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“Bridging the gap between increasing knowledge and decreasing resources”

## Cooperation Between German Universities and GIZ in the Walnut-Fruit Forest Area of Southwestern Kyrgyzstan: Experiences on Integrating Research Findings into a Development Project on Biodiversity Preservation and Poverty Reduction

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### Abstract

Kyrgyzstan is one of Asia's most sparsely wooded countries, with a forest cover of only 4 to 5%. Despite the fact that the world's largest connected natural walnut-wildfruit forests are to be found in southwestern-Kyrgyzstan. They are considered the origin of many domesticated fruit and nut varieties. The *in situ* conservation of these wild varieties seems to be of global importance.

Acknowledging the unique nature of the forests, many research activities on biodiversity and the breeding of new varieties of nuts and fruits were conducted already in Soviet times. After the independence of Kyrgyzstan, within the project 'The Impact of the Transformation Process on Human-Environmental Interactions in Southern Kyrgyzstan' funded by the Volkswagen Foundation, scientists from German and Kyrgyz Universities conducted intensive research on the region, covering ecological as well as socio-economic and natural resource management aspects. The outcomes proved that the forests form a significant basis for rural livelihoods and have important regulating functions for the downstream regions, e.g. for the water regime. Degradation processes, induced by unsustainable resource management and use (firewood, nut harvesting, forest pasture) - performed within the context of legal pluralism and uncertain institutions, changed the forest structure and biodiversity negatively. Walnut harvests have decreased, as has the natural resilience of the forests. The negative impacts on the forests as well as the surrounding ecosystems are additionally exacerbated by the already perceivable adverse impacts of climate change. Additionally, the pressure on the forest resources increases steadily due to the region's difficult economic situation as well challenging social and demographic processes.

In March 2014, in the framework of BMZ's Energy and Climate fund (EKF) the GIZ project 'Biodiversity Preservation and Poverty Reduction in the Walnut Forests of Southern Kyrgyzstan' has been launched. This project integrates the findings of the mentioned research project into its own activities, which encompass i) the improved management of the forests and adjacent pasture lands through participatory land use planning, ii) the plantation of agroforestry systems with local high yield walnut trees as well as iii) the development of agroforestry value chains and alternative income generation measures. The implementation of the chosen measures will be flanked by the advices and assessments of the associated scientists.

**Keywords:** Climate fund, development project, forestry, Kyrgyzstan