THE USE OF BLACK AND WHITE PANCHROMATIC AIR-PHOTOS AND GEOGRAPHIC INFORMATION SYSTEM IN DETERMINING CRITICAL

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ABSTRACT

Forest as natural resource has many function, among them : preservation function, conservation function and tourism function. The increasing population growth has significant effects toward existing natural resource and land area. The management of critical land if carried out well can decrease the rate of degradation of environment quality so that a holistic and ecologic sustainable development can be done achieved. Determining critical land area is then needed before management can be done, because of that there is a need for the science and technology to support the goals above. The purpose of this research is to map and classify critical land also to determine and classify further according to priority in the protected forest area of Kabupaten Pacitan with the use of Air-photos and Geographic Information System.

The research method used is the scoring method and classification of four parameters that are used, consisting of : land coverage, slope class, erosion and management. Furthe management is taken with remote sensing techniques of air-photos and overlay maps.

The results and analysis of the research shows that the protected forest area is in very critical condition with a very critical land area of 163.497 ha (25.26%), a critical land area of 183. 848 ha (28.74 %), a rather critical of 9.073 ha (14.86 %), a land area of potentially critical land as much as 192.029 ha (30.02 %), and a land area of not critical land area of 5.112 ha (0.8 %).

Keyword : Critical Land area, Protected Forest, Air-photos, Geographic Information System.

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