EAGRO CROP MARKETING FOR FARMING COMMUNITY

D.Vinoth[1], K.Nisharth[2] and K.Shanmugapriya[3]

[1]B.Tech (IT), Sri Ganesh College of Engineering and Technology, Puducherry, India.
[2]B.Tech (IT), Sri Ganesh College of Engineering and Technology, Puducherry, India.
[3]Assistant Professor (IT), Sri Ganesh College of Engineering and Technology, Puducherry, India.

ABSTRACT

The Major Occupation in India is the Agriculture; the people involved in the Agriculture belong to the poor class and category. The people of the farming community are unaware of the new techniques and Agro-machines, which would direct the world to greater heights in the field of agriculture. Though the farmers work hard, they are cheated by agents in today's market. This serves as a opportunity to solve all the problems that farmers face in the current world. The eAgro crop marketing will serve as a better way for the farmers to sell their products within the country with some mediocre knowledge about using the website. This would provide information to the farmers about current market rate of agro-products, their sale history and profits earned in a sale. This site will also help the farmers to know about the market information and to view agricultural schemes of the Government provided to farmers.

KEYWORDS

Website, Agricultural-marketing, market-rate, e-learning, Government Schemes

1. INTRODUCTION

eAgro crop marketing (web application) increases in the standard of living of farmers and achieve success in their business. This enables the farmers to know about the development in Agricultural technology. An Authorized-agent would help the farmers to sell their products in the market. The review of the activities of the Agents in the business would be foreseen by Central Marketing committee.

Website will provide market-wise as well as product-wise report to the farmer in interactive way. This helps the farmers to get to know about the Agricultural Schemes available for them.

The Government will be introducing the newer schemes for the farmers. The Government will compensate the farmers for loss in the production in case of natural disasters. A separate interface will be provided for viewing the schemes.

Farmers as well as the Agents will be provided with an individual login ID for logging into their accounts leading towards secure access.

2. OBJECTIVES

The prime intent of this paper is to make a website that helps farmers to sell their products to other markets in different places in India. It is a computerized approach for clear and better marketing.

Farmers will get a distinctive interface where they can learn about the market information and perform marketing, acquire the current rates of market, get in touch with the knowledge of different schemes. This website will act as best and safe way to perform agricultural-marketing.

3. EXISTING SYSTEM

There is no computerized approach to help the farmers to sell their products. Presently, the farmer moves to nearest market place to hand over his/her product to some particular agent, the agent requests the farmer to visit the market after some specific time to collect the money earned out of the product sold. That agent sells the same product to some other agent or dealer at an excessive cost. By this every agent tries to cuts his/her commission out of that. The farmer cannot be aware of transaction and the amount at which their product was sold.

There is no facility present for the farmers to know the market rates at different markets where they can sell their products for achieving earnings of higher profits.

Utmost times, farmers are unaware of the compensations and schemes provided by government. Regardless of all the chances knocking the doors the farmers find it hard to cut benefit out of those. So he/she doesn't get the maximum profit in the current system.

4. eAgro CROP MARKETING

This provides a distinctive ID to all the users who perform agro-marketing.

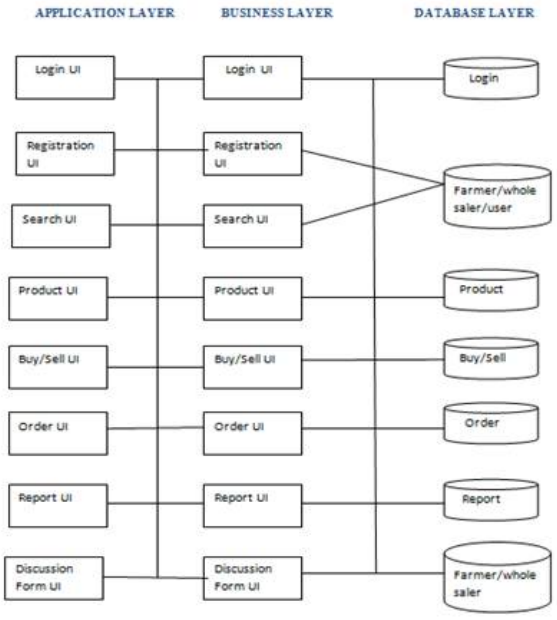

Figure 1. Architecture Diagram

4.1. Design and Architecture

We describe the Algorithm, a group of instructions involving set of inputs to obtain some specific output to achieve a unique goal, the Flowchart that represents the graphical representation of program logic and finally the Data Flow Diagram (DFD) of the eAgro crop marketing.

4.1.1. Algorithm

The normal users who want to view the market information and schemes can view the website without login details. Farmers who want to perform marketing must have the login username and password the agent who will function the selling of farmer's product will be checked by the marketing committee for their marketing license and after approval, they will be granted with ID and password. During approval, Farmer needs to provide his/her bank account number, names of product he/she farms, his/her personal details, etc. This data could be used for various other reasons of marketing.

Once confirmed with the username and a password for the marketing the users can function different operations like marketing and view account information.

4.1.2. Flow Chart

The diagram (Figure 2) thus shown below provides fundamental briefing regarding the progress of the system. An outline of the actions functioned and the control flow after an operation has been performed is displayed. The diagram shows different conditions like ("if else") i.e., if one condition is untrue then where the flow will go and from where will it start again or where the flow will end after some action has been performed.

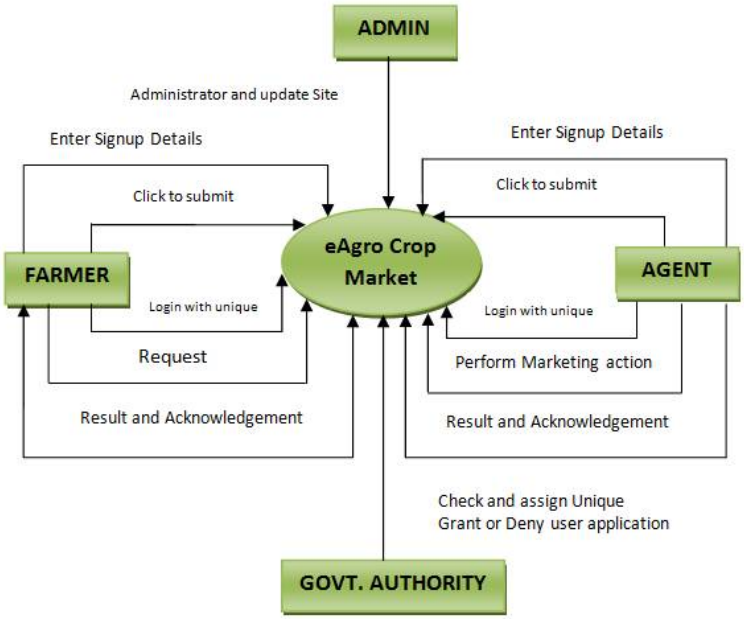

Figure 2. eAgro Market

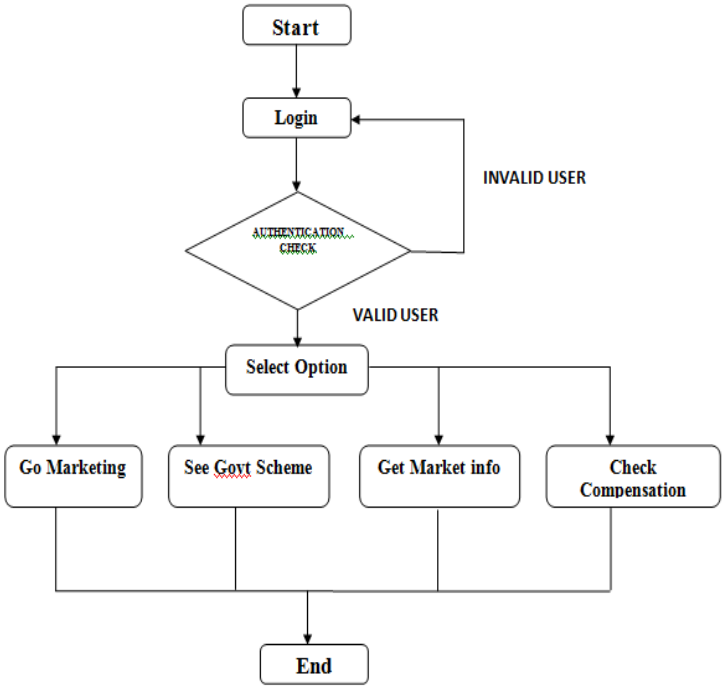

Figure 3. Market Login

4.2 Applications

- Provides user friendly interface for the marketing purpose.
- User can access accurate market information.
- Lessens the threat of corruption and displeasure in viewing the market.
- Easy and problem free access to view the schemes and compensation provided by government.
- Agricultural education through E-learning.

4.3 Risks in implementation

- Less number of peoples accessing the internet in rural areas.
- Cyber-phobia of new users.

5. METHODOLOGY

Following are the basic modules involved in the paper:

Account Generation: It consist of the creation of account, which contains basic information of user, type of user, whether he/she is farmer, agent or Gov. Official is submitted. Through this module, user gets the Distinctive ID which serves as the identity of user.

Marketing: It includes prices of the products from different areas. It will show the farmer at what price his/her commodity will be sold. Farmer can contact his/her Agent to know about the market sale and future reference about sold product. One should be logged in for using this facility.

Market Information: Farmer can see the market information. Market will have selling rates of different product, today's turnover, product-wise details like quantity, grading, selling cost, etc. It will give commodity-wise, market-wise daily report, commodity wise price during last week, community transaction below MSP (Maximum Sale Price), date wise prices for specified community. Farmer can search for product at particular duration of specific market.

Compensation: Packages provided by government to the victim farmers of various natural calamities like heavy rain, drought etc., will be listed. Farmer can view without log in
Government Schemes: All government schemes related to particular product and area will be listed.

E-Learning: It will guide the farmers know about new trends and techniques for farming .Agro Conference conducted different location can be viewed. User can view as well as download the content.

6. IMPLEMENTATION

eAgro Market will have User-name and Password section on the front page, as per the user-name and password the system will know whether user is Farmer/Agent/Administrator/Government Official.

6.1. Scenario of the Paper

Scenario 1: Farmer

- He/ She can create new account, log-in to their existing accounts which will give them the right to use the services provided by the system.
- Legitimate users can sell their product, claim the benefit from government and can view his fund.
- Farmer log-in will have option to select online buying and selling and can directly sell their products.
- User can form the account on fund transfer.

Scenario 2: Agent

- Agent buy/sell their product to other agent or wholesaler.
- Agent gives away the cost at which the product was sold to the farmer.

Scenario 3: Government Official

- Government officer can log-in to their accounts as created by administrator.
- Authorities can access all the details of the market in the entire different district.
- They can view revenue of the market daily, weekly or monthly.
- Validate farmer's eligibility for benefit and schemes.
- Updates governmental schemes for agriculture.

Scenario 4: Administrator

- Monitor accounts of farmers.
- Maintain the website.
- Username and authorities as per user.
- Modernize the website.

6.2 Software Implementation

Expected application is web application build using jsp, servlet and db database. Software implementation is as follows.

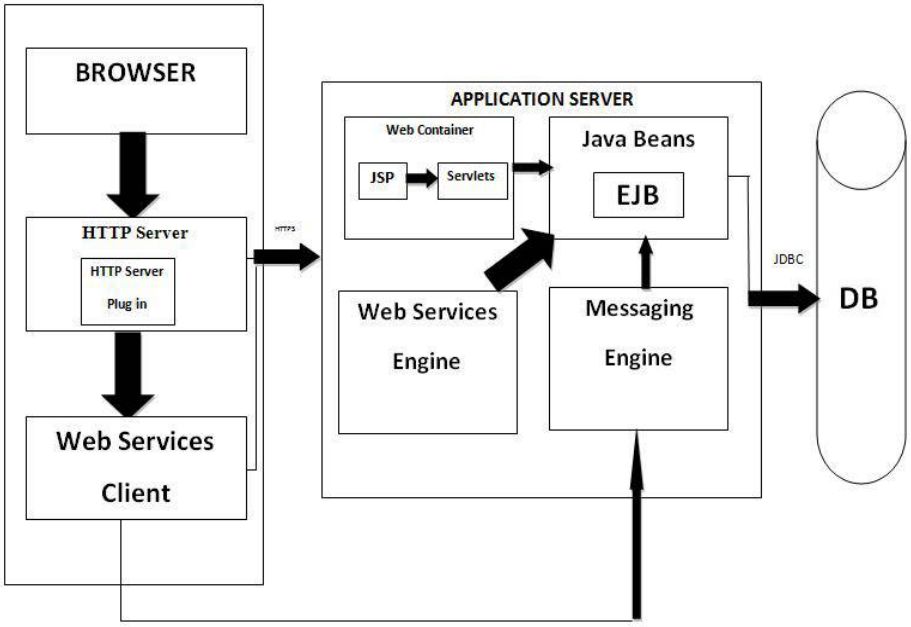

Figure 4. Software implementation for eAgro Market

Software Interface:

- Client on Internet: Google Chrome41.0.2272.76, Web Browsers, Operating System (any)
- Web-Server: Apache Tomcat Web Server 8.0, Operating System (any)
- Data Base Server: Microsoft Office Access 2013, Operating System(any)

Communication Interface:

- HTTP/HTTPS protocol used by Client (Customer) operating Internet.
- HTTP/HTTPS protocol used by Client (System) operating Internet.

6.3 Hardware Implementation

Premium machine will be attached to the agent machine that will mechanically upload the weight of the product in farmer's statement. Balancing instrument is involved to the microcontroller which will display the actions of machine and provide the related data to the agent's computer.

7. RESULTS

Figure 5.Welcome page

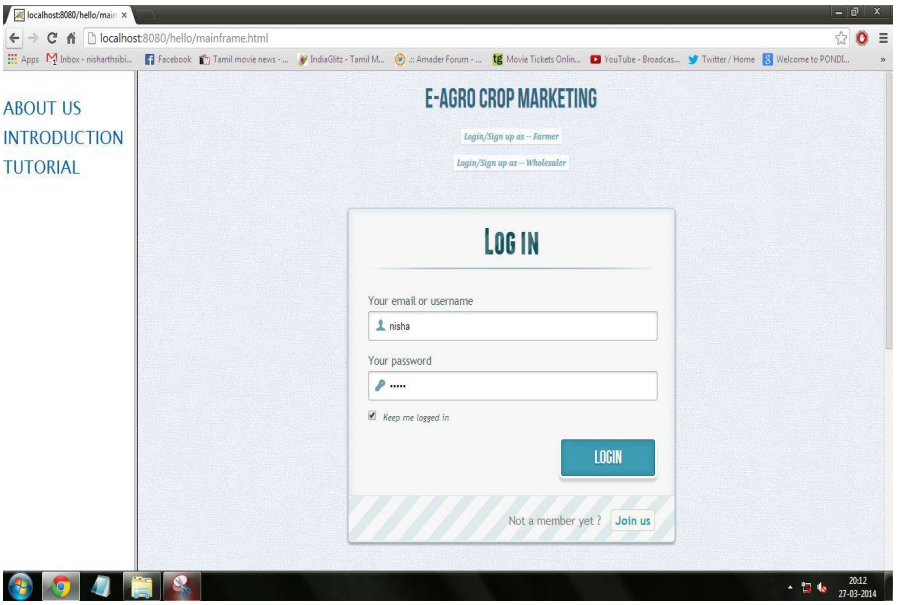

Figure 6. Sign Up/Login page

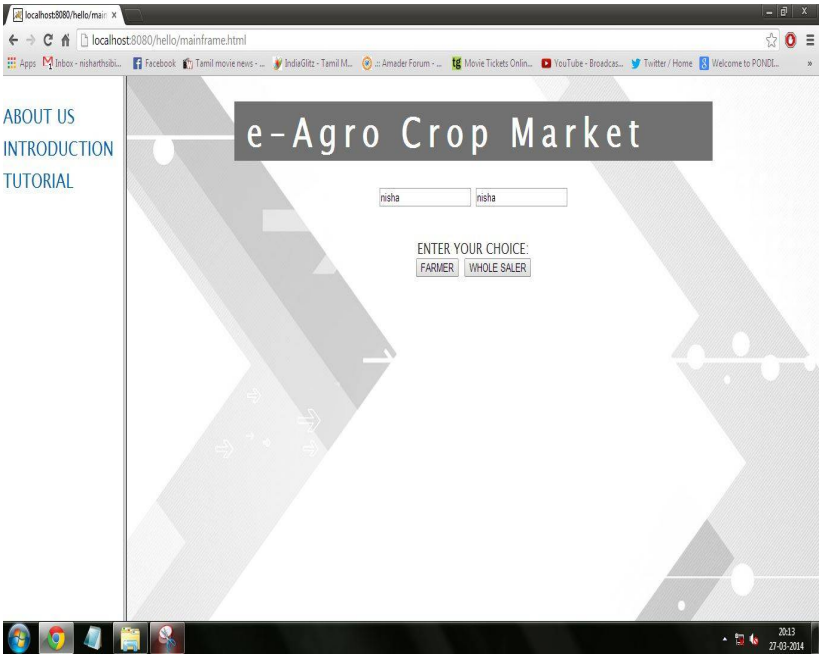

Figure 7. Selection page

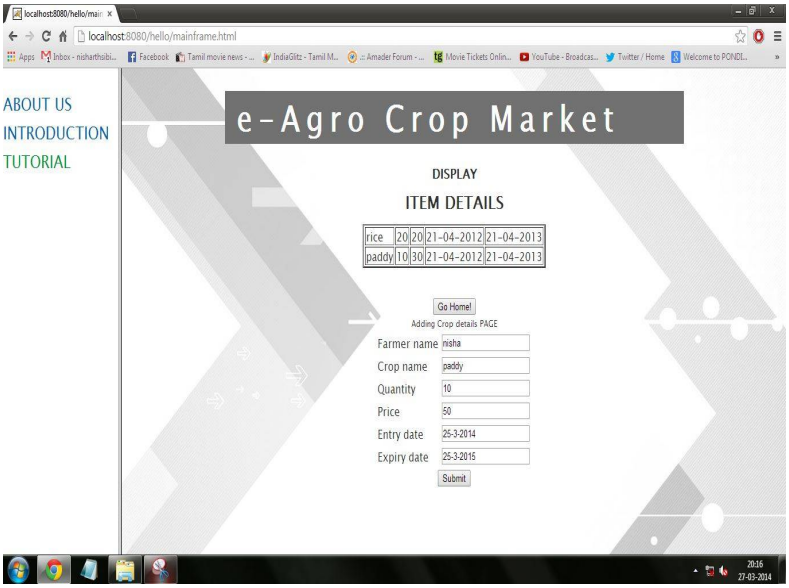

Figure 8. Item details

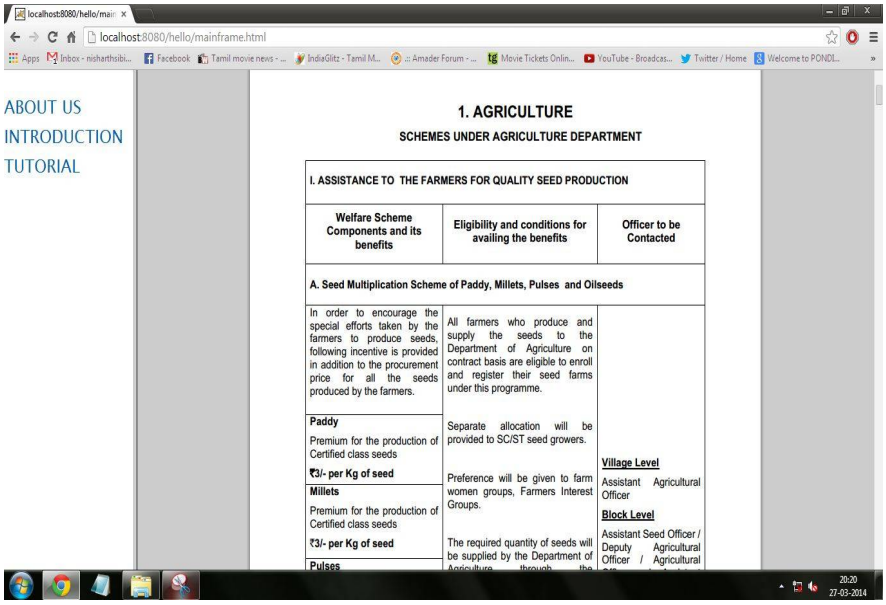

Figure 9. Conference and Schemes Page

Figure 10. Database Updated Page

8. CONCLUSION

This paper helps the farmers to know more about market information; will act as distinctive interface of schemes and compensation. Through this they will always be connected to information of new technique and trends of farming. But to some extent, new user may feel some kind of stress about its use. On the whole, the system is quicker, safe and easier to work with.

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Authors

D.Vinoth pursuing his B.Tech degree in Information Technology from SGCET, Puducherry in 2015. His research interests are in Web Services and Android App Development.

K.Nisharth pursuing his B.Tech degree in Information Technology from SGCET, Puducherry in 2015. His research interests are in Web Services, Reverse Engineering and Android Security.

K.Shanmuga Priya, Assistant Professor, Department of Information Technology, SGCET, Puducherry. received her B.Tech degree in Information Technology from BCET, Karaikal in 2010 and Completed M.Tech degree in Network and Internet Engineering from Pondicherry University, Pondicherry. Her research interests are in Wireless Security and Cloud Computing. She has published the paper in IJMNCT.