

water supply and sanitation and institutional development) recently prepared a manual for irrigation consultants to assist them in identifying and addressing gender concerns. The manual focuses on small-scale farmer-managed irrigation systems.

Rather than attempting to give a blueprint for gender-aware planning of irrigation, the manual stresses the need for creating opportunities for information exchange, consultations and negotiations with the different interest groups involved in the project at every stage in the project cycle.

Using existing gender planning frameworks, tools are presented for collecting gender-specific data of relevance in the identification and project formulation stage. The manual shows how technical design criteria, such as the size and location of irrigated plots and irrigation methods relate to the gender-based divisions of labor, responsibilities and access to and control over resources and incomes. Some design options that may be of particular relevance to women farmers and water users are identified. Alternatives to organizational structures based on the 'head of family' or landownership criteria are proposed, which will enable both male and female irrigators to participate in and benefit from irrigation decision making.

The manual lists a number of possible measures which will help ensure that extension, training and credit services are accessible and relevant to women. Some considerations to help monitoring and evaluating irrigation projects in a gender sensitive way are also given.

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Women in the Netherlands-Assisted Irrigation Projects in India

Under the Indo-Dutch Development Cooperation Programme, irrigation has been identified since the early eighties as one of the sectors of bilateral cooperation. During 1987, two projects, one in North Bengal Terai and the other in Uttar Pradesh, were evaluated with regard to the role of women. The studies showed the need for adequately recognizing and addressing both female and male farmers when planning and formulating irrigation projects.

In order not to lose this focus in the formulation and implementation of projects, the Netherlands Embassy prepared a proposal which gives a brief statement on the role of women in Indian agriculture and on the impact of irrigation

development on women. To facilitate and reinforce women's participation in irrigation projects, a number of specific steps for each phase in the project cycle have been identified. These steps stress the need for separate consultations with women and men farmers.

A first requirement in each project is to adequately understand women's productive and reproductive roles and to identify their specific needs and interests. A farmers' household survey, taking into account economic, cultural and social variables is suggested as a good way to collect the necessary information.

The proposal identifies aspects of specific relevance to women that need to be stated in the project document. Among the technical-engineering aspects that require specific attention are, for example:

- 1) facilities for bathing, laundering and drinking water for animals;
- 2) water connections for home compounds and/or land close to the houses; and
- 3) locations for fruit, firewood and fodder trees.

To ensure women's representation in the management of the water it needs to be ensured that they participate in all committees, either individually or on the basis of existing local women's organizations.

An important agricultural aspect is the preservation of local subsistence cash crops, as these provide an important component of the nutritional intake of the family. Agricultural inputs, extension services, credit and technologies should be accessible and relevant to both male and female farmers.

The proposal also provides a number of indicators to be included in the evaluation of the project. These relate to women's access to and control over resources, labor and income. The views of women themselves on the impact of the project on their personal and family situation, in terms of economic, social and personal empowerment constitute perhaps the most important indicator of success.

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Women in Irrigation Management: Case Study in South India

This case study describes the important role of voluntary cooperative efforts of women in irrigation management in a village in Madurai District, Tamil Nadu.