



Greenhouse Innovation | Western Negev

A Critical Opportunity for Sector-Wide Transformation

Restoring Profitability Across a Strategic Sector

Greenhouse agriculture in the western Negev is a strategic national asset. It sustains Moshav livelihoods and contributes to Israel's food security. The sector, however, has long faced a profitability challenge. As a result, most farmers are unable to invest in much needed technological advancements. October 7 and its aftermath compounded these pressures; widespread damage and severe labor shortages placed many farms at risk.

In response, ReGrow launched Greenhouse Innovation, a program to restore profitability and build long-term resilience in this strategically vital sector. Following a successful \$2.1M pilot, ReGrow is now scaling the program to meet strong, demonstrated demand from farmers.

There is now an opportunity to welcome new partners in supporting the transition of an entire region toward technological resilience and enduring strength.

Project Overview

A two-phased evidence-based intervention, Greenhouse Innovation was designed to de-risk technological adoption, improve farm-level profitability, and generate insights for scaling impact.

Phase 1 | Completed

Pilot: \$2.1M*

Supported 20 tomato farmers to implement and evaluate a portfolio of solutions

Phase 2 | In Process

Program: \$5.9M

Applying proven insights from the pilot to scale across 80–100 farms and drive system-level impact

(*) Phase 1 was budgeted at \$2.1 million but came in under budget. The unspent funds are being rolled over to Phase 2.

Phase 1 Pilot Findings

The pilot ran from January–December 2025, supporting 20 tomato growers through two distinct interventions:



Implementation of advanced technological solutions



Trials of a determinate tomato variety

From Pilot to Farm-Level Impact

What a Typical 50 Dunam Tomato Farm Stands to Gain

As part of the pilot, an agricultural economist developed an economic model based on field data to estimate the expected impact of the project on a typical farm. The results demonstrated:

Efficiency & Annual Savings

When determinate tomato varieties and select technologies are implemented in combination, the model anticipates:

23% REDUCTION
IN PRODUCTION COST

\$50.8K ANNUAL
SAVINGS

Profitability Starts Earlier

At 60–70% of previous yield levels



Barrier Identification

Alongside the pilot, ReGrow conducted field research to identify the key barriers preventing farmers from adopting innovative practices, revealing three core challenges:

01

Financial Constraints

limiting farmers' ability to take on risk

02

Information Gaps

around available technologies and their economic viability

03

Limited Professional Guidance

to support implementation in real field conditions

ReGrow's Response

Guided by these learnings, ReGrow developed the **ReGrow Framework for Innovation Adoption**, a practical model for scalable action to ensure all interventions are farmer-informed and adapted to local realities.



**ReGrow
Framework
for Innovation
Adoption**

Farmer adjusts moisture
check device in Moshav
Amioz



Farmer inspects soil
moisture mobile
application in Moshav
Amioz



Phase 2 Program Structure

Pilot insights and field research have created a clear pathway to scale, ensuring Phase 2 is farmer-driven and system-ready, with three grant tracks for greenhouse farmers across diverse crops.

Track 1: Technology Grants

Up to \$160,000 per farmer to cover 70% of costs*

Farmers can apply for commercialized technologies that improve efficiency, yields or labor productivity for a wide variety of crops*

- Greenhouse spraying technologies
- Precision irrigation systems
- Mechanized harvesting carts
- Advanced fertigation systems

(*) Rather than uniform investment levels, Phase 1 revealed significant variation in farmers' capacity and requirements. As a result, the grant ceiling increased from \$95,000 in Phase 1 to \$160,000 in Phase 2 to support a broader range of applications and execute larger, high-impact investments.

Track 2: Multi-Farm Grants

Up to 50% of costs

Building on ReGrow's experience implementing collective agricultural infrastructure across moshavim, this track supports formal collaboration between multiple independent farms, or Moshav-level initiatives. Grants target challenges not efficiently addressed at the single-farm level or where collective implementation offers clear economic and operational advantages, including:

- Shared service
 - Logistics
 - Water systems
 - Infrastructure
-

Track 3: Advancing Determinate Tomato Varieties

During Phase 1, determinate tomato varieties were tested under real field conditions demonstrating strong economic potential. In Phase 2, the program will partner with MOP Darom and the Ministry of Agriculture's extension services to:

- Further test these varieties and develop formal cultivation guidelines
- Host a demonstration day to raise awareness and support adoption
- Offer targeted grants to support adoption

(*) Phase 2 expands from tomatoes to support greenhouse farmers across diverse crops

Phase 2 Status Update

Phase 2 is now underway, with early application data offering a first look at farmer priorities, technology needs, and how grant funding will be allocated.

High Farmer Demand

Applications from the Jan 21–Apr 15, 2026 open call offer a first look at farmer demand and technology priorities.

288 applications

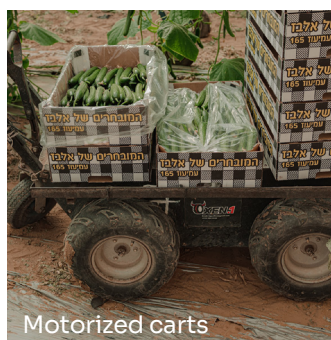
From 105 farmers across 25 communities

8+ crop types

Tomatoes, peppers, strawberries, eggplants, cucumbers, herbs, berries, zucchini.

\$8.9M

Grant needed (70% of technology costs)



Motorized carts

Technology Demand Breakdown

Farmers requested grants for a range of different technologies including:

25%

Precision irrigation systems

4%

Advanced fertilization systems

24%

Greenhouse spraying technologies

10%

Mechanized harvesting carts

37%

Other



Netiv Haasara waterpipe expansion



Pickapp barcode

Application Review Criteria



Farm Size

Scale and scope of the operation



Investment Fit

Relative size of investment to the farm



Prior Support

Consideration of previous ReGrow funding



Impact Potential

Strategic and economic benefit

Multi-Farm Grants

The open call for multi-farm grants is currently on hold while the government develops a co-funding mechanism. **They have expressed a desire to match our grant 50-50.** This track is expected to launch in Q2, with or without government participation.

The Need for Additional Funding

Phase 2 of the Greenhouse Innovation Program was originally budgeted at \$5.9M. To date, \$3.4M has been secured, leaving a \$2.5M funding gap.

Bridging this gap is critical to meeting demonstrated farmer demand and achieving system-level impact across the Western Negev.

Additional funding will enable:

Expanding Technology Grants to More Farmers

Funding Still Required: \$1.3M

Achieving systemic, sector-wide impact requires reaching ~20% of farmers in the region.

Demand for support significantly exceeds available resources. Many high-quality, eligible applications remain unfunded.

Funding would ensure:

- An additional grant round
- The expansion of the program across the Western Negev
- Acceleration in the adoption of productivity and resilience-enhancing technologies

Multi-Farm Collaborative Projects

Funding Still Required:
\$750,000 - \$1.3M (4-6 projects)

These projects improve efficiency, reduce costs, and strengthen regional agriculture in ways not achievable at the individual farm level.

Funding would support collaborative projects involving at least three farms (typically at the moshav level) that formalize:

- Shared infrastructure
- Cost and responsibility sharing frameworks
- Coordinated implementation and management

Build a Farmer Community and Knowledge Network

Funding Still Required:
\$300,000 (\$150,000/year for two years)

A key challenge is that existing agricultural knowledge does not consistently translate into on-farm practice. This intervention is designed to both close the gap and strengthen existing systems, particularly through MOP Darom and the broader extension network.

This initiative will:

- Establish a farmer network
- Deliver field days, demonstrations, lectures, and practical training
- Support knowledge transfer, peer learning, and stronger connections between farmers, researchers, and the wider agricultural ecosystem
- Offer training on financial and farm management to improve decision making and enhance profitability.

Adoption Grants for Determinate Tomato Seed Varieties

Funding Still Required:
\$350,000 (\$35,000/farmer for 10 farmers)

While Phase 1 demonstrated strong economic potential, adoption remains limited due to farmer cautiousness and lack of formal cultivation guidelines.

Once MOP Darom and Shaham cultivation protocols are finalized, targeted grants will pave the way for broader regional uptake by:

- Enabling early adoption
- Reducing perceived risk
- Demonstrating viability

Foundational Partnerships

Throughout Phase 1, ReGrow engaged key partners, including the Ministry of Agriculture, MOP Darom, and Shaham (Israel's national extension service).

These partnerships now enable Phase 2 to scale impact across the ecosystem.

Government & Ecosystem Partnerships

Looking forward, key partnerships for Phase 2 will enable:

- **Joint Funding:** Tkuma has expressed a strong interest in co-funding multi-farm projects. Discussions are ongoing with Israel's Ministry of Agriculture and Ministry of Finance.
- **Ongoing Professional Support:** Farmers applying to the program are referred to their local extension service advisor to ensure their proposed technologies make sense in the context of their farm conditions and can be implemented successfully.
- **Professional Committee Participation:** Representatives from Shaham and MOP Darom contribute expertise to the program's professional committee, which reviews applications and monitors performance.
- **Joint Research:** MOP Darom and Shaham are collaborating on targeted research to support technology adoption, including testing cooling solutions and developing cultivation protocols for specific tomato varieties piloted in Phase 1.



ReGrow in the field with Dudi Alon at his greenhouse in Moshav Yated



With your partnership, we can scale proven solutions, unlock system-wide impact, and strengthen Israel's agricultural resilience for the future.

Join Us

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