

**“TECHNICAL DIRECTION OF POST LIMESTONE MINE RECLAMATION
IN BENDO HAMLET, KENTENG VILLAGE, PONJONG DISTRICT,
GUNUNGGIDUL DISTRICT, YOGYAKARTA PROVINCE”**

By
Ibnu Aji Utomo
114140149

ABSTRACT

The study was conducted in Bendo Hamlet, Kenteng Village, Ponjong District, Gunungkidul Regency, Special Region of Yogyakarta. Limestone Mining in Bendo Hamlet is a community mining using a quarry system. The purpose of this study is to knowing the land capability class in the limestone mining area in Bendo Hamlet and Determine the direction of reclamation in the area of limestone mining in accordance with the capabilities of the land.

Primary data is obtained by survey and field mapping methods. Sampling of land capability is used disproportionate stratified random sampling method, with criteria from Permen LH Number 17 of 2009 concerning Guidelines for Determining Environmental Carrying Capacity in Regional Spatial Planning. The soil texture parameters were measured in the laboratory. The parameter used in soil texture, soil permeability, slope, drainage, erosion, rock distribution, flood hazard, soil effectiveness. Assessment of land capability is used in the appreciation method for each parameter element so that the level of land acquisition can be obtained at the class level, sub-class level and management unit level. Determination of the design of reclamation engineering technique was used by the Gunungkidul Regency RTRW regulation for 2012-2032. Soil samples were analyzed by the laboratory, obtained soil characteristics so that it could be determined the determination of the type of plants to be used for the reclamation stage.

The results of the study with the ability of land in Bendo Hamlet included in Land Capability Vt3, Vs3, IVt2, IIIs1, IIIs1, IIIs1 and IIIs1 because the mining process had a negative impact on slope conditions and plant roots. Results of planning for reclamation of teak plantations. The technical reclamation model used is a level terrace, with a height of 3 meters, a terrace width of 6 meters and a slope of a level of no more than 45°. Biotic reclamation is used by teak plants, with a spacing of 2 x 2 m, and planting cover crops of vetiver grass, spacing of each strip of 40cm. The process of structuring the reclamation land is used the distribution method, with the land taken from the research area. Management directives are carried out, with social, economic and institutional approaches for the realization of sustainable development

Keywords: *Land Capability, Limestone Mining, Reclamation.*