

IMPROVING WATER MANAGEMENT AND SUSTAINABILITY

Investment in integrated water supply and demand management that takes into account gendered roles and responsibilities for water management is critical to enhance the sustainability of water resources. Community based efforts for rainwater harvesting for household use and to recharge aquifers can augment water supply and storage in areas of increasing groundwater extraction and rainfall variability.

Rainwater harvesting

In Kusa village in the Nyando District of Kenya's Lake Victoria Basin, the village government worked with women's groups to construct domestic rainwater harvesting units, and develop springs, shallow wells, earth dams and sand dams.



This project was supported by the Regional Land Management Unit (RELMA) of ICRAF, and tanks were provided with subsidies and revolving credit. With assured supply of domestic water at the homestead, women's lives changed dramatically.

Labour, time, and harassment experienced in collecting water was dramatically reduced. Some adaptation efforts to increase accessibility of water in drought conditions may also serve as mitigation efforts when alternative energy sources (other than fossil fuels) are used, as described below.

Adaptation-mitigation efforts for water access

The most critical impacts of drought are decreased availability of drinking water (for both people and livestock), inadequate fodder and food insecurity.



In Gujarat, India the Kutch Abhyian network is supporting women and men in 30 villages to enhance their resilience to drought. Under this programme, Dador village was able to address its water problem by recharging and lifting/pumping water from an old well using solar energy panels. In order to maintain a continuous flow of water in the main well, small check dams for water harvesting have been constructed. The water is used mostly by women for domestic purposes and for livestock. While these technologies can enhance resilience to decreasing water availability, costs of alternative energy sources generally remain high limiting replication elsewhere.

In urban areas, buildings equipped with rainwater harvesting structures, as well as recycling of wastewater can augment water supply, and even reduce environmental degradation.

Recycling Wastewater

In West Bekka, Lebanon, water is already an extremely scarce resource and wastewater is generally left untreated, contaminating soil and groundwater. With support from the Middle East Centre for the Transfer of Appropriate Technology (MECTAT) and the International Development Research Centre (IDRC), women in six urban communities are treating and recycling greywater for domestic use and in home gardens. Women's time spent for water collection diminished and vegetables grown were both used for household consumption and sold at the market generating income.

Water demand management practices that decrease the amount of water required (such as cultivating less water intensive crops and using water efficient technologies like drip irrigation) and reduce the loss in quality of quantity of water as it flows from source through use to disposal (such as maintenance of irrigation channels) are as critical as strategies to augment supply, particularly in light of projected climate impacts. Improved governance processes are needed.

Decentralized participatory water management institutions such as water users associations can facilitate more equitable decision-making about resource use, enhance management and maintenance of irrigation channels and ponds, and facilitate access to water-saving technologies thereby improving the efficiency of water management systems. However, these institutions need to be more representative of women and inclusive of their priorities and needs.

Integrating women's and men's priorities in water management

On the island of Hispaniola, Dominican Republic, over 75% rural communities do not have access to piped drinking water, and women spend significant time obtaining water for family use and household agriculture. 42% of freshwater is used for irrigation and food production, which in turn generates income, but in negotiations to the rights of water and irrigated land, women, and even poor male farmers, are often excluded. MUDE (Women in Development, DR) initiated a project to support community water-management committees, with a minimum of 40% representation of women. Members were trained in democratic decision-making, community participation and gender analysis. Some committees have now prioritized drinking water and household use in water distribution planning.

Source:

<http://www.iwawaterwiki.org/xwiki/bin/view/Articles/GenderWaterandClimateChange>