

SYMPOSIUM ON INTEGRATED APPLICATIONS (B5)
Tools and Technology in Support of Integrated Applications (1)

Author: Mr. Okeke Ugo Henry
COPIN/ASTAL-NASRDA OAU CAMPUS, Ile-Ife, Nigeria, henutop12@gmail.com

Prof. Mohammed Seidu O.
National Space Research and Development Agency, Aduja, Nigeria, somohed@yahoo.com
Mr. Eguaroje O. Ezekiel
COPIN-NASRDA OAU Campus, Ile-Ife, Nigeria, eguaroje14@yahoo.com

SECONDARY SUCCESSION AND DYNAMICS OF WETLAND AND RIPARIAN VEGETATION OF
ASABA-ONITSHA RIVER NIGER CORRIDOR USING GEOSPATIAL TECHNIQUES

Abstract

Wetlands and their riparian vegetation are natural ecological resources that are marked invaluable all over the world and vital for sustainable environment and the general ecosystem. This work studied the dynamics and alteration of wetlands/riparian vegetation as a base for wetlands management and sustainable green environment around the Asaba-Onitsha River Niger corridor. The area extent of wetlands was mapped, the rate of change was determined and the wetland vegetation quality using NDVI was ascertained. The data sets used include: Landsat TM 1987, Landsat ETM 2001, and 2004 satellite images, while other secondary data includes: topographic, soil, geology maps and DEM covering the study area. The data from ground-truthing combined with visual image interpretation were used for supervised classification of the imageries with an average kappa coefficient and overall accuracy of 0.94 and 95.7