

Impact of high-value market participation on income, saving and assets among smallholder vegetable farmers in Arumeru District, Tanzania

Happiness Anton Huka^a, Fredy Timothy Kilima^b and Alban Dismas Mchopa^a

^aDepartment of Procurement and Supply Chain Management, Moshi Co-operative University (MoCU), Moshi, Tanzania; ^bDepartment of Economics and Statistics, Moshi Co-operative University (MoCU), Moshi, Tanzania

ABSTRACT

This paper examined the impact of participating in High-Value Markets on the income, savings, and asset value of smallholder vegetable farmers. The study was guided by the participatory behaviour theory and operationalized through a cross-sectional research design. It was conducted in the Arumeru District. Data was collected through household surveys, focus group discussions, and key informant interviews. A total of 384 respondents including both farmers participating and not participating in the HVM for vegetables were randomly selected and interviewed. The data were analysed using propensity score matching. Nearest neighbourhood, kernel, radius, and stratification matching techniques were used to estimate the impact of participation on income, savings, and asset value. Findings revealed that farmers participating in HVM had higher and statistically significant values of income, savings, and assets as compared to farmers not participating in HVM. This was evidenced by the statistically significant values of Average Treatment Effect (ATE) and Average Treatment Effect on the Treated (ATET) ($p < 0.05$). These findings underscore the advantage of selling vegetables in HVM over traditional markets. While HVM participation shows promise in boosting savings, income, assets, and overall livelihoods of smallholder vegetable farmers, its full potential hinges on strong collaborative efforts. Agricultural extension services and NGOs must actively work together to support training programs, build capacity, and promote quality standards amongst farmers.

ARTICLE HISTORY

Received 24 November 2023

Revised 12 March 2024

Accepted 21 August 2024

KEYWORDS

Livelihood outcomes; high-value market; smallholder farmers; participation; vegetables

SUBJECTS



Marketing; Agriculture and Food; Agriculture

1. Introduction

Agriculture is vital for poverty reduction and serves as the primary employment in many African countries (Rafael, 2023). Smallholder farming accounts for about 80% of all farms in sub-Saharan Africa, directly engaging around 175 million individuals (FAO & UNICEF, 2020). Moreover, within rural communities, it sustains the livelihoods of many small-scale farmers (Zada et al., 2022). In Tanzania, Agriculture plays a key role in the economy, accounting for over 25% of the GDP and employing almost 70% of the workforce. It is estimated that 80% of the rural population relies on this sector for their livelihoods (FAO, 2021). While smallholder farmers derive their livelihoods from a wide range of economic activities, agriculture is the most dominant where vegetable crops alone contribute about 40% of the global horticultural

production value. Vegetable production has experienced significant growth worldwide where China leads on the global stage followed by India (Boddepalli et al., 2023). The production and consumption of vegetables are mainly concentrated in East and Southeast Asia, with Japan emerging as the largest importing nation. Nutritionally, vegetables serve as a vital dietary source of micronutrients and play a key role in promoting human health. Tanzania seeks to empower smallholder farmers through vegetable production to ensure improved livelihoods, food security, and healthy families (Rajendran et al., 2015).

Tanzania boasts a vibrant vegetable landscape where cabbage, tomatoes, onions, chillies, okra, pumpkin, African eggplant, carrots, sweet pepper, broccoli, zucchini, baby corn, and French beans are produced. The highly diversified production holds

CONTACT Happiness Anton Huka  hpendo046@gmail.com  Department of Procurement and Supply Chain Management; Moshi Co-operative University (MoCU), Moshi, Tanzania

© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.