



# THE IMPACT OF COVID 19 PANDEMIC ON INDIAN ORGANIC FOODS INDUSTRY AND BUYING BEHAVIOUR OF ORGANIC FOODS CONSUMERS: GEOGRAPHICALLY IN BHUBANESWAR CITY, ODISHA

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## ABSTRACT

*The Organic food industry has high market potentials and in few areas, the company has to focus i.e. Awareness, Pricing, and Availability. All these affect the consumers' behavior. And with time the preference of the consumer changes therefore, this study is conducted to find the current scenario of consumers' behavior toward organic foods especially during this Covid 19 pandemic in Bhubaneswar City. This study will find the Awareness Level in the consumers of the Bhubaneswar City towards organic foods and Relationship between Awareness and Purchasing decision. This study will also help to know whether there is an increase in the willingness of organic foods due to Covid 19 and impact of it on the purchase decision. And association of willingness with demographic factors through Chi-square. With the Rating Scale the motivators and barriers are found for Organic foods. All these analyses are done through 200 Non-probability samples.*

**KEYWORDS:** Organic foods, Bhubaneswar City, Consumers behavior, Covid 19, Awareness, Willingness to Purchase

## 1. INTRODUCTION

Until the British ruled India, Organic Farming was being used for thousands of years. But at that time "Organic" word hasn't come, it was termed as "Traditional Farming". Farmers used to do farming in traditional ways like using natural fertilizers and pesticides (non-toxic). However, the increase in population and various natural disasters had left India with a scarcity of food. Due to which India started importing foods from other countries which require a lot of costs. And this created the urge for the production of foods within the country. Therefore, the government around the 1960s came up with the initiative of the "Green Revolution" or the "Third Agricultural Revolution" for increasing the production by adopting various modern methods such as Higher Yielding Variety Seeds (HYV), Irrigation, Tractors, Land Reforms, Supply of credit, and Use of advanced machineries. Because of which in the 1990s India was able to reduce imports and had surplus food grains and became an exporter of it.

However, Green Revolution had only a Short-run positive effect but in long run, it has numerous detrimental effects on the environment, as well as humans and other species. Such as:

- i. Because of the increased usage of chemical fertilizers, soil fertility has decreased.
- ii. Groundwater is getting polluted
- iii. Loss of genetic diversity
- iv. Farmers are exploited by money lenders due to an increase in cost
- v. Health problems due to consuming chemicals and pesticides

Therefore, due to above the problems both farmers and consumers have started shifting to Organic Farming and Foods respectively.

### 1.1. Organic Farming and Organic Foods in India

**Organic Farming** is the farming which involves cultivation in natural ways like Crop rotation (protects soil from soil depletion), Cover cropping (to tackle soil erosion), Green manures (which add organic matter and



nitrogen to the soil), etc.

According to FSSAI Organic Foods means *“Organic foods are products of holistic agricultural practices focusing on bio-diversity, soil health, chemical free inputs etc. with an environmentally and socially responsible approach that have been produced in accordance with organic production standards.”*

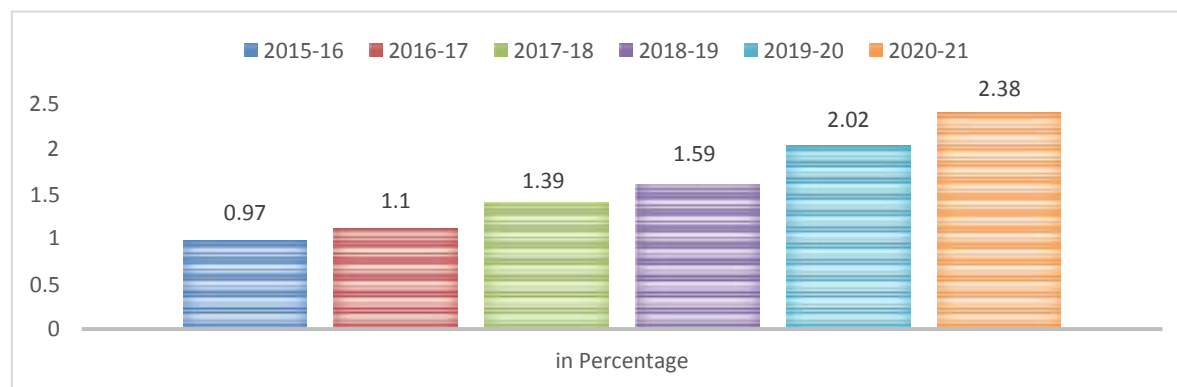
In Other words, Organic foods are the products that are produced by various methods of organic farming i.e., producing without any artificial fertilizers. Now-a-days the demand for Organic foods is increasing due to the increase in population, improved purchasing power, and also the majority of the population finds Organic foods to be Healthier than Conventional foods especially during this COVID 19 pandemic.

The following are some of the advantages of consuming organic foods: -

- (i) **Overall, Health Benefit-** Organic foods are high in nutrients, include antioxidants, and contain more vitamins and minerals, all of which serve to boost the immune system and improve the human body's health.
- (ii) **Free from pesticides and chemicals-** Organic foods do contain pesticides and homicides but in the natural form which causes no harm to the body, unlike conventional foods which contain various artificial pesticides and chemicals which act as poison for the human body.
- (iii) **Often found Fresh-** Sometimes Organic foods are produced near to the market where it is sold and also organic foods don't contain any preservatives to last long. Therefore, it is found Fresher.
- (iv) **Environmentally friendly-** Organic foods are produced using organic farming methods. Due to which there is an increase in soil fertility, reduction in soil erosion, decrease in water and soil pollution, and use of fewer environmental resources.

In addition, the Net Area Covered by organic farming grows year after year. The drastic increase in farmland from FY 2018-19 to FY 2019-20 is due to various government initiatives, schemes, and subsidies (Figure 1.).

**Figure 1. Net Area Under Organic Farming**



Source: Sustainable Development Goals: Progress Report 2021

India produces a large number of organic crops, which benefits the domestic market while also encouraging exports. In the market year 2020-21, India exported \$1.04 billion in organic products. Organic agriculture's meteoric rise has been supported by Indian government programmes encouraging organic production. India's rural northeast region is rapidly generating organic products for export, thanks to improved market ties between growers and agribusinesses, more organized retail, and e-Commerce.

## 1.2. Government Initiatives

As there are various benefits in production and consumption of Organic foods, the Government has come up with policies to increase and support Organic farming Such as **Paramparagat Krishi Vikas Yojana** (To promote Sustainable Integrated Organic farming System), **Mission Organic Value Chain Development for North Eastern Region** (To support the development of entire value chain in the northeastern region), **Capital Investment Subsidy Scheme under Soil Health Management Scheme** (100% support to govt. entities for establishment of mechanized fruits and veg. market wastes, and 33% support to private entities), **National Mission on Oilseeds**



**and Oil palm** (Financial support of 50% subsidy at the rate of Rs 300 per hectare), **National Food Security Mission** (Financial assistance for the promotion of bio-fertilizers of cost Rs 300 per hectare)

Organic food products are certified under NPOP (National Programme for Organic Production) or PGS (Participatory Guarantee Systems). And Official Government Website for Organic Food Products is <https://jaivikbharat.fssai.gov.in/>

According to the 2020 data, India stood in the 8<sup>th</sup> Rank in terms of the World's Organic Agricultural Land and 1<sup>st</sup> in terms of Total numbers of producers (FIBL & IFOAM Year Book, 2020).

As per the Latest data presented by **APEDA** (Agricultural & Processed Food Products Exports Development Authority) the Area, Production, Exports of Organic foods are given in following table: -

**Table 1**

Year (2019-20)	Area	Production	Exports
	3.36 million hectares	2.75 million MT	6.389 lakh MT

The health issue has brought the concept of healthy living to the forefront, and people have never been more focused on natural food choices. Fitness programmes, health supplements, and organic food have all seen a spike in demand as a result of this trend. Even though conventionally produced foods continue to dominate the market, the trend is shifting to include more organic products. This pandemic has made new-generation consumers more aware of what they consume. Therefore, this study is conducted and several literatures have been reviewed in order to understand the current and future scenario of the organic food products market and consumers perception towards it, which are listed in the following section of the paper, Review of Literatures.

## 2. REVIEW OF LITERATURE

**Dr. N. Savithri & B. Lavanya (2019)** in their study "Organic food products: A study on perception of Indian consumers" found that the Consumers' overall preferences or factors to purchase for organic food products are Taste and Chemical Free. **V. Manaloor, S. Islam & D. Srivastava (2016)** in their study "Growth of Organic Food Industry in India" has found that the Partnership between the government and private retailers will lead to benefits for both the parties including farmers. Farmers will get access to better markets and get high premiums. Retailers will get access to a larger variety and quantity of organic foods increasing their profits. **S. Kalra, Dr. S. Dixit, & Dr. B. W. Lyall (2020)** In her study "Impact of Consumer Perception on Demand for Organic Food Products in India," she finds that customers' personal attributes have a significant impact on their consumption patterns. Furthermore, the bulk of organic food customers are well-educated and well-off. The main stumbling block is the cost of the products. **Roshny Munshi (2020)** in her study "A Study on the Organic Food Industry: Consumer Perception concludes that the major factor for organic food consumers is feeling the need of consuming nutritious food and there is a lack of awareness about the differentiation between organic and conventional products. **Dr. Anuj Mangain (2019)** "Status, importance, prospects, and vision of organic farming in India" is his study which identifies that there is a scope for the organic food industry due to increase in demand in developed countries and policies adopted by the government of organic farming in India. This would strengthen the Indian economy and Health standards. **A. Chattopadhyay & P. Khanzode (2019)** in their study they have targeted Bengaluru city specifically and identifies that Consumers irrespective of age, income and education have enough knowledge about organic foods. But there is still a lack of awareness in some portion of the population. **Roshny Munshi et.al (2020)** studied the Western Mumbai's Customers perception towards organic food products. They found huge demand for organic food products but there is lack of awareness and faith for the organic products which increased the gap. They also recommended the organic marketers to have two market segments I.e., one for existing customers and other for potential customers. **Silvia Cachero-Martinez (2020)** discovered that among behavioural variables, contentment had the largest influence on purchase and WOM intentions. The author also looked at the association between organic product attitudes, satisfaction, trust, purchase, and WOM intents. **Leila Hamzaoui-Essoussi & Mehdi Zahaf (2015)** "The organic Food Market: Opportunities and Challenges", is their study conclude that there are challenges from both the side of demand and supply. True organic food consumers, sporadic organic food consumers, and inexperienced organic food consumers were discovered.

### 2.1. Research Gap

Several Research Scholars explored the evolution of the organic food industry as well as varied consumer perceptions of organic food consumption. Some of the research has been done depending on geographical area, but no research has been done on this in the state of Odisha. As a result, this study is being done to fill in the gaps mentioned above and provide useful findings for the organic food companies and Government.



### 3. OBJECTIVES OF THE STUDY

1. To examine the growth of the organic food market in India during the pandemic and future potential.
2. To Analyze the Buying behavior of consumers towards organic foods.
3. To Determine the relationship between consumer awareness of organic foods and their purchasing decisions.
4. To Determine whether the Covid 19 pandemic has increased consumer willingness to use organic foods.

### 4. HYPOTHESES OF THE STUDY

**H1:** Purchasing Decision of the Consumers for organic food products is Correlated with the Level of Awareness about organic foods.

**H2:** Covid 19 Pandemic has influenced the Willingness among the consumers towards organic foods.

**H3:** Willingness to consume organic foods among consumers due to Covid 19 associated with demographic factors of consumers.

### 5. RESEARCH METHODOLOGY

#### 5.1. Data

Descriptive Research Design is used to achieve the study's goals. This study considers both primary and secondary data. Due to the state's lockdown restrictions, primary data is obtained by creating a Structured Questionnaire with Google Forms and distributed it to the residents of Bhubaneswar city via various internet platforms. A total of 200 replies were received. The collection of primary data took place between October 2021 and December 2021. Secondary data is gathered to examine the growth of organic foods and market potential of the Industry from several government websites and reports released by Authenticated Organizations.

#### 5.2. Statistical Tools and Techniques Used:

Microsoft Excel for Calculations, Graphs, and Charts

SPSS Software for Computing various Test

Mean, SD, Percentage

Chi-square test

Likert Scale Analysis

Regression Analysis

### 6. DATA ANALYSIS

#### 6.1. Growth of Organic foods and Market opportunities for the industry

Despite the COVID-19 pandemic in MY 2020-21, India's organic agriculture, food, and retail industries are booming. Organic food consumption in the United States has risen over time, owing to a growing desire for nutritious, immunity-boosting meals. Organic crop production in MY 2020-21 reached 3.2 million metric tonnes (MMT), up from 36% in MY 2019-20, according to India's APEDA. Oilseeds, fibre crops, sugar, cereals, and millet are among the most important organic crops farmed in India (**Table 3**).

However, problems with India's organic legal structure and an increase in fraud cases continue to damage the organic sector's legitimacy and exports. Organic packaged food consumption is growing YOY, as shown in **Table 2**. And although the CAGR for 2016-19 is 18 percent, the CAGR for 2020-22 is 13 percent. The breakout of the Covid 19 Pandemic, which resulted in lockdowns, limitations, and other measures, has caused a drop in CAGR. Mom-and-pop shops and e-commerce became more popular among Indian consumers during the Covid Period.

Despite the constraints and disruptions in the supply chain, there has been a rising change in demand for organic foods as a result of a growing positive impression of organic foods as providing greater immunity, better quality, and increased availability through online/eCommerce channels. The most popular organic packaged food and beverage categories include organic teas, condiments, dressings, sauces, and fruit nectars. And this points to organic foods' good growth and future market potential. To capture the market, corporations must devise a variety of marketing and pricing methods (as customers perceive the price to be too expensive to acquire).

Table 2. Organic products consumption in India.

India: Organic Packaged Food and Beverage Consumption (\$ million)								CAGR* (16-19) %	CAGR (20-22) %
Category	2016	2017	2018	2019	2020	2021	2022		
Organic beverages**	38	44	53	63	71	81	92	18%	14%
Organic packaged food consumption	8	9	11	13	14	15	17	18%	9%
<b>Total Combined Organic packaged food and beverages</b>	<b>45</b>	<b>54</b>	<b>64</b>	<b>75</b>	<b>85</b>	<b>96</b>	<b>108</b>	<b>18%</b>	<b>13%</b>

Notes: (\*) Compounded Annual Growth Rate. CY 2021 is estimated, 2022 is forecast (out year). (\*\*) Packaged foods and beverages that have been certified organic by an accredited certifying authority fall under this category. This category does not include fresh food products or specific ingredients.

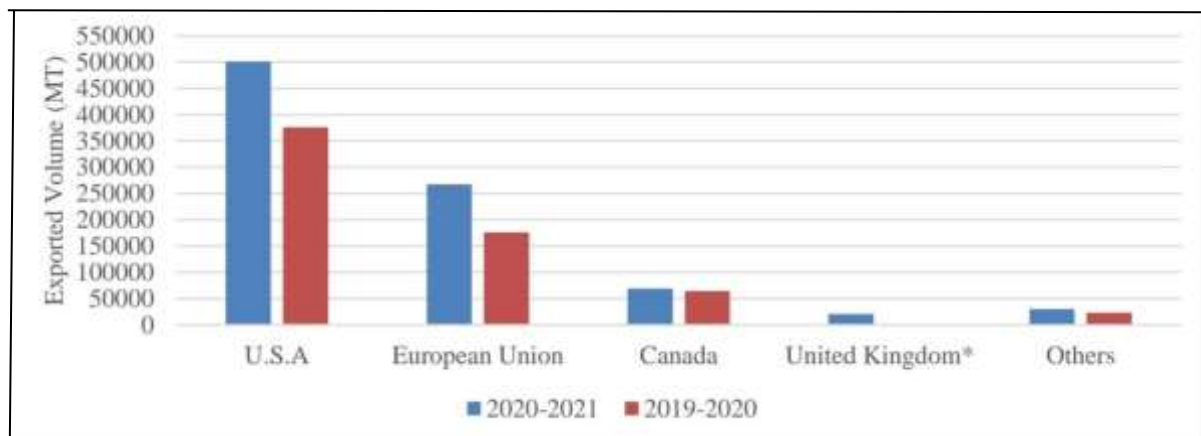
Source: Global Organic Trade Guide

Table 3. Organic Crop Production

Category	2020/2021	
	Volume (MT)	Value (\$ million)
Processed Foods	409,424	360
Oilseeds	33,688	41
Cereals and Millets	22,906	32
Sugar	14,646	10
Pulses	6,497	14
Spices and Condiments	6,122	33
Medicinal Plant Products	1,887	29
Dry Fruits	1,519	15
Tea	1,319	9
Coffee	1,162	4
Tuber Products	825	2
Essential oils	113	5
Flowers	175	2
Others	651	3
<b>Total</b>	<b>500,936</b>	<b>558</b>

(Source: APED)

Fig.2. India's Top Exporting Country of Organic Foods Product



(Source: APED)



The value of India's organic food exports surged by 39% to \$1.04 billion. India's main export markets are the United States, the European Union, and Canada. India's organic product exports to the US have already increased by 33% this year, while exports to the EU have increased by 52%, and exports to Canada have increased by 7%. (Fig. 2.)

Increased consumer attention to healthy consumption as a result of the pandemic, new consumer-oriented products, wider availability across cities, and new brands selling organic products are all contributing to the organic food market's growth. The Participatory Guarantee System has allowed numerous smaller enterprises to enter the market in recent years, enhancing price competitiveness. Imported organic food and beverage demand will continue to be driven by a growing emphasis on healthy and immunity-building foods, with organic teas, juices, and apple cider vinegar leading the way. Organic dairy products and fruits and vegetables have the most potential for growth in India.

Despite the government's aim toward "self-reliance," several barriers persist for foreign enterprises exporting to India, particularly for organic food and beverage items. Despite the market's size and growth potential, exporters and investors in India's organic sector may continue to encounter opaque and often unpredictable regulatory difficulties.

## 6.2. Respondents Profile

In this study, 200 responses were collected for analyzing the consumers behavior regarding Organic foods and the demography of the respondents are segregated based on Gender, Age, Occupation, Education, and Income (Table 4.).

**Table 4. Demography of the Respondents**

Demography		Frequency	Percent
<b>Gender</b>	Male	110	55
	Female	90	45
	<b>Total</b>	<b>200</b>	<b>100</b>
<b>Age</b>	21-30 yrs.	162	81
	31-40 yrs.	24	12
	Above 40 yrs.	14	7
	<b>Total</b>	<b>200</b>	<b>100</b>
<b>Occupation</b>	Dependent	53	26.5
	Private Sector	82	41
	Self-employed	45	22.5
	Public Sector (Govt.)	20	10
	<b>Total</b>	<b>200</b>	<b>100</b>
<b>Education</b>	12th Grade/Diploma or less	16	8
	Graduation or Equivalent	77	38.5
	Post-Graduation or Equivalent	90	45
	M.Phil./PhD	17	8.5
	<b>Total</b>	<b>200</b>	<b>100</b>
<b>Income</b>	No Income	51	25.5
	Less than 6 lac rupees	88	44
	6 lac - 12 lac rupees	49	24.5
	More than 12 lac rupees - 24 lac rupees	9	4.5
	More than 24 lac rupees	3	1.5
	<b>Total</b>	<b>200</b>	<b>100</b>



And to examine the Normal Distribution of the responses collected, population descriptive test is conducted through SPSS Software. In this test, the data is examined to check whether it is Normally Distributed or not. The Normal Distribution, also known as the Gaussian distribution, is a symmetric probability distribution centered on the mean, indicating that data close to the mean occur more frequently than data far from it. To check the normality of the data, the value of skewness and kurtosis is considered (Table 5.). The Standard Value or the Normal Curve Value of Skewness and Kurtosis is 0 and 3 respectively.

**Table 5: Population Descriptive Test**

		Statistics				
		Gender	Age	Occupation	Education (Highest Degree)	Income
N	Valid	200	200	200	200	200
	Missing	0	0	0	0	0
Std. Deviation		.499	.578	.932	.762	.896
Variance		.249	.334	.869	.581	.803
Skewness		.203	2.120	.428	-.102	.639
Std. Error of Skewness		.172	.172	.172	.172	.172
Kurtosis		-1.979	3.278	-.660	-.321	.378
Std. Error of Kurtosis		.342	.342	.342	.342	.342

The Skewness of the demographic factors are positive except Education qualification (negatively skewed) which indicates that more values are concentrated on the right side of the distribution graph (but, its value is very less i.e., -0.102). And the most skewed demographic factor is Age i.e., 2.120 as the majority of the respondents are in between the age of 18-30 years. The data collected for the study can be considered as Normal as the acceptable range of skewness can be -1.5 to +1.5, here except Age demographic factor all others are Normally Distributed.

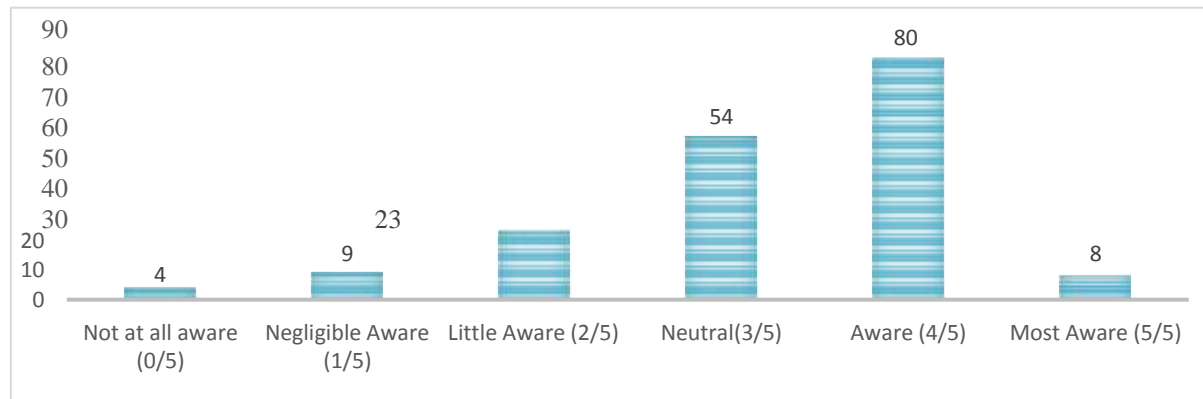
### 6.3. Relationship between Level of Awareness and Purchasing Decision of the Consumers.

Out of 200 respondents, 178 respondents considered themselves to be aware of organic foods. And Remaining 22 Respondents are to be not Aware. To check the reality whether 178 respondents are actually aware or not, so they were asked 5 questions regarding Organic foods in the format of 'True' and 'False' questions such as, *i) Organic Food Products are Healthy and contain various Nutritious, ii) Organic Foods are only used by Rich people, iii) Organic Foods are just Marketing Manipulation, iv) Organic Foods are free from Artificial Pesticides and herbicides (Chemicals) and v) "Organic Foods" are same as "Natural Foods"* and Scores were computed out of 5 points and the remarks assigned based on scores are Not at all Aware, Negligible Aware, Little Aware, Neutral, Aware, and Most Aware (Table 6.).

**Table 6. Scores and Remarks for Level of Awareness**

Scores	0/5	1/5	2/5	3/5	4/5	5/5
Remarks	Not at all aware	Negligible Aware	Little Aware	Neutral	Aware	Most Aware

**Figure 3: Scores Obtained by the Respondents**



Out of 178 respondents, Majority of them i.e., 80 of them were Aware of Organic Foods. This depicts that the awareness level in the consumers regarding organic foods is 50% against 50% of respondents of being Unaware. And the major role played to make aware about organic foods product is Social Media (60%), followed by from Families and Friends(55%) (as per the data collected from respondents).

Now, whether the level of awareness has influenced the respondents to purchase the Organic Foods and to establish the relationship between level of awareness with the purchase decision, a Regression Analysis is conducted.

**Table 7. Relationship Between Awareness and Purchasing Decision**

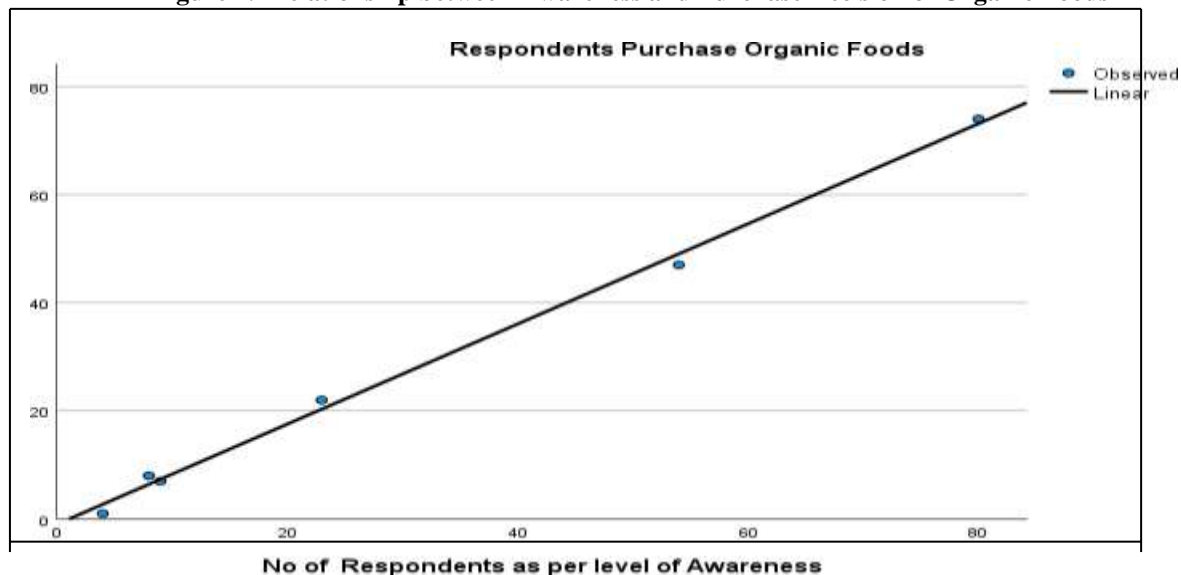
Level of Awareness	No of Respondents as per level of Awareness	Prefer Purchasing Organic Foods
Not at all aware	4	1
Negligible Aware	9	7
Little Aware	23	22
Neutral	54	47
Aware	80	74
Most Aware	8	8

The p-value = 0.000004 < 0.05 which suggests to Reject Null Hypothesis and Accept the Alternative Hypothesis.

As per the below Plot Diagram (Fig. 4.), it shows a Positive linear trend between Awareness and Purchase Decision. **The Regression Equation is  $Y=0.926X-0.986$** . Here, X = Awareness of Organic Foods and Y = Purchasing Decision of the Respondents. The correlation between awareness and Purchasing Decision of Organic foods is 0.998, which is very high.  $R^2 = 0.997$ , Adjusted  $R^2 = 0.996$  which states that 99% of dependent variable (Purchase Decision) is explained by the independent variable (Level of Awareness). And the S.E (Standard Error) is 1.824, which is within the Acceptable range of +/- 2.

Hence,  $H_1$  holds true, Purchasing Decision of the Consumers for organic food products is Correlated with the Level of Awareness

**Figure 4. Relationship between Awareness and Purchase Decision of Organic Foods**



#### 6.4. Buying Behaviour of Consumers towards Organic food Products

Several questions were posed to the respondents in order to better understand their purchasing habits. The majority of respondents are Occasional Organic Food Buyers, followed by Frequent Buyers, and One-Time Buyers. The majority of customers (57%) consumes organic fruits and vegetables, followed by organic immunity products (46%), and organic food grains (35%), indicating that Covid 19 has motivated people to buy immunity organic





products owing to the wide range of health benefits. Consumers favour local retailers and supermarkets, which account for 38 percent of all purchases, followed by online stores and specialty food stores.

Likert Scale Analysis is also used to identify the motivators and barriers to purchasing organic food. In **Table 8**. The aspects that influence customers' purchasing decisions for Organic foods products are rated using an Interval Scale. The range of 1 to 1.8 indicates that it is not at all influential. Least Influential ranges from 1.81 to 2.60. It implies Neutral between 2.61 and 3.40. It implies Influential between 3.41 and 4.20. From 4.21 to 5, it denotes the Most Influential.

The mean for the first statement, Self-Health Awareness, is 3.78, indicating that the majority of consumers consider Self-Health Awareness to be "Influential" in their purchase decision of Organic foods, implying that the company should have health awareness campaigns (including diseases and curable remedies by using organic food products). All other criteria, on average, fall into the "Neutral" bracket, which suggests that the majority of customers perceive all other aspects to be neutral when purchasing organic food products (has indifferent effect in influencing the purchasing decision). (Kalra, Dixit, & Lyall, 2020)

An Interval Scale is used to rate the aspects that act as roadblocks to customers' purchasing decisions about organic foods (**Table 9**). The range of 1 to 1.8 indicates that it is not at all affecting. It indicates Least Affecting between 1.81 and 2.60. It implies Neutral between 2.61 and 3.40. It implies Affecting from 3.41 to 4.20. It signifies Most Affecting in the range of 4.21 to 5. The average scores for lack of availability, lack of faith in marketing campaigns, and high pricing are 3.74, 3.74, and 3.89, respectively. As a result, the majority of customers regard these as "Affecting" barriers to purchasing Organic foods.

Lack of Availability, Lack of faith in Marketing Campaigns, and High Pricing has mean 3.74, 3.74, and 3.89 respectively. Hence, it means majority of the consumers consider these to be "Affecting" barrier to purchase Organic foods products. All other variables are to be regarded as "Neutral." **Tables 8** and **9** show that the results or means are consistent because the standard deviation is low (around 1.5 SD).

**Table 8: Factors that Drives consumers to Purchase Organic foods products**

Drivers	Mean	Standard Deviation
Self -Health Awareness	3.78	1.320
Recommendations from families and friends	3.28	1.262
Health Experts Advice	3.38	1.321
Social Status	2.68	1.318
Availability	3.16	1.134
Wider Variety of Organic foods	3.21	1.258
Good in tastes	3.30	1.252
Reasonable Pricing	3.23	1.274

(Note: 5 Most Influential, 4 Influential, 3 Neutral, 2 Least Influential, 1 Not at all Influential)

**Table 9: Barriers consumers face to purchase Organic foods products**

Barriers	Mean	Standard Deviation
Lack of Availability	3.74	0.806
Lack of Variety of Organic Foods	3.32	1.293
Lack of brand awareness	3.37	1.300
Lack of faith in Marketing Campaigns	3.74	1.195
Lack of Awareness of Various Certification	3.47	1.264
Couldn't Purchase due to Covid 19 Lockdown	2.79	1.548
High Pricing	3.89	1.329

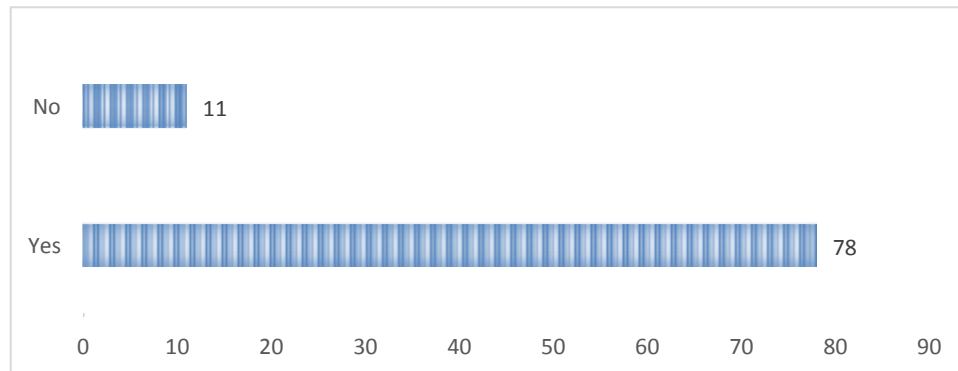
(Note: 5 Most Affecting, 4 Affecting, 3 Neutral, 2 Least Affecting, 1 Not at all Affecting)

### 6.5. Increase in Willingness of the consumers due to Covid 19.

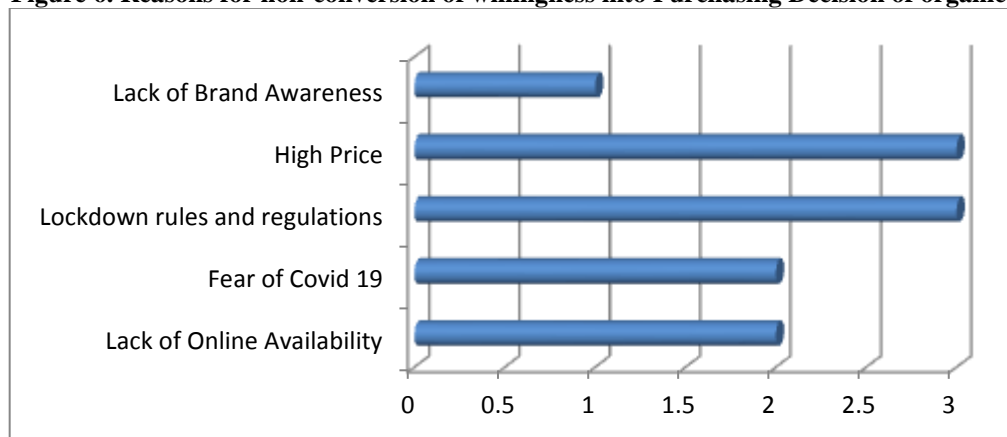
Out of 159 respondents who buy organic food, 89 consumers (respondents) have increased their willingness to buy organic goods, as a result of Covid 19, while the other respondents have denied any increase in willingness. There are several reasons why respondents haven't developed any willingness, including satisfaction with present items, lack of necessity, unpleasant experience with previously used products, and so on. Covid 19 enhanced the willingness of 89 individuals to buy organic goods, and 78 of them converted that willingness into a purchase decision (**Fig. 5**). Lockdown norms and regulations, high price, lack of Online availability Organic foods, and fear of becoming infected with Covid 19 are the main reasons why individuals have been unable to convert their

willingness to purchase organic foods (Fig. 6.) It suggests that the Covid 19 pandemic has influenced the purchase decisions of about half of the respondents.

**Figure 5: Conversion of willingness to Purchase Decisions of Organic Foods**



**Figure 6. Reasons for non-conversion of willingness into Purchasing Decision of organic foods**



Hence, H2 holds true, Covid 19 Pandemic has influenced Purchasing Decision of organic foods among Consumers.

Chi-square test of independence has been conducted for all demographic factors to find whether the increase in willingness of organic foods due to covid 19 is independent of the demographic factors. And for this Hypotheses are stated:

**H01:** Increase in willingness of organic foods due to covid 19 is not associated with Gender.

**H11:** Increase in willingness of organic foods due to covid 19 is associated with Gender. **H02:** Increase in willingness of organic foods due to covid 19 is not associated with Agegroups.

**H12:** Increase in willingness of organic foods due to covid 19 is associated with Age groups. **H03:** Increase in willingness of organic foods due to covid 19 is not associated withOccupation.

**H13:** Increase in willingness of organic foods due to covid 19 is associated with Occupation. **H04:** Increase in willingness of organic foods due to covid 19 is not associated withEducation.

**H14:** Increase in willingness of organic foods due to covid 19 is associated with Education. **H05:** Increase in willingness of organic foods due to covid 19 is not associated with Incomelevel.

**H15:** Increase in willingness of organic foods due to covid 19 is associated with Incomelevel.

**Table 10. Chi-square test for all demographic factors.**

Demographic Factors	Chi-square value	Test	D.F	P-value	Comparison	Decision
<b>Gender</b>	5.772	Pearson chi-square	1	0.016	<0.05	Reject
<b>Age-groups</b>	2.066	Fisher-Freeman-Halton Exact test		0.599	>0.05	Accept
<b>Occupation</b>	0.423	Pearson chi-square	3	0.935	>0.05	Accept
<b>Education</b>	2.522	Fisher-Freeman-Halton Exact test		0.477	>0.05	Accept
<b>Income Level</b>	7.504	Fisher-Freeman-Halton Exact test		0.091	>0.05	Accept

It is found that increase in willingness of organic foods due to covid 19 is not associated with the demographic factor of consumers except Gender of the respondents.

*Hence, H3: Holds True, that increase in willingness to consume organic foods is independent of all demographic factors except Gender of the respondents.*

## 7. CONCLUSION

Consumers have increased their hunt for healthy and clean food since the extraordinary Covid 19 pandemic has had a significant influence on people's daily life. As a result, organic food has become the preferred option for consumers. People are becoming more aware of the importance of chemical free organic consumption in boosting immunity and improving overall health. This Pandemic has influenced consumer behaviour in favour of organic products to the point where it may become ingrained in people's purchasing habits.

Around 2.38 percent of agricultural land is used for organic farming, and this number is rising year after year as a result of government incentives and subsidies. And the market for organic goods is ripe, because to the pandemic's increased awareness of the benefits of organic consumption. However, more consumer awareness regarding organic foods is essential, particularly in terms of distinguishing between organic and natural foods. (Munshi, Agarwal, Radia, Makwana, & Agarwal, 2020)

There has been a lot of research on organic food awareness, and every study has found that there is a lack of awareness. Lack of awareness of organic foods was discovered in this study as well. Out of 200 people surveyed, 88 are aware of organic foods and 112 are not. As a result, awareness programmes and activities should be developed by the government, non- governmental organisations, and businesses. Furthermore, the Regression Analysis reveals that there is a Positive Relationship between Organic Food Awareness and Purchase Decisions. Organic fruits and vegetables, as well as organic immunology products, are the top two products selected by customers, according to the study. According to this study, word of mouth and social media play a critical role in marketing organic foods. Covid 19 Pandemic plays a crucial role in raising customer desire to purchase organic foods. And the vast majority of them were successful in turning their willingness into a buy. Due to strict rules and regulations as well as high prices, a few of them were unable to do so.

This study also discovered that increased willingness is linked to or depending on gender. Other demographic characteristics are not thought to be linked to willingness. Using the rating scale, it was discovered that self-health awareness has a beneficial impact on organic food purchase decisions. Lack of availability, lack of confidence in marketing campaigns, and high pricing are all regarded hurdles to customers purchasing organic goods. To combat high prices, the USDA research recommended using a complimentary bundling strategy in an organised retail style similar to traditional consumer products to attract customers and grow quickly. The collaboration between the government and commercial shops will benefit both sides, especially farmers. Farmers will have easier access to markets and higher premiums. Retailers will get access to a larger variety and quantity of organic foods increasing their profits. (Manaloor, Srivastava, & Islam, 2016)

Imported organic food and beverage demand will continue to be driven by a growing emphasis on healthy and immunity-building foods, with organic teas, juices, and apple cider vinegar leading the way. Organic dairy products and fruits and vegetables have the most potential for growth in India.



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