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“Development on the margin”

## Food Security in the Light of Climate Change and Bioenergy - potentials to Stabilize Livelihoods for Small-scale Farming in Tanzania

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### Abstract

During the past decades, Climate Change (CC) increasingly challenges research in manifold scientific disciplines. Evidence on the need for better adaptation strategies to CC caused growing efforts to tackle the new challenges in agriculture sciences. Ensuring threatened food security results in a key policy issue, which is even more considerable, when linked with issues on increased bioenergy demand. CC related to energy demands should be seen as a holistic system, which interrelations seek for new strategies focusing especially rural poor in small-scale agriculture. New in-depth methods on feasibilities, sustainable development and economic viability in mixed rainfed crop-livestock agriculture pose therefore a major future challenge.

Three GIZ-financed projects, coordinated by the International Food and Policy Research Institute (IFPRI) and the Leibniz-Centre for Agricultural Landscape Research (ZALF e.V.), enhanced the development of strategies related to CC adaptation and the use of bioenergy in Tanzania. The results of the three projects over a period of four years of intensive research are summarised in this presentation. All partners initiated diverse research activities in the frame of Impact Analysis, which are assembled to one integrated, interdisciplinary research overview to seek for new strategies at the science-policy interface.

The widespread application of these adaptation strategies and practices resulted in methods to design resilient “agro-landscapes” and livelihood systems with improved adaptive capacity to climate change and biofuel value chain management in the fields of energy, transport and agriculture in Tanzania.

**Keywords:** Agricultural systems, food security, household survey, livelihood