

## To assess the hydrological impact of climate change on Niger Delta, Nigeria

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Through years of observation and measurements, scientists have found that coastal region is vulnerable due to the effect of climate change and associated sea level rise, which impose substantial costs on the region. This is as a result of low elevation in the region. Continuous growth of greenhouse gas emissions and related global warming might well promote sea level rise of 1m-3m in the region. It becomes important to examine how global hydrological models process climate forcing data. Nigeria is among the top five countries expected to be mostly impacted with a 1 m sea level rise as a result of global warming. Total urban areas, Nigeria's natural resources such as Niger Delta coastal zone, water resources, water quality, agricultural land, livestock and fisheries possibly exposed to vulnerability, meaning that Nigeria's GDP would be significantly impacted because the main source of revenue for the Nigerian state is the oil and gas from the region. In order to understand implications of sea level rise on flooding of the Niger Delta region, there is need to assess the hydrological impact of climate change on Niger Delta region from changes in catchment hydrology and sea level rise. Understanding existing climate threats is more appropriate basis for developing adaptation strategies to manage future climate risks. This is important because it will provide the desired knowledge needed for the effective management of flooding in the Niger Delta region of Nigeria.

### Biography

Agumagu Ogadinma is currently a postgraduate student studying climate change and Development at the University of Sussex, United Kingdom.

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