

One to One Sale of Agri Products in the Absence of Intermediary

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Abstract: Due to the presence of intermediary, farmers have the lot of loss during the sale of their farm products. Though the farmers were struggled over a long period of time in their farm lands to produce those products, they were not even able to bring back the invested amount due to the unforeseen natural disasters during the period of harvest and deception activities from intermediaries during the period of sale. End users also somehow affected but not that much level of farmers. Even though lot of android apps and websites available for e-farming (online - agriculture product sale), farmers were unaware and uneducated to access those complex resources. The mission of this project is to provide the resources through SMS and Voice Call features in regional language to farmers for sale the bulk fresh farm products directly to the nearby hotels, hostels, catering services, departmental stores, fruit shops. Through SMS feature information about crop diseases, details of organic pesticides, government schemes and weather updates can be sent to the registered farmers all over India.

Keywords: e-farming, deception, intermediary, SMS & Voice Call feature.

1. Introduction

Farming is the most crucial and historic activity. One product that was produced, is producing, will always be produced & consumed is food. According to statistics India holds the second place in farm outputs across the worldwide; India is the largest producer of fruits, vegetables, spices, cereals, wheat, rice, coconut, cotton, sugarcane, fishes, milk and milk products; The Indian government has initiated many schemes like Pradhan Mantri Fasal Bima Yojana (PMFBY), Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), Pradhan Mantri Annadata Aay Sanrakshana Abhiyan (PM-AASHA), Soil Health Cards, Electronic National Agriculture Market (eNAM), but the reach of those schemes to the rural farmers are very less; India is the land of small and marginal farmers; Only a 21% of India's population alone working in the field of agriculture, out of this 86% of farmers are small and marginal farmers; The contribution of small & marginal farmers to the total farm output is higher when compared to their share in the total land holdings i.e in India small & marginal holding farmers cultivate around 44% of the farm land area and they produce around 60% of the total food grain production and over half of the country's fruits and vegetables production.

Being an agricultural country, Indian farmers must have to

deserve considerably more compared to others. But the bane is the volatility between the global and local markets. Right from sowing the seeds to dispatching the grown crops, farmers spend a lot of blood and sweat. They will obviously expect the right amount of money for their efforts. Mean the while not every consumer gets the farm products at the "factory price". Farmed products may go through around three to four middlemen and when they reach the customer with almost double the actual price. The same goes with the farmers. If they have to buy manure or some pesticides, they don't get it at the right price at the right quality. While the produce prices are always under pressure and the costs to customer are rising day by day thereby impacting the farmer's overall incomes and their debt repayment capacity. The risks such as cost of pests at production or transportation charge and storage losses or the uncertainty of price while marketing a farm products are not evenly distributed amongst the intermediaries like stakeholders and marketers. Those intermediaries always gain the profit irrespective of the type of risks, mean the while the farmer alone bear the entire risk that will occur during the farm to market cycle. This is not a recent problem.

In order to avoid this, there has to be direct relationship and communication between the farmers and customers. Everyone has started to recognize the influence of smart phones and its technology. But most of the farmers were uneducated and they were unaware also had inconvenient feeling to use those smart phones and technologies. So the vision of this project is to connect the all type of farmers with bulk retailers in a way that farmers can afford a fair retail price for their produced items. Benefits- This web application is used to fix the cost of farm products by farmers according to market price.

2. Existing system

The most of the available resources which are useful to farmers are in the form of android apps and websites which are works in online and too complex to use by the farmers. Around 80% of the farmers have the knowledge to use only basic mobile handsets only to make the calls and the messages then those resources become worthless.

3. Proposed system

The proposed approach is to provide the resources needed for farmers through SMS and Voice call features in the regional language to farmers for sale their bulk fresh farm products directly to the nearby buyers. Farmers have to register their details like their name, mobile number, address and product details by sending a message in a specific format to a specific number or by sending a voice message or by directly register through website. The buyers directly connect with the registered farmers to make a deal of buying those products.

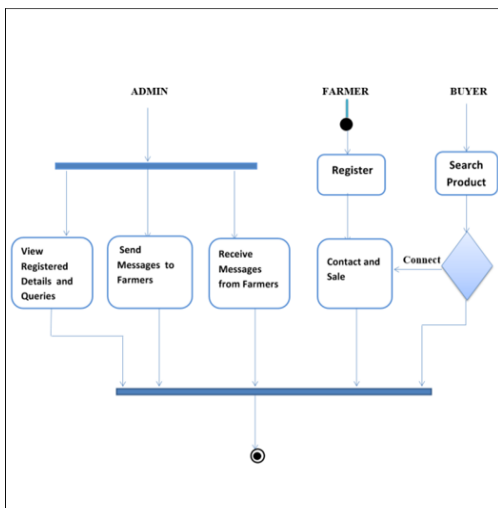


Fig. 1. Activity diagram

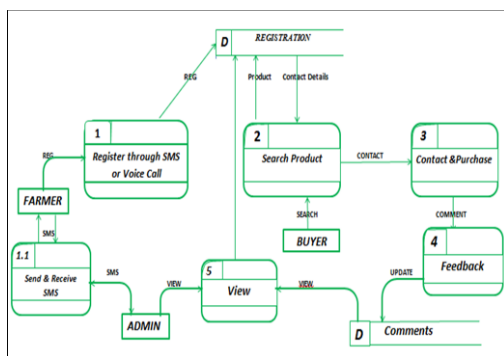


Fig. 2. Data flow diagram

4. Implementation

The implementation of this project contains the following modules:

- Message Module
- Admin Module
- Search Module
- Comments Module
- *Message Module:* Farmers can register themselves with the website community by sending a SMS in a specified format to the standard phone number which will automatically updated in the database table. Admin can be able to send messages like crop details

such as market price, crop diseases & pesticide information, ways to obtain government schemes, weather updates directly to the related farmers through SMS.

- *Search Module:* Buyers can be able to search the required product with respect to the location. They can be able to contact the farmers directly to buy fresh bulk farm products. Thus this website connects the buyers directly with the appropriate farmers to avoid the intermediaries.

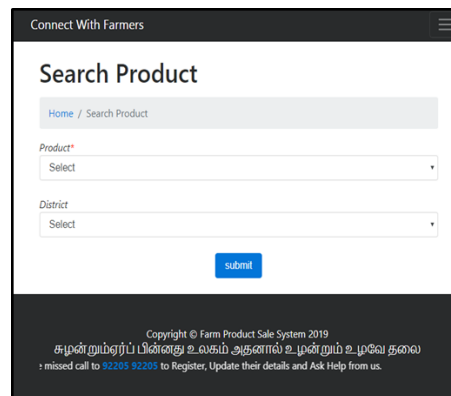


Fig. 3. Search page

- *Comments Module:* After the process of buying a fresh farm product from the farmers, Buyers can be able to post comments about the farmer and his/her farm product's quality details to the website which will help the successive buyer to know about the product quality of that specified farmer. This in turn increases the reliability and trustworthy between the farmers and the buyers.

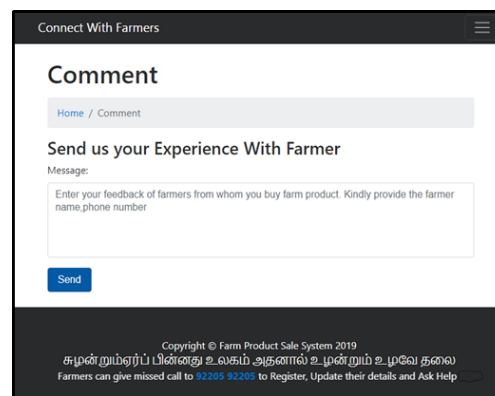


Fig. 4. Comment page

- *Admin module:* Admin can be able to view the details of the registered farmers, the messages received from the farmers, comments received from the buyers. And also admin can send information like government schemes, weather updates and crop market price to all or applicable farmers.

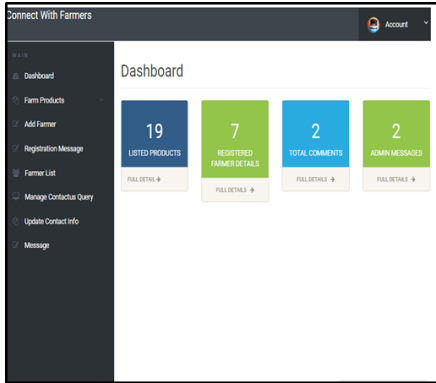


Fig. 5. Dashboard page

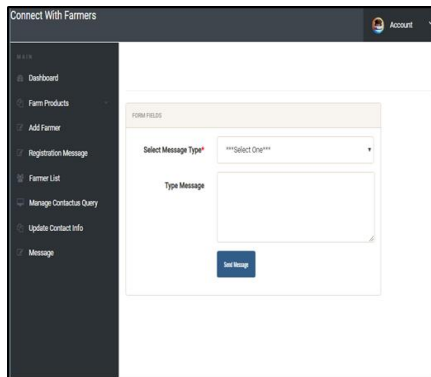


Fig. 6. Message page

5. Conclusion

Agricultural is the back bone of India. A farmer plays a vital role to increase the wealth of the society. This application will be the most useful to increase the profit for the farmers by direct dealing with the customers/retailers. By using this website both the farmers and the customers will get benefited. Farmers provide the food to all over the people. So it is our duty to increase the profit of farmers. Marketing the Agri products is one of the most effective ways to increase the profit to farmers. Without intermediary farmers get benefited through this web application. This website will help the farmers to make more cultivation according to the need of buyers and to earn the equitable fair amount.

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