

**Sistem Pendukung Keputusan Pemilihan Kesesuaian Lahan Tanam  
Tembakau Voor Oogst Kasturi di Kabupaten Jember  
Menggunakan Fuzzy Sugeno**

*(Decision Support System Selection of Conformity of Planting Land  
Voor Oogst Toburi Tobacco in Jember Regency  
Using Fuzzy Sugeno).*

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***ABSTRACT***

*The selection of suitability of Voor Oogst Kasturi tobacco plantations is an important factor in tobacco productivity in kw/ha. BPS data from Jember Regency in figures shows that the 2016 harvested area of Voor Oogst Kasturi is 3,435.15 Ha, with a production of 11.00 Kw / Ha. In 2017 the harvest area was 4,104.60 Ha, with a production of 10.48 Kw / Ha. In 2018 the harvest area was 7,523.83 Ha, with a production of 1.50 Kw / Ha. Incorrect selection of land suitability can lead to decreased tobacco productivity in kw/ha. The selection of land suitability is inseparable from the role of farmers as the main actor in Voor Oogst Kasturi tobacco production. This study aims to provide recommendations for the suitability of planting land by using a decision support system that applies the Sugeno fuzzy method based on the conditions of the land suitability matrix including rainfall factors in mm/month planting period, the slope of land in%, height of the area in masl. The results of this study in the form of a percentage of land suitability that is categorized to be very appropriate, appropriate, and not appropriate. Based on 17 observation areas, it shows that Ajung Subdistrict has 100% of land suitability is a very suitable range, and the lowest value in Summersari Subdistrict is 52% in the appropriate range. With the results of the user acceptance test, addressing the average total percentage at a value of 64.27% means that the index value is in the range of the system enough to be acceptable to the user.*

**Key words :** *Decision Support System, Fuzzy Sugeno, Voor Oogst Kasturi*