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 hotspot of biological diversity, despite their small size. 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 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 deterioration of pasture and forest resources. The existing system of forest and pasture use is not 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.

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 on three fields of action. 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 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 biodiversity. This management approach will improve not only the ecological condition of the forests and pastures, but also the living standards of the 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 (leskhozes) receive assistance in planting young trees. Seedlings from the gene pool of native species are to be grown in nurseries and then planted on deforested land. In addition, leskhozes have been equipped with computers, fire-fighting equipment and materials for fencing of forest areas. For fencing and afforestation activities, the leskhozes contract local forest user groups.

The third field of action 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, then 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

Jointly with leskhozes and pasture committees we started to test a new pasture management model. The model is the result of an intensive discussion process between leskhoz staff, representatives of pasture committees, district and village administrations, facilitated by our experts. Pasture monitoring responsibilities remain with the leskhoz, annual pasture use rights are transferred to the pasture users’ committees.

Through courses on water and soil conservation technologies, local farmers have built rainwater-harvesting reservoirs and installed a drip irrigation system. This increases the “learning by doing” experience and helps to build ownership. 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 at a higher price.

Since February 2015, thanks to monthly 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, we for example supported our partners to initiate and carry out the first “Walnut Festival” in autumn 2014 in Jalal-Abad.