

MAPPING AND CRITICAL LAND MANAGEMENT AS EFFORTS TO CONTROL CLIMATE CHANGE IN LAMONGAN

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Abstract

Development of agricultural sector should be able to develop the potential of natural resources, particularly optimization of land and environmentally sounding. In addition to the program intensification, extensification and agriculture diversification, rehabilitation of land is also an effort that can be taken to scale up the productivity of land. The purpose of study was to analyze the potential and critical level of land which is presented in the form of maps and recommended management actions as efforts to control climate change in Lamongan. Sample of this study was two groups; there are soil components and communities. Soil components which studied were physical environment, morphology and chemical of land, topography, land closures and nature of erosion. Communities variable which studied were perceptions of soil fertility, plant species commonly planted, plan habit at certain seasons, agricultural issues that commonly arise or encountered, strategies and expectations of development of the land. Laboratory results of soil texture in six districts showed that the majority districts were having clay loam, clay dust, and dusty clay loam textured. From the results of the laboratory, soil textures at the districts are less than ideal for agriculture but still potential. The average of land potential level at six districts was adequate, although there are some areas and villages were still moderate moreover very critical. Each district showed their average land potential, there are moderate at Sukorame District, Bluluk District, Modo District, Ngimbang District and Sambeng District, while Mantup District has the potential land. It is recommended for the management of critical land of rice fields in six districts was studied by conservation farming which combine mechanical and vegetative conservation techniques in an integrated farming patterns. The goals are to increase farm productivities and farmer incomes, reducing the rate of erosion, and increase farmer participation in conservation of soil and water resources.

Keywords: *mapping, critical lands, management, climate change*

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