GEFF Green Economy Financing Facility

European Bank for Reconstruction and Development

This project is funded by the European Union

ECTAP ENHANCED COMPETITIVENESS OF TAJIK AGRIBUSINESS PROJECT

In partnership with:

GREEN CLIMATE FUND

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GEFF TAJIKISTAN NEWSLETTER

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GEFF Tajikistan

WELCOME TO THE GEFF TAJIKISTAN NEWSLETTER #10!

In this edition of the newsletter, you can find highlights of the GEFF project activities and achievements in the first quarter of 2022. We have continued our work in generating pipeline of green projects together with PFIs, carried out marketing and awareness raising activities amidst the challenging circumstances.

GEFF Tajikistan continues its cooperation with our Partner Financial Institutions (PFIs): Eskhata Bank, Bank Arvand and IMON INTERNATIONAL. Our aim is to scale up climate finance with our financial partners, contributing to sustainable growth of Tajik agribusinesses, farmers and individuals.

To support EBRD efforts on increasing women's economic empowerment, we are planning to provide capacity building to our PFIs in gender-sensitive green financing and to produce inspiring case studies, demonstrating real-life results of our women-beneficiaries. Providing women with access to finance is important. Currently, women borrowers represent 36% of GEFF Tajikistan's loan portfolio and 73% of all borrowers are from rural areas. The GEFF predecessor project CLIMADAPT was included in the Climate Investment Fund's (CIF) gender campaign as one of the facilities which actively supported women. We are happy to be part of CIF's success story.

We believe that the newsletter will be useful reference to understand EBRD's ongoing efforts in promoting climate resilience in Tajikistan. Here you may read our previous newsletters.

KAIRAT SHALABAY
GEFF TAJIKISTAN PROJECT MANAGER

GEFF TAJIKISTAN ACHIEVEMENTS
as of 31 March 2022:

1,600
Sub-Loan Beneficiaries Consisting of Farmers, Agribusinesses and Households

7.7 MILLION
USD dollars disbursed in sub-loans

+20
climate resilience technologies supported

73%
of all sub-borrowers are rural

30%
of all sub-borrowers are from agricultural sector

36%
of all sub-borrowers are female

36,230 GJ/YEAR
PRIMARY ENERGY USE AVOIDED

1,737,345 M3/YEAR
WATER USE AVOIDED

2,358 TONNES/YEAR
GHG EMISSIONS AVOIDED

GENDER
Equal opportunities and gender equality

Promoting gender equality is a major objective for the EBRD across its countries of operation. To address the new global and regional gender equality challenges, the EBRD has launched a new Strategy for the Promotion of Gender Equality (SPGE 2021 – 2025) and the Equality of Opportunity Strategy: Strengthening Human Capital across the EBRD Region (2021 – 2025). These two strategies reflect the Bank's key strategic priorities for the next five years, highlighting EBRD's commitment to promoting gender equality and equality of opportunity throughout the EBRD region in partnership with its clients and policy stakeholders.

The EBRD's Strategy for the Promotion of Gender Equality (SPGE) 2021-2025 builds on the lessons learnt under the previous SPGE, with a focus on consolidating and strengthening gender-responsive results while taking into consideration the impact of the Covid-19 crisis on women's access to economic opportunities.

The SPGE steers Bank investments and policy engagements based on three key focus areas:

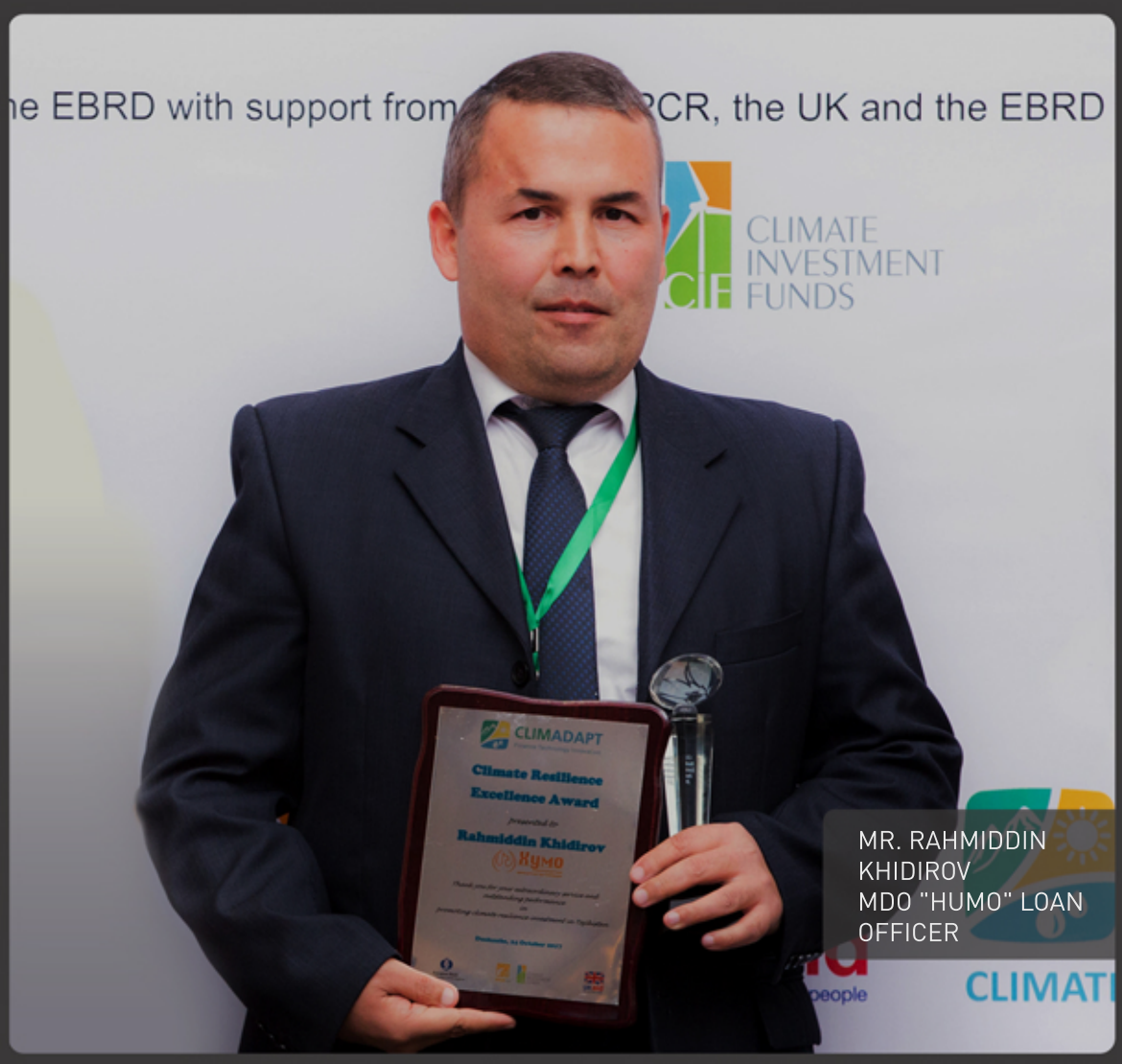
1. The Access to Finance and Entrepreneurship priority has the overall goal of building inclusive and gender-responsive financial systems and business environments

2. The Access to Skills, Employment and Livelihoods focus area has the overall goal to support investments to better promote skills, employment and sustainable livelihoods

3. The Access to Services and Public Goods priority has the overall goal to create inclusive and gender-responsive services and public goods.

With an overall ambition to increase the share of annual EBRD's operations integrating gender equality measures from 18 to 40 percent by the end of 2025, the Bank already made significant progress on this target by achieving a 35 percent share in 2021.

The EBRD Tajikistan Climate Resilience Financing Facility-CLIMADAPT was a successful pilot Facility developed by the EBRD and supported by Climate Investment Funds and the UK, and is a prime example of a financing programme to tackle gender issue. Under this programme, Tajik banks and microfinance institutions received EBRD credit lines, co-financed by international donors, for on-lending to local businesses and households to facilitate access to and uptake of climate resilience technologies that ensure efficient use of water, energy and land resources in Tajikistan. CLIMADAPT was included in the CIF's gender campaign and as ne of the facilities, which actively supported women. The article showcases power of women in green finance. Please read the article here.



MR. RAHMIDDIN KHIDIROV
MDO "HUMO" LOAN OFFICER

«Building capacity and providing equal access to finance for women boost participation at both national and local levels.

In Tajikistan, we were able to definitively see that when women are given access to climate loans and green markets, they contribute to economic and social empowerment for their entire community».

says MDO "Humo" Loan Officer Mr. Rahmiddin Khidirov for #IWD2022

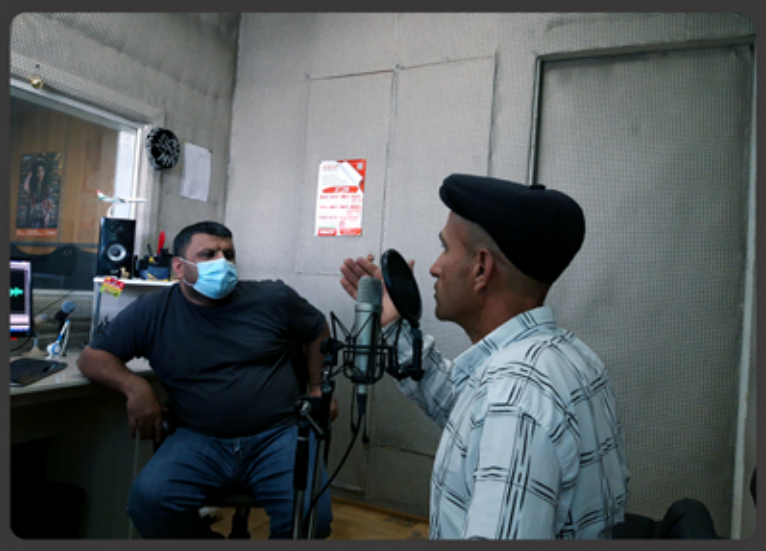
RADIO INTERVIEW SERIES 2022

The GEFF Tajikistan supports private sector through a number of measures, which includes knowledge and information transfer aimed to encourage awareness and action for the protection of our environment. Radio helps to inform, educate, influence attitudes towards innovation and empower the audience. The radio programs can provide tailored content to specific communities, including tailored content for rural farmers.

The GEFF Tajikistan Radio Interview series with Radio Vatan is a well-recognized and established radio program in Tajikistan with a high level of popularity especially for rural farmers.

The invited experts will provide their opinions on the needs, barriers and relevant solutions in the implementation of the green technologies in agricultural sector within the GEFF project and share experience. You can listen to the livestream of the radio interviews on Radio Vatan 106 FM or download the mp3 version on our website.

The interviews are based on actual cases where experts and beneficiaries are invited to share their views and experiences. Experts also present relevant facts and data. Through a discussion, we aim to develop solutions and share recommendations to address challenges faced.



DRAINAGE SYSTEMS TO REDUCE GROUNDWATER LEVELS AND IMPROVE SOIL PROPERTIES

Due to the lack of modern drainage cleaning types of machinery and their obsolescence, fuel consumption tends to be very high, which poses a direct risk to climate change. An excavator, a modern and fuel-efficient agrotechnology, allows cleaning drainage systems in an efficient manner, reduces water consumption and salinization of soil.

USE OF MODERN AGRI-MACHINERY FOR INCREASED FUEL AND PRODUCTION EFFICIENCY

The analysis showed that as a result of using the above technology, depending on the types of equipment, energy savings reach 20-37.6%, fuel savings up to 3,298 kg/year (from 1.33 to 6.2 GJ). As a result, there was a significant reduction in manual labor, fuel savings and a several-fold increase in productivity.

LEMON GREENHOUSE WITH BIO HEATING

Tajik lemons are mainly produced in special trench-based greenhouses which allow to keep favorable conditions, even during negative temperature outside (up to minus 25 degrees Celsius) and do not require any biomass-burned heating systems. A decomposed manure is placed under the soil of the greenhouse, which in winter season provides the greenhouse with the necessary heat without usage of any heat source.

RAPID FREEZING SYSTEMS FOR LONG-TERM STORAGE OF BERRIES

Berries need to be cooled in a timely and high-quality way to ensure long-term storage. Due to the rapid cooling, an attractive appearance of the berry is also maintained. In addition, such cooling allows holding a large batch of products. Another important factor - the rapid cooling of berries slows down the growth and spread of diseases and fungi.

PIPES AND TUBES FOR IRRIGATION AS A WATER SAVING MEASURE, ESPECIALLY FOR CULTIVATION OF HILL SLOPES

The PVC pipes eventually reduces water loss and consumption and provides the land with regular and stable water supply for the irrigation of crops.

STRAW MULCHING IN THE ORCHARDS ON THE HILL SLOPES FOR SOIL EROSION CONTROL AND WATER SAVING

Orchard on the slopes and applied straw mulching is an effective method of conserving water and soil because it increases water infiltration into the soil, reduces surface runoff and the soil erosion.

«Thank you for your kind cooperation. Through this series of programs, we are able to give farmers and agribusiness the opportunity to share their success stories and give advice to others. The listeners from different parts of Tajikistan become aware of latest technological achievements, advanced and modern agricultural methods, which are reduce the negative environmental impacts of farming, increase resilience and soil health, and decrease costs for farmers. I hope we may continue to strengthen the partnership and cooperation, which will certainly be useful, interesting and important for our scientific, agricultural, industrial and ordinary audience. So glad to be part of vital initiative and hope that our cooperation will bring best possible outcome for everyone in the future.»

SUBHON JALILOV
GENERAL DIRECTOR
RADIO VATAN

GREENHOUSES
WITH DRIP IRRIGATION

In recent years, there has been an increase in the area of greenhouse cultivation and Tajik farmers actively use this technology. The greenhouse business is developing in almost all regions of the Republic of Tajikistan. Farmers grow tomatoes, cucumbers, potatoes, and herbs there. Depending on the region, the Tajik farmers mainly use the three types of greenhouses: **Chinese greenhouses, Dutch greenhouses and trench greenhouses.**

Greenhouses are used as a shield between nature and the plants, and thus allow growing seasons to be extended. They provide shelter from excess cold or heat as well as pests. The structure impedes the flow of thermal energy and the sunlight that passes through the transparent "walls" of a greenhouse heats up the ground in the greenhouse which radiates warmth and heats the air.

Tajik farmers already possess benefits in setting up a greenhouse business as they are endowed with sufficient land, suitable geographic location, good soil, labour force, climatic conditions, and a dynamically growing market with possibility to export products to foreign markets. The construction of greenhouses is considerably capital intensive and the cost depends on the area of the greenhouse and the technology used. Coupled with recent advancements in agricultural technology, greenhouse farming has become more and more productive and lucrative agribusiness venture. If you have ever wondered if it would be worth to construct one, we have some thoughts to help you sort out the pros and cons.

THE BENEFITS OF A GREENHOUSE:

- INCREASE IN CROP YIELDS
- PROFIT MAXIMIZATION
- STABLE YIELD
- HARVEST ALL YEAR ROUND
- OPTIMAL CONDITIONS FOR PLANTS
- PEST CONTROL
- PROTECTION FROM ANIMALS AND INVASIVE PLANT SPECIES
- PROTECTION FROM STORM AND DROUGHTS

THE DISADVANTAGES OF A GREENHOUSE:

- SIGNIFICANT UPFRONT COSTS
- PLENTY OF KNOWLEDGE NEEDED TO GROW CROPS SUCCESSFULLY
- HIGH OPERATIONAL COSTS
- EXPERT NEEDED TO SET UP A GREENHOUSE
- REQUIRES CONSTANT MONITORING, MAINTENANCE AND CARE
- COULD INCREASE ELECTRICAL AND WATER BILLS

EXAMPLE OF A GREENHOUSE GEFF BENEFICIARY

Farmers are constantly trying to find ways to most efficiently use their resources. Efficiently utilizing water and nutrients not only promotes healthy plant growth but also saves money and makes horticulture more sustainable. Considering the rising costs of water and electricity, it is no wonder that farmers are actively implementing techniques aimed at increasing efficiency. One particular system that can significantly increase efficiency in multiple ways is a drip irrigation system.

Drip irrigation systems are horticultural watering systems that localize the watering and fertilization process in order to provide a precise amount of water and nutrients directly to the root zone of the plants. The key benefits to drip irrigation systems include less water loss during irrigation and precise watering and fertilizing that can be tailored to a specific crop or a specific stage of growth. Drip irrigation is an efficient way to irrigate greenhouse crops – the placement of dripper tubes makes it easy to deliver precise volumes of nutrient water directly to the root systems of our plants.

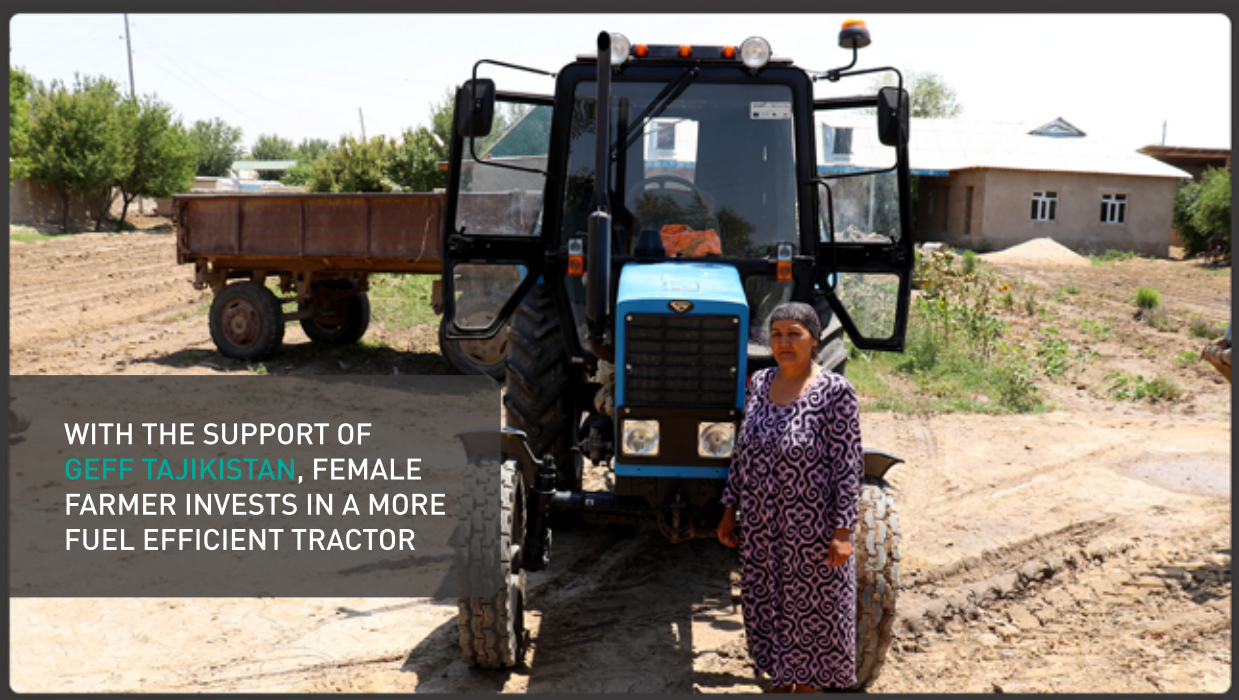
The price range for constructing greenhouses has a large range depending on its material such as glass or plastic. If you would like more information about greenhouses which could be financed under GEFF Tajikistan with 20% grant support, please contact us.

SOME FIGURES ON FINANCED COLD STORES WITHIN THE PROJECT IN TAJIKISTAN:

- **74 SUB-BORROWERS** received concessional loan and grant support
- **134,411 GJ/YEAR** Primary Energy use avoided
- **477,211 USD** dollars total investment amount
- **20.35 TONNES/YEAR** GHG emissions avoided

GEFF TAJIKISTAN
SUCCESS STORIES

Green technologies increase productivity and address climate change. The case studies below are supported by GEFF Tajikistan and demonstrate how green solution save resources of local farmers.



WITH THE SUPPORT OF GEFF TAJIKISTAN, FEMALE FARMER INVESTS IN A MORE FUEL EFFICIENT TRACTOR

Investment size:
US$ 19,700

Financial results:
Payback in 4 years

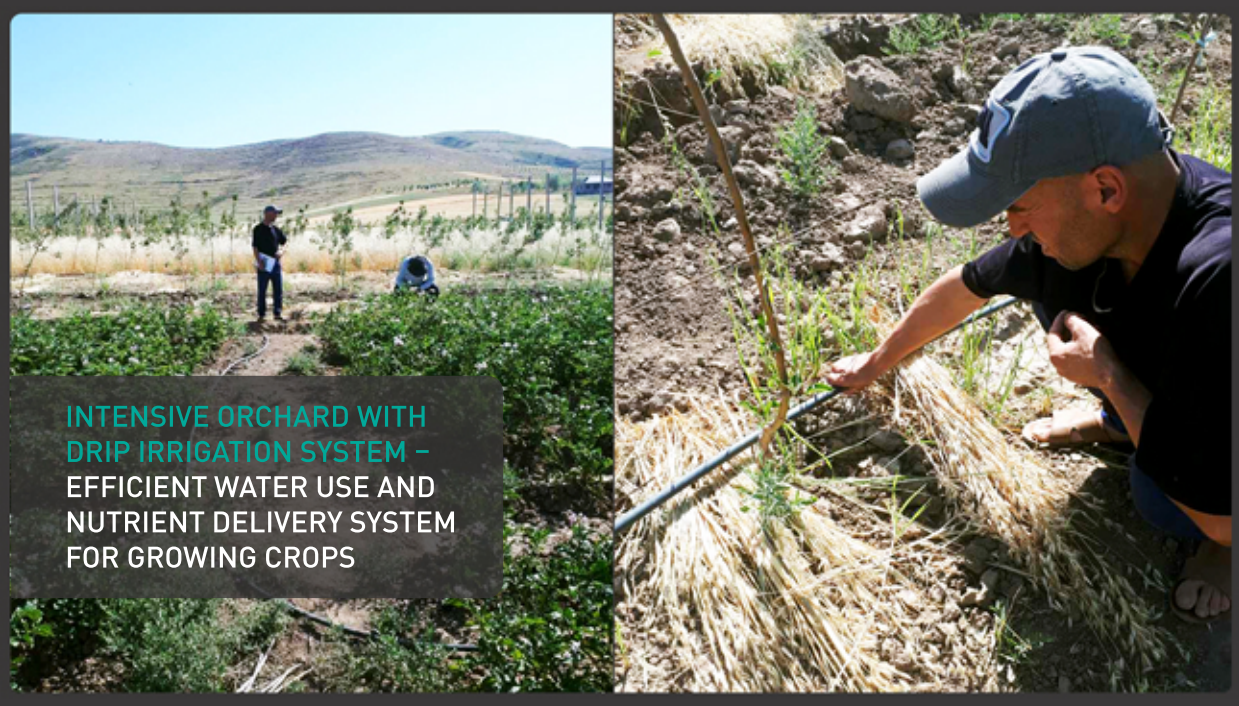
Energy savings:
141 Gj/year

Grant support:
30%

Ms. Baymuradova works with 8 members of her family in a 3-hectare farm and additionally rents another 2 hectares. She grows different fruits, onion, cotton, corn and wheat. Her husband is a tractor driver and also works in the farm. Over the years, their tractor has worn out and it has become necessary to purchase a new, more fuel - efficient tractor.

With this purpose, Ms. Baymuradova approached one of the European Bank for Reconstruction and Development (EBRD) partner banks for a GEFF loan of US$19,700 and invested in a new fuel-efficient tractor MTZ 80.1. The old tractor consumed around 23,550 liters of fuel per year for plowing the fields, and the new one – around 19,628 liters. Higher fuel efficiency of the tractor will result in a 20% reduction in fuel consumption.

«With a new tractor, we do the same work faster and with less cost, efficiency has increased. Also, the provision of plowing services to neighbouring farms brings its own income, later, with the support of the GEFF, we also want to buy a loader.» asserted Ms. Baymuradova.



INTENSIVE ORCHARD WITH DRIP IRRIGATION SYSTEM – EFFICIENT WATER USE AND NUTRIENT DELIVERY SYSTEM FOR GROWING CROPS

Investment size:
US$ 8,843

Financial results:
Payback in 2 years

Water savings:
8,450 m3/year

Grant support:
30%

Mr. Nuraliev Davlamad is an experienced farmer from the Shamsiddin Shohin district. He works as a tractor driver and provides ploughing services to neighbouring farms.

In 2016, Mr. Nuraliev saw an intensive orchard in his district, which was equipped with drip irrigation system and according to his neighbour, has increased the yield per hectare by 15%. Later he decided to build an intensive orchard on 1-hectare land of his farm and started to cooperate with a vendor which recommended investment opportunities with GEFF program.

Mr. Nuraliev approached one of the partner banks that the European Bank for Reconstruction and Development (EBRD) works with and obtained a loan to purchase 1000 apple seedlings and install drip irrigation system. According to the farmer's calculations, he will harvest 10 tonnes in the second year and 20 tonnes in the third year.

«I want to thank the GEFF team and Bank experts for the support and advice that helped me to build the orchard. Drip irrigation system prevents disease by minimizing water contact with the leaves, stems and fruit. Now, I'm planning to apply for another GEFF loan to purchase a mini-tractor and another 500 seedlings to expand my intensive orchard.» said Mr. Nuraliev.