FMIS EXPERIENCE IN STRENGTHENING NATIONAL CAPACITY

INTRODUCTION

One of the outcomes of the workshop on "Public Intervention in Farmer-Managed Irrigation Systems" conducted in Nepal in August 1986 was to initiate the FMIS Network. The FMIS Network is a means to organize and bring together researchers, practitioners, members of implementing agencies, and donors to exchange information and experiences and to stimulate research and innovative approaches in the field of FMIS. Specific program objectives are:

* to document management practices and evaluate management problems in farmer-managed systems;

* to evaluate and develop alternative intervention strategies;

* to develop case study training materials that illustrate alternative approaches to assist FMIS for policy makers and planners; and

* to develop methodologies for diagnosing FMIS problems for use by the staff of implementing agencies and researchers.

To meet these objectives the FMIS project employed two research modes, an indirect network mode and direct research. The indirect mode involves the FMIS Network which generates and disseminates information, and provides backstopping support to policy makers, managers, and researchers who are concerned with and/or are actively engaged in assisting the FMIS sector. At the same time, IIMI has carried out direct research in collaboration with national research institutes and/or implementing agencies.

THE FMIS NETWORK

The FMIS Research Program, which evolved from the Kathmandu workshop on public intervention in FMIS. Its aim is to help both government agencies and nongovernment organizations to develop more appropriate and effective FMIS assistance strategies, and to develop assessment methods to enable managers and planners to understand when and how intervention can be successful. Through conducting FMIS research, IIMI attempts to strengthen national research planning and implementation capacity leading to more appropriate and effective policies regarding the farmer-managed sector.

Currently, the network links more than 1300 irrigation professionals from 76 countries, representing a wide variety of disciplines and professions and geographical regions. Countries with more than 30 members are : United Kingdom (96), India (86), Sri Lanka (80), United States of America (79), Indonesia (71), Thailand (65), Nepal (62), Argentina (53), Peru (53), Brazil (51), Chile (47), Bangladesh (38), the Philippines (32) and Morocco (30). The objectives of the network are:

* to enhance the use of existing FMIS knowledge by facilitating worldwide interaction among irrigation researchers, policy makers, and managers;

* to create an awareness among researchers, professionals, donor agencies and governments of the important role FMIS plays in irrigation and agriculture;

* to increase understanding of the existing FMIS technologies and management practices;

* to develop appropriate methods for technical assistance and support activities for FMIS;

* to identify the lessons learned from FMIS that might improve the performance of agency-managed systems;

* to identify research priorities and stimulate FMIS action-research projects; and

* to identify training and education needs for the design and support of FMIS.

Network activities include a wide variety of topics and modes. It includes organizing and supporting study tours and workshops and providing some common methodologies for undertaking activities by agencies represented in the network. The FMIS Newsletter is the main link between the network members and is an important outlet for research results as well as a useful channel for sharing experiences.

IIMI's role is to serve as facilitator and coordinator and provide administrative support to the network. This role includes organizing and supporting study tours and workshops, coordinating two-way consulting opportunities and providing some common methodologies for undertaking activities by agencies represented in the network. The agenda for the network is set through interaction among members of the Advisory Committee.

This committee was established to advise IIMI on network priorities and future activities. Although the Advisory Committee does not have formal authority for decision making, there is an informal understanding that the recommendations of the committee will be accepted as long as they are within the budget limitations and the terms of reference of the grant. The Advisory Committee comprises 12 regular members from Asia, Africa and Latin America as well as representatives from implementing agencies and other networks. Additional resource persons are also invited to participate in specific meetings. A three year plan for the period of 1991-1993 was recommended by the Advisory Committee identifying the need for more research, workshops and information.

PROGRAM

The program has highlighted certain critical issues in farmer-managed irrigation. They are:

* There is a need to further increase awareness among government officials of the economic importance of the FMIS sector and to find ways to support its productivity and sustainability. The importance of FMIS is often not reflected in the funds allocated by the respective governments. Relatively small government investments in the FMIS sector can produce much higher positive returns than is the case for investment in agency-sponsored irrigation. This is largely because projects can be completed quickly, benefits are realized sooner, and farmers are more likely to provide corresponding local investment.

* Government assistance to FMIS should be provided only where water user rights, responsibilities, performance objectives and system boundaries are clear, or where they will be made clear under the assistance programs. Development of effective FMIS institutions depends on a proportional and direct relationship between farmer investment, and responsibilities and water user rights.

* Management problems and development needs differ considerably between FMIS in different types of "hydro-management" environments. Each environment needs special attention and different strategies for research and development. Groundwater and other lift irrigation systems are the fastest growing types of FMIS today and need greater investment in research and assistance due to their growing importance. A second category of fast growing FMIS is that of systems whose management is being turned over from government agencies to water users' associations. This is a very widespread phenomenon with its own particular challenges, given the pressures to create effective farmer management institutions in settings where the primary irrigation investment is not indigenous.

* Local investment by farmers in FMIS is a key factor in the institutional development of FMIS and consists not only of investment of farmer labor and equity, but also of investment in indigenous technical knowledge, organized efforts to negotiate decisions among fellow farmers and creating and implementing rules and sanctions. This is evidenced in a number of cases where the use of local knowledge and experience allowed for improved farmer operation and maintenance of the system with lower costs for improvements.

* There is a need to encourage local institutional development, agencies should give less attention to standardized institutional models and training modules and more attention to helping FMIS clarify their own management objectives and functional management requirements.

* In recent years, nongovernmental organizations have become increasingly involved in assisting FMIS, especially in the institutional development aspects. They have more flexibility in undertaking projects and appear to respond more to farming-community needs and less to political pressure. There have been numerous examples where such nongovernmental entities as social organizers and farmer-to-farmer exchange training strategies have proven so successful that they have shifted from being only pilot projects to parts of national programs.

* There is a strong need in many countries to develop effective programs and organizational arrangements for assisting their FMIS sectors. There

tends to be a lack of well-developed laws and policies related to FMIS since the governments have not had substantial involvement in this sector.

* There is a need to analyze the various constraints which exist within bureaucracies for interacting with FMIS in ways which are sensitive to local needs and capacities. Rigid "quality control" or design standards impose emphasis on structures which may not be important to farmers.

The main link between the network members is the FMIS Newsletter. It is an important outlet for research results and a useful channel for sharing experiences. The bulk of the text of every issue is contributed by non-IIMI members. Readers' reaction has been very positive, and the mailing list continues to grow. Selected portions of the Newsletter have been translated into Spanish to help overcome the language barrier in sharing experiences across countries and to reach a wider target audience. Translation into French is also being planned. Ten issues of the Newsletter have been produced to date and the eleventh is in production.

A series of study tours for FMIS professionals was separately funded through a UNDP grant administrated through the Network. Fourteen individuals participated in six different visits which resulted in comparative FMIS reports. Excerpts of these reports appeared in the Newsletter.

Several workshops have been conducted at international, regional and national levels.

The international workshops focussed on crucial aspects of "Design Issues in Farmer Managed Irrigation Systems" (held in Thailand); Developing and Assisting FMIS in North and West Africa" (held in Morocco); "Performance Measurement in FMIS" (held in Argentina). The regional and national workshops explored different dimensions of "the Role of Social Organizers in assisting FMIS" (held in Thailand); and other themes such as Rapid Assessment Methodologies, Role of NGO's, Enhancing Sustainability of Rehabilitated Systems etc..

IMPACT ON STRENGTHENING NATIONAL CAPACITY

The FMIS program has been in operation only for a period of four years, which is a short time span to evaluate the impact of such a program. Therefore, IIMI has not yet carried out a formal evaluation of the impact of the program. Furthermore, as there are other actors in the field of FMIS, it is rather difficult to fully identify the direct impacts of, and the changes made because of the FMIS program. However, an attempt is made here to illustrate a number of beneficial effects and advantages of this program.

One of the objectives of the FMIS program is to generate interest in FMIS topics among professionals and policy makers and to stimulate activities in FMIS.
The FMIS Network, which has drawn the attention of many irrigation professionals to the potential of FMIS in various parts of the world, is a growing network. The mailing list of the FMIS Newsletter reflects this interest. The mailing list, which is being revised continuously, includes all those who wish to receive the FMIS Newsletter as well as other publications and information on FMIS. The list has grown from 150 members in 1988 to 1300 members in 1992.

The expansion of the Network outside the Asian region was a result of key professionals participating in the Network activities. About 25 percent of the total membership is taking an active part in the Network through the exchange of information and experiences. As the membership increased significantly, more and more professionals from Africa and Latin America have joined the Network. The Network spread to Africa and Latin America as a direct result of people from these two continents taking part in its activities. As a result, more attention was given to initiating FMIS programs in African countries like Egypt, Sudan, Morocco and Nigeria. In Latin America, the FMIS Network has already made significant progress in Argentina in creating awareness of the importance of FMIS among the various institutions in the country. A variety of FMIS support activities have been initiated. The Workshop on Performance Measurement of FMIS, hosted by the Argentinean Network members, was an important step in strengthening the program in Latin America. The activities in Argentina have stimulated interest among the neighboring countries such as Chile, Brazil and in particular Peru, presenting new opportunities for the exchange of information and experiences with Latin American countries. The experiences in traditional FMIS of countries such as Chile or Peru can make an important contribution to the development of FMIS in other parts of the world. Recently, professionals from China have indicated a strong interest in FMIS Network activities, which is an encouraging development.

While it may be true that the size of the network, in terms of numbers, may not accurately reflect the impact of the FMIS program, it is reasonable to assume that if more professionals from a wide range of disciplines are involved there will be more opportunities to diversify the range of interventions in FMIS through research programs, policy changes, new ideas and plans, and their implementation.

Furthermore, in Thailand, the Royal Irrigation Department (RID) has realized the importance of farmers' experience and knowledge in the rehabilitation of FMIS and, as a result, it has changed its approach which had previously been mostly technically oriented. An associated national network, TRIMNET, has played an important role in facilitating this change. In Sri Lanka the experience gained in FMIS is having an impact on the preparation of new irrigation management policies. As a result of lessons learned through various media, including IIMI's FMIS and other programs, the next major FMIS rehabilitation project will be focussed on institution-building, and recently the government has been discussing a policy objective of turning more schemes over to farmers for self-management. Similarly, in Bhutan, the results of activities carried out on FMIS are an important input for framing a new irrigation policy. In Nepal, an action-research program was conducted to examine strategies for assisting existing FMIS. The lessons learned from this program have wide applicability for increasing farmer participation and responsibility in irrigation management. In the Philippines the emphasis has been on translating major findings into intervention strategies and detailed implementation schedules.

The FMIS Network has also received requests from members asking for support in the development of national networks in their countries or for collaboration in their programs. Recently, members from Tanzania and Peru have requested IIMI's collaboration in their FMIS programs.

The involvement of government and agency officials in FMIS workshops and in other activities of the FMIS program has, in some cases, a direct effect on

government strategies. If they are directly involved in the FMIS network and are in a position to influence changes in their own country, then there is an opportunity for direct implementation of new ideas or approaches. For example, in Sri Lanka a government official who has actively participated in the Workshop on the Role of Social Organizers in assisting FMIS has succeeded in getting some of the recommendations made at the Workshop implemented. As a result, in a new program in Sri Lanka, about 250 social organizers will be recruited to help farmers to get organized and improve the irrigation-management performance in FMIS. Similarly, other participants of this particular Workshop from Indonesia and the Philippines have contributed to improving FMIS in their own countries: a Farmer Irrigation Organizing Project has been formulated in the Philippines, and a program to use trained agency staff as social organizers in the turnover program has been developed in Indonesia.

The need for training in FMIS has been highlighted at FMIS Workshops and at Advisory Committee meetings and also by several Network members. Those requests have encouraged several institutions to initiate activities in training independently or in collaboration with IIMI. For example the German Foundation for International Development (DSE) is planning a training program on FMIS for South East Asian participants this year. Furthermore, a curriculum for a training program in FMIS in sub-Saharan Africa has been jointly developed by Wageningen University, Silsoe College, and the University of Southampton.

Dissemination of knowledge to network members and other interested audiences through publications is another way of sharing knowledge and research findings. Although some of the publications are country-specific, there is still an indication of high interest in them and there were several requests for additional copies of these publications to be used for training programs and libraries. One way of evaluating the impact of such publications is through the responses received from network members. They show a high interest in the contents of these publications.