Climate Change and Household Food Security in Tanzania A Case of Hai District in Kilimanjaro Region By Rabia Amaniel Mshana Master of Arts in Co-operative and Community Development, Moshi Co-operative University (MoCU), 2016

The study aimed at investigating the impacts of climate change on household food security in Tanzania, with focus on Hai District, Kilimanjaro Region. Specifically, the study aimed at assessing smallholder farmers' awareness on climate change, its impact on food crop production especially maize and the coping strategies adopted by rural smallholder farmers in mitigating against climate change effects. The study used both secondary and primary data. The primary data were on farmers' awareness on climate change and copping strategies adopted by smallholder farmers to remain food secure. Primary data were collected from 113 households through interviews and by using questionnaire while secondary data were collected from both published and unpublished documents. Data were analyzed using descriptive statistics and Inter item Correlation Matrix. Findings revealed that farmers are quite aware of climate change and adaptation options. Frequent droughts, temperature change and outbreak in plant and animal diseases were the most perceived consequences of climate change. Despite the farmers' awareness and adaptation to climate change such as engaging in small petty business and at times selling household assets including livestock, those activities do not provide sustainability for buying food items as a result of climate variability. The relevant policy recommendations from these findings are that, enhanced access to credit and information can significantly increase farmers' adaptive capability. Government policies should support research and development on appropriate technologies to help farmers adapt to changes with recurrent climatic conditions. The study recommends on vital measures as follows: Concerted efforts should be made in enhancing diversification of agricultural production, investing in rain water harvesting technologies and improvement of irrigation infrastructures.