

https://dspace.org/

Vulnerability and adaptation to climate variability and extremes: A case study of flooding in Niger state, Nigeria

Eze, Jude Nwafor

2006-10-31T09:09:49Z
http://hdl.handle.net/10539/1517

Downloaded from a DSpace repository. https://dspace.org/

ABSTRACT

This research analyses the vulnerability and adaptation of communities living along the River Kaduna floodplain at Shiroro Local Government in Niger State to flood occurrences. These communities are one of the most flood-prone areas in Niger State, with fertile alluvial deposits for agricultural production. The analysis of rainfall and flood flow into the Kaduna River System shows that there is an increasing flood frequency and flood magnitude along the River Kaduna for the past two decades because of slight increase in rainfall amount. Although there is a slight increase in rainfall amounts, the flooding of the Kaduna River could be regarded as normal. This is because there is no major change in rainfall amounts. Therefore, any slight increase in rainfall may cause flooding. The 1990s with slight increase in rainfall coincides with the period of abundant flood flow in the Kaduna River System and very significant runoff into the Kaduna reservoir.

Floods have impacted negatively on the life of the people living on the floodplain resulting into food insecurity, poverty and vulnerability to malnutrition and other health problems among the communities in Shiroro Local Government Area. There are three vulnerable groups identified within the communities (the very poor, those residing on the floodplain and those that depend only on agriculture). These three groups identified lack accesses to good shelters and social amenities like electricity, good water, roads, health facilities and schools. Moreover, this research shows that the adaptive capacity of these communities is being severely compromised by factors such as poverty, poor infrastructure, weakening social networks and environmental degradation.