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Online marketing of agricultural products during COVID pandemic: Farmers and customers perspectives

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Abstract

India is basically an agrarian economy where the majority of the population depends on agriculture for income. But the significance of agriculture in the rural economy was in a lackluster mode since everyone started to depend on non-agricultural activities for earning their income. The second wave of COVID 19 has made 2021 worse and this time people in the rural area also have been affected, so the farmers. The COVID pandemic has dampened the spirits of marketing of agricultural products, especially for the rural farmers. So this study aims to know whether online marketing for agricultural products is feasible or not. Convenience sampling and descriptive research design was used for the study. Both primary and secondary data were used and primary data was collected using questionnaires. The study reveals that COVID19 made the market unreachable for farmers to sell their products likewise the customers can't access the markets to buy the products. Most of the farmers and customers suggested that an online platform can make their operation even easier.

Keywords: online marketing, agricultural products, COVID pandemic

1. Introduction

India is an agrarian economy with its majority of the population belongs to the agriculture sector. For the rural households agriculture is the primary livelihood and most of them are small and marginal farmers. They don't adopt high level marketing strategies like other sectors do. They generally sell their products to APMC Mandis, available local markets, to wholesalers or to retailers or directly to consumers. Farming is considered as a risky job as there can be many odd activities in this sector such as climate change, animal attacks, low quality of seeds etc. So at a certain year they can have a high yield and at a

certain time they do not. Online marketing is a recently emerged topic; it means the marketing that is conducted through the internet. Beyond marketing there are numerous government regulated schemes for farmers to promote agriculture because it is considered as an encouragement for farmers to go on with their work. Only the economy with a good agriculture pattern becomes self-reliant in food, spices and all. Kerala is a very well-known state for coconuts and spices and a state which gives prime importance for agriculture. Palakkad, one among districts of Kerala is first in producing paddy. So online marketing can make sense among the farmers to

reduce their problems they are facing. From the early times itself the farmers are selling agricultural produce in APMC mandis, local markets or they find wholesalers or retailers and only a few sell directly to customers as they will be producing the products in a bulk. The market condition can vary from country to country, from states to states and even from districts to districts. So the benefits they gain from farming products can be different. The act of middlemen between farmers and the customers makes both the farmers and customers' condition more pathetic as the farmers get low prices for the products and customers need to pay high prices to get the products. [1-4]. And also the farmland has been attacked by animals and the farmers are incurring huge losses. Moreover the COVID 19 pandemic that has struck our economy from December 2019 onwards put the farming sector in a big question mark. The amendments made in the farm laws also made fuel to the fire and they were protesting for numerous days to withdraw the bill. During COVID pandemic the situation was worse as no one can go outside to sell their products and online marketing was a relief for the problem. Online marketing not only in agriculture but in every product will be helpful in future.

1.1 Statement of Problem

Agriculture is considered as a livelihood for most of the farmers in India. They are the major contributors of GDP. Without agriculture our economy will not be self-reliant in food grains. So farmers are one of the pillars that hold our economy. From the early times itself they have been facing a lot of problems. Their work is considered as risky, because of the reasons like climatic change, natural disasters, animal attack, low quality seeds etc. But now apart from other reasons the newly emerged COVID pandemic made them stuck in marketing issues. And also amendment of farm laws made their situation go worse. So the marketing of their products was in a great chaos for them. So in these circumstances online marketing is a chance to get rid of their problem. Kerala is a state with farmers in great numbers. Many quit from agricultural work due to low profitability in this sector. The farmers are not getting enough prices for their products. The act of middlemen made the condition of farmers distressing one. Not only farmers, consumers of

agricultural products are also affected because of the middlemen. So in this case online marketing can be considered as a good view. So in this aspect these questions such as is online market is feasible for agricultural products? Are consumers willing to buy agricultural products through online platforms? What are the challenges the farmers are facing during COVID pandemic in Palakkad district? are yet to be answered and studies based on this are very few. In this case the study is relevant.[5-9].

1.2 Objectives of the study

- To identify whether the online marketing is feasible for agriculture products in Palakkad district.
- To analyze various challenges faced by farmers during COVID pandemic in Palakkad district.
- To identify the customers perspective regarding online marketing of agricultural products.
- To provide suggestions on improving the life of farmers.

1.3 Research Design and Methodology

There are a lot of researches conducted on online marketing but studies related to agricultural products counted few and the research based on the possibilities of online marketing of agricultural products were rarely found. The study uses Descriptive research design, which examines the factors favoring and nor favoring farmers to enter into online marketing, the reasons for the losses during COVID pandemic, the major farm business they are engaged in, the various challenges faced by the farmers during the pandemic, the benefits of online shopping of agricultural products to customers, the preferences of agricultural products in online shopping. The data required for the present study was collected by using both primary and secondary data. Primary data for the study was collected using a survey method from farmers and consumers of agriculture products of Palakkad district in Kerala. The survey analyzed the feasibility study of online marketing of agriculture products during the COVID pandemic. A five point Likert scale has been used in the questionnaire, so that the respondents can choose the option that best aligns with their view. The secondary data for the study was collected from various government institutions, from various

websites and by interviewing some the heads of various institutions related to agriculture (Krishi Bhavan) of Shoranur municipality of Palakkad district. Convenience sampling is used for this study. It is a type of non-probability sampling that involves the sample being drawn from that part of the population that is close to hand. So, the samples for the study were selected from Shoranur municipality of Palakkad district. The data were collected with the help of municipal councilor from Shoranur municipality and the period of the data collection is from April, 2021 and May, 2021. The various tools used for data analysis for this study were percentage analysis, measures of central tendency and mean percentile score. The results were accordingly presented in the subsequent pages.

1.4 Sampling size

Agriculture being the primary livelihood there will be numerous farmers in the district and because of the COVID pandemic only 50 farmers and 50 customers in the Shoranur municipality which can be conveniently contacted were selected for the study.

2. Review of literature

Network marketing is carried through internet and helps the farmers decrease the selling cost of the agricultural products, increase effective competitiveness and also helps the farmers to raise their income (Bao & Liu, 2014). Consumers' inclination towards online marketing is low in the study area and most of them wish to purchase yam flour and livestock products like skimmed milk, eggs and live chickens online. Due to limitations like, risk of fraud, poor network infrastructure and supply of inferior products they are not ready to go for online purchasing of products (Badiru & Afolabi, 2016). Online marketing helps the customers to find substitutes for their products within a click and also it offers immense opportunities for the companies too. Consumers behave in the same way whether it is online or offline (Chitra et al., 2017). For a developing nation like India, digital marketing is a very much needful thing. Farmers in Puducherry region use social media for agricultural purposes. If the government, NGOs, and other bodies can help farmers in improving their agriculture marketing (Khou & Suresh, n.d.). Digital marketing is considered as best e-commerce solution. Through this we can

reach out a wide number of audience and customers and also it is more affordable than traditional offline marketing. The main benefit of digital marketing is the results can be tracked and monitored easily (Shirisha, 2018). The buying behaviour of the consumers has changed during the lock down period, the importance for the essential products has been increased (B. Patil & Patil, 2020). COVID-19 pandemic has turned into a stumbling block for e-commerce business and if the situation goes on like this, the global economic growth will be reduced by 2%. E-Commerce platforms and their sales are not that much in line but they have proved that e-commerce sites will be a solution to crises like covid pandemic (K. S. Patil, 2020). [1-6].

3. Data Analysis

Data analysis is considered as a pivotal part of research. This study primarily focused on online marketing of agricultural products during the COVID 19 pandemic. In the survey both the farmers' perspectives and customers' perspectives were considered. The survey instrument collected the factors that were favoring and not favoring farmers to enter into online marketing, reasons for the losses during the COVID crisis, challenges faced by farmers on the pandemic, types of farm business they are dealing with, the type of products preferred by the customers, the benefits of online shopping during COVID pandemic etc. The analysed data which were significant for the study were presented in the tables.

3.1 Farmers perspectives

Farmers perspectives regarding online marketing of agricultural products were presented in this part. Most of the respondents were males and have an educational qualification higher than high school. Many of the farmers have only less than an acre to do their farming operation. Considering all these, the other significant analyses were presented in the table below.

Table.1. The major farm business in which the farmers are engaged in

Farm Business	Percent age
Food crops ((Wheat, Maize, Rice, Millets and Pulses etc.)	51%

Cash Crops (Sugarcane, Tobacco, Cotton, Jute and Oilseeds etc.)	12.5%
Plantation Crops (Coffee, Coconut, Tea, and Rubber etc.)	20.8%
Horticulture crops (Fruits and Vegetables)	50%
Others	16.7%

Source: Primary Data

The table 1. Indicates that food crops and horticulture crops were the major farm business done by the farmers. 20.8% do plantation crops as farm business and only 12.5% go for cash crops such as rubber and pepper. Other category farmers work as a seedlings raiser.

Table.2. The reasons for losses during COVID pandemic

Reasons	Percentage
Lack of fertilizer availability	68.3%
Not able to find a market for the product	77.5%
Forced to sell at low rates	85%
Lack of storage facility	63.3%
Transportation issues	84.17%
Lack of labour availability	70%
High cost of seeds and fertilizer	70.83%
Lack of govt. schemes to help them during covid 19	75%
Yield was lower comparing to other years	75%
Low price for the products	80.83%

Source: Primary Data

More than 80% of the respondents find forced to sell at low rates, transportation issues and low price for the products were the main reasons for losses during COVID pandemic. The moderate reasons were lack of govt. schemes, low yield, not

able to find a market for product and lack of labour availability and the least opted reasons lack of fertilizer and storage availability.

Table.3. The mode of selling the products before COVID pandemic

Mode	Percentage
Government authorized markets	4.2%
Local markets	62.5%
Wholesalers	45.8%
Retailers	37.5%
Customers	33.3%
Others	16.7%

Source: Primary Data

Most of them used to sell their products through local markets before COVID pandemic i.e. 62.5%. Only 4.2% will sell through government authorized markets and the reason for this least percentage can be the lack of government authorized markets in Kerala.

Table.4. The mode of selling the products during COVID pandemic

Mode	Percentage
Government authorized markets	4.2%
Local markets	33.3%
Wholesalers	12.5%
Retailers	25%
Customers	62.5%
Others	25%

Source: Primary Data

During COVID pandemic the mode of selling has changed and most of them now sell products directly to customers. The customers can be their neighbors, friends, relatives etc. The farmers that depend on government authorized selling were same before COVID and during COVID i.e. 4.2%.

Table.5. The factors favor farmers in online marketing (Source: Primary Data)

Factors	Percentage
Profitable	88.3%
Quality assurance	84.17%
Price assurance	86.67%
Changing buying behavior	87.5%
Internet usage	85.83%
Enough buyers for the product	88.3%
No travel required	89.17%
Convenience	85%
Helps to know the demand	81.67%
Easy access to markets	84.17%
Knowledge on grading of products	75%
Others	74.17%

The major factors that contribute farmers in entering into online marketing were profitability, price assurance, changing buying behaviour, internet usage, enough buyers for the product, no travel required, and convenience in comparing with offline marketing. The moderate factors were assurance in quality, helps to know the demand of products, easy access to markets. The least accepted factors were knowledge and other factors such as encouragement to do farm activities, 24*7 accesses to the markets, reduce their work load etc.

Table.6. The factors not favor farmers in online marketing

Factors	Percentage
Stiff competition from other farmers	82.5%
Technical knowledge required	85.83%
Trust issues	75%
Security issues	84.17%
Others	72.5%

Source: Primary Data

Technical knowledge requirement, security issues and stiff competition from other farmers were the major factors that pull back farmers from entering into online marketing and the least factors were trust issues and other factors such as high data price, connectivity problems etc.

Table.7. Challenges faced by farmers during COVID pandemic

Challenges	Percentages
Unable to find markets for the products	83.33%
Difficult to find buyers for the product	80.83%
Not getting expected price	86.67%
Lack of transportation facility	85.83%
Lack of storage facility	65%
High cost of fertilizers and seeds	70%
Unavailability of fertilizers	70%
Unavailability of good quality seeds	77.5%
Lack of knowledge on government schemes	77.5%
Others	74.17%

Source: Primary Data

More than 80% of the farmers difficult to find buyers for the product, unable to find markets for the products, lack of transportation facility and not getting an expected price for their products. 70%-77.5% of the farmers find high cost of fertilizers and seeds, unavailability of fertilizers and unavailability of good quality seeds, lack of knowledge on government schemes and other factors (animal attacks, natural disasters, COVID pandemic was a challenge etc.). The least challenge was lack of storage facility i.e. 65%.

3.2 Customers perspectives

Customers perspectives regarding online marketing of agriculture products were discussed in this part. Majority of the customers of agricultural products were female and belongs to

the age group of 20-40 years, who believe that COVID pandemic has increased the online purchasing habit. The other important analyses regarding online marketing of agricultural products were presented in the table below.

Table.8. Benefits of online shopping during COVID pandemic for customers

Benefits	Percent ages
No need to travel	92.31%
Quality Assurance	67.69%
Discounts on products	78.46%
Saves time and effort	86.15%
All under one roof	83.07%
Social distance can be maintained	90.77%
Wide selection	90.77%
Compare various models and brands	90.77%
Get detailed information of the product	86.15%
24*7 access	86.15%
Others	83.07%

Source: Primary Data

The reasons why more customers go for online shopping during COVID pandemic is because of the benefits like comparability of various models and brands, wide selection of products, social distance can be maintained and no need to travel. About 85%-90% of the customers' find- saves time and effort, get detailed information of the products and 24*7 access as the benefits to enter into online shopping during the COVID crisis. The least benefit chose by the customers was quality assurance.

Table.9. Preferences of agricultural products in online shopping by the customers

Preferences	Percentage
Food crops ((Wheat, Maize, Rice, Millets and Pulses etc.)	69.2%
Cash Crops (Sugarcane, Tobacco,	38.5%

Cotton, Jute and Oilseeds etc.)	
Plantation Crops (Coffee, Coconut, Tea, and Rubber etc.)	61.5%
Horticulture crops (Fruits and Vegetables)	69.2%
Others	23.1%

Source: Primary Data

Most of the customers would like to buy food crops and horticulture crops products if the online marketing of agricultural products were available. 61.5% of the customers prefer plantation crop products and 38.5% like to buy cash crop products. Only 23.1% were interested to buy other products like seedlings through online.

4. Findings

The major findings of the study were:

4.1 Farmers perspectives

- Most of the farmers have 7-8 years of experience in agricultural activities.
- Majority of the farmers get only an annual income less than ₹ 25,000 from their agricultural products and also they earn income apart from farming.
- Greater number of farmers cultivates food crops and horticulture crops as their major farm business.
- Farmers had revenue losses during COVID pandemic and the major reasons were forced to sell at low rates, transportation issues and low price for the products.
- Most of the farmers sell their products through local markets before COVID pandemic and during COVID pandemic mostly sell products directly to consumers.
- Generally the farmers have a very good opinion in online marketing and also opinionated that e-commerce websites for agricultural products make their farming better.
- Profitability, price assurance, changing buying behavior, internet usage, enough buyers for the product, no travel required, convenience were the major factors favor farmers in entering into online marketing while stiff competition from other farmers, technical knowledge required, security issues possess as the major factors not favoring the farmers in entering into online marketing.

- Unable to find markets for the products, difficult to find buyers for the product, not getting expected price and lack of transportation facility were the challenges faced by most of the farmers during COVID pandemic.

4.2 Customers perspectives

- COVID pandemic has influenced the buying behavior of about 61.5% of customers.
- Most of the customers have previous experience in online shopping and they have done more online shopping during COVID pandemic compared to pre COVID period.
- No need to travel saves time and effort, social distance can be maintained, wide selection, compare various models and brands, get detailed information of the product and 24*7 accesses are generally accepted benefits of online shopping by the customers during COVID pandemic.
- A great number of customers like to buy agricultural products online.
- Food and horticulture crops are the main agricultural products that they would like to buy online.

5. Suggestions for future

The various suggestions related to the study were:-

5.1 Farmers perspectives

- There should be a government regulated online platform.
- Everyone should be aware of government schemes.
- Improve the distribution network, so that the products can be distributed according to demand.
- Giving out subsidies for agricultural implements, fertilizers and seeds.
- There should be policies for price assurance and financial safety of farmers.
- The transportation, storage facility and the commission regarding agriculture products must be regulated by the government or other government authorized institutions.
- There must be government control regarding the markets.

5.2 Customers perspectives

- Training on electronic gadgets must be given to make the farming operation online even better.

- Customers can be self-reliant in some products through homestead farming.
- If the agricultural products are made available, the quality of the products must be assured and also the description on soil type, climate, and grade must be mentioned.

Conclusion and Summary

This 21st century has made a lot more opportunities for online marketing and moreover the COVID crisis made it even more significant. In the COVID pandemic we can't access the markets as usual; we need to maintain social distance and travelling except in emergency cases were limited. So in this situation online marketing and online shopping is the best solution. Before COVID pandemic farmers sold most of their products through local markets but the circumstances changed and now most of them sell directly to consumers and the customers can be their relatives and their friends and the people near the neighborhood. So they did not get an expected price and the farmers had to sell at low rates. And the case of the customers is also not different. If the agricultural products were made available, the customers can access the products from their home itself and also it has a huge scope in future also. Making online marketing into a picture is not that easy as it faces many challenges. Training in electronic gadgets, solving the transportation issues and storage issues and the chaos in commission charges all should be solved. Considering all this online marketing of agricultural products is feasible during COVID pandemic and in future.

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