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Agri Succor Helping Hand for Farmers Community

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Abstract -Farmers serve as a backbone to our agricultural country - India. But, the lives of the farmers are at stake nowadays due to losses incurred during the land cultivation, harvest and natural calamities. There are also many mobile applications that are specially designed for farmers. Most of these apps mainly focus on only one particular feature like crop management, usage of pesticides, etc. Even if they are aware about those applications, the farmer does not know how to access it even though it is in native language as he might be ignorant. The proposed project provides an ultimate solution to all the problems above mentioned. The app focuses on designing a farmer friendly application. Input is given in text formats throughout the app. Using this application, the farmers can get agriculture related information from other fellow farmers or volunteers connected through this application. The plant is also checked for the pesticides level and the disease is identified. The recovery solution for the same is provided either in video or text format in an interactive portal. The plant is quality checked, and viewed by the buyers and purchase it at reasonable market price which is delivered with the help of the volunteers.

1.INTRODUCTION

Agri succor is a web-based application which will be helpful for farmers who are dealing with troubles in sales and protection of plants from diseases. Due to rapid growth in technology people need to upgrade themselves to current fashions and our upcoming ages are searching forward for essential administrations in a single touch. This project is created to provide effective, cheap, reliable, time saving, efficient and comfortable services for farmers, volunteers and buyers. Farmers serve as a backbone to our agricultural country. The lives of the farmers are at stake nowadays due to losses incurred during the land cultivation, harvest and other natural calamities. Although there are many solutions commercially made available for the upliftment of the farmers, none of them proved to be such helpful in improving their livelihoods. The farmers are unaware of the upcoming government schemes and the benefits.

The proposed system focuses on designing a farmer friendly web application. Input is given through text formats throughout the app. Using this application, the farmers can get agriculture related information from other fellow farmers or volunteers connected through this application. The volunteers and farmers should authenticate themselves for registering in the application. The farmers can provide details about their farmlands and groceries that are being cultivated in their land. Once the crop has been harvested, the farmer uploads the image of the infected plant into the database. The recovery solution for the same is provided either in video, audio or text format by fellow farmers in the community portal. Once the crops are ready for sales it is posted in the portal and can be viewed by the buyers who can purchase it at reasonable market price which can be delivered with the help of the volunteers. Hence all the facilities are confined under one roof. The user can login using username and password are provided during the registration. The user id and password is sent to their respective mail id using it they can login into the system. The user can post the infected plant images and ask for suggestions, post climate updates, government schemes and more. The buyer can view the posts of the farmers who has invited for sales and buy if interested by contacting directly with the farmer.

2. RELATED WORK

Modernization of (agricultural) marketing implies greater interaction and involvement of the private sector. There is major block hole in the growth of the agricultural sector of India mainly because the farmers are held as hostages by the middlemen. Farmers don't get enough outcomes for the efforts that they put in. Therefore, almost two-thirds of the farmers in Madhya Pradesh and Bangalore commit suicide, a report says. To get out of this trap cuff, providing a direct link between the farmers and consumers will solve problems for both, thus yielding high profits. A web cum mobile technology will solve this problem. This will serve as a platform where they can communicate directly to buy/sell farm products at the right price. The study examines the cellular technology to enhance the services on Agricultural services and delivery system in India.

The result of the research shows the amount and the quality of service with the speed in delivery is projected. Further the evaluation suggests that the farmer's benefits are more rather than the intervention from the better off. E- Agriculture is the rising field which focuses on the rural and agricultural development through the information andcommunication

process. The E- Agriculture is the platform which supports the marketing of agriculture products.

3. CHALLENGES AND AWARENESS

There are many challenges involved in marketing of agricultural produce. The limited access to the market information, multiple channels of distribution that eats away the pockets of both farmers and consumers and reduces the literacy level of farmers. The govt funding of farmers continues to be at nascent stage and most of the little farmers still rely upon the local moneylenders who are leeches and charge high rate of interest. There are too many vultures that eat away the advantages that the farmers are presupposed to get. Although we are saying that technology have improved but it's not gone to the agricultural levels because it is confined to urban areas alone. There are several loopholes within the present legislation and there's no organized and controlled marketing system for marketing the agricultural produce. The farmers must face such a big amount of hardships and must overcome several hurdles to induce fair and just price for his or her sweat. the attention on market information normally was found to be relatively poor just {in case} of farmers as compared to the traders since the accessibility of market information in terms of communication systems is extremely poor in case of farmers.

The status of assets on audio visual and communication systems of farmers clearly indicated that radio followed by television were the sole assets owned by small farmers. The advanced communication systems like mobile phones were owned by medium and enormous farmers. some large farmers also subscribed to agriculture magazines like Annadata, Krishimunnade and Krishipete. However, traders with all the fashionable and advanced communication gadgets were able to source the market information easily and frequently. The attention on market information pertains to only arrivals and costs in local markets altogether the categories of farmers. The opposite important production and marketing parameters like post-harvest handlings, grading and standardization, etc and weren't known to the little and medium farmers but some large farmers were responsive to them.

4.SYSTEM ANALYSIS

A. Existing System

There are many mobile and web applications that are specially designed for farmers. Most of these apps mainly focus on only one particular feature like crop management, usage of pesticides, etc. Still, such applications lacked in some aspects as the farmers are unaware about the existence of such applications. Even if they are aware about those applications, the farmer does not know how to access it even though it is in native language as he might be ignorant. The existing applications such as Agro app, Krishi ville, E-agro are some of the applications which mainly concentrates on pesticides level information, crop management and doesn't provide a community forum which can help farmer to directly connect with buyers, volunteers and with other fellow farmers. The standard of sales has not developed in the existing systems.

B. Proposed System

The application provides a community portal where farmers, volunteers, and buyers are interlinked. Farmers can post the infected plant images and ask for solutions by posting it into the portal. The farmers can also ask queries about the pesticide level to be used, and climatic conditions related to info in the portal. Once crop is ready for sales the farmers can post the details of the crop in the portal, which is viewed by the buyers and if interested they can contact the farmer directly through viewing their details and buy the crops. Volunteers are the groups of agricultural students who can post the details about the new agriculture schemes introduced by the government, they can even add the links related to it or the PDF related to that scheme. The agriculture news, climatic updates, and the daily prices of the crops are updated by the volunteers and admin.

5. SYSTEM METHODOLOGY

The system consists of three users: farmers, volunteers, and buyers. Each user is registered in the application with the help of admin. Admin creates the account for the users by getting their details such as name, address, phone no, email id and Aadhar number. The user id and password is sent to their email address using which they can log in, and access the application. User id and passwords are unique for each user and can only be logged in if they are registered.

The application provides an interactive portal where the farmer posts the infected plant image and crop details in the community portal and are stored in the database. The posts uploaded can be viewed by volunteers, buyers and other fellow farmers and suggest recovery solutions to the posts in the comment section. Farmers can even ask queries about any government schemes, climatic conditions, and more. Volunteers and admin upload the posts related to emerge to government schemes with the related PDF or links related to it. News and climate updates of different regions are updated in the portal through which the farmer can get aware of the outgoing activities around the world.

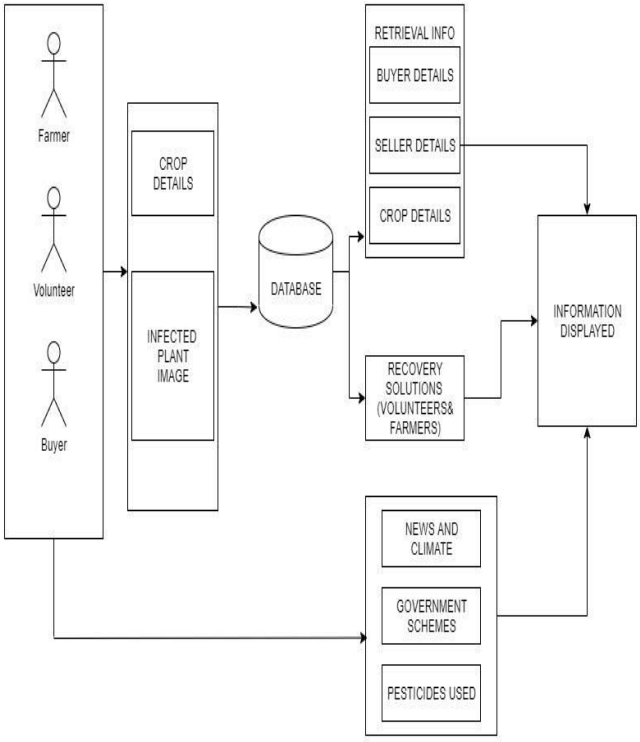

Fig 1.1 Architecture Diagram

Once the crops are ready for sales it is posted in the portal and can be viewed by the buyers who can purchase it at a reasonable market price and can be delivered with the help of the volunteers. The buyers, farmers are directly linked which eliminates the inter mediator, and this helps the farmers to get a good economical price for their goods. Buyers can directly contact with the farmers by viewing their details from the posts posted. The buyers also get the fresh and quality crops at a reasonable price. The buyer details, farmer details and volunteer details are displayed for all the registered users.

The images, files, and details are securely stored in the database. An application can be accessed using a local browser in all PC and mobiles. The application is hosted in cloud and can be accessed at any place and time with internet access. There are four main modules included in the application which performs multiple tasks.

A) Data Collection Module

The farmers, volunteers, and buyers have to register their account with the essential details and admin takes care of the registration process. The farmer details include name, contact number, address, field and crop details, email address, gender, date of birth, Aadhaar number. Farmer can upload the images of disease infected plants if any and the images are stored in the database.

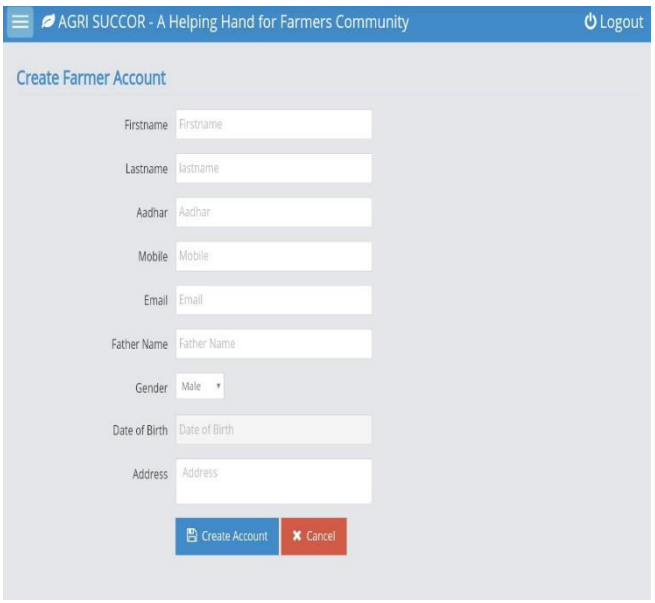

Fig 2.1 Data Collection

B)Community Portal

Farmers are allowed to post their queries about the government schemes, and also request for solutions. The infected plant images are uploaded and the solutions are provided in the comments section by the help of either volunteers or fellow farmers. Solutions are provided in text format or videos links related to the problems are shared.

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Fig 2.2 Community portal

C)News and Climate Updates

The newly introduced government schemes details are updated in the app and awareness created among farmers. Volunteers constantly updates the application with current agriculture-related news and solutions. The climatic updates of different areas are updates constantly by the volunteers.

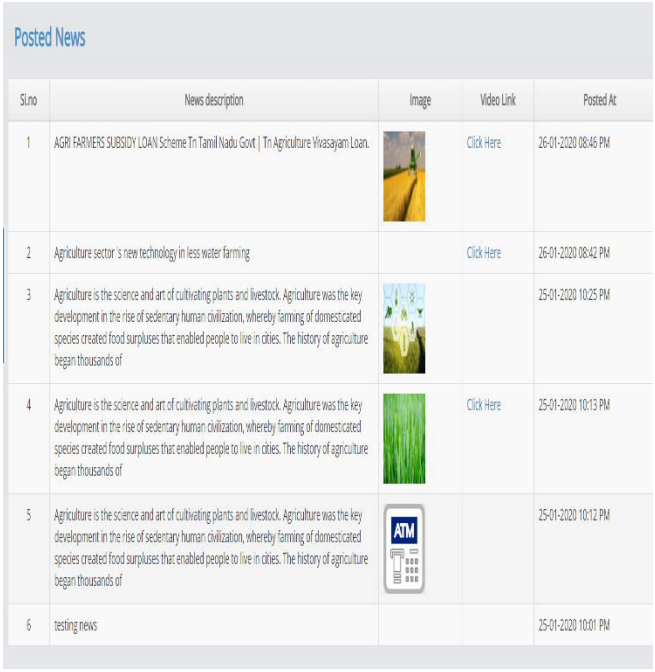

Fig 2.3 Agricultural news.

D) Sales and Report Module

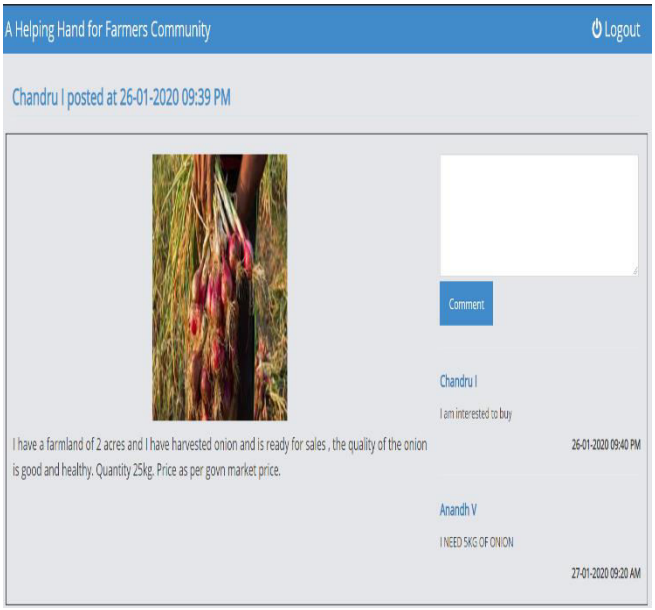

Fig 2.4 Sales and report

Buyers can log in into the homepage and view items that are located nearly to him and also the details of farmer is viewed. Once the buyer agrees to buy the product, the respective farmer is notified through the application. The buyer can directly contact the farmer and buy the crops at a reasonable market price. The farmer provides the customer with the necessary details, and the buyer buys the needed.

6. CONCLUSION

Through the use of the application, both the standards of agriculture and farmers can be raised. It also increases the job opportunities for the unemployed youth. The commodities are freshly handpicked and delivered to the customers at a reasonable market value. The application can be assessed in the regional language. Instant updates on agricultural schemes, climate, crop diseases, and their solutions are provided by the farmers, and volunteers. Quality check of the farm products before marketing them ensures that only disinfected items are sold. The remedial measures for the crop diseases are provided in form of text, voice and video. Most of the problems faced by the farmers are provided immediate solutions and guidelines. If this initiative is comprehended in the near future, unemployability is reduced to a considerable rate due to the advent of the volunteers.

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