



# FrontAg Nexus - Bodrum Municipality - Bahceyaka Seed Center Demonstrator

## Descriptive Summary

The Bahceyaka Seed Center is affiliated to the FrontAg Nexus partner, Bodrum Municipality. It is a specialized facility focusing on the preservation, cultivation, and distribution of high-quality seeds to support sustainable agriculture. The Center plays a crucial role in promoting biodiversity by conserving local and traditional seed varieties while providing farmers with access to resilient, drought-tolerant, and productive seeds. The Center aims to enhance crop productivity, preserve traditional seeds to maintain biodiversity, and promote drought-tolerant seeds given increasing heat periods and water scarcity. This strategy enhances regional food security and contributes to environmentally sustainable farming practices.

## Background

The Bahceyaka Seed Center was established in response to maintain seeds resilient to rising average temperatures and water scarcity in the Bodrum region and to preserve seed biodiversity. With the challenges of climate change, soil degradation, water scarcity, and the loss of traditional seed varieties, the Center was created to safeguard local genetic resources and provide farmers with access to productive seeds under harsh climatic conditions. Its mission is to conserve native and resilient seed varieties while also supporting agricultural innovation. By promoting sustainable farming practices and ensuring food security, the Center addresses both environmental and economic challenges faced by the farmers in the region.

## Aims and Goals

- 1. Preserve Seed Biodiversity:** Conserve and protect native and traditional seed varieties to maintain genetic diversity in agriculture, which is crucial for resilience against climate change (e.g., high temperatures and water scarcity), pests, and pathogens.
- 2. Support Sustainable Agriculture:** Provide farmers with high-quality, resilient seeds that promote environmentally friendly and sustainable farming practices, reducing the need for harmful chemicals and excessive water use.

**3. Enhance Food Security:** Ensure a reliable supply of high-yielding and traditional, resilient seeds to improve crop productivity, contributing to long-term food security for local communities.

**4. Empower Farmers:** Offer training and resources to farmers, enabling them to adopt improved agricultural practices and make informed decisions about seed selection and crop management.

### **Actions taken**

**1. Seed Preservation and Collection:** The Center has identified, collected, and preserved a wide range of local and traditional seed varieties to safeguard biodiversity and protect genetic resources.

**2. Seed Distribution:** High-quality, resilient seeds are distributed to local farmers, ensuring access to better crop varieties that are well-suited to local environmental conditions such as heat waves and water scarcity.

**3. Farmer Training Programs:** Training workshops are provided to farmers, educating them on sustainable agricultural practices, seed selection, and crop management to improve overall farm productivity.

**4. Community Outreach and Engagement:** The center engages with local communities to raise awareness about the importance of seed diversity and sustainable farming, encouraging the use of resilient seeds and eco-friendly practices.

### **Main Achievement to date**

The Bahceyaka Seed Center's primary achievement to date has been the successful preservation and distribution of a wide variety of local and traditional seed types, which has helped safeguard biodiversity and improve crop resilience in local farming. This has led to increased crop yields and enhanced food security for the surrounding communities. Additionally, the Center has effectively empowered local farmers through training programs, equipping them with the knowledge and tools to adopt sustainable agricultural practices and make better use of resilient seed varieties.

### **Partners**

Universität der Bundeswehr aquaponik manufaktur Foodscale Hub Ben Gurion University of the Negev Alma Mater Studium Universita Di Bologna National Agricultural Research Center University Mohammed VI Polytechnic Elbosten Euroscolar Türkiye Bodrum Municipality

### **Lessons, replicability and scalability potential**

Lessons:

**1. Biodiversity Preservation is Crucial:** Safeguarding local and traditional seeds is vital for creating resilient agricultural systems capable of withstanding climate change, pests, and pathogens.

**2. Farmer Engagement is Key:** Active participation and training of farmers in sustainable practices and seed management ensure the successful adoption of resilient crop species.

**3. Sustainability Requires Ongoing Support:** Continuous support through training and resources is necessary for the long-term success of sustainable agricultural practices.

**Replicability:**

The Bahceyaka Seed Center is highly replicable in other regions facing biodiversity loss, climate change challenges, and agricultural challenges. Essential for replication is access to local and traditional seed varieties, farmer training programs, and institutional support for seed preservation and distribution.

**Scalability Potential:**

The seed preservation and distribution initiatives can be scaled up to larger regions, offering a solution for improving agricultural resilience and food security. With increased resources and infrastructure, this model can be adapted to various agricultural settings, from smallholder farmers to larger agricultural operations.

**Affiliation**

Bodrum Municipality Türkiye

**Keywords**

seed multiplication Sustainability Indigenous knowledge seed preservation and collection drought-tolerance

**Country**

Turkey

**Start year**

Sun, 01/01/2023 - 12:00

**End year**

Thu, 01/01/2026 - 12:00

**Facebook**

<https://www.facebook.com/frontagnexus/>

**Twitter**

<https://x.com/frontagnexus>

**LinkedIn**

<https://www.linkedin.com/company/frontag-nexus/>

**Acknowledgement of funding source**

PRIMA

**Total funding**

100 - 500k €

**Environmental**

High

**Social**

High

**Technological**

Medium

**Financial**

Medium

**Institutional**

Medium

**SDGs**



**YouTube**

<https://www.youtube.com/@FrontAgNexus>

**Website**

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**Nexus Dimensions**

Ecosystems

Food

Water

**City**

Bodrum Municipality

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**Source**

**URL:**

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