

Central Asia: Acting locally – cooperating regionally

Sustainable and climate sensitive land use

Context

Central Asia is suffering significantly from the consequences of climate change. Eighty percent of the territory of Central Asia is arid land. Continued expansion of deserts and arid areas are predicted, along with above-average increases in temperature, as well as water shortages.

According to data of the Center for Development Research (ZEF) of the University of Bonn, in the period from 2001 to 2009 the economic losses from land degradation in Central Asia amounted to 6 billion USD annually. These losses are caused by the depletion of pasture lands, deforestation and abandonment of croplands. The results of ZEF analytical studies show that the cost of measures that may be taken against land degradation in Central Asia is five times less than the damage that occurs through inaction.

The region is affected by a lack of awareness about, or inability to apply strategies for, the sustainable use of renewable natural resources. Consequently, resources are becoming degraded in the short and medium-term, and biodiversity is being lost. This, in turn, serves to aggravate poverty in rural areas. The governments have now understood the dangers, but often lack the capacities and resources to tackle the problems.

Our objectives

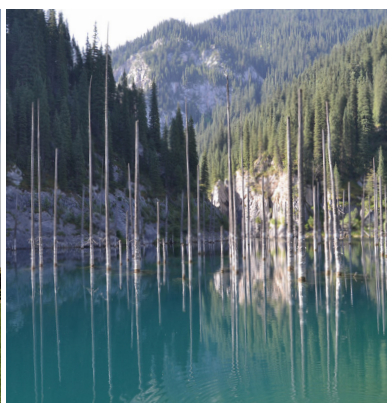
Together with our partners we are aimed that the different land users, government agencies and the private sector in Central Asia adopt integrated, economically and ecologically sustainable forms of land use, taking climate change into account.

Project name	Programme for Sustainable and Climate Sensitive Land Use for Economic Development in Central Asia
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Project region	Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan
Lead executing agency	Line ministries, nongovernmental organizations
Duration	2016 - 2019

Our measures

The new regional programme on sustainable and climate sensitive land use started in May 2016 and partly continues the activities of its predecessor programme on sustainable use of natural resources in Central Asia. Now the focus has shifted to the integration of different forms of land use, such as pasture and forest management, and their economic valuation at both on the level of land users as well as on the level of national economic accounts.

We work in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan utilizing a multilevel approach. In villages, work is being done directly with the population and local administrations. Together we are developing new, locally adapted measures and methods of protection and sustainable use of forests and pastures, and we are working on developing and ensuring biodiversity. On the one hand, we want to stop deterioration and gradual disappearance of these resources, and on the other hand, to improve the livelihoods of people. We then use the experience gained, which is based on work



Flowering cherry, covered with snow in Tashkent, Uzbekistan.

Cattle grazing on partly degraded pasture in Khatlon region, Tajikistan.

Dead forest in the Lake Kaindy, Kazakhstan.



Foresters from Kyrgyzstan and Tajikistan discuss methods of seedlings cultivation in the nursery in the Issyk-Kul region, Kyrgyzstan.

Meeting of the National Pasture Management Networking Platform in Dushanbe, Tajikistan.

on the local community level, in collaboration with the ministries of the five countries of the region. We are trying to promote reforms that will enable application of new methods for the protection and use of natural resources across the countries. Through linking local expertise and best practice with country-level reform processes, we want to ensure that innovative methods of careful handling of natural resources do not remain isolated solutions for individual areas.

All activities are implemented in close cooperation with programme's other related bilateral and regional projects such as project on community-based walnut forest and pasture management in Southern Kyrgyzstan, adaptation to climate change through sustainable forest management in Tajikistan, and regional project on ecosystem-based adaptation to climate change in high mountainous regions of Central Asia. In each country strong collaboration with regional programme on promotion of sustainable economic development (NAWI) is envisaged.

With regard to the **conservation and use of forests**, we have reached a point where the state forest enterprises (leskhozoes) and villagers in Kyrgyzstan and Tajikistan enter into agreements regulating the long-term use of forest plots. Instead of illegal felling of trees and overgrazing in the forest, people are now working according to approved management plans; which is an important constituent of the "joint forestry management" principle. We have supported villagers and relevant government agencies in concluding agreements and developing action plans. Together with our national partner in Kyrgyzstan, we are piloting the institutional reform of the forestry sector in six forest enterprises representing different ecoregions. Within the framework of this piloting, various approaches of forest resources management with the involvement of local communities are tested. The process of piloting the reform is coordinated by a Consultative and Coordination Council, established with our support. It consists of representatives of government agencies and international and local NGOs.

In the South of Kyrgyzstan, we are actively supporting the partners in their attempts to preserve the biodiversity and relict walnut and fruit forests through the establishment of forests adapted to climate change, consisting of mixed stands of walnut and fruit trees. New ways to generate income from alternative sources are being introduced, which are aimed to reduce the dependence

of the population on the walnut forests and thereby enhance the restoration of forest areas. Our partner organizations are conducting special training sessions for farmers' cooperatives with a demonstration of new technologies.

The process of implementation of the joint forest management principle in Tajikistan has been launched several years ago, and at the moment principal attention is directed to the dissemination of positive experiences in six regions of Tajikistan. These activities are accompanied by reforestation programmes and by support of the natural rejuvenation of forests. We are developing attractive approaches for local tenants that encourage them to restore deforested and damaged areas. By treatment and preparing of non-timber-forest products for selling, women in particular are being supported.

Furthermore, in order to improve forest monitoring in the country, our GIS expert has developed forest cover maps, applying a methodology to assess forest cover over time. Forest monitoring activities are intended to transition from paper based monitoring to a digital and participative monitoring system in the near future.

In Kazakhstan, with our support, the Forestry and Wildlife Committee of the Ministry of Agriculture is developing mechanisms for private afforestation in the country. During a small pilot project, initiated in 2016, important technical information is being accumulated on several experimental plots, which will form the basis for the development of tools and a detailed legal and regulatory system for state support for private afforestation.

In two pilot areas of forestry enterprises in the Samarkand and Kashkadarya regions of Uzbekistan, demonstration plots of plantation of sea buckthorn as mean for combatting land degradation were established. These plantations will enable local people to earn extra income from the production of raw materials for pharmaceutical purposes, as well as from the sale of fruits and sea buckthorn oil.

With regards to **conservation and management of pasture lands** in Kyrgyzstan and Tajikistan, together with our national and international partners we are looking for solutions to help associations of pasture users to develop land use plans. Such plans include rotation of livestock distribution on pastures in different seasons, monitoring of pastures, and improvement of infrastructure. Our experts provide ongoing consultative support to the relevant ministries and other government agencies.

In the South of Kyrgyzstan, we are helping to develop and implement mechanisms for joint planning of the use of pastures. To resolve conflicts between leskhozos that have significant pasture areas as part of the State Forest Fund and local pasture committees that lack land for livestock grazing, an agreement on cooperation of forestry enterprises and pasture committees has been reached as a result of an agreement between the State Agency on Environment Protection and Forestry and the Ministry of Agriculture, Food Industry and Land Reclamation of the Kyrgyz Republic. Now, the forestry enterprises and pasture committees may enter into a contract for one year, which allows the use of pastures on the territory of the forestry enterprises for livestock grazing.

In Tajikistan, we have contributed to the establishment and operation of the Tajik Pasture Management Networking Platform. The Platform brings together more than 50 governmental, international and non-governmental organizations as well as scientists and researchers.

An analysis of the legislation of Turkmenistan in the field of ownership and disposition of pastures was made with our support to determine the currently existing conditions of access of users to pastures. Based on the results of this study and taking into account international experience, recommendations for the new Law "On pastures" were developed and the Law was approved by the Parliament in 2015. The mechanisms for the implementation of the law are being developed now.

In all fields of activity, we assist our partner organizations in the adaptation of existing, and the formulation of new, action plans for climate change in Central Asia. Local approaches with a focus on Ecosystem-based adaptation (EbA) were developed and are being tested. National political partners are supported in the negotiation processes on climate change at the international level and preparation for accessing international climate financing.

We intensively support our partners in **the economic assessment of natural resources** and their essential ecosystem services. On the local level, cost-benefit analyses (CBA) are applied for different forms of land use, including the valuation of environmental aspects.

CBA are also conducted to assess the damage caused by the loss of land due to degradation caused by human activity in contrast to the benefits of sustainable land management approaches.

On the national level, economic statistics are complemented by the introduction of a system of environmental-economic accounting (SEEA) that reveals the interactions between the environment and the economic activity of a country. Technical staff are strengthened in their capacity to evaluate environmental aspects of land use in economic terms. These approaches enable political decision-makers to opt for economically and ecologically sustainable forms of land use.

Environmental awareness and education are also high priorities for us. In collaboration with the American University of Central Asia, we support the development of educational programs for students who will be able in the future to work in the field of natural resources management and adaptation to climate change. Interactive television programs, which help children and adolescents to form a sense of responsibility for the proper use of natural resources and their conservation, are developed for the younger generation.

Regional cooperation and exchange of experience in the field of sustainable land management, the green economy and adaptation to climate change are essential for all countries of Central Asia. We also contribute to this process by supporting the activities of the Interstate Commission on Sustainable Development (ICSD) and helping to improve its organizational capacity.

We have created a new online tool, K-Link, for the **exchange of successful experience and knowledge** in the region. This is a search engine that automatically combines information and documents on environmental topics, which are stored on different web pages. Users of K-Link get quick and easy access to the knowledge in all Central Asian countries. An Informational Platform of the regional Pasture Knowledge Exchange Network and the K-DMS Electronic Library were additionally launched on the basis of K-Link.

Our results to date

In **Kazakhstan**, the Committee of Forestry and Fauna of the Ministry of Agriculture is developing mechanisms for the



Participants of workshops on participatory forest management approaches in Yakkabog pilot area, Kashkadarya region, Uzbekistan.

Establishing a pilot of the K-DMS data management system at the ICSD meeting in Ashgabat, Turkmenistan.



Training on adaptation to climate change for media representatives in Bishkek, Kyrgyzstan.

Discussion of a system of national accounts at the International conference on the natural capital for the transition to a green economy in Bishkek, Kyrgyzstan.

development of private forestation in the country. Due to our consulting services, training sessions and assistance in studying the international and regional experience, the partners are actively working on improvement of the legislative framework for the transition to a green economy. The participatory pasture management approach has been adapted to local conditions and can be integrated legally and institutionally.

In **Kyrgyzstan**, piloting of the reform of the forest sector using six forestry enterprises is progressing successfully, where the testing of various approaches to forest management with the participation of local communities is being conducted. At the national level, the Coordination and Consultative Council comprised of relevant government agencies, international organizations and civil society representatives coordinate the reform. Results of piloting will serve as a basis for developing a new concept for forestry development. Based on this experience and with our support, the World Bank is launching in Kyrgyzstan a project on integrated management of forest ecosystems.

In **Tajikistan**, more than 900 contracts with households had been signed by 2015. The forest agency, forest enterprises and forest users have gained a comprehensive understanding of JFM and are now able to share this approach more widely within and beyond the target areas. With the development of local bylaws, the legal basis for JFM is now fully in place and documented so that it can be rolled out in additional areas. The National Pasture Management Networking Platform actively works here, supporting a national dialogue and an exchange of knowledge in order to facilitate the recovery of pasture ecosystems through sustainable management.

In **Turkmenistan**, the new draft law “On pastures”, developed through our support, was submitted to the Parliament and was

approved in August, 2015. Preparatory work for the piloting of this law with the subsequent development of a number of the most important normative documents is in process at the moment. Improvement of the legislative base of the forest sector is also in process. A number of new normative documents are being coordinated by the State Committee of Turkmenistan for Environmental Protection and Land Resources.

In **Uzbekistan**, the development of a model of joint forestry management through the establishment of plantations of sea buckthorn has commenced on the territory of the State Forest Fund. Plantations of sea buckthorn not only create an additional source of income for the local population, but they are also a source of raw materials for the pharmaceutical industry of Uzbekistan.

Within the frame of the Economics of Land Degradation (ELD) initiative and in close collaboration with national research institutions in the five countries of Central Asia, analyses of the impact of land degradation have been conducted, which show that sustainable land management will provide substantial benefits for the economy and the livelihood of the population in the region.

An active **regional exchange of experience** and knowledge between the countries of Central Asia through the innovative tool, K-Link, promotes the effective application of successful technologies on the sustainable management of pastures and forests and conservation of biodiversity. Currently, K-Link combines six different organizations in Central Asia and this number will increase to 20 in the near future. A specialized information platform of regional pasture networks helps practitioners to learn successful experience and to exchange information.

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