



Tropentag 2023
September 20-22, 2023

Conference on International Research on Food Security, Natural Resource
Management and Rural Development
organised by the Leibniz Centre for Agricultural Landscape Research (ZALF),
Germany in cooperation with Humboldt-Universität zu Berlin, Germany

The Significance of Social Capital for Smallholder Farmers: Selected Evidence on Welfare from Kenya

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Abstract

Poverty continues to be a challenge among smallholder farmers in Kenya. Despite the inundated interventions by the government to improve the welfare situation among smallholder farmers, food security emerges among the many socio-economic challenges that impede smallholder farmer welfare development. While other physical and human capital interventions have already been explored, the potential of social capital is not well-discovered to full length.

This study investigates the significance of social capital on smallholder farmers' food security. To achieve the research objectives, a detailed review of relevant literature was implemented together with empirical research. The empirical research was carried out using a survey conducted in Kenya in 2013 and 2015. The ordered logistic model was employed to examine the significance of social capital on smallholder farmer household food security. The result of the study reveals that household connection and interaction in the community are positively associated with household food security while connection and interaction with its immediate relation reduce household food security.

The conclusion was that social capital can potentially improve smallholder farmers' food security, but it would be more beneficial to all households when it is integrated with other food insecurity preventive strategies such as the promotion of diversification, intensification of irrigation practices, and adoption of innovative practices. Based on these results, it is recommended that policymakers consider integrating and strengthening social institutions such as Farmer Based Organizations (FBOs), farmer cooperatives, and development groups among others that improve household interaction and networking by supporting and promoting the tailored needs for household food insecurity coping strategies.

Keywords: Food Security, Social Capital, Smallholder Farmers, Welfare

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Introduction

Agriculture is a significant contributor to the Kenyan economy, accounting for 51% of the gross domestic product (GDP), over 60% of national employment, and 65% of national export earnings (World Bank Group, 2018), providing a livelihood for about 80% of the population (FAO, 2022). The sector is dominated by smallholder farmers, who farm on an average farm size of fewer than 2 hectares (Husan, 2017), with production challenges such as diminishing farmlands, inadequate credit access, climate change shocks, and low technological and innovative farm management practices adoption (Birch, 2018; Kalinda, 2015; Nyariki, 2019). This renders smallholder farming unproductive, resulting in hunger, malnutrition, and chronic poverty. The Food and Agriculture Organization (FAO) report confirms the poverty-driven livelihood of Kenyans by indicating that 46% of the population lives on less than 1 USD a day, 36.5% suffer from food insecurity and 35% of children are chronically malnourished (FAO, 2022). The situation becomes worse for smallholder farmers in arid regions with a recorded poverty rate of over 80% (Eichsteller, 2022). Several interventional policies such as Social Dimensions of Development, National Poverty Eradication Plan, National Development Plans, and the recent Big 4 Agenda have been implemented to improve the welfare of Kenyans, particularly, smallholder farmers (Nthia, 2005). However, these efforts have not yielded as expected as poverty, food insecurity, and other developmental challenges continue to threaten the life of the populace. Social capital is considered a potential intervention capable of improving smallholder farmers' welfare. Though empirically proven and well documented (Woolcock, 2000; Bhandari 2009), the Kenyan government and policymakers have not explored to full length the potential of social capital in the battle against poverty. Therefore, this study aimed to investigate the significance of social capital for smallholder farmers' food security.

Material and Methods

A detailed review of relevant literature together with empirical research was implemented, using socioeconomic data collected under the SIMLESA (2013 & 2015) project in Kenya. Smallholder farmers in the counties Bungoma, Kakamega, and Siaya in western Kenya and Meru, Tharaka, and Embu in eastern Kenya were investigated through a purposive multistage sampling method. In all, 613 households were interviewed employing a standard quantitative questionnaire. Food security was measured by the Household Food Insecurity Access Scale (HFIAS) while social capital was measured by the forms of bonding, bridging, and linking. The significance of social capital on food security was measured by the ordered logit model.

Results and Discussion

Social Capital

The variable years spent in the communities, relatives and non-relatives, both within and outside the communities, were used to measure bonding social capital. The findings show that on average, the household head has lived in the village for 30.5 years, had 6 relatives both within and outside the community, and knew 9 non-relatives both within and outside the community. The findings further show that the longer a household lived in the community, the more relatives, and non-relatives the household had. Regarding bridging social capital, the variable trust for traders and group membership was employed. The findings show that almost every household head is a member of at least one social group and knows 4 traders within and outside the

community. Wholesalers were trusted more than other traders because they were regular customers and offered better prices. The results show a positive correlation between households' head years lived in the community and trust for traders. Linking social capital was measured by household trust for government support, trust for government officials, and the number of people in higher positions available to them. The finding shows that 47% of the households knew someone in a higher position, 60% of the households do not trust government support, and 32% trust government officials including extension agents. It was observed that household trust for government officials and support declined over the years.

Food Security

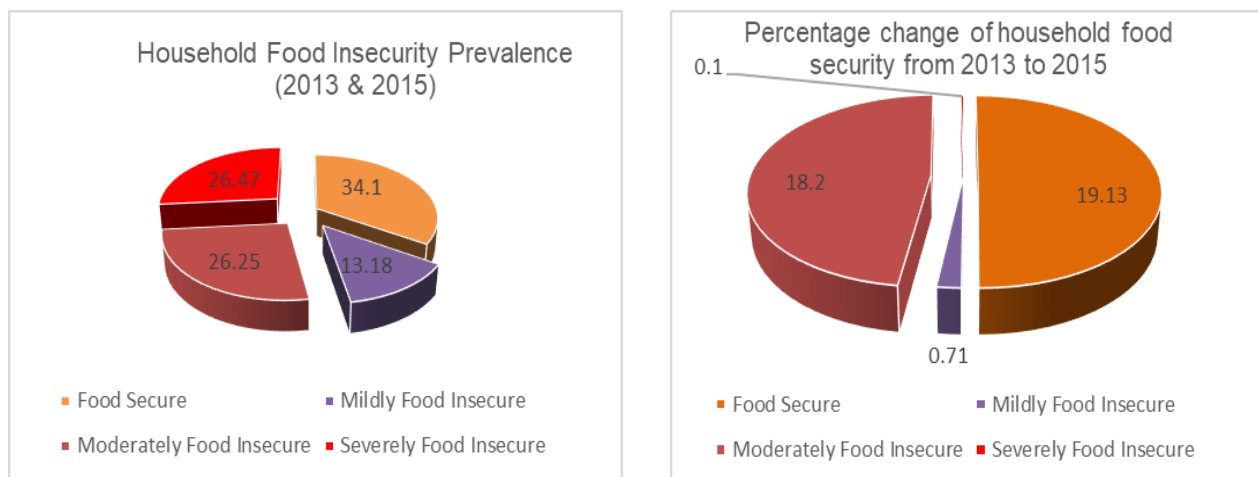
The result shows that 31% of the households were food secure, 13.18% were mildly food insecure, 26.25% were moderately food insecure and 26.47% were severely food insecure. The average household in the study area was mildly food secure with a mean score of 5.8.

Table 1: Descriptive of Household Food Insecure Access Scale (2013 and 2015)

Indicator	Obs.	Mean	Std. Dev.	Min	Max
HFIAS index	916	5.775109	6.298553	0	27

Another insight is the ease with which households could move from one category to the other. The possibility lies with the mildly food insecure and moderately food insecure categories as households in these categories can easily move to either the food secured category or the severely food insecure category depending on the food insecurity adopted coping strategy.

Figure 1: Household Food Insecurity Prevalence and Percentage Change from 2013 to 2015



Social capital and food security

The findings reveal that non-relatives in the community and years spent in the community are positively associated with household food security affirming with the literature review findings that membership in social groups improves farm outputs, resulting in improved food access. Household connection and interaction in the community improve food security through information sharing, farm input access, labor sharing, and physical food sharing. The findings further show that household connections with their immediate relations and participation in decisions are negatively associated with household food security. Mitigating household food insecurity works best with internal strategy, thus bonding and bridging are important for household food security.

Table 2: Significance of Social Capital on Household Food Security

Ordered logit Model

Explanatory variables:	Coeff.	Std. err.	Odds. rat.	Std. err.
Bonding Social Capital				
Years	0.018**	0.009	1.018	0.009
Nonrelatives within	0.035**	0.014	1.035	0.015
Relative within	-0.061**	0.029	0.940	0.027
Bridging Social Capital				
Participation	-0.016	0.084	0.983	0.082
Decisions	-0.257***	0.140	0.772	0.108
Linking Social Capital				
Position	-0.330	0.270	0.718	0.194
Government officials	0.086	0.073	1.090	0.080

The dependent variable is food insecurity prevalence (1 = food secure, 2 = mildly food insecure, 3 = moderately food insecure and 4 = severely food insecure)

*Significant at p= 0.01 – **Significant at= p=0.05 – ***Significant at p=0.1

Conclusions and Outlook

In conclusion, food security is a household-level problem and therefore requires specifically tailored household interventions. Social capital can improve household food security and works best when blended with physical and human capital interventions. Policymakers should consider strengthening institutions such as FBOs, farmer cooperatives, and development groups among others that improve household interaction and networking on the capacity of leveraging household access for labor, farm inputs, and information for improved farm yield. In doing that, consideration must be given to bonding and bridging social capital as internal household food insecurity coping strategies.

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