Rainfall Variability related to Global Climate Change: Its Effects on the Economic Activities in the North-Eastern Part of Nigeria

Manko Rose RINDAP1

¹Department of Political Science, Plateau State University (P.M.B 2012, Bokkos, 932112, Plateau State, Nigeria) E-mail: roserindap@yahoo.com

Abstract

Rainfall variability had become pronounced in the twentieth century. The decrease in rainfall over the years, especially in Borno state, led to a reduction in available pastureland, a decline in the available surface water and increase in the salinity of water resources available to animals. The main objective of the study was to assess rainfall variability on the economic activities in the North-eastern part of Nigeria. The study evaluated the rainfall variability in the North-east using climate record (1971-2009) from the Nigerian Meteorological Agency and analysed the data using the quantitative method through mean, median and standard deviations to arrive on the rainfall variability in that region. The result revealed that an increase in temperature of +0.76 C from 1971 to 2009 had been recorded in the entire North-eastern Nigeria, whereas rainfall hadn't exhibited any trend. These adverse conditions affected livestock production and availability of animal species as food and the vanishing of Lake Chad had created untold calamities. In order to adapt to rainfall variability, farmers and herdsmen adopted migration patterns to adapt to both seasonal variability in precipitation and extended periods of droughts. The study recommended that changes in precipitation patterns need to be incorporated in water resource and agricultural planning, this can be achieved by placing new requirement on both agricultural research and extension services.

Key Words: Rainfall, Economy, North-Eastern Nigeria, Variability.