The objectives of the FMIS Program are to: 1) facilitate the development of knowledge and international exchange of information about conditions which enhance the performance of farmer-managed irrigation systems and 2) facilitate the development of knowledge and international exchange of information about which support services are needed and what kind of assistance strategies are successful. During Phase II of the FMIS Program, from 1991 to 1993, a third objective was added, which was to assess and report on key research and development issues for groundwater and lift irrigation, with particular emphasis on South Asia and West Africa.

The Research Component of the FMIS Program currently has five research activities underway. Two of the activities deal specifically with groundwater or lift irrigation (one for Bihar, India and one in West Africa). All deal with management performance assessment and support services for FMIS.

The first research activity is a study of groundwater irrigation development and management within the command area of the Gandak Scheme, a large-scale canal system in northern Bihar, India. Bihar is located within the largest concentration of people in absolute poverty in the world (250 million people). Given its favorable natural resources and rainfall it has considerable untapped potential for development. But it is plagued with institutional and management problems. This activity was a follow-on to an earlier IIMI-India study on conjunctive irrigation water use in Bihar, done in collaboration with the state Water and Land Management Institute (WALMI). The current activity aims to document the extent, nature and performance of farmer-managed groundwater irrigation within a sample command area of the Gandak Scheme and to examine the potential to improve overall performance and sustainability of the water resource base through linking the farmer-managed groundwater sector with the agency-managed surface canal water sector through conjunctive management. This involved several direct-hire research staff working in the field for nine months. A research report is currently being finalized and will be ready later in 1993.

The second, more modest activity is a review paper on the status of groundwater and lift irrigation in West Africa, which, after South Asia, is the second area in the world characterized by severe poverty and high dependence on groundwater and lift irrigation. The paper identifies the current stresses and challenges facing farmer-managed lift irrigation in West Africa, providing data on the extent of irrigation, types of technologies used, water environment, socio-economic influences and development, management and research issues. The paper will be completed before the end of 1993.

Research activities three and four deal specifically with support services for the FMIS sector. The third is a comparative assessment of the status of the FMIS sector in Sri Lanka and Nepal. The cases analyze which organizations provide which types of support services, through what arrangements and with what patterns of specialization and coordination existing among other providers of services. The more innovative and successful programs will be examined in detail, particularly in terms of the arrangements and processes for delivering support services to farmer-managed irrigation systems (FMIS's). Programs included are government organizations, non-government organizations and user or community-based organizations. Recommendations and a short guide for planning and implementing support services programs will be produced.

The fourth activity is the Irrigation Resource Inventory, in collaboration with IIMI Nepal and the Institute of Agricultural and Animal Sciences, at Rampur. This is an action research experiment to develop and apply a participatory method of acquiring an information base as a decision-support tool to enable providers of support services to plan and implement programs which are more comprehensive, equitable and locally appropriate. A large number of irrigation systems in two districts of Nepal will be included in the inventory which will obtain information on performance levels and problems, technology and management methods used, potential for development and types of support needed. A computer database will be developed into a practical decision-support tool for support service organizations. A report which displays the data and important findings will be prepared at the end of 1993.

The fifth research activity is an action research study in the Bicol region of the Philippines, wherein farmers periodically assess irrigation management performance for both the agency-managed main canal of the irrigation system and their own farmer-managed sub-system. Object-oriented assessment forms have been developed and used by the farmers involved to show levels and trends of perform-
ance. This is being used as a feedback correction-
response mechanism by the National Irrigation
Administration (NIA). A report with an assess-
ment of findings and recommendations will be
prepared before the end of 1993.

OTHERS CONDUCTING RESEARCH ON FARMER-MANAGED
IRRIGATION ARE INVITED TO SUBMIT SHORT ARTICLES TO THE
FMIS NEWSLETTER.

(DR. D. VERMILLION IS IN THE LOCAL MANAGEMENT PROGRAM AT
IMI HEADQUARTERS IN SRI LANKA.)

MORE ON GENDER ISSUES

Gender Issues and Irrigation: Some Experiences and Initiatives

We were happy to receive quite a number of reac-
tions to our request for information and experi-
ences on gender related questions in irrigation. The
reactions prove that there is a growing awareness
that effective irrigation planning and management
approaches need to take gender considerations
into account. As a result, there also is a growing
need for information on approaches, mechanisms
and strategies to adequately recognize and address
gender-related issues in the context of irrigation. A
number of people wrote to us, requesting for infor-
mation, training materials, and methodologies. Col-
collecting and evaluating past and on-going experi-
ences is a first good step in developing this infor-
mation. We would therefore like to encourage
members of the FMIS Network to keep in touch
with us and to share with us, and others, your
findings and experiences.

First attempts to improve the gender awareness of
irrigation-related actors have been made in Bangla-
desh, Indonesia, India, Tanzania and Burkina Faso.
The experiences show that involving and accom-
modating both male and female stakeholders in
irrigation systems requires a somewhat different
approach. First of all this is because women water
users' needs and interests are often not well known
and understood, and secondly, because women
often face specific constraints and are more difficult
to reach than men. Women often lack institutional
support, and often have less (secure) access to, and
control of, critical resources.

A participatory approach, communicating and in-
teracting with both female and male farmers can
help to identify and address women’s and men’s
shared and conflicting interests and needs. This is
emphasized in two sets of guidelines, one prepared
by SAWA (a consultancy bureau) and the other by
the Netherlands Embassy in India. These guide-
lines aim to assist irrigation planners and designers
in recognizing and addressing gender considera-
tions in the planning, design and implementation
of irrigation projects.

The need for research aimed at analyzing and un-
derstanding the various agricultural, irrigation and
management activities performed by women and
men and the way in which these are interdepend-
ent was stressed by various respondents. Women
need to be recognized and addressed in their ca-
pacities as producers and providers, and not just in
their domestic roles. In many existing irrigation
systems, projects complying with donor require-
ments to pay attention to women and/or gender
issues has resulted in isolated, small-scale income-
generating projects. The experience has shown that
merely adding a women’s component to existing or
planned irrigation projects often has a very limited
impact, and in itself may cause the aggravation of
gender inequalities in project activities.

Some of the more interesting experiences and ini-
tiatives are summarized in more detail below. If
Network members would like to have more infor-
mation, please either contact us, or communicate
directly with the authors.

(MARGREET ZWAETVEEN, ASSOCIATE EXPERT GENDER ISSUES AND
IRRIGATION, IMI.)

Role of women in Pump Irrigation in
North-East Thailand

Five selected pumping schemes in Northeast Thai-
lard were part of the Mekong Irrigation Programme,
implemented during 1985-1991. The main objec-
tive of this Programme was to increase agricultural
production. The role of women in achieving this
objective is significant, even though many young
women migrate to cities for off-farm work. Once
women are married, their off-farm work decreases
and they assume major roles in regular farming
activities. Women are also responsible for house-
hold work and they often engage in craft produc-
tion. Even though the income women gain in craft
production may be minimal, it serves an important
purpose in reducing the uncertainties of crop-pro-
duction.