

Assessment of Social Vulnerability and Adaptive Capacity to Flood Hazard: The Case of Kilosa Morogoro.

The main objective of this study was to assess social vulnerability and adaptive capacity to flood hazard in Kilosa district. A total of 414 households from ten wards of Kilosa district were randomly sampled and heads of households were interviewed during the survey. Primary data were collected in the field through in-depth interview with heads of households and government officials. Secondary data were collected through literature review and mapping. Data processing and analysis was done by using Statistical Package for Social Sciences (SPSS) software version 16.0 and Microsoft Excel. ArcGIS software version 10 was used to analyse spatial patterns of social vulnerability.

Results show that socioeconomic and demographic characteristics particularly children aged 0-5 years, the elderly aged 65 years and above, disabled people, women, uneducated population, unemployed population, renters, low household income, poor membership to social groups and poor participation in community decision making process were the key contributing factors in the construction of social vulnerability to flood hazard. The calculated Social Vulnerability Index shows that Mbusi is the most vulnerable ward with a score of 0.93 while Mkwatani was the least vulnerable with a score of 0.37. The spatial pattern of social vulnerability shows that there is moderate variation of levels of vulnerability among communities due to similar socioeconomic circumstances among wards. Results also indicate low adaptive capacity to flood hazard which is evident in poor disaster preparedness, response and recovery. Adaptive capacity was household centred and most communities lack plans and institutions that could enhance adaptive capacity. Kilosa communities are generally vulnerable and their adaptive capacity is low but there is a potential for enhancing adaptive capacity. This study recommends public awareness creation on flood hazard management among communities. Community approach towards building is also recommended in order to complement efforts of individual households.

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