

## Agro Planner Web Application

<sup>1</sup>Prasad dilip pathare ,<sup>2</sup> Devendra Arjun Mali,<sup>3</sup> Neha kishor more <sup>4</sup> Prof. S.G.Bodke  
, Sandip Polytechnic, Nashik

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1,2,3,4 Department of Information Technology

### **Abstract—**

Now a days, everyone is familiar with smartphones including farmers. Mobile phones play indispensable role in daily life of people. Use of traditional methods in farming results slow progress. People can see the advantages of using better approaches to cultivate the crops with the tools and technologies that supports farming are yet to move into agricultural field. Farmers are mainly not aware about the technical advancements in farming and also they are unable to know the rates of the crops and their products they sell. There are also many schemes for farmers which are not known to them. With the emergence of mobile phones and Internet, there is a high potential for giving essential information via this means Agricultural services play a critical role in supporting farmers and agribusinesses, and in promoting sustainable agriculture. By providing access to information, technology, and equipment, agro-services help farmers to improve their yields, reduce their costs, and ensure food security for communities around the world. As of now, there are over 10,000 ASCs across India, serving a large number of farmers and agribusinesses. These centers provide farmers with access to a wide range of services, including technical advice on soil and water management, crop selection and rotation, pest and disease control, and the use of modern technologies. Additionally, ASCs provide farmers with market information and financial services.

We have to developed the Project for the Farmer its help to the Farmer for choose accurate solution by using Community Discussion . we have also list the all retailer store which is help the farmer to choose according to his Choice . we have also Provide the fertilizer uses and fertilizer suggestion to the farmer according to thte Crop Choose by farmer. The app will be provide the Weather forecasting. Latest news Section for awareness. We have also Provide the expert advice and suggestion for the farmer .

**Keywords—**Farmer , retailer , news expert suggestion , advice , community discussion

### **I. INTRODUCTION**

Today, farmers get news through television, radio and smartphones. But all farmers has little knowledge to read newspaper or they have no time to watch Television. So farmers never get information about the

current farming news and schemes, so farmers have to know about latest Fertilizer and used of theme .The major part of farmers is often unable to know about technological advancements in agriculture which helps to get better yield and prices for their crops. Since it is not possible to increase the land area for cultivation, the only possible way is to increase the productivity. The usage of smartphones solves some of the above problems. The usage of mobile phones with internet connection has recently increased in rural areas which help in spreading the agriculture- based information to the farmers. Smartphones will take their space in all the environments where people handle their day to day activities, and compute operations that are performed on computers. So, mobile applications are appropriate option for sharing information to the farmers. Android is the commonly used latest platform for developing mobile applications and most people's uses android smartphones than others. Android smart phone becomes popular due to its features and its low price. The application helps farmers who use smartphones We have to developed the Project for the Farmer its help to the Farmer for choose accurate solution by using Community Discussion . We have also list the all retailer store which is help the farmer to choose according to his Choice . we have also Provide the fertilizer uses and fertilizer suggestion to the farmer according to the Crop Choose by farmer. The app will be provide the Weather forecasting. Latest news Section for awareness. We have also Provide the expert advice and suggestion for the farmer . The application also provides the features like showing climate conditions, methods of cultivating specific crops, opportunities for better interaction and communication with experts, market price of crops, guidelines for selecting pesticides and fertilizers, information on most suitable seasons to cultivate various crops, renting agricultural machineries directly from owners, new farming policies and schemes from government

## Survey and Specification

The main objective of our proposed project is to build an application that help users for cultivation of crops with necessary information obtained through App. The user first registers with his/her personal details and these details are stored in the database. The user can login into the app by using the username and password provided during their registration. The basic information obtained through this App is information related to weather forecasting , Community Discussion for the better advice and new technology knowledge, We have also list the all retailer store which is help the farmer to choose according to his Choice . we have also Provide the fertilizer uses and fertilizer suggestion to the farmer according to the Crop Choose by farmer. The app will be provide the Weather forecasting. Latest news Section for awareness. We have also Provide the expert advice and suggestion for the farmer . The application also provides the features like showing climate conditions, methods of cultivating specific crops, opportunities for better interaction and communication with experts, market price of crops, guidelines for selecting pesticides and fertilizers, information on most suitable seasons to cultivate various crops, renting agricultural machineries directly from owners, new farming policies and schemes from government

## II. LITERATURE REVIEW

discusses an Android application for Farmer used the updated rates of vegetables and fruits at each market in India and farmers will be able to sell their crops at better rates. This Application gives proper information such as all the farming related notices from the government and different schemes to farmers. They are predicating the rates of the vegetables and fruits depending on market condition.

presents an overview of mobile-apps targeted to the agricultural sector currently available in Google Play Store, android operating system. In addition, a solution of the given problem is designed and presented in the form of an Android application- Kissan Sevak. This provides crop planning which include when to grow the crop, which crop to grow, seed variety related to the soil type, the time of harvest, buying seeds, pesticides, farm-equipment, and fertilizers, contact

with the respective dealers, marketing applications which is the available price in the current market information applications, for contacting farm specialists ,for checking the available storage facilities, for post-harvest technologies.

suggest various ways in which a farmer can utilize Mobile Computing(MC) on their handsets using application called "Kissan", to assist them for relatively better cultivation and merchandise. This framework uses MC, which in effect, puts power into a farmer's hand. The experimental setup uses tools like Android SDK. This application gives real time weather, news and market prices at different locations related to farming that also in regional languages.

With the help of Android SDK, Mobile Computation can be used to develop infrastructure for smart farming. Building cognoscente in the field of agriculture that enlarges countries agriculture production. Here the framework is build using MC, revolving the agriculture with technology. Asolution that builds on top of mobile computation that helps in farm management and agriculture yield. Tools like Android SDK, Xampp Server, etc. are used in the system.

## III. DISCUSSION AND METHODOLOGY

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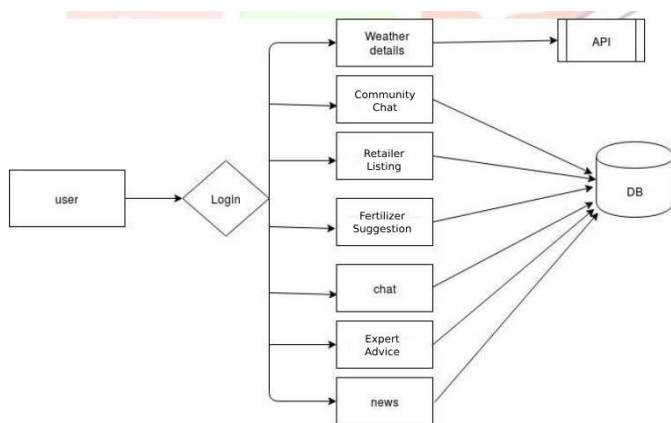
**IV. PROPOSED DETAILED METHODOLOGY**

**Hardware Requirement**

1. Processor : Intel CORE i3
2. RAM : 4 GB
3. Hard Disk : 64 GB

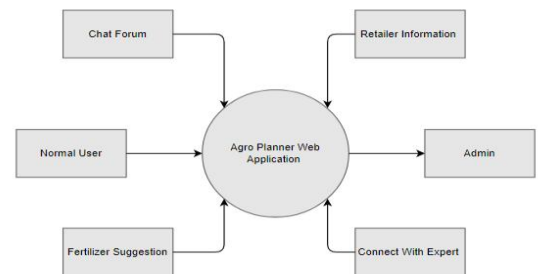
**Software Requirement**

1. Operating System : Microsoft Windows-7.
2. Software Package : MySQL, Xampp
3. Front End : HTML, CSS, BootStrap, JS
4. Backend : PHP



*Figure 1. Block Diagram*

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*Figure 2. Data Flow Diagram*

Community Model: In Community Model the farmer and Admin can raise some questions and all the user is able to participate in Community to gave the answer or discussion.

Retailer Listing Model: In Retailer Listing Model Will provide the all retailer Shop list with contact number , address Owner name so the farmer can easily identity and know about the retailer shop .

Fertilizer Suggestion Model: In Fertilizer Suggestion Model Will provide which fertilizer is used fore the which the crops and its benefits and features and uses .

Weather Forecasting Model: Provided daily and weekly Weather for casting for his or her day to day activities .

**Latest News Model:** Provided latest news regarding the crop , market rate , crop guidelines etc.

**Expert advice Model:** Provide expert advice we will create a profile or the or person name and mobile number for the expert advice .

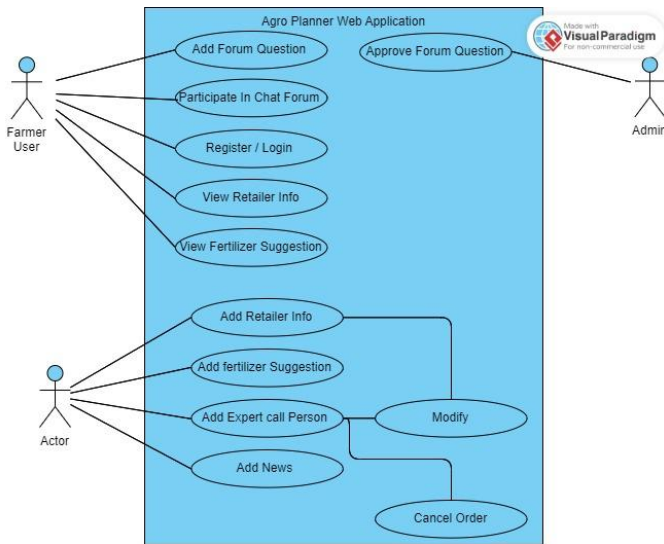


Figure 3. Use Case Diagram

**Chat Forum:** The system can host a chat forum where farmers, agricultural experts, and stakeholders can communicate and share knowledge. discussions, answer queries, and provide a platform for exchanging experiences and best practices.

**Retailer :** Connect local agricultural retailers to the Agro Planner through APIs or a dedicated interface. Farmers can browse and purchase seeds, fertilizers, pesticides, and other agricultural supplies directly through the platform.

**Weather Forecast:** Integrate real-time weather data into the system to provide accurate and timely information to farmers. The system can analyze historical weather patterns and use predictive modeling to offer forecasts tailored to specific regions and crops. Farmers can receive notifications and alerts about potential weather-related risks and take proactive measures.

**Fertilizer Information:** Provide a comprehensive database of fertilizers with detailed information on their composition, usage, and effectiveness for different crops.

Implement a recommendation system that suggests suitable fertilizers based on the type of soil, crop rotation, and historical performance data. Integrate

with retailers to enable seamless purchase of recommended fertilizers directly through the Agro Planner

## V. CONCLUSION

This App help to reduce the problems of farmers by introducing a platform with different operating interfaces that provide services that are needed by farmers such as knowing the details of information required for the cultivation of each crops, weather forecasting for each selected location, Market rates of each crops in different location, supporting expert's advisories, diseases and prevention methods for each crop weeds, renting of agricultural machines, trending news regarding agriculture, etc Provide retailer store which is help the farmer to choose according to his Choice . we have also Provide the fertilizer uses and fertilizer suggestion to the farmer according to the Crop Choose by farmer. The app will be provide the Weather forecasting. Latest news Section for awareness. We have also Provide the expert advice and suggestion for the farmer . The application also provides the features like showing climate conditions, methods of cultivating specific crops, opportunities for better interaction and communication with experts, market price of crops, guidelines for selecting pesticides and fertilizers, information on most suitable seasons to cultivate various crops, renting agricultural machinery directly from owners, new farming policies and schemes from government

## VI. ACKNOWLEDGMENT

With profound gratitude, we extend our sincere thanks to Prof. P. M. Dharmadhikari, Principal of Sandip Polytechnic & HOD of computer Department Prof. Vishal Ohal , Nashik, for his insightful guidance and generous permission, integral to the success of our project planning. Our heartfelt appreciation also goes to Prof. S.G.Bodke, and the dedicated staff of the Computer Engineering Department for their unwavering support.

We extend special thanks to colleagues, industry experts, and lab technicians, whose collaborative efforts enriched our project with practical insights. Their contributions have added depth and real-world relevance to our planning process

## VII. RESULT

24/7 Accessibility: The online website allows users to access information and control the automated gardening system at any time of the day or night. This flexibility is particularly useful for users with busy schedules, providing convenience and accessibility.

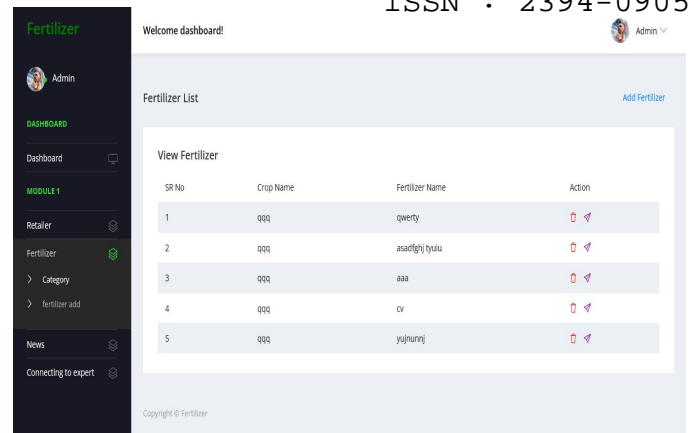
Centralized Information: Having all necessary information in one place on the internal website streamlines the gardening process. Users can easily monitor plant status, receive alerts, and adjust settings without the need for multiple tools or platforms.

Time Savings: The integrated system can save users time by automating routine tasks, allowing them to focus on other aspects of their lives. This is particularly beneficial for individuals with busy lifestyles who still want to enjoy the benefits of gardening.

User-Friendly Interface: A well-designed internal website can provide a user-friendly interface, making it easy for individuals, including those with limited gardening experience, to navigate and manage their automated gardens.

Enhanced Productivity: With reduced manual tasks and streamlined processes, users can potentially achieve higher productivity in their gardening endeavors. This can lead to more successful and enjoyable gardening experiences.

Easy To use, Real time use. Reduce time. No middle man required. Maintain all record online on the server. Reduce paper work. This system will reduce the paper work of storing vaccination schedule. This system will provide perfect suggestions for Farmer improvement



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