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"Solidarity in a competing world — fair use of resources"

# Improving Rural Livelihoods in Sub-Saharan Africa: Sustainable and Climate-Smart Intensification of Agricultural Production (SMACC)

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**Abstract**

The project is aimed at providing sustainable field-to-market strategies on production intensification of selected key crops that are adapted to help sub-Saharan regions to cope with climate change. To achieve the targeted goal, the research project was conducted by multidisciplinary consortium consisting of European Universities (BOKU and UHOH) and African Universities and Agricultural Research Institutes (Bahir Dar, Ethiopia; Egerton, Kenya; and ARARI (Ethiopia) and KARI (Kenya)). Hence, the entire research project was divided into five work packages.

The project, ERA ARD (2013–2016) financed by KEF, BMLFUW (Austria) and BMEL (Germany) addressed the improvement and sustainability of rural livelihoods in Sub-Saharan Africa through adaptation of sustainable and climate-smart intensification of agricultural systems. The indended project output was to foster sustainable farming practices, economic and social development and help to reduce negative CC impacts on livelihoods in rural areas.

Main project results are that with a combination of clover, green manure from alley farming as well as the addition of farm yard manure, cash crop yields can be increased. However a longer period is needed to show the effects of organic manure management. At household level we identified a set of activities that help to optimise the efficiency of the energy and water system. The research process was supported through intense communication between researchers, advisors, farmers and other representatives of the region, continuously observing and discussing the findings through field walks and workshops. This

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also helped building trust between the actors, which we identified as one key factor for the dissemination of the findings.

**Keywords:** Alley farming, climate change, market strategy