A Study on Ecommerce Agriculture

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Abstract: Every day new technology is arriving and billions of people were connected to the Internet. Purchasing goods, groceries, clothes everything is online. He or She can able to place the order from their smartphone within a minute. But, Farmers are still lack of benefitting from the internet. As we all known that Farmers are the backbone of our country and without them, we can’t complete a day. Well, this idea is completely dedicated to farmers and helps them in generating good profitable revenue by using our platform. This is an online eCommerce platform that enables a farmer to buy or sell anything related to the agriculture and farming category by simply creating an account. Strictly all vendors are farmers since it is dedicated to them. The ultimate objective of the idea is to help a farmer with good revenue for their goods. Nowadays smartphone is like a coin in a pocket. So, it’s not a big question of thinking about smartphones with a farmer. Also, most of them are already familiar with social media accounts and it is quite easy to play with our online e-platform. But, there will be demo videos for each like registration, adding products, payment, etc. Safe payment gateway with a good logistic delivery partner, A farmer can do profitable business from his/her home itself. Both time and energy are also saved.

Keywords: Agriculture, Cultivator, E-Platform, Multiple Vendor, Store, Payment Gateway Integration, Irrigation.

I. INTRODUCTION

In India, agriculture is the largest dependent sector. As we all know, farmers are struggling to meet their needs. There comes a thought to use software technologies to help farmers with our hands-on project. We are utilizing the latest tech simple to integrate agricultural efforts. Farmers are able to get knowledge of cultivation techniques. A simple user-friendly interface easily helps users to get into our website. Fortunate and very responsive which enables it to work effectively on any type of device. The website functions are in different languages like Hindi, English and some regional languages. The farmers who grow crops according to the season, after harvesting the crops they pack them and contact the vendor regarding the stock availability. The wholesale vendor asks for the price, the farmer tells the price at which he can trade at. The vendor who is striving for his profits negotiates with the farmer regarding the price the needy farmer sacrificing their profits generally accept the price told by the vendor. Due to financial conditions and the unavailability of vendors, the farmer will sell their products at low prices demanded by the market. Farmers grew their crop since there are various other problems such as soil infertility, weather changes, seed defects etc. So they expect some profits for their products. Due to wholesale vendors and their marketing strategies farmers are not getting their required profits. The wholesale vendors after buying the crop from farmers at their quoted price, sell it to retail vendors. Then the retailer vendors sell it to end customers. Here the intermediate vendors are getting enough profits for their selling. Farmers only lose their profits even though the most hard work is theirs. Technology is the driving force in every sector. We use this technology to drive the farmers into a profitable way. Here we are introducing the multivendor E-commerce business for farmers to do their business. It will help farmers by giving an opportunity to sell their products easier on our digital platform. Our main aim is to develop farmers by using the new technology and making their business more efficient and also it is used to speed up their marketing process. It will be helpful for farmers to generate profitable income. It will disconnect the connection with intermediate vendors that helps to save some money.

II. MOTIVATION

Farming is not a job, it is a way of living. Food is one of the major sources of living farmers who are producing these food are not fulfilling their needs. Rightnow in the country, the farmers are facing a lot of issues in agriculture. In the process of research, we came to know that there is a way to utilize digital technology to help the farmers. Technology is stepping in every field and helping every field in its own way so we were taught to bring this E-commerce business into farming. We are taught that this creative and unique idea will help farmers to reduce their efforts in selling and buying their products. The farmers sell their product to the specific dealer to sustain in these present situations. Here farmers don’t know the exact price of the product they are selling. The entire system is not transparent. Farmers are not aware of prices in different markets and thus they don’t know where they can sell their products to obtain greater profits. This brings the motivation in us to develop a helpful system for farmers.
III. LITERATURE SURVEY

Significant research has been done on the agriculture market and various studies in journals about the agricultural sector. Making a distinct platform for farmers helps them to share some information about agriculture. Technology is existing everywhere from well-equipped cities to a small village in the current generation. So there are no difficulties in using the technology to move into this e-commerce field. In the study, we got to know that the majority of the farmers are not getting enough profits for their crops. All the intermediate market strategies doing all these losses to the hard-working farmers. Despite all the hard work and patience to grow the crops, farmers play a crucial role in the agricultural life cycle but still they are facing a lot of issues to get profit due to their bad circumstances. In India two-third of the one billion population relies on agricultural entities. Now the country is not matching the requirements for agriculture.

The farming sector has to formulate with the rise in the market to do such increments there should be unique development that has to be done. That is the new techniques and technology should be used to build modern farming in a high yield manner. A lot of countries are doing their research on technologies to use them in farming, in the process, they are achieving good outcomes. With the spread technology, agricultural system connections between regions become easy and they can easily get the information they are seeking. The modern IT (Information Technology) infrastructure simplifies the integration in the network. We can use information technology in an enormous amount in the agricultural sector. From planting saplings to harvesting the present advances in information technology help us to adopt new automated ways in farming. All of this resulted in that information technology is very much beneficial in all the techniques carried out in the farm management system. After harvesting, there is the main struggle to begin selling the product, every farmer wants to sell their product for profits. To analyse the cost in different markets the IT Services are more helpful to farmers. Most of the public are aware of smartphones and their usage which will help to go with the technology. The website we are making is simple in design and easy to understand the interface of the website. Technology has advanced to a high level and farmers have the option of using mobile phones in rural regions effectively. We publish the information from the (IFFCO) which is a multi-state cooperative society in India on our website. The information is all about farming techniques, this will be transferred in the form of voice response, reading blogs. We will implement these services slowly in multi-languages, which make the promotional campaigns easily understandable through various regions. The information from the survey states that China, the USA, Germany, Norway are the most advanced in agriculture so they are moving to the easy way of farming.

The technology will help farmers in various aspects like a weather report, various market prices, information about new techniques, climatic changes, crop suitability etc., will help the farmers to grow their agriculture in different ways. We can develop E-commerce (Electronic commerce) in a way that may increase the sale of crops to every place. E-commerce is an effective tool that has fundamentally altered the flow of human life. And E-Commerce is largely known as buying and selling products using the Internet. But E-Commerce is mainly divided into three sections: B2B (business-to-business), B2C (business-to-consumer and C2C (consumer-to-consumer). These three sections are also called E-Commerce. The website system we are developing will help them to make more informed decisions and increase their income potential by aligning the farm output to market demands. There might be an effective increase in the usage of the network in future and also networks available in every rural area in India. So there should not be any consequences with the networks to manage the digital system.

IV. PROJECT ILLUSTRATION

We are providing the site with Buying and selling food marketplace features for customers:

1) Quick Signup for Users: Save your clients time by simplifying the functioning and interface of the website.
2) Efficient Product Management: Farmers should be ready to easily add or remove any products they own, specify prices, and supply the required details.
3) Comfortable Order Processing with Notifications: Vendors got to see exactly what was ordered, how much, the delivery details, and be notified about different changes within the delivery process. Communication through the system we are proposed will be easy.
4) Review or Rating System: The buyers always want to make certain that they will trust the vendor.
5) Products Promotion: For farmers and suppliers to sell more, the buy and sell food marketplace should provide tools to market their products, like featured products or discount campaigns.
6) Customer Registration/Login: Customers should also access the platform easily.
7) Attractive Interface: The attractive and user-friendly design can make all the difference. Create a platform for your clients that they need to use and continuously return to.
8) **Helpful Search with Filters:** In your buy and sell marketplace development, product search plays a crucial role. Buyers should easily mapped out among different types of food to seek out specially what they’re trying to find. Easy checkout tactic of adding products to carts and proceeding to buy them has to be smooth.

9) **Delivery Options:** Users got to schedule the day & time for delivery. they'll be prepared to devour at the local farm or store or choose delivery to the doors. within the time of pandemic, people are more worried about safety, so confirm you provide them with the contactless delivery option.

10) **Order Tracking With Notifications:** Customers’ order tracking acquires to be transparent and accurate. Add notifications to form the method less fussy, but more satisfying for your clients.

### V. SOCIAL PRIVILEGES

A. It establishes an online presence.

B. More customer reach.

C. Product promotion is easier as it is a simple process.

D. Farmers easily avail their necessities at one point store.

E. Communication makes it easier for farmers.

F. There will be less efforts.

G. We are also providing new cultivation techniques (Blogging).

H. Profitable income generation.

### VI. LIST OF ABBREVIATIONS

| IT    | Information Technology |
|-------|------------------------|
| IFFCO | Indian Farmers Fertilizer Cooperative Limited |
| B2B   | Business-to-business |
| B2C   | Business-to-consumer |
| C2C   | Consumer-to-consumer |

### VII. CONCLUSION

This analysis confirms that E-commerce will help the farmers in a way that they achieve some profits for their hard work. The Ecommerce System is needed to improve farming in rural society to make them aware of crops and their market prices. This type of system is also helpful for the government to get the proper information about the crops available in their respective areas. The study we made has predicted that the development and transformation of E-commerce is a creative way of controlling and market access for smallholders. We will develop a system that is easy and simple to use by every rural farmer. The project we are doing will provide maximum earnings to the farmers who do not get profits due to the wholesalers who quote their price for the crops. All these unique technologies, advanced software solutions and network reforms will help the farmers grow more and more and we strive for a better future for farmers.

### REFERENCES

[1] Peter Namisko and Moses Aballo “Current status of agriculture and Global Trends” in International Journal of Science and Research Volume 2 Issue 7, 2013.

[2] “E-Commerce in agri-food sector: a systematic literature review” by Yiwu Zeng, Fu Jia, Lia Wan and Hongdong Guo in the International Food and Agriculture Management Review on 26 February 2017.

[3] “A Survey Conducted on E-Agriculture with Indian Farmers” by Sumitha Thankachan, Dr. S. Kirubakaran in International Journal of Computer Science and Mobile Computing on 2 February 2014.

[4] “A study of Segments Contribution: E-commerce growth in India” by Mahipal D in Academy of Marketing Studies Journal in 2018.

[5] “Emerging Trends of E-Commerce in India: An Empirical Study” by Shetter . M in International Journal of Business and Management Invention in 2016.

[6] “Understanding E-Commerce: A study with reference to competitive economy” by Neha Wadhawan and RK Arya in Journal of Critical Reviews on 25 June 2020.

[7] “The Need of Agribusiness E-commerce to Support Staple Food Self-Sufficiency” by Ujang Maman and Yuni Sugiarati in the International Journal of Applied Agricultural Research in 2016.

[8] “Agriculture in India: A SWOT analysis” by N. Praveen Kumar in Indian Journal of Applied Research in 2013.
