Presentation Title: Drivers of Commercial Rabbit Production for Nutritional Diversity in Kenya

Authors: Sylvia Mogeni Moraa*[1] , Dennis Etemesi Olumeh[1] and David Jakinda Otieno[1]

Affiliation: [1]Department of Agricultural Economics, University of Nairobi, Kenya

Authors' Contacts': shonizmoraa254@gmail.com; etemesideaty@gmail.com; jakinda1@yahoo.com

Tropentag 2018, September 17 - 19, 2018 at Ghent University, Ghent, Belgium

1. Introduction

• Majority of Sub Saharan Africa states (SSAs) are agrarian based and depend on land as a critical resource for production.

• However, rapid population growth and declining land sizes in developing countries have necessitated innovative shifts in enterprise mix towards more intensive farming systems that can adequately support agrarian livelihoods.

• Emerging small livestock such as rabbits that require less land are considered more viable enterprises in land constrained systems (Serem et al., 2014).

• The ability of rabbits to be produced in small land parcels ensures production even in declining land sizes. Further, rabbit meat has diverse nutritional benefits (Mashapa et al., 2014).

• However, rabbit production in Kenya is largely on small informal scale and mostly done as a hobby by youth in rural remote areas. Further, commercial rabbit production has lowly been adopted in few urban and peri-urban areas.

Figure 1: Examples of rabbit rearing systems

2. Materials and methods

• A survey of random sample of 70 rabbit farmers of peri-urban population in Kiambu, Kenya.

• Face-to-face interviews using structured questionnaires.

•Both qualitative and quantitative analysis were used to generate results. Qualitative analysis was used in profiling socio-economic characteristics of rabbit farmers, whereas a probit regression model was quantitatively used to determine the factors that affected rabbit commercialization

3. Results

• Descriptive analysis in Table 1 showed that Majority of rabbit farmers were male at 67%. More than three quarters of these farmers had education level above primary education, were members in development groups, and had access to credit.

•Slightly over half (64%) of farmers were practicing commercial rabbit production.

Table 1: Socio Economic characteristics of Rabbit Farmers

Variable	Descriptive statistics
Gender (% male)	67
Education level (% above primary)	79
Credit access (% yes)	87
Credit use (% otherwise)	64
Group membership (% yes)	79
Market participation (% yes)	64

•Results from the probit analysis illustrated that level of education, farming experience, and access to credit significantly influenced commercialization decisions among rabbit farmers.

Table 2: Determinants of Farmers' Decision on Commercial Rabbit Farming

Variable	Coef.	Std. Err.	P>z
Gender of the respondent	-0.025	0.430	0.953
Level of education***	0.604	0.222	0.007
Farming experience***	1.668	0.520	0.001
Access to credit*	-0.856	0.490	0.081
Constant	-2.222	1.579	0.159

Notes: *, ** and *** show significance at 10%, 5% and 1% respectively

Figure 2: Rabbit Rearing In Kenya

4. Conclusions & Policy Implications

• Interventions that support up scaling of commercialisation of this relatively new and emerging meat value chain are recommended.

•Such initiatives include provision of value chain-specific training and affordable capital for business start-up; including low interest credit.

• Targeted credit mechanisms that support the rabbit meat value chain should be developed and advanced to ensure credit that is accessed is specifically used in the rabbit meat value chain.

5. Acknowledgements

We are very grateful to all the rabbit farmers who provided relevant information for this study. Technical support from colleagues at the University of Nairobi specially acknowledged.

6. Literature cited

• Mashapa, C., Deliwe, S., Dube, L. and Mrema, M. (2014). Socio-economic determinants of commercialization of smallholder rabbit production in Mt Darwin District of Zimbabwe. *Journal of Agricultural Sciences*, 4 (8): 346-353.

• Serem, J. K., Wanyoike, M. M., Gachuiri, C. K., Mailu, S. K., Gathumbi, P. K., Mwanza, R. N., ... & Borter, D. K. (2013). Characterization of rabbit production systems in Kenya. Journal of Agricultural Science and Applications, 2(3).