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## THE VULNERABILITY IMPACT ASSESSMENT AND HOTSPOT MAPPING FOR THE CHALINZE DISTRICT COUNCIL, TANZANIA

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### ABSTRACT

This study comparatively quantified the way and extends to which different areas within Chalinze district are vulnerable to the impacts of climate change, and consequently mapped the hotspot. It used both quantitative and qualitative primary and secondary data. Quantitative secondary data were collected from various sources, including the National Bureau of Statistics (NBS) and Tanzania Meteorological Authority (TMA). Qualitative data were collected using Participatory Rural Appraisal (PRA), Focus Group Discussion (FGD) and a stakeholder workshop. Assessment results on Exposure, Sensitivity and Adaptive capacity indicated that; the central parts of Chalinze District Council, specifically, Kimange, Msata, Talawanda and Miono wards had the highest Exposure to the associated climate change impacts. On Sensitivity assessment, the findings indicated that Msata and Ubenazomozi wards and some villages in Talawanda, Pera, Vigwaza and Mkange were the most sensitive. On Adaptive capacity, it was found that two wards of Bwilingu and Mandera had a high Adaptive capacity compared to the rest of the wards. The overall vulnerability determined through averaging of the rescaled values from exposure, sensitivity, and lack of adaptive capacity indicates that Talawanda and Kimange wards were the most vulnerable wards. The need for the government, development partners and other stockholders in promoting livelihoods diversifications across the districts to relieve pressure on environment and natural resources were recommended. This will help to reduce community vulnerability and upset impacts of climate change and environmental degradation



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