Intelligence Decision System For Agricultural Prediction

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Abstract- Agricultural intelligent decision system has a positive practical significance for guiding agricultural production, which can provide scientific basis for agriculture. Machine learning technology can effectively improve the performance of intelligent decision system. The research development of the agricultural intelligent decision system is given. The classification of the agricultural decision system is introduced. The frame designation of the intelligent decision system is studied, and the design process is given.

I. INTRODUCTION

In the recent years, the huge volume of real time data in the agricultural sector and its need for an efficient and effective processing, stimulate the use of novel technologies and platform to acquire, store, process, analyze and visualize large data sets for future predictions and decision making. Machine learning is an evolving term given to a wide area of data-intensive technologies in which the datasets are extremely large that dealing with them become more challenging than how it was

Before. Due to the critical challenges facing the agriculture sector farmers feel more forced to adopt intensive farming practices and sustainable agricultural ones, in order to increase both economic and environmental costs.

II. EXISTING SYSTEM

In the agriculture system. farmer still follows traditional method to grow crops, this logs the production in the agriculture field . Due to the critical challenges facing the agriculture sector, farmers feel more forced to adopt intensive farming practices and sustainable agricultural ones, in order to increase both economic and environmental costs. Farmers predicting manually the demand of grains and vegetable so its effect to farmers economically to overcome this problem we are proposed machine learning auto demand and yield prediction process

Disadvantage

- Less accuracy

- Farmer will get loss economically

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III. PROPOSED SYSTEM

propose an effective data mining technique based on profiling(PHANI) improve their traditional decision-making process using Linear Regression algorithm we are suggesting the what type grains and vegetable farmer has to cultivate to get more profit and production.

In this module admin will upload the previous 10 year dataset like

- vegetable demand,
- crops demand
- vegetable yield dataset monthly wise
- vegetable demand dataset monthly wise

District wise crops data season wise(Karif , Summer , Winter) Admin will upload all the above datasets using the Excel API propose an effective data mining technique based on profiling(PHANI) improve their traditional decision-making process using Linear Regression algorithm. we are suggesting what type grains and vegetable farmer has to cultivate to get more profit and production.
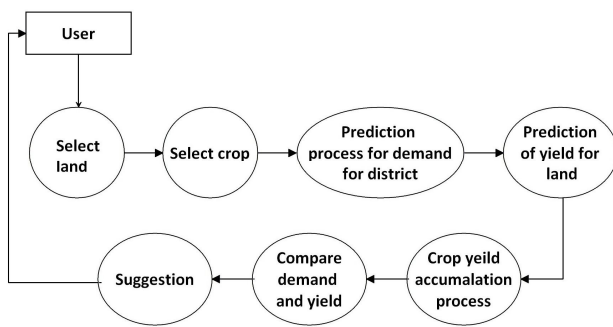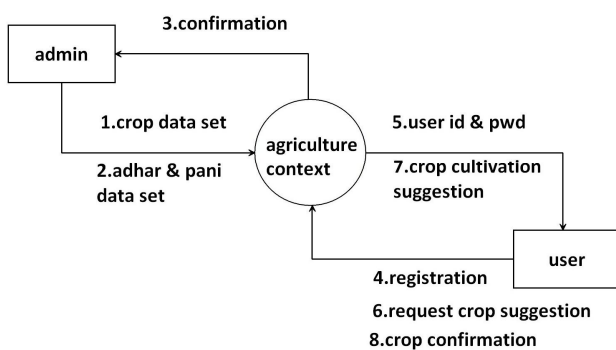
Figure 1. land selection process

Figure 2.Context analysis diagram

Advantage of Proposed System

In this context, varieties of terminologies and techniques have been done to make agricultural practices more efficient. Using these advanced technologies to facilitate crop management, minimize losses and maximize yields.

Methodology used: Linear Regression Process, MVC architecture.

IV. CONCLUSION

The rapid development of machine learning technology provides a new technical means for the research and development of agricultural intelligent decision system. It can effectively improve the processing speed and accuracy of the agricultural intelligent decision system, and can provide guidance for agricultural production. The application of machine learning analysis technology and artificial intelligence technology in the agricultural intelligent decision system is the next development direction.

REFERENCES

[1] Ritaban Dutta; Ahsan Morshed; Jagannath Aryal; Claire D'Este...Development of an intelligent environmental knowledge system for sustainable agricultural [J]. Environmental Modelling and Software. 2014.

[2] Ştefan Conţiu; Adrian Groza. Improving remote sensing crop classification by argumentation-based conflict resolution in ensemble learning [J]. Expert Systems With Applications,2016.

[3] Safaa Abdelraouf Ahmed; Shadia Ragheb Tewfik; Hala Ahmed Tal. Development and verification of a decision support system for the selection of optimum water reuse schemes [J]. Desalination,2003.

[4] M. Pérez-Ruiz; P. Gonzalez-de-Santos; A. Ribeiro; C. Fernand. Highlights and preliminary results for autonomous crop protection [J]. Computers and Electronics in Agriculture, 2015.

[5] Ranya Elsheikh; Abdul Rashid B. Mohamed Shariff; Fazel Amiri. Agriculture Land Suitability Evaluator (ALSE): A decision and planning support tool for tropical and subtropical crops [J]. Computers and Electronics in Agriculture, 2013.

[6] Wu Wan-sheng; Su Zhong-bin; Li Xiao-ming. Research on Intelligent Decision Support System of Soybean [J]. Journal of Northeast Agricultural University(English Edition), 2013.