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"Global food security and food safety: The role of universities"

## Value Chain Development for Food Security in the Context of Climate Change- A Contribution through Strengthening Capacity in Higher Education in Eastern Africa

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## Abstract

In East Africa, the sustainable use of natural resources and preservation of productive agricultural land are priority objectives to secure the nutrition of rural as well as growing urban populations. A large majority of rural households' livelihoods depend on the natural resources and their ecosystem services. However, climate change is threatening the livelihood bases of these resources through higher mean temperatures, rainfall variability, higher risk of droughts, shorter growing seasons and new distributions of pests and dis—eases. In particular, small-scale farmers are most vulnerable to changes in cropping conditions and climate change facing an immediate risk of crop failure. It is stated that strengthening didactical and technical capacity as well as regional integration of higher education's enables to improve the performance of food value chains in response to challenges of climate change. The project on "Value Chain Development for Food Security in the Context of Climate Change- A contribution through strengthening capacity in higher education in Eastern Africa (ValueSeC)" aimed at addressing food security and poverty reduction in Kenya and Ethiopia by strengthening didactical and technical capacity as well as regional integration of higher educational institutes in the target region to improve the performance of food value chains through adapting climate change. The partner universities include (University of Nairobi and Karatina University, Kenya; Haramaya University, Ethiopia; and Humboldt- University Berlin, Germany). The results of the project intervention has showed that revising the university structure through revising its curricula to address the societal and environmental transformation particular in the area of food security, climate change adaptation and value chain are found to be significantly important. Further, the project has learnt that the revision of curricula should be coupled and supported by active local stakeholders' participation in the process of the arrangements: problem identification, planning and implementation of strategies. Such integration of stakeholders enabled to create a strong competence network among local stakeholders and

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sustain the project activities, even after the end of the project life. Such a competence network also enabled to disseminate project results, outputs and other knowledge to the relevant stakeholders on time.

Keywords: Climate change adaptation, competence network, higher education, stakeholder