

A Study on the Consumer Perception towards Organic Food Products in Punjab

Abstract:

As the population is increasing all around the world, and to have good quality food is now becoming a challenge for everyone. On another side food which is grown with unhealthy practices is also becoming a way to the unhealthy body with lots of diseases. There is a huge gap between customers' expectation and market supply, especially in terms of quality and their price. This study aims to investigate the influence on buying decisions and challenges towards healthy food accessibility. We have used cross-sectional survey data and analytical methods used in the study were Pareto analysis and Garret ranking method. Descriptive statistical analysis was used for the study, and to segment the organic consumers, we have used factor analysis. Study found that Demand and supply have a massive gap and this gap is an opportunity for other farmers that is why new producers can serve and cash benefits.

Comment [a1]: Paving way towards an unhealthy body prone to diseases.

Keywords: organic food, Branding, Price, Consumer perception, Consumer attitude, Certification, Availability

1.1 Introduction:

Race of development has today brought us to a time where even access to good quality food is a challenging task in itself [1]. In the whole wide world around 9.2% of people are living in extreme poverty [2] and if anyone does not belong to the extreme poverty criteria it doesn't mean that they have access to good quality of food. Awareness and attraction for organic food are rapidly increasing around the world nowadays [3]. Most of the people in developed and developing countries have turned out to be more health-conscious [4], and they have started spending more on a healthy and happy life [5]. Food grown in natural conditions is also one of their priority; that's why farmers are also turning their cultivation to natural or organic farming. Organic food articles are produced without using chemicals, like-pesticides, herbicides, hormones, antibiotics, etc. That's why they not only preserve the environment but also help in making public health safe [6].

Global Organic Food Market is dynamically changing and growing [7]. In today's world, the latest cutting-edge technology makes everything possible, farmers are heralding again to age-old practices in agriculture for the higher precise of humankind on this planet. Organic food has been necessitated by a new generation of health-conscious consumers increasingly aware of the harmful effects of artificial chemicals and other additives in food [8], and farmers are now signaling back to ancient farming practices to get yield that is acknowledged as organic food. From the seed to the soil, water, and the end product, everything that energies into bringing organic food to the table is herbal and free from pesticides, artificial chemicals, and fertilizers. As per the TechSci Research report [9], the global organic food market stood at \$110.25 billion in 2016 and is expected to grow at the rate of 16.15%, during 2017 – 2022, to reach \$ 262.85 billion by 2022. Increasing awareness about health benefits of organic food consumption, rising of disposable income per capita on natural food products, growing trend

Comment [a2]: What do you mean by this?

of fitness, and concerns due to a growing number of chemical poisoning cases are expected to be the driving force towards development of global organic food market in the coming years [10]. Also, initiate product innovations and hostile marketing strategies adopted by major players and e-retailers would positively affect the global organic food market throughout the forecast period.

Comment [a3]: What do you mean by this?

Indian farming was based on organic agriculture from ancient times. Still, from the last 6 to 7 decades, farmers are motivated to use pesticides and chemicals for more production, and this gave so many diseases and harmed both the farmers as well as consumers [11]. Farmers, as well as consumers of Punjab, are engulfed by dangerous diseases like cancer due to the production and consumption of conventional food articles [12]. And, due to this alarming situation a new era has emerged towards organic food consumption and production. According to a recently published TechSci Research report [9] "India Organic Food Market Forecast and Opportunities, 2020", the organic food market in India is expected to grow at a CAGR of over 25% during 2015-20.

Comment [a4]: You can merge these 2 sentences

We can see the data published by (fibl.org) in tabular form that shows continuous growth since 2013; organic farming has covered about 1% of total cultivating land in India.

Chart 1 : organic agriculture from ancient times

Comment [a5]: Kindly write year instead of writing ancient times

Country	Item	Organic area (farmland) [ha]	Organic area share of total farmland [%]	Organic producers	Organic retail sales [Million \$]
	Element				
India	Year	510'000.00	0.28	650'000.00	69.3
	2014	720'000.00	0.4	650'000.00	101.3
	2015	1'180'000.00	0.66	585'200.00	144.7
	2016	1'490'000.00	0.83	835'000.00	171.6
	2017	1'780'000.00	0.99	1'093'288.00	185.89

Comment [a6]: Area under organic cultivation w.r.t the total farmland

Comment [a7]: Kindly convert it into Rs.

Comment [a8]: Instead of writing whole numbers, you can mention them in '000 units and write it as 650. It will simplify the numbers

(Source: Research Institute of Organic Agriculture)

https://statistics.fibl.org/world/key-indicators-world.html?tx_statisticdata_pi1%5Bcontroller%5D=Element2Item&cHash=ba0aa70d46b2bb18dca4638c75aa654e

Comment [a9]: You can mention this link in the reference section instead of writing it here

With the phenomenal growth in the area under organic cultivation and growing demand for natural harvest products, India has emerged as the largest nation with the highest arable cultivated land under ecological management. India has also achieved the status of the single largest country in terms of the total area under certified organic wild harvest collection.

The Indian government is also promoting organic farming in many ways. Paramparagat Krishi Vikas Yojana (PKVY) is introduced by the Government of India to promote organic agriculture under which two lac hectares have been reserved for organic farming, thereby benefiting 5 lac farmers. Such steps will improve organic agriculture and related industry in the future. India has opportunity to serve potential customer at world level. The demand for Indian organic food products is increasing rapidly at the global level as we have exported organic products worth \$ 515 million in the financial year (2017-18), which is exported

Comment [a10]: Against \$370 million in 2016-17.

worth \$370 million in 2016-17. Agricultural and Processed food products Export Development Authority (APEDA) has also registered an increase of 39% of the total volume of the export during 2017-18 and was a total of 4.58 lac tons [13].

Comment [a11]: Of what?

Comment [a12]: Amounting to

1.2 Organic Food and Chandigarh:

Chandigarh is the fastest developing city in India because it's a union territory and capital of Punjab and Haryana state. That's why people who live in Chandigarh. Most of them are Government employees and businessmen and are well educated.

Comment [a13]: Is it a single line? Do you have any evidence to support your claims?

If we talk about the quality of life in Chandigarh, without the unusual hustle and bustle, Chandigarh can be categorized as a city with a pleasing atmosphere. The reason why this metropolis is desired by human beings is simply due to its nonviolent and calm atmosphere.

Comment [a14]: ???

If we talk about food habits, Chandigarh has lots of organic product shops (approximately 50) because customers here are well aware of health. They usually prefer quality food (free of artificial additives) to consume.

Comment [a15]: Do you have any evidence to support your claim?

Among all these already existing shops, one of the oldest organic markets is serving customers differently. There were many challenges along the way, remember Raman Mann, a farmer, and activist, and Dr. Upendra Nath Roy, professor, and Head of, Department of Rural Development, NITTTR, who together with a handful of farmers, started this initiative. This market is located near the *sukhna lake sports complex in Chandigarh*. This market is running since 2015. Organic Farmers in this Market comprises people of the farming community, researchers, professors, poets, and young, educated local volunteers. The group organizes organic mandis on Saturday, to provide a better exchange between producers and consumers without intermediaries. "With vegetables, fruits, honey, mustard oil. The beauty of this market is "A market without intermediary" in this market; farmers are serving customers directly with reasonable prices. This market is an idol for all other food markets throughout the county because if these farmers can operate a market without intermediary, then others can also make this possible.

Comment [a16]: Dear author, this is a research article and not a newspaper article, so, kindly use formal tone of speech while writing it.

Comment [a17]: Which initiative?

1.3 Significance of the Study:

The present study is conducted from a point of view as it tries to study the factors influencing consumers to purchase organic food. This mainly focuses on the organic market in the study area. There is a future scope as this study would be helpful to provide information on attributes that are highly recommended by customers to buy organic food or their processed product. The total outcome of the study will help in knowing the perception of the consumer about branding, certification, and quality. It can also be used for future ideas for the marketing of organic food in a way that farmers will be able to provide organic food to the vast population. With a constant increase in organic food demand, it is an emerging opportunity for farmers to grab it and this study helps in finding the possible and effective way to serve this emerging market.

Objectives of the Study:

- To identify the factors which influence consumers to purchase organic products.
- To analyze the consumers' satisfaction towards the purchase and consumption of organic products.
- To study the challenges faced by consumers in buying organic products.

Review of Literature

A review of past research helps in evaluating the objectives of the study and the methods adopted to identify the conceptual issues relevant to the study. This chapter tries to present a brief review of the relevant research literature related to the present study.

Prince (2018)^[14] suggests that consumption of Organic food products should become a habit of life among people. There should be regular demand and consumption of organic food among consumers. For this, proper awareness about the health benefits of organic food products and the harmful consequences of consuming inorganic food products must be made famous among the people. Consumer behavior plays a significant role in the organic food products segment Krishnakumare and Niranjana (2017)^[15] found that the marketers of organic foods must be advanced and active to meet the changing purchase behavior for organic food products among urban residents. The main reason for buying an organic food product was health consciousness. Though the organic food product was regarded as healthy, the lack of trust in the originality of organic food products was another reason for not buying organic food products. And, Prince found that high Price and Less availability are the main problems faced by the consumers. The main reason for the premium price is the limited supply concerning the demand for organic food. Chiciudean, Harun, Chiciudean, and Arion (2019)^[16] also found that perishability is another barrier to consumption. Shaveta (2019)^[17] found that consumers prefer non-perishable products. To increase the consumption of organic products, marketers need to bridge the gap between retailers and consumers by promoting them. Regarding marketing, Chiciudean, Harun, Chiciudean, and Arion (2019)^[16] observed that consumers mostly prefer ready-to-use food, non-perishable and in the case of organic food, both personas became barriers in consumption. Three main influencing factors which marketers should look at because they frequently show barriers in the consumption of organic food products are followed by Influence and marketing, mistrust (not perceiving advantages of organic food consumption), and financial (high prices and personal financial status). Patnaik (2018)^[18] found that the salesperson & customer could show some horrifying picture. Just at last, after a keen survey upon organic food products, researchers could find that lack of authenticated labeling creates distrust among the customer. High pricing for some organic produce is out of reach of the common man. healthy food safety, human health, and environmental concern, along with sensual attributes such as nutritive value, taste, freshness, and appearance, influence organic food preferences. Sharma and Shingvi (2018)^[19] and Shafie and Rennie (2009)^[20]. Demographic variables are deciding factors of organic consumers, but the correlation is not very significant. Sivathanu (2015)^[21] observed that females have more preference for organic food products as compared to male. More educated respondents prefer to buy organic food products. Also, people of higher-income groups prefer to buy organic food. Consumers prefer to buy organic food products because of their perception that organic food products are healthy and safe, nutritious, and environmentally friendly.

3 Research methodology:

3.1 Research Design

3.1.1 Description of the Study Area

The study was conducted in Chandigarh. There is a growing concern about organic food trends in the city. Chandigarh is one of the busiest union territories in India. It is the capital of the neighboring states Punjab and Haryana. Chandigarh encompasses an area of 114 square kilometers. Peoples who are living in Chandigarh are well educated and understand that what healthy food brings to us. However, with the changing lifestyle, a lot of people can be observed ordering food online without knowing that is made up of healthy ingredients or not. On another side, many customers are so concerned about diet. There are lots of organic stores in Chandigarh and they are serving in different segments but no one is a big brand, all of them are local players. Kartar asra road organic market is one of the oldest organic markets in Chandigarh and serving at a premium price without any certification. It is thus beneficial to identify the factors which influence consumers to purchase organic products.



Fig. 1 Map of Study Area

3.2.2 Nature and Source of Data

The study was based on primary and secondary data. The primary data was collected by using a structured questionnaire. The data was collected from 100 respondents. The secondary data was collected from various research papers and journals and APEDA. The target respondents were specifically the consumers of organic products from the study area.

3.2.3 Sampling Procedure and Data Collection

Sample: 100 respondents

The data was collected by convenience sampling, and details on demographic characteristics, awareness, and knowledge, perception, attitude, and barriers in purchasing decisions of the sample respondents towards organic food products were included in the questionnaire.

3.2.4 Analytical Tools Employed

The analytical methods used in the study were Pareto analysis (differentiate between major minor things in consumer basket), Garret ranking method, and factor analysis (appropriateness of factors and indicators). Descriptive statistical analysis was used for the

study, and to segment the organic consumers, we used factor analysis. SPSS software was employed for analyzing the data. A factor analysis was performed using Principal axis factoring, and Varimax rotation was used. Bartlett's test of Sphericity was significant at the 0.000 level, and the Kaiser–Meyer–Olkin (KMO) value was higher than 0.6.

Comment [a18]: Kindly provide more information and formulas/ commands used for Garrett ranking and other techniques that you have used

Results and Discussion

Keeping because of the objectives, the data related to the present study was collected and drew from direct customer's responses and analyzed using appropriate techniques. The results of the present study are presented below keeping in view the objectives of the study.

4.1 Factors that influence consumers to purchase organic products.

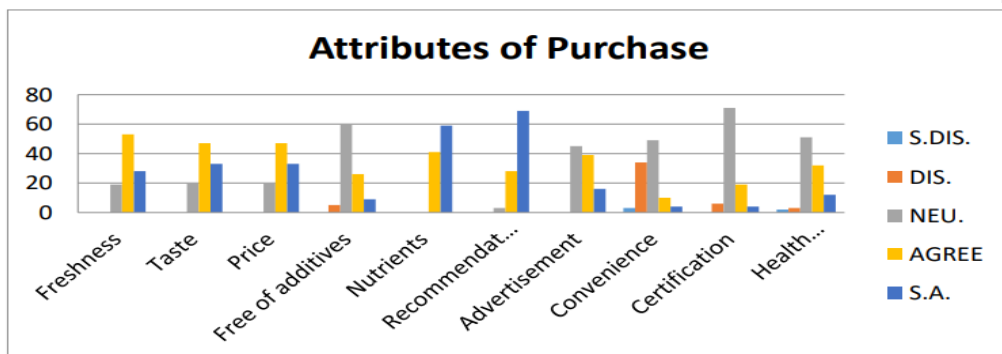
4.2 Challenges faced by consumers in buying organic products.

4.1 Factors which Influence Consumers to Purchase Organic Products

Everyone wants to eat healthy food and also make efforts to make it possible. In the Kartar asra road market customers are well educated and ready to buy uncertified organic products. Customers have willing to pay a good amount for these products because according to the present study most of the customers in this market are recommended by their near and dear ones on that they can trust. Customers have a perception that organic food is good for their health. It's better than conventional food because it is free of artificial chemicals.

It's a good approach that people are spending more on their health. That why most customers said that it's their family decided to have good quality goods and around 70 percent of customers are having organic food for the last 2.5 years.

Responsible attributes for organic product purchase



Source: Author's own computation from primary data

Fig. 2 : Responsible attributes for organic product purchase

Fig.2 represents the attributes responsible for organic product purchase. Responses highlighted that recommendations for the market and its product were the most important factors to consume the organic product. Whereas recommendation and nutrient value was the second strongly accepted factor to consume organic products. The convenience factor was rated neutral by most of the customers to buy organic products because they were ready to travel anywhere in the city to purchase organic products. The present study is in line with Krishnakumare et al, (2017) ^[22] reported that health, freshness, the quality was the main attributes of purchase but in the present study recommendation by friends or family members was the most important attribute.

Table 4.1 (a): Descriptive statistics

	Mean	Std. Deviation	Analysis N
Freshness	4.090	.6831	100
Taste	4.130	.7199	100
Price	3.390	.7233	100
Free of additives	4.590	.4943	100
Nutrients	4.660	.5360	100
Recommendation	3.710	.7288	100
Advertisement	2.780	.8236	100
Convenience	3.210	.6079	100
Certification	3.490	.8226	100

Source: Author's own computation from primary data

Table 4.1(a) presents the descriptive analysis calculated using spss. The mean of the data, followed by the standard deviation for all the variables' is present in this table.

Table 4.1 (b): KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.636
Bartlett's Test of Sphericity	Approx. Chi-Square	238.193
	Df	36
	Sig.	.000

Source: Author's own computation from primary data

Table 4.1(b) presents KMO, and Bartlett's test values show the value of 0.636 is acceptable (mediocre level) as a value above 0.6 is acceptable in the case of the KMO test. Bartlett's test of sphere city has a significant value of 0.000, which is acceptable as a value below 0.001 is acceptable. The value is statistically significant for Bartlett's test of sphere city.

Table 4.1 (c): Communalities

	Initial	Extraction
Freshness	1.000	.584
Taste	1.000	.750
Price	1.000	.457
Free of additives	1.000	.774
Nutrients	1.000	.790
Recommendation	1.000	.600
Advertisement	1.000	.567
Convenience	1.000	.646
Certification	1.000	.645

Extraction Method: Principal Component Analysis.

Source: Author's own computation from primary data

Table 4.1(c) explains the communalities in the variables. The extraction value tells us the proportion of each variable that can be explained by the factors. The extraction values for nutrients, free of additives, taste are preferably high, which thus can be explained well by these factors.

Table4.1 (d): Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	percentage of Variance	Cumulative percentage	Total	percentage of Variance	Cumulative percentage	Total	percentage of Variance	Cumulative percentage
1	2.862	31.799	31.799	2.862	31.799	31.799	2.122	23.578	23.578
2	1.930	21.448	53.247	1.930	21.448	53.247	1.966	21.846	45.423
3	1.020	11.338	64.585	1.020	11.338	64.585	1.725	19.162	64.585
4	.878	9.754	74.339						
5	.618	6.862	81.202						
6	.548	6.093	87.295						
7	.482	5.361	92.656						
8	.420	4.667	97.323						
9	.241	2.677	100.000						

Extraction Method: Principal Component Analysis.

Source: Author's own computation from primary data

Table 4.1(d) explains the total variance, and it can be inferred that spss has extracted three components, which can be used to explain 31.79, 21.44, 11.33 percent of the variance of the various components under consideration.

Table 4.1 (e): Rotated Component Matrix

	Component		
	1	2	3
Recommendation	.745		
Taste	.729		.404
Freshness	.721		
Price	.612		
Certification		.798	
Convenience		.767	
Advertisement		.721	
Free of additives			.865
Nutrients			.864

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Source: Author's own computation from primary data

Table 4.1(e) presents the component matrix explaining the strength of the relationship between the various items and the components being extracted in the solution. These values were the Pearson correlation values of the items with the component 1, 2 and 3, which was being extracted. The factor loadings were very high for free of additives followed by the nutrients and then recommendation. All the factor loadings were loading quite highly on the component, thus giving a clean solution.

Reasons for buying organic products

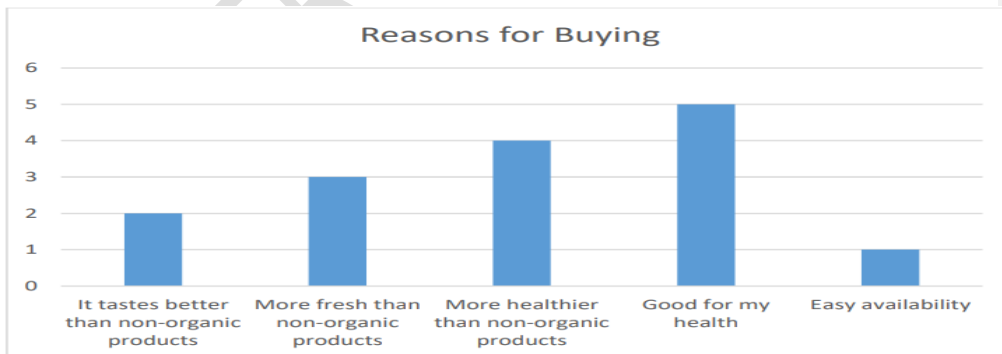


Fig.3: Reasons for buying organic products

*(Based on Garret Ranking Method)

Source: Author's own computation from primary data

Fig.3 represents the reasons for organic product purchase. Figures have been prepared as per the garret ranking method. Garret's method helped to decide ranking for the different factor

which is responsible for buying. According to the Garret method F4-good for health got the first rank among all factors. And F3, F2, and F5 got 2nd, 3rd and 4th rank. F5- easy availability got 5th rank because it was not tough for customers to go to a market and purchase. In a study conducted by Vietoris et al, (2016) [23], Chandrashekar, (2014) [24], Bashaa, et al, (2015) [25] highlighted that consumers were more concerned about health and nutrient values. Similar results are highlighted in the present study as customers are health conscious and found organic food more ~~nutrient~~ nutritious.

Buying decision for organic food

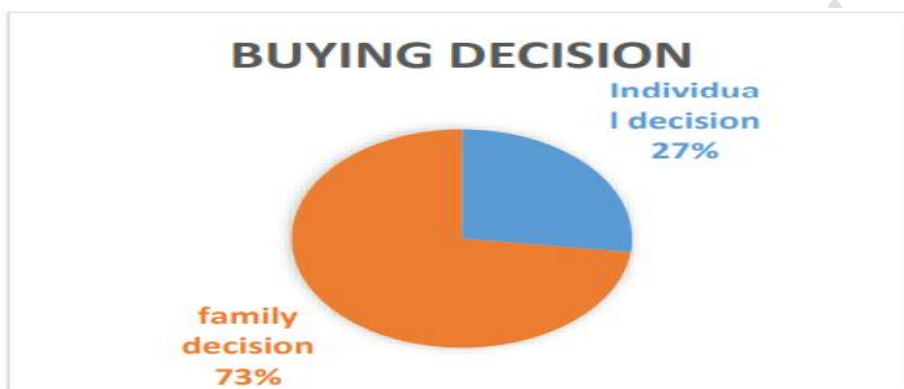


Fig.4: Buying decision for organic food

Source: Author's own computation from primary data

Fig.4 represents the buying decision of the respondents. Around 73 respondents said that it was their family decision which is 73 percent of the respondents. Whereas 27 respondents said that it was their individual decision because somehow they were living without their family or their children were not able to decide on this thing.

Source of knowledge about this market

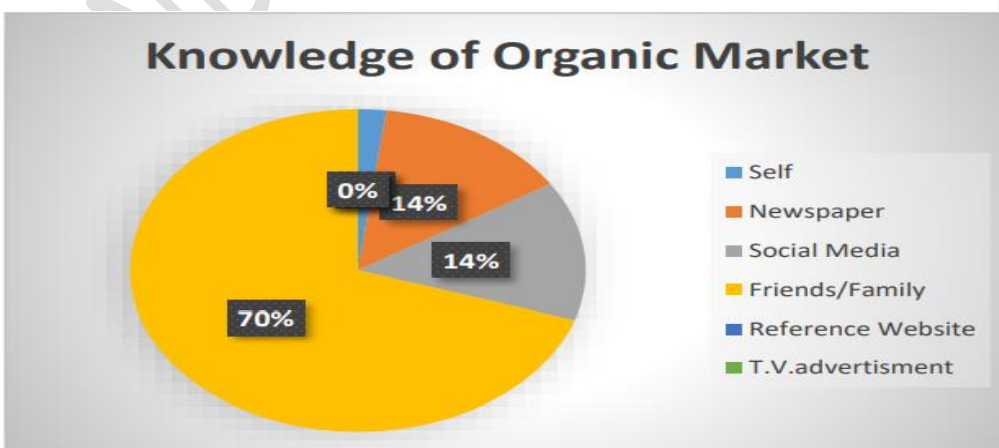


Fig. 5: Source of knowledge about the market

Source: Author's own computation from primary data

Fig. 5 represents a source of knowledge about the market. Most of the customers around 70 percent said they got to know about this market from their friends or family members. Whereas the second-largest source of knowledge was social media which was around 14 percent. A reference website was, however, not useful to attract people towards this market.

General choice of different things during the purchase

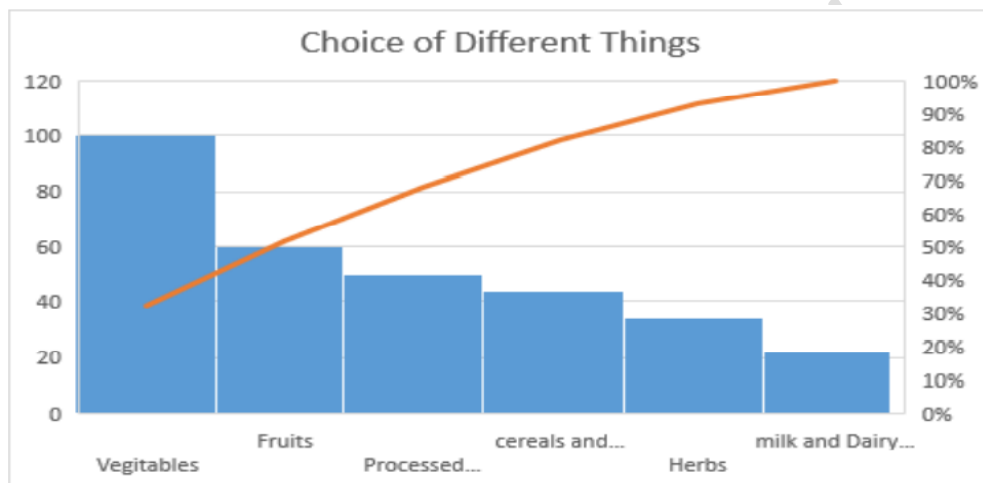


Fig.6: Choice of different things during the purchase

Source: Author's own computation from primary data

Fig.6 represents the choice of different organic items during purchase. Around 80 percent of customers in this market preferred to buy vegetables and fruits, these two were traffic generators in this market. After these two processed bakery products were the most preferred item in this market. The present study is in line with Iqbal (2105)^[26], Chandrashekar (2014)^[27], Shafie, et al, (2009)^[28] reported that vegetables and fruits were the most preferred items among all available organic products. The present study is also in line with Nandi (2017)^[29] who reported that the majority of customers were ready to pay a premium price for fruits and vegetables except for other products.

4.2 Challenges faced by consumers in buying organic products

Challenges are everywhere, every people has to face some challenges in his life. Here farmers and customers both face different-different challenges to serve and to get served. This market is serving in a good manner that new customers every day come and want to be a part of it but it's so costly because this is a premium market, everyone can't afford it. Another challenge is the limited availability of products because it opens ones in a week and when it's open first come first serve policy works to deal with customers and early customers bought almost everything. That's is why some customer tries to find out a new market like this so

they can get quality food and it is laying the foundation of competitors in the same geographical area.

Problems or challenges faced in buying organic products

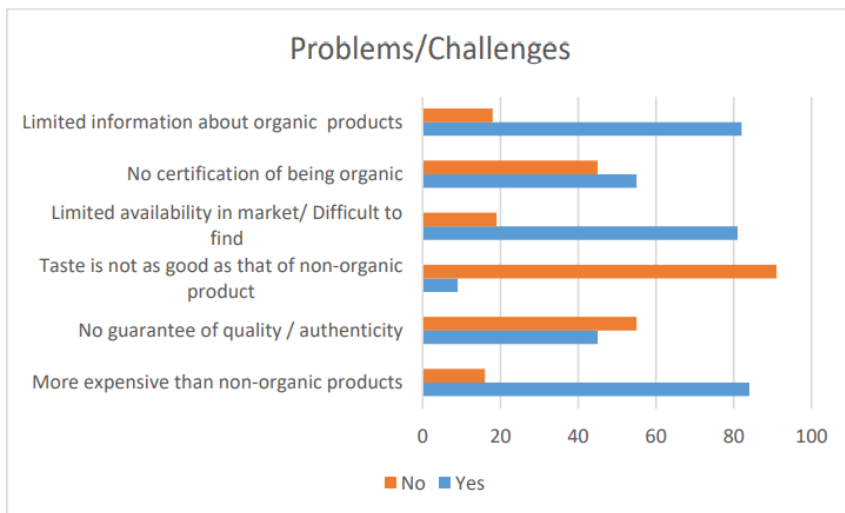


Fig.7: Problems faced / challenges in buying organic products

Source: Author's own computation from primary data

Fig.7 highlighted the problems/challenges that were affecting the buying process (more expensive than, limited information about products, and limited availability). It was because organic produce yield was less and to cover all expenses, the final price was kept high. The present study is in line with (Fillion and Arazi, 2002)^[30] reported numerous claims were made about the goodness of organic food, to justify the premium price that consumers have to pay. The present study is also in line with (Nandi R. et. al, 2017)^[31] reported that premium price and lack of availability were major obstacles in purchasing organic products.

Opinion towards the price of Organic Products

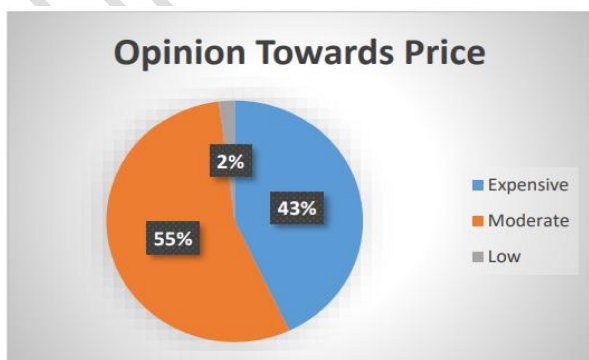


Fig.8: Opinion towards the price of Organic Products

Source: Author's own computation from primary data

According to the above figure, it seems that the price of products was moderate for 55 percent of customers and 2 percent said that they can easily spend money. According to the new customer/middle-class customers (43 percentages), it was expensive to bought organic products. The present Study is in line with the study of (Whitehead and Nicholson, 2001) ^[32] reported that consumers simply assume that they cannot afford organic food and some feel that the market often charges more for healthier food.

Conclusion & Suggestions:

The present study has found out that peoples are aware of the term organic and its benefits. In this market (Kartar ashra road) customers come together not only to bought food items but to make their day more joyful and happy. Results show that awareness and trends among peoples about organic food are increasing, here farmers are feeling glade to have more customers. According to farmers every month they welcome 2-3 new families in their market.

Now if we discuss the problems that customers are still facing in this well-serving market and these are limited information about products, limited information about the availability of products, and its premium price. These problems are occurring because day by day customers are increasing and on the other side, farmers are the same those are serving from the beginning of this market. That's why product availability is limited because farmers have limited farmland.

The suggestion for this problem is farmers should encourage other farmers to participate in this market and earn good profit. Or if farmers in this market are not interested in joining other farmers due to fear of completion so in this condition, other farmers should learn from this market and try to serve in the same manner with good quality products. So that more willing peoples can purchase organic products.

References:

1. <https://www.fao.org/3/i6583e/i6583e.pdf>
2. <https://www.worldvision.org/sponsorship-news-stories/global-poverty-facts>
3. Uvaneswaran S.M. & Gimirugan B. (2015). International Trend and Buying Behavior of Organic Food Products. *International Journal of Scientific Research*. 04(05)
4. Lin, W. L., & Wu, C. C. (2016). The concerns about choice attributes and behavior intentions of consumers toward food safety restaurant. *International Business Research*, 9(4), 11-19.
5. Cagalj, M., Haas, R., & Morawetz, U. B. (2016). Effects of quality claims on willingness to pay for organic food: Evidence from experimental auctions in Croatia. *British Food Journal*.

6. Kalsi, A., Sikka, R., & Singh, D. (2016). Influence of organic and inorganic amendments on the bioavailability of lead and micronutrient composition of Indian mustard (*Brassica juncea* (L.) Czern) in a lead-contaminated soil. *Environmental Earth Sciences*, 75(18), 1254.
7. <https://www.thebusinessresearchcompany.com/report/organic-food-global-market-report>
8. Selvan S.A. & Grace A.E. (2021). Organic food-way ahead for healthy life and a smarter choice. *ANVESAK*. 51(7)
9. <https://www.techsciresearch.com/news/2905-global-organic-food-market-passing-trend-or-potential-hegemon.html>
10. Kearney, J. (2010). Food consumption trends and drivers. *Philosophical transactions of the royal society B: biological sciences*, 365(1554), 2793-2807.
11. Sharma, N., & Singhvi, R. (2017). Effects of Chemical Fertilizers and Pesticides on Human Health and Environment: A Review. *International Journal of Agriculture, Environment and Biotechnology*, 10(6), 675.
12. Punjab, cancer capital of India. (n.d.). Retrieved March 19, 2021, from <https://www.downtoearth.org.in/news/punjab-cancer-capital-of-india-40255>
13. <https://economictimes.indiatimes.com/industry/cons-products/food/global-demand-for-indian-organic-food-products-on-constant-increase/articleshow/66330641.cms?from=mdr>
14. Prince, A. (2018), A study on the consumers' perception towards organic food products. *International Education & Research Journal*. 4(5): 49-52.
15. Krishnakumare, B., & Niranjan, S. (2017). Consumers' buying behaviour towards organic food products in Tamil Nadu. *Agricultural Economics Research Review*, 29(347-2017-2044), 133-138.
16. Chiciudean, G. O., Harun, R., Ilea, M., Chiciudean, D. I., Arion, F. H., Ilies, G., & Muresan, I. C. (2019). Organic food consumers and purchase intention: a case study in Romania. *Agronomy*, 9(3), 145.
17. Shaveta (2019), Evaluation of consumer awareness in regard to organic products in Punjab region. *International journal of basic and applied research*. 9(1): 169-186.
18. Patnaik, A. (2018), Consumers perception towards organic food. *Journal of Emerging Technologies and Innovative Research*. 5(6): 309-313.
19. Sharma, N. and Singhvi, R. (2018), Consumers perception and Behaviour towards organic food. *Journal of Pharmacognosy and Phytochemistry*. 7(2): 2152-2155.
20. Shafie, A. and Rennie, D. (2009), Consumer Perceptions towards Organic Food. *Social and Behavioral Sciences*. 49(2): 360-367.

21. Sivathanu, B. (2015), Factors Affecting Consumer Preference towards the Organic Food Purchases. *Indian Journal of Science and Technology*. **8**(33).
22. Krishnakumare, B. and Niranjana, S. (2017). Consumers' Buying Behaviour towards Organic Food Products in Tamil Nadu. *Agricultural Economics Research Review*. **30**(1): 133-138.
23. Vietoris, V., Kozelova, D. and Mellen, M. (2016), Analysis of Consumer Preferences at Organic Food Purchase. *Institute of Animal Reproduction and Food Research of the Polish Academy of Sciences*. **66**(2): 139-146.
24. Chandrashekar, H.M. (2014), Consumers Perception towards Organic Products - A Study in Mysore City. *International Journal of Research in Business Studies and Management*. **1**(1): 52-67.
25. Basha, Mason and Shamsudinc, F. (2015), Consumers Attitude Towards Organic Food. *Elsevier B.V.* **31**(2): 444-452
26. Iqbal, M. (2015), Consumer Behaviour of Organic Food: A Developing Country Perspective. *International Journal of Marketing and Business Communication*. **4**(4): 59-68.
27. Chandrashekar, H.M. (2014), Consumers Perception towards Organic Products - A Study in Mysore City. *International Journal of Research in Business Studies and Management*. **1**(1): 52-67.
28. Shafie, A. and Rennie, D. (2009), Consumer Perceptions towards Organic Food. *Social and Behavioral Sciences*. **49**(2): 360-367.
29. Nandi, R., Bokelmann, W., Gowdru, N. V., & Dias, G. (2017). Factors influencing consumers' willingness to pay for organic fruits and vegetables: Empirical evidence from a consumer survey in India. *Journal of Food Products Marketing*, **23**(4), 430-451.
30. Fillion, L. and Arazi, S. (2002), "Does organic food taste better? A claim substantiation approach", *Nutrition & Food Science*, Vol. 32 No. 4, pp. 153-157.
31. Nandi, R., Bokelmann, W., Gowdru, N. V., & Dias, G. (2017). Factors influencing consumers' willingness to pay for organic fruits and vegetables: Empirical evidence from a consumer survey in India. *Journal of Food Products Marketing*, **23**(4), 430-451.
32. Whitehead, P., & Nicholson, S. (2001). *Organic Food: Niche Or Mainstream?*. IGD.