RELOAD
REDUCING LOSSES ADDING VALUE

Reduction of Post Harvest Losses and Value Addition in East African Food Value Chains

Post Harvest Technology as key skill to enhance Food Security

Prof. Dr. Oliver Hensel, MSc. Michael Hesse; contact: michael.hesse@uni-kassel.de

Introduction

- Annually 1,3 billion tons of food are lost worldwide
- Post Harvest Losses destroy between 20 and 60 % of harvested food stuffs in East Africa
- Up to now little success has been achieved in reducing them. This failure is mainly due to the multitude of reasons for losses at all stages of complex food systems
- A German – East African network for system – related research to reduce Post Harvest Losses (PHL) is developed and implemented
- The Promotion of small/medium processing enterprises for value-addition of agricultural products reduces losses and supports creation of employment

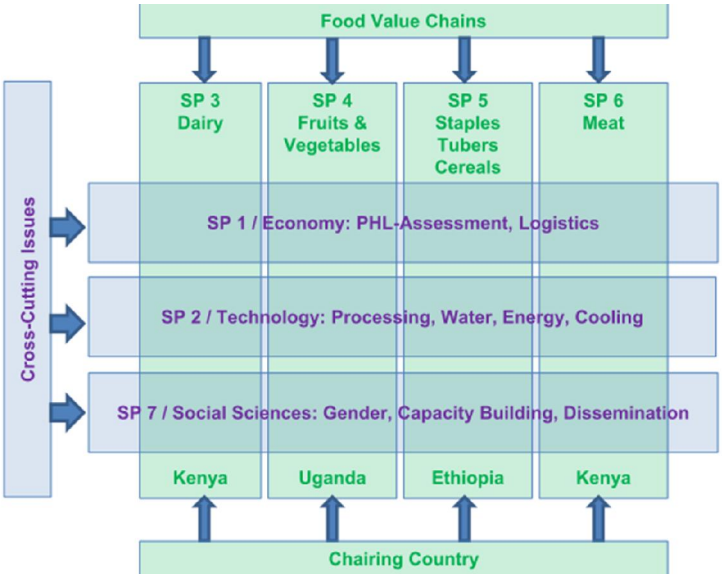

Fig. 2. Set-up of Reload project structure

Approach

- Identification of problem spheres in a systemic context
- Analysis of the precise problem
- Prevention (e.g. computer-based prediction) instead of reaction
- Development of marketing structures
- Decentralized processing and solar applications: Biogas – Solar cooling, drying and roasting - Solar Dairy – Solar distillation – Solar meat processing
- Value addition and shelf – life prolongation by innovative processing procedures close to the production areas

Fig. 1. PHL caused by *Sitophilus granarius*

Consortium and structure:

- 16 partner institutions (universities, national and international research institutes) from 4 countries (Ethiopia, Germany, Kenya, Uganda)
- **7** subprojects (SP), **4** related to the most important commodities in the respective countries and **3** product- and country-comprehensive (econ., technical and social aspects)
- A total of 26 work packages

Fig. 3. Ensete processing

Fig. 4. Drying of maize

Exerpt of results hitherto

- 26 PhD and more than 30 MSc students integrated
- Baseline surveys on milk, meat and staples Value Chains
- Identfication of PHL hot spots
- Implementation of an early warning system for grain pests
- Formation of farmer self help groups in Kenyan small scale milk production
- Upgrading of starchy products for special target groups
- Technical solutions for different cooling needs in pilot phase

Fig. 4. uncooled meat transport in Kenya

organicagriculturalsciences UNIKASSEL

GEFÖRDERT VOM
Bundesministerium für Bildung und Forschung
Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung
ptj Projektträger Jülich Forschungszentrum Jülich
HOCHSCHULE RHEIN-WAAL
DITSL where science meets people
HOCHSCHULE KONSTANZ TECHNIK, WIRTSCHAFT UND GESTALTUNG
AGRARTECHNIK WITZENHAUSEN