Smart Krushi

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ABSTRACT
Agriculture is India's most important economic sector. For controlling the growth and harvesting of sugarcane the field Agriculture may be defined as an integrated system. India is well known for a 'Krishipradhan' country. The rapid growth of mobile telephony and the recent introduction of mobile enabled information services provide a means to overcome existing information asymmetry and facilitate timely information disposal. It also helps to bridge the gap between the availability and delivery of agriculture inputs and infrastructure. Sugarcane production area is used for sugar refinery, and it is very important for enhancing the quality of sugarcane and increasing the sugar yields. Sugarcane has special requirements for climatic condition which are grows in tropical and sub-tropical areas. The model addressed, on the whole, harvest operation, transportation. The database consisting of harvesting schedule, history data and first come first serve strategy. The model could adequately assess the relation of the freight, the lead time, sand also to detect fraud during calculation of crop's weight with hardware control module. This model is totally depend on farmer applications having shared and non-shared members, they can also able to add manipulation on seeds directed by block office which is having capability to give authorized access to farmers like login, approve/disapprove, view request page under admin. Admin is the master key which manage all the operations done in project.

General Terms
Harvesting ,Security, ,ICT

Keywords
Mobile telephony;harvesting; sugar refinery; tropical; infrastructure.

1. INTRODUCTION
Agriculture is the most popular economic sector in India. Agriculture may be termed as an integrated system technique for controlling the growth and harvesting as well. It is an uncomplicated endeavor comprising of technical and practical processes that helps in the maintenance of the ecological balance. The agricultural sector is critically important in any developing economy and so it is in India, where it contributes close to 20% of GDP. Here 60% of the population depends on agriculture, either directly or indirectly. Small-scale producers, who make up the vast majority of Indian farmers, are often unable to access information that could increase yield and lead to better prices for their crops. The application of information and communications technology (ICT) in agriculture is increasingly important. The rapid growth of mobile telephony and the recent introduction of mobile enabled information services provide a means to overcome existing information asymmetry. It also helps to bridge the gap between the availability and delivery of agriculture inputs and agriculture infrastructure. The increasing penetration of mobile networks and handsets in India therefore present an opportunity to make useful information more widely available. This could help agricultural markets operate more efficiently, and overcome some of the other challenges faced by this sector. E-Agriculture is an emerging field focusing on the enhancement of agricultural and rural development through improved information and communication processes. More specifically, E-Agriculture involves conceptualization, design, development, evaluation and application of innovative ways to use Information and Communication Technologies (ICT) in the rural domain, with a primary focus on agriculture. India is the second largest producer of sugar cane. On the domestic front the Indian sugar industry has a turnover of Rupees 700 billion per annum. There are 553 installed sugar mills in the country with a production capacity of 180 lakh MT of sugar. These mills are located in 18 states of the country with Maharashtra contributing over one-third of it. About 60% of these mills are in co-operative sector, 35% of the total are in the private sector and rest in to public sector. Almost 75% of the sugar available in the open market is consumed by bulk consumers like bakeries, candy makers, sweet makers and soft drink manufacturers.

2. EXISTING SYSTEM
It presents simulation model to evaluate the sugarcane supply system to mills. It adequately assess the relation of fright, the lead time feet of trucks and discount.[1]Itintroducesugarcane planting and metrological database this can prove metrological service, production decision making guidance for sugarcane growers.[4]It involves information and communication technology in agriculture which can be utilized for providing accurate and timely relevant information and services to the farmers. In which krushi- ville mobile app provides different agriculture commodities, weather forecast update, agriculture updates.[9]

3. CLIENT- SERVER ARCHITECTRURE

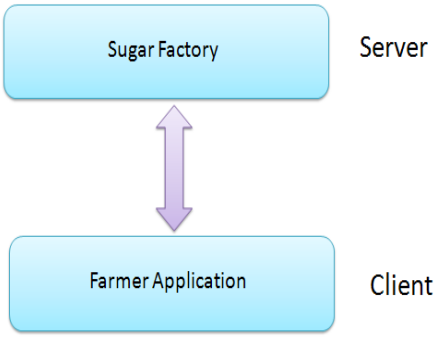

Fig 1:Client-Server Architecture

The 'Smart Krushi' system is based on client-server architecture. For accessing information client can send request to the server through the android application. In which security can be maintained by providing authentication technique. The server can act as a database which can store all the information as well as request. The request would be for harvesting, for payment, for more information. The server will do the scheduling of the harvesting request. At the time of harvesting Pre-calendaring can be achieved. In Client/server architecture the server hosts, delivers and manages resources and services to be consumed by the client. This type of architecture has one or more client computers connected to a central server over a network or Internet connection It is the network of networks in which all the requests and services are delivered over a network..All the system shares computing resources. The server provides high-end, computing-intensive services to the client on demand. These services can include applications access, storage, file sharing, printer access and/or direct access to the server's raw computing power. It works when the client computer sends a request to the server over the network connection, which is then processed and delivered to the client. A server can manage several clients simultaneously, whereas one client can be connected to several servers at a time. Internet is also based on client/server architecture where the Web serverservesmany simultaneous users with Web page and or website data.

4. PROPOSED SYSTEM

Mobile communications technology has quickly become the world's most common way of transmitting voice, data, and services in the developing world. Given this drastic change, mobile applications hold significant potential for advancing development in agricultural industries and rural development. They could provide the most affordable ways for millions of people to access information, markets, finance, and governance systems previously unavailable to them. In previous system notification and cost prediction technique are not implemented. Due to which more time can be consumed for performing operation. Now days the farmers have to contact the sugar factory and book the date for scheduling process. In the proposed system the farmer can contact directly through the mobile application. We proposed the android as well as web application for farmer in which the farmer can easily get the all information related to sugarcane and its updates from sugar factory by on click through the application. In which multiple block officers are available for maintaining respective region or field. Admin has an authority to control all the system. For security purpose authentication can be done. Using valid username and password multiple users can access the system. In that weight sensor can be used for calculating the weight of sugarcane. After calculating weight all the sugarcane related information can be available on users mobile. In this paper we can used Naive Bayes algorithm for cost prediction. The major function of the System is to provide agricultural related information and payment related notification to farmer.

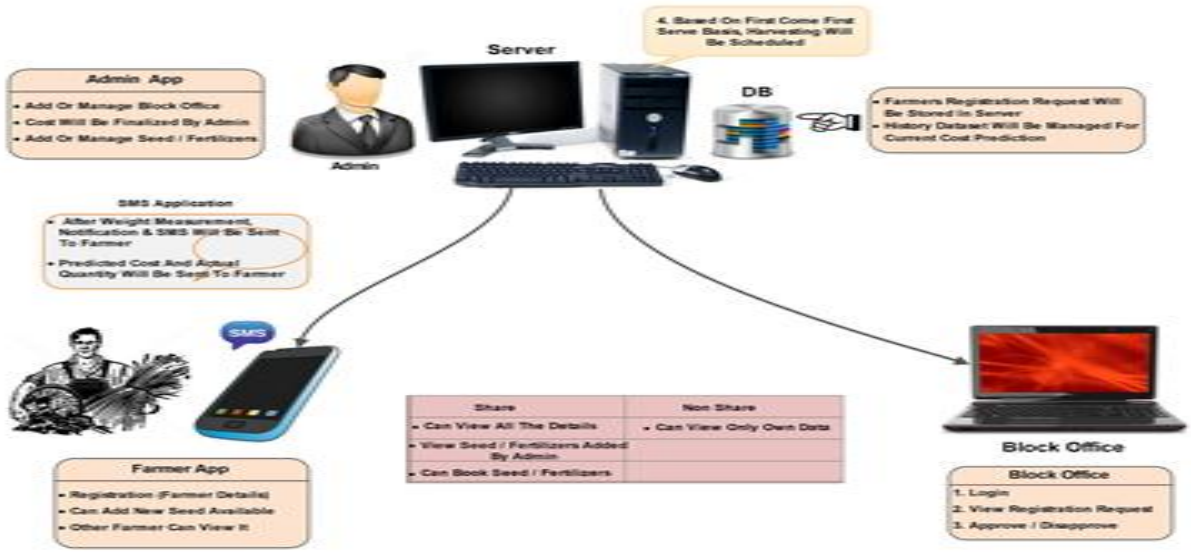

Fig 2:SSystem Architecture

4.1 Modules of the System

1. Admin

-Add/Remove Block Office

-Cost Prediction

-Send Seed and Fertilizers information

-Control all system

2. Block Office

-Log In

-Approve/Disapprove request of farmers.
-View registration

3. Database
-History data for prediction
-Scheduling
-Stores Farmers data

4. Farmer Application
-Add new seed
-View seed
-Share Holder/Non share holder

4.2 Relevant Mathematical Model

Let 'Smart_krushi' be the set of element.
Where,
Smart_krushi={start,input,output, procedure ,DD,NDD}

Start: Starting state.

Input:{Farmer_name,Farmer_passowrd,Admin_name,Admin_password,BlockOffice_name,BlockOffice_password};

Output:
Authorized access getting. Register new farmer, admin, block office successfully.

Procedure:
Verify_the_user();
Register_new_farmer();
Register_new _Block_Office();

DD (Deterministic Data)-Desire outcome get.

NDD (Non-Deterministic Data)-Unexpected outcome.

5. GOALS AND OBJECTIVE

There are following goals and objectives for the Smart Krushi System. After measurement of sugarcane the notification will be get on farmers mobile.

- Easy to handle.
- Communication time get reduced.
- Cost prediction can be done

6. CONCLUSIONS

The application "Smart Krushi" helpful for the sugarcane growers and the sugar factory by addressingthe keyproblems of the getting information of schedule harvesting from the sugar factory. This application will predict the rate of the sugarcane. Now days the farmer must meet the block officer of the sugar factory and take the schedule for harvesting. By using the Smart Krushi application the farmer can directly access the harvesting date and time on the mobile. The farmer can also get the notifications as well as payment information on the mobile phone. This application is also beneficial to maintaining the records or information about the farmers. The sugar factory managed all things in java application such as harvesting scheduling is based on First Come First Serve (FCFS) operation. and availability of the workers and Block officer. This application also gives the news and updates related to sugar factory

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