

**DESIGN OF RECLAMATION TECHNIQUE ON URUG SOIL
MINING BASED ON DRYLAND AGRICULTURE LAND
SUITABILITY EVALUATION IN KRAJAN HAMLET,
MURYOLOBO VILLAGE, NALUMSARI DISTRICT, JEPARA
REGENCY, CENTRAL JAVA**

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ABSTRACT

Muryolobo Village, Nalumsari District, Jepara Regency, Central Java Province, has great natural resource potential to supply the need for urug soil. Mining activities carried out at the research site have stages including land clearing, excavation of urug soil, loading and distribution, which have an impact on the environment in the form of decreased land productivity, increased erosion, and the potential for soil mass movement. This study aims to determine the land suitability class of dryland agriculture land and the design of the reclamation plan based on the evaluation of land suitability.

The methods used in the research include survey and mapping methods, laboratory analysis methods, descriptive analysis methods, and weighing factor matching methods. The parameters used refer to Hardjowigeno, 2020 namely effective depth (s), grain size class (s), rocks on the soil surface (s), soil fertility (n), topsoil reaction (a), slopes and other conditions soil surface (t), altitude (h), soil erodibility (e), agro-climatic zone (c), drainage class (d), flooding and inundation (f), and salinity (x).

The results of the evaluation of the land suitability of the research location were divided into 6 classes of land suitability for dryland agriculture land, namely N1sntd, N1snd, N2t, N2s, N2snatdx, and N1t. The mine reclamation directives include (1) land arrangement with slope geometry engineering in the form of a bench terrace with a slope of 45° , a height of 4 m, and a terrace width of 8 m with a back slope of 2° - 3° (2) construction of sewers (SPA) in each area. trapezoidal level (3) planting soybeans with a spacing of 0.2 m x 0.4 m with a mound system, planting cassava with a spacing of 0.7 m x 0.8 m with a mound system, planting sengon trees with a spacing of 4 m x 4 m with a pot system, and planting vetiver grass with a spacing of 2 m x 2 m with a pot system.

Keywords: *Mining, Land Suitability, Agroculture, Reclamation*