ESTIMATE THE CROP YIELD USING DATA ANALYTICS

Team ID:PNT2022TMID13266

Team Members:

INDHU S (621319104016)

DEEPAVARSHINI V (621319104010)

ARUNA A S (621319104005)

KAVYA V R (621319104023)

Mentor:

Mrs.L.NIVETHA,M.E,

ASSISTANT

PROFESSOR

Table of Contents

ABSTRACT

In India, agriculture is important for human to survive because it serves the basic need. In our project, there are four phases of people to describe our project problems. First phase people is Farmer, they wants to know what are the demand of crops. Second phase people is Business person, they wants to know the level of crop yielding in a particular area to satisfy their needs in season. Third phase people want to know what are the crops grows in our nearby area. Fourth phase people doesn't know whether the farming is done in nearby areas or not. So, all the four phases people's problem have been solve by our project idea.

CONT...

As for the farmers demand of crops can be rectify by dashboard estimation and they also know the import and export product by dashboard. As for the business persons, they can see high yielding product for their factories and they can also estimate the high importing yielding product. Then, for third phase people can know what type of crops yield in nearby area and also know the sum of crop yield in particular area by using this dashboard. And the last phase people can know whether the crops are yield in their own area and they also can check estimation crop yield in any area. So, this are some problems we occur in our project and solution is done by the dashboard for estimate the crop yield using Data Analytics.

INTRODUCTION

Agriculture forms the basis for food security and hence it is important. A well-known fact that the majority of population in India is into agriculture. Due to 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. Various factors are to be considered which have direct impact on the production, productivity of the crops. Crop yield prediction is one of the important factors in agriculture practices.Crop yield prediction helps the farmers in various ways by providing the record of previous crop yield.

CONT…

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 year 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 big data analytics. Efforts are going on to understand how big data analytics can agriculture productivity. 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.

LITERATURE SURVEY

TITLE	AUTHOR & YEAR	PUBLISHER	PROBLEM PROPOSED	PROBLEM SOLUTION	PROS & LIMITAT-ION
Rice Crop Yield Prediction	Dhakshayini patil, Dr. M.S, Shirdhonkar/ 2021	B M Sagar, Cauvery N K	It is utilizes for prediction of rice crop yield	Data Mining and pH value from which alkalinity of the soil	WEKA tool was applied in dataset processing. Precipitation.
A survey on Crop yield production	Dhivya B H, Manjula R, Siva Bharathi S, Madhumathi R/ 2021		It has the different algorithms applied for prediction of crop yield.	Agricultral data, With the advent of data mining crop yield	It has the mechanism of agriculutural data mining.

CONT....

The Impact of Data Analytics in Crop Management	Swarupa Rani A/ 2020	B M Sagar, Cauvery N K	Application model like fuzzy logic designs in optimization of the crop yield, ANN in validation studies	Crop management by Weather conditions	Vector machines to study soil, climate conditions and water regimes related to crop growth.
A study of various data mining techniques for crop yield prediction.	Yogesh Gandge, Sandhya/ 2020		various data mining techniques employed for predicting the crop yield	Data Mining includes inorganic atmospheric problems, highcost, and various types of data.	Agriculture, Efficient crop management, Weather data, Climate change.

CONT..

A Study on Crop Yield Forecasting	R.Sujatha, Dr.P.Isakki Devi/ 2019	B M Sagar, Cauvery N K	comparing previous agricultural data with present to identify optimum condition favor enhanced crop yield.	we are creating an agriculture data. This data could be gathered, stored and analyzed for useful information. It is used to promote new advanced methods and approaches.	season and the climatic factors which support by enhanced crop yield.

REFERENCES

1. Dhivya B H, Manjula R, Siva Bharathi S, Madhumathi R. A Survey on Crop Yield Prediction based on Agricultural Data, International Journal of Innovative Research in Science, Engineering and Technology. 2021.
2. Jharna Majumdar, Sneha Naraseeyappa, Shilpa Ankalaki. Analysis of agriculture data using datamining techniques: application of big data. Journal of Big data. 2020.
3. Majumdar J, Ankalaki S. Comparison of clustering algorithms using quality metrics with invariant features extracted from plant leaves. International Conference on Computational Science and Engineering. 2020.
4. D Ramesh, B Vishnu Vardhan. Data Mining Techniques and Applications to Agricultural Yield Data. International Journal of Advanced Research in Computer and Communication Engineering. 2019.
5. Swarupa Rani. The Impact of Data Analytics in Crop Management based on Weather Conditions. International Journal of Engineering Technology Science and Research. 2019.

Thank You