EVALUATION OF THE SUCCESS OF FOREST RECLAMATION ON COAL MINING LAND IN THE IUP AIR LAYA MINING PT. BUKIT ASAM Tbk MUARA ENIM DISTRICT SOUTH SUMATRA

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ABSTRACT

Coal mining activities can cause significant ecosystem changes. This needs to be remedied by reclamation. In reality, reclamation carried out in the field is not always successful, hence the need for monitoring. The purpose of this study is to evaluate the factors that contribute to the success of forest reclamation on coal mining land in the Air Laya Mine IUP of PT Bukit Asam Tbk and then provide appropriate management advice. This study uses the Minister of Forestry Regulation No. P.60 of 2009 with parameters of land management, erosion and sedimentation control, and revegetation. Data was collected using reference study, survey, sampling, scoring and analysis. The revegetation plants used are revegetation with the age of 1 years, 2 years and 5 year. Revegetation assessment was conducted by purposive sampling, based on planting year and ease of access using sample plots. The number of sample plots was determined as 5% of the total reclamation area. The number of sample plots observed was 6 plots with a size of 40 x 25 m. The results showed that reclaimed land with revegetation aged 5 and 2 years fell into the good and successful category with evaluation scores of 81 and 85. Whereas on reclaimed land with 1 year old revegetation is included in the medium category and is acceptable but must be improved again with an evaluation value of 75.5. The recommended management is with optimizing drainage channels, raising soil pH with liming, enriching local plants and revegetation treatments.

Keywords: coal mining, forest reclamation, mining land, revegetation