Annex-I*.

### **1.4 Organization of the Program**

The program was formally opened by Dr. Prachanda Pradhan, Chairman of the FMIS Promotion Trust. He introduced the goals, objectives and significance of the talk program and other on-going programs of the Trust and the speaker.

### **1.5 Speaker of the Talk Program**

The speaker of the talk program was Mr. D. J. Bandaragoda. He has been working as Senior Irrigation Management Specialist in IWMI-Colombo, Sri Lanka. Before joining IWMI-Sri Lanka, he worked in IIMI- Lahore, Pakistan, for

almost a decade. A graduate of the University of Ceylon, he also holds a master degree in Administration from the Monash University of Australia and a post graduate diploma in Development Studies from the Cambridge University. Prior to joining IIMI, he was the Secretary, Ministry of Rehabilitation and Reconstruction of the Government of Sri Lanka. He served for several years as an Additional Secretary in the Ministry of Mahawali Development and also as the Executive Director of the settlement program of the Mahawali Authority of Sri Lanka. He has over 20 publications to his credit.

## **1.6 Presentation**

After brief introduction of the talk program, the speaker presented his talk on the theme focusing on the underlying situation of farmer-agency interface in some Asian developing countries like Pakistan, Bangladesh and the Philippines. Giving the reference of Irrigation Management Transfer (IMT) programs in these countries, he stated that farmers have been facing numerous problems from the government agencies. This situation has been hindering for smooth functioning of the interface in the irrigation systems. On the other hand, the question of property rights in case of irrigation systems are being pertinent for the management pattern. Therefore, to avoid the situation and enable legal framework for better irrigation management, he has suggested that different mechanisms such as coordination, negotiation, re-orientation, and accountability should be properly developed.

## **1.7 Follow-up Discussion**

Shortly after the presentation of Mr. Bandaragoda, Dr. Pradhan opened the floor for discussion. Participants warmly interacted with Mr. Bandaragoda by raising different issues and questions. In this context, Mr. Bandaragoda and Dr. Pradhan shared their experiences and knowledge on the issues and questions raised from the floor.

## **1.8 Publication**

With a view to share national and international experiences and knowledge on the areas of FMIS Promotion and development, the Trust is pleased to publish the paper presented in the talk program in the form of FMIS Dialogue Series. This paper is the first in the dialogue series published by the Trust.

## **2. FARMER-AGENCY INTERFACE FROM A PROPERTY RIGHTS PERSPECTIVE**

### **2.1 Background**

The idea of involving water users in the management of water resources is a popular theme for both intellectual discussion, as well as experimentation in the field. Increasingly, many developing countries are looking for strategies to adopt some form of a local level management strategy in trying to improve the productivity of irrigated agriculture. This growing interest led to the popular term, Irrigation Management Turnover (IMT), which means "the shift in responsibility and authority for the management of irrigated agriculture from the government to non-government entities" (Vermillion, 1996). IMT has become a prominent national policy in more than 20 countries, including those with major irrigated farming systems (Turrall, 1995). However, a survey of the actual ground situation in many countries (e.g. Philippines, Sri Lanka, Pakistan) would show a rapid decline in this policy interest when the initial enthusiasm, often supported by project aid, pales away with the closure of associated infrastructure development projects.

Generally, the following main characteristics can be identified in these IMT strategies :

- a) Many countries had developed over a long period of time a fairly robust, but, a static institutional structure for managing irrigation. Consequently, the felt need has been to change this rigid structure to make it more responsive to users' requirements and to involve the users in the changed management structure.
- b) In this strategy, the major expectation appears to have been that the users, in turn, would be more responsive to the needs of increased cost recovery or an increased share of O&M responsibility. Thus, the emphasis of these IMT strategies in fostering users' participation seems to be primarily for the purpose of resource mobilization for irrigation system management.
- c) The attempted institutional changes do not appear to be firmly founded on a genuine interest from government agencies as they are often donor-driven.
- d) The national requirements of securing project funds seem to be a major incentive for embarking on IMT institutional changes.
- e) Driven by such external pressure, the agencies have embarked on IMT by planning and implementing it in a top-down approach and thus appropriately referring to them as management "turnovers", or "privatization" efforts.



Recognizing the problems of semantics associated with “turnover” and “privatization” aspects of IMT, some enthusiasts have preferred to use the term “participatory irrigation management” (PIM). Recent literature advocating PIM solutions, however, illustrates how the preferred emphasis has remained unchanged. Popular participation is often believed to be a strategy “primarily aimed at increasing the probability of establishing infrastructure that people want, in ways people can and will manage them” (Mienzen-Disk, Reindinger and Manzardo, 1995). In this perception, the major benefits from users participation through collective action are presented as increasing the potential for better maintenance of physical facilities, contributing to community cohesion and empowerment, and reducing the financial and management burdens of the governments.

Without much of a committed view of their own on related institutional reforms, the developing country governments usually tended to be content in satisfying donor pressure on these preferred emphases, whereas the donors also perceived the countries’ fiscal and management constraints as major motivating factors for change. A common perception is : “governments are finding that collection at the local level, they can use the capacity of community members to exert social pressure on their neighbors to pay” (World Bank, 1993)

Since the governments’ attention was focused on the issue of transferring management responsibility to the users groups for these limited purposes, some important planning requirements have escaped their attention. One such key requirement is the need to carefully define the interface between the state and the newly created water users organizations. A carefully defined interface would determine their respective post-transfer responsibilities and related accountability mechanisms.

## **2.2 Interface between the Users Organizations and the State**

In a participatory management process, or a management transfer process, one important consideration is that there are two parties engaged in the transfer transaction. This view represents a major deviation from the top-down “system management turnover”. Considering the value of the asset and the value of the management task, this transaction is often effected through a contractual agreement. As in the case of a normal asset transfer, both parties agree on a set of conditions or obligations, preferably on a formal instrument. Identifying these conditions and obligations become one of the most critical elements in the transfer process. Otherwise, the transfer itself is a simple exercise, which in some instances has been quickly concluded through administrative or executive fiat.

In a top-down approach, often the state agencies tend to exaggerate the importance of obligations to be fulfilled by the users organizations, and downplay the obligations of the state towards the users. Worse still, in some instances, the obligations have been identified as a none-way responsibility, only to hold the users responsible for various responsibilities with no corresponding requirement for the state to share responsibility on any aspect of the post-transfer relationships.

In some instances, even the intermediary planners have tended to neglect the conditions that should exist at the interface between the state and the newly established users organizations. Pre-occupied with the burgeoning O&M budgets and the failure to mobilize sufficient financial resources, the state authorities have either paid little or no attention to this important requirement, often when they expected the existing legal and administrative systems to somehow cope with the newly emerging needs of the users organizations.

### **2.3 Legal Environment for Post-Transfer Transactions**

For effectively handling management responsibilities, the users organizations need adequate legal authority, which can only be given by the relevant higher source of authority, the state. The state, therefore, as one of its primary responsibilities in a management transfer, should consider the following main needs :

- a) An appropriate enabling legal environment, which is usually derived from some form of legislation (this gives them the legal recognition).
- b) A set of administrative rules and regulations arising from such legal enactments (specifying the way the organizations can regulate and implement their rules); and
- c) A set of internal rules or bylaws adopted by an appropriate body of the organizations themselves (these bylaws determine the relationship between the organization and its individual members and how the organization would conduct its business), which need to be recognized by the state.

At a glance, it appears as if the new organizations could be fully independent if they have a set of clearly defined internal rules mentioned in (3) above. However, for sustainability of the organization in the modern society, in which individual rights are protected by various laws, it needs the legal coverage that is provided in (1) and (2). The optimum level of interactions between these three categories of legal provisions form an important part of the interface between the state and the farmer organizations.

## **2.4 Coordination Mechanisms**

In addition to the enabling legal framework, the smooth functioning of the interface needs a number of other institutional supports. Most important among them is the method of coordinating their mutual interactions and responsibilities. The new organizations have to be responsible for a number of functions (equitable water distribution, proper system maintenance, adequate resource mobilization, and responsible financial management).

For all of these and many more organizational responsibilities, the new organizations have to be accountable to their membership, as well as to the state. Correspondingly, the state has to be responsible to the new organizations for some essential functions related to water acquisition and delivery in required quantity and quality, and at the correct time. The issue is that these sets of mutual accountability need to be adequately defined, and the mechanisms and instruments through which they can be fulfilled should be clearly clarified. The new organizations would require explicit methods by which they can transact with the state on the support they may need in performing these functions.

## **2.5 Negotiation Mechanisms**

The way the new organizations transact business with the state will be different from the traditional way the individuals interacted with state functionaries. In designing the transfer process, some specificity regarding the negotiation mechanisms becomes necessary. Who does what and how will assist the members of the new organizations as they proceed to conduct their business, particularly with state agencies.

## **2.6 Re-orientation of Roles**

In essence, with the transfer of management to users groups, there is a re-orientation of responsibilities. The state has new responsibilities to nurture and protect the new organizations. In many countries, no institutional arrangement has been made to undertake this responsibility in the post-transfer phase. To avoid confusion and misunderstanding, some of these adjusted responsibilities need to be specified in agreements.

## **2.7 Accountability Mechanisms**

Theoretically, all state agencies have their accountability clarified through a hierarchy of supervisory levels and a plethora of rules and procedures. In many developed societies, these mechanisms work through a judicial process. Similarly, there is a need to define the mechanisms through which the new

organizations demonstrate their accountability. Obviously, their own internal rules (by-laws) are meant to fulfill part of this requirement. However, considering the overall social responsibility of the state, some state mechanism need to ensure that those bylaws are adequately and properly formulated and applied, and the relationships (rights and duties) between the organization and its individual members are well defined and pursued. This is an inalienable responsibility of the state.

## 2.8 Property Rights Perspective

Following Bromley (1992:4), there are four ways in which resources are controlled and managed: "as common property, or as state property, or as private property, ... and there are resources over which *no property rights* have been recognized". Each of the first three methods can be referred to as a property rights regime.

A canal irrigation system, in which a time-based turn rotation (*warabandi*) among the individual water users is in operation at the tertiary level, can be analyzed in terms of the above categorization.

- a) The tertiary level watercourse is a combination of common and private property rights. The physical system is common property as it belongs to the whole groups of water users, whereas, the water flowing at a given time in the watercourse is private property as it belongs to one water user who is having the *warabandi* turn at the time.
- b) The secondary level canal and the primary level main canal, including both water flowing in them, as well as their physical facilities, have been managed as state property. With the users organizations taking them over, they become common property. If the state retains the main system management, it is still state property.

Thus, in an IMT situation, the water resources system can be treated as a common pool resource, which is owned and managed as common property (can also be understood as commonly owned private property).

In a combination of property rights regimes (state, common and private), the interfaces between different regimes becomes loci of numerous transactions. Interactions between different regimes are determined by sets of external and internal rules. For instance, converting the secondary canal level water resources system from its present "state property" status to a "common property" regime, the farmer-bureaucracy interface is shifted to the head regulator of the secondary canal. While the external rules would largely determine the interactions at this interface, the secondary canal water resources become a common pool resource for which appropriate internal rules are applicable.

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World Bank 1993. The International Economic Environmental for Developing Countries. Global Economic Prospective and the Developing Countries.

**Annex - I****List of Participants**

<b>S.N.</b>	<b>Name of the Participants</b>	<b>Institution Involved</b>
1.	Mr. Rajan Subedi	FMIS Promotion Trust
2.	Mr. Sachin Upadhyay	CMS
3.	Mr. Krishna Murari Gautam	CMS
4.	Dr. Prachanda Pradhan	FMIS Promotion Trust
5.	Dr. Amrit Bahadur Karki	CMS
6.	Mr. Ajaya Lal Shrestha	CMS
7.	Mr. Abinash Pant	CMS
8.	Mr. Ram Prasad Satyal	DoI
9.	Mr. Rishi S. Neupane	IMTP-DoI
10.	Dr. Indra Lal Kalu	IMTP-DoI
11.	Mr. Purshottam Shrestha	ADB/N, Ramshah Path
12.	Mr. N. Ansari	SISP-DoI
13.	Mr. Achuyt Man Singh	DoI
14.	Dr. Khem Sharma	IMTP
15.	Mr. K.C. Shah	IWMI
16.	Mr. N. K. Agrawal	Freelance Consultant
17.	Mr. C. B. Shakya	APTEC
18.	Mr. Sheetal Babu Shrestha	DoI
19.	Mr. Durga Upreti	IMTP
20.	Mr. Hari Upreti	FMIS Promotion Trust
21.	Dr. Robert Yoder	USA
22.	Mr. Susil Sharma	Rajapur IP