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

Crops for Healthy Diets: Linking Agriculture and Nutrition (HealthyLAND)

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Abstract

East Africa shows relatively high rates of malnutrition and low dietary diversity. Our goal is to discover to what extent and how a more diverse farming system contributes to diverse diets and nutrition security.

The research aims at contributing to the discussion on nutrition oriented agriculture and capacity building. The focus will be on knowledge exchange, fostering nutritional health between consumption and production units using a trans-disciplinary approach, in which crop scientists, agronomists and nutrition experts work together with farmers, households and re-tailers.

We hypothesise that improvements in farming systems, based on ecologically oriented farming, impact positively on food diversity and nutrition security. Expected outcomes are: a comparison of nutritional status, level of dietary diversity and agro-biodiversity and choice of crops among resource poor households in Kenya, Uganda and Malawi. The target sites are currently following carbohydrate based survival strategies.

Cross-sectional surveys were carried out in May and June 2016 among farm families with chil-dren below five years in Kapchorwa District (Uganda) and Teso South Sub-County (Kenya). Focus group discussions, a farming system analysis, observations, collection of soil and crop samples to assess level of degradation complemented the baseline data collection. The information will be used to identify agricultural interventions and nutrition education messages that are likely to improve the nutrition security of households. In Malawi data collection will start in October 2016.

Land productivity appears to be poor and the sites fit into the frame of hypothesised degradation, low-diverse monoculture, and nutrition problems. Kitchen gardens were available in 74 % and 73 % of the farm households in Teso (n=418) and Kapchorwa (n=454). In Teso, they were mainly used to produce vegetables only (89 %) and rarely to produce both, fruits and vegetables (8 %). Crop rotation (39 %), intercropping (12 %), permanent crops (13 %), crop pure stand (14 %) or fallowing (10 %) were main practices in Teso.

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Stunting levels were 14 % in Teso and 29 % in Kapchorwa. First results indicate that family nutrition is a challenge and need further investigation. In both areas the interventions will focus on linking nutrition messages and agriculture innovations to improve the food systems for nutrition security.

Keywords: Agriculture innovations, agro-biodiversity, dietary diversity, nutrition - agriculture linkages, nutrition education