

# Performance Evaluation of Machine Learning Algorithms for Crop Yield Prediction

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**Abstract:** Agriculture is the backbone of India and also plays an important role in Indian economy by providing a certain percentage of domestic product to ensure the food security. For most developing countries, agriculture is the primary source of revenue. Modern agriculture is a constantly growing approach for agricultural advances and farming techniques. But now-a-days, food production and prediction is getting depleted due to unnatural climatic changes, which will adversely affect the economy of farmers by getting a poor yield and also help the farmers to remain less familiar in forecasting the future crops. This research work helps the beginner farmer in such a way to guide them for sowing the reasonable crops by deploying machine learning, one of the advanced technologies in crop prediction. The modern technologies can change the situation of farmers and decisions making in agricultural field in a better way. Python is used as a front end for analyzing the agricultural data set. Jupyter Notebook is the data mining tool used to predict the crop production. The parameter includes in the dataset are soil nutrient values like Potassium(K), Nitrogen(N), Phosphorous(P) and Temperature, Rainfall, Humidity

**Keywords:** Crop Prediction, Food production, Machine Learning Algorithms, Random Forest Algorithm, SVM, Decision Trees.

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