



## CONSUMER BEHAVIOR TOWARDS BUYING ORGANIC FOOD

**Mrunmayee Joglekar\***      **Dr. Kalpana Jadhav\*\***

*\*Research Scholar, Rashtrasant Tukdoji Maharaj Nagpur University), Maharashtra.*

*\*\*Head of Department, Post graduate teaching, Department of Home Science.*

### **Abstract**

*Organic food market is rising now a day. Consumer behavior towards organic food purchase was studied and described in this paper. Consumer survey was conducted by convenient sampling for understanding buying behavior towards organic farm produce through online and offline mode. Questionnaire designed to know consumer preferences and purchase behavior towards organic food. It is found that 70% consumer would prefer buying organic over conventional if made available. 25% consumers reported that organic food tastes different and better which was mentioned in subjective answers. However they feel organic food items are costlier than conventional. Results shows less awareness about organic certification rather prefer buying from familiar or well-known farm producers or grocery shops. While trying to find out reasons of consumer preferences towards organic purchase, it is showed that they feel that organic foods are nutrient rich and believed to be chemical free. Socio-economic status and education also affects organic purchases. Overall it is positive trend towards rise of organic food market despite high cost.*

**Keywords:** *Organic Food, Consumer Preferences, Consumer Behavior, Organic Cereals and Legumes.*

### **1. Introduction**

Organic means Natural. The term organic farming suggests natural cultivation of cereals and grains which devoid use of manmade chemicals for weed, fungus protection to crops. Use of various chemicals for pest and fungus control, weed control protects crop and yield increases. However uses of these chemicals are proven for causing various health problems such as cancer, endocrine disruptions, allergic reactions and other serious health illnesses. (Tholang A. Mokhele, 2011) Concept of organic food products evolved, in order to avoid these health effects. Amid increase in awareness about environment and negative impacts of chemicals on animal body created people's interest in natural or organically grown food produce.

Consumer survey conducted in Turkey to examine factors affecting organic food purchase suggests 385 consumer respondents living in urban area are willing to purchase organic food on higher prices. Consumers confirm concern over negative impact on consumption of pesticide residue drives them to purchase organic foods. The key factor that influences consumer preference was human health and safety (Unakitan, 2010).

Conventional foods are those cultivated by using various chemical fertilizers and pesticides. Plants, fruits and vegetables tend to absorb these pesticides during cultivation. Traces of pesticide residues have been found in raw fruits and vegetables (Mahugija JAM, 2017).

Food safety and standards authority of India i.e. FSSAI states 'Organic food products are either grown under a system of agriculture without the use of chemical fertilizers and pesticides or made from organically produced raw materials'. FSSAI regulates organic farming in India with tagline of 'Jaivik Bharat'. It issued Food safety and standards (Organic Food) regulations, 2017 which are based on the standards of National Program for Organic Production (NPOP) and Participatory Guarantee System



(PGS-India). It states standards of crop rotation, fertilizers and chemical to be used, post-harvest care and labeling. Organic farmer get Organic certification and able to sell organic produce only after fulfilling all criteria's mentioned during certification procedure. Therefore customers will be assured of the genuineness of organic produce. India issues organic certification after fulfilling criteria and necessary documentation that avail farmers to sell their produce as organic certified at higher prices.

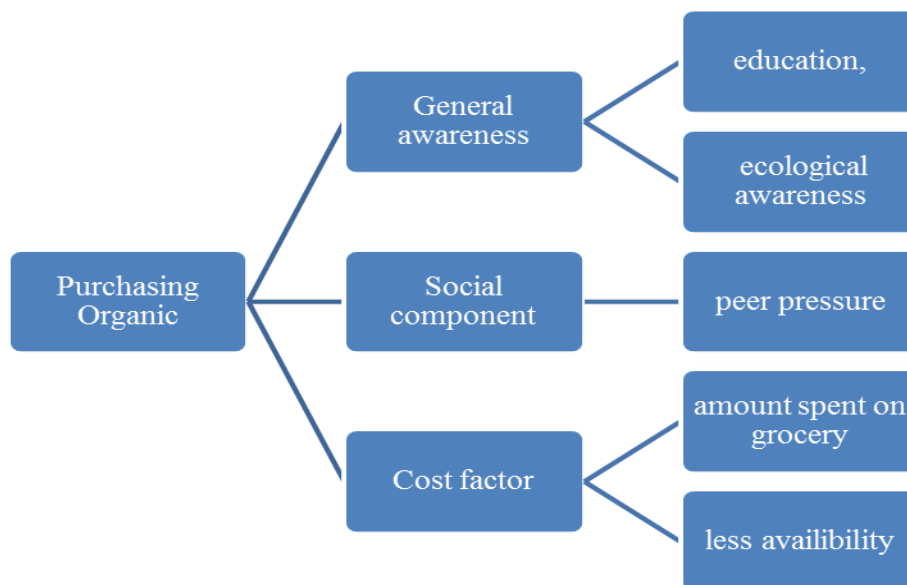
In the view of these attributes, some consumers try and test various food available in market. Some consumers prefer organic instead of conventional and vice versa. This choice may be related to amount of money one can spent on purchasing groceries.

Objective of this study is to analyze whether consumer prefers buying organic or conventional farm produce. And what are the causes preferring organic instead of conventional? We are focusing on cereals and legumes.

### Theoretical framework

This study focuses on whether consumer wants to purchase organic food and factors that influencing the same. Study analyses whether consumer fined any differences of taste, flavor in organic and conventional food.

Study focuses on variables that drive consumers for purchasing organic farm produce. General awareness about organic agriculture due to education, ecological awareness is considered as one variable. Social component, peer pressure could be one reason to buy organic as many celebrities are preferring organic produce. Farm produce grown organically without giving chemical boosters are of different colour, flavor and less weight. Therefore, total yield in quantity and weight is less as compared chemically grown farm produce.



### Design

Amid Covid-19 restrictions, consumer survey has been conducted online through google form as well as some face to face interactions. Samples were selected by convenient sampling method. Total 111 people from Nagpur city underwent survey from which some participants filled survey form (87%) while some forms filled during face to face interactions (13%). These participants include housewives,



grocery purchasers, working professionals as well as research students. Educational status of these samples varies from graduates, post graduates, diploma holders to PhD scholars. Questionnaire was designed to know how organic farm produce is well accepted over conventional. Questionnaire contains close end questions for food choices- organic vs conventional and preferences of grocery procurement, approximate amount spent on grocery purchase. Participants were asked to opt for reasons to purchase organically grown farm produce.

Consumers also asked whether they check quality of grocery before purchasing in terms of color, texture etc. Preference for organic certification before purchased also asked for. Reason of buying organic over conventional food was asked in survey.

### Result and Discussion

Total 111 participants studied for consumer survey towards organic purchasing. Few of them had no idea what organic food is however some were enthusiastic to know more about it. Few consumers showed keen interest regarding quality check of organic food and how organic is different over conventional during consumer interactions. To answer close end question whether consumer prefer to buy organic instead of conventional; 70% said yes for purchase of organic grocery. Only 8% said no and 22% people said they sometimes buy organic grocery which depends largely on availability and budget restrictions. 22% of people said ‘Sometimes’ for organic purchase, which could not be neglected. During face to face conversation, people says, organic farm produce was of good taste but not always. Some of them (14%) said, they can differentiate between organic vegetables and conventional by smell and size. 4 consumers reported that organic cereals and vegetables are of small size and less weight in terms of gms. About 45% consumers said organic farm produce may not always look fresh and appealing. 37% consumers reported that conventional are preferred in times of no organic availability. Organic farm produce is seasonal with limited stock and high price. This drives them to purchase conventional even if they are willing to purchase organic farm produce.

<b>Socio-Economic Status of Participants</b>			
<b>Monthly Income*</b>	<b>Education</b>	<b>Preference of Organic Shopping in percentage</b>	<b>Working Personnel in Percentage</b>
<b>Income Grade I (8220 and Above)</b>		68	93
	Graduate	71	98
	PG	69	94
	PhD	66	86
<b>Income Grade II (4110—8219)</b>		75	68
	Graduate	100	100
	PG	20	35
<b>Income Grade III (2465--4109)</b>		0	
	Graduate	0	
<b>Grand Total</b>		68	

\*Prasad scale of Social Class (2022)

Participants were categorized based on their educational qualification. Two categories were made - graduate and post graduate and above. Their responses tested for correlation coefficient between consumer education and consumer’s preference for organic purchase. Coefficient value: 1 suggests

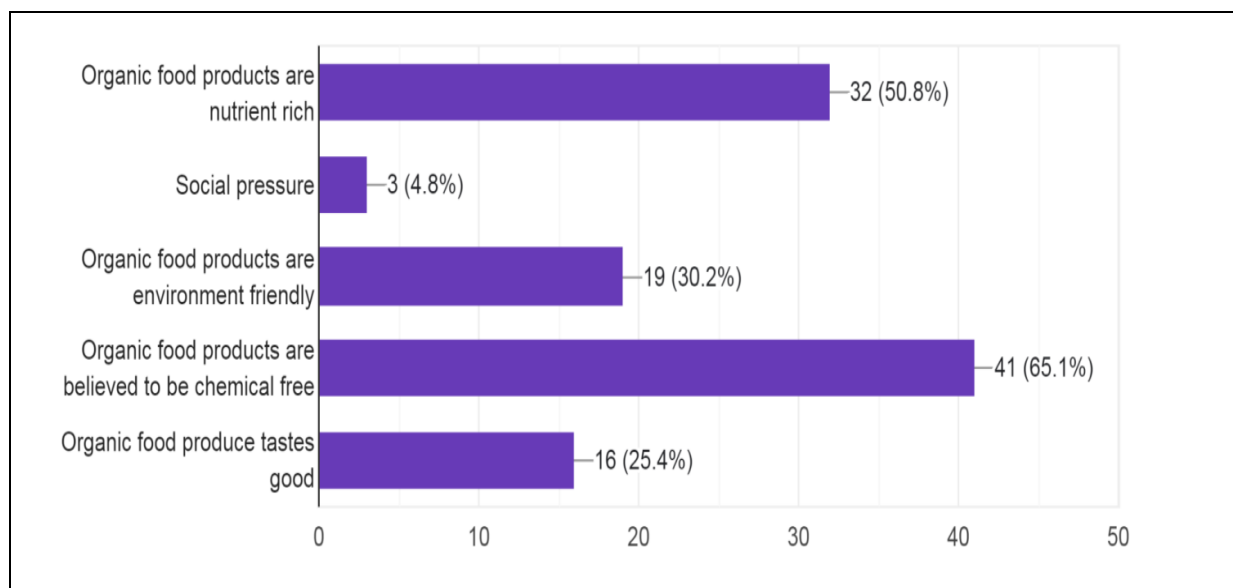


high correlation between education and organic purchase preference. This can be interpreted as education plays important role in organic purchase. However there were small segment of working citizens who are graduate but prefer buying organic as they found it is tastier than conventional.

Another correlation was tried to find between socioeconomic status and organic purchase. Prasad’s scale (2021) was used to categories participants by their annual income. Statistical analysis between social class and consumer preference for organic purchase shows that social class has certain impact of organic purchasing. Social class I prefer buying organic even if organic food are costlier than conventional. However in case of no availability, they tend to purchase conventional. Occasional organic buying is seen in social group II which may be related to organic food prices and availability. This may be due to increased awareness about nature or fear of chemical pesticide ingestion. 0.1 correlations were found between social class and willingness to purchase organic farm produce. However, this impact is not statistically significant seeing values more than 0.3 considered statistically significant correlation coefficient value.

	Social class	Purchase preferences
Social class	1	
purchase preferences	0.096176354	1

Attempt made to know why consumer buy organic over conventional and plot the reasons to understand mindset towards buying organic food. As per survey majority people i.e. 65.1 % people think that organic food products are believed to be chemical free. 50.8% people believe that organic food products are nutrient rich. Common belief of eco-friendly nature organic food has been present in society. Similar result has been found in another consumer survey conducted in Indonesia for organic purchase. (Nurdasila Darsono, 2018) Statistical analysis shows that attitude and purchase intention was significantly affected by health concern, product quality and knowledge but not by environmental concern. Then, attitude was have a significant direct effect on purchase intention, and this significant result has an impact on actual purchase behavior, in which attitude and purchase intention significantly affected actual purchase behavior of consumers’ toward organic product.





Moreover 60% ladies reported that organic food produce tastes better than conventional. Some people said they want to know exact figure which shows organic is better than conventional. However, small segment of people thinks that organic farm produce is not actually organic. It is named organic for fetching more money. There is no such thing as organic exists today, it is chemical only but grown by using naturally produced chemicals which are less harmful to human body.

To answer preference of organic certification while purchasing, only 30% consumer said yes. 46% said sometimes and 24% consumers said no to look for organic certification. This data showed less awareness about organic certification. Organic certification is issued by government after documentation and verification of organic farm. During conversation with consumers, revealed that they didn't have any idea of organic certification for farm produce. Popularity of organic certified product is less among common people.

Another question has asked in questionnaire if consumer feel organic farm produce is costlier than conventional. 74.6% Consumer reported that organic food is costly than conventional. Therefore sometimes they buy conventional although organic tastes better. If we compare organic crop yield with conventional (by using chemical pesticides), it is clear that organic crop has yield less than conventional around 60-80%. This might be reason for costlier organic farm produce than conventional. Moreover organic certification increases final costing.

Similar finding were observed by H. Stolz et al (2010) where consumer prefer occasional buying of organic farm produce due to costlier nature. In their study, two segments of occasional organic consumers were identified. Consumers in segment 1 strongly preferred organic products and were less price sensitive. Furthermore, consumers in this segment showed a significantly higher level of agreement with most of the investigated attitude factors than consumers in segment 2. The latter consisted of consumers who were significantly more price sensitive and preferred conventional-plus and conventional products rather than organic products. Communicating quality attributes represents a promising marketing tool of product differentiation and information for both organic and conventional food marketers. The price sensitivity of parts of occasional organic consumers suggests that the perceived price-performance ratio of organic products needs to be increased by targeted pricing and communication strategies integrating product-relevant information. If not, conventional-plus products, representing a cheaper alternative, might be preferred by parts of the occasional organic consumers.

Answer	
Yes	74.6 %
No	4.8 %
Sometimes	20.6 %

Citizens reported that organic fruits and vegetables taste better however consumer don't feel significant taste difference in organic and conventional cereals and legumes. Only 42.9% people prefer buying organic cereal over conventional. This shows less awareness among consumers about organic cereals and legumes.

Now a days organic certified products are available in common market. Question has been asked whether people prefer buying organic certified food products over conventional. Only 30.2% people says that they do prefer organic certified food produce over non-certified. Sometimes (46%) public sees for organically certified products. It seems that there is less awareness and trust on organic



certified products. However public prefer buying non- certified organic farm produce from known or familiar places. 84.1% community prefers organic or toxin free farm produce purchasing from popular or familiar people or places or shops.

Overall results from present study are in consistence with previous studies in many aspects. We find quality in terms of nutrients and fear of chemical are the key reasons for organic purchase. Organic certified products are not very popular among people. However organic export from India is rising every year. The export value of organic products was over 1.04 billion U.S. dollars from India which is more than previous fiscal year when the export value was 689 million U.S. dollar. This reveals rising export of organic farm produce as well as food products. Indian organic farm produce is also increasing which can be reflected in figures as APEDA reports 3.2 million metric tons of organic crop production in 2020-21 which is 36 percent up by 2019-20. Oilseeds, fibre crops, sugar, cereals and millets are the major organic crops being produced in India. Experts says that India will need to address challenges related to India's organic control system and increased incidences of fraud continue to impact the credibility of India's organic sector. (Market Report, 2021) Study shows consumers awareness is needed about organic farm produce and its health benefits. More studies need to be conducted to find if organic farm produce is actually providing better nutrients or not.

## References

1. Mahugija JAM, Khamis FA, Lugwisha EHJ. "Determination of levels of organochlorine, organophosphorus, and pyrethroid pesticide residues in vegetables from markets in Dar es Salaam by GC-MS." *Int J Anal Chem*, 2017: 1-7.
2. Market Report, 2021, India: Organic Industry Market Report- 2021, USDA FAS.
3. Nurdasila Darsono, Afrida Yahya, Abdul Muzammil, Said Musnadi, Chairil Anwar, Wirdah Irawati, 2018, Consumer Actual Purchase Behavior for Organic Products in Aceh, Indonesia, *Advances in Social Science, Education and Humanities Research*, volume 292, 265-275.
4. Prasad Scale-Modified BG Prasad Socioeconomic Status Scale: Updated for the year 2022.
5. Tholang A. Mokhele, (2011), Potential health effects of pesticide use on farmworkers in Lesotho, *South African Journal of Science* vol.107 n.7-8 Pretoria Aug. 2011.
6. Unakitan, Yasemin Oraman and Gokhen. "Analysis of Factors Influencing Organic Fruit and Vegetable Purchasing in Istanbul, Turkey." *Ecology of food and nutrition* 49, no. 6 (2010): 452-456.