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“Filling gaps and removing traps  
for sustainable resource management”

## The Role of the Integrated Maize-Soybean-Chicken Value Chains in Sustaining Diverse Diets in Tanzania

WILSON WILSON<sup>1</sup>, MAJA A. SLINGERLAND<sup>1</sup>, HANNAH VAN ZANTEN<sup>2</sup>, FREDERICK BAIJUKYA<sup>3</sup>,  
SIMON OOSTING<sup>2</sup>, KEN GILLER<sup>1</sup>

<sup>1</sup>Wageningen University and Research, Plant Production Systems, The Netherlands

<sup>2</sup>Wageningen University and Research, Dept. of Animal Sciences, The Netherlands

<sup>3</sup>International Institute of Tropical Agriculture (IITA), Tanzania

### Abstract

In Tanzania, there is a large gap between food production and consumption, which contributes to high rates of undernourishment and micronutrient deficiencies. The dietary problems are mainly due to limited dietary diversity among households. Furthermore, increased urbanisation leads to an increase in demand for poultry products which is difficult to satisfy by domestic production. The objective of the current study was to understand the current maize, soybean and chicken value chain(s) and identify important entry points for value chain integration in the Southern Highlands of Tanzania to support nutritious diets. The focus was on these value chain(s) as integrating soybeans in the maize-chicken value chains might increase the productivity of chickens by providing nutrient-dense feed. We carried out an explorative study followed by a multi-stakeholder workshop with 54 stakeholders and experts involved in development of the value chain(s). The current maize, soybean and chicken value chains inter-connected particularly at the levels of the smallholder farming system and at processing facilities. The production of one or more of these products contributes to farmers' food security and income. Poultry feed is an important entry point for integrating the three value chains, whereby maize (grain/bran) and soybean meal are the main sources of energy and protein for chicken, respectively. A small proportion of maize produced is exported to neighbouring countries, while the current amount of soybean produced is mainly marketed in the domestic market. Three systems of poultry keeping were identified in the study area i.e. extensive, semi-intensive and intensive systems, with diverse feeding strategies ranging from scavenging, home-made rations, industrial feed rations and combination of home-made and industrial rations. Furthermore, the informal chicken market dominates in both urban and rural location. Currently, there is inefficient soybean marketing and processing in Tanzania, mainly due to disorganised producer groups and lack of adequate processing plants. As a result, soybean meal is mainly imported and sold at almost three times higher prices than the whole soybean grain produced in the country. Improving soybean production and marketing and investment in soybean processing infrastructures has a great potential to increase local availability of soybean products, reduce the cost of feed in chicken farming, and increase the availability of nutritious animal-based foods for human consumption.

**Keywords:** Chicken, feed, marketing, soybean, Tanzania, value chain