Kisan360 (Agro App-A perfect Marketplace for all Farmers)

Sharanya Datrange¹, Samruddhi Ahire², Sakshi Attarde³, Divya Tambat⁴, Prof. H. M. Gaikwad⁵
¹, ², ³, ⁴Diploma Students, Dept. of Computer Technology, K.K.Wagh Polytechnic, Nashik, Maharashtra, India
⁵Sr. Lecturer, Dept. of Computer Technology, K.K.Wagh Polytechnic, Nashik, Maharashtra, India

Abstract: Six decades ago, Mahatma Gandhi said that agriculture is the backbone of Indian economy. The situation remains the same today almost the entire economy is sustained by agriculture, which is the mainstay of the village. Nowadays, farmers sell their product at wholesale price to wholesalers, wholesalers sell them to retailers and make more profit than farmers. This application can help to break the chain between farmers and retailers. Through the application, farmers sell their products directly to customers and make more profit. In this application farmers can sell their equipment and buy new one. Farmers can direct knowledge about how to do digital farming. Once the farmers application is made available, any farmer can find relevant information about specific seed, fertilizer, farming equipment, weather forecasting, market rate, etc. This application is easily accessible by the farmers and other users too. Farmers as well as other users can ask specific question and provide valuable feedback through a specially designed feedback module.

Keywords: Farmers, marketplace, wholesalers, retailer, users, admin.

I. INTRODUCTION

Agricultural produce markets, sub yards, rural periodic markets, were studied and surveyed by us to meet the objective of system. Accordingly we have planned to create a system which will prove supportive to the farmers in all aspects. This will be acting as a sole marketplace for the farmers where any farmer can sell his products. With this application, farmers will get an opportunity to sell their products directly to customers on their choice rate which will indirectly demolish the chain and will prove profitable for both of them. Provides a platform for farmers to sell their agricultural equipment and buy a new one. Farmer can share expertize on how to do digital farming. Once the farmer’s application is developed, user can find all relevant information about specific seeds, fertilizers, farming equipment, weather forecasting, Market rates, etc. Easily accessible by the farmers and other users too. Farmers as well as users can ask specific questions and provide valuable feedback through a specially designed feedback module.

II. LITERATURE SURVEY

In market yards, sub-yards and rural markets, buying and selling of agricultural commodities takes place (Agricultural produce markets). The research studies revealed that farmers on an average gets 8 to 10 percent higher price and higher share in the consumer’s rupee by selling their produced in the regulated markets.

A. Benefits Received By Farmers After Selling Varies

1) From area to area.
2) From markets to markets.
3) Existence of necessary infrastructural facilities in regulated markets

There is an uneven spread of regulated markets in the districts of the state. The average area served by each regulated market also varies considerably among the states of India. Average area served by markets varies from 103 sq.km in Punjab, 129 in West Bengal, 156 in Haryana, 305 in Andhra Pradesh 347 in Assam, 350 in Maharashtra, 383 in Karnataka and 394 in Uttar Pradesh Jairath, and so on. States like Arunachal Pradesh, Himachal Pradesh, Sikkim, Meghalaya and Uttarakhand has more than 1000 sq.km area served by each market. As recommended by National Commission on Agriculture, there should be one market for 80 sq.km of area. Overall India has a shortage of 34,679 markets and so promoting more markets in various states is necessary.
B. Applications Referred

1) Krishi Network
2) Agri App
3) AgroStar
4) Kisan Abhimaan

III. PROPOSED SYSTEM DESCRIPTION

In normal situation, farmers can send the product to stack-holder in less price and stack-holder can sell the same product to customer in high range. In this situation, only stack-holder can make profit.

To overcome this situation, we have implemented the Farmer’s Application for the farmers and users through which they can easily access the various useful modules like weather forecast, market rates, government schemes as well as donation and sell their product directly to customer and earn more profit.

The users of the application can be:

A. Customers (Retailers, Wholesalers, Merchants, etc.).
B. Transport agencies.
C. Co-operative societies.

IV. SYSTEM IMPLEMENTATION

From login page user will able to choose whether he’s merchant or a farmer.

1) Merchant Login: If user logs in as a merchant, then he will be able to access the merchant module and buy products.
2) Farmer Login: If the user logs in as farmer he will be able to access all modules within the application.

A. Procedure for Selling Product

In order to sell the product, the farmer will first need to fill the details provided inside Click here to sell button which will allow the farmer to add his product details like: product name, product description, seller name, seller address, product price, product image, product category and seller phone number. If this all details are valid then after clicking on Add product the product will be sent to admin for approval. The approval or rejection of product will depend on admin.

Taking into consideration our main motive of application we have planned to include 7 modules in our application which includes:

1) Product: This module includes all the products within the 6 Categories provided i.e. Fruits, Vegetables, Grains, Seeds, Vehicles and Animals. The products are added to this module when the user opts to sell and clicks on Click here to sell product button provided at the bottom of home screen wherein the details of product are taken from the user who wants to sell and on the other hand Admin checks whether the product is appropriate and not fake, if the product details entered by farmers are fake then admin will delete that particular product.
2) Weather Forecasting: The users of application can know the current climatic conditions using this module. Here we have provided link.
3) Government Scheme: This module will be useful for the users who are willing to use the schemes for farmers provided by government. Here too, we have provided links of various useful schemes for farmers which are offered by government.
4) Donation: The users who are willing to donate to poor and needy farmers can donate money to them using this facility provided.
5) Market Rate: Everyday Market Rates will be provided to the users for every product. We have given a link of market rate in this module.
6) Feedback: Users can provide their feedback about application using this module wherein we’ll come to know about the happy users along with some drawbacks which we will need to overcome through their perspective.
7) Transportation: This module is specially provided for the convenience of the users if they are willing to use transportation service instead of going to farmer’s place. Certain charges will be applied for delivering.
In order to handle this application efficiently admin role is also provided. Admin mainly has three authorities:

a) **Delete Products**: With this admin will have the right to delete or remove the product on the basis of its appropriateness or fakeness.

b) **Add Transport**: Here Admin will have the authority to add a transporter so that he will be added to transport module wherein users will able to use transportation service.

c) **Sale Record**: The record of products sale will be maintained here.

---

**Fig. System Diagram**

---

**Fig2: Home Page**
Fig 3: Modules in Application

Fig 4: Block Diagram

- Weather Forecast
- Transport
- Products
- Gov. Schemes
- Feedback
- Market Rate
- Donation

**Login**

- Normal Login
- Create new Account

**Verify**

- Yes
- Type of User
  - Merchant Module: Merchant
  - Farmer Module:
    1. Form to sell Products
    2. Weather Forecast
    3. Feedback
    4. Market Rate
    5. Government Schemes

- Invalid Username or Password
- N
V. OBJECTIVE
A. India has shortage of nearly 34,679 markets, so we have planned to develop an android application which will act as a platform to sell and buy agricultural produce.
B. The main motive behind developing this application is to improve the livelihood of the farmers and common persons by providing information and assisting them to start self-employment activities.
C. Also the objective lies in decreasing the suicidal rate of farmers by giving them a chance to decide their own prices of products and demolish the chain formed between farmers and buyers.
D. The intent of the project consists of improvement in agricultural development and adoption of modern technologies, reduce poverty, access markets and good prices. Also this will mainly have its focus on development, co-ordination, and targeted techniques to sell their products and earn thus leading to retiring farm families and their problems they face.

VI. ACKNOWLEDGEMENT
With deep sense of gratitude, we would like to thank all the people who have lit our path with their kind guidance. We are very grateful to these intellectuals who did their best to help during our project work. It is our proud privilege to express deep sense of gratitude to, Prof. P. T. Kadave, Principal, K.K.Wagh Polytechnic, Nashik for his comments and kind permission to complete this project. We remain indebted to Prof. G.B. Katkade, Head of Computer Technology Department for his timely suggestion and valuable guidance. The special gratitude goes to our Internal Guide Mr. H.M.Gaikwad, staff members, technical staff members, of Computer Technology Department for their expensive, excellent and precious guidance in completion of this work. We thank to all the class colleagues for their appreciable help for our working project. We are also thankful to our parents who provided their wishful support for our project completion successfully. Lastly, we thank to all our friends and the people who are directly or indirectly related to our project work.

VII. CONCLUSION
This application is very useful for farmers as this provides all the marketing related products for farmers and they can easily get all the essential products required for farming on a single platform. After using this application farmer will no longer face the problems of buying and selling products. Farmers often face the problems in search of equipment’s, vehicles, seeds, grains, etc. This problem of farmers will abolish now. Also beneficial facilities are available to farmers like market rate, weather forecasting, Government schemes. It is easy to access and one can easily buy and sell the product. It provides smooth transaction between buyer and the seller. Our application is a platform which provides the farmer to interact by selling and buying the product. Hence it is denoted as “FARMER’S COMPANION” and their elevation in new world
REFERENCES

[1] A modern farming technique using android application by Santosh G Karkhile, Sudarshan G Ghuige- ITRSET-2015
[2] E-Agriculture: A Golden opportunity for Indian farmers by L. Pradhan, B.B.Mohapatral- IJRDMR-2015
[3] E-Agro android application( Integrated Farming Management Systems for sustainable development of farmers) by Subham sharma, Viraj Patodkar, Sujit Simant, Chiraj Shah, Prof. Sachin Ghodse-IJERGS-2015
[4] An android- arduino system to assist farmers in agriculture operations by Arpit Narchania – IRF International Conference 2015.
[5] Aspect Based Sentiment Analysis to extract meticulous opinion value by Deepali virmani, Vikrant Malhotra, Riddhi Tyagi.

WEB LINKS

[1] https://pscnotes.in/problems-facedby-farmers-in-india/
[2] https://www.accuweather.com/en/in/mh/maharashtra-weather
[3] https://rates.goldenchennai.com/vegetable-price/nashik-vegetable-price-today
