

Abstract

Over the years there has been a continual decline in crop and livestock diversity, increasing vulnerability of smallholder farmers to food insecurity. We instituted this study to determine the impact of agro-biodiversity interventions on crop and livestock diversity, smallholder farmers' food security and income generation. Data for this study was obtained from a random sample of 150 households using a single household survey (SHS). Multinomial Logit (MNL) and Ordinary Least Square (OLS) regression models were used to determine the impact of crop and livestock diversity on food security and income, respectively. The results showed that crop diversity significantly increases farm income as well as the probability for the smallholder farmers to be food secure. Further analysis showed that optimal enterprise combination to meet household food security requirements and increase income, farmers should reduce on enterprises with negative gross margins in their farm plans either by among others, perfecting endogenous innovations.