## Sistem Pendukung Keputusan Penentuan Jenis Tanaman Pangan Berdasarkan Karakteristik Lahan Petani

Decision support system determines the type of food crop based on the characteristics of farmers's land

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## **ABSTRACT**

Land use that is not suitable for crops is generally caused by a lack of knowledge and understanding of farmers about the characteristics of a land. Because everything is still done manually. This causes significant financial losses, especially for farmers. For land use, it is necessary to evaluate land resources. Evaluation of land resources is based on geographic physical conditions which are the basic input in the overall land evaluation process. Common geographical conditions in the evaluation of land resources are slope, altitude, rainfall and soil type (pH).

This Decision Support System (DSS) uses the Mamdani fuzzy inference technique. This application applies the Mamdani fuzzy method in decision making and data analysis, so that the right crop yields can be planted on certain land and weather conditions, as well as maximizing land use with suitable plants so that farmers' production yields increase. With this application, you can determine what types of plants are suitable for the available land.

**Keyword**: Food crops, land use