

Land-Use Suitability Analysis for Merauke Agriculture Estates

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Abstract : Merauke district in Papua, Indonesia has a strategic position and natural potential for the development of agricultural industry. The development of agriculture in this region is being accelerated as part of Indonesian Government's declaration announcing Merauke as one of future national food barns. Therefore, land-use suitability analysis for Merauke need to be performed. As a result, the mapping for future agriculture-based industries can be done optimally. In this research, a case study is carried out in Semangga sub district. The objective of this study is to determine the suitability of Merauke land for some food crops. A modified agro-ecological zoning is applied to reach the objective. In this research, land cover based on satellite imagery is combined with soil, water and climate survey results to come up with preliminary zoning. Considering the special characteristics of Merauke community, the agricultural zoning maps resulted based on those inputs will be combined with socio-economic information and culture to determine the final zoning map for agricultural industry in Merauke. Examples of culture are customary rights of local residents and the rights of local people and their own local food patterns. This paper presents the results of first year of the two-year research project funded by The Indonesian Government through MP3EI schema. It shares the findings of land cover studies, the distribution of soil physical and chemical parameters, as well as suitability analysis of Semangga sub-district for five different food plants.

Keywords : agriculture, agro-ecological, Merauke, zoning

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