

Model spasial deforestasi dan pengaruhnya terhadap cadangan karbon = Spatial models of deforestation of forest area and effects against on carbon stock

Mujiono, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20455294&lokasi=lokal>

Abstrak

Penelitian bertujuan untuk membuat model spasial deforestasi tahun 1996 – 2007, 2007 – 2016, 1996 – 2016 dan prediksi deforestasi periode 2016 - 2035. Selain itu, penelitian juga dimaksudkan untuk mengetahui biomassategakan dan cadangan karbon. Metode pendekatan yang digunakan adalah analisis kuantitatif dan deskriptif berbasis spasial. Deforestasi yang berlangsung selama periode 1996 hingga 2016 menyebabkan Kabupaten Bengkulu Utara kehilangan hutan seluas 27.154 ha. Pada periode tersebut umumnya deforestasi terjadi pada kawasan hutan produksi di kecamatan Pinang Raya dan Giri Mulya. Kemudian, berdasarkan analisis NDVI pada citra Landsat tahun 2016, kawasan hutan dengan karakteristik NDVI rendah, sedang dan tinggi secara berturut-turut memiliki biomassategakan 132,23 ton/ha, 287,59 ton/ha, dan 560,20 ton/ha. Sedangkan cadangan karbon pada NDVI rendah 62,15 ton C/ha, NDVI sedang 135,17 ton C/ha, dan NDVI tinggi 263,29 ton C/ha. Hasil perhitungan ini cukup valid karena sesuai dengan catatan Puslitbang Perubahan Iklim dan Kebijakan KLHK RI yang mengatakan bahwa cadangan karbon pada berbagai kelas tutupan lahan di hutan alam berkisar antara 7,5 – 264,70 ton C/ha. Sementara itu, berdasarkan model spasial prediksi deforestasi tahun 2016 - 2035 Bengkulu Utara terancam kehilangan hutan seluas 21.345 ha. Deforestasi semakin meluas ke arah hutan lindung dan konservasi. Ketinggian dan lereng merupakan faktor pendorong deforestasi pada periode ini. Kata kunci: Model spasial, deforestasi, cadangan karbon.

.....The study aimed to create spatial deforestation models 1996 2007, 2007 2016, 1996 2016 and predicted deforestation period 2016 2035. In addition, the study also aimed to determine biomass and carbon stock. The approach method used is spatial based quantitative and descriptive analysis. Deforestation that lasted from 1996 to 2016 caused the North Bengkulu Regency to lose 27,154 ha of forest. In that period, generally deforestation occurred in production forest area located in Pinang Raya and Giri Mulya sub districts. Then, based on NDVI analysis on Landsat image 2016, forest area with low, moderate and high NDVI characteristic biomass 132,23 ton ha, 287,59 ton ha and 560,20 ton ha respectively. While carbon stocks in low NDVI was 62.15 ton C ha, moderate NDVI was 135.17 ton C ha, and high NDVI was 263.29 ton C ha. The results of this calculation was quite valid because in accordance with the record of the Center for Climate Change Policy KLHK RI said that carbon stocks in various classes of land cover in natural forests ranged from 7.5 to 264.70 tons C ha. Meanwhile, based on the spatial model of prediction of deforestation in 2016 2035 North Bengkulu threatened loss of forest area of 21,345 ha. Deforestation is increasingly widespread towards protected forests and conservation. Elevation and slope are the drivers of deforestation in this period. Keywords Spatial model, deforestation, carbon stock