MIRRA

Methods for Irrigation and Agriculture

لتطوير أساليب الري والزراعة

NEWSLETTER

OCTOBER 2026 | ISSUE NO.42



TABLE OF CONTENTS

1 PAGE 02

INNOVATION AND BUSINESS SUPPORT

From Service Line to the Field: SMEs Explore MIRRA's AgriTech Piloting Capabilities

2 PAGE 05

RESEARCH AND DEVELOPMENT

Rediscovering Underutilized Crops Through Local Food Traditions: NUSTALGIC Recipe Day in the MIRRA Climate Smart Farm

3 PAGE 07

RESEARCH AND DEVELOPMENT

MIRRA Hosts Jordan Valley Authority to Highlight Water Harvesting Solutions for Climate-Resilient Agriculture

INNOVATION AND BUSINESS SUPPORT

From Service Line to the Field: SMEs Explore MIRRA's AgriTech Piloting Capabilities



Picture 1: Eng. Ammar Namarneh, MIRRA, presenting the farm's infrastructure and explaining how MIRRA can support SMEs with on-farm testing, performance validation, data collection, and farmer engagement.

Following the launch of the AgriTech Service Line in September, MIRRA welcomed participating SMEs to its **Climate Smart Farm in the Jordan Valley on 29 September 2026** for a dedicated Field Day under the **Piloting Track**.

The visit marked an important transition from introducing the Service Line to showing SMEs, in practical terms, how MIRRA can support the testing, validation, and refinement of AgriTech solutions under real agricultural conditions.

Bringing the Piloting Track to life

The Piloting Track, led by MIRRA is designed for SMEs that already have an advanced prototype, Minimum Viable Product, or functional market-ready solution and are looking to move beyond controlled development toward real-world validation.

During the Field Day, MIRRA presented its Climate Smart Farm and explained how its infrastructure, technical expertise, farmer networks, and field experience can be used to support SMEs throughout the piloting process.



Picture 2: Participating SMEs touring MIRRA's greenhouse facilities and learning about the available production infrastructure and photovoltaic system that can support real-world technology testing and demonstration.

The session provided participating companies with a clearer understanding of what field validation can involve: defining suitable testing conditions, monitoring technology performance, generating field data, collecting farmer and user feedback, and using the results to improve both the technology and its value proposition.

Inside MIRRA's Climate Smart Farm

The visit began with a presentation introducing the farm, its different sections, and examples of technologies that MIRRA has tested and demonstrated over the years.

MIRRA's Climate Smart Farm serves as a **testing and demonstration hub for agricultural innovation**, allowing technologies to be evaluated, adapted, developed, and refined under real farming conditions in the Jordan Valley.

Participants were introduced to several components of the farm's infrastructure, including irrigation and pumping systems, filtration and fertigation units, monitoring equipment such as weather stations, flow and pressure sensors, as well as controlled cultivation facilities including the soilless multi-span greenhouse.

The visit also highlighted MIRRA's experience in structuring field experiments and comparative trials. Different sections of the farm can be used to establish controlled comparisons and generate evidence of technology performance under consistent agricultural conditions.

Seeing the facilities first-hand

Following the presentation, the SMEs joined the MIRRA team for a guided tour of the farm. The tour gave participants the opportunity to see the facilities first-hand and discuss how different types of technologies could potentially be integrated into field trials. Rather than discussing piloting only in theoretical terms, SMEs were able to explore the physical infrastructure, understand the available testing environment, and consider what would be required to validate their own solutions.

The visit also created space for direct technical discussion. SMEs asked questions about **the AgriTech Service Line, MIRRA's role within the Piloting Track, the type of support available, and how technologies could be tested and evaluated**.

These exchanges were particularly important because each solution comes with different technical, agronomic, operational, and data requirements. The Field Day allowed MIRRA and the SMEs to begin discussing those requirements in relation to an actual farm environment.



Picture 3: Eng. Ammar Namarneh, MIRRA, introducing SMEs to the greenhouse control and fertigation infrastructure and discussing how these systems can be integrated into field-validation activities.

More than a demonstration site

The Field Day also reinforced that MIRRA's role is not limited to providing physical space for technology demonstrations. Through the AgriTech Field Lab, MIRRA aims to help SMEs generate meaningful evidence on whether a solution works under real production conditions and whether it creates value for the intended user.

This can include assessing **agronomic performance, technical reliability, resource efficiency, operational practicality, potential cost savings, and user experience**. Farmer engagement and feedback can then complement the technical results, helping SMEs understand not only whether their technology functions, but also whether it responds to actual farmer needs and has realistic adoption potential.

This field-based approach builds on MIRRA's long-standing role as a bridge between technology development and agricultural practice. MIRRA has worked with technology providers and research partners to test, adapt, validate, and developed agricultural technologies, using applied field research to support solutions that are relevant to local farming systems.

As the AgriTech Service Line moves forward, MIRRA will continue to place field realities at the centre of innovation—connecting SMEs with real farming conditions, technical expertise, and end users so that promising technologies can be tested, refined, and ultimately developed into solutions that are relevant, credible, and ready for wider adoption.



Picture 4: MIRRA team with participating SMEs during the visit to MIRRA's Climate Smart Farm, where companies explored the facilities and field-validation support available through the AgriTech Service Line.

Rediscovering Underutilized Crops Through Local Food Traditions: NUSTALGIC Recipe Day in the Northern Jordan Valley



Picture 1: Participants and Eng. Sewar Saleh from MIRRA gather during the third NUSTALGIC Recipe Day at MIRRA's Smart Climate Farm in the Northern Jordan Valley.

MIRRA hosted the third Recipe Day at its Smart Climate Farm in the Northern Jordan Valley, in collaboration with Ro'ad Al-Aghwar Charity Association, as part of the NUSTALGIC project, funded by the PRIMA programme.

The event brought together community members and project partners to raise awareness about neglected and underutilized crops (NUS), highlighting their nutritional value, their potential to support more sustainable and resilient food systems, and the importance of reintroducing these traditional ingredients into our daily diets.

Through interactive discussions and hands-on cooking activities, participants explored the relationship between food, cultural heritage, and gender roles, with a particular focus on encouraging shared responsibilities in food preparation and challenging common perceptions about the roles of women and men in the kitchen.

Picture 2: Eng. Sewar Saleh from MIRRA highlights the importance of neglected and underutilized species (NUS), emphasizing their nutritional value and potential to contribute to more sustainable and resilient food systems.





Picture 3: Ms. Nida crushes garlic as part of preparing Huraaq bi Isba'o.

One of the most engaging moments was the discussion about how cooking is perceived differently for women and men. Nida, one of the participating women, shared an insightful observation

"Men are often more widely recognized for their cooking because cooking is more likely to be treated as a profession or career for them. This visibility does not necessarily mean that men are better cooks; rather, it reflects the different opportunities and recognition that women and men receive in the culinary field."

Her reflection highlighted the importance of looking beyond traditional gender expectations and recognizing that cooking skills are not determined by gender. It also opened the door to a broader conversation about the value of women's contributions to food preparation at home and the recognition they deserve for their knowledge, experience, and culinary skills.



Picture 4: Women prepare the dough and chop coriander while exchanging views on gender roles in cooking, highlighting the importance of recognizing women's contributions and encouraging shared responsibilities in food preparation.



Picture 5: Mr. Ashraf Mahawesh rolls the dough as part of the preparation of Huraaq bi Isba'o.

A key highlight of the day was preparing Huraaq bi Isba'o, a traditional dish that offered an opportunity to celebrate culinary heritage while exploring the use of local ingredients and connecting food traditions with nutrition and sustainable food systems.

The Recipe Day demonstrated how community-based activities can bring together sustainable agriculture, nutrition, cultural heritage, and gender equality. By celebrating local food and encouraging open conversations about shared responsibilities, the event contributed to promoting more inclusive and sustainable food practices.

Small steps, rooted in local traditions, can make a meaningful difference in building more sustainable food systems and fostering more equitable roles in our communities.

MIRRA Hosts Jordan Valley Authority to Highlight Water Harvesting Solutions for Climate-Resilient Agriculture

As Jordan faces increasing water scarcity and climate-related challenges, improving agricultural water management has become more important than ever. On 26 October 2026, MIRRA welcomed representatives of the **Jordan Valley Authority (JVA)**, farmers, and local stakeholders to its Climate-Smart Farm in the Northern Jordan Valley for a field day focused on water harvesting, sustainable agriculture, and practical solutions to strengthen farmers' resilience.

The event was organized as part of the **NUSTALGIC project**, which promotes the integration of water-harvesting technologies and neglected and underutilized crop species to support climate adaptation and sustainable agricultural production.

During the field day, MIRRA presented practical water-harvesting approaches suited to Jordanian farming conditions, including **rainwater collection, surface runoff management, and techniques to improve soil moisture retention**. The presentation also explored how combining water harvesting with crops such as barley, lentils, chickpeas, and faba beans could help diversify agricultural production and strengthen resilience to drought.



Picture 1: Eng. Anat Radaideh, representing the Jordan Valley Authority (JVA), discusses practical opportunities to enhance agricultural water management through rainwater harvesting, improved utilization of existing farm ponds, and efficient water storage solutions to strengthen climate resilience in the Jordan Valley.

Representatives of the JVA highlighted the growing pressure on Jordan's limited water resources, noting that annual water availability is **approximately 100 cubic meters per person**, far below the internationally recognized absolute water scarcity threshold of 500 cubic meters

A key focus of the discussion was the potential to improve existing farm infrastructure. The JVA presented opportunities to adapt agricultural ponds, currently used primarily for irrigation water storage, to also capture rainfall and runoff. According to the presentation, **one dunum of greenhouse rooftops could potentially collect 250–350 cubic meters of rainwater annually**, depending on rainfall conditions. Integrating rooftop collection systems with existing ponds, sedimentation facilities, and evaporation-reduction measures could provide farmers with supplementary irrigation water while improving overall water-use efficiency.



Picture 2: Eng. Ammar Namarneh, representing MIRRA, presents practical water-harvesting techniques and their potential to improve water-use efficiency, support sustainable agricultural production, and strengthen farmers' resilience to water scarcity and climate change under the NUSTALGIC project.

The field day emphasized the importance of connecting technical knowledge with farmers' needs and institutional expertise. Through its Climate-Smart Farm and its involvement in NUSTALGIC, MIRRA continues to promote locally appropriate agricultural innovations and facilitate knowledge exchange among farmers, researchers, and water-sector institutions.

By bringing the Jordan Valley Authority and farming communities together, MIRRA reinforced the importance of collaborative, practical approaches to water conservation, contributing to a more sustainable and climate-resilient agricultural future for Jordan.

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

Copyright © 2026, Methods for Irrigation and Agriculture. All rights reserved.