Tropentag, September 10-12, 2025, hybrid conference

"Reconcile land system changes
with planetary health"

Creating an enabling environment for food system innovation - An analysis of the kenyan livestock innovation system

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Abstract

Social, technical and institutional innovation can help to enable a transition towards more sustainable food systems. However, it is still largely unclear how outcome-oriented "food system innovation" can be strategically fostered in the African context. African food systems are evolving rapidly, causing positive impacts on some sustainability outcomes and negatives on others. This applies particularly to the livestock sector with its important socio-economic role but notorious "long shadow", that is potential negative environmental impacts. This study develops a conceptual framework adapting the agricultural innovation system (AIS) framework to the food system (transformation) literature by identifying specific AIS elements and functions pivotal for food system change. The framework is applied to the Kenyan national context with specific focus on the livestock sector based on qualitative interviews with 70 experts from diverse AIS actors including research, education, extension, industry, start-ups, policy makers, among others. Additionally, livestock and innovation policies and internal organisational documents are reviewed.

We identify 3 major structural trends/challenges that characterise the Kenyan AIS. 1) Projektisation, the almost complete reliance of activities on donor funds or grants; 2) Decentralisation challenges; 3) Imperfect markets and passive private sector. Due to these trends several challenges to food system transformation arise. Projects are good at creating niche environments and experiment innovations but fail to create market demand and an enabling environment under which the innovations can succeed permanently. Disruptive innovations such as drones or artificial meat are not transferred by entrepreneurs on their own. Policies to create directionality of innovation fail due to lack of an outcome-oriented vision and strategy and difficulties with policy adoption by the counties. The structural weakness and traditional design of the public research, extension and training system creates a vacuum for leadership, coordination and novel facilitator functions. We conclude that AIS structures in Kenya are still geared towards technological innovations but lack mechanisms to facilitate "food system innovations" which are more disruptive, require social and institutional change and involve more directionality, legitimacy creation and diverse actors (e.g., consumers/retailers). New or re-oriented Actors and institutions

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providing these functions and principles are currently lacking for which we discuss policy recommendations.

Keywords: Agricultural innovation System, Food System transformation, Livestock policy