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Improving food security and income through soybean value addition: Evidence from Soboba district of Ghana

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Abstract

Food insecurity and poverty are a serious concern for marginalised populations around the world, especially in sub-Saharan Africa where development is progressing rather slowly. The northern part of Ghana where this study is carried out is considered the poorest part of the country, persistently lagging in stable growth. Crop production in this part is highly susceptible to climate variability, partly as a result of the unimodal rainfall pattern experienced in this area. These, coupled with several challenges peculiar to agriculture in this area makes it susceptible to food insecurity which often results into out migration to the southern part of the country. Soybean production plays a very important role in the livelihoods of rural farm households in this part of the country, serving as a major cash crop due to its tolerance to climate variability and environmental shocks. In maximising gains from farming, farmer participation in commodity value chain activities such as value addition is often encouraged. This study sort to examine the effects of farmers' participation on soyabeen value addition on household income and food security in the Saboba District of Ghana using 401 farm households. Methodologically, the study employed a probit model to examine the determinants of farmers' participation in soyabeen value addition. We further use an endogenous switching model to analyse the effects of participating in value addition on the income and food security of farm households. The results indicate that, training on soyabeen value addition, input access, tractor access, land ownership, extension services, FBO membership, household size, age and gender are the key determinants of farmers' participation in soyabeen value addition. The endogenous switching model revealed that farm household participation in soyabeen value addition is a positive function of household per capita income and a negative function of farm household food insecurity. The study recommends that, the government and key stakeholders whose focus is on improving rural livelihoods and food security should consider soyabeen value addition as part of the strategies to help households out of poverty, since participation in soyabeen value addition is found to improve household food security.

Keywords: Food security, Ghana, livelihoods, soybean, value addition