"STUDY ON LAND REVEGETATION IN POST RECLAMATION COAL MINING AT PIT 1 EAST AND PIT 3 EAST, WEST BANKO PT. BUKIT ASAM, TANJUNG ENIM, SOUTH SUMATRA"

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ABSTRACT

This research activity was conducted in coal mining land at West Banko pit 1 east and pit 3 east PT. Bukit Asam (Persero), Tbk. Lawang Kidul sub-district, Muara Enim district, South Sumatra province. The coal mining activities in this area can potentially change its physical environment such as top soil lose, biodiversity degradation, land erosion and drought. The aim of this research is to recognize the land condition after revegetation and the success rate of revegetation activities at West Banko Pit 1East and Pit 3 East, PT. Bukit Asam (Persero), Tbk.

The methods applied in this research are field survey with purpossive sampling technique, land observation and laboratory analysis. The parameters in this research are slope, effective soil depth, soil fertility (C organic), land cover vegetation and plant health. The technique conducted to evaluate the data is scoring method in which 5 parameters are measured. The purpose of this method is to know the land condition after reclamation and the success rate of revegetation in the research area.

Based on this research, the revegetation in West Banko pit 1 East has been done with pioneer revegetation plant age 2 years, slope condition 2,2% -16,66%, effective soil depth 71-153 cm, soil fertility 2,73% -3,82%, land vegetation cover 43,3%-62,3%, and plant health 90,47%-96,10%. The success criteria of revegetation is rated good at plot 2, while plot 1 dan 3 are rated moderate. On the other side, the revegetation activity in West Banko Pit 3 East has been done with pioneer revegetation plant age 3 years, with 3,33%-16,66% in slope, 74-126 cm in soil depth, 2,21%-2,94% in soil fertility, 38%-50,6% in land vegetation cover and 84,31%-87,5% in plant health. The success criteria of revegetation is rated good at plot 1, 2 dan 3 while plot 4 is rated moderate.

Keyword: Coal, Reclamation, Revegetation, Coal Mine, Post Mine Reclamation