**DETECTING FOREST DEGRADATION USING SPOT IMAGERIES**

**IN CENTRAL KALIMANTAN, INDONESIA**

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# Abstracts

Tropical forests in Indonesia have important roles in preserved global ecosystem as well as heart of the earth and nature laboratory to support human lifes. In case of global climatic change, forests have a role in sequence carbon cycle, mainly to reduce green house emission. Forest degradation in Central Kalimantan occurred some causes such as forest fires, illegal logging, forest convertion to uther uses, over harvesting etc. In Central Kalimantan forest degradation mainly from NATURE forest converts to other uses have more than 50% portions, while the others causes such us mining, settlement and others.

SPOT imageries were applied to detect forests degradation in the study areas by using change detection and multi temporal analysis, as well as some others information such as statistical data, field observations and Focus Group Discussions. Forests degradation could threat land resources preservation especially forests resources. In this study area forests degradation were occurred continuously. The result from analysis SPOT imageries analysis shows that the trends of forests degradation as high as 2.2 % yearly or (256,000 ha out of 10 million ha, the total forests areas in Central Kalimantan). From these 256,000 ha degraded forests about 70.0% as forest degradation from natural forests to estates uses, while the others 30.0% as degradation to other uses such mining, resettlements, illegal logging, or others forests types.

**Key words**: Central Kalimantan, Forest degradation, land resources, Preservation .