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The water accessibility of rural communities in the context of actual climate change: a focus on Sanyati District, Zimbabwe

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ABSTRACT: This study aims to examine the effects of climate change on access to and availability of water resources in rural communities, with a particular emphasis on Zimbabwe's Sanyati District. Using a quantitative research design, 230 questionnaires were applied to gather data between August and October of 2024 from residents. Simple random sampling technique was used to choose participants of the study. To evaluate past and current trends in climate, the research used scientific evidence documented in existing literature. Furthermore, the study used a descriptive survey methodology to assess climate change trends and their effects on rural communities' access to adequate water resources, based on the population's perception. Spearman's rank correlation coefficient was applied to determine the strength of the relationships between demographic characteristics of the population, their perceptions of climate change, and its impacts on water resource accessibility. Respondents noted observable changes in climate characterized by declining rainfall, rising temperatures and increasing incidence of droughts. Notably, the impacts of climate change on water accessibility were gendered, with women and those living with disabilities disproportionately affected. The research's findings underscore the urgent need for adaptive water management plans and regulations that tackle climate change's effects, while enhancing local resilience initiatives to ensure sustainable water access for communities in Sanyati. The study therefore recommends that there is need to promote community engagement and participation in decision making processes as this helps to build resilience and ensure the long-term sustainability of water resources in rural communities.

KEYWORDS: climate change, water stress, adaptation, vulnerability, drought, resilience, Zimbabwe

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