

Irrigation Benefits Disadvantaged Jordanians

Challenge

Jordan is in the top ten of most water-deprived countries in the world with an arid climate and a shortage in surface water places. Rapidly expanding demands from the growing population, increasing industries, and outdated agricultural practices continue to be a serious drain on Jordan's water resources.

These constraints on the water supply have a significant impact on Jordan's environment and economic growth. Two-thirds of Jordan's water goes to low-value agricultural crops, while uses for urban consumers, industry, and tourism go unmet. The water shortage problem will increase if the demand for irrigation water is not curbed.



Photo: USAID/Jordan

Crops grown using reclaimed water from the Wadi Mousa Wastewater Treatment Plant are a strong contrast to the surrounding Petra mountains.

Results

The three pilot farms have been planted and irrigated with reclaimed water. Close monitoring has revealed no health hazards. A field of barley and vetch at the Jordan University of Science and Technology farm was sold for animal fodder and a field corn crop at the Wadi Mousa site was sold as well. All revenues from the pilot sites go to a fund to help the needy as well as for future equipment and seed needs.

In addition, a greenhouse for ornamental flowers has been constructed and women from the community will be trained in its operations and the cultivation of flowers for commercial sale to the many tourist hotels in the area. An additional 150 acres of land, complete with irrigation systems, has been designated for planting and irrigation by the local Bedouin tribes. Areas that were never farmed before are now opened up to farming and local farmers have the means to earn their livelihood in an otherwise desert area.

Initiative

USAID initiated a \$3.5 million pilot program to demonstrate the safe, reliable, and sustainable use of reclaimed water by the agricultural and industrial communities. Reusing treated wastewater for agriculture is poised to effectively double Jordan's water supply at affordable costs.

The initiative aims at alleviating poverty and improving economic conditions at the local level by providing jobs for local residents and creating income opportunities. Three pilot sites were chosen for this purpose: Wadi Mousa (Petra), Aqaba, and the Jordan University of Science and Technology.