



Adaptation Story



Republic of Tajikistan

PROJECT DETAILS

AF Funding Amount: US \$9,996,441 • **Implementing Entity:** UN Development Programme and Committee for Environmental Protection under the Government of the Republic of Tajikistan

OBJECTIVES

- Integrated catchment management to build climate resilience
- Ecosystem-based Adaptation (EbA), including Climate-Smart Agriculture and Sustainable Land Management, in agroecological landscapes
- Knowledge management on building climate resilience through integrated catchment management and EbA in the KRB

Located in the heart of Central Asia, the Republic of Tajikistan (Tajikistan) is one of the most climate-vulnerable countries in this region. Rising temperatures and extreme climate events, such as floods and droughts, are resulting in damages to crops and increased rates of soil erosion, threatening the food, water and energy security of rural populations. The vulnerability is exacerbated by limited adaptive capacity because of the high dependence on agriculture for livelihoods as well as limited opportunities for alternative income.

In a collaborative effort funded by the Adaptation Fund (AF) and implemented by Tajikistan's Government and the United Nations Development Programme (UNDP), rural communities have witnessed a resurgence through an innovative project using integrated landscape approaches to enhance climate resilience of small-scale farmers and pastoralists in Tajikistan. The initiative strategically confronts the socio-economic repercussions of climate change in the Kofirnighan River Basin (KRB) by introducing integrated landscape management to improve climate resilience of rural communities.



Children cross a key new bridge from the project with their families' livestock as trusty companions. (Photo: UN Development Programme)

Bridging Lives and Landscapes: Tajikistan's Path to Resilience and Connectivity

A primary challenge in the area was restricted pasture access and lack of connectivity between Chorbogh and Luchob jamoats (municipalities). Restoring a vital bridge became a key part of the project to overcome recurring challenges from the formidable currents of the Varzob River. These obstacles severely constrained livestock mobility, amplifying local hardships.

Recognizing the urgency, the Committee for Environmental Protection of the Government of Tajikistan partnered with UNDP to embark on a transformative endeavor under the AF-funded project. Among comprehensive efforts to enhance climate resilience for farmers and pastoralists, the successful completion of a new bridge in jamoat Luchob marked a pivotal achievement. The newly established bridge not only reconnects Chorbogh and Luchob but also ushers in expanded opportunities for livestock grazing, revitalizing the region's economic prospects. Through synergistic efforts, the Government of Tajikistan, UNDP, and determined villagers have transcended the challenges posed by climate change, forging pathways toward prosperity.

This initiative effectively tackled pressing challenges faced by residents within the Varzob district, with direct benefits extending to 200 individuals, including 90 women among them. Access to 500 hectares of previously inaccessible grazing lands has invigorated livestock mobility and fortified the region's resilience against the impacts of climate change.

Ecosystem-based Adaptation: A Transformation in Jangalak Village, Tajikistan

Similarly, an impactful water conservation drip irrigation system was established in Jangalak village, aimed at addressing the pressing issue of soil erosion and introducing climate smart agriculture.

Situated within the Varzob District, Jangalak had been grappling with the adverse effects of climate change. With a population of over 1,200 residents distributed across more than 200 households, Jangalak faced formidable challenges stemming from climate-induced land degradation.

PROJECT BY THE NUMBERS

46,000

DIRECT AND

828,000

INDIRECT BENEFICIARIES

IN 100

VILLAGES

ACROSS 6

DISTRICTS

2,600

100

PERSONS IMPLEMENTING EbA INTERVENTIONS

STAFF TRAINED ON INTEGRATED CATCHMENT MANAGEMENT



Manuchehr Makhmudov, a 34-year-old resident of Boboi Vali village of Fayzobod district, is standing on a stone fence to prevent erosion, as part of the project. (Photo: UN Development Programme)

The resulting drip irrigation system emerged as a pivotal solution, effectively conserving water resources while curbing soil erosion and facilitating restoration of the delicate ecosystem. This EbA solution exceeded outcomes by restoring approximately 4,000 square meters of previously imperiled land, effectively mitigating the risk of further degradation. Furthermore, it has nurtured a diverse arboreal population, encompassing as many as 2,000 trees of varying species.

This innovative sustainable land management approach has not only breathed new life into sustaining the environment but conferred a heightened sense of empowerment upon the local community, equipping them to effectively address the intricacies of climate-related adversities.

Beyond the immediate scope of soil erosion prevention, the project has assumed far-reaching significance. It has acted as a beacon of hope and resilience, effectively dispelling apprehensions related to landslides and serving as a catalyst for wider climate-conscious actions.

Mr. Rahimjon Khakimov, a resident of Jangalak Village, expressed his gratitude for the project, stating, “Thanks to the drip irrigation initiative in Jangalak village, our lives have transformed in ways we could have never imagined. Previously, we struggled with unpredictable weather, and our crops suffered due to a lack of water, but with the drip irrigation system, we can provide a precise amount of water directly to the roots of our crops. This project has not only improved our farming practices but has also instilled a sense of hope and confidence within our community. We are now better prepared to confront the challenges of climate change.”

Resilience Blossoms: Restoring Tajikistan’s Land and Livelihoods Amid Climate Crisis

Another comprehensive initiative to improve agricultural productivity and water availability has been successfully executed in the village of Boboi Vali in the eastern Fayzobod district.

With 264 households and a population of 2,036 residents, the community has been experiencing climate change impacts. Spring floods from the Elok River, a prominent tributary spanning 97 km with a basin area of 829 km², led to flooding of nearby settlements. Over time, the previously solid ground weakened, resulting in fissures and a catastrophic collapse. Spring mudflows further threatened homes and eroded agricultural land, exacerbating challenges for the local farming community.

“One morning when we awoke, we discovered that around a half hectare of land had been destroyed by water torrents. My friends and I used to play football on this field when we were kids, but it’s no longer there,” said Makhmudov Manuchehr, a village resident.

The project team worked with the local community to formulate a pilot initiative designed to enhance resilience and stability of the riverbank against erosion or potential slope collapse caused by the currents and mudflows. This entailed safeguarding four hectares of garden and yard space from subsidence by reinforcing the riverbank with stone fences and riverbed cleansing. The successful implementation of these protective structures significantly mitigated the risk of sinking land in the region.

The project not only shields the land against erosion and degradation but also ensures its long-term viability, with the added benefit of extending flood protection to downstream districts.

The story is based on content provided by UN Development Programme.



Nurturing Growth: A dedicated hand tends to the promise of new life. Jangalak village, Varzob district (Photo: UN Development Programme)