



“The study on the impact of Covid-19 on the consumption of organic food in South Mumbai”

Aayush Ajay Murdeshwar

HR College of Commerce and Economics

ABSTRACT :

The coronavirus pandemic has created a wave of health consciousness. Indian consumers have realised the benefits of immunity building and nutritious chemical-free food. Increasingly, consumers perceive organic foods as being safer and higher in quality. Moreover, consumers are developing an ecologically friendly behaviour considering the current state of the environment. This research aims to study the possible shift of consumers preferences towards consumption of organic food due to the impact of the pandemic.

Introduction :

There has been a rise in the modern era leading to awareness regarding environmental conservation and sustainable development. There has been an awakening among people around the world since the onset of the pandemic for people to monitor and look after their health and also preserve the environment. People have realised the damage done by mankind and have switched to naturally produced organic products. The organic food industry has seen astonishing growth, especially in India over the past few years. The organic products exported were valued at around \$1 billion dollars and managed to produce 3.2 million metric ton of organic crops in the year 2020-2021. The major organic crops produced and consumed in India include sugar, cereals, millets, fiber crops and oilseeds. The government of India has strongly supported and promoted the demand of organic food in India by providing financial support to farmers who are adopting organic farming under various government schemes.

Indian consumers have been changing their food consumption habits over time due to the rapid rise in health problems in addition to the coronavirus. Organic food is grown on land without any trace of chemicals, pesticides, and fertilizers. Animals too are not treated with any antibiotics or hormones. Overuse of fertilizers and herbicides has not only contaminated water sources but has also killed a variety of species vital to the environment.

Thus, by providing and consuming ecological products, we are not only preserving our ecosystem but also protecting individuals from synthetic harmful chemicals. The sudden outbreak of the COVID-19 pandemic led to the implementation of stringent lockdown regulations across the nation resulting in limited cultivation and supply chain disruptions of organic food products. However, there still was a demand for organic food products in various regions of the country by a wide spectrum of consumers.

What is organic food?

The term “organic” refers to how certain foods are produced. Organic foods have been grown or farmed without the use of artificial chemicals, hormones, antibiotics, and genetically modified organisms (GMOs)

In order to be labelled organic, a food product must be free of artificial food additives. This includes artificial sweeteners, preservatives, coloring, flavoring, and monosodium glutamate (MSG). Organically grown crops tend to use natural fertilizers like manure to improve plant growth. Animals raised organically are not given antibiotics or hormones. Organic farming tends to improve soil quality and the conservation of groundwater. It also reduces pollution and may be better for the environment. The most commonly purchased organic foods are fruits, vegetables, grains, dairy products and meat. Processed organic products are also available, such as sodas, cookies, and meat substitutes.

What is covid 19 and its impact on the food industry in general in India?

Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. Researchers know that the coronavirus is spread through droplets and virus particles released into the air when an infected person breathes, talks, laughs, sings, coughs or sneezes. Larger droplets may fall to the ground in a few seconds, but tiny infectious particles can linger in the air and accumulate in indoor places, especially where many people are gathered and there is poor ventilation. Due to its infectious nature, the governments of each and every country imposed a nation-wide lockdown confining everyone in their homes. Workers migrated back to their hometowns from the cities. This impacts raw material availability, operations of manufacturing facilities following possible shutdowns, disruption of imports/exports from ports, availability of workforce during the coming harvest season for example, and a slowdown in the pace at which grocery stores are stocked, leading to supply-demand imbalances and increased price volatility. The lockdown also

significantly impacted informal small businesses and resulted in job losses, including the daily wagers. Combined with an economic slowdown, the income of farmers/consumers were also affected.

Review Of Literature :

Growth of the Organic food industry in India: The organic food industry has seen rapid growth around the world, especially in India. The Organic food market in India in the year 2018 was worth USD 704 million and was estimated to be worth USD 849.5 million in 2020. In 2020-2021, the organic food exported was roughly 1040.95 million. Experts predict by 2024, there will be a roughly 20% CAGR increase reaching 2091 USD million (4). India has 5.2 million hectares of land or about 3% of agricultural land which is used for organic farming.(5) India ranks fifth globally in total area under organic production and counts the highest number of organic farmers on the planet. Forty-four percent of the world's certified organic farmers operate in India.(6) The government has made several efforts to provide and support farmers to produce organic crops through several schemes such as Mission for Integrated Development of Horticulture (MIDH), National Food Security Mission (NFSM), National Mission for Sustainable Agriculture (NMSA), Rashtriya Krishi Vikas Yojana (RKVY) etc.(7)

Peoples concern for food safety and health: Health is a major aspect in the drive for demand for organic food. People do not want to compromise in any manner when it comes to matters relating to their health and children(4)(1). Consumer want safe food which means they want organic food as the farming is stringent with its regulations and standards and restrictive in its use of chemicals on their agricultural lands and pastures.(2)Moreover, food scandals in several nations have compelled people to trust food with certification marks and labels.(4)

Shift in Consumption of food according to one's lifestyle, education and awareness: The upper class generally purchase organic food as they feel it will raise their social status. (4) Organic food has the right to be sold at a premium price due to its safety, taste and nature conservation. Organic food consumers are willing to pay 10% premium for organic food products with an average of 9.5% by women and 11.4% by men. Organic food consumers give less importance to price as compared to the consumers who never purchase organic food earlier. There is strong correlation between increasing consumption of organic food and the level of formal education.(1) Urban consumers are more aware of the influence and importance of good quality food compared to rural consumers. Working professionals buy organic food on regular basis as they believe intake of organic food helps to trim down stress levels and maintain an energetic lifestyle.(2) Individuals with more education and income have more awareness and knowledge of food hazardous to health. However households with graduates were less likely to buy organic produce, while households with children under 18 were more likely to buy organic produce. (1)

Concern, protection and welfare of the environment and animals: The natural ecosystem in India has been severely affected due to irrigation of land for high yielding crops and due to the use of chemicals as well. The groundwater reserves are getting contaminated and getting depleted at an alarming rate. Moreover, these synthetic chemicals also kill a variety of species important to maintain the nature's equilibrium.Overuse of these chemicals has led to eutrophication and ecosystem disruption. Animals grazing in pastures tend to feed on plants which are grown on these contaminated lands, thus posing a threat not only to their lives but also to humans who lie at the end of the food chain. Consumers are also encouraged to buy organic food because of animal welfare concerns.People's sentiments about organic food are more favourable when they are concerned about environmental and animal rights issues.(4) Consumers are willing to pay more for organic foods which is produced without any herbicides, pesticides, chemicals and antibiotics due to their ecological friendly behaviour.(1)

Increase in certification of organic farmers, land and products: The number of certified organic farmers increased in 2021 to 1.19 million. The Indian government is promoting organic agriculture and is trying to develop sustainable organic farming models through technical best practices,quality assurance and institutional cluster-based producer models. The government is also implementing its large area certification program to transform traditional organi areas into certified organic production areas. As a result there has also been an increase in certified and labelled organic production reaching 3.2 million metric tonnes in 2021. Major states such as Madhya Pradesh, Maharashtra Karnataka etc have shown an increase in organic crop production since 2020.(6)

Secondary Data :

Consumption: According to the United States department of agriculture, India is an attractive, emerging market for organic food and beverages. By 2024, market sources put India's market size for domestic organic food and beverages reaching \$138 million, growing at an annual compound growth rate of 13% (2019-2024).India's domestic consumption of organic products however lags, accounting for less than one percent of the global value demand. India's total organic packaged food and beverage consumption in 2020 is \$85 million. It counts with a 2020 market share of over 28 percent. Organic India (14 percent), and Chamong Tea Exports (seven percent) follow as domestic market leaders. The organic retail foods market landscape, however, is fragmented. Thanks to accelerated demand, along with shifting consumer preferences toward organic foods in urban centers, there has been a breakout of smaller companies seeking to increase their market share through competitive pricing.

Indian retail growth significantly declined during the COVID-19 pandemic and related national lockdowns. However, India's mom-and-pop stores (kirana) and e-commerce (hyperlocal food delivery companies) became the mainstays supporting Indian consumers, especially in Tier II and III cities. Organic product supply and distribution throughout the pandemic has remained unfazed despite some temporary disruptions. Sales increased thanks to shifting consumer behavior, with a growing positive perception of organic products. Categories that gained the most included essential foods such as organic eggs, dairy, and fruits and vegetables.

Despite the 2020/2021 COVID-19 national lockdowns, retail sales of organic foods surged from March 2021 onwards. Driving demand for organic products is a growing number of consumers perceiving these products as offering improved immunity, better quality, and increased availability through online/eCommerce channels. 13 Organic teas, condiments, dressings, sauces, and fruit nectars are the most consumed organic packaged food and beverage categories. India's young, highly educated consumers are concerned with chemicals and pesticide residues in food products.

This demographic is spurring demand for organic products. Supermarkets, convenience stores, and hypermarkets such as Future Group, Avenue Supermarts (DMart), Reliance Jio (JioMart), the Aditya Birla Group/More Retail are some of the retail points for this influential group of consumers. Indian high-income consumers are similarly propelling organic food and beverage consumption. High end hotels and restaurants are offering specialized organic menus for patrons. This is leading to the mushrooming of specialty organic stores catering to high-income consumers in Tier-1 cities. Even India's Prime Minister Narendra Modi is known to promote consumption of organically produced foods. Social media channels actively promote organic products. Brand engagements along with product placements on Instagram, Facebook, and others help promote organic product awareness and influence audiences' tastes. However, the price premium associated with organic products hinders lower-income consumer access.

Source: https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=India%20-%20Organic%20Industry%20Market%20Report%20-%202021_New%20Delhi_India_07-31-2021.pdf

Organic Operations In India: In 2021, India had 1.19 million registered certified organic farmers. It has another 1.13 million farmers practicing organic farming methods under the Participatory Guarantee System (PGS India), a locally focused quality assurance system adapted to local markets. However, with USDA/National Organic Program's termination of the mutual recognition agreement with APEDA (2021), a wave of new certifications has ensued. Some 2,100 organic operations are seeking NOP accredited certification.

Source- https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=India%20-%20Organic%20Industry%20Market%20Report%20-%202021_New%20Delhi_India_07-31-2021.pdf

Domestic Organic Program and Policy In India: APEDA's National Program for Organic Production (NPOP) (2002) is the central regulatory system for Indian organic agriculture. It encompasses the National Standards for Organic Production (NSOP), which are based on International Federation of Organic Agriculture Movements (IFOAM) standards. The NPOP includes rules for the accreditation of certification authorities, guidelines for certifying growers, and rules for the use of India's organic label. The Indian government is promoting organic agriculture as part of the Paramparagat Krishi Vikas Yojana (Traditional Agriculture Development Scheme), a part of the National Mission of Sustainable Agriculture. It provides producer guidelines for developing sustainable organic farming models through technical best practices, quality assurance and institutional cluster-based producer models. Under the program, farmers receive \$671.2 per hectare (~INR 50,000/hectare) in financial assistance over three years. About \$416 is provided through inputs including biofertilizers, biopesticides, organic manure, and compost, among others. The government is also implementing its Large Area Certification program to transform "Traditional Organic Areas" into certified organic production hubs. The northeastern states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura are governed by Mission Organic Value Chain Development for the North Eastern Region. At the same time, the government maintains the "India Organic" national seal, used by exporters, processors, and manufacturers. Organic certification is carried out by a third-party inspection agency under the POP's purview (see, NPOP accredited certifiers)

Source- https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=India%20-%20Organic%20Industry%20Market%20Report%20-%202021_New%20Delhi_India_07-31-2021.pdf

Organic Crop Production In India: India's APEDA reports that in MY 2020/2021 organic crop production reached 3.2 million metric tons (MMT), up 36 percent compared to MY 2019/2020.7 Oilseeds, fiber crops (cotton), sugar, cereals, and millet are the major organic crops being produced in India.

Source- https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=India%20-%20Organic%20Industry%20Market%20Report%20-%202021_New%20Delhi_India_07-31-2021.pdf

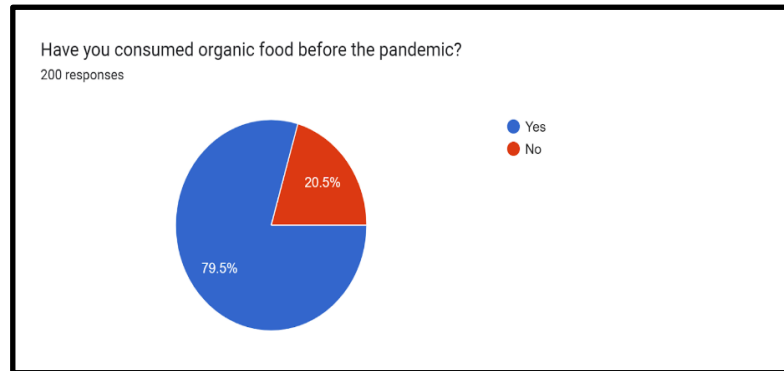
Exports of Organic Products to India: Organic food exports to India under bilateral or multilateral agreements based on the equivalence of organic standards between NPOP and exporting countries shall not be required to recertify on import. All organic food consignments should be accompanied by a Transaction Certification issued by an accredited certification body covered under the terms of equivalence agreement. Since July 1, 2018, food business operators in India are required to follow the Food Safety and Standards (Organic Foods) Regulations, 2017, which mandates the use of the Food Safety and Standards Authority of India (FSSAI) organic logo on the primary label of all certified organic products entering India.

In 2020, the United States exported an estimated \$1.85 million in organic products to India, a decline of 42 percent since 2018. Reasons behind this decline include ambiguous regulatory policies and overlapping import requirements between APEDA and the Food Safety and Standards Authority of India. While the overall value is small, there remains significant growth potential in the next four years, absent market access challenges. U.S. exporters of organic products find a limited, but dedicated, and rapidly growing consumer segment that remains interested in U.S. organic food categories including flours and grains, apples, and vinegars/apple cider vinegar, and pears.

Source- https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=India%20-%20Organic%20Industry%20Market%20Report%20-%202021_New%20Delhi_India_07-31-2021.pdf

Primary Data Analysis and Data Interpretation :

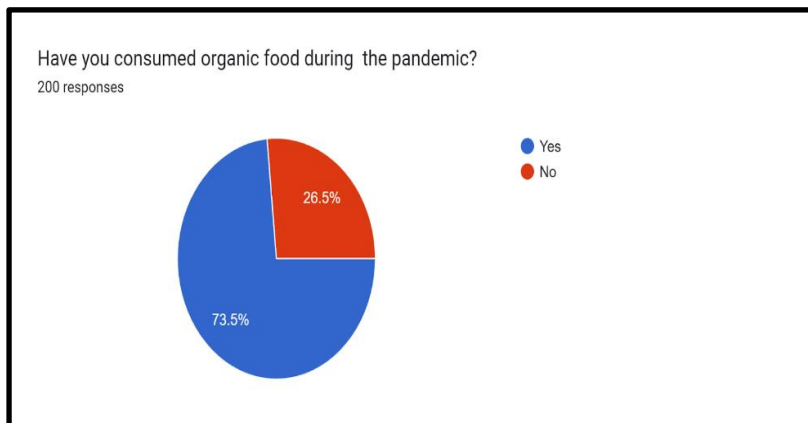
1)



Analysis- According to the above pie chart, 20.5% of the respondents did not consume organic food whereas, 79.5% of the respondents consumed organic food before the pandemic in South Mumbai.

Interpretation- As we can see in the above pie chart, 79.5% did consume organic food before the pandemic began. This indicates that people were aware of its benefits and consumed it for several reasons such as health, nutrition, taste etc.

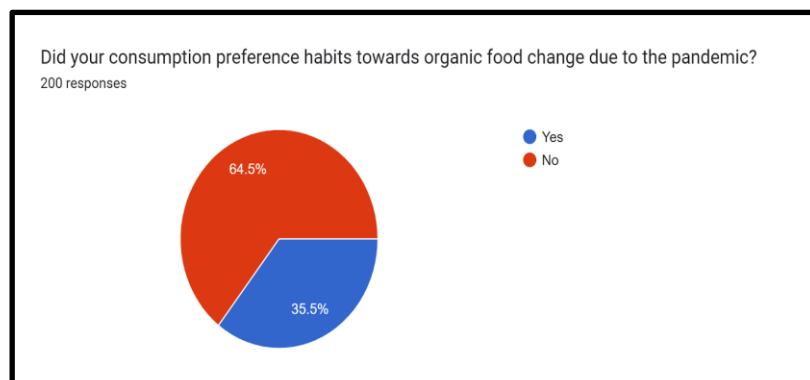
2)



Analysis- According to the above pie chart, 26.5% of the respondents did not consume organic food whereas, 73.5% of the respondents consumed organic food during the pandemic in South Mumbai.

Interpretation- In the above pie chart, we see that 73.5% consumed organic food during the pandemic. In comparison to the previous pie chart, there's a reduction of 6%. This means that people did consume organic food during the pandemic but there were several reasons as to why there was a reduction in consumption. These reasons could include lack of availability during the pandemic due to supply chain and logistic disruptions that not just affected the food industry but several other sectors of the economy. Another reason could be the price. Organic food is priced slightly higher than its chemically produced counterpart. Layoffs and unemployment reduced individual's disposable income, which in turn compelled people to purchase as per their needs and not want. So although people would have probably wanted to consume and purchase organic food due to its benefits, they could not due to various circumstances. On the other hand, we still see a majority who did consume organic food during the pandemic which means that irrespective of their situation, they still prioritised the importance of health and still purchased organic food.

3)

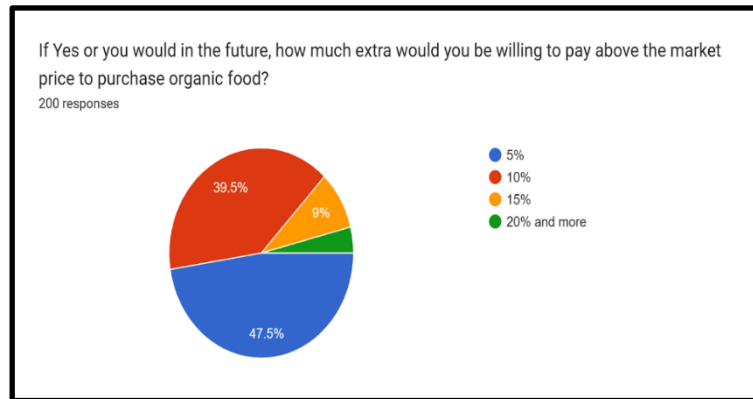


Analysis- According to the above pie chart, 35.5% of the respondents' consumption preference habits towards organic food changed due to the pandemic whereas 64.5% had no change in their consumption preference habits.

Interpretation- The above pie chart indicates that the majority of the responses state no change in their consumption preference habits during the pandemic. There are two outcomes to this. The first being people did consume organic food before the pandemic and continued consuming in the same proportion and quantity as before the pandemic. The second being they never did consume organic food and continued to do so during the pandemic as well.

The minor segment of the pie chart which states that there was a change in consumption preference habits also indicates two things. The first being there was no consumption of organic food before the pandemic, but people started consuming it due to a rise in health awareness and immunity strengthening. The second being people consumed organic food in smaller proportions and quantity, but due to the covid wave spreading rapidly across the globe, people started consuming more in terms of quantity and proportion.

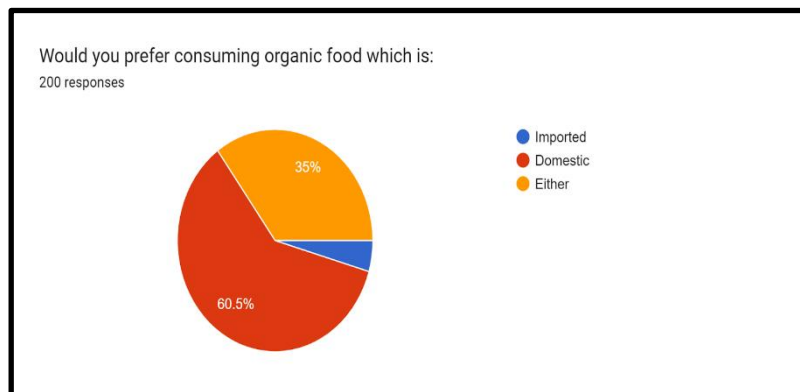
4)



Analysis- The above pie chart depicts the premium an individual is willing to pay over and above the market price to purchase organic food. 47.5% are willing to pay only 5%, 39.5% are willing to pay 10%, 9% of the respondents are willing to pay 15% and only 4% are willing to pay a premium of 20% or more.

Interpretation- As we already know, organic food is priced higher than chemically produced agriculture. Hence, we see that the majority of the people are willing to pay only a 5% premium over and above the market price. There is an inverse relation between the number of responses and the premium price. As the premium price increases, fewer people are willing to pay that much and vice versa.

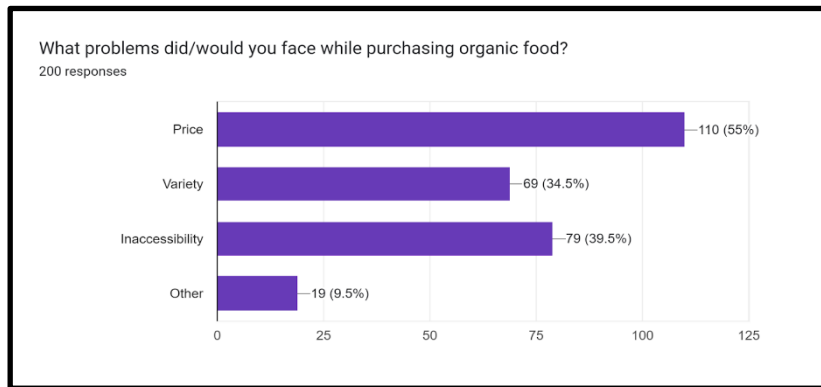
5)



Analysis- The above pie chart indicates the preferred production location from where people would purchase organic food. 60.5% prefer consuming organic food which is domestic, 35% prefer consuming organic food which is either domestic or imported and a small percentage of consumers prefer consuming organic food which is only imported.

Interpretation- We see that a majority of the responders prefer consuming organic food which is domestically produced because it's much cheaper than imported organic food. For example, an imported avocado may cost around Rs.400-450 whereas an avocado grown in India may cost around Rs.250-300. Another reason could be that consumers are trying to promote Indian grown products and wish to help the country become self-reliant. Consumers may prefer organic food which is imported because they believe it may be of better quality and more nutritious. Another reason could be due to status. As mentioned in my secondary data, consumption of organic food is also seen as a status symbol, thus people believe that buying imported items increases their status symbol.

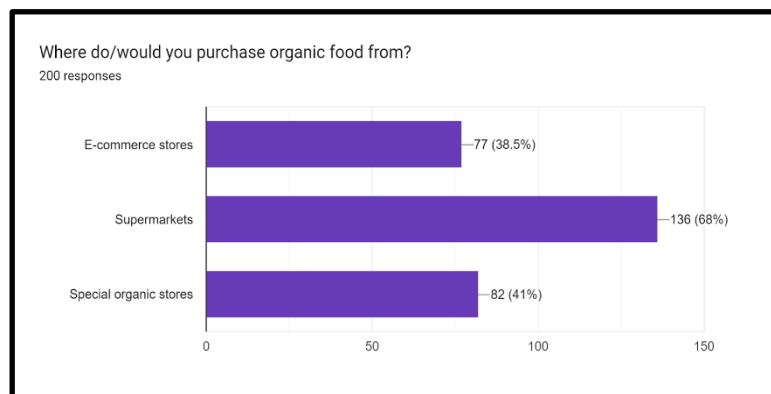
6)



Analysis- This bar graph indicates the problems an individual would or had faced while purchasing organic food. 55% responded with price being a major factor, followed by inaccessibility at 39.5% and variety at 34.5%.

Interpretation- The main problem as to why individuals would not purchase organic food is because of its price. For example, an imported avocado may cost around Rs.400-450 and an avocado grown in India may cost around Rs.250-300. Moreover the reason why it is priced so high is due to the fact that it is much more healthier and nutritious compared to its chemically produced counterpart. Packaging to increase shelf life also increases costs. In addition to the fact that growing organic food takes much more time and effort, there are also fewer farmlands allocated and used for its production. As a result, many farmers in India may not produce all kinds of crops. Thus, considering the impact of covid and the climate on agriculture, many consumers did not have access to a variety of products. Many products which the consumers would or probably would prefer might have or might suffer a shortage, thus making several products inaccessible to consumers.

7)



Analysis- The above bar graph indicates that 68% would prefer purchasing organic food from supermarkets, followed by special organic stores and e-commerce stores at 41% and 38.5%.

Interpretation- The maximum number of consumers would prefer shopping at supermarkets because it's the most convenient place to purchase a variety of products. People have been used to going to supermarkets for decades and wish to stick to this tradition while making purchases. Moreover, supermarkets like nature's basket have a reputation for product authenticity and quality. Whenever an individual goes shopping, they would definitely prefer saving their time, energy and money at once place with all products available.

Consumers might prefer purchasing organic food from special organic stores as well. These kind of people may be more interested in knowing about these products and might be looking for more variety in organic food products. They will also get authentic organic food from such stores. Moreover, they might only visit famous organic stores such as organic India. We can also say that the majority of the consumers visiting these stores belong to the rich class because the products in these stores are costly.

Lastly, purchasing organic food from e-commerce stores is on the rise. During the pandemic, there was a rise in purchases from e-commerce stores. The misconception of products being inauthentic and of poor quality is slowly fading and people are relying more and more on online stores for their shopping because it saves a lot of time and energy and you get many discounts on products sold online.

Chi Square Analysis :

Problem statement: On the basis of the above data, can it be concluded that there is a significant rise in the consumption of organic food due to the Covid-19 pandemic.

Hypothesis:

H_0 : The COVID-19 pandemic has not had a significant impact on the consumption of organic food.

H₁: The COVID-19 pandemic has had an impact on the consumption of organic food.

Hypothesis Testing (Chi-Square Method)

	Consumption of organic food before the pandemic	Consumption of organic food during the pandemic	Total
Yes	159	147	306
No	41	53	94
Total	200	200	400

	Consumption of organic food before the pandemic	E	Consumption of organic food during the pandemic	E	Total
Yes	159	153	147	153	306
No	41	47	53	47	94
Total	200		200		400

$$X^2 = \sum (O - E)^2 / E \quad \text{when, } E = RT \times CT / N$$

$$E_{11} = RT \times CT / N = (306 \times 200) / 400 = 153$$

$$E_{12} = RT \times CT / N = (306 \times 200) / 400 = 153$$

$$E_{21} = RT \times CT / N = (94 \times 200) / 400 = 47$$

$$E_{22} = RT \times CT / N = (94 \times 200) / 400 = 47$$

Calculation of X²:

O	E	(O-E)	(O-E) ²	(O-E) ² /E
159	153	6	36	0.235
41	47	-6	36	0.765
147	153	-6	36	0.235
53	47	6	36	<u>0.765</u>
				2.0

Calculated value is **2.0**

Level of Confidence= 95%

Level of Significance= 5%

Degree of Freedom = (C-1) (R-1)

$$(2-1) (2-1)$$

$$= 1$$

At 1 degree of freedom and 0.05 level of significance, the tabulated chi-square log value is **3.84**.

Comparison of the values

Calculated value	<	Tabulated Value
2.0		3.84

Since the Tabulated value is higher than the calculated value, we pass and accept the Hypothesis null.

Thus, the COVID-19 pandemic has not had a significant impact on the consumption of organic food.

Conclusion :

- The Indian organic market is still at a growing stage and there is a lot of scope and demand for organic food.
- One of the major reasons for demand in organic food is due to health awareness and rise in education levels.
- Additionally, this demand and growth is attributed to increased consumer attention on healthy eating due to the pandemic, new consumer-oriented products, wider availability across cities, and the new brands selling organic products.
- A growing emphasis on healthy and immunity building foods will continue to drive demand for imported organic food and beverage products, led by categories like organic teas, juices and apple cider vinegar. Organic dairy products and fruits and vegetables maintain the highest growth potential in the Indian market.
- The majority of the Indian population, nearly 60%, is involved in agriculture. The government is steadily increasing their financial support and providing organic certification to farmers all over the country in order to encourage and develop organic farming in India and be more self-reliant. Certification and labeling of organic food will not only gain consumer trust but will also increase consumption, thus leading to a rise in sales and revenue in the economy.
- We also see that people are willing to pay a premium for organic food due to the fact that it takes time to grow and the packaging is costly as well, hence they are priced at a higher rate. As concluded in my secondary research, people also consume organic food as it is regarded as a status symbol. Thus, majority of the consumers purchasing organic food belong to the upper middle and elite class of the society. As a result, they have the capacity of buying food which is costlier.
- According to my primary research, there was no impact of Covid-19 on the consumption of Organic food. In fact, there was a decline in the percentage consumed during the pandemic compared to before the pandemic. There are several reasons to support this hypothesis.
- The foremost reason being price. The average Indian salary is around Rs.30,000. Many people lost their jobs during the pandemic and are still struggling to get back on their feet. They had to purchase goods according to their needs and not want and thus resorted to purchasing inorganic products as well. There was a fall in consumption and lack of demand among this section of the society and they may prefer food in whatever form available and at a lower cost. Everyone suffered during the pandemic and even the rich might have reduced their expenditure on organic food in order to survive through the pandemic and face any unforeseen circumstances. Therefore, although there was consumption of organic food to protect one's health and build their immunity, it was much more before the pandemic.
- The second reason is variety and inaccessibility. The major preferences of organic food were vegetables and fruits. Every sector and region of the world was affected due to the pandemic. Even in a metropolitan like South Mumbai, especially in the mid stage of the pandemic, there were shortages of supplies and several goods. Thus, although people would have wanted to purchase organic food, the disruptions in logistics and supply would have reduced accessibility to consumers.
- The last reason could be trust factor and authenticity. Many people lost their jobs and were willing to make a quick buck by any means possible. There were a lot of counterfeit products too sold during the pandemic. Humans are very concerned with what they eat, considering the spread of the virus. Hence, they would have decided to stick to their local and trusted vendors for supplies.
- Thus, we see that Covid-19 did not have an impact on the consumption of organic food in South Mumbai. This small sample could also be used to determine the consumption in other parts of the country considering the fact that Mumbai is the commercial capital of India with people of diverse cultures and income.
- In today's time, with everything getting back to normal and with people moving on with their day to day lives, we are hopeful to see a change in their consumption habits. Eventually, with the decrease in agricultural practices of using chemicals and contaminating the environment, with people earning and the economy growing, with the government providing more financial aid and land to farmers, the prices of organic food will be standardised for the benefits of the consumers and producers thus leading to an increase in organic agricultural practices and utilization.

Recommendations :

- The market for organic food is growing in India. There are several ways to meet the demands of such a large population and also export products at the same time.
- The main reason for people not consuming organic food is due to its high costs. Organic food costs way more because it follows its natural growth process compared to chemically grown food which grows at a much faster rate due to chemicals added to it. This is done in order to meet demands and also earn a quick profit at the expense of human health. Hence the government should encourage more natural farming.
- Many farmers can just go to a chemical store and purchase a whole lot of chemicals without realising the amount they have used and do not have any proper knowledge of the chemicals they used. It will take time to completely switch to pure organic farms, but in the meantime the government should implement stricter regulations and guidelines regarding the purchase and sale of chemicals and should carry out routine checks in these farms.
- The government should also increase the number of locations to set up farmers markets where people from different regions and cultures can meet and share their knowledge, products and expertise with each other.
- Although the government has increased the proportion of the budget allocated to agriculture, they should ensure that they follow it and provide farmers with more tools and resources which will increase their efficiency and productivity in the long run.
- Organic certification courses take nearly three years to complete. The government should reduce the time period and make it easier. Farmers won't spend much time studying and hence they should introduce a very brief and concise course in simple words.
- Moreover, they should also start introducing courses and subjects to youngsters from their schooling age as it will provide them with immense knowledge about the benefits and process of producing organic food.

- The packing costs of these foods are extremely high in order to maintain the shelf life of the product. The customers have to bear the burden of these costs. Hence, the government should come up with alternatives to this as well.
- Lastly, there should be a drastic reduction in the number of agricultural lands converted to non-agricultural lands. Soil is fertile only in certain regions and hence the city planning committee should plan urbanisation accordingly. In addition to this, every household should try growing their own produce either in their balconies, terraces or societies. This will help reduce the pressure on farmers and also save costs.

REFERENCES :

1. <https://sciresol.s3.us-east-2.amazonaws.com/IJST/Articles/2015/Issue-33/Article10.pdf>
2. https://www.cibgp.com/article_9382_8532ea65da07846508562baf7bad25c0.pdf
3. <https://www.semanticscholar.org/paper/Market-Opportunities-and-Challenges-for-Indian-Garibay-Jyoti/615f43d0406eeaea6b27ed3b0c8d3de6a41fd6d1#paper-header>
4. <https://www.allresearchjournal.com/archives/2022/vol8issue6/PartH/8-7-17-440.pdf>
5. https://www.researchgate.net/publication/311545956_GROWTH_OF_ORGANIC_FOOD_INDUSTRY_IN_INDIA
6. https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=India%20-%20Organic%20Industry%20Market%20Report%20-%202021_New%20Delhi_India_07-31-2021.pdf
7. <https://www.imarcgroup.com/indian-organic-food-market>
8. <https://www.healthline.com/nutrition/what-is-organic-food>