

# Al Murunah المرونة

Building Climate Resilience through Enhanced Water Security in MENA

## Jordan Resilient Nature-Based Water Solutions Pilot



Located just west of Amman, Wadi Seer, an area historically known for its natural springs, faces interconnected environmental and socio-economic challenges. **Inefficient water distribution, aging infrastructure, and declining agricultural productivity** have limited income opportunities and strained local livelihoods, contributing to broader economic vulnerability in the community.

**Pilot Project objective:** Safeguard agricultural land and water resources in Wadi Seer by rehabilitating springs, modernizing irrigation infrastructure, reducing water contamination, and promoting sustainable agricultural livelihoods through Resilient Nature-Based Water Solutions (RNBWS).

### Innovations in Water and Farming Systems

The pilot project implements physical works including **rehabilitation of upstream and downstream springs and associated irrigation canals** to improve water supply and reduce water loss, prevent landslides and sedimentation, and prevent contamination and water quality degradation.

The pilot in Wadi Seer also introduces a suite of sustainable agricultural practices, such as solar-powered drip irrigation systems to minimize water loss and reduce fossil fuel consumption. **Crop rotation** methods and **drought-resistant crops and varieties** maintain soil fertility and enhance climate change adaptation. **A demonstration site** affiliated with the cooperative serves as a learning hub, providing hands-on training and expert guidance to local farmers.

### Market and Economic Development

Women will receive **targeted support to improve packaging, marketing, and market linkages** to supplement their traditional roles in olive and fig processing chains.

### Social and Institutional Transformation

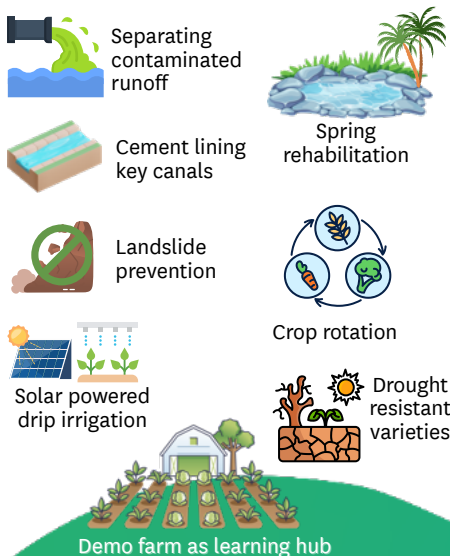
The project established the **Wadi Seer Springs Cooperative (WSSC)**, a local institution dedicated to ensuring long-term water security and agricultural productivity. The cooperative is empowered to drive local business growth, create leadership opportunities for women, and coordinate community efforts to improve water use and agricultural practices.

In parallel, the pilot introduced a multi-level governance framework that includes a local **task force** and a **National Project Advisory Committee (NPAC)**. The task force will foster dialogue among policy analysts, practitioners, and stakeholders at all levels, promotes inclusive engagement by identifying training needs, and acts as a liaison to the NPAC. The NPAC, in turn, provides strategic policy guidance, engages on workplans, offers oversight, and addresses challenges that arise during implementation.

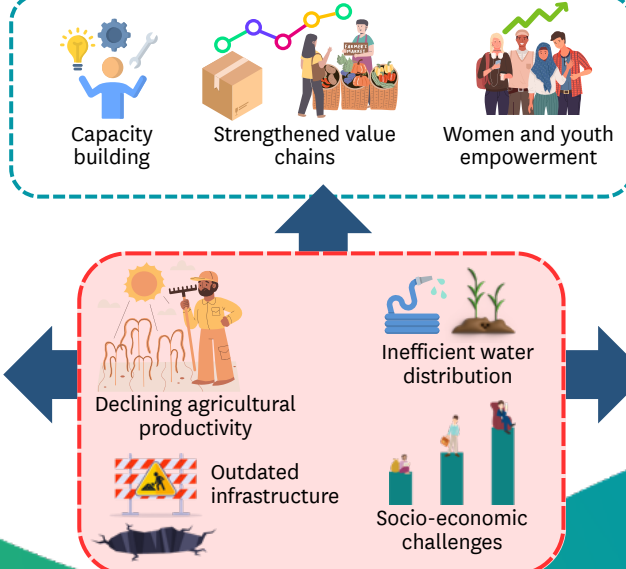
### Anticipated project impacts



### Reduce water loss, protect springs, sustainable crop systems



### Support capacity building, strengthen value chains, and empower women and youth



### Establish cooperative leadership, manage irrigation, and drive local growth



## Capacity Building

Targeted training sessions equip farmers, cooperative members, and local leaders with both technical and entrepreneurial skills, with a focus on engaging women and youth. These sessions cover agricultural water management, crop production, agri-processing, marketing, project management, and gender inclusion. Training is tailored to specific groups: smallholder farmers focus on water management and crop production, female entrepreneurs receive training in agri-processing and sales, cooperative and irrigation canal committees members strengthen administrative and financial skills, extension services enhance community engagement, and national government officials are supported in policy implementation and decision-making.

## Anticipated Impacts and Scaling Potential

The intervention enhances water security, boosts agricultural productivity, and supports the enabling environment for long-term sustainable watershed and agro-ecosystem management. It will provide evidence for how integrated, community-driven solutions can improve climate change adaptation and agricultural livelihoods in comparable contexts and environments.

## Strategic Alignment with Climate Adaptation and Sectoral Policies

This pilot supports implementation of Jordan's National Adaptation Plan and 2023-2040 Water Sector Strategy by tackling water scarcity, land degradation, and rural vulnerability in Wadi Seer. It reinforces national priorities around integrated water resource management, agricultural resilience, and gender-responsive development. The project delivers a scalable model for sustainable, community-driven adaptation. It also aligns with Jordan's Climate-Smart Agriculture Strategy and the 2020-2025 National Strategy for Women, making it a strong candidate for cross-sector investment.



### Wadi Seer Springs Cooperative (WSSC)

**Local Task Force:** Ministry of Water and Irrigation, Ministry of Environment, Ministry of Agriculture, Greater Amman Municipality, and the local community.

**National Project Advisory Committee (NPAC):** Ministry of Water and Irrigation, IUCN, Ministry of Agriculture, Ministry of Environment, Inter-Islamic Network on Water Resources Development and Management (INWRDAM), and an independent gender expert.



Images: (1) Wadi Seer pilot site. Photo credit: Malek Abu Hjeelah/IUCN, (2) Wadi Seer springflow, midway down the pilot area. Photo credit: Stephen Fragaszy/IWMI