**ESTIMATE THE CROP YIELD USING DATA ANALYTICS**

**ABSTRACT**

The aim of this paper is to make an investigation on estimation of crop yield using data analytics. Agriculture is important for human survival because it serves the basic need. A well-known fact that the majority of population in India is into agriculture. Due to the variations in climatic conditions, there exist bottlenecks for increasing the crop production in India. It has become challenging task to achieve desired targets in agri based crop yield. Farmers need information regarding crop yield before sowing seeds in their fields to achieve enhanced crop yield. The use of technology in agriculture has increased in recent years and data analytics is one such trend that has penetrated into the agriculture field. The main challenge in using big data in agriculture is identification of effectiveness of data analytics. The present study gives insights on various data analytics methods applied to crop yield prediction and also signifies the important lacunae points in the proposed area of research.

**PROBLEM STATEMENTS**

Data Analytics based on prior crop prediction, soil quality analysis to achieve high crop yield through out technology solution. The main objectives of this project is to predict crop-yield which can be extremely useful to farmers in planning for harvest and sale of grain harvest. Implement a data analytics that gives better analysis of suitable crop for the corresponding region and crop season in our country. This project aims to predict yields based on location and weather data. In India crop yield is season dependent and majorly influenced by the biological and economic causes of an individual crop. The aim of this study is to look at the prediction of crops which will offer high yield within the given location considering the climate and soil parameters.

**LITERATURE SURVEY**

Data Analytics has emerged as a potential tool for crop yield prediction, allowing the model to extract features and pridict from the datasets. Meanwhile, smart farming technology enables the farmers to achieve maximum crop yield by extracting essential parameters of crop growth. The study focuses on the advantages of using data analytics in crop yield prediction. There have been a number of research studies undertaken that focus on the importance of using data analytics as a supplementary tool in transforming large volumes of agricultural data into meaningful information. Many researchers have been contributed their previous knowledge towards data analytics in agriculture. There are many simulations models available for crop productivity predictions. As it depends on economical and environmental parameters so we cannot apply these existing models or methods to any other area.

**REFERENCE**

1. Rice Crop Yield Prediction using Data Mining Techniques: An Overview Dakshayini Patil, Dr. M .S, Shirdhonkar/ 2017

2. A Survey on Crop Yield Prediction based on Agricultural Data Dhivya B H, Manjula R, Siva Bharathi S, Madhumathi R/ 2017

3. Prediction of Crop Yield using Regression Analysis V. Sellamand E. Poovammal/ 2016