

## Gender Dimensions of Climate Change Adaptation Needs for Smallholder Farmers in the Upper East Region of Ghana

Mohammed Gali Nuhu\*, Kenichi Matsui

University of Tsukuba, Japan

### Abstract

In developing countries, where agriculture remains to be the main employer of work forces, men and women have played socially differentiated roles in sustaining households. Studies on farmers' climate change adaptation and food security have emphasized productivity and climate hazard at large without much heed to this gender role divisions. In this paper, we argue that understanding gender specific perceptions and needs about climate change adaptation for farmers is much needed to better understand overall climate change adaptation needs and capacities. Without this understanding, it is difficult to identify how policy interventions are to be effectively designed as much of rural farming practices were deeply influenced by gender specific traditional customs and mores. This study attempts to shed light on gender specific smallholder farmers' adaptation needs and perceptions in the Upper East Region of Ghana. We conducted a questionnaire survey among 200 smallholder farmers. We also held a focused group discussion. In particular, we asked them about their socio-demographic information along with their gendered roles in resource use, land ownership conditions, and decision-making involvement. Our analysis shows that the female respondents, who mostly belonged to low/middle income groups, emphasized their urgent need for financial support in improving their income. They were in need of more farm land as 94% of them had only less than 5 acres to farm whereas 66% of the males were in the same condition. These women (91%) expressed the importance of being connected to farmers' mutual-help groups to share information about common farming needs. The male respondents, who were in middle-income status, needed access to irrigation facilities. We also found different responses to such needs as their access to extension services, farm inputs, climate information, crop insurance, mechanization and infrastructure. Regarding access to resources, most of the women respondents, except those from Tindana family (priest of the earth), had little hope as they did not own land. In addition to these needs, we examine how men and women were involved in decision-making processes for farming. In response, 91% of the respondents indicated that women were partially involved in decision-making for land acquisition and land preparation.

**Key words:** Climate change; Adaptation needs; Gender; Smallholder farmers; Ghana