

Impact assessment of climate variability on the yield of maize in Ondo State, Nigeria

P.O. Emaziye

Department of Agricultural Economics and Extension, Delta State University, Nigeria

The study focused on the impact assessment of climate variability on the yield of maize in Ondo State. The specific objective was to examine maize yield trend and its projected future values in the state. Multistage sampling procedure was used in random selection of local government areas, communities and rural households for the research study. Annual mean time series data of temperature and rainfall were collected from Nigerian Meteorological Agency (NIMET) and also annual mean time series data of yield of maize, yam and cassava were collected from Agricultural Development Programmes (ADP). Structured questionnaire survey data were also used for the study. Data were analyzed using descriptive statistic and trend analysis. Most trees are been cut for lumbering and other purposes exposing the land to environmental degradation as a result of erosion and other environmental hazards. Respondents (76.5 %) confirmed the existence of flooding in the state. The impact of losses to annual income was 53.83% loss which is substantially severe and the yield of maize projected future values are decreasing. The study therefore recommends that rural households must be encouraged in the planting of trees that will assist in the reduction of our farm land been exposed to environmental degradation in the state. Also in the face of climate change the practice of deforestation must be discouraged to place our farm land a productive land. The study also recommends that adaptive measures must be taking in maize production in the state to avoid future chronic food insecurity situation in the state.

pemaziye@yahoo.com