ABSTRACT

Indonesia is a country with great agricultural potential, supported by its natural resources and favorable climate. However, the utilization of agricultural recommendation systems in farming activities in Indonesia is still underdeveloped. This is despite the fact that the limited knowledge of farmers regarding various aspects of agricultural decision-making remains a barrier to optimizing agricultural productivity, such as determining the best planting times, assessing land performance, and identifying the appropriate crops to plant at specific times, among others. If this issue persists, agricultural activities will remain suboptimal, leading to insufficient agricultural yields to meet Indonesia's needs. Based on this problem, this research aims to develop Machine Learning to provide accurate recommendations to farmers in selecting suitable agricultural land for the desired crops. The study will employ a Machine Learning development approach. The results of this research will be an agricultural recommendation system for determining the suitability of agricultural land with the crops to be planted. It is hoped that the outcomes of this research will contribute to the productivity of food production in Indonesia.

Keywords: Decision tree, Machine learning, Smart farming, Crop recomendation