Tropentag, September 18-21, 2016, Vienna, Austria

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

Scaling-Up Nutrition: Implementing Potentials of Nutrition-Sensitive and Diversified Agriculture to Increase Food Security

Constance Reif[1], Hadijah Mbwana[2], Wolfgang Stuetz[3], Michelle Bonatti[1], Stefan Sieber[1]

[1] *Leibniz Centre for Agricultural Landscape Research (ZALF), Inst. of Socio-Economics, Germany*
[2] *Sokoine University of Agriculture, Food Science and Technology, Tanzania*
[3] *University of Hohenheim, Inst. of Biological Chemistry and Nutrition, Germany*

Abstract

Food and nutrition security is still one of the most pressing challenges to constantly growing populations in Sub-Saharan Africa. The nutritional situation in Tanzania has only slightly improved in the last decade despite high rates of economic growth.

Scale-N aims at ameliorating the critical food security situation and nutritional status of the rural poor in Tanzania by implementing nutrition-sensitive agricultural innovations and nutrition education. Following the core principles of participatory and collaborative research, the project design includes the following steps (i) analyses of the food and nutrition situation; (ii) application of nutrition-sensitive interventions; (iii) measurements of impacts of the interventions on the nutritional status, livelihoods, and food security and (iv) up-scaling of successful interventions at farm-, policy-, and educational levels.

To identify the baseline situation of the local population, Scale-N conducted a household survey including the following core topics: (1) socio-economics; (2) disease history and medical conditions; (3) home gardening; (4) nutrition knowledge attitudes, perception and practices; (5) food production, distribution and consumption; (6) problem perception and community drivers; (7) measurement of nutrition status of mother-child-pairs: More than 650 households (mothers) from four different study sites were interviewed and anthropometrics and haemoglobin of mother-child-pairs were measured on study sites; blood samples were drawn for further analysis on iron status (serum ferritin, sTfR), infection markers (CRP, AGP), vitamin A status (serum retinol, RBP, pro vitamin A carotenoids) and zinc status (plasma zinc).

Outcomes of the survey and the nutrition value chain analysis will be evaluated to design a tailored education programme for local target groups on a household level and a specific training programme for facilitators will be set up. In this participatory approach, local population will be involved in learning processes to develop and improve nutritional knowledge of local nutrient-dense foods and optimised post-harvest treatments.

Keywords: Food and nutrition security, nutrition education, nutrition value chains, participatory action research

Contact Address: Constance Reif, Leibniz Centre for Agricultural Landscape Research (ZALF), Inst. of Socio-Economics, Eberswalder Str. 84, Müncheberg, Germany, e-mail: constance.reif@zalf.de