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# Precision Irrigation in The Jordan Valley

## Case Study



## KEY HIGHLIGHTS

### How Emerging Technology Supports Farmers to Enhance Efficiency and Profitability

In this case study, we shed lights on how Flowless system helps farmers in the Jordan Valley in reducing costs and optimizing operations.

- Real-time data collection is essential for efficient farming
- Automating processes in the farm supports farmers in improving their productivity and reducing operational costs
- Utilizing emerging technologies enhances operations and facilitates efficient resource allocation

# Smart Irrigation in Jordan Valley

## Brief Overview

The Jordan Valley is identified as a fertile land, with warm climate and availability of ground water. Various types of agricultural activities prosper in the area, including vegetables and fruit.

Flowless deployed the precision irrigation system (AgriWise™) in four farms on both sides of the Valley. In Palestine, the system helps local farmers in automating irrigation for tomatoes and cucumber cultivated in greenhouses. In Jordan, farmers utilize smart irrigation to optimize irrigation for palm trees based on the need of each tree.

The system helps farmers automatically perform daily operations based on an innovative data-driven approach. System benefits include resources conservation, cost reduction, and improved agriculture yield.





# Collecting real-time data for precision irrigation and process optimization







## PRECISION IRRIGATION IN PALESTINE

AgriWise™, Flowless precision irrigation system helps farmers in Furush Beit Dajan (in the Jordan Valley) by automating irrigation process and reducing costs.





Field sensors collect data  
on soil moisture, humidity,  
and weather





## SMART PALM FARM IN JORDAN VALLEY

Palm trees are sensitive to over irrigation. Farmers in the southern Jordan Valley use AgriWise™ to provide just the right amount of water to enhance date yield

# HOW FLOWLESS WORKS

## Our Approach & System Design

Flowless integrates emerging technology, innovative financing, and social responsibility to support farmers in enhancing water use efficiency.

Flowless system utilizes IoT and AI technologies to optimize operations and automate processes in the farm. It starts with collecting real-time data from the field, then analyzes it and provides robust tools for precision irrigation and process optimization, ultimately contributing to reducing water consumption and enhancing agriculture yield.

Flowless aims to support local farmers and agribusinesses in leveraging sustainable resource utilization. Our is designed to serve the needs of farmers and agribusinesses while generating positive impact and building communities' resilience and welfare.







## KEY TAKEAWAYS

- **Stakeholders Engagement**

Coordination between all stakeholders in the water sector is essential. While the private sector will continue to introduce technology innovations, close coordination and strategic partnerships with the public sector is key to materializing the envisioned impact.

- **Innovative Financing**

Blended financing approaches proved to be effective in mitigating financing challenges in Palestine. In this approach, both the farmer & the technology provider contribute to covering implementation costs to ensure better outcomes.

- **Adaptive Solutions**

Local technological solutions are often overlooked. It is evident that such solutions are more adaptive to the local context and are more effective in tackling local challenges



Interested in contributing to  
Flowless impact? Need more  
details on the smart irrigation  
system? Drop us an email!

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