



A Study of Trading & Live E-Trading Analysis of Agri Perishable Commodity

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ABSTRACT

In this study, we try to find about Trading System and Live E-Trading Analysis of Agri Perishable commodity. Farmers have only APMS and Mandi source to sell their goods now a days (in general case), and that's why they are facing so many problems like Best Price of Goods, MSP, on Time Payment, Storage, Transportation and so many. We are belonging to farmer family and we are cultivating perishable like dragon fruit, tomato, brinjal, etc., So, we can closely understand this problem of farmer. On the other hand, user of this Agri perishable commodity is leaves in Urban area and T2 and T1 city areas and they are buying this from local product vendors. Some of the farmer who we met personally, they want to sell their product directly to those peoples so they can earn good money from direct sell, but the major problem is that famers are not trusting the buyers for money and Buyers are not trusting for good quality product from farmer. Beside that unawareness about the marketing channel amongst the farmer is also one of the major challenges realised while documenting the case. Now we understand problems from both sides' farmer as well as buyer. So, we discussed this problem and with our team and now we start working on this solution. At the end we jointly came up with the Solution for this problem to make one Live E-Trading platform for Agri Perishable Commodity (B2B, D2C) system where farmer can make their profile, make online store, add product and sell their day-to-day products direct to retailer who can take it in bulk and farmer get benefited. As well as buyer like retailer and wholesaler make their profile and post their day-to-day requirement and farmer can grab this requirement and get benefited.

.Keywords: Online Retailing, Perishable Commodity, D2C & B2B models, AgriTech

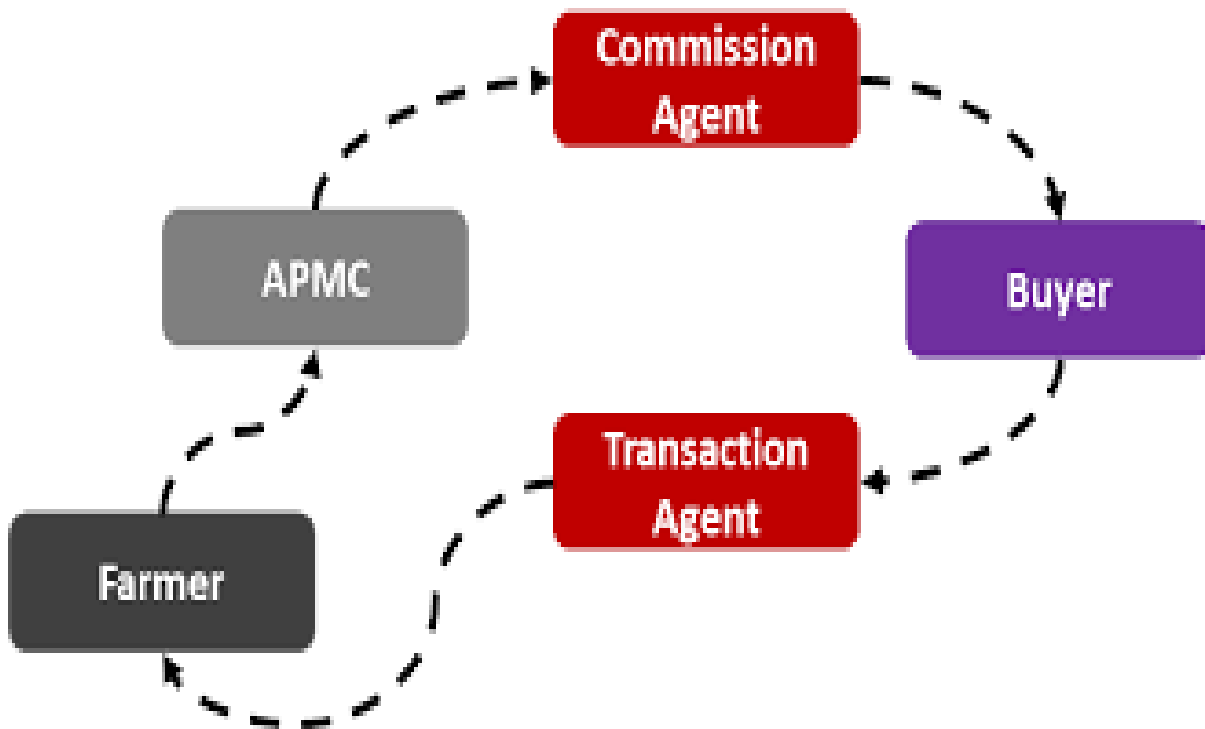
INTRODUCTION

Figure 1:- Normal Method of trading

(Source of Image: <https://www.yourcolumnist.in/the-apmc-fiasco-and-the-much-needed-agricultural-reforms/>)

This is Normal process of Agri commodities trading of Fruits and Vegetables, where brokers or agents plays most important role between farmer and buyer. And farmer have to pay 10% minimum commission to farmer and not get proper price and not get benefited by direct selling to buyer.

Agriculture, is playing biggest role in Indian economy, it's around 17% of GDP. Still farmer is not getting what they exactly want in terms of market, price, due to middle man or 10% or 20% of brokerages, facility.

India has just touch 329.86 million tonnes (MT) of fruit & 196.27 MT of vegetables production on paper.

30-40% of fruit & vegetables, approx. 10% of Indian agriculture get wasted due to supply chain, due to selling availability, due to market that farmer can target.

Also, food processors, exporter, Consumer are paying high for this product but farmers didn't get it.

Here we are providing direct selling opportunity to farmer from our platform, **Live E-Trading Analysis of Agri Perishable Commodity**, where farmer get connected with direct from other states or from other area and sell their goods and get more benefit.

HISTORY BEHIND PROBLEM

We, started searching about dragon fruit farming and market of dragon fruit. Purchase it from local farmers and sell it to direct customer

or wanders for set our network. With dragon fruit also purchase other fruit commodity also.

Planted 25 Bigha of Dragon Fruit in Gujarat. Parallely, we set our market for Gujrat and Maharashtra only. But we are unreachable to outside markets.

We are doing well, our fruit production gets increased day by day, also fruit got wasted which are not sold. We have to reach out these local markets for selling. So, we set on offline market without state wanders & wholesalers and our problem get solved.

Also found that there are so many farmers who are facing this problem. So, we proposed one solution and work accordingly towards, in offline market and meet with exporter, food processor, retailer, direct buyer

pan India they are appreciate it, told us they use it for their businesses.

Farmers are facing problems about essay and chip logistics. Also, looking for a trusted partner who can be a mediator between farmer and buyer.

There are so many farmers are facing the same issue like they are producing the perishable goods but some time they are not getting proper market for it and they have to through it out and bare the losses, by listing their problems,

We came to know about the global problems of farmer. Some problems by farmer or some food producers are given below.

WE FUND IN OUR PROBLEM FINDING SURVEY

1. “Yes, we need, that type of system which can contact us with direct buyer so that we can sell our fruit and vegetables to them, we need wholesaler and direct retailer from our outer regional so we can

expand our selling over region, also I am facing issues from third-party chit issue from Mandi Agent so we all farmers want trusted partner “-said **PareshBhai Becharbhai** (Fruit Farmer)

2. “I have Black Turmeric of 4 acre and it's a very costly project. In the next 6 months I will harvest 35-40 tons of Black Turmeric. Now I am facing the issue of selling because it's a very rare and costly product and also not any regional market for it nearby me. So, I need that type of buyer or companies who directly purchase

it from me, because if I sell it through agents then I might not get proper benefits. Black Turmeric have so many health benefits so normally we take with our melas, so if I can direct customer or Direct processors or Exporters so I can get my proper product return.”-said **Jentibhai Bavabhai Faldu** (Black Turmeric Farmer)

3. “I am food producer and my company needs best quality of fruit for food processing, and if we got chance to purchase direct from the farmer, we will do that first because our we have to clear payment on same day of purchase, so in case of direct deal with trusted farmer we will best quality fruits at net price (without mandi commission) with farms freshness.”-said **Amol Kardel** owner **SAPRO**, Saputara (Food Producer)

4. “I am food producer and we are doing dehydrating of fruit, mushroom, Onion, Garlic and so many vegetables so need best quality raw material at low price, also we doing export of all dehydrated items so my company required fresh product every day and we purchase it from Mandis nearby or from regional farmers, but some products are very costly at some at time or not available in our region so we have to purchase it from other region but we are unaware about where those product are available so we need one trusted platform who connect us directly with farmers so can make deal with them and both get benefited.”-said **Ronak Baid** owner **RAANAN FOOD**, Abu (Food Dehydrator)

5. “I am Agri Exporter and I need best quality material at best price (Direct from Farm is best), but we are only connected with regional suppliers or some farmers of 4 5 states, rest of India’s famers are not connected with us, if we got connected with them it will too good for both of us 1, famer will get their proper price and 2, we got best product at down price from open market.”-said **Amiteh Argal**, Indore (Agri Exporter)

OBJECTIVES OF THE STUDY

1. To provide farmer buyers for fruit and vegetable and other perishable items
2. To provide trusted famer to buyer with whom they can deal
3. Verify the profiles of Buyer and famer for create trust
4. Promote the product of farmer on internet as well as on our platforms so they can get more reach form buyer
5. Monitor the transaction between both of them for payment security
6. Hold Money of buyer and confirm delivery from both side and release payment of farmer
7. Analysis of requirement of commodities and provide as reference to farmer for new listing of product

RESEARCH METHODOLOGY

Every project work is based on certain methodology, which is a way to systematically solve the problem or attain its objectives. It is a very important guideline and lead to completion of any project work through observation, data collection and data analysis.

According to Clifford Woody, “Research Methodology comprises of defining & redefining problems, collecting, organizing &evaluating data, making deductions &researching to conclusions.”

The present study is exploratory in nature with survey method being used to complete the study. The population of the study includes consumers / buyers of soft drinks and fruit juices. The sample elements of the study were the individual respondents with the sample size of 250 respondents. Random sampling technique was applied to select the sample from the market. Self-designed Questionnaire was used to collect the data for the study

Accordingly, the methodology used in the project is as follows: -

1. Defining the objectives of the study
2. Framing of questionnaire keeping objectives in mind (considering the objectives)
3. Feedback from the respondents
4. Analysis of feedback
5. Conclusion, findings and suggestions.

RESEARCH DESIGN

A research design is a framework or blueprint for conducting the marketing research project. It specifies the details of the procedures necessary for obtaining the information needed to structure and/or solve marketing research problem. On the basis of fundamental objectives of the research we can classify research design into two general types:

A) EXPLORATORY RESEARCH

Exploratory research is one type of research design, which has its primary objective the provision of insights into, and comprehension of, the problem situation confronting the researcher.

B) CONCLUSIVE RESEARCH

Conclusive research is designed to assist the decision maker in determining evaluating and selecting the best course of action to take in a given situation. Conclusive research can be further divided into two types: -

1. Descriptive
2. Experimental.

The research design used in this project is a descriptive design.

LIMITATION OF THE STUDY

Biggest limitation I faced in this research is to convey this to farmers, because their education ratio. They are not much user friendly to use mobile phones and they, but they are spending times on mobile phones.

Also, it's limitation to get understood them that this system is can help them to sell their products directly to their targeted customers and give them best price. They are using old systems of selling, transfer them to new system is challenging

Also found that their children are leaves in urban area, they can be backbone of them so have to target them, and we have to do more effort to reach them and convey them to use our system for sell their produces at best price. Challenge to empowerment them with technology use.

ANALYSIS & FINDINGS

In this project We have to do 2 different way findings, 1st is customer review of farmer, food processor, exporter, direct buyer. 2nd is for geographic location for start this, to know in which area how much production we are getting, what is the total loss of fruit & vegetables. Also finds the what farmers are growing and about their products.

Did research on it and prepared some questionnaire and found the result as below. And did brain storming on the data for exact need of user and our solution is appropriate or not.

1st Finding:

“As per data shows horticulture plantation and production increased day by day in compare to food-grains. Currently and in upcoming future farmers needs one stop solution to sell their horticulture product to buyer directly anywhere in INDIA. So, our proposed solution can be the one stop solution for farmer and also for food processors, Horticulture Exporters. Direct Buyer, HORECA, “

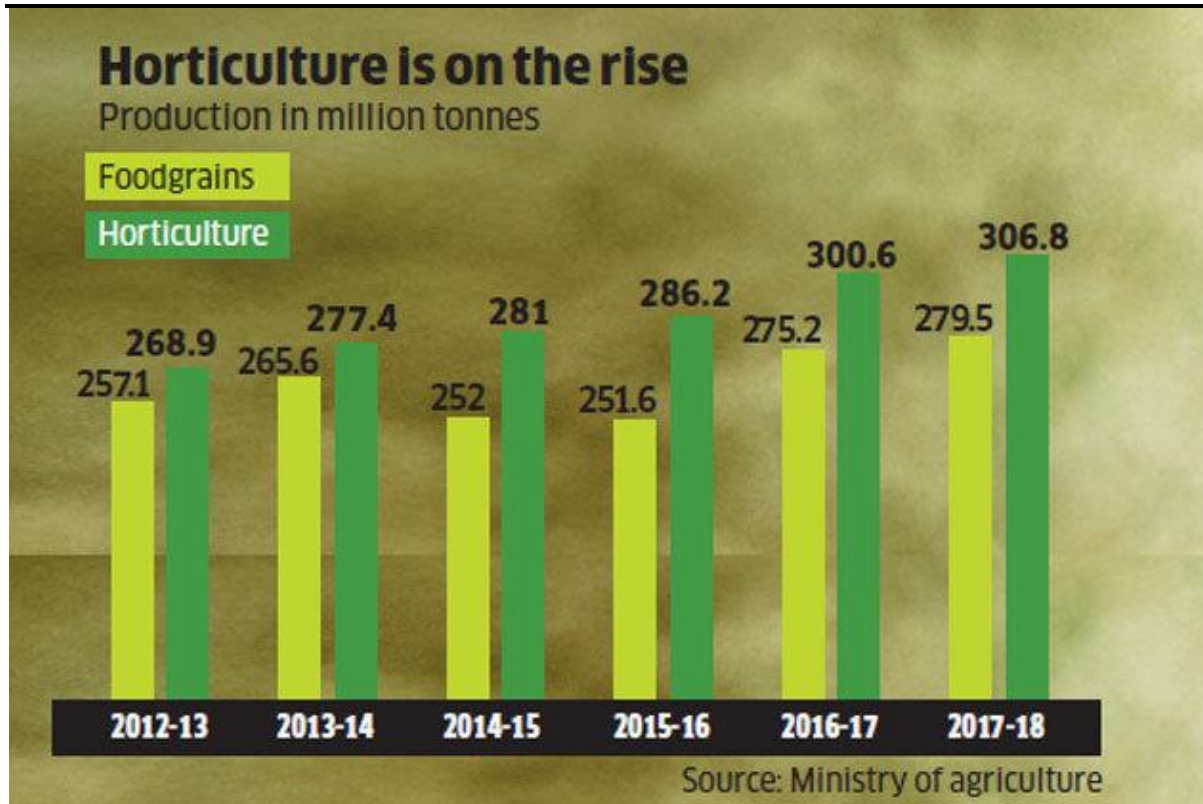


Figure 2:- Horticulture is on the rise

GEOGRAPHICAL DATA

Table 1:- Total Plantation Area & Production

No	State	Area	Production
1.	Uttar Pradesh	2282.91 HA	38601.74 MT
2.	West Bengal	1946.42 HA	33242.83 MT
3.	Madhya Pradesh	2025.95 HA	29946.01 MT
4.	Andhra Pradesh	1515.04 HA	26331.10 MT
5.	Gujarat	1641.46 HA	22937.50 MT
6.	Bihar	1256.43 HA	21283.63 MT
7.	Maharashtra	1705.35 HA	19756.19 MT

DATA ACCORDING NHB OF INDIA ACCORDING [2019-20 1ST ADV EST](#)

[CLICK HERE TO VIEW NHB SHEET 2018-19 2ND EST, 2018-19 3RD EST](#)

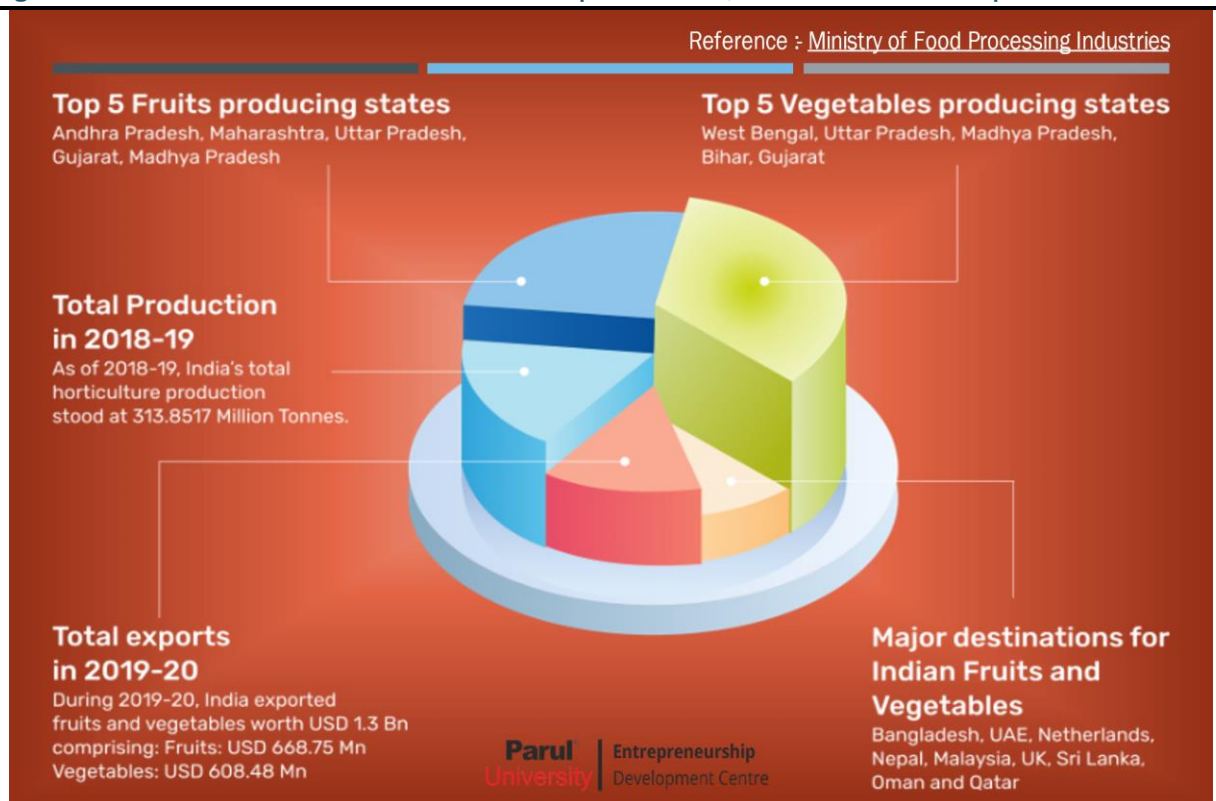


Figure 3:- Data of Ministry of Food Processing Industries



GEOGRAPHICAL STARTING

According to data and our personal experience with farmers who are facing these issues, we decided to start from **Kutch, South Gujarat, Junagadh in Gujarat** and **Pune from Maharashtra**, and also join farmers who are currently connected with us in offline mode. Reason behind selecting this location is we are very familiar with locations knows so many farmers, direct buyer, Processor, retailer in this region. So, it's little bit easy to get connected with them.

QUESTIONNAIRE

1. Google Survey: -

We have conducted one google survey and get responses from buyer end sellers both, this are the questions for survey as below. We will use Primary data collection method.

1. Who are you? *

Seller: Farmer Reseller, Broker	3. Full Name
Buyer: Retailer, Wholesaler, Sell from Home, Food Processor, Exporter	4. Mobile Number / WhatsApp Number
2. Deals In? * (Can select both)

Fruit	5. Gender
Vegetables	6. Address (Village, District, State)

7. Which Crops you want deal?
By Transport
Personal pickup from buyer
Personal delivery from seller
8. Self-life of your product in which you want to deal?
Day's range given as option
are options (can select multiple)
9. Quantity you can sell or buy?
10. Selling location for retailer and wholesaler?
Selling from Home
From shop
Want to process or export
11. Payment Condition for product
100 % Advance
Credit base
At a time of delivery are options
12. Transport mode
By Bus
By Bolero Pickup
13. Duration between purchase or production
Daily
Day After
Weekly
Monthly are options
14. Are platform/ides useful for you?
15. Packaging type
Carton Box
Caret
loose
16. Any branding required for costly product?
17. Can you choose Platform as trusted third party?

Google Form Link:

<https://forms.gle/EH3NopQJ3uVik7eH8>

2. Personal Interview or Telephonic Interview: -

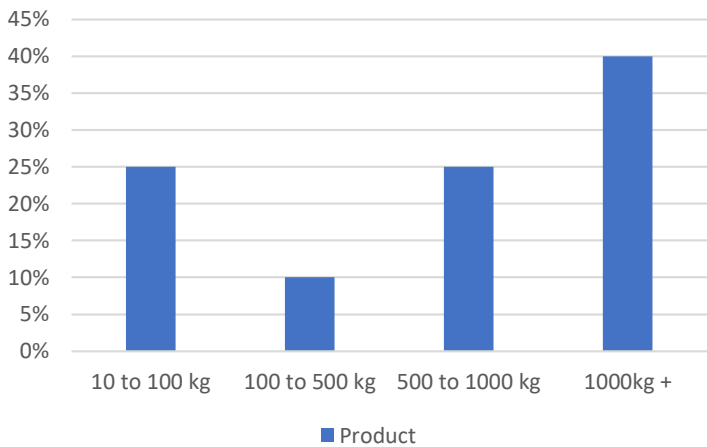
Apart from google form survey we also talk to farmers and purchasers directly by personal interview or telephonic interview and collect the primary data from there.

For personal Interview we had targeted 250 farmers of Kutch, Jamnagar, Surat district. And for Telephonic interview. We have so many contacts of farmer, so we choose 100 to 80 farmers for telephonic interview. And 50 responses from google survey. So total **400-380 farmers** from across the INDIA.

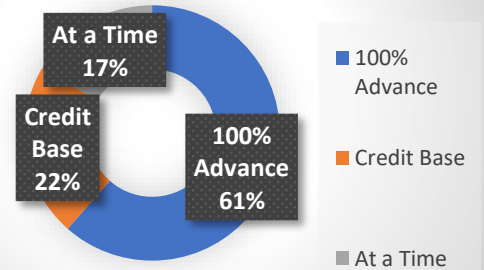
Also take telephonic Interview of **50 Exporter and Food Producer**, and take telephonic interview and google form survey of **100 direct buyer** from across the INDIA.

FINDING: - RESPONSE ON SURVEY

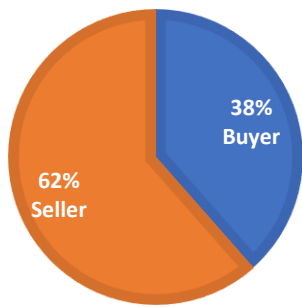
Graph 5:- Quantity



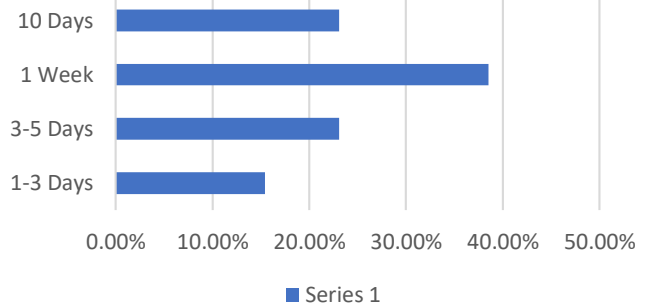
Graph 6:- Payment Methods



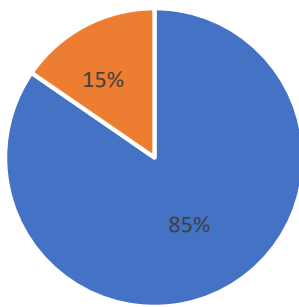
GRAPH 1:- USER IS



Graph 4:- Self-Life of Product

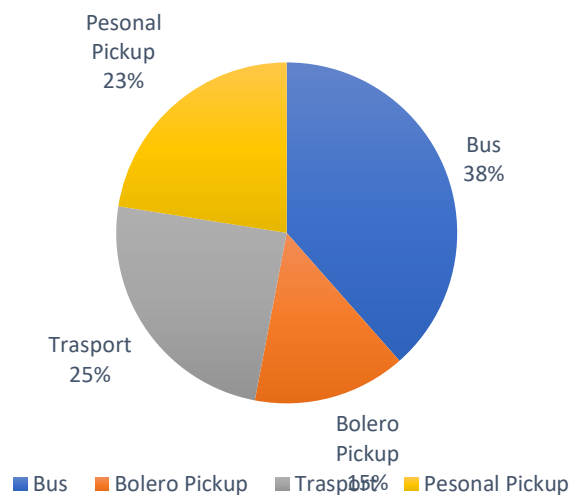


Graph 3:- Gender

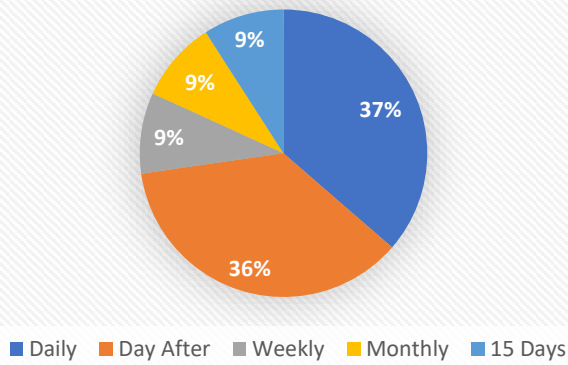


FRUIT 76.90%

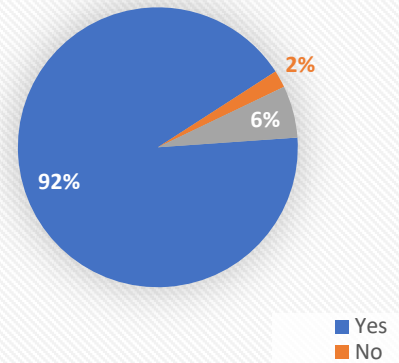
Graph 7:-Transport



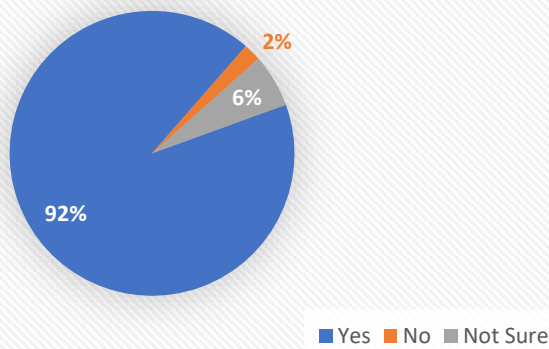
Graph 8:- Gape



Graph 9:- Sysytem is Useful



Graph 10:- Trusted 3rd party



Monthly expenditure of Consumers on purchasing on this product

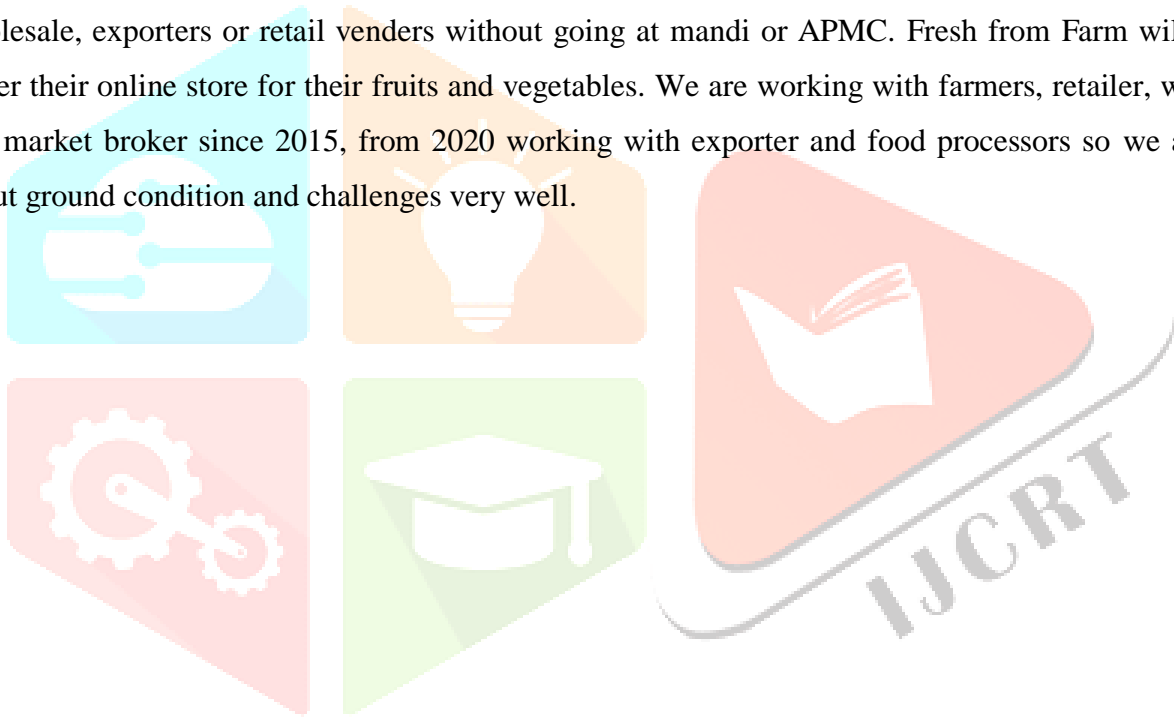
Table 2:- Monthly expenditure of Consumers on purchasing

Monthly Expenditure (Rs.)	Frequency	User
< 500	7 days	Small House (4 member)
500-1000	7 days	Middle Family (6 member)
>50,000	Monthly	Wholesaler, Retailer, HORECCA
>100000	Depended on Requirement	Food Processors
>2000000	Depended on Requirement	Exporter

Looking too words Monthly expenditure of Consumers on purchasing on these commodities, if they all Family and HORECA, Retailer, Wholesaler, Food Processes, Exporter directly purchase from farmer, we can change the ecosystem of good selling in D2C or B2B.

PROPOSED SOLUTION

We are going to make one E-Trading platform, where user can sell or buy Agri commodities like fruits and vegetables. Main motive of this innovation is that farmer can sell their products direct to wholesale, exporters or retail venders without going at mandi or APMC. Fresh from Farm will provide famer their online store for their fruits and vegetables. We are working with farmers, retailer, wholesaler and market broker since 2015, from 2020 working with exporter and food processors so we are aware about ground condition and challenges very well.



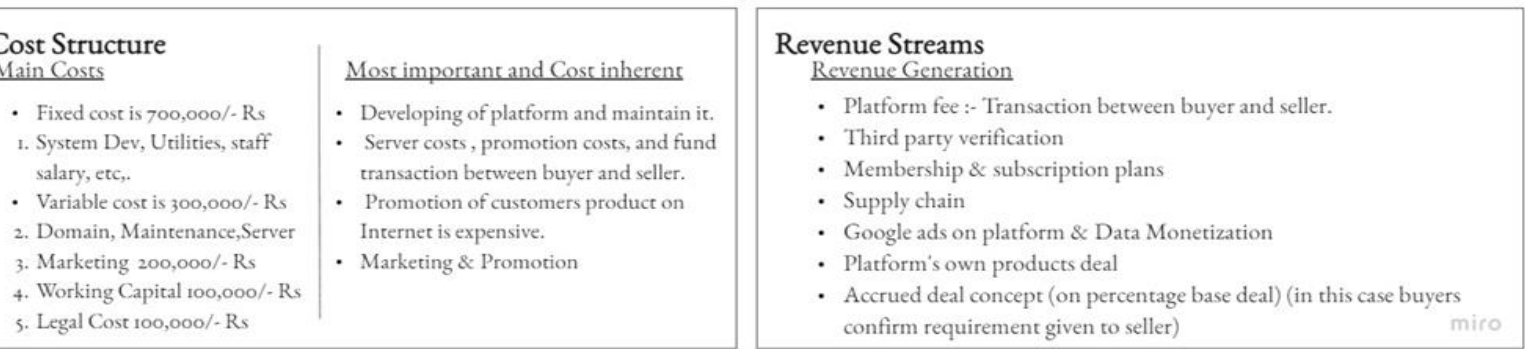
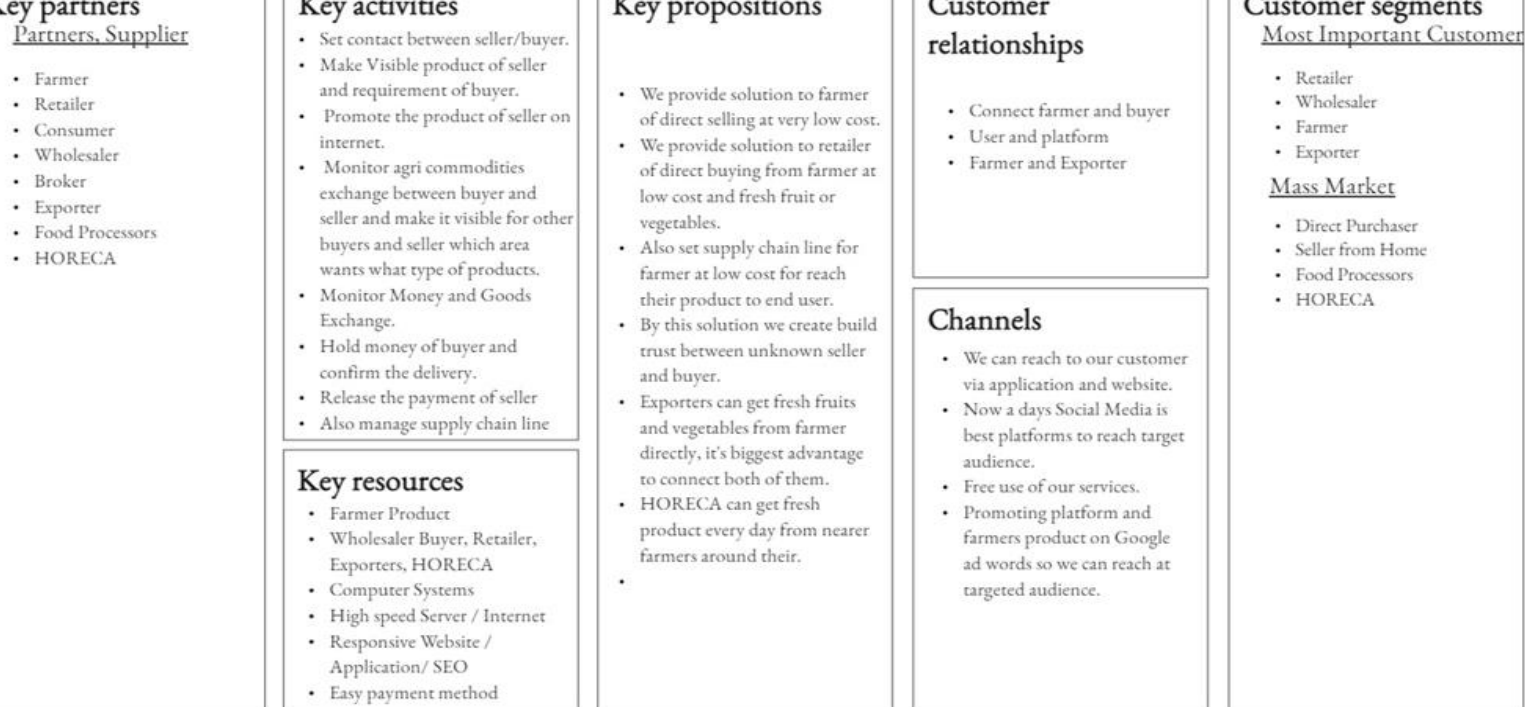
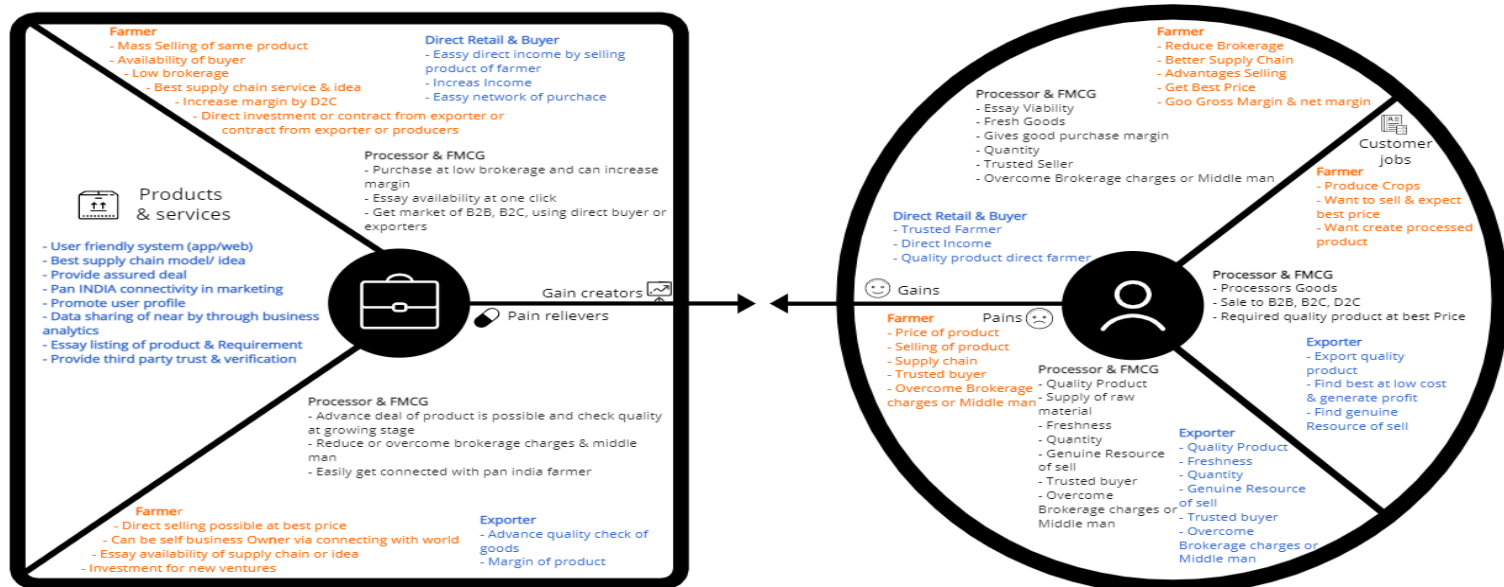


Figure 4:- Business Model Canvas

VALUE PROPOSITION CANVAS

Value proposition

Customer segment



Address: Surat, Gujarat -395004.

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Figure 5:- Value Proposition Canvas

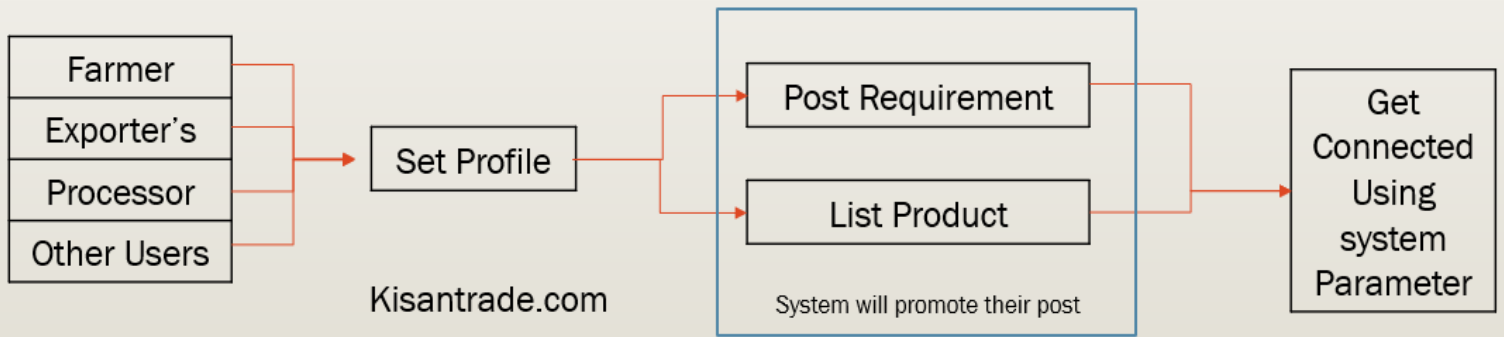


Figure 4:- Basic flow of kisantrade.com

CONCLUSION

Many farmers are making big mistake of missing opportunity of direct selling the main reason is they don't have market and other thing is that they are farmers not much have more time to market their product they trust blindly mandis broker that broker will sell our goods at best price. So, we are going to create on Web base or Application base platform where farmer can sell their product by making one store and out their products, our team will verify the status of profile and then after give reviews on product of customer, review will give benefit to farmer of trust from Buyers.

Buyers wants to purchase direct from farmer but they have lake of trust for best quality product, we will help them using review system. Other issue is of money advance transaction, in that case buyer can use platforms pay system, system will confirm delivery from both sides and release or hold or do return of payment.

Also system will promote the product of famer in selected locations by farmer and give the best customer calls and messages or enquiry. And provide direct lead (confirm deal) on percentage based.

Provide buyers requirements as lead to farmer can grab this deal go ahead.

System will also provide analysis which of product requirements from where so farmer can set location accordingly for promoting their product and get more benefit from these services.

REFERENCES

1. Data of NHB INDIA Advance Estimation of production and Area under Cultivation.
2. Data of Ministry of Food Processing Industries
3. Normal Method of trading: - <https://www.yourcolumnist.in/the-apmc-fiasco-and-the-much-needed-agricultural-reforms/>