

## **ABSTRACT**

*Kasihani is one area in Bantul, Yogyakarta which has a carrying capacity of land for cultivation of sugarcane crop was good. Sugarcane crop cultivation activities are not separated from the barriers that can reduce the level of land suitability and lowers production yield. It is shown by the percentage of sugar cane which is only 6.1 %, and even lower. Suitability of land is a land suitability for particular uses. The actual land suitability Kasihan planting sugarcane in Bantul have limiting factors that can be improved and economically still profitable with technology inputs. Land evaluation can be done with land resources and approaches, for purposes of classification of the quality or characteristics of the sugar cane crop land in Kasihan Bantul.*

*FAO (Food and Agriculture Organisation) method used classifying quantitative and qualitative data using the framework of land suitability categories at the level of orders, classes, subclasses, until the unit. In this study, the categories used are three levels of classes that used in order S (appropriate) and two classes that used in the order of N (not appropriate), grade level for the quality of the land, and the unit to explain the characteristics of land suitability limiting factor. The results showed that the sugarcane crop land in Kasihan Bantul into the land suitability class to subclass S3r Petung gardens and Mojopahit, S2re for Ngasinan garden, S3f for Serut gardens, S3b to the garden Kulon Gangin, N1f for gardens Wetan Gangin and Kabag.Pemerintahan, and S3fn to Romawi VII garden. The actual land suitability classes explains that barriers sugarcane land located in Kasihan Bantul give negative effects on the productivity of the land, which is not in accordance with the ideal potential sugarcane production .*

**Key words:** *the suitability of land, land evaluation, FAO method, land quality.*