



**GREEN
CLIMATE
FUND**



**Co-funded by
the European Union**

Implemented by:



Integrative and Climate-sensitive Land Use in Central Asia

Context

Across Central Asia — from drylands to mountain landscapes — 42 million rural people depend on forests, pastures, and water for their livelihoods and income. These ecosystems are also home to globally important biodiversity. However, decades of overuse have degraded soil and reduced land productivity. Climate change compounds the pressure by intensifying droughts, accelerating glacial retreat, and reducing the natural resources and ecosystem functions people rely on. As a result, communities across the region are becoming more vulnerable.

In Tajikistan, these pressures are especially visible in the cotton sector. Smallholder and women farmers, who make up a significant share of the rural workforce, face water-intensive farming systems, outdated agricultural practices. At the same time, they are increasingly exposed to extreme weather events and have limited access to advisory services or resilient seeds. Cotton is the primary source of income for many families, making the sector's vulnerability to climate change a direct threat to rural livelihoods.

Accessing climate finance remains a major challenge. Mechanisms such as the Green Climate Fund (GCF) offer opportunities to support climate action. However, countries struggle to meet the requirements for accessing funding, strengthen expertise, and improve coordination between governmental agencies. Weak monitoring systems and limited environmental data further slow down funding flows and reduce the effectiveness of climate investments.

Project name	Integrative and Climate-sensitive Land Use in Central Asia
Commissioned by	The German Federal Ministry for Economic Cooperation and Development (BMZ)
Co-funded by	Green Climate Fund, the European Union
Project region	Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan
Main partners	Kazakhstan — Committee of Forestry and Wildlife, Ministry of Ecology and Natural Resources; Kyrgyzstan — Forest Service under the Ministry of Emergency Situations; Tajikistan — State Committee for Environmental Protection; Turkmenistan — Ministry of Environmental Protection; Uzbekistan — Agency for Increasing Forests and Green Areas and Combating Desertification
Duration	03.2021–08.2030

There is still a significant gap between national strategies and their implementation. Although all Central Asian countries have policies and strategies for forests, pastures, biodiversity, and climate action, limited capacity within government institutions often hinders their effective delivery. Cross-border ecosystems shared between countries require coordinated action beyond national plans, but regional cooperation is at an early stage. Without stronger institutions and sufficient climate finance, protecting ecosystems and supporting rural livelihoods will remain a major challenge.



L. to r.: An informational tour for residents of the pilot region on agroforestry and irrigation.

Consultations with local communities and stakeholders in southern Kyrgyzstan to inform the GCF project on climate-resilient landscapes in Central Asia.



L. to r.: Huntsmen, Tajikistan.

Classic walnut forest
(Kaba Forestry).

Our goal

Integrative land use approaches are better mainstreamed in Central Asian countries.

Our measures

The regional programme on integrative and climate-sensitive land use in Central Asia (ILUCA) is the latest in a series of initiatives implemented by GIZ on behalf of the German Government since 2008. It addresses the connected challenges of land degradation, biodiversity loss, and climate change by working together with government institutions, civil society organizations, and regional partner organizations.

Sustainable land use depends on many interconnected factors — environmental, social, economic, institutional, cultural, and financial. Landscapes are shaped not only by nature, but also by how people use land, how institutions work, and how communities interact with their environment. Together with authorities and local organizations, the programme team and experts develop practical solutions that respond to these realities and help communities to adapt to future challenges.

In cooperation with ministries, state agencies, and committees, ILUCA helps strengthen the systems needed to put existing environmental policies and strategies into practice. While Central Asian countries already include sustainable land use principles in national legislation, implementation often requires better monitoring systems and coordination between sectors. The programme therefore supports countries in improving land use planning and developing more coherent monitoring frameworks.

ILUCA also supports access to international climate finance in Kyrgyzstan and Tajikistan through the Green Climate Fund (GCF) Readiness Programme. The programme strengthens the capacities of National Designated Authorities (NDAs), helping countries prepare climate investment projects that align with national priorities and the Sustainable Development Goals. This approach is already expanding across the region, with Uzbekistan joining GCF Readiness activities in cooperation with GIZ.

Another important part of ILUCA is **the Green Cotton Value Chain Action in Tajikistan, co-funded by the European Union.**

The initiative supports climate-smart cotton production while improving links between farmers, processors, and markets. It places special attention on women and smallholder farmers by providing advisory services, training, support for crop diversification, and assistance with certified production. The programme also works with textile and processing companies to strengthen local businesses, improve market access, create jobs, and increase resilience across the cotton sector.

Because ecosystems in Central Asia cross national borders, they need countries to work together to manage them effectively. ILUCA supports this cooperation in three main areas. First, the programme works with the Interstate Commission for Sustainable Development (ICSD) to help include eco-friendly land use approaches into regional policies and to improve capacities of member countries for programme development and fundraising. Second, it works with the GREEN Central Asia Expert Network, which connects civil society organizations and independent experts across the region to share knowledge and build partnerships. Third, the programme supports direct cooperation between protected areas and government agencies neighboring. This helps them test and apply joint solutions within shared ecosystems, where cross-border cooperation can have the greatest impact.

Our results to date

ILUCA has already contributed to stronger regional cooperation in biodiversity conservation and land management. Tajikistan and Uzbekistan jointly developed a roadmap for the Zarafshan Valley to better coordinate conservation work and improve wildlife monitoring in the shared ecosystem. Kazakhstan and Kyrgyzstan also adopted a joint five-year action plan for the Zaili Alatau range in the Northern Tien Shan. As part of this work, they introduced the SMART (Spatial Monitoring and Reporting Tool) system to monitor biodiversity, which is now being expanded across the region.

Kazakhstan, Kyrgyzstan, and Uzbekistan have also launched a trilateral cooperation framework for managing the Western Tien-Shan biodiversity hotspot. Through this cooperation, the countries have established a shared data exchange mechanism to improve coordination on protection of migratory species and to strengthen collaboration between protected areas.

At the regional level, the Interstate Commission for Sustainable Development is integrating and monitoring eco-friendly land use solutions into the Regional Climate Change Adaptation Strategy and the Regional Environmental Programme for Sustainable Development (REP4SD).

Knowledge exchange between communities and practitioners has become another important result. Farmers, forestry specialists, and staff of protected area in different countries regularly participate in joint workshops on watershed management, pistachio forest restoration, and biodiversity monitoring. At the same time, the GREEN Central Asia Network continues to grow as an independent regional platform, now connecting 188 experts who learn from each other through webinars and the GREEN CA online platform.

In 2024, ILUCA co-organized a side event at the Convention on Migratory Species COP14 in Samarkand together with EcoAral and the Michael Succow Foundation. Representatives from across Central Asia shared practical experience in biodiversity monitoring, with a special focus on the SMART system. One key outcome of the event was a regional agreement to develop a unified SMART system for Central Asia to strengthen cross-border conservation monitoring.

Countries in the region have gained new insights on how better link land management, biodiversity conservation, and climate action through the regional study. The findings were validated with national stakeholders in 2024 and presented at UNCCD COP16 in Saudi Arabia.

In 2023, Turkmenistan hosted a regional dialogue in Ashgabat that brought together government representatives, border authorities, and biodiversity experts to discuss wildlife migration across national borders. The event resulted in the adoption of the Ashgabat Communiqué on Transboundary Cooperation, strengthening regional commitment to coordinated wildlife conservation.

Across all five Central Asian countries, existing land use planning and monitoring systems in the agriculture, forestry, and biodiversity sectors have been assessed.

Based on these assessments, the countries developed roadmaps outlining practical steps to strengthen more integrated land use planning and monitoring systems.

Several countries have already made concrete progress. Kazakhstan introduced a national timber traceability system to improve transparency in the timber production and distribution chain and help reduce illegal logging. The country also developed a new methodology for calculating fees for harvesting wild plantes, based on scientific data. This provides a stronger basis for managing natural resources more sustainably.

Kyrgyzstan adopted new guidelines for pasture monitoring and assessment to improve responses to land degradation and strengthen climate resilience. In the forestry sector, updated forest lease agreements now include provisions related to carbon market projects, creating new financing opportunities for sustainable forest management.

Turkmenistan has made progress in aligning its national systems with international solutions to land degradation neutrality and biodiversity conservation. Reviews of laws and institutions have produced recommendations for improving land management systems, while training activities supported the introduction of SMART tools for biodiversity monitoring in the country.

Improving Access to Climate Finance

Kyrgyzstan and Tajikistan significantly strengthened their ability to access and manage international climate finance through support to their National Designated Authorities (NDAs). Both countries developed strategic frameworks, operational guidelines, investment plans, and digital platforms that improve coordination and broaden access to climate finance knowledge among government institutions and financial actors.

This work has already led to regional cooperation. The NDAs of Kyrgyzstan, Tajikistan, and Uzbekistan jointly prepared the first regional Green Climate Fund concept note focused on strengthening climate resilience in the transboundary



Ibex on the territory of hunting area Chakir-Corum-Trophy, Kyrgyzstan.

Pg 4: Participants of the Eco-Marathon during an interactive group work.



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landscapes of the Ferghana Valley. The concept note has already been endorsed, and partners have developed a full funding proposal that could unlock substantial investment for climate resilience and carbon sequestration in one of Central Asia's most important regions.

Expected Results in Sustainable Cotton Production in Tajikistan

Through the Green Cotton Value Chain Action, Tajikistan is working to strengthen the sustainability and resilience of its cotton sector. At the policy level, ministries, local authorities, and sector stakeholders will have better coordination and improved monitoring and reporting systems related to eco-friendly cotton production and alternative crops.

At the production level, farmers receive support for various farming systems, sustainable land and water management, and climate-informed planning approaches such as PICSA. Women, youth, and smallholder farmers will use small grants to adopt water-saving technologies, earn income from a wide range of activities and improve their agricultural practices. Certified production areas have expanded, and stronger partnerships between cooperatives and processing companies will be created.

Textile and clothing businesses will have improved product quality, become more innovative, and compete more effectively in the market. Regional cooperation, including partnerships with Uzbekistan, will be strengthened. As a result, Tajikistan's cotton sector will become more resilient, create more jobs, expand domestic processing, and promote more sustainable land use.

An example from the field

The Eco-Marathon in autumn 2025 was a series of outdoor environmental activities, field trips, and joint learning experiences for young people from border communities in Uzbekistan and Tajikistan. The event successfully revived learning directly in nature through observation, research, and teamwork while giving students an opportunity to connect with peers from across the border.

One of the most encouraging results was the high level of interest and dedication shown by the participants. Students completed the tasks with genuine enthusiasm, especially knowing that their work would be shared with a team in another country. This created a sense of pride and responsibility, as participants wanted to present their local environment and community in the best possible light.

During the marathon, students learned how environmental monitoring works in practice. Together with local nature reserve staff, they explored nearby ecosystems, photographed plants and animals, identified species, and collected information about local biodiversity. For many participants, it was their first experience with this kind of hands-on scientific learning outside the classroom.

In Uzbekistan, the Eco-Marathon built on the environmental education activities already carried out by the staff of Zarafshan National Park but introducing in a more modern and interactive way.

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