SP9: Poverty, Vulnerability and Coping of vegetable producers and consumers in rural and urban areas of East Africa

Project partners
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1. Objective
   a. Overall aim
   The aim of this sub-project is to understand, in an interdisciplinary and dynamic way, the role of horticultural value chains in poverty, vulnerability, and coping of households and individuals. In so doing, the sub-project aims to create the necessary knowledge that contributes to the overall objective of the project—namely, improving food security, well-being and livelihoods of vegetable producers and consumers. It intends to study the behavior (such as horticulture production decisions, savings and credit, migration, and intra-household allocation decisions) and well-being (such as health, income, consumption, food security) of households in response to a variety of shocks (such as institutional, policy, and climatic changes). In particular, it looks at various production techniques at the field level to understand how households use these techniques to manage production risks (which may differ between value chains). In addition, it analyses the various coping strategies used in response to different shocks and how these can be up-scaled at the national level.

   The sub-project uses a new panel household survey that captures key elements of value chains in at least two locations (study sites) in Kenya. This permits the analysis of a range of topics such as organization of value chains, production methods, intra-household and gender issues, food security outcomes and the impact of new practices, shocks and policies. The household panel will also serve as a core research infrastructure for other sub-projects. Thus, a large number of research questions to be asked by the consortium will potentially be tackled by drawing on this panel household survey. The planning and designing of the survey will be done with collaboration of experts from various disciplines who will contribute their specific needs and expertise into the survey. Hence, this brings out the value added of the project by bringing together a group of disciplines working on a common theme. This will be coordinated by Humboldt University of Berlin (Prof. Dr. Tilman Brück) in collaboration with Leibniz University of Hannover (Prof. Dr. Ulrike Grote). The data collection will be done by Kenyan institutions that are sub-contracted to take care of the organization and implementation of the survey.

   b. Relevance of sub-project to the objectives of the project (output)
   This sub-project belongs to output 5 analyzing the current situation of vegetable value chains and assesses its impact on poverty, vulnerability, and coping of vegetable value-chain stakeholders. The results of the study create necessary knowledge that can be fed into environmental subgroups as well as the policy and institution sub-projects.
c. Research and/or technical goals of intervention

With this research, we will close important knowledge gaps about the dynamics of horticulture value chain and poverty, vulnerability and coping in East Africa. This in turn contributes to improving food security, well-being and livelihoods of vegetable producers and consumers.

2. State of knowledge (Evidence-based literature)

Poverty is said to exist in a given society when one or more persons do not attain a level of well-being deemed to constitute a reasonable minimum by the standards of that society (Ravallion, 1992). Two distinct types of poverty are chronic and transient poverty. Chronic poverty is a state where people persistently live below the poverty line while transient poverty refers to people moving back and forth across the poverty line due to a change in a random event for example, a shock. Poverty dynamics assesses the poverty status of households over periods of time which captures the vulnerability aspect.

The World Food summit (1996) defines food security as a state when all people, at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Food security entails three important concepts namely availability of food of acceptable quality at the national/regional level; access to food by households; and food use and nutritional adequacy at the individual level. It is widely agreed that food insecurity, especially at the individual and household level is an outcome of poverty. For instance, many researchers have shown that malnutrition is quite high in poor countries. In addition, the behavior or response of households determines to what extent poor households are food insecure. Some households use different coping mechanisms such as saving and credit, migration, and product diversification to improve their food security situation even if they are already resource-scarce and poor.

A key knowledge gap concerns the role of horticulture value chains in contributing to poverty, food security and coping. The role of vegetable production and marketing in reducing vulnerability in the context of East Africa is not widely studied. In particular, what causes households and/or individuals to move in and out of poverty- namely what causes households' vulnerability to poverty- is not extensively researched. Vulnerability does not refer to the current status of a household or individual but rather to the risk or probability that they will be poor in some future period. This question is especially relevant to vegetable producers and consumers in East Africa as studies have already found
that vegetable production and marketing offer a high opportunity to reduce poverty (Weinberger and Lumpkin, 2007; Minot and Ngigi, 2004; and Minten et al. 2006). Vegetable production and marketing creates employment opportunities, increases wage levels, has high value-added and income generating potential (Weinberger and Lumpkin, 2007). As vegetable production and marketing is a labor intensive activity, it requires increased use of hired labor benefiting small farmers and land-less laborers. Even though some studies found that vegetable production and marketing indeed has a great potential to reduce poverty of smallholder farmers, the evidence is not conclusive. Furthermore, poverty and vulnerability of households and/or individuals depends on exposure to various risks and shocks such as institutional, policy, and/or climatic that has direct relevance in the context of vegetable producers and consumers. Hence, this sub-project will fill these missing links in the literature.

3. Utilization of results (uptake)
This cross-cutting sub-project covers all three targeted value chains (output 1, 2 and 3) and delivers the results and implications to the dissemination activities (output 1 and 6). The sub-project provides a comprehensive situation analysis and impact assessment for the entire project regarding livelihoods of the rural and urban poor. The results of studies on poverty, livelihood and food security could contribute to other sub-projects to see how such concerns may drive various agricultural choices.

4. Cooperation with other subprojects / cooperation with third parties
- Kenya: Egerton University, Department of Agricultural Economics – Dr. Arnold Opiyo: Local partner in Kenya, collaboration regarding the household survey, research and analysis.
- Germany: Leibniz University of Hannover (Prof. Dr. Ulrike Grote and Anja Faße). The organization of the household panel data collection with the corresponding workshops and interviewer training will be coordinated in collaboration with IUW.