ABSTRACK

THE QUALITATIVE AND QUANTITATIVE LAND EVALUATION SUITABILITY FOR MAIZE (*Zea mays* L.) ON FARMERS GROUP TANI MAKMUR SINAR MULYA VILLAGE NATAR DISTRICT, SOUTH LAMPUNG REGENCY

By

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Maize (*Zea mays* L.) is one type of grain crops of the grasses family. Maize comes from the America, around the 16th century was redistributed to Asia including Indonesian by Portugal nations. Maize plants is very beneficial for human being and animal life. In Indonesia, maize is the second most important commodity of food crop beside rice. Based on the staple foods in the world, maize include the third level after wheat and rice. Maize has sufficient of nutrient content and crude fiber as a substitute of a staple food of rice.

Land evaluation is a process to estimate the land resources potentially for a specific use, for agriculture and non-agriculture. An area of land suitability classes for the development of agriculture is essentially determined by the matching between the physical properties of the land and landuse requirements or conditions of plant growth. This research was done to classified of land suitability and financial feasibility of the maize plantation.

The aim of this research is to evaluate the qualitative suitability of land classes of maize fields on farmers group of Tani Makmur Sinar Mulya Village Natar District, South Lampung Regency, according to Djaenuddin et al. (2000) criteria and as well as evaluating of the quantitatively land suitability of maize plantation by calculating the value of Net B/C Ratio, NPV, and IRR.

The research results of maize plantation of farmers group Tani Makmur Sinar Mulya Village Natar District, South Lampung Regency according to Djaenuddin et al. (2000) criteria can be classified into the marginally suitable class with the limiting factor of water availability and nutrient retention (S3wanr). Then, financially maize farming is feasible to be developed. This results proved that the

average value of the NPV Rp 42.236.508,- , Net B/C 2,79, and IRR 33.45% month^{-1}, is more than which that was assumed of interest rate of 1,08% month^{-1} or same as 13% year^{-1}.

Key words : Qualitative land suitability, quantitative land suitability, maize plantation.