



Methods for Irrigation and Agriculture
لتطوير أساليب الري والزراعة

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Rethinking Food Waste: The Power of Our Everyday Choices

*Food loss and waste can happen at every stage of the food journey from production and harvesting to storage, retail, and consumption. While many losses occur before food reaches consumers, **our everyday choices at home also play an important role.***

A CHALLENGE FOR JORDAN

Picture1: Spoiled Vegetables and fruits thrown away after going unused



Food waste is a global challenge, and Jordan is no exception. According to Jordan's first national food waste studies, launched in 2025, households are the largest contributors to food waste in the Kingdom, with an estimated **81.3 KG** of food wasted per person each year.

This matters beyond the food itself. When food is wasted, we also waste the water, land, energy, labour, and money invested in producing and bringing it to our tables. This connection is especially important in Jordan, **where water resources are limited and food security is a growing concern.**

From Farm to Fork

Reducing food loss and waste requires action across the entire food value chain.

This is the approach taken by the FUSION project, which works to reduce food loss and waste across the Mediterranean food chain through a combination of technologies, good practices, training, and digital solutions. The project addresses challenges ranging from post-harvest handling and storage to food quality, shelf life, and consumer engagement.

But solutions do not stop at the farm or the supply chain. Consumers are also part of the food system and part of the solution.

Small Choices, Real Impact

At home, reducing food waste can start with simple habits:

Plan and Buy Smart:

Plan your meals, make a shopping list, and buy only what you are likely to use.

Store and Prepare Food Wisely:

Store food properly, keep items that need to be used soon visible, and prepare appropriate portions.

Use What You Have and Reduce Waste:

Save and reuse leftovers, find creative ways to use ripe fruits and vegetables, and pay attention to what your household throws away and why.

FUSION also explores ways to turn food loss and by-products into new food products, including dehydrated foods and tomato and pepper concentrates or purées. These approaches are planned to be validated at the domestic level, showing how food that might otherwise be wasted can be given a new value.

FROM EVERYDAY CHOICES TO A SUSTAINABLE FUTURE

Food loss and waste is a shared challenge that requires solutions across the entire food chain. Technology, better practices, and consumer awareness all have a role to play.

For Jordan, reducing food waste means making better use of the resources behind our food and building a more resilient food system.

It can start with something as simple as planning the next meal, using what we already have, or saving yesterday's leftovers.

Food has value. Let's make every choice count.



Pictures 2-4: Shoppers selecting and purchasing fresh vegetables at the Downtown Market.

Chickpea: A Nutritious Crop for Climate-Resilient Agriculture

Picture 1: Chickpea plants at MIRRA's Climate-Smart Farm - 12 April 2026.



Overview

Chickpea (*Cicer arietinum* L.) is an important legume crop with high nutritional value and strong potential to support sustainable and climate-resilient agricultural systems. As a drought-adapted legume, chickpea can contribute to agricultural diversification and soil health, particularly in dry and semi-arid environments. Within the NUSTALGIC approach, legumes are promoted alongside other underutilized crops to strengthen resilient farming systems and support sustainable food production.

Why Chickpea Matters

Nutritional Benefits

- Rich source of plant-based protein
- High in dietary fiber
- Contains important vitamins and minerals
- Low in fat
- Supports healthy and balanced diets

Food Security Value

- Provides an affordable source of plant-based protein
- Can be stored for extended periods
- Contributes to diversified and resilient food systems
- Has strong potential for use in a wide range of traditional and innovative food products

Quick Facts



Crop type

Legume



Water needs

Low-moderate



Main Advantage

Plant-based protein
and nitrogen fixation



Farming system

Rainfed and
irrigated agriculture

Environmental Benefits

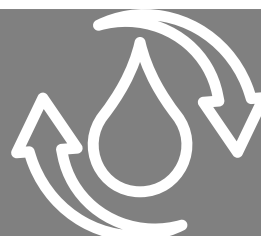
Improving Soil Fertility

As a legume, chickpea improves soil fertility through biological nitrogen fixation, reducing the need for synthetic fertilizers and benefiting subsequent crops in rotation.



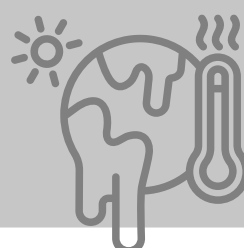
Efficient Water Use

Chickpea is well suited to dry and semi-arid environments, making it a valuable crop under conditions of water scarcity.



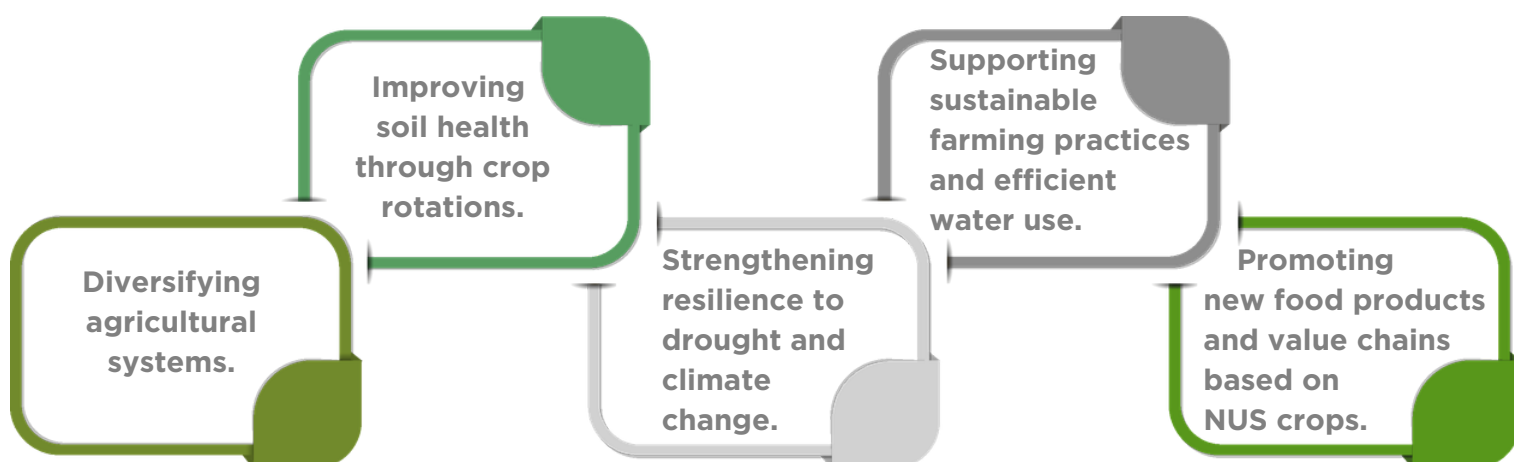
Climate Change Adaptation

- Adapted to dry and semi-arid environments
- Supports diversified and low-input farming systems
- Strengthens agricultural resilience to drought and climate change



Chickpea in the NUSTALGIC Project

Within the NUSTALGIC framework, chickpea and other legumes contribute to:

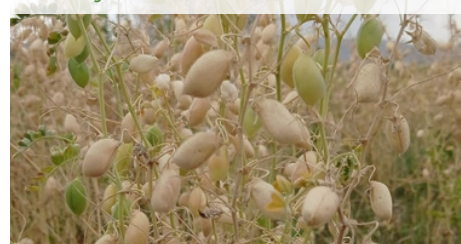


NUSTALGIC promotes drought- and disease-resilient legumes alongside improved agronomic and conservation agriculture practices.

Key Message

Chickpea is more than a traditional legume—it is a valuable crop for building resilient and sustainable food systems. Through its nutritional value, contribution to soil health, and suitability for dry and semi-arid environments, chickpea can support agricultural diversification and strengthen resilience to climate change.

Picture 2: Chickpea plants at MIRRA's Climate-Smart Farm - 3 May 2026.



Jordan's agricultural sector is seeing a growing range of technologies and innovative solutions aimed at improving productivity, resource efficiency, and farm management. Yet, for these innovations to create meaningful impact, they need to respond to the realities and needs of farmers.



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As part of the AgriTech Field Lab, implemented within the GIZ-supported GAIN initiative, MIRRA conducted a mapping of AgriTech SMEs and businesses operating in Jordan.

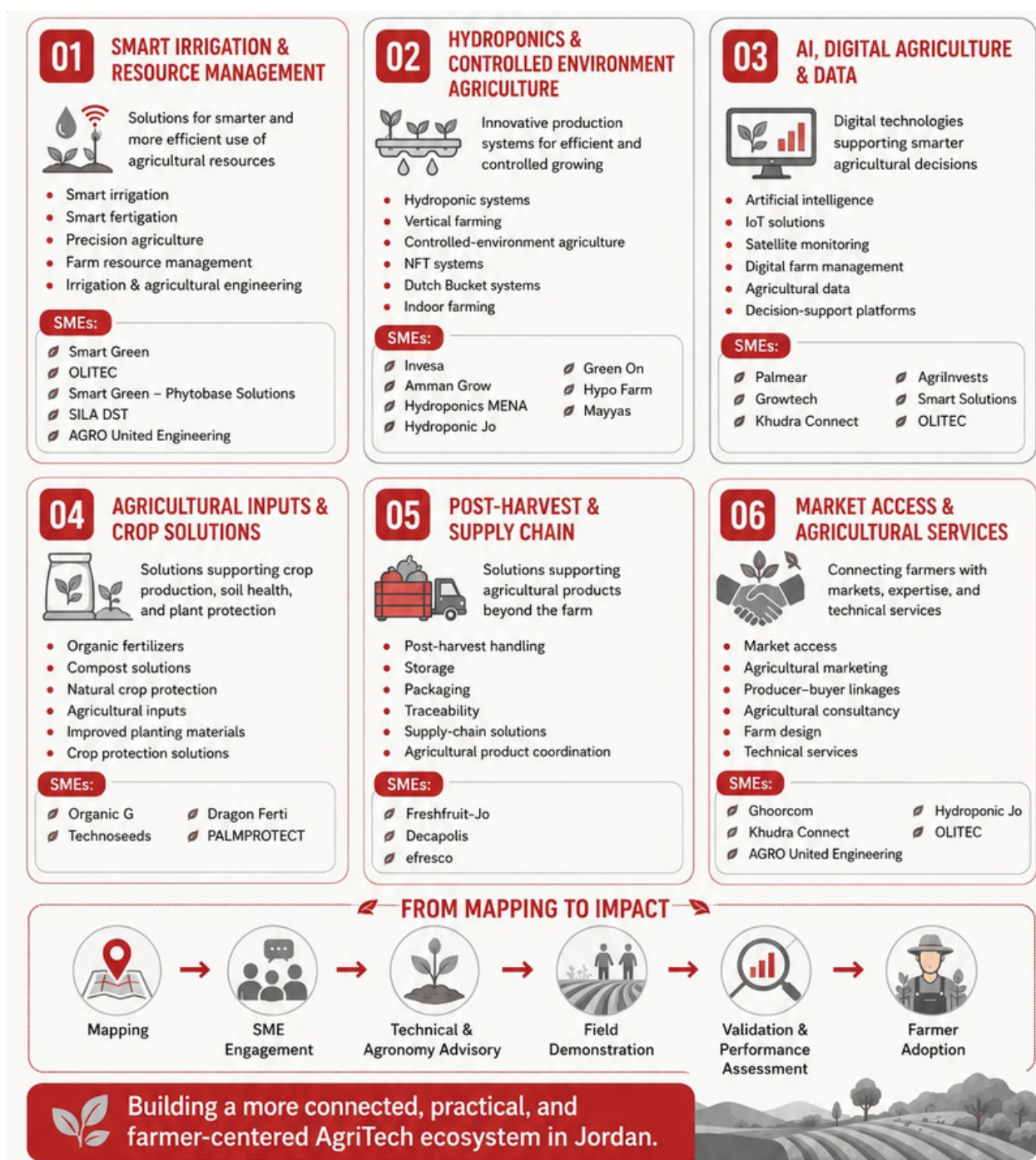
The mapping aims to provide a clearer understanding of the technologies, services, and innovations currently available across the agricultural sector.

Mapping the AgriTech Landscape

The mapping identified a diverse ecosystem of businesses working across key areas of agriculture, from **smart irrigation** and **resource management to hydroponics, digital agriculture** and **AI, agricultural inputs, post-harvest solutions**, and **market access** and **agricultural services**.

Rather than looking at these solutions in isolation, the mapping provides a broader picture of how different technologies and businesses are positioned across Jordan's agricultural value chain.



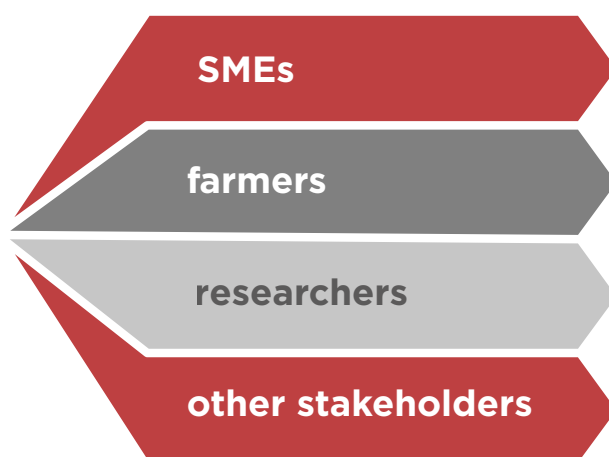


Picture1: Mapping Jordan’s AgriTech ecosystem and the SMEs and solutions operating across key areas of the agricultural value chain.

Beyond identifying available solutions, the mapping provides an important starting point for understanding where innovation can connect with real agricultural needs. Different SMEs are operating at different levels of technology and business maturity, creating opportunities for technical support, collaboration, field demonstration, and validation.

From Mapping to Field Impact

The AgriTech Field Lab builds on this ecosystem by creating a practical link between



MIRRA's role is to help translate farmers' needs and field realities into practical technical inputs for AgriTech solutions. Through **agronomy advisory support**, **farmer engagement**, **field demonstrations**, and **technology validation**, the Field Lab will provide opportunities for SMEs to test and refine their solutions under real farming conditions.

This approach is designed to move beyond technology development alone and focus on whether solutions are technically appropriate, practically feasible, economically relevant, and suitable for local farming systems.

Building a Farmer-Centered AgriTech Ecosystem

The mapping represents an important first step toward a more connected AgriTech ecosystem in Jordan. By understanding who is developing solutions, what technologies are available, and where these solutions fit within the agricultural value chain, stronger connections can be created between innovation and demand.

Through the AgriTech Field Lab, MIRRA aims to turn these connections into practical opportunities for



helping promising technologies move closer to the farmers and agricultural systems they are designed to serve.

From mapping the ecosystem to testing solutions in the field, the goal is simple: connecting innovation with real farming needs.



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