

## LAND, ENVIRONMENT

### f) Irrigation

#### **Why are gender equality issues relevant in irrigation initiatives?**

Although the importance of a gender equality perspective is now generally accepted in domestic water supply and sanitation initiatives, this consensus has not spread to other water sectors.

Yet there are important reasons to go beyond a technical approach to irrigation and incorporate a gender equality/socio-economic perspective.\*

**Ensuring success:** It has been pointed out that the success of any irrigation intervention ultimately depends on the willingness and ability of the system's final users to use the irrigation water efficiently and effectively. The gender division of labour, different responsibilities, and inequalities between women and men mean that women and men often have different incentives to invest time, labour and capital in irrigation and related agricultural initiatives. The failure of planners to understand these differences can lead to the failure to meet overall goals and objectives.

For example, in the 1980s an irrigated rice project in Northern Cameroon failed to attract farmer interest and approximately a third of the area remained uncultivated. The project failed to understand intra-household conflicts over labour allocation and compensation. Women were not assigned land, but were expected to work in their husbands' rice fields. According to traditional practices, women were entitled to a cash payment from their husbands in return for their work in the rice fields. Many women felt the payment was insufficient and reduced their time devoted to rice cultivation, leaving land unused.

**Ensuring environmental sustainability:** although there is no guarantee that the inclusion of women as well as men as beneficiaries and active participants in irrigation initiatives will produce better environmental results, experience shows that the potential for sustainability grows with increased involvement of all affected parties.

An example from Egypt of an initiative aimed at increasing community participation in the design and management of irrigation canals illustrates this point. Given that the canals were often clogged with garbage, research was carried out to develop more environmentally friendly alternatives. The project found that women and men had different

perceptions of the canals and that although women's work and responsibilities were tied to canal maintenance, their needs were not taken into account when the canals were upgraded. As a result, after the consultation and involvement of both women and men, suggestions for improvements to the irrigation system included the establishment of solid waste sites for the disposal of household waste.

**Ensuring that women benefit as well as men:** when gender equality issues are not taken into account, women can become worse off – both absolutely and/or in relation to men.

For example, in Kenya, the Mwea Irrigation Scheme appropriated all available land, investing control in the hands of the male scheme managers. Women lost rights to land they had traditionally used to grow subsistence food crops. Thus, women were forced to turn to their husbands to buy food and became more dependent on men.

#### **What gender equality issues are important in irrigation initiatives?**

Women's and men's interests are influenced by factors such as class, religion and ethnicity. Although each situation requires specific investigation, themes to explore include:

- **Women's and men's productive uses of irrigated water:** water projects often favour men's uses of irrigated water. Planners often only document women's domestic water needs (washing, food preparation, cleaning, etc.) and overlook women's other uses for water: farming, raising animals, and producing products for the market.
- **Potential side-impacts of an irrigation initiative:** these may have different implications for women and men. In one case in India, irrigation contributed to the growth of weeds. This was beneficial for women of landholding families as the increased fodder enabled them to increase milk and ghee production.
- **Land tenure systems** (formal and informal): there are generally differences between women and men tend in access and control over land.
- **Potential and ability to participate** in community organisations and water users' associations: social and economic norms often reinforce unequal participation patterns between women and men and result in unequal decision-making.

\* This discussion draws on Zwartveen (1994). The first and third examples are from that paper as well. The Egyptian example is from Greiser & Rawlins (1996).

Common (often false) assumptions in irrigation planning	
Male heads of households control farm resources and labour	In some regions (including parts of Africa), a husband's ability to mobilise his wife's labour is contingent upon remuneration. Some women may also have sufficient bargaining power to resist their husband's requests for work investments.
Improved income for male farmers will lead to improved quality of life for the entire household	Evidence clearly shows that women and children do not always and automatically benefit from increased income to the male head of household. Research shows that it cannot be assumed that men will allocated increased income to household necessities, their spending priorities may not coincide with family needs.
Farm households are composed of nuclear families.	There is a wide range of 'households' with a complex set of internal dynamics and relationships. It is often difficult to generalise across and within regions.
Aside from domestic tasks, women's labour is confined to assisting their husbands.	Women often have independent income-generating activities apart from work on their husbands' fields. This can include other agricultural production, livestock, crafts or wage-labour.
Irrigated agriculture is the only income and food generating activity of farm households.	Often irrigated agricultural is only one of a number of income and food-generating activities simultaneously pursued by a farm family.
Women's primary interest in water (either through irrigation or domestic water supply programmes) is for family health and domestic use.	Many donors have focused on women's domestic roles. Aside from neglecting women's uses of water for productive purposes, this focus has other problems. According to one analyst, it "reinforces the notion that women have a special responsibility for family sanitation and hygiene. Such efforts do not address a more fundamental issues – that water and sanitation facilities which are used by both men and women, should be a joint responsibility, not only in terms of sharing of labour input but also in terms of sharing of decision-making and associated power" (Rathgeber, 1996).
<i>Sources: Zwarteveen (1994) and Rathgeber (1996)</i>	

Why attention to gender equality is important: two examples	
<p>"Research in Kenya on smallholder rice irrigation in the Kano Plains revealed [gender] inequities. Most women were not active members of the water users' associations in the rice schemes, and those who did attend meetings were not allowed to speak before men or to express opinions in opposition to those expressed by men, despite the fact that women performed up to 61% of the requisite labour in their own and their husbands' plots. Even when both men and women participated in irrigation schemes, their needs and priorities sometimes differed. Women were less interested in night irrigation because cultural norms made it difficult for them to work after dark. Men were interested in having watering places for cattle; women in having communal areas for washing... These different perspectives were not effectively represented by the water users' associations because women were underrepresented and were not given unequal voice in decision-making. The study also found that the water guards in the rice-irrigation area were exclusively male, and men generally tended to receive more water from the irrigation schemes" (Rathgeber, 1996).</p>	<p>"The positive impact of paying attention to gender issues is detailed in the project completion report of the Philippines Communal Irrigation Development Project. This project exceeded physical development targets and appraisal estimates of irrigation intensity and paddy yields. The project's success has been attributed to the full participation of the farmers- beneficiaries. The project partly draws on a tradition of farmer-built irrigation systems and responds to a cultural context n which women exercise independent land rights in the community by:</p> <ul style="list-style-type: none"> <li>▪ Recruiting community organisers, two-thirds of whom are women;</li> <li>▪ Ensuring membership of both spouses in water user associations; and</li> <li>▪ Actively encouraging women to assume leadership roles.</li> </ul> <p>It was also noted that women's membership facilitated the payment of fees, because women controlled family finances" (Quisuimbing, 1994).</p>

References
<p>M. Greiser &amp; B. Rawlins (1996). <i>Issues in Urban and Rural Environments: GreenCOM Gender Reports</i>. Washington, DC.</p> <p>A. R. Quisuimbing (1994). <i>Improving Women's Agricultural Productivity as Farmers and Workers</i>, World Bank Discussion Paper Series No. 37 quoted in FAO (1998). <i>SEAGA Sector Guide: Irrigation</i>. Available at &lt;<a href="http://www.fao.org/sd/seaga">http://www.fao.org/sd/seaga</a>&gt;</p> <p>E. Rathgeber (1996). "Women, Men and Water-Resource Management in Africa" in E. Rached, E. Rathgeber &amp; D.B. Brooks (eds.). <b>Water Management in Africa and the Middle East</b> Ottawa: IDRC. Available at &lt;<a href="http://www.idrc.ca/books/focus/804/index.html">http://www.idrc.ca/books/focus/804/index.html</a>&gt;</p> <p>M. Z. Zwarteveen (1994) <i>Gender Issues, Water Issues: A Gender Perspective to Irrigation Management</i>. Sri Lanka: IIMI..</p>