OBJECT BASED APPROACHES FOR IDENTIFICATION OF COASTAL FOREST DEGRADATION USING MULTITEMPORAL LANDSAT IMAGERY IN MEDAN INDONESIA

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ABSTRACT

Coastal forest is majority of land cover in coastal region in Indonesia. Coastal forest has dynamic characteristics. There are many land coastal forest change because sedimentation as well as human activities. Coastal forest degradation is important to identify by using remote sensing technology. Object based classification system, a promising method as it is close to human perception. This paper discuss the application of Landsat satellite remote sensing image in 1989 until 2011 to identify coastal forest degradation by using object based classification approach in the part of Medan, North Sumatera, Indonesia. The methodology is consist of satellite data acquisition, existing topographic map and statistical data collection, pre-processing image, classification of land use and land cover using object based approach, and field survey. The result shows many land coastal forest change in Medan, North Sumatera, and that use of object based classification system reliable to identify coastal forest degradation.

Keywords : object based method, LANDSAT multitemporal, coastal forest degradation.