

## **FACTORS INFLUENCING THE CHANGES OF FOREST COVER (A CASE STUDY ON SUMATRA ISLAND)**

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### **ABSTRACT**

*In Indonesia, decreasing the forest cover or deforestation in 2000-2005 period had increased up to 1,09 million ha per year, and in Sumatera island alone the deforestation reached 0,27 million ha per year. The primary factors that caused the changes of forest cover in Sumatera are logging, both legal and illegal, and forest conversion for other land uses. This paper used panel data model for eight provinces in Sumatera from 2000 to 2006 to analyze direct causes of changes of forest cover. In the model of changes of forest cover caused by logging, resulted a positive correlation between deforestation and price of timber. These results implied that the rise of timber price made illegal loggers try to get maximum profit in a short time, and it could stimulate illegal logging. In the model of changes of forest cover caused by forest conversion for other land uses, the results showed a positive correlation between deforestation and GDP per capita. The result concludes that the increase of GDP per capita makes consumption for agricultural goods increase, and it can stimulate forest conversion for other land uses.*

**Keywords:** forest cover, illegal logging, deforestation, forest conversion