

An Assessment of Institutional Importance of Climate Change Adaptation in the Volta River Basin of Northern Ghana

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Abstract

Climate change affects a lot of sectors including agriculture. Several measures are being adopted to avert the impacts associated with it. Water resources in semi-arid areas are not excluded. The study, conducted in Lawra District of Upper West region of Ghana was undertaken to identify and assess the adaptation strategies adopted by settlers along and in the Volta River Basin as well as to analyse the level of agreements among the institutions that are helping farmers to adapt to climate change impacts. This study used a mixed method including focus group discussion and a semi-structured questionnaire to obtain information from 160 farming households in 8 randomly selected communities in the Lawra district. Results revealed three classes of adaptation strategies which include environmental, cultural/agronomic and economic strategies. Majority (65%) of the settlers adopted the environmental practices, while 52% of the respondents also adopted the cultural/agronomic practices and less than half of the respondents (31%) adopted the economic practices. We viewed that adoption levels, though more than half of the respondents adopted the environmental and cultural strategies, are still not encouraging given the magnitude of interventions related to water management. The results also reveal that community watchdogs, climate change, agriculture and food security platforms and non-governmental organisations are the three most important institutions working to improve farmer resilience to climate change. Therefore the results could re-stimulate policy implementation with the overall aim of increasing adoption levels of the strategies. Only when this is done, will a significant step have been taken towards saving our water resources from climate change impacts.