IIMI

GENDER & IRRIGATION: ISSUES, METHODS, AND ELEMENTS OF A PROGRAM

a consultancy report

by

Barbara Lynch
Department of Natural Resources
Ithaca, NY 15853

EXECUTIVE SUMMARY

This report argues for attention to gender as a first step in improving irrigation performance through a better understanding of the ways in which different water user groups participate in and benefit from irrigation. Gender differences with regard to water use and water management are common to almost all systems, although specific gender roles vary widely according to class, ethnicity, and degree of acculturation. Studies of the effects of improved agricultural programs and technologies on women suggest that unless one learns how women use water in their productive and domestic roles, it is not possible to predict how they will be affected by changes in water management practices, irrigation system design, or support service provision.

Evolution of Gender Concerns in the Context of Irrigation, the CGIAR, and the International Development Community

Early WID irrigation studies concentrated on women's domestic roles. The contributions of women farmers to food production, the ways in which they manage water, the knowledge that they bring to irrigation, and the ways in which they can benefit or lose from irrigation development have received little systematic study. The interplay of women's domestic and productive roles is of great importance for understanding

(1) the impacts of irrigation technology on production and farmer well being

(2) how gender roles in irrigation affect system performance.

Impeding an understanding of this interplay is the assumption that irrigation policies, technologies and institutions are gender-neutral. This report argues that gender-neutrality must be verified rather than assumed. Verification is made more difficult by the fact that womens activities in irrigation tend to be invisible for normative and practical reasons as well as for reasons having to do with the limitations of conventional agricultural research methods.

Women's activities, knowledge, and concerns can be made visible through gender analysis. Because gender analysis experts tend by and large to be women in the social sciences, the small number of women and social scientists in irrigation bureaucracies may also contribute to the invisibility of women in irrigated agriculture. However, simple affirmative action policies may do little to encourage attention to gender within irrigation agencies.

Research Questions

If it is to contribute to improving the performance of irrigated systems, a program on women and irrigation should begin with an understanding of

(1) women's roles as they involve irrigation and the specific knowledge that women have about crop water needs as a result of their roles,

(2) the barriers to effective flow of information to and from women at various points in the irrigation system, and

(3) the extent of women's access to the resources that would make their work in irrigated agriculture more productive.

Themes within the first broad domain include women's tasks in irrigated agriculture and returns to their labor; women's crops, irrigated farming systems, and water needs; the changing roles of women in households and in water management as a result of demographic shifts in rural areas; and the ways in which legal, statistical, and institutional mechanisms may obscure women's activities in agriculture. Another area of inquiry is the roles of women in irrigation system operation and maintenance and decision making--both at the local level and within irrigation bureaucracies.

Once women's roles, knowledge, and needs are understood, it is important to ask how well they are understood by system managers. This requires a focus on interactions at critical interfaces where information is exchanged: for example,

the household, irrigation staff field visits, extension programs, participating in water user associations, and interactions of water user association officials with agency personnel. Attention should also be given to flows of information within bureaucracies, particularly between men and women and between social and biological scientists and engineers.

The resources of particular importance to women are land, water, labor saving or production increasing technologies, and credit. Where these resources are allocated to heads of households, it is necessary to ask whether women are getting what they need for their own agricultural activities.

If the measures used to determine performance have implicit gender biases, it is not likely that the issues outlined above will be addressed. The gender bias of census data and conventional development data gathering techniques must be examined and their gender neutrality verified. Participatory research approaches that directly engage women farmers in definition of research questions as well as interface analyses can be adapted to the needs of water management.

Is Gender an Appropriate Concern for IIMI

IIMI's mandate encompasses social and cultural factors as they relate to irrigation. IMI's commitment to a sociotechnical approach is based on its understanding that institution building is as important as technological imperatives in irrigation management. Irrigation institutions by their very nature mirror the class, ethnicity, and gender relations of the society as a whole. If social arrangements are central to an understanding of irrigation management issues, gender neutrality cannot be assumed; women's as well as men's concerns must be made visible if we are to learn whether and/or how gender makes a difference.

Specifically, IIMI's central concern with the performance of irrigation systems and with developing research methodologies for assessing performance obliges it to resolve the questions of whether or not performance is gender-neutral and whether it can be measured by using gender-neutral indicators. If IIMI can questions of gender and agricultural performance in a credible and authoritative way, it can act as role model for other CGIAR centers and for national irrigation agencies.

Second, system managers may not be able to meet performance goals if they do not pay particular attention to women's changing roles in agricultural production. Gender analysis which focuses on the productive roles of women in irrigated agriculture and in system management can help irrigation departments to address changing realities in the countryside.

In sum, gender analysis is a tool for understanding and removing impediments to the flow of resources--water, cash, labor, information, etc.--upward and downward in irrigation systems between designers and system users, between the main system and the root zone of crops, between engineers and social scientists within the irrigation bureaucracy, between designated cultivators and farm workers, between support service providers and various groups of cultivators, blockages that weaken system performance. Thus, it should be of practical interest not only to IIMI, but to the irrigation agencies that form its clientele.

A Program for Women and Irrigation

The first order of business for an IIMI Program on Women and Irrigation is to assess the extent to which attention to gender can make a significant difference in water management and ultimately in system performance and the quality of life for families engaged in irrigated agriculture. This requires that women's work at all points in the irrigation process be made visible and that men and women professionals in irrigation be trained to recognize and to address gender questions.

If it is demonstrated that women's participation and systematic articulation of their interests makes a difference in terms of IIMI's general goals, second stage research should be designed to help managers encourage women cultivators to participate fully in irrigation decision making and enhance capabilities and visibility of women in irrigation agencies.

A major program development question is whether women and irrigation activities should be highlighted or brought into the mainstream of IIMI research. Highlighting a women's program will be necessary at the outset to ensure that a gender perspective is incorporated into ongoing IIMI activities.

The IIMI Women in Irrigation program would be divided into two phases, each with the following components:

PHASE I (1992-93)

1. Identification of areas of congruence between women's interests and those of irrigation agencies.

2. Identification of NGOs and research institutions working with rural women; facilitation of dialog with host country irrigation professionals.

3. Familiarization of IIMI staff with relevant gender issues relevant through seminars and workshops, library building, and staff participation in women and development conferences.

4. Addition of a WID specialist to IIMI staff on a temporary basis.

PHASE II (1993-97)

1. Gender methodologies workshop in Colombo designed to increase awareness of innovative research tools and to assess their applicability to irrigation research.

2. Mainstreaming gender issues in IIMI activities. Topics in which gender could be profitably incorporated include turnover, farmer managed irrigation systems, development of performance indicators.

3. Participatory research on the roles of rural women in irrigation management and irrigated agriculture using innovative research methods developed as a workshop product. Study would constitute a module in a comparative series on women and irrigation in various national and ecological settings. A primary objective will be development of materials for training trainers, bureaucrats, and irrigation professionals in the private sector and academia on use of gender analysis to improve irrigation performance.

April 1991.