

**Cooperation Fund for the Water Sector
Pilot Demonstration Activity
Request Form**

Activity Title: Promoting Gender Equality for Poverty Reduction through Improved Irrigation Management	
Proposer (Name, Div/Dept): Ava Shrestha, Nepal Resident Mission	
Request Date: 9 October 2002	
Region: South Asia	Country: Nepal
Activity Start Date: January 2003	Activity End Date: October 2003
Cost Estimate: \$45,000	
Implementing Organization Contact:	
Consultant Identified?	If so, Consultant(s) Contact:

Short Description:

1. Background and Rationale:

1.1 Insensitivity to gender issues and social stratification has limited the impacts of water development on women. Past efforts focusing on expanding large-scale flood irrigation has benefited the more favored areas with little impact in reducing rural poverty. From a gender perspective, this resulted in channeling women's labor to field crop production at the expense of homestead vegetable production managed and controlled by women. While the workload of women increased, control over the outputs of irrigated field crop production remained primarily in the hands of men, inadvertently weakening women's bargaining position in the family and increasing gender inequality.

1.2 Rural poverty has a woman's face. Small and poor quality land with commensurate low yields has forced male migration in search of wage labor. Reducing rural poverty, therefore, means increasing the capacity of those left behind, primarily of women to cope with the vagaries of the weather through efficient water management, appropriate technology, and innovation through research, dissemination, and adoption of its results. Numerous examples exist in Nepal where the adoption of sprinkler and drip irrigation in water scarce and marginal areas have transformed subsistence households into cash crop producing farm units with increased benefits to women and poorer farmers. These innovations are reported to be particularly suited to women farmers as they build on the existing farming practices of women engaged in vegetable gardening. The technology is more suitable in marginal lands where land leveling and terracing is difficult, and prone to top soil loss and erosion. Studies show that the poor derive even smaller returns from the land in relation to the size of their holdings due to the smaller share of good quality agricultural land, and poor access to technology. Therefore, the technology self targets geographically poor and the less endowed areas and has the potential to have a significant impact in alleviating rural poverty. Additionally, the hill topography offers a natural advantage to exploit the availability of gravitational force required to operating the sprinkler system at no energy cost. It has proven to be environmentally sound, increased water use efficiency four fold compared to traditional irrigation practices, and improved livelihood security by a five fold increase in production, significantly contributing to moving small holders above the poverty line. More importantly, positive impacts have been reported in reducing women's labor, in weeding, land preparation, harvesting and other activities defined as women's tasks. Interventions that reduce women's overall work farm work burden by using more productive on-farm water practices free up women's time for increased participation in community activities, learn and share new ideas, network with women and men, and contribute towards building women's social capital.

2. Objectives:

2.1 The objective of the project is to (i) document the impact of sprinkler/drip irrigation from a gender perspective; (ii) analyze factors promoting/impeding its adoption and diffusion; and (iii) undertake trial innovations with women farmers with the objective of increasing productivity and thereby contribute towards alleviating rural poverty.

3. Scope of Work/Description of Activities:

3.1. The scope of the project includes (i) mapping of districts and within them areas that have shifted to drip/sprinkler irrigation, (ii) preparation of case histories of a representative sample of innovators, including cost benefit analysis, time spent per crop, and women's and men's perception of the benefits of drip/sprinkler irrigation, and the potential for expansion, (iii) identification and selection of farmers interested in adopting the new technology with the assistance of the Department of Agriculture Development Office (DADO), (iv) capacity building training including observation tours to farms using drip/sprinkler irrigation, gender sensitization, simple accounting and book keeping and improved agronomic practices, (v) farmer workshop to disseminate the technology.

4. Implementation Schedule, Institutional Management Arrangements, and Proponent Qualifications:

4.1 The pilot project will work closely with the DADO and the Department of Women Development to identify potential farmers and farms interested/suitable for undertaking field trials. The consultant/firm recruited will collaborate with the DADO to implement the pilot initiative. The project is expected to start in January 2003 and complete by October 2003.

5. Expected Results (outputs/outcomes/impacts):

- Improved women's technical knowledge on efficient water use;
- Increased women to women extension services provided;
- Increased social capital of women as a group;
- More even spread of demand for agricultural labor leading to reduced male migration with positive social impacts to women and children;
- Improved cultural practices: better soil and water management;
- Opportunities for assistance identified for large-scale adoption and diffusion.
- Increased household food security and more balanced nutritional intake
- Women increasingly involved in household decision making
- Increased women's control over resources

6. Measurable Performance Indicators:

- Increase in homestead agricultural production
- Increased availability of cash
- More girls enrolled in primary and secondary schools
- Increased presence of women in community activities

7. Stakeholder Participation:

7.1 Single sex and mixed group discussions will be held at locations and time suitable for women to participate. Men and women using the technology will be brought together to share their experiences. The findings of the field trials will be disseminated with the assistance of the DADO and the DWD.

8. Scope for Replication/Use in Other DMCs:

8.1 The pilot project has the potential to link innovation with effective capacity building, education and awareness raising while addressing issues of poverty and gender inequality.

9. Cost Estimate: \$45,000