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ASSESSMENT AND ESTIMATION OF LOCAL CHARCOAL PRODUCTION AND ITS EFFECT ON THE CLIMATE CHANGE USING AN OBJECT-BASED APPROACH

Abstract

The impact of climate change resulting from deforestation cannon be under estimated. The production of charcoal is a common conversion technique for biomass into a useful energy source. Nigeria is the major producer of charcoal in Sub Saharan Africa. A huge amount of wood is harvested from the forests of Nigeria in other to produce charcoal for energy. Countless people depend on biomass for their household energy. The Relationship of charcoal-land use change-energy enacts a considerable problem on the amount of wood that must be removed from the forest for the production of charcoal. Therefore, charcoal production is linked to deforestation and forest degradation and well as decline in soil fertility. However, there is yet no clarity to what extent the demand for charcoal in Nigeria contributes to deforestation by land use change, and degradation of forests by selected wood loggings (Lansu, Angelique 2020).

this study attempt to examine and estimate the climate change induced effect resulting from charcoal production using and object-based approach. sentinel image will be employed. The work will use literature and open data on charcoal production, deforestation, forest degradation and population growth in Nigeria for analysis. Subsequently, calculations would be carried out to determine what extent charcoal production contributed to deforestation in the period 2000-2020.