



## **AVOID THE RISKS POSED BY CLIMATE CHANGE - TURN YOUR AGRICULTURAL VENTURE INTO A RESPONSIBLE AND PROFITABLE BUSINESS**



**Whether your business is in agriculture, supply chains or food processing, investing in technologies that support climate adaptation measures will contribute to the sustainability of your business!**

Supported by:



Agriculture is one of the key economic sectors in Armenia and employs 30% of the workforce. However, this industry is the most vulnerable to the growing risks posed by climate change. Therefore, having well-developed agricultural practices and infrastructure are essential for developing the industry to its full potential in a sustainable manner.

Rising temperatures, unpredictable seasonal rains, reduced river flows, and landslides have been occurring far more frequently than expected. The acceleration and severity of these changes are coupled with our lifestyle choices and economic activities.



## WHY SHOULD AGRICULTURAL BUSINESSES TAKE CLIMATE ADAPTATION INTO ACCOUNT?

- **Farming consumes the most water worldwide.** Traditional irrigation systems use excessive amounts of water, resulting in increased costs in the short run and soil erosion and desalination in the long run.
- **Extreme droughts and excess rainfall can damage crops, resulting in irreversible losses.** Seed and harvest storage units as well as greenhouses can be an effective means of planning for an unpredictable future.
- **High levels of fertiliser and pesticide use can lead to water pollution.** Technologies that efficiently deliver chemicals to the fields can help businesses reduce the use of fertiliser and pesticides and thus avoid unnecessary costs.



## HOW CAN AGRICULTURAL BUSINESSES COMBAT THESE RISKS?

The events that can threaten the livelihood of any agricultural venture are hard to predict; however, being prepared decreases the risk of irreversible damage to the business. Optimising operations to better use water, soil, and other available resources can significantly improve a business's ability to adapt to abnormal and atypical weather conditions.

There are various technologies available on the Armenian market that can help businesses become more sustainable and profitable. Every business affected by climate change can start by purchasing technologies that are essential to their activities.

## CLIMATE ADAPTATION TECHNOLOGIES FINANCED BY GEF



### Pre-approved sustainable land management technologies designed to reduce soil erosion

#### Land preparation and seeding

- Subsoilers
- Mulchers
- Central tire inflation system
- No-tillage seeders
- Roller crimpers
- Slurry spreaders

#### Example: Corn farm

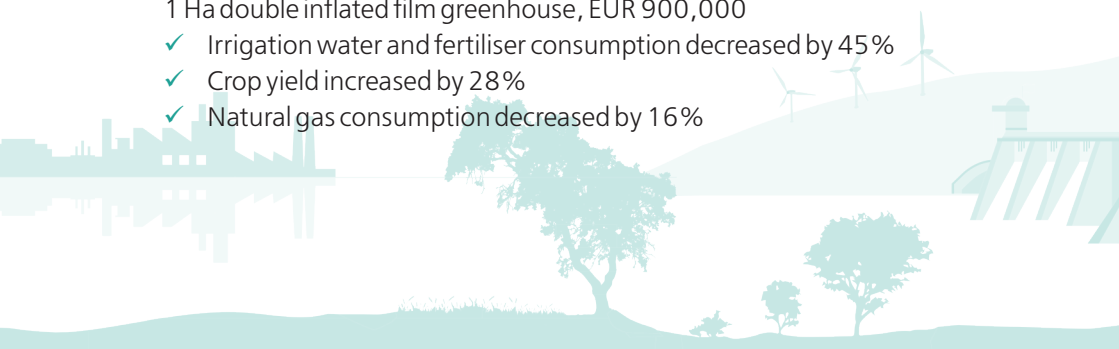
Set of no-till farming equipment for corn, EUR 125,000

- ✓ Crop yield increased by 48%
- ✓ Fuel consumption decreased by 43%
- ✓ Seed consumption for planting decreased by 10%

#### Example: Greenhouse

1 Ha double inflated film greenhouse, EUR 900,000

- ✓ Irrigation water and fertiliser consumption decreased by 45%
- ✓ Crop yield increased by 28%
- ✓ Natural gas consumption decreased by 16%





## Pre-approved water-efficiency technologies designed to reduce water stress

### Irrigation

- Greenhouses
- Drip irrigation line
- Sub-soil drip irrigation line
- Sprinklers

#### Example: Radish farm

Stationary installed sprinkler irrigation system for 13 ha, EUR 10,800

- ✓ Crop yield increased by 20%
- ✓ Pump electricity consumption decreased by 25%
- ✓ Irrigation water and fertiliser consumption decreased by 35%

### Water reuse and recovery

- Rain water harvesting tanks
- Aerators

#### Example: Fish farm

Aerators for a pond with an area of 1.1 ha, EUR 22,400

- ✓ Production (density) increased by 200%
- ✓ Fresh water consumption decreased by 70%
- ✓ Improved product quality

### Cleaning and washing

- Semi-professional washer extractors
- Professional washer extractors
- Professional barrier washers

#### Example: Hospitality business

Professional washer-extractor with 25 kg capacity, EUR 7,200

- ✓ Water consumption decreased by 25%
- ✓ Washing time reduced by 30%
- ✓ Detergent consumption reduced by 12%

Browse the **Green Technology Selector** for more available technologies.



## WHAT ARE OTHER MEASURES THAT CAN HELP BUSINESSES ADAPT TO CLIMATE CHANGE?

- **Adopting renewable energy sources** - solar energy is the cleanest source of energy and can reduce air and climate pollution, as well as offer reduced utility costs.
- **Practising crop diversity and rotation** - introducing nitrogen-producing plants such as peas and beans can enrich the soil with significant amounts of this essential nutrient.
- **Using alternative sources of fuel** - biomass, which is derived from plants and animal waste, can be transformed into energy and other value-added products.



## HOW CAN GEFF HELP THE AGRICULTURE SECTOR?

**The Green Economy Financing Facility or GEFF** is a facility offered by the EBRD that helps businesses become more competitive and sustainable by enabling them to **invest in green technologies and projects**.

GEFF offers financing that can help contribute to a better future. Offered through our **Partner Financial Institutions**, GEFF funds can be used to purchase the best-in-class high-performing technologies mentioned above and invest in green projects, such as installing a solar power station on your farm.

## GEFF HAS TWO APPROACHES TO FINANCING YOUR INVESTMENTS

**Pre-approved investments:** If you already know what technology you would like to invest in, you can browse our **Green Technology Selector**. This online database contains green and high-performing technologies under US\$ 300,000 (or equivalent in other currencies) that have already been approved for green financing.

**Assessed investments:** If the investment you are looking to make is complex and requires a customised solution, as a potential sub-borrower of one of our partner financial institutions, you can apply for our **FREE** technical assistance. GEFF consultants will provide expert advice to ensure that you find the most appropriate green technologies and services eligible for financing under the GEFF.



## HOW TO MAKE THE GEFF WORK FOR YOU?

- I. Choose high-performing CA technologies that best suit the needs of your business by either using the **Green Technology Selector** at [techselector.com/armenia](https://techselector.com/armenia) or by approaching vendors directly
- II. Summarise the **technical and financial requirements** of your proposed investment
- III. Approach a **Partner Financial Institution** (PFI) to apply for financing: [ebrdgeff.com/armenia/financing](https://ebrdgeff.com/armenia/financing)
- IV. If necessary, apply for a free **consultation and project assessment** from an experienced team of GEF experts
- V. Secure financing through a **loan or leasing agreement**
- VI. Have the **technology** installed
- VII. Benefit from **long-term energy or resource savings** as well as **financial gain**



We look forward to hearing from you and answering your questions

GEFF in Armenia

62 Hanrapetutyan Street, Apt. 101 | Yerevan, R.A.

[armenia@ebrdgeff.com](mailto:armenia@ebrdgeff.com) | +374 10 542721 | [www.ebrdgeff.com/armenia](https://www.ebrdgeff.com/armenia)