

# LITERATURE SURVEY

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S.NO.	Author	Title	Source	Findings
1.	Samihan Deshmukh,Devesh, Dhannawat,Mohit Dalvi	Application of Data Analytics in Agriculture Sector for Soil Health Analysis	IEEE XPLORE 2019 5th International Conference on Computing Communication Control and Automation (ICCUBEA)	In this paper, for soil health analysis they compared prediction of different soil elements with different machine learning algorithms. This survey will be very useful for those who are building products related to soil health analysis and prediction.
2.	M.Chandrababha, Rajesh Kumar Dhanaraj	Machine learning based Pedantic Analysis of Predictive Algorithms in Crop Yield Management	IEEE 2018 5th IEEE International Conference on Parallel, Distributed and Grid Computing (PDGC)	In this paper,we observed that, various algorithm operates well with different factors but when considering error rates as performance measure, recurrent neural network (RNN) works well when compared to other algorithms. When considering accuracy as performance measure, BayesNet

				performs very well for rice crop and produces an accuracy of 97.53%.
3.	Aakash G Ratkal, Gangadhar Akalwadi, Vinay N Patil, Kavi Mahesh -	Farmer's Analytical Assistant	2016 IEEE International Conference on Cloud Computing in Emerging Markets	In this paper, it is intended to help farmers to make educated choices about the crop which he plans to grow next. We have implemented features like production prediction and price prediction which will help the farmer make a reasonable estimate of the price and yield he may get.
4.	Cristanel Razafimandimby, Valeria Loscri, Anna Maria Vegni, Alessandro Neri	Efficient Bayesian Communication Approach For Smart Agriculture Applications	IEEE 2017	In this paper, we observed that they presented an inference-based approach –namely, BIA– applied to the PEACH network, with the aim of avoiding useless data transmission. The

				strong correlation between temperature and humidity data was taken into account for this study.
5.	V.Roopaa,C. Emilin Shyni	Data Driven Approach For Farm Re-Modeling Using Prediction Analytics	IEEE 2017	In this paper,we observed that they digitize farming and agricultural activities so that the farmers can check on the requirements of the crops and correctly predict their growth.The proposed system is being modeled such that the field area is being set up with sensors being located at specific locations, drones are set up for weekly monitoring.
6.	NamgiriSuresh,N. V.K.Ramesh,Syed Inthiyaz,P. Poorna Priya,Kurra Nagasowmika,	Crop Yield Prediction Using Random Forest Algorithm	IEEE 2019	In this paper,it showed that practical use of data mining techniques in predicting crop yield

	Mashkoor Shaik			based on climate input parameters. The built website is user-friendly, and that reliability of prediction in all of the other grains and regions chosen in the analysis should be above 75 percent, indicating greater predictive performance
7.	Mona Alghamdi, Plamen Angelov, Raul - 2019	Self-Organising and Self-Learning Model for Soybean Yield Prediction	IEEE 2021 7th International Conference on Advanced Computing & Communication Systems (ICACCS)	In this paper, the ALMMo-1 system is implemented to predict soybean crop yields from factors that affect the yield. The model achieves high accuracy. The model evolves and updates with each data sample entry, improving memory and computation efficiency.

8.	Shivi Sharma,Hemraj Saini	Big Data Analytics for Crop Prediction Mode Using Optimization Technique	IEEE 2018 5th IEEE International Conference on Parallel, Distributed and Grid Computing(PD GC	In this paper,it presents a hybrid model i.e. SVM_GWO that uses a combinational approach for improving the classification accuracy, recall, precision, f-measure by selecting the optimal parameters settings in SVM.
9.	Shreya V. Bhosale, Ruchita A. Thombare, Prasanna G. Dhemey,Anagha N. Chaudhari	Crop Yield Prediction Using Data Analytics and Hybrid Approach	IEEE 2018 Fourth International Conference on Computing Communication Control and Automation	In this paper,the final result contains crop names which is suggested in that region for specified rainfall as well as land of farmer in acres. The predicted yield as crop count attribute is displayed in kg/acre format. The attribute yield describes the average production of that crop in 1 acre.
10.	Potnuru Sai Nishant, Pinapa Sai Venkat, Bollu Lakshmi,Avinash,	Crop Yield Prediction based on Indian Agriculture	IEEE 2020 International Conference for Emerging	This paper predicts the yield of almost all kinds of crops that are planted in India.

	B. Jabber	using Machine Learning	Technology (INCET)	The paper uses advanced regression techniques like Kernel Ridge, Lasso and ENet algorithms to predict the yield and uses the concept of Stacking Regression for enhancing the algorithms to give a better prediction.
11.	D Ramesh,B Vishnu Vardhan	Analysis of crop yield prediction using data mining Techniques	2015 (IJRET)International Journal of Research in Engineering and Technology	In this paper,they create a user friendly interface for farmers, which gives the analysis of rice production based on available data.Here,they use Multiple Linear Regression technique and Data Mining method namely Density-based clustering technique were take up for the estimation of crop yield analysis.

12.	B M Sagar, Cauvery N K	Agriculture Data Analytics in Crop Yield Estimation	2018 Indonesian Journal of Electrical Engineering and Computer Science	In this paper, it has been observed that analysis has been done on agriculture soils, hidden patterns discovery using data set related to climatic conditions and crop yields data. The activities of agriculture field are numerous like weather forecasting, soil quality assessment, seeds selection, crop yield prediction. The survey outcomes indicate the need for improved techniques in crop yield analytics.
13.	Jharna Majumdar, Sneha Naraseeyappa and Shilpa Ankalaki	Analysis of agriculture data using data mining techniques	2017 Springer open, Journal Of Big Data	In this paper, we observed that they used data mining techniques PAM, CLARA and DBSCAN to obtain the optimal climate requirement of wheat like optimal range of best temperature, worst temperature and



				rain fall to achieve higher production of wheat crop. The clustering quality metrics, DBSCAN gives the better clustering quality than PAM and CLARA, CLARA gives the better clustering quality than the PAM.
14.	V. Spandana,V.S. Vaishnavi,K. Neha,V.G.R.R. Devi	Supervised Machine learning Approach for Crop Yield Prediction in Agriculture Sector	IEEE 2020 Proceedings of the Fifth International Conference on Communication and Electronics Systems (ICCES)	The proposed technique helps farmers to acquire apprehension in the requirement and price of different crops. It helps farmers in decision making of which crop to cultivate in the field. The more increase in accuracy results in more profit to the crop yield. This work is employed to search out the gain knowledge about the crop that can be deployed to make an efficient and useful

				harvesting.
15.	Mummaleti Keerthana, K J M Meghana, Siginamsetty Pravallika, Modepalli Kavitha	An Ensemble Algorithm for Crop Yield Prediction	IEEE XPLORE 2021 3rd International Conference on Intelligent Communication Technologies and Virtual Mobile Networks (ICICV)	In this paper, they have taken top 10 crops which solves majority of consequences when the parameters consist of the location and weather conditions. The accuracy in prediction of different kind of crops across the world will guide farmers to make a clear decision in choosing a suitable crop for yield.