WELT HUNGER HILFE

LIGHTHOUSE STORY: TAJIKISTAN

Best Practices Strengthening Climate Resilience: Climate Resilient Development Pathways in Tajikistan

Focus area: climate adaptation and mitigation project

PROJECT OVERVIEW

Funded by the Swiss Agency for Development and Cooperation (SDC), the 'Strengthening Climate Resilience in Southern Tajikistan' project is carried out by Welthungerhilfe (WHH) in partnership with the local partner Bargi Sabz as well as Helvetas and the Committee for Environmental Protection.

This 48-month initiative focuses on the Khatlon region, specifically targeting the Tigrovaya Balka Nature Reserve and its surrounding districts. Southern Tajikistan is experiencing severe impacts from climate change, including water scarcity, land degradation, and extreme weather events, all of which significantly affect food security and livelihoods.

The project specifically addresses these challenges through interventions aimed at promoting sustainable agriculture, improving water resource management, and increasing access to renewable energy, biodiversity conservation, disaster risk reduction, and capacity building. It seeks to enhance the resilience of local communities to climate change impacts, promote sustainable natural resource management, and facilitate the adoption of climate-resilient practices among vulnerable populations.

This will be achieved through community-based initiatives, active collaboration with government agencies, the private sector, and targeted knowledge sharing to ensure long-term sustainability and widespread positive impacts.

Name:	Climate Resilience Development Project
Location:	Khatlon Region, Tajikistan
Objectives:	Enhance climate resilient development path to reduce the exposure and vulnerability of people in Tajikistan.
Duration:	November 2023 – October 2027
Budget:	3.500.000 EUR
Funded by:	Swiss Development Cooperation (SDC)
Partners:	Bargi Sabz, Helvetas Swiss Intercooperation, Committee for Environmental Protection

THE CLIMATE CHALLENGE

- Tajikistan faces rising climate risks, with temperatures up 0.3–1.2°C and glacial melt increasing by 30% since the mid-20th century. While meltwater has temporarily boosted river flows, glaciers are rapidly shrinking. By 2050, up to one-third may disappear, threatening long-term water, food, and energy security in Central Asia.
- Land degradation further complicates the issue, as agriculture employs 45% of the population but suffers from inefficient irrigation, coupled with increased water scarcity due to climate change, with only 40% of channeled water reaching fields.
- Summer temperatures can hit 50°C, causing heat stress and lower crop yields. Erratic rainfall leads to floods and landslides, damaging infrastructure and livelihoods.
- Tigrovaya Balka Nature Reserve, an important ecological area, faces threats from deforestation, encroachment, and overuse, endangering biodiversity and local community resilience to climate shocks.

Renewable energy system installed for water heating in Dusti District.

Improved cooking stoves introduced in Dusti District to reduce firewood use.

HOW THE PROJECT STRENGTHENS CLIMATE RESILIENCE

The Climate Resilience Project strengthens the ability of communities and ecosystems to adapt to the impacts of climate change through an integrated and inclusive approach. It promotes adaptation and disaster preparedness and renewable energy access leading to improved livelihoods and an increase in overall resilience of vulnerable population groups in targeted districts.

The project further supports sustainable land and resource use through the restoration of degraded areas with Saxaul trees and other endemic species, alongside the cultivation of organically managed cotton fields. In the Tigrovaya Balka Reserve, efforts focus on conserving biodiversity by maintaining stable populations of key species such as Bukhara deer and gazelles, while sustainably managing protected natural habitats. These actions are guided by Ramsar principles, with targeted conservation measures actively involving local community members in their implementation.

Energy efficiency and climate mitigation are key priorities of the project, aiming to significantly reduce and count CO_2 emissions and cut fuel and firewood consumption. The project also promotes regenerative agriculture, supporting farmers in the transition to more sustainable and climate-resilient practices.

Community participation lies at the heart of the project, encouraging active engagement in both decision-making and implementation. Strengthened natural resource management structures aim to benefit broader communities across the project region. Public awareness efforts focus on building climate and biodiversity knowledge, particularly among youth, while knowledge-sharing events foster collaboration between civil society, government, and the private sector. The project also supports the development and submission of policy recommendations to promote long-term climate resilience.

Global Climate Team
alicianatalia.zamudio@welthungerhilfe.de

Deutsche Welthungerhilfe e. V.,
Friedrich-Ebert-Straße 1 53173 Bonn,
Tel. 0228 22 88-400

WELTHUNGERHILFE

More insights here

IMPACT IMPACT AND LESSONS LEARNED

The project aims to strengthen community resilience to climate change, reaching approximately 35,000 individuals with enhanced disaster preparedness by 2027. Its success will be measured through key indicators such as increased agricultural productivity, expanded access to clean energy, and stronger community engagement in natural resource management—contributing to a climate-resilient development pathway for Tajikistan. A central focus is sustainable natural resource management, including biodiversity conservation in the Tigrovaya Balka Nature Reserve to ensure stable populations of Bukhara deer and gazelles. The project will also empower at least 5,000 vulnerable households by diversifying livelihoods, while partnering with Bargi Sabz, a social enterprise, to scale renewable energy solutions such as solar pumps and improved cooking stoves—targeting an annual reduction of 1,500 tons of CO^2 emissions. Additionally, by raising awareness among 100,000 individuals and fostering inclusive community participation, the initiative will reinforce local governance and inform national policies on climate adaptation and mitigation

KEY TAKE AWAYS

- Strengthening resilience requires joint action across water, land, biodiversity, and energy to restore ecosystems and drive sustainable development.
- Empowering women and youth with diversified livelihoods, regenerative farming, and ecosystem restoration builds climate resilience.
- Expanding solar pumps and clean stoves reduces vulnerability and cuts 1,500 tons of CO_2 yearly.
- Policy engagement ensures evidence and community needs shape adaptation and mitigation.

“Living in Tajikistan, I've witnessed firsthand the devastating impacts of climate change on our communities. This project is a beacon of hope, aiming to strengthen our resilience through sustainable agriculture, improved water management, and renewable energy solutions. By working together, we can ensure a brighter, more resilient future for our region.”

Qumriya Vafodorova, Local Climate Resilience Advisor, WHH Country Office, Tajikistan