

The Study of the Existing Adaptation Mechanisms of Small holder farmers to Impacts of Climate Change in Tanzania. Case Study: Moshi Rural District in Kilimanjaro Region.

This study focused on the study of the existing adaptation mechanisms of small holder farmers to impacts of climate change in Tanzania. It was conducted in Kilimanjaro Region at Moshi Rural District. This District was purposeful selected in order to; 1: To capture important agro-ecological zones thus providing important adaptation measures of smallholder farmers to climate change impacts, 2. The district has both food and cash crops and also differ significantly in the amount of rainfall received annually across its zones from the highland, middle land and lower land respectively. 3. To obtain relevant information with regards to climate change impacts and adaptation strategies of smallholder farmers from government and private institutions located in these areas. Thus objectives of this study included (i) to study and assess the effectiveness of existing traditional mechanisms for smallholder farmers' adaptation to climate change (ii) To identify innovative agricultural practices those promote small holder adaptation to climate change and determine the extent of their adoption. (iii) To identify determinants of adaptive capacity of small holder famers to climate change and variability. (iv) To suggest other effective interventions by smallholder farmers to climate change adaptation in the district. Both qualitative and quantitative methods were used in this study and sampling techniques involved bokth probability and non-probability techniques. Research tools for data collection included Literature Review, consultation, physical observation, questionnaire and interview and data collected were be analyzed using excel and findings were presented using various themes including tables, graphs and charts. In this study it was clear that smallholder farmers understand that there is climate change and its impacts has already affecting them and they had some strategies to cope with some of those impacts which included crop diversification, water management practices, conservation agriculture practices and pest management practices. However, most of the adaptation mechanisms seem to be not effective in the study area as farmers complained a gradual production fall annually which is mainly caused by lack of adequate climate information and technical support.

For full thesis please contact Mujahid Gabier at mujahidg@sun.ac.za