

USAID and GOJ Water and Environment Goals

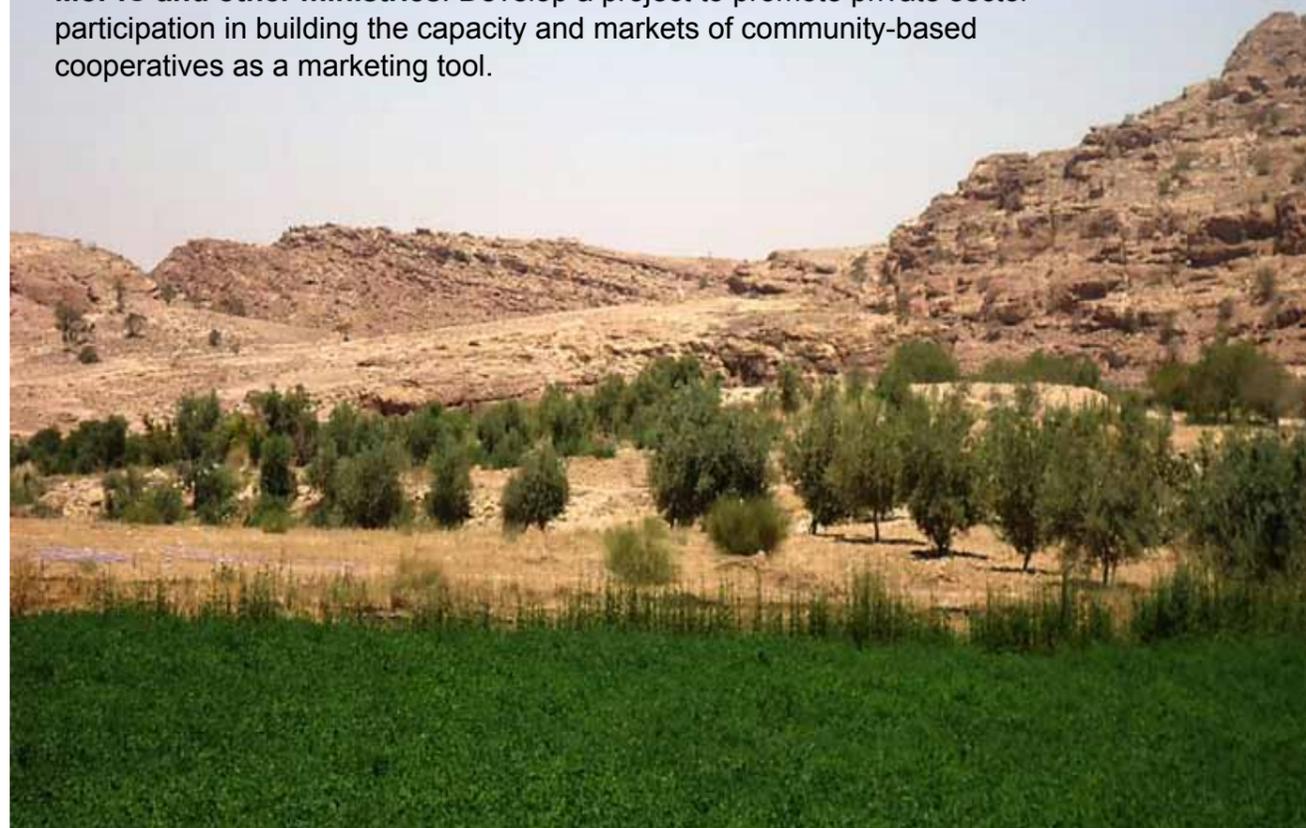
- Protect and conserve fresh water resources
- Promote beneficial and safe reuse of wastewater
- Help communities generate income through water reuse projects
- Help mitigate climate change impacts

Project Recommendations for Next Steps

- **MWI: Take the lead in preparing a national wastewater reuse plan.** Jordan reuses 95% of its treated wastewater, mainly in agriculture, but there is no national wastewater reuse plan. MWI can use lessons from Wadi Mousa, Al-Lajjoun and other USAID water reuse projects to develop this plan.
- **MWI and MoEnv:** Support integration of energy and climate change into the national water reuse plan
- **MWI, MoPIC, and JCC:** Support networking to establish community based cooperative projects in water reuse for fodder crops production. This will promote the systematic development and sustainability of the water reuse sector and reduce the amount of imported fodder (heavily subsidized by the government), thus promoting economic growth.
- **MoPIC and other ministries:** Develop a project to promote private sector participation in building the capacity and markets of community-based cooperatives as a marketing tool.



Project field engineer with local farmers at Wadi Mousa



Water Reuse for Community Livelihood at Wadi Mousa and Lajjoun

Challenge

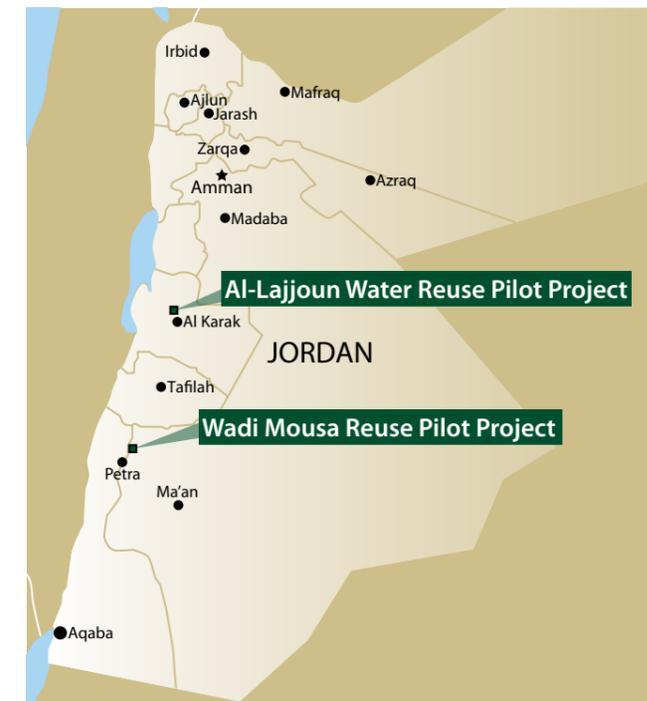
Throughout Jordan, farming communities could benefit from greater access to properly treated wastewater, so they could reuse it to irrigate fields and increase fodder crop yields. Such reuse would reduce subsidies on imported fodder crops and promote Jordan's economic growth. At Wadi Mousa, USAID trained farmers in water reuse and equipment repair and maintenance; supported water users' associations and agricultural cooperatives; fostered networking in reuse communities; supported the establishment of marketing chains and seed cooperatives; and promoted private sector participation. The pilot has helped conserve water resources, generated income for local families, and mitigated climate change impacts. This successful pilot is now being replicated at Lajjoun.

Wadi Mousa

A landmark water reuse pilot project was established at Wadi Mousa in 2002 by the USAID Water Reuse Implementation Project, aimed at enhancing livelihood in the local community. This pilot project was later expanded during the USAID Water Reuse for Agriculture, Industry and Landscaping Project from 2004-2007. These projects were successful in establishing concepts, but the progress they made was not very well sustained, in part because the water distribution and irrigation systems fell into disrepair, and in part because of the need for continued training and re-definition of roles as the players changed.

From 2010-2014, the USAID Water Reuse and Environmental Conservation Project worked closely with farmers, the local water users association and the Hashemite Fund for the Development of Jordan Badia to make the gains from 8 years of USAID interventions far more sustainable.

The project site is adjacent to the Wadi Mousa wastewater treatment plant. Up to 80 hectares is irrigated with reclaimed water for growing fodder crops—mainly alfalfa and barley—and some fruit crops. Farmers practicing reclaimed water irrigation belong to Sad Al- Ahmar Association, commonly known as the Water Users Association (WUA).



The association has 120 members (over 200 people including their families), of which about 42 members are directly engaged in the pilot agricultural activities.

Lajjoun

The farming community in Lajjoun, 140 km south of Amman, has struggled with poor soil and scarce water. Under agreements signed by the MoEnv, the Jordan Cooperative Association and USAID, 50 farmers in Lajjoun will benefit from this new project, which will encourage planting fodder and irrigating the crop with treated water from the Lajjoun wastewater treatment plant. State-of-the-art irrigation networks will be installed, and water pumps will operate using solar energy to reduce energy bills.

The project will make strategic use of scarce water resources, support local farms to address a fodder shortage, and improve the livelihood of local communities. The project is to be jointly supported by USAID and the MoEnv Environmental Compensation Programme, which is funded by the UN Compensation Committee (UNCC).

Elements that have been successful at Wadi Mousa will be replicated here, particularly farmer training and support for water users' associations and agricultural cooperatives.

WRECP Initiatives Sustain Wadi Mousa and Replicate Success at Lajjoun

