

The Role of Formal and Informal Institutions in Smallholder Agricultural Adaptation: The Case of Lawra and Nandom Districts, Ghana

Rabiatu Abass^{1*}, Adelina Mensah¹ & Benedicta Fosu Mensah¹

¹ *Institute for Environment and Sanitation Studies (IESS), University of Ghana, (UG)*

* *Corresponding author; Email: rabiatuabass@yahoo.com*

Abstract

As the current frequency of climate impacts is expected to increase in semi-arid regions of Ghana, smallholder farmers will require access to new and relevant information to adapt successfully. Institutional support is increasingly gaining attention for effective and successful adaptation; however, there is limited knowledge on the specific roles of both formal and informal organizations in implementing adaptation strategies in semi-arid regions. Using the Lawra and Nandom Districts as case studies, the various roles of existing institutions in adaptation strategies were examined. A total of 135 household questionnaires, six focus group discussions (FGDs), 20 in-depth interviews with farmers, and seven key informant interviews from institutions evaluated climate risks and impacts, adaptation responses of farmers and the functions of the different institutions in supporting these adaptation strategies. Majority of respondents observed that irregular and unpredictable rainfall (77%), high temperature and extreme heat (56%) and rainfall irregularities during growing season (55%) as the main changes in the past 10 years. Major agricultural adaptation strategies identified were changing of planting dates (100%), planting of different varieties of the same crop (51%), planting of trees (35%) and seasonal migration by the local farmers (21%). There is high dependence by the smallholder farmers on formal institutions' resources to adapt, especially for developing/building the local capacity, rather than on local innovations within the communities. This is mainly due to the lack of knowledge about climate change risks and adaptation strategies and limited or no access to financial resources. Government-led adaptation is considered to be more sustainable than NGO-led programmes although it comparatively lacks specific mandates and financial resources. Continued support by formal institutions will therefore enable the development of more effective agricultural adaptation initiatives.