

# ANDROID APP FOR FARMERS IN REGIONAL LANGUAGE

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**Abstract** – In the present-day scenario, internet and smartphone are few of the most common things readily available to people at low cost. The uses and the wide scope that the internet and smartphone bring with them are very wide and global. These advancements, when imparted to farmers, can bring about revolutionary change in agriculture. Adding technology to traditional agriculture can work wonders for the field. This paper aims to integrate traditional knowledge of farmers and advancements in the field of agriculture using an android application that can be used on any smartphone. This system based on android platform provides a database to the farmers, that contains complete information about a particular crop. This information consists of crop details, methods of irrigation, fertilizers and pesticides required, insects that attack the crop and perfect weather conditions for crop growth. This android application is unique in the essence that all this information is available for the farmer in regional language and also contains aids for usage of the app by illiterate farmers.

**Key Words:** Android, Database, Internet, regional languages, aids.

## 1. INTRODUCTION

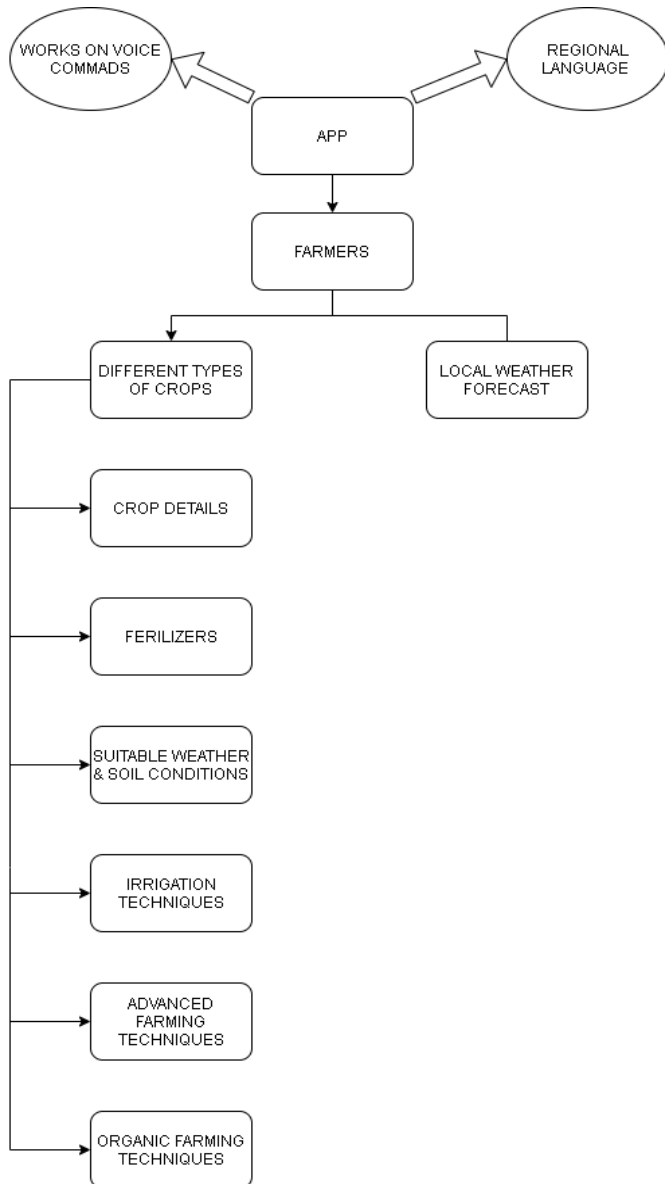
Modernization and technological advancements in the field of agriculture can prove to be game changing. The benefits of internet and technology when available to farmers, can increase agriculture produce and manage services better. Knowledge and information about a particular crop is necessary to the farmer if he/she intends to move to planting of newer crops. This information is also of use in these ever changing weather and climatic conditions. Providing the know-about of latest irrigation techniques can help the farmer in better managing water resources. Latest fertilizers, pesticides and organic supplements can help in better growth of plants. Warning the farmers about the insects to watch out for through the database can provide a lot of help in protecting the crop. The market and MSP prices available about the crop in database helps the farmer in pricing his crop beneficially.

## 2. EXISTING SYSTEM

Systems existing in this field are either inaccessible to the farmers or incomplete. Very few sources such as websites and webpages are available currently, that are very rare and are hard to access. A simple farmer can not perform such complex actions in order to access this information. The necessary knowledge is not available in rural areas. Also, these sources only provide the information in English language, which is a major hurdle. Even if accessible, this language restriction is very hard to overcome. Entire information about the crop is also not available at a single place.

## 3. PROPOSED SYSTEM

The proposed system overcomes all the disadvantages and is beneficial to the farmers. Android apps have revolutionized the entire world in various sectors. The proposed system brings the android platform into the domain of agriculture to help farmers. By providing all the information that is ever necessary, at the convenience of a single button, it is very easy to use. Considering the percentage of illiterate users, options like speech to text and text to speech are incorporated into this application. Those farmers who cannot read and write, can press a single button and request the information needed. The major highlight of this proposal is that all the mentioned features and accessibility options are available in the regional language of the farmers to facilitate their usages. The database is regularly updated and consists of latest and accurate information to help the farmers. The proposed system in the form of an android applications, can be easily accessed on smartphone of any kind and through all mobile internet services.



#### 4. HARDWARE REQUIREMENTS

##### (For Project development)

- Processor : i5 generation 8
- Hard disk : 1TB
- RAM : 8 GB

##### (For User)

- Android version: 6.0.1
- RAM: 1GB
- Storage space: Minimum 10MB

#### 5. SOFTWARE REQUIREMENTS

- Operating system : Windows 10
- Front End : Android SDK
- Language : Java

#### 6. MODULES

The modules that are present – choice provider, mic sensor, database.

##### 6.1 CHOICE PROVIDER

This module consists of the home screen that provides the choices in regional language for farmer to select. This selection process takes the farmer to required screen.



##### 6.2 MIC SENSOR

The inbuilt mic in the phone is the second module. By pressing the mic button, illiterate farmers can activate this sensor and give a voice input about their requirement or choice. This input automatically takes the user to the intended screen.



### 7. CONCLUSION

This application for the usage of farmers involves complex systems. Despite this, the output is in the form and format that is both easily accessible and understandable. This project forms the bridge between technology and agriculture. The task of providing latest scientific advancements to farmers is accomplished through this project. The beneficiaries stand the chance of enhancing their output and profits. Farmers are in need of scientific and technological support for providing the ever-growing population with food. This project makes use of the efficient android platform that is flexible to the specifications and requirements of the smartphone and internet services. Future enhancements are in the process of development that make use of artificial intelligence for optimal usage.

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### 6.3 DATABASE

Database is the inherent feature that is helpful to the farmer. The choice of the farmer directs to the database screen. This contains the entire information about suitable weather conditions, latest irrigation techniques, fertilizers, pesticides and insecticides to be used, insects that attack the crop and fair price of the crop in the market.

ప్రపంచ అభివృద్ధికి చాలా వరకు వేరి ఆన్లైన్ ఒక ప్రధానమైన మూలం, అలాగే ప్రతి సంచితమైన సమాచారం 40,000,000 టెక్స్టులు, రిచి ప్రపంచ ఉద్భావం 100 వరకు వాడ్యత వహించే గ్రీన్ హౌస్ గ్యాస్ మిషన్ కు ఇది ఒక కీలక అంశం.

నిజ వినియోగదారులు తగిన సుఖం వేరి ఉత్పత్తి పద్ధతులు మరియు ఎరువుల అవసరం. మిషన్ ఉద్భావం ముందు సంవత్సరాల వేరి ముందు లక్ష్యాన్ని ముందు లక్ష్యాన్ని ఉన్నట్లు నిర్ణయం, ప్రతి ఒక్కరినూ ఇవ్వడానికి సహాయం చేయాలి.

మిషన్ ఉద్భావం తగిన లక్ష్యాలకు సుఖం వేరి ఉత్పత్తి పద్ధతులు అవసరమైన సమాచారం అందించడానికి, మరియు తరచూ అవసరం, వేరి దిగిపోయిన కూడా ముందు పద్ధతులను వినియోగం మరియు ప్రతి ఒక్కరినూ ఉన్నట్లు ముందు చేయాలి.



వేరి మును సాగు వాతావరణం మరియు ముట్టి ఆవశ్యకత



వేరి అనేది ఉష్ణమండల వాతావరణం కలిగిన ఒక మును. ఇటుక, ఇది ఉష్ణమండల మరియు సమశీతోష్ణ ఉత్పత్తికి కీలక మరియు ఉప-ఉష్ణ సౌకర్యాలకు కూడా వినియోగం చేయబడింది. వేరి ఉత్పత్తికి దాదాపు అన్ని దేశాల నుండి సాగు చేస్తున్నారు. అనేక ఉత్పత్తి కీలక, తగిన పద్ధతులు మరియు