Abstract

Land use emission factor is one of the causes of global climate change. The Intergovernmental Panel on Climate Change (IPCC) concludes that most of the global average temperature increase is due to human activities through GHG emissions. GHG emissions come from a variety of sources from agriculture, forestry, and other land uses to a land ecosystem, derived from changes in carbon stock and from non-CO2 emissions as well as from various sources.

Changes in carbon stocks in a Biomass can be calculated using the Stock-Difference method in which carbon stores in a cage are measured at two different times to assess changes in carbon stores. In finding the value of carbon stocks in primary dryland forest is highly dependent on the availability of data that becomes the supporting variable that is the data of forest for each region, then GIS becomes one of the solutions in obtaining data.

Our results conclude that in 2012 and 2016 there was a decrease in carbon savings of an average of 1,842 C tons/ha and an average rate of emission increase of 5,430.73 CO2 tons/ha.
References


Index Terms

Computer Science  Information Systems

Keywords
Emission, Change carbon storage, Geographic Information System, Stock-difference.