

Title:

Analysis of Estimation Production with NDVI for Agriculture Land Conversion in Bantul, Yogyakarta

Authors & affiliations:

*Erisa WP, Dyah AF, Tiara S, Saronu
Universitas Gadjah Mada, Indonesia
rhi_silence@yahoo.co.id*

Abstract:

Food security is a very important issue today in the era of globalization and high population world. Land conversion occurs due to increased demand for land and make agricultural land is shrinking in various countries, including Indonesia. The land conversion must be new problems, particularly the resilience of Food. Bantul is one example of the district have large farms and a granary of paddy in the province of Yogyakarta, which has a population of over 3.5 million. That 's population increase without accompanied by the availability of food can make other problems such as hunger. For that it needs to be monitoring to determine major food production from year to year quickly and accurately. One way is by using the Normalized Difference Vegetation Index (NDVI). From the analysis of NDVI in Landsat imagery will know the value of each pixel indicating land vegetation density to calculate the productivity of land and production estimates of an area in a given year. The production estimate can be used to retrieve a food security in a religion or needs to increase the supply of other regions. In addition to great unknown future land productivity by using the rate of conversion of land relations and land productivity for monitoring and as a guide in an effort to suppress the production of agriculture land.

Keywords: Food security, NDVI, agriculture land