

## **Farmers Buddy**

### **OBJECTIVE:**

It is an agricultural portal which gives solutions to the farmers and students of agricultural studies in India. Farmers Buddy aims to disseminate useful information about improved technology to the farming community and service providers in the rural areas. The major focus of Agriculture sector presently in the in this portal, is pertaining to Agricultural Credit, Policies & Schemes, Agricultural Bank loans, Market Information, Agricultural Best Practices, On & Off Farm Enterprises and various Products & Services.

### **Purpose of the System**

Farmers Buddy is playing an important and vital role in agricultural production and marketing. This system allows farmers to save time on order and delivery and getting feedback. In the existing competition, there is a need to rapidly attract new customers as well as retain existing customers.

### **Proposed System**

Farmers Buddy is playing an important and vital role in agricultural production and marketing. This system allows farmers to save time on order and delivery and getting feedback Farmers' (Agricultural Students) crop database must be managed. The database includes the kinds of crops, the size of cultivated area, time of harvest and yield. Farmers or the extension personnel transmit those data via the Internet to database server. Further, information provides the farmer with an important instrument for decision making and taking action.

- Crops information service system should be created by the administrator. This system analyzes the crop data to create some statistical tables. Farmers can access these statistical data by browsing the homepage and make their production plan.
- Production equipment's inquiry service system should be created. This system gathers information from the companies of seeds and crop production equipment to build the production equipment's inquiry service system.

### **Scope of the System**

It is an agricultural portal which gives solutions to the Farmers and Students of Agricultural studies in India. The following points needs to be addressed which designing the portal:

- Individual profile management for all kind of users.
- Online query handlings for all users. Queries can be general or directed to a particular officer.
- Officers/NGOs can schedule trainings and publish it online.

### **Out of Scope**

- The data collection of Salt & Fertilizer analysis report is out of scope.
- The conduction methodology of basic Soil analysis for all regions

### **BACKGROUND:**

Agriculture is a way of life, a tradition, which, for centuries, has shaped the thought, the outlook, the culture and economic life of the people of India. The advent of modern technologies at the beginning of the last century has brought in development of various technologies, which has substantially increased the yields of various crops.

### **Problems in the Existing System**

Slow agricultural growth is a concern for policymakers as some two-thirds of India's people depend on rural employment for a living. Current agricultural practices are neither economically nor environmentally sustainable and India's yields for many agricultural commodities are low.

A major drawback of India's agriculture, watershed development ,irrigation strategy, seed management, improving yield bank and insurances are provided loans to farmers has been the neglect of relatively wetter catchment areas and the rural people living therein.

### **Solutions of these Problems**

The development of this new system contains the following activities, which try to automate the entire process keeping in the view of database integration approach. User Friendliness is provided in the application with various controls provided by system Rich User Interface.

### **Future Improvement**

- It can be implemented to upload files with an huge amount of size with the support of various file formats.
- This System being web-based and an undertaking of Cyber Security Division, needs to be thoroughly tested to find out any security gaps.
- A console for the data centre may be made available to allow the personnel to monitor on the sites which were cleared for hosting during a particular period.
- Moreover, it is just a beginning; further the system may be utilized in various other types of auditing operation viz. Network auditing or similar process/workflow based applications.

### **Inputs & Outputs of the System**

#### **Inputs:**

- Administrator enter his user id and password for login to authenticate in this system
- Administrator accepts the student, agricultural officer registration.

While registration Agricultural officer and student can able to provide their information like

1. Personal Information
2. Educational Information
3. Address Information.
4. They can upload their photo for registration using Browse Image User control.

#### **Outputs:**

- Admin get all students details and agricultural officer details.
- The registered user's data can be stored in centralized database through the system user interface.
- Student can watch live videos in the part of online training using this system user interface.

### **FUNCTIONAL REQUIREMENT:**

## **Modules Description**

A module is a bounded contiguous group of statements having a single name and that can be treated as a unit. In other words, a single block in a pile of blocks.

### **Guidelines for Modularity**

- Make sure modules perform a single task, have a single entry point, and have a single exit point.
- Isolate input-output (I-O) routines into a small number of standard modules that can be shared system-wide.

The system after careful analysis has been identified to be presented with the following modules:

1. Administrators
2. Agricultural Officer
3. Farmers or Agricultural Students
4. Web Registration
5. Communication
6. Reports
7. Authentication

### **Administrators:**

- He should also have rights to accept the registration of the Agricultural Officers based on their profile (unless the Agri. Officer should not be able to login to the site).
- Same like he should also have rights to accept the registration of Agriculture student's registration also.
- Information about major crop markets (mandi) and their current price for crop should be published daily.

### **Government Loan Details:**

Nationalization of banks was a major step for channelizing credit to various sectors of economy of which agriculture is a major sector. A dynamic and growing agricultural sector needs adequate finance through banks to accelerate the overall growth.

Normally any loan contains this type of information.

1. Loan Type

2. Objective
3. Eligibility
4. Coverage
5. Terms and Conditions
6. Rate of Interest
7. Repayment Schedules

**Insurance Details:**

Crop insurance is purchased by agricultural producers; including farmers, ranchers, and other protect themselves against either the loss of the crop due to natural disasters, such as hail, drought, and floods, or the loss of revenue due to declines in the prices of agricultural commodities.

This application contains the following insurance Information

1. Insurance types
2. Objective
3. Eligibility
4. Applying Procedure
5. Starting Date
6. Contact Address Information etc.

**Students:**

- These users are authenticated to the website by providing the credentials which they got at the time of registration.
- Should have facility to communicate with other users like Students, Farmers and Agricultural Officers.
- Individual Profile Management for Each student is provided in this system by using that a student can update his details by using the system interface.

**Agricultural Officer:**

- These users are authenticated to the website by providing the credentials which they got at the time of registration.
- He is the person who provides the solution to the Queries given by the Farmers and Students of Agricultural studies.
- He is the person who provides the Answers to the queries directly asked by the Farmers and Students of Agricultural studies.

**Web Registration:**

The system has a process of registration. Every Agricultural student need to submit his complete details in the form of registration. Whenever a student registration completed administrator need to approve the registration. Then only student can get log in into the system by using his user id and password.

**Communications:**

A well rich user interface is designed by the students and agricultural officers like Email and chat etc. By using this Email functionality students can send mails to officers as vice versa.

**NON-FUNCTIONAL REQUIREMENT:**

**Scalability** - The system can be scalable from small to a large business.

**Haphazard development** – It is observed that some initiatives have already been made to provide IT based services to rural community. However, duplication of efforts are witnessed as most of the services revolve around limited subjects.

**User Friendliness** – The success of this strategy depends on the ease with which rural population can use the content. This will require intuitive graphics based presentation.

**Local Language** – Regional language fonts and mechanisms for synchronization of the content provides a challenge that needs to be met with careful planning.

**Restrictions** - Information content based on remote sensing and geographical information.

**Bandwidth** - Even in areas where telephone and other communication services exist, the available bandwidth is a major constraint. Since internet based rural services require substantial use of graphics, low bandwidth is one of the major limitations in providing effective e-services to farmers.