

Does agri-investment decisions mediate the relationship between access to financial capital and livelihood outcomes among rural smallholder farmers in Tanzania? A PLS-SEM moderated mediation model

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Abstract

Livelihood outcomes denote improvements in overall wellbeing among rural smallholder farmers, anchored in access to financial capital. Despite increasing policy attention to financial inclusion, evidence on how access to financial capital translates into improved livelihood outcomes remains scarce. This study examined the influence of physical, economic, and digital access to financial capital on livelihood outcomes and agri-investment decisions and assessed the mediation effect of agri-investment decisions between financial capital access and livelihood outcomes. Explanatory sequential mixed-methods design was employed. Data were collected from 391 rural smallholder farmers in Singida Region, Tanzania, using structured questionnaires, focus group discussions, and key informant interviews selected through simple random sampling. Quantitative data were analyzed using PLS-SEM, while qualitative data were examined through content analysis. The results indicate that physical and economic access to financial capital on livelihood outcomes were insignificant ($p > 0.05$), while digital access was significant ($p < 0.05$). Agri-investment decisions were found to partially mediate the relationship. Furthermore, financial self-efficacy negatively but significantly moderates the indirect effect of access to financial capital on livelihood outcomes through agri-investment decisions ($\beta = -0.063$, $t = 2.281$, $p < 0.05$), suggesting that higher financial self-efficacy encourages more cautious and thoughtful agri-investment decisions. The study recommends expanding affordable, reliable, and friendly financial services, promoting sound agri-investment decisions, and strengthening farmers' financial self-efficacy to enhance sustainable livelihood outcomes. By incorporating a behavioral dimension, the study extends the Sustainable Livelihoods Framework beyond its traditional structural focus by integrating a behavioral dimension.

Keywords: [Financial capital](#), [livelihood outcomes](#), [financial self-efficacy](#), [agri-investment decision](#)