

Gender specific determinants of inorganic fertilizer adoption in the semi-arid region of Ghana

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Abstract

Poor soil fertility is a major challenge in food production in Ghana especially in the upper east region. Fertilizer which is known to increase soil fertility is not widely adopted especially by female headed households. This research is aimed at investigating the influence of gender on inorganic fertilizer adoption in the Upper East Region of Ghana. A total of 300 households comprising 150 male and 150 female headed households were interviewed. A separate model was used to determine if the factors of adoption of fertilizer differ by gender. Results show that household size, area of land allocated for maize production and area for rice production were common factors that influence fertilizer adoption by both gender groups. However additional factors such as marital status and perception about soil fertility status positively and significantly influenced fertilizer adoption by male headed households while farming experience, dependency ratio, and family remittance were additional factors that significantly influenced fertilizer adoption by female headed households. Similarly factors such as age of farmers, access to extension services, access to credit, access to market, livestock holdings, slope of the land and group membership were not statistically significant to fertilizer adoption for both gender groups. Male headed households had additional factors such as education, farming experience, dependency ratio, slope of the land and remittance that were not statistically significant. Factors such as, marital status, non-farm income, soil fertility status, and access to climate information were not statistically significant for female headed households. Policies which target large scale maize and rice farmers will be relevant in increasing fertilizer adoption among male and female headed households. In addition government policies should target farmers with long farming experience and female headed households with large family sizes.