E-PORTAL FOR THE FARMER'S

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***Abstract*- Agriculture is an important sector in Indian economy and can cause a spike in Indian GDP which can be achieved by providing information about the suitable conditions for planting crops, knowledge about the optimum utilization of natural resources. This Application is built for farmers involved with Farming and Cultivation, and aids in solving many tasks of different complexity. This software will help the farmer from soil testing to selling their production. This Increases the chances of production which will help in increasing India's GDP. As this Application is made for farmers it enables the farmers to sell the production online and helps them not to restrict themselves to the local market and also enables the wholesalers and retailers to expand their business. This Application provides a Disease Detection module so that farmers can get solutions to disease in minutes to few. Along with that there will be a section for government policies, agriculture information, career information, etc. by which farmers can stay updated to new information and technologies. Smart innovations make their business comfortable, predictable, confident and more profitable. Agronomy software makes the farming process easier, covering a wide spectrum of agricultural activities: Soil testing, E-Commerce, loss prevention, Information of cultivation.**

***Key Words*: Agriculture, Farming, Cultivation, Import, Export, Fertilizers.**

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1. INTRODUCTION

In India Agriculture is a crucial part. Agriculture is only one income resource for most of the Indian. If a farmer is rich then, so is the country this line tells all about the country. All necessary data is available on the internet and so of agriculture to[3]. E-Farming application is basically for sustainable development of farmers. Many times, farmer is confused to take decision regarding selection of fertilizer, pesticide and time to do particular farming actions. So, this E- Farming portal is very useful. Fertilizer schedule of each type of crop will get registered.

Portal for farmer to sell product at better rate System is to help farmers to update farm product related information in the website. Portal for farmer to sell product at better rate System is farmer product management website application which helps farmers to get best price for farming products. It will also help farmers to improve their product and profit. It enables farmers to sell their product direct to customer or farmers can do direct delivery of product to the seller. Farmers can view labors profile and they direct by the farmer. The Farmers Portal of the Department of

Agriculture & Co-operation is a platform or farmers to seek any information related to agriculture. The main objective of this project is that there is an direct communication is done in between the User and the farmer.

The farmer can be deal with the customer directly so the price of the products offered by the farmer to the customer will also be affordable to customer, it will help both the farmer as well as the customer where the customer can save some money and the farmer will gain extra profit. The main importance of this Project is to give the better rate to the farmer from the whole seller or from any user. The farmer can be deal with the customer directly so the price of the products offered by the farmer to the customer will also be affordable to

customer, it will help both the farmer as well as the customer where the customer can save some money and the farmer will gain extra profit.
After yielding product farmer has a limited amount of time to find out nearest market, current stock details & to determine which market will be more profitable for his product. The study of market situation takes a lot of time[2].
In traditional marketing scheme, farmers had limited option for selling their product due to which they cannot optimize their product profit at optimum level.
System is providing platform such as website application at government level wherein farmer can sell his products at different layer of marketing chain with multiple option. This platform will help farmers to find out nearest markets, its current stock details and its demand for particular product within less time & with less effort

PURPOSE

The main importance of this Project is to give the better rate to the farmer from the whole seller or from any user. Save effort and time. Good quality at better price along with transparent pricing information .

Quality and variety segregation for the ease of buying and exploration.

Eliminate time variable from pricing and quality so that the system becomes more accessible.

3.EXISTING SYSTEM

In existing system, for buying the agricultural product farmers can go to the any shop and buy the product. Sometimes there is a lack of product or stock of the product is finished. Then farmers can go to the another shop for the same product. This process is time consuming. This existing system there is middle man present. Company sell the product to wholesaler, then wholesaler sell the product to the retailer and retailer sell the same product to the shopkeeper. In this process there is more than one middle man is present. The middle man cut his commission from the product by selling it to the next middle man. At the end price of the product increases by the actual price. Sometimes farmers are not able to purchase the product with such increased price. Because of that crop can be deteriorate.

4.PROPOSED SYSTEM

In this system we are going to implement E-commerce platform for farmers by using this platform they can purchase the Agricultural product. This platform provide the agricultural product direct through the company or organization. In this system there is no middle man is present, there is no middle man present means price of the doesn't increases by any chance. Farmers can go through the online platform and check the product availability and price, and accordingly purchase it. It saves the time and efforts for the farmers. They can purchase the product within time. This platform will help farmers to find out nearest markets, its current stock details and its demand for particular product within less time & with less effort. This analysis will thereby help to determine which market will be more profitable for his product. This platform can accommodate traditional marketing method as well as modern marketing methods. This application makes the farmers requirement become easy. One can easily browse through the various details using the well defined interfaces provided by the system.

SYSTEM ARCHITECTURE

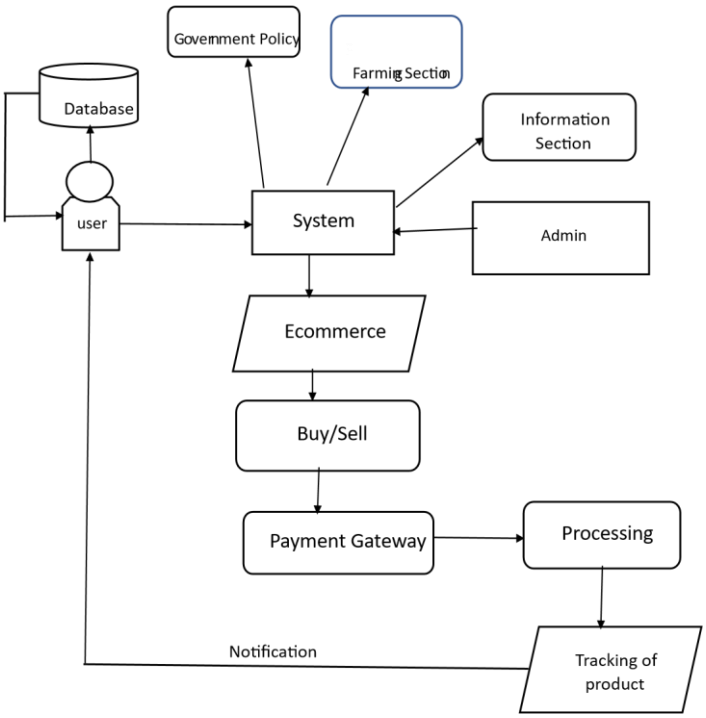

Fig -1: System Architecture Diagram

METHODOLOGY ALGORITHM

The Advanced Encryption Standard (AES) is a widely used symmetric-key encryption algorithm. It was adopted by the U.S. government in 2001 as a standard for encrypting sensitive information. AES operates on fixed-length blocks of data, with block size of 128 bits and key sizes of 128, 192, or 256 bits. The algorithm consists of several rounds of substitutions and permutations applied to the input data using a set of fixed tables, called the Rijndael S-boxes.

During each round, the input data is first subjected to a byte substitution step, where each byte is replaced with a value from the S-boxes. This is followed by a shift rows step, where the rows of the input block are shifted by a certain number of bytes and a mix columns step, where each column of the input block is transformed using a matrix multiplication.

Finally, a key addition step is performed, where the input block is XOR-ed with a portion of the encryption key. This process is repeated for several rounds, depending on the key size, with the number of rounds increasing as the key size increases. AES is considered to be a highly secure encryption algorithm, with no known practical attacks that can break it. It is used widely in various applications, including secure communication protocols, data storage systems, and digital rights management schemes.

6.RESULTS

These terms are a bit confusing. So, let's take each term one by one and understand it fully.
True Positives (TP)-These are the correctly predicted positive values which means that the value of actual class is yes and the value of predicted class is also yes. True Negatives (TN) -These are the correctly predicted negative values which means that the value of actual class is no and value of predicted class is also no.
False Positives (FP) - When actual class is no and predicted class is yes.
False Negatives (FN) -When actual class is yes but predicted class in no.
Accuracy - Accuracy is the most intuitive performance measure and it is simply a ratio of correctly predicted observation to the total observations. One may think that, if we have high accuracy then our model is best. Yes, accuracy is a great measure but only when you have symmetric datasets where values of false positive and false negatives are almost same.
Therefore, you have to look at other parameters to evaluate the performance of your model.
For our model, we have got 0.803 which means our model is approx. 80 percent accurate.

Accuracy = TP + TN/TP + FP + FN + TN

7.CONCLUSION

Finally, with the analysis and survey with farmers we came to know the problems facing by them in the process of cultivation and accordingly updated the modules which would help them. so far, we also came the conclusion of modules and the way of implementing the same. The administrator can also use the system to keep the farmer up to date with the current farming techniques.

REFERENCES:

1. Construction of E-commerce Platform System for Targeted Poverty Alleviation IEEE 2020**.**
2. E-Commerce Application for the farmers IEEE 2018.
3. Krishi Portal Web Based Farmer Help Assistance International Journal of Advanced Science and Technology Vol. 29, No. 6, (2020), pp. 4783 – 4786
4. Design of Web Portal for E-Trading for Farmers'. Swapnil International Journal on Future Revolution in Computer Science & Communication Engineering IJFRCSCE March 2018, Available @ http://www.ijfrcsce.org
5. **"**E-Application and Dss for Farmers to Sell Food Crops through E-Auction" International Journal of Engineering & Technology, 7 (2.19) (2018) 101-103
6. **"**FARMER TO CUSTOMER E-TRADE'' International Journal of Latest Trends in Engineering and Technology Vol.(13)Issue(3), pp.050-056 DOI: http://dx.doi.org/10.21172/1.133.08 e-ISSN:2278-621
7. An Efficacious E-Portal for Rancher to Buy Seeds and Humus International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8, Issue1S5, June 2019.
8. Smart E-Marketing in Agricultural Products International Journal of Engineering Research & Technology (IJERT) ISSN: 2278-0181 Published by, www.ijert.org ICRADL – 2021.