



Looking at Food Security from an innovation systems perspective - first empirical insights from Tanzania -

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Introduction

To arrive at meaningful recommendations to feed into the dissemination strategy, as a major objective of WP 8.2, it studies the specifics of Tanzanian food security innovations. It focuses on understanding *how* innovation processes work on different levels of interaction. As a perspective to look at food security innovations, an innovation system approach was taken. By describing the system on all relevant system levels, it provides a *broad picture* of the present conditions for food security innovations. It pinpoints to obstacles, as well as promoting factors to food security innovations and reveals interlinkages between system elements.

Definitions & Objectives

Innovation System Food Security					
System Elements	System Levels	National	Regional	Village	Livelihood
Actors, Organizations Firms, governments, research ..		?	?	?	?
Interaction, Intermediaries Extension, networks, sectoral interfaces		?	?	?	?
Knowledge Base, Human Capital Local knowledge, mobility of labor		?	?	?	?
Institutions, Politics laws, governance, communities of practice		?	?	?	?
Competition Regional economic specifics and characteristics		?	?	?	?
Technology, Demand Demand and acceptance of technology, Trends		?	?	?	?
Limitation of Natural Resources soils, water...					
Innovation Processes (shows interlinkages of single system elements, emphasizes process character)					

Figure 1: Innovation system framework as a conceptual framework (adapted from Malerba 2002, 2004; Bokelmann et al., 2012)

Innovation System

„The elements and relationships which interact in the production, diffusion and use of new, and economically useful knowledge... and are either located within or rooted inside the borders of a nation state“
Lundvall, 1992

Innovation

“Innovation is seen as a continuous cumulative process involving not only radical and incremental innovation but also the diffusion, absorption and use of innovation.”
Muchie et al., 2003

Objectives of Working Package 8.2

- I. Description** of system elements and relevant systems levels regarding Tanzania's food security innovation system. (Part I, Baseline Study)
- II. Description** of existing innovation mechanisms and **obstacles / promoting factors** to food security related innovation processes. (Part I, Baseline Study)
- III. Documentation** of identified **possibilities to enhance food security innovations** on different levels of interaction. (Part II, Impact Study)

Methods used for Baseline Study

Different kinds of **knowledge and information** is available on different levels of the innovation system. Whereas innovation policy papers are available on a national and regional level, there is no data available on the village and livelihood level to be built on. Therefore an explorative approach was taken using qualitative methods:

Blue circles represent **semi-structured expert interviews**. Experts are main actors from the system e.g. from extension, ministries, research, NGOs, business, finance or farmer associations. (Expert interviews are conducted on national and regional level, 7 in Sept. 2014, 3 in March 2015)

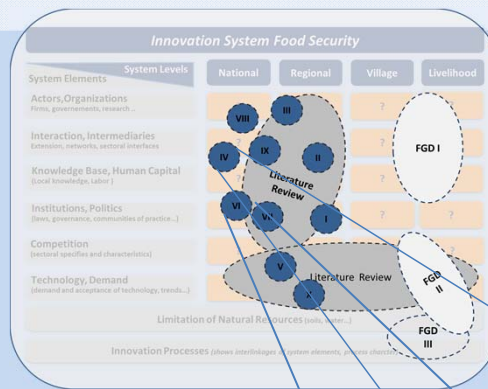


Fig.2 Methods used in WP 8.2 for the Baseline Study

Grey ovals represent the **literature review**. This activity is ongoing throughout the project (literature is available on national and regional/ zonal level).

White Ovals represent **Focus Group Discussions (FGD) / group interviews** on a village/livelihood level to study the nature of innovation processes. These activities take place in Feb/March 2015. All focus groups will be supported by an introductory interview.

The mix of methods used here ensures a comprehensive understanding of the system.

First Results from Interviews

General results from interviews (preliminary):

- A perceived “gap” between regional and village level results in a disturbance of communication among the levels.
- Activities could be better coordinated between government and non-government organizations.
- There is a need for technical and institutional innovations.
- Research is mainly donor driven and not demand driven.

Upcoming activities in WP 8.2.

- The **Baseline Study** will provide a «Description of the TZ Food Security Innovation System» due in April 2015.
- In the next step the **Impact Study** will use conditions/functions of innovation systems in order to study a range of selected innovation examples with respect to success/failure factors in order to give recommendations. Methodology used here is similar to a Qualitative Comparative Analysis (QCA).

System Elements	System Levels	National	Regional	Village
Actors, Organizations Firms, governments, research ..		?	?	?
Interaction, Intermediaries Extension, networks, sectoral interfaces		?	?	?
Knowledge Base, Human Capital (Local knowledge, Labor)		?	?	?
Institutions, Politics (laws, governance, communities of practice...)		?	?	?
Competition (sectoral specifics and characteristics)		?	?	?

Fig.3 Exemplary Interview quotes ordered according to the Innovation Systems elements

“Innovation platforms role is to develop a common voice and a platform for people to participate – on the other hand the job description is not clear”
“the gov. extension system is underfinanced and coverage for farmers is appr. 30 %”

“National plans are hardly ever implemented on the ground”
“National strategies are not evaluated by a neutral body - and - not evaluated on the ground”
“After decentralization the ministry „officially“ plays a supervisory role”