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# **KISAN KERALA-AGRICULTURE BASED ANDROID APP**

## **LOCATION BASED ASSISTANCE FOR FARMERS**

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### **ABSTRACT**

*This android app mainly focuses on helping the farmers to identify the crops suitable to their land. In initial PART the app contain a portion for the user who can type their location and search. While searching, he gets the information's about that location like the soil, amount of rain etc. from the past 5 year details and it also contain the list of crops suitable to that land. The farmer can choose from it, the app also contain a provision for the farmers to chat with experts, who can give them advises regarding the selection of crop. Thus it will be a great help for farmer's especially new ones to the field. The main goal for the development of this project is to help the user to work in a user-friendly environment. This project creates an application which helps the Users to access the privileges and grants from the government. The users are provided to store all their personnel information's so that they are able to access the grants from the government based on their status. This project mainly aims at focusing the small scale industry such as farmers. Agriculture is the backbone of the Indian economy so farmers must be provided with all the privileges from the government. Based on the type of sector of farmers they are provided with the information's such as crop management, insurance, loan facilities and grants from the central government. This application helps the user to access the government privileges and grants easily.*

**KEYWORDS:** Agriculture, Farmers, Kisan Kerala

### **1. INTRODUCTION**

India is an agriculture based developing country. Information dissemination to the knowledge intensive agriculture sector is upgraded by mobile-enabled information services and rapid growth of mobile telephony. It bridge the gap between the availability of agricultural input and delivery of agricultural outputs and agriculture infrastructure. Mobile computing, cloud computing, machine learning and soft computing are the immersing techniques which are being used in almost all fields of research. Apart from this, they are also useful in our day-to-day activities such as education, medical

and agriculture. This paper explores how Android Apps of agricultural services have impacted the farmers in their farming activities.

### **2. PROBLEM DEFINITION**

The progression in the agriculture production straight increases the Indian Economy and vice-versa is also true. Mobile apps in the arena of agriculture can be the best option to increase countries,, agriculture production. The inventions in technology in agriculture domain are not getting to the farmers; because of either most of them are illiterates or due to unawareness of the location from where they can have information. Hence, utmost of the farmers is being

failed in acquisition of the possible production rate. Today farmers are receiving diverse facts or information about farming like seeds, crop selection, and crop processes weather, fertilizer, pesticides etc. from various resources which are distributed on many different locations according to its origin, its processors, producers or vendors. The data having different format and may have different specific contents can be heterogeneous in their structure and format. Therefore it is required to develop a system from where the required information is available to the farmer directly.

### 3. LITERATURE SURVEY

Information management is becoming an increasingly challenging task for farmers, especially in terms of the amount of data and the complexity of processes in precision farming. One of the most demanding functions is data acquisition. Mobile farm equipment featuring different sensors is able to collect a large amount of data while working. Automated process-data acquisition can be the basis for information-steered agricultural production. But use of these data is restricted today by hardware and software compatibility, different data formats, the lack of a concept for reusing data, and the amount of data.

### 4. PROPOSED SYSTEM

The rapid growth of mobile telephony and the introduction of mobile enabled information services provide a means to overcome existing asymmetry of information in all field like agriculture, healthcare and education. There is a big gap between the availability and delivery of agriculture inputs and agriculture infrastructure that can be bridge by the mobile technologies. A smart phone is the device that is used to make telephone calls, having additional features and abilities like to send and receive email, Wi-Fi and modem ability, internet access, Office documents, easy touch screen operation and most of all the capability to run custom software.

### 5. MOTIVATION

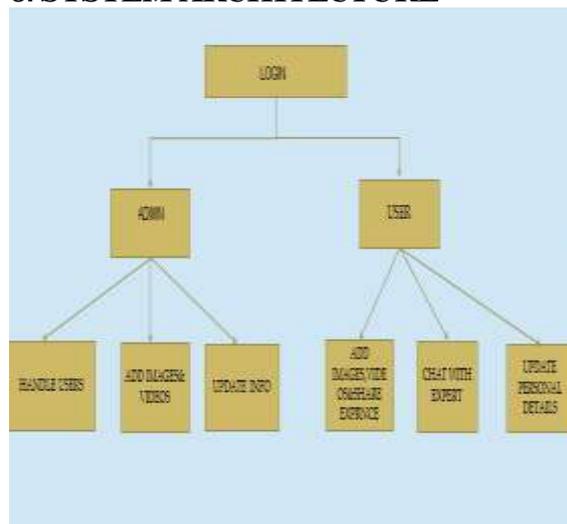
The very basic information need by the farmers are about information of soil, type of seed, required pesticide for the particular crop in all stage of its growth, fertilizer type, crop diseases and its selling. Below are the questions that must be answered for the better production of crop.

- Fundamental information such as which crop to plant?
- Which seed varieties is to be used?
- When he can show and for weather information is required?
- Best cultivation practices for my crops and soil which fertilizer and pesticides will be required for the crop?
- The Prices, demand indicators, and logistical information for transport

The main development purpose behind this app is to provide as much as information possible to the farmers regarding the crop selection. It also

provide the facility to chat with an expert which will be more effective. Especially for a new one to the farming field have lots of doubts during each and every step, our main goal behind the development of this app was to help such people. It is dynamic and interactive to take in the feedback and other input from the end users and can guide people regarding the different procedures that need to be adopted. This project shows a simulation of live environment which takes different aspects into consideration like market-demand- and-supply, production forecast, fertilizer preferences etc.

### 6. SYSTEM ARCHITECTURE



User can login to their respective profile with the help of username and password where they are updated with crop information. If in case, admin feels that registered profile is not genuine, he can deactivate the profile at any time. Admin will upload complete information, views & feedback given by the user. User can view the information that he want and they can share the experiences which is often verified by the admin. In comparison to the present system the proposed system will be dynamic, precise and provides complete information related to crop production, methods, technology, tools and crop protection. It also provides facility to chat with agriculture expert. User and technical person need to be registered in order to access information provided by the admin. Registration provides authentication to the user/technical. Technical expert and user can have discussion. This helps the user to have even much more clarity about the things that they want.

### 7. CONCLUSIONS

This Android application will be useful in Agriculture System to suggest farmers to select a crop for cultivation mapping using different ground parameters crop production, methods fertilizer, technology, tools. As this system more helpful to increase productivity of crops and indirectly to increase GDP of India and reduce poverty. As farmers adopt new techniques and differences in productivity arise, the more productive farmers benefit from an increase in their welfare. Many apps are being utilized

for different kind of functionality regarding the farming activities like cropping information, pesticides, fertilizer, seed, selling of crop, irrigation information, estimation of crop production, weather information and information regarding the best practices of farming. We found that many of the apps are static. Instead of that dynamic apps will be better to use. Also if all such listed functionalities are bundle into the one single app and in the native language of the farmer, then it is easy to utilize it

## **8. FUTURE SCOPE**

Here we provide just information about the grand and loan facilities to the farmers. By associating the app with government users can get the information and also they can apply for it from the app itself. The Scheduling, Controlling And Monitoring of Agricultural Devices app is limited to the work of controlling the motor and pesticides proportion, monitoring the farming activities going on and irrigation. All these problems can be minimized in future sing various developing technologies

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