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Research Interest: Community Adaptation to Climate Change: What motivates Household Decision Making to change farming practices in Lushoto District, Tanzania.

Warming of the climate system is now unequivocal and it is human induced (IPCC, 2001a 2007; Al Gore, 2007; Stern, 2006; UNDP HDR, 2008). It has been observed that the global surface temperature has increased by an average of $0.74^{o}C$ in the past century (IPCC, 2007). Warming is positively correlated with the build-up of greenhouse gases in the atmosphere. As a result of global warming, there has been a decrease in the extent of snow and ice cover; a rise in average sea level as well as the heat content of our oceans (IPCC, 2001). Such changes can be associated directly or indirectly with the rising temperatures and reduced intensity and patterns of rainfall (Majule et al., 2009; Lema and Majule, 2009).

Observation has indicated shifts in crop production areas and crop growing pattern as a result of climate change impacts in the Mkomazi Valley. While coffee continues to be cultivated in some areas within the slopes of East Usambara Mountains, the traditional coffee production areas are now used for maize growing and coffee production has shifted upwards the slopes of Usambara Mountains. Some of the areas that were used to cultivate beans once a year are now producing the same crop twice. While much has been done on community based adaptation, the real factors that drive decision making to change the farming practices are not well known and this requires a detailed investigation. A number of questions require answers such as: what motivates such communities and households to change: Is it because of local knowledge? Or intuition? Or knowledge transfer or what?

This study intends to explore the factors that motivate decision making to change from one farming practice to another in response to climate change impacts in the Mkomazi Valley. The study will explore the perception of local communities on changing climate in their localities, changes in the farming practices by local communities, examine the reasons and timing of decisions to change farming practices by households, and analyse socio-economic implications of the changes at household level. The theoretical framework Willows et al. (2003) indicates a complex inter-linkage between climate change and its impacts as well as response by the communities. This framework will guide this study. Primary data will be collected through interviews with key informants; focus group discussion; household surveys; and field observation. Appropriate statistical analysis will be used.