

LITERATURE REVIEW:

Agriculture Data Analytics in Crop Yield Estimation:

A Critical Review Agriculture fulfils a fundamental need, which makes it crucial for human survival. It is a well-known fact that in India, agriculture employs the bulk of the population (about 55%). There are obstacles to expanding crop production in India because of weather changes. To reach desired crop yield goals has become a difficult undertaking in agriculture. Numerous elements that directly affect the yield and productivity of the crops must be taken into account. Predicting crop productivity is one of the key elements of agricultural techniques. Before planting seeds in their fields, farmers require knowledge about crop yield in order to increase agricultural output. Data analytics is one such trend that has permeated the use of technology in agriculture in recent years.

ANALYSIS OF CROP YIELD PREDICTION USING DATA MINING TECHNIQUES:

India's agricultural sector is struggling mightily to increase crop productivity. The crop still depends on monsoon rainfall for more than 60% of its production. Recent advancements in the field of agricultural information technology have become an interesting research area for crop yield prediction. Based on current knowledge, the issue of yield prediction is one that needs to be resolved.

accessible data For this, data mining techniques are a superior option. Various data mining methods are employed, and assessed in agriculture to predict crop yield for the following year. In this essay, agricultural yield is briefly analysed. combining density-based clustering and the Multiple Linear Regression (MLR) technique to make predictions for the chosen region, i.e. Indian state of Andhra Pradesh's East Godavari district.

ANALYSIS OF CROP YIELD PREDICTION USING DATA MINING TECHNIQUE TO PREDICT ANNUAL YIELD OF MAJOR CROPS :

India is a predominantly agricultural nation.

The single largest contributor to the Indian economy is agriculture. Crop output in agriculture is influenced by the season, organic factors, and economic factors. For any country, predicting agricultural productivity is a difficult and rewarding task. Due to unpredictable climate changes and a lack of water resources, farmers are reluctant to generate the output today. The primary goal is to gather agricultural data that may be used to forecast crop yields in a useful way. Advanced methods can be developed to estimate agricultural production using data mining techniques, and it also assists the farmer in selecting the best crop, increasing the value and profit of the farming area.

Crop yield forecasting using data mining:

India depends a lot on agriculture. Agronomic yield is influenced by organic, financial, and seasonal variables. Given the current demographic situation estimating agricultural productivity is a challenging challenge for our nation. Long-term projections of crop production can aid farmers in making the required preparations for things like marketing and storing. Crop production forecasting includes a vast quantity of data, making data mining techniques the ideal choice. Data mining is a technique for gathering predicted information from huge databases that had never before been viewed. Making educated judgments is made possible for businesses thanks to data mining, which aids in the understanding of future patterns and character. This study offers a quick look into agricultural yield forecasts for a particular area using the Random Forest method.

