Non-conventional technology for women

Non-conventional irrigation technologies may have significant potential for use by women on very small parcels of land, near their homes. Irrigated garden agriculture could provide supplemental income and food supplies based on crops with which they are already familiar. The technology itself would enable them to make use of existing water supplies to augment productivity with minimal inputs of capital and labor, and minimal risks to health and environment.

Women's needs, requirements, and vulnerabilities have rarely, if ever, been taken into account in the design and implementation of irrigation projects. The exact specifications of the technology and process of introduction would vary according to the situation, and could only be determined through on-site investigation. In its general outline, however, a technological approach could be developed that would be very widely applicable, to the benefit of women in need of food and income for their families.

The constraints are that the women must have some land, an appropriate supply of water, and familiarity with cultivation of some crops. Preferred sites would be those in less remote areas (not too far from cities or towns), with marketing and credit institutions already in existence, though they need not be highly developed.

Conventional irrigation projects are often designed for mechanization of agriculture, which in turn requires consolidation of land holding, and other complex arrangements for access to capital, machinery, timing of delivery of resources and equipment, and so forth. All these things tend to

preclude women's participation, in part because they need to be near their homes to attend to domestic duties, or because they do not often have access to credit, or because they are insufficiently trained to participate, or because they simply do not have access to the various factors of production. Yet these dynamics occur in areas where women are traditionally food producers, and often continue to be responsible for provisioning their families -- now with reduced means.

The situation of women in such positions could be improved if they could irrigate small "subsistence" plots near their homes with alternative irrigation methods, such as drip irrigation. Because the scale would be so small -- 100 square meters or so-- the investment would be minimal. Mechanization would not be required, nor re-parcelization, and the plots would be adjacent to their houses. Because the labor requirements are so low, including maintenance and weeding, they could incorporate the technology with no appreciable disruption of their existing workload.

If you are aware of any experiments of this kind, or have any comments about the potential of this approach, please contact:

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