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“Management of land use systems for enhanced food security:  
conflicts, controversies and resolutions”

## Globe – Reload: An Approach to Facilitate Food Security in Sub Saharan Africa

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### Abstract

In the face of 850 million people being undernourished and a growing global population which is predicted to reach 10 billion by 2050 the German ministry of education and research has started a call for research projects enhancing food security especially in African developing countries.

Post Harvest Losses (PHL) with a global extent of about one third of the harvested products (annually 1.3 billion tons) contribute essentially to the devastating nutritious situation in many developing countries.

RELOAD (Reduction of Post Harvest Losses and Value Addition in East African Food Value Chains) is a project based on German-African research cooperation. Four academic institutions and one private company from Germany together with six African universities from Ethiopia, Kenya and Uganda, African national agricultural research institutes, small and medium enterprises and the International Centre of Insect Physiology and Ecology (ICIPE, Nairobi) make up a network for research about solutions to the problems arising from PHL.

RELOAD consists of seven sub-projects, four of which are related to important commodities with significant losses in each of the respective East African countries. These include staple foods, roots and tubers in Ethiopia, milk and meat products in Kenya and fruits and vegetables in Uganda. Three subprojects are product- and country-comprehensive, covering economic, technical and social aspects. The research results will be disseminated and implemented using SMEs and stakeholder groups as vectors and multipliers.

Besides optimising supply chain performance and developing low-cost and grid independent technological solutions for storage and preservation it is especially aimed at developing innovative processed food products that provide for a balanced diet (e.g. maize or plantain flours blended with pulses or pumpkin flours) and other convenience food items that respond to the demand of a growing urban middle class in the concerned countries.

Based on this approach and setup valid research results are generated that can be transferred to other regions and contribute to a considerable reduction of PHL in a sustainable manner.

**Keywords:** Food security, post harvest losses