

# **Android tablet application**

BY

NUNC Systems Private Limited

## **Company profile**

NUNC Systems is one of the best Mobile App Development, Web Development and Software Development (Java and .Net) organization. Established in 2009 with a vision to grow and excel, has grown up with quality IT Professionals. We have extensive & in-depth knowledge be it Web Development; Application Development our experience in managing technology projects, right from selecting tools and platforms, to implementing information technology solutions has shown results.

## **Tablet application**

This Android Tablet Application establishes linkages between Research-Extension-Markets through innovation ICT mediated extension systems and Public-Private Partnership for improving productivity and profitability of smallholder agriculture.

## **Goals**

- Develop and sustain new ICT mediated knowledge innovations through public-private partnerships.
- Improve quality and convenience of information dissemination to smallholder farmers'
- through sustainable "backbone communication network"
- Deliver quality inputs along with agro-advisory at smallholder framers' door steps
- Create info entrepreneurs/para extension professionals out of rural
- Bring transparency within the crop value chains through IMOD approach Replicate and scale-up through "Knowledge to the poor revolution".

## **Features**

1. Tablet App allows farmers and agricultural industry professionals the ability to keep accurate, field specific scouting reports throughout the growing season
2. Easily accessible and simple to use, designed for the agricultural production industry
3. Step through identification process helps farmers narrow down for better productivity
4. Provides multiple, high quality photos of identified soil conditions along with soil background, life cycle and threshold information
5. Ability to generate field specific scouting reports through provided data entry fields including farm photos, weather, plant population, pest pressure, Season etc.

6. Allows user to upload images to scouting report for better record keeping customizable data fields allow user to add comments and/or directives for the scouted field
7. Field mapping capabilities are included to allow cellular data enabled users To map fields, via GPS coordinates for increased accuracy in reporting
8. Identified concerns are automatically recorded on field map via GPS coordinates, for cellular data enabled users, to help identify concentrated problem areas needing immediate attention.
9. Scouting reports can be saved, stored on the hosted server, company website and/or emailed to be shared or archived for reference in future crop years
10. Package of practices decreases communication lag by allowing users to input and upload easy to read information and then allowing them to share the information instantly
11. Collected data provides users with accessible information to make better information crop input and management decisions for upcoming seasons
12. GPS mapping system automatically records GPS coordinates, allowing geo-reference specificpest “hot spots” in fields, leading to better spraying efficiencies
13. Training report module allows farm facilitators to have wide scope on growing the crops in most efficient way from season to season.

## **IMPLEMENTATION**

This Android Tablet Application we implemented at KGS – Krishi Gyan Sagar, Karnataka.

## **APP OVERVIEW**

This APP will help farmers to identify common problems in their fields, this will help farmers keep track of these problems in their fields and help with future management decisions. Apps like this are extremely valuable, especially as it is used more and more... This Application has level of access based on designation to provide the recommendations to farmers. We are providing this service on both WEB and Mobile APP platforms.

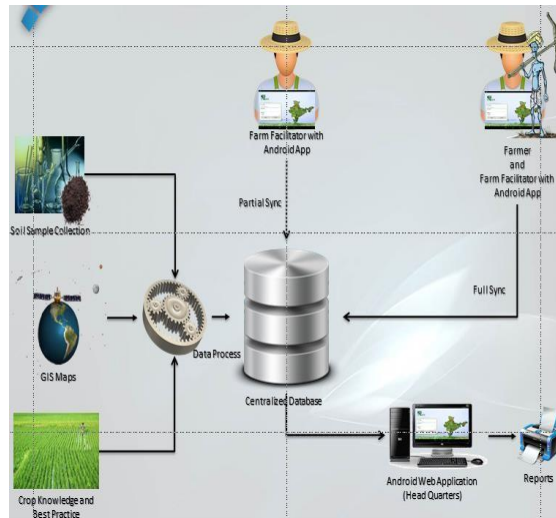
## **FARM FACILITATORS LEVELS:**

- Farm Facility (FF)
- Assistant Agriculture officer (AAO) & Agriculture officer (AO)
- Assistant Director of Agriculture (ADA)
- Joint Director of agriculture (JDA)
- Admin or ICRISAT scientists

Since it is enterprise application it has access for only limited users. Admin is the only person who is eligible to create the list of users for accessing this application on both app and web. Here Farm facilitators are the only one who can create and edit the farmer and his corresponding crop information. Apart from FF all roles has been denied to create or edit the farmer. This is the first user interacting screen to start accessing this application. Here user needs to enter his login credentials provided by his higher officials for using it.

## LOGIN SCREEN:

In Login screen user has option to use the application as per his convenient language by selecting the language option (English or Kanada..... Defalut is English)



After entering the login credentials tap on login button to enter in to home screen. Even though it is an offline application, user needs one time login and sync to update all his data.

*Note: Please make sure you have internet connection before login.*

## HOME SECTION

In this section the following are major functionalities:

- Search Functionality**

It helps in filtering the farmers of the available bulk data. “Refresh Button”- It is used to clear the data from text fields.

- Farmer Info Functionality**

Farm facilitator will register each farmer by collecting all his personal and farms information along with his photo ID from the farmer location. Here few mandatory fields which are necessary like Name, mobile Numuber, District, Taluk, Hobli and village. Farmer cannot register until he enters all mandatory fields which are minimum required. After farmer registration process we can create the farms for him. So that all farms record will be maintained under his record. From the list of registered farmers FF can even edit the farmer information from this list by selecting. And we can even see the farmer existing location by tapping on the map icon.

- Production Packages**

It’s helpful to read all the information of all crops before starting cultivation. It will let us know the awareness of all crops. Here we have option to elect any crop by clicking on “choose crop”. Based on the selection of crop you will get the recommended document.

□ **Soil Maps**

Soil maps are served from the server based on talukas . Farm facilitator has ability to explain the condition of soils based on areas by seeing the application. So that farmer can use the recommended chemicals to overcome the deficiency of land.

□ **Synchronization**

For this we need internet connection for uploading and downloading the scouted records. By tapping on top corner second button the shown dialog will appear with the following options. Full synchronization: By clicking this, two-way synchronization takes place to send records i.e from Server to App and App to Server. Partial synchronization: By clicking this, one way synchronization takes place to send data i.e from App to Server.

□ **Settings**

- *Send Bug*: This option will helps to increase the efficiency of the application by sending bug report to developer at the time of crashing.
- *About Us*: This option will provide the description about the agenda of the project.
- *LogOut*: It helps to come out from the application by signing off.
- *User Info*: It gives the detail description of application user, providing all his concern villages and other information.
- *Exit*: It allows user to come out from the application but still it will be in login state.