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Value Addition and Off-Season Market Participation among Retailers in the Grasshopper Value Chain in Uganda

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Abstract

Grasshoppers are a nutritious delicacy for most people in Uganda. They provide essential nutrients such as protein, minerals and vitamins. They are also a source of livelihoods for many people who trade on them including women. However, seasonality and high perishability of grasshoppers coupled with low value addition tend to limit their availability throughout the year. Despite their importance, empirical studies on grasshoppers' value addition and retailers' off-season market participation are limited. Our paper therefore analyses the effect of value addition on retailers' participation in off-season grasshopper markets in Uganda. Five-hundred (500) grasshopper retailers were randomly sampled from Kampala and Masaka Districts of Uganda in December 2019 during the peak season. Data were analysed using multivariate Probit and binary Probit models, where a control function approach was applied to account for endogeneity of value addition. Our results show high participation of retailers in activities that increase product market value, but low participation in those that increase both the product market value and shelf-life. After controlling for endogeneity of value addition, we find a strong positive effect of value addition on off-season market participation. Our results also show mixed effects of retailers' characteristics, institutional variables, transactional variables, storage constraints and managerial constraints on traders' value addition decision and participation in off-season market in the grasshopper value chain. We conclude that to ensure continuous availability of grasshoppers throughout the year, agri-food policy should promote the adoption of grasshopper value addition to increase shelf life stability. Agri-food policy should also prioritise integrating human capacity building and providing affordable credit for retailers in the grasshopper business.

Keywords: Food security, grasshoppers, multivariate probit, retailers, Uganda, upgrading strategies, value addition, value chain