

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY,  
BELAGAVI**



**A PROJECT REPORT ON  
“DYNAMIC CROP PREDICTION SYSTEM”**

Submitted in partial fulfillment for the award of Degree of,

**BACHELOR OF ENGINEERING**

**IN**

**COMPUTER SCIENCE & ENGINEERING**

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**CERTIFICATE**

This is to certify that the project entitled **“DYNAMIC CROP PREDICTION SYSTEM”** has been successfully completed by

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the bonafide students of **DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**, **ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2019–2020. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

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# ABSTRACT

For human survival, agriculture is important because it serves the basic necessity of human life. A well-known fact is that most of the Indian population (about 55 percent) depends on farming. The farmers in our country do not generally get the expected crop yielding due to various factors. Because of environmental and climatic variations, there exists an inefficiency in the crop production of India. In this precarious domain, the farmers and agricultural businessmen have to make numerous decisions every day and various factors affect complexities. An essential issue for the intention of agricultural planning is the precise estimation of yields for numerous planning crops. In this context, achieving desired goals in agriculture-based crop yield has become a challenging task. In order to get better yielding, the farmers have to take up the recommendations from the concerned experts who can suggest through predictions with statistical analysis. There are different factors that have a direct impact on crop production and productivity of agricultural products. Predicting crop yields is merely only one of the key factors in farming practices. These recommendation may not be so accurate due to lack of consideration of the crucial parameters for good yielding such as Ph values, Humidity, Temperature and Rainfall .Therefore it is the need of the hour to build a machine learning model to predict the yielding for a crop depending upon the fore mentioned parameters and soil type of the land in which the particular crop is cultivated. In this regard, a comprehensive approach for crop yielding prediction methodology is adopted to accurately predict the yielding of the crop by considering the local soil type of the cultivable land along with the fore-mentioned crucial parameters. This System focuses on the evaluation of agricultural data and discovering optimal parameters to gain maximum cultivation using data mining and ML algorithm techniques such as SVM, MLP Classifier, K-Nearest Neighbor , Random Forest , Decision Tree & Logistics regression.