**Community based forest management and its long-term effects upon ecosystem services and Livelihoods resilience – A comparative study between two communities in the Gaurishankar Conservation Area – Nepal**

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In the framework of the recently launched BOKU initiative 'Carbon offsetting as an opportunity for sustainable rural development in Nepal ‐ a participatory, community based approach' implemented by (1) Nepal Academy of Science and Technology, Kathmandu, Nepal (NAST) (2) Tribhuvan University, Institute of Science and Technology, Department of Botany, Amrit Campus, Kathmandu, Nepal (TU), (3) National Trust for Nature Conservation, Kathmandu Nepal (NTNC) and (4) University of Natural Resources and Life Sciences, Vienna, Austria (BOKU), the long-term effects of community based forest management on ecosystem services are evaluated. The study aims at a better understanding of social and economic implications of clean development mechanism (CDM) projects as well as the carbon sequestration potential, biodiversity and other ecosystem services, like the effects of intact forests on the provision of drinking water in rural communities. A strong emphasis is on understanding influencing factors on the resilience of communities to shocks with **special emphasis on the impact of the recent earthquakes** in 2015.

The study is conducted in a ‘twinning arrangement’ of BOKU students and Nepalese students, supervised by Nepalese and Austrian scientists. It is based on a community-scale comparison of two adjacent settlements. One community (Bulungkhani) which had support from a development cooperation project for more than 20 years starting at the beginning of the 1980’s is compared with a neighbouring community (Ladhuk) which did not participate in the described activities. While 35 years ago the forest integrity in the latter community was allegedly intact, the forest is now heavily degraded and overgrazed, leading presumably to scarcity of fodder and wood supply. In the social-economical part of the study **the livelihoods of the two communities are compared regarding their resilience with a special emphasis on the impact of the recent earthquakes** in 2015. The research method is based on the “sustainable livelihoods framework” (SLF) by DFID (Department for International Development), UKAid, which was developed on the basis of the sustainable livelihoods concept by Robert Chambers and Gordon Conway in 1991. The framework describes the main factors that are affecting people’s livelihoods and their relationships to each other. One part of the 'twinning' study investigates the so called „Livelihood Assets“, namely Human Capital, Social Capital, Natural Capital, Physical Capital and Financial Capital and the other part focuses on the external factors: shocks through the earthquakes (vulnerabiliy context) and transforming structures and processes influencing livelihood outcomes. The second part of the study compares the communities/VDC’s **with respect to biomass and soil carbon stocks and stock changes and biodiversity**. The case study will be a starting point for the joint BOKU funded carbon offset activities in mountain communities of Nepal.