

**Impacts of adaptive livelihood dynamics in response to climate change and variability on coastal and marine resources: a case of Mlingotini and Kondo villages in Bagamoyo district, Tanzania**

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**Master of Science (Climate Change and Sustainable Development)**

**University of Dar es Salaam, Institute of Resource Assessment, 2017**

Tanzania like many other countries in the world has felt the impacts of climate change and variability on various sectors including agriculture and fisheries in different districts, to include Bagamoyo. This study aimed at assessing the impacts of community's adaptive livelihood dynamics in response to climate change and variability on coastal and marine resources in Bagamoyo district. Quantitative and qualitative research methods were employed. Data collection techniques involved questionnaires, Focus Group Discussions, Key Informants Interviews and observation which reflected the mixed approach. Questionnaires were administered to 10% of the population where each household was randomly selected using villages register. Focus Group Discussions comprising seven participants were carried out in each village. Participants who had lived in the village for decades and with an understanding on the subject matter were considered for Focus Group Discussions. Government officials as key informants provided detailed information about climate change and natural resources management. Observations were used to witness how livelihoods are affected with the climate change and variability impacts. Data were analyzed, discussed and presented in form of texts, tables, plates and figures for easy reading and interpretation. Results revealed that communities in the villages had been changing and diversifying their livelihood activities as reported by 71.4% and 63.5% of the respondents from Mlingotini and Kondo villages respectively. Majority of the respondents in the study villages acknowledged existence of the degradation of coastal and marine resources and the environment in general due to dynamism of activities undertaken by community in response to the adverse impacts of climate change. On the other hand, large number of the respondents in the study villages confirmed to have been involved in decision making on use, conservation and management of coastal and marine resources. Despite their involvement in the conservation and management of natural resources, degradation of ecosystems has been increasingly signifying un-effective resources conservation and management. An integrated and adaptive natural resources management is recommended to insure both sustainability of coastal and marine resources and communities' livelihood.