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"Reconcile land system changes
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Assessment of socioeconomic characteristics and adoption of sustainable land management practices in northern Ghana: the case of legume and cereal farmers

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Abstract

This study assesses the perception of cereal and legume farmers in Northern Ghana and the factors that determine the adoption of various components of Integrated Soil Fertility Management (ISFM) using cross-sectional data from 288 farmers. Employing a descriptive and three-stage least-square regression, the study shows that farmers held an average of 10 acres of farmland of which 7acres was cultivated. Maize and groundnut farms were comparatively bigger than rice and cowpea farms. In addition, majority of the sampled farmers were monocropping and only 40 % used machinery for land preparation. Again, the sampled farmers predominately worked on family lands and have diverse ways of managing farmlands, which are distinct in the wet and dry seasons. About 37 % of farmers use neither organic nor inorganic fertilisers in the wet season although production activities are intense in this season. Farmers perceived the use of organic fertilisers to be high yielding, environmentally friendly and less costly. Nevertheless, it is often not available in the right volumes demanded and application is very laborious when larger areas of farmlands are considered. Further, farmers showed limited knowledge on ISFM practices. Being a female, engagement in secondary occupation as well as increased contact with extension increase farmers' likelihood to adopt ISFM. On the other hand, age, area of farmland and farming on family lands dissuade farmers from the full adoption of ISFM practices. Therefore, ISFM can be promoted through increased farmer contact with extension and the exploration of alternative source of organic fertiliser that can easily be assessed in any volume.

Keywords: Cereals, Integrated Soil Fertility Management, legumes, Northern Ghana

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