EARTH OBSERVATION SYMPOSIUM (B1)
Earth Observation Applications and Economic Benefits (5)

Author: Dr. Seidu Mohammed
Nigeria

Dr. seidu mohammed
Nigeria
Mr. Gajere efron
NATIONAL CENTER FOR REMOTE SENSING JOD, Nigeria
Mr. MUSA ABUBAKAR
Modibbo Adama University of Technology, Yola (MAUTECH), Nigeria
Mr. Hyelpamduwa Yaro
National center for remote sensing jos, Nigeria

DEVELOPMENT OF REMOTE SENSING AND GIS BASED PREDICTIVE MODEL FOR
DESERTIFICATION EARLY WARNING

Abstract

Abstract: The project set out to examine the problem of desert encroachment in the north eastern part of Nigeria, with Borno and Yobe states as the primary project areas, because they are the most affected in the region. The project showed that the problem of desertification in the region is as a result of both anthropogenic and climatic factors. Based on review of previous work and field investigations by the project team, the project revealed that the rate of desertification southwards is 8047 hectares/year (80.47 sq km per year). Based on the findings of the project, some suggestions were made as to how to reduce, if not totally halt the advancement of the desert south wards, some of which are (a) Afforestation schemes should be more systematic. Also, the rivers have been identified to be a natural obstacle to the southward spread of deserts. It is therefore logical to recommend that Afforestation projects should be concentrated along the riverbanks,(b) Aridity trends have been shown to be fluctuating i.e. periods of decreasing aridity followed by periods of increasing aridity. It is important to continuously monitor these periods. Afforestation schemes in areas outside the riverbanks should be done during periods of decreasing aridity,(c) A community based tree-planting program will be more sustainable than using government agents. Mass awareness programs should therefore be conducted, encouraging inhabitants to plant trees in their farms and settlements,(d) Investors in fuel wood farms should be encouraged to come to this region.