MIRRA

Methods for Irrigation and Agriculture

لتطوير أساليب الري والزراعة

NEWSLETTER

OCTOBER 2025 | ISSUE NO. 31

TABLE OF CONTENTS

WOMEN EMPOWERMENT IN AGRICULTURE

Women of the Northern Jordan Valley: Harvesting Strength, Cultivating Futures

In honor of **Breast Cancer Awareness Month**, we dedicate this article to the woman whose strength, compassion, and resilience shine both in their fields and in their families.

In the fertile lands of the Northern Jordan Valley, Jordan's food basket, agriculture is more than a livelihood, it is a legacy. At the heart of this legacy are women whose hands nurture the soil, whose resilience withstands the challenges of climate and economy, and whose determination sustains families and communities.

These women rise with the sun, balancing the demands of family life with the rigors of agricultural work. They plant, harvest, sort, and market produce, often carrying a double burden of responsibility. Yet, in the face of limited resources, fluctuating market prices, and harsh working conditions, they embody perseverance.

Their contribution is not only measured in crops harvested but in futures cultivated. By securing food for their families and contributing to local markets, they play a central role in ensuring food security in Jordan. Their knowledge of traditional farming methods, combined with their eagerness to learn modern techniques such as climate-smart agriculture and water-saving technologies, which they were introduced to while working at MIRRA's Climate-Smart Farm illustrates their adaptability and vision for sustainable farming.

Picture 1: Women harvesting okra at MIRRA's Climate-Smart Farm in the Northern Jordan Valley, where tradition meets innovation in sustainable agriculture.

Among these dedicated women is Um Ahmad, who has been working in agriculture for approximately 20 years. She expresses her deep appreciation for MIRRA's Climate-Smart Farm, noting that it provides a comfortable and supportive environment for women farm workers. Unlike many other farms, MIRRA's facilities include clean and private restrooms for women, something she says is rare to find elsewhere in the Jordan Valley. For Um Ahmad, agricultural work is not just a profession; it is her family's main source of income. She values the work because it allows her to interact with kind and respectful people, although, as she notes, the nature of individuals she encounters can sometimes vary.

Picture 2: Um Ahmad, one of the dedicated women farmers at MIRRA's Climate-Smart Farm, carefully plants cherry tomato seedlings inside the greenhouse.

Um Ahmad is not alone in her appreciation. Many of the women farmers visiting MIRRA's Climate-Smart Farm expressed how impressed they were by the farm's advanced technologies and well-organized facilities. They were particularly fascinated by the soilless agriculture system using coco peat, which demonstrates modern, resource-efficient production that conserves water while improving crop quality. The farm's clean environment, organized layout, and facilities designed to meet women's needs left a positive and lasting impression on them.

MIRRA's Climate-Smart Farm
proudly hosts women farmers like Um Ahmad

providing them with a platform to explore innovative practices and strengthen their skills, while honoring their invaluable role in shaping resilient, sustainable agriculture for Jordan.

Despite their vital role, women farmers often face barriers to land ownership, financial resources, and decision-making opportunities. Empowering them through training, access to credit, cooperative structures, and policy support is not merely a matter of equity it is a necessity for the resilience of Jordan's agricultural sector.

The story of the women of the Northern Jordan Valley is one of strength, endurance, and hope. As they cultivate the land, they also cultivate opportunities for future generations. Supporting them means investing in food security, rural development, and social equity.

Their voices, their labor, and their dreams deserve to be seen and heard. In their hands lies not only the harvest of today, but the seeds of tomorrow.

MIRRA remains committed to empowering women farmers across Jordan, equipping them with the knowledge, tools, and opportunities they need to lead the way toward a more resilient and equitable agricultural future.

Picture 3: Tomato seedlings grown in the greenhouse using a soilless agriculture system with coco peat at MIRRA Climate Smart Farm.

RESEARCH AND DEVELOPMENT

Building Water Resilience Together: Upcoming Multi-Actor Surveys for the NUSTALGIC Project

Water is life, but in regions facing climate stress, water is also challenge, opportunity, and responsibility. Within the **NUSTALGIC** project (**N**eglected and **U**nderutilized **S**pecies and wa**T**er h**A**rvesting for bui**L**din**G** cl**I**mate **C**hange resilience), a series of multi-actor surveys will bring together farmers, water cooperatives, local authorities, and private sector actors. These surveys aim to build dialogue, connect communities, and design sustainable solutions for water security and agricultural resilience.

Why Surveys, Why Now?

NUSTALGIC combines two key strategies:

Reviving Indigenous Water Harvesting Technologies (IWHTs) such as pitting and subsurface channels.

Scaling climate-resilient Neglected and Underutilized Species (NUS) like faba beans, cactus, lentils and garbanzo beans.

To ensure these innovations succeed, we must listen to the people who live under water stress every day. Their perspectives, needs, and capacities will shape the pilots and guarantee that interventions are not only technically sound but socially accepted and economically viable.

Who We Are Meeting

Farmers

Central to the process. Surveys will explore farming practices, access to water, traditional knowledge, and openness to innovation, while addressing gender, youth, and social inclusion.

Water Cooperatives

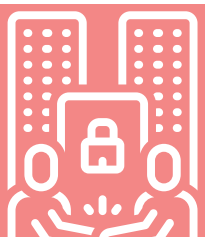
Manage local water systems. Surveys will study governance, equity, technical capacity, and inclusion of women and youth in leadership.

Local Authorities and Water Officials

Bridge local needs and national policies. Surveys assess infrastructure, capacity, and policy alignment, highlighting barriers and opportunities for integrating pilots into national water strategies.

Private Sector Actors

Suppliers and service providers who can enable market-driven water solutions. Their input helps identify business opportunities, technical needs, and pathways for sustainability.



What We Hope to Learn

The surveys aim to:

- Map local water challenges, infrastructure conditions, and governance systems.
- Identify suitable sites for specific technologies and crops.
- Understand community dynamics, inclusivity, trust, and opportunities for collaboration among different actors.
- Explore how policies can support and integrate traditional water systems.

This information will guide the project in selecting pilot sites and designing interventions that are equitable and impactful.

Goals Beyond Data

These surveys go beyond data collection to promote:

Inclusivity: Engaging women, youth, and marginalized groups.

Empowerment: Amplifying farmers' and cooperatives' voices.

Collaboration: Encouraging dialogue among farmers, cooperatives, officials, and businesses.

From Surveys to Action

Survey findings will guide three main work packages:

WP2: **Demonstrating Indigenous Water Harvesting Technologies.**

WP3: **Testing and scaling Neglected and Underutilized Crops.**

WP6: **Ensuring inclusive participation across genders and social groups.**

Meeting with communities, cooperatives, and institutions will create shared visions where traditional knowledge meets modern innovation.

Looking Ahead

The surveys will represent a critical first step in building climate resilience. They will be the compass that points us toward households and institutions most ready to lead the way. But they will also remind us that resilience is not built in isolation—it is co-created across actors, generations, and sectors.

By documenting voices, experiences, and aspirations, these surveys will enable NUSTALGIC not only to pilot innovative technologies and crops but also to spark a broader movement for sustainable water and food systems.

In the coming months, as teams fan out across villages, cooperatives, municipalities, and markets, we invite stakeholders to see themselves not just as respondents but as co-authors of resilience. The story we are beginning to write together is one where ancestral knowledge meets new science, where farmers and officials collaborate, and where the private sector fuels sustainable change.

Because when water is scarce, every drop matters. And when knowledge is shared, every voice counts.

MIRRA participates in "Voices of the Zarqa River: People, Practices, and Memories"

Picture 1: Zarqa River

As part of Environment & Climate Month in Jordan, MIRRA participated in the event "Voices of the Zarqa River: People, Practices, and Memories," organized by the Institut Français du Proche-Orient (Ifpo) and the Agence Française de Développement (AFD) at Jadal for Knowledge and Culture in Amman on October 30th, 2025.

The event brought together researchers, artists, and environmental practitioners to shed light on the ecological, social, and cultural dimensions of the Zarqa River — one of Jordan's most vital yet most challenged waterways. The exhibition featured historical photographs, sound installations, and films that collectively traced the transformation of the river and its impact on surrounding communities.

Picture 2: Dr. Samer Talozi speaking during the "Voices of the Zarqa River" roundtable.

During the roundtable, Dr. Samer Talozi addressed the environmental degradation of the Zarqa River, explaining the factors that have led to its current condition. He highlighted how the deterioration stems from a delayed understanding of essential water management concepts particularly the connection between surface and groundwater systems along with rapid urbanization, industrial expansion, and insufficient enforcement of environmental regulations. Dr. Talozi emphasized that the river's future depends on rethinking these interconnected systems and adopting a more integrated, sustainable approach to water resource management.

MIRRA also contributed to the visual storytelling of the exhibition through a series of short films and photos portraying the Zarqa River, King Talal Dam, and the Jordan Valley. These visuals showcased the organization's efforts in documenting local realities and promoting awareness of water resource challenges in Jordan. In addition, MIRRA distributed informational booklets and brochures highlighting its environmental initiatives and community-based projects.

Picture 3: MIRRA's informational booklets and brochures distributed during the "Voices of the Zarqa River" event

The event served as a space for dialogue between scientists, artists, and citizens all sharing their "voices" and perspectives on how the river shapes, and is shaped by, human life. Through its participation, MIRRA reaffirmed its commitment to advancing integrated water management, community engagement, and environmental education in Jordan and beyond.

Picture 4: Exhibition rooms featuring photographs, podcasts, and short films including MIRRA's documentary on the Zarqa River and the Jordan Valley.

https://mirra-jo.org
info@mirra-jo.org
941454 Amman 11194 Jordan
Methods for Irrigation and Agriculture - MIRRA
7 Abdelaziz Al-Thaalibi Street, Shmeisani, Amman, Jordan.

MIRRA
Methods for Irrigation and Agriculture
لتطوير أساليب الري والزراعة