

## Impact of global warming and climate change on Nigeria's water resources

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The major aims of this paper is to look into the impact of global warming and climate change on Nigeria's water resources, The climate change will seriously affect water resources in Nigeria exemplified by changing water levels, temperatures and flow will in turn affect food supply, health, industry, transportation, and ecosystem integrity. Drought arising from climate change is likely to have adverse consequences for the hydrological cycle and water resources in Nigeria and a decrease of water table flows in the alluvial aquifers resulting in a decrease of base flows; a decrease of the non-dissolved solid transportation capacity due to the severe low flows; and a reduction of the capacity of rivers in sediment transport while air, mechanical and hydraulic erosion has been accentuated. Climate Change is also expected to have the following impacts on Nigeria's water sector- increases in sea surface temperature and mean global sea level, changes in salinity, wave conditions, and ocean circulation; disruption of marine ecosystems dynamics, with significant impacts on fish-dependent human societies; and increased levels of flooding, accelerated erosion, loss of wetlands and mangroves, and seawater intrusion into freshwater sources. The Climate change adaptation and mitigation on Nigeria's water resources requires investments in water resources management and infrastructure as well as global food and energy security cannot be achieved without considering the water component. The paper then underscores the need for governments at all levels to adequately fund geoinformation production and cultivate the culture of its usage for adequate and proactive response to global warming, climate change, mitigation and adaptation for national development.

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