World Academy of Science, Engineering and Technology
International Journal of Agricultural and Biosystems Engineering
Vol:12, No:06, 2018

Impact of the Government Ghana Block Farm Program on Rural Households in Northern Ghana

Authors : Antwi Kwaku Dei, Lyford Conrad Power

Abstract : This paper investigates the outcome of participating in the government of Ghana block farm program on rural households' farm productivity, income, food security and nutritional status in Northern Ghana using cross-sectional data. Data analysis was done using the Instrumental Variable and the Heckman Selection Bias procedures. Our analysis indicates that participation in the block farm program significantly increased directly the productivity of maize, rice, and soybean by 21.3 percent, 15.8 percent, and 12.3 percent respectively. Also, the program participation was found to increase households' farm income by 20 percent in northern Ghana. Furthermore, program participation was found to improve household food security and nutrition by 19 percent and 14 percent respectively through income effect. Based on the benefit-cost ratio of 1.59 the results from the study recommends that the program is expanded to other communities in the northern region. Further analysis indicates that rural households' decision to participate in food security intervention programs is significantly influenced by factors including the gender of the household head, the age of the household head, and household size. Results of the study further show that gender of household head, household size, household monthly income, household assets, women educational status, the age of women, marital status of women, are significant determinants of food security and nutrition status in Northern Ghana.

Keywords : block farm program, farm productivity,, household food security, Northern Ghana
Conference Title : ICFSN 2018 : International Conference on Food Security and Nutrition
Conference Location : Vienna, Austria
Conference Dates : June 14-15, 2018