Beyond single fixes

Climate variability is a reality in the arid and semi-arid lands (ASALs) of agro-pastoralist that rely on agriculture for their livelihoods. Agro-pastoralists have engaged in adaptation strategies to reduce their vulnerability. Despite the implementation of interventions that aim to enhance food security, food insecurity is worsening among the agro-pastoralists in Kenya. This study investigates the influence of the adaptation strategy combination on food (in) security in Laikipia West sub-County, Kenya. A multistage sampling technique was employed to select 308 households. Descriptive statistics, inferential statistics, factor analysis, the Rasch model, and generalized ordered probit were employed to analyze the collected data. The study results show that 76.62% reported worrying about not having enough food. The infit statistics were between 0.7 and 1.3, implying items were fit. Approximately 6.37% of female-headed households were more food secure relative to male-headed households. The combination that comprised risk reduction, cultural, sustainable, farm, livestock, and diversification practice was the most adopted at 64%. The marginal effect of generalized ordered probit model findings shows that consumption equivalent household size, farming experience, household education stock, tropical livestock unit, access to agroweather information, and a multi-component adaptation package—integrating risk reduction, cultural, and sustainable practices crucially influenced food (in) security categories. The results imply that implementing combined adaptation strategies enhances their effectiveness, highlighting the importance of policy interventions that promote the adoption of locally relevant combinations that improve food security.