

Community-based Walnut Forest and Pasture Management in Southern Kyrgyzstan

Promoting Biodiversity, Conservation and Poverty Reduction

Context

The woodlands of southern Kyrgyzstan form an important chain of biological diversity, despite the relatively small territory they cover. Many domesticated varieties of fruit and nut trees originate in the walnut and wild fruit forests. Preserving these species is of national and global significance. The forests work to naturally regulate the water cycle in downstream areas. The livelihood of the local population is highly dependent on these natural resources, especially nuts, pasture and timber. With an accelerating rate of glacier melt, Kyrgyzstan is amongst the countries predicted to be most severely affected by global climate change. This is expected to exacerbate soil erosion, resulting in landslides and the deterioration of pasture and forest resources. The existing system of forest and pasture use is not able to cope with these changes: 50-70% of pastureland has already been degraded due to livestock overgrazing.

The relevant state structures have not yet succeeded in resolving conflicts over land use nor in developing innovative forms of land management involving the participation of local people. Local communities are not in a position to introduce sustainable management models, which would conserve biodiversity, adapt to climate change and increase local incomes.

Our objectives

Together with national and local partners, we aim to introduce a modern and rational model of sustainable forest and pasture management in southern Kyrgyzstan in order to promote the conservation of biodiversity, support adaptation to climate change and increase local incomes.

Project name	Community-based Walnut Forest and Pasture Management in the South of Kyrgyzstan
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Project region	Kyrgyzstan, Jalal-Abad region
Lead executing agency	State Agency for Environmental Protection and Forestry, nongovernmental organizations
Duration	2014-2018

Our measures

Our project is active in Bazar-Korgon, a district of the Jalal-Abad region in a watershed of approximately 125,000 hectares. Of this total, 13,000 hectares are covered by natural walnut forests - the largest of their kind in the world. Around 36,700 hectares are used as pasture. Highlands and settlements constitute the rest of the territory, which is home to more than 47,000 people.

We focus our work in three main directions. The first is to support state agencies and local communities (forest enterprises, pasture committees, local self-government, etc.) to develop a joint management model for natural resources. Forest and pasture users are already actively involved in this process. Besides supporting the introduction of a national forestry reform, joint management at the local level will help to establish a balance between the roles and responsibilities of different actors involved in land management.

Pastures and forests should be managed in accordance with the principles of sustainability, ensuring the protection of existing



Walnut forests in the valley of Arslanbob river in Jalal-Abad region, Kyrgyzstan.

Installation of solar dryers in Jalal-Abad region, Kyrgyzstan.



Installation of hydraulic ram pumps in Kyrgoo village of Bazar-Korgon district, Kyrgyzstan.

Infotour on pasture management model implementation in Bazar-Korgon district, Kyrgyzstan.

biodiversity. This management approach will improve not only the ecological condition of the forests and pastures, but also the living standards of local resource users.

The second field of action strives to increase the forested area by planting forests with a mixture of walnut and fruit trees, which are well-adapted to climate change. These activities build on results from recent agroforestry research, as well as innovations from earlier projects. Six local forest enterprises (leskhoz) receive assistance in planting young trees. Seedlings from the gene pool of native species are grown in nurseries and then planted on deforested land. In addition, leskhoz have been equipped with computers, fire-fighting equipment and materials for fencing off forest areas. For fencing and afforestation activities, the leskhoz contract local forest user groups.

The third direction of our work focuses on the improvement of livelihoods for the local population. The assumption is that if local people have other, more sustainable options for the use of the forest resources, walnut forests can recover. We also introduce alternative methods of income generation on a broader scale. For instance, we assist farmers' cooperatives by providing specialized trainings on water and soil conservation technologies, construction of greenhouses and improvement of livestock quality. An information campaign on energy efficient technologies is being carried out in order to reduce unnecessary tree cutting. Within the scope of this campaign, local people are being trained in home insulation technologies.

Our results to date

A new pasture management model has been introduced with the participation of leskhoz and pasture committees. The model is the result of an intensive discussion process between leskhoz staff, representatives of pasture committees and administrations at district and village level that was facilitated by our experts. Pasture monitoring responsibilities and control functions remain with the leskhoz. Annual pasture use rights are transferred to the pasture users,

in coordination with pasture committees, and should not exceed the maximum pasture carrying capacity.

Integrated management plans for natural resources that take into consideration factors such as tourism and value chains have already been developed with the key stakeholders of a pilot leskhoz. Over 200 forest and pasture users and leskhoz staff came together and worked jointly. This process helped build constructive working relationships between stakeholders and strengthened trust between forest users and the leskhoz.

Tree nurseries have received support from the project in order to produce high-quality and climate-resilient seedlings of walnut and fruit trees which are then used to afforest fenced plots and rejuvenate the forest so it can continue providing Ecosystem Services for generations to come.

Five hundred farmers were trained in livestock keeping and cropping. Some of these formed breeding groups to improve livestock quality. As winners of a business plan competition, ten user groups received solar dryers for drying and processing forest products. They are thereby able to sell quality dry fruits, mushrooms and medicinal herbs at higher prices. A newly opened forest product village shop contributes further to the local people's income and to strengthening sustainable tourism. Five greenhouses are operational and enabling the production of locally grown vegetables. This increases the "learning by doing" experience and helps build ownership.

Since February 2015, thanks to quarterly information tours in the project areas, local community members improved their knowledge of sustainable pasture and forest management techniques. In the course of raising awareness about the uniqueness of this environment, our project supported partners to initiate the "Walnut Festival" which has become an established and popular event in the province's administrative capital Jalal-Abad ever since it was carried out for the first time in 2014.

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	Community-based Walnut Forest and Pasture Management in the South of Kyrgyzstan 6, M. Jumabaev str., Kurmanbek microdistrict 720900 Jalal-Abad, Kyrgyz Republic Edith Koshkin, Project manager edith.koshkin@giz.de T +996 312 90-93-40 www.giz.de, www.naturalresources-centralasia.org
Author(s)	Kamilla Alykulova, Indika Kochkarova
Layout	Aleksandr Gorbatsky
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Division	401 East Asia; Central Asia	
Addresses of the BMZ offices	BMZ Bonn Dahlmannstrasse 4 53113 Bonn, Germany T + 49 228 99 535 – 0 F + 49 228 99 535 – 3500 poststelle@bmz.bund.de www.bmz.de	BMZ Berlin Stresemannstrasse 94 10963 Berlin, Germany T + 49 30 18 535 – 0 F + 49 30 18 535 – 2501