

Senior Fellowship for Dr. Jeninah Karungi-Tumutegyereize: Productivity and biological diversity in the coffee-banana system in the Mt. Elgon Region of Uganda: Establishing Trends, Linkages and Opportunities

Initiative: Wissen für morgen – Kooperative Forschungsvorhaben im subsaharischen Afrika (beendet)

Ausschreibung: Postdoctoral Fellowships "Resources, their Dynamics and Sustainability - Capacity-Development in Comparative and Integrated Approaches"

Bewilligung: 23.07.2014

Laufzeit: 3 Jahre

Three interconnected subprojects will be implemented to: 1) identify socio-economic and biophysical drivers of agricultural land use and change, management options and outputs in coffee-banana systems in the Mt. Elgon region (MER). We will establish a range of interactions and factors influencing farmers' decisions by investigating crop production and resource management practices; aiming at long-term sustainability. 2) Assess the impact of land use, management options and the landscape context on biological diversity and productivity in coffee-banana systems in the MER. The study will explore the relationship between farm management profiles and land use at different landscape levels with variability in biotic and abiotic parameters of the system as well as establish the linkages between status of indicators of ecosystem services of pollination, biological pest control, nutrient cycling and soil formation with land productivity. Longitudinal surveys will collect data on plant and soil parameters; indicator insects' diversity; and produce value. 3) Establish optimal levels of interactions between the ecological and economic goods of farming systems in the MER. The project will consider the three dimensions of sustainable development: ecology, economy and society, simultaneously. We will delineate an innovative concept of cash crop production based on nature conservation, income generation and livelihood promotion. Results will be packaged as recommendations and policy briefs to guide and direct future management protocols for sustainable production and biodiversity in coffee-banana systems.

Projektbeteiligte

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Open Access-Publikationen

Mountainous Ecosystems In The Production Of Arabica Coffee

Cropping intensity driven microclimate is influencing abundance of ground foraging predators in coffee farmlands