

Original Research Article

<https://doi.org/10.20546/ijcmas.2019.809.170>

## Multi Dimensional Analysis of Consumer Preference for Organic Products

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### ABSTRACT

#### Keywords

Organic product,  
consumer,  
preference,  
consumer  
satisfaction,  
willingness to pay

#### Article Info

##### Accepted:

18 August 2019

##### Available Online:

10 September 2019

The present study was conducted in Bengaluru urban district of Karnataka during 2018-19 to assess the consumer preference and their satisfaction about organic products. It was observed that 100 per cent of consumers preferred organic vegetables followed by organic fruits (80.00%), organic eggs (71.66%), millets (66.66%), Pulses (43.33%) and cereals and their bi products (30.00%). With respect to overall preference for organic products by the consumers, it was found that 53.33 per cent of consumers belong to medium category followed by high (30.00%) and low (16.66%) category. About 73.33 per cent of consumers preferred exclusive organic outlets to buy organic products and 43.33 per cent of them preferred online purchase. Forty per cent of consumers were ready to pay 30.00 per cent premium price for organic products. About 56.66 per cent of the respondents belong to medium category of consumer satisfaction followed by high (25.00%) and low (18.33%) category of consumer satisfaction.

### Introduction

Globally organic farming is gaining momentum. Increasing consciousness about conservation of environment as well as health hazards associated with agrochemicals and consumers' preference to safe and hazard free food are the major factors for growing interest in organic agriculture. Organic farming is a production system that sustains the health of soil, ecosystems and people. It relies on

ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic farming combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved (IFOAM, 2008). India produced around 1.70 million MT of certified organic products which includes all varieties of food products namely oil seeds, sugar cane, cereals & millets, cotton, pulses, medicinal

plants, tea, fruits, spices, dry fruits, vegetables, coffee etc. The production is not limited to the edible sector but also produces organic cotton fiber, functional food products etc.

The organic food industry has grown considerably over recent years on a worldwide basis and has been the thrust and priority issue over the past decade. Global demand for organic products remains robust. In the organic food and beverages segment alone, India has witnessed a market growth of INR 40,000 million in 2016-17 from INR 675 crore in 2009-10, with an annual growth rate of 25%. While, the growth rate for conventional food processing industries is 10-15% (Arpita Mukherjee, 2017). The market of organic products is growing as the number of people willing to consume organic food and consumer preference towards organic food products is increasing. The future of organic agriculture will depend on consumer demand to a great extent. Further, it is important to understand the consumer preference and satisfaction for organically produced foods. This consumer preference would serve as push factor to promote organic farming among farmers. Hence a study was undertaken to assess the consumer preference and satisfaction about organic products.

### **Materials and Methods**

The study was conducted in Bangalore urban district of Karnataka. Six organic outlets were selected and from each outlet, 10 respondents were selected randomly. Total sample size of consumers was 60. Ex post facto research design was employed for the study. To assess the consumer preference for organic produce instrument was developed consisting of ten parameters to prefer organic products. The responses were elicited on five point continuum i.e. strongly agree, agree, undecided, disagree and strongly disagree with score of 5,4,3,2 and 1 respectively. Based on

cumulative response, consumers were classified into low, medium and high categories by using mean and standard as measure of check. To measure consumer satisfaction, instrument was developed consisting of eight parameters for consumer satisfaction and data was elicited in four point continuum with the score of 4,3,2 and 1 for Highly satisfied, satisfied, neutral and dissatisfied respectively. Consumers were classified into low medium, and high categories using mean and standard deviation as measure of check. Data were collected using structured schedule by personal interview method. Collected data were analyzed using appropriate statistical tools.

### **Results and Discussion**

It can be observed from table 1 that 60.00 per cent of respondents were young followed by middle age group (33.33%) and old (6.66%). With respect to education level of respondents is concerned, it can be inferred that all the respondents were educated and precisely 40.00 per cent of them were graduates followed by post graduates (31.66%), Pre University (20.00%) and equal percentage (8.33%) of respondents possessed primary and high school level of education.

Among respondents interviewed, 65.00 per cent were male and 35.00 per cent were female. With respect to occupation of respondents is concerned, 51.66 per cent were corporate employees, 18.33 per cent were business men followed by other doctors (16.66%) and government employees (13.33%).

It was found that the consumers got the information about organic products from different sources. Among them internet was one of the important source for about 60.00 per cent of respondents followed by media (55.00%), promotional events (43.33%),

advertisements in social network (40.00%), Specialists like doctors, health experts (38.33%) and specialized shops (13.33%).

With respect to monthly income of consumers, it was found that 28.33 per cent of them fall under Rs 30,000-Rs 40,000 category followed by equal percentage of consumers (23.33%) belonged to Rs 20,000- Rs 30,000 and Rs 40,000- Rs 50,000 categories and 18.33 per cent of them fall under Rs 10,000- Rs 20,000 category.

### **Frequency of purchase of organic products**

Frequency of purchase depends on their need and location of availability. Frequency of purchase of organic products is presented in table 2. More than half of the consumers (53.33%) purchase the organic produce on weekly basis followed by once in a while (35.00%) and fortnightly (11.66%). It is due to the fact that consumers preferred to consume fresh produce which possess good quality hence they used to purchase the quantity required to meet the requirements of family members for a week. About 35.00 per cent of respondents purchased once in a while because organic stores are not located in all places and organic products are not sold in all general stores. The results are on par with results of Petersen et al, (2011).

### **Consumers' Willingness to pay premium price for organic products**

Willingness to pay premium is operationized as amount of money a consumer would be willing to pay for organic products compared to inorganic products. It depends on the perception of the consumer about organic products. It can be observed from table 3 that 91.66 per cent of consumers were willing to pay five per cent premium to organic products followed by 85 per cent of them were ready to pay ten per cent premium for organic

products, 65.00 per cent of them were willing to pay 20.00 percent premium followed by 30.00 per cent premium (40.00 %), 40.00 per cent premium (18.33%) and 50.00 per cent premium (10.00%).

It is evident that all the respondents are willing to pay premium price for organic products and majority (91.66) of respondents will still prefer to buy organic products if the difference is 5%. It is due to the fact that the consumers prefer safe, nutritious and chemical free produce which helps to maintain good health. But the costs seems to overweight the benefits of organic product around midway mark 30-40 per cent where majority of consumers have negative reaction towards organic produce due to price.

### **Preferred organic products by consumers**

Wide variety of organic products like fruits, vegetables cereals etc., are available for consumers Organic products preferred by the consumers are depicted in table 4. It can be inferred that cent per cent of consumers preferred organic vegetables followed by organic fruits (80.00%), organic eggs (71.66%), millets (70.00%), milk and its products (66.66%), millets (66.66%), pulses (43.33%) and cereals and their products (30.00%).

The reason for the above trend of findings is due to the reason that vegetables and fruits being perishable in nature, have very less time gap between harvest and consumption and huge amount of chemical residues would be present in inorganic produce so the consumers preferred organic vegetables and fruits. With respect to less preference to organic pulses and cereals and their products is concerned, consumers perceive that pulses and cereals being non perishable in nature and have good amount of time gap between harvest and consumption, the chemical residual effect

would be reduced to the greater extent and they wouldn't cause much health problems.

### **Consumer preference for organic products**

Consumer preference is operationally defined as expectations, likes, dislikes and inclination towards organic products that drive consumer purchasing decisions. They complement consumer needs in explaining consumer behavior. Various factors are associated with preference for organic products. These factors may vary with individual to individual. It can be inferred from table 5 that various factors are associated with preference for organic products. Highest mean score was ascertained to parameter chemical free (4.73) followed by natural (4.71), healthier (4.60), safe in nature (4.41), diet purpose (4.01), freshness (3.70), tastier (3.45), good nutrition value (3.28) trendy (3.28) and appearance (2.03). The parameters were ranked based on mean score obtained.

### **Overall Consumer preference for organic products**

It can be summarized from the table 6 that more than half (53.33%) of consumers belong to medium category of preference for organic products followed by high (30.00%) and 16.66 per cent of respondents belonged to low category of preference for organic products.

The reason for the above results is due to their education level which has created health consciousness among them to consume food free from pesticides and fertilizers residues which on consumption leads to better health. And it is also due to the trend created among the consumers about organic foods through different sources and further this is supplemented by recommendation and prescription of doctors and health experts to consume organic food.

These findings are inconformity with the study conducted by Suganya et al. (2014) and Mohan (2015)

### **Preferred place for buying organic products**

Organic products are available in different places. Preference of the place of buying depends on various factors like availability of organic outlets, convenience of consumers, credibility of the source etc., Table 7 depicts that 73.33 per cent of consumers preferred to buy organic products at exclusive organic outlets, 43.33 per cent of them preferred to buy online, 33.33 per cent of them preferred super markets, 20.00 per cent of them preferred local markets, 13.33 per cent of them preferred to purchase at farm gates and very less i.e. 10.00 per cent of consumers preferred street vendors to purchase organic products.

Most of them preferred exclusive organic outlets because consumers perceive them as credible organic source and since only organic produce is available in the outlet it becomes easy to select and also most of consumers were intended to physically check the freshness and quality of produce. A good number of consumers preferred online mode to buy because of added advantages like time saving and convenience. Results are in line with findings of Sarumathi (2015)

### **Consumer satisfaction about organic products**

Consumer satisfaction plays a crucial role in marketing of any produce. Consumer satisfaction is the degree to which the organic products has met or surpasses consumer expectation. Consumer satisfaction can be assessed using various factors associated with the product.

**Table.1** Profile characteristics of Organic consumers

(n=60)

Sl. No.	Characteristics	Category	Frequency	Per cent
1	Age	Young (< 35 years)	36	60.00
		Middle (> 35 upto 50 years)	20	33.33
		Old (> 50 years)	04	6.66
2	Education	Primary	05	8.33
		High school	05	8.33
		Pre University	12	20.00
		Graduate	24	40.00
		Post Graduate	19	31.66
3	Gender	Male	39	65.00
		Female	21	35.00
4	Occupation	Govt. employee	08	13.33
		Corporate employee	31	51.66
		Doctor	10	16.66
		Business men	11	18.33
5	Source of information	Media (TV, Radio)	33	55.00
		Friend/Family	13	21.66
		Specialist (Doctor's etc)	23	38.33
		Specialized shops	8	13.33
		Internet	36	60.00
		Promotional events	26	43.33
		Ads in social network	24	40.00
6	Monthly income	Less than Rs 10,000	0	0.00
		Rs 10,000 upto 20,000	11	18.33
		Rs 20,000 upto 30,000	14	23.33
		Rs 30,000 upto 40,000	17	28.33
		Rs 40,000 upto 50,000	14	23.33
		Above 50,000	0	0.00

**Table.2** Distribution of consumers based on frequency of purchase of organic products

(n=60)

Sl. No	Particulars	Frequency	Per cent
1	Weekly	32	53.33
2	Fortnightly	7	11.66
3	Once in a while	21	35.00

**Table.3** Consumer willingness to pay premium price for organic products

(n=60)

Sl. No.	Premium price	Frequency	Percentage
1	5 %	55	91.66
2	10 %	51	85.00
3	20 %	39	65.00
4	30 %	24	40.00
5	40 %	11	18.33
6	50 %	06	10.00

**Table.4** Preferred organic products by consumers

(n=60)

Sl No.	Particulars	Frequency	Per cent
1	Vegetables	60	100.00
2	Fruits	48	80.00
3	Cereals and its products	18	30.00
4	Millets	42	66.66
5	Pulses	26	43.33
6	Eggs (Local birds')	43	71.66
7	Milk and its products	40	66.66

**Table.5** Consumer Preference for organic products

(n=60)

Sl. No	Particulars	Mean Score	Rank
1	Healthier	4.6	III
2	Tastier	3.45	VII
3	Natural	4.71	II
4	Freshness	3.70	VI
5	Chemical free	4.73	I
6	Good nutrition value	3.43	VIII
7	It is safe	4.41	IV
8	Trendy	3.28	IX
9	For diet	4.01	V
10	Appearance	2.03	X

**Table.6** Overall Consumer preference for organic products

(n=60)

Sl. No	Category	Criteria	Criterion score	Frequency	Per cent
1	Low	< (Mean – ½ SD)	<36.98	10	16.66
2	Medium	Between (Mean ± ½ SD)	>36.98 upto 39.77	32	53.33
3	High	> (Mean + ½ SD)	> 39.77	18	30.00

Mean =38.88 SD=2.78

**Table.7** Preferred place for buying organic products

(n=60)

Sl. No	Preferred place	Frequency	Percent
1	Super market	20	33.33
2	Exclusive organic outlet	44	73.33
3	Online	26	43.33
4	Local market	12	20.00
5	Farm gates	08	13.33
6	Street vendors	06	10.00

**Table.8** Consumer satisfaction about organic products

(n=60)

Sl. No	Particulars	HS		S		N		DS	
		F	%	F	%	F	%	F	%
1	Price	7	11.66	27	45.00	18	30.00	8	13.33
2.	Taste	24	40.00	25	41.66	11	18.33	0	0.00
3	Availability	02	3.33	11	18.33	12	20.00	35	58.33
4	Freshness	00	0.00	27	45.00	21	35.00	12	20.00
5	Shelf life	28	46.66	24	40.00	5	8.33	2	3.33
6	Authenticity of organic nature	07	11.66	29	48.33	22	36.66	1	1.66
7	Quality	06	10.00	23	38.33	16	26.66	15	25.00
8	Packaging and labeling	20	33.33	27	45.00	11	18.33	02	3.33

HS- Highly satisfied S- Satisfied N= Neutral DS- Dissatisfied

**Table.9** Overall satisfaction level of consumers about organic products

(n=60)

Sl No	Category	Criteria	Criterion score	Frequency	Per cent
1	Low	< (Mean – ½ SD)	<19.83	11	18.33
2	Medium	Between (Mean ± ½ SD)	>19.83 up to 22.23	34	56.66
3	High	> (Mean + ½ SD)	>22.23	15	25.00

Mean= 21.03SD=2.4

With respect to price of organic product is concerned, 45.00 per cent of consumers were satisfied followed by neutral (30.00%), dissatisfied (13.33%) and highly satisfied (11.66%). While taste of organic products is concerned, positively skewed response was observed i.e. 41.66 were satisfied, followed by highly satisfied (40.00%) and neutral (18.33%). Regarding availability of organic product is concerned, 58.33 per cent of respondents were dissatisfied followed by

neutral (20.00%), satisfied (18.33%) and highly satisfied (3.33%). 45.00 per cent of consumers were satisfied with freshness of organic products followed by neutral (35.00%) and dissatisfied (20.00%).

While shelf life of organic products is considered, 46.66 per cent of consumers were highly satisfied followed by satisfied (40.00%), neutral (8.33%) and dissatisfied (3.33%). 48.33 per cent of respondents were

satisfied with the authenticity of organic nature of product, followed by neutral (36.66%), highly satisfied (1.66%) and dissatisfied (1.66%). 38.33 per cent of consumers were satisfied with quality of organic product followed by neutral (26.66%), dissatisfied (25.00 %) and highly satisfied (10.00%). With respect to packaging and labeling, 45.00 per cent of consumers were satisfied followed by highly satisfied (33.33%), neutral (18.33%) and dissatisfied (3.33%)

### **Overall Consumer satisfaction about organic products**

It can be inferred from table 9 that 56.66 per cent of consumers belong to medium satisfaction category followed by high (25.00%) and low (18.33%) category of consumer satisfaction.

Consumers are satisfied with the price of the organic products, it is due to income level of the respondents, willing to pay premium for organic products and more preferably because of the fact that preference and benefits of organic products has overweight the price of organic products. Consumers were also satisfied with taste and shelf life of organic product because of the fact that the organic produce is free from hazardous chemicals. In case of availability of organic product, most of the consumers expressed dissatisfaction; it is due to less number of organic outlets and also due to availability of narrow range of organic products.

It can be concluded that majority of the consumers belonged to medium to high category of overall preference for organic produce and also they are willing to pay premium price for organic produce. Majority of consumers were satisfied with the organic produce. These results clearly depicts that there is a huge demand in the market for

organic produce and it act as push factor to promote organic farming. Also the concerned agencies involved in promotion of organic farming need to emphasize these results during carrying out capacity building programmes and transfer of technology programmes to organic farmers and establish proper marketing channels for farmers so that the objectives of both farmers and consumers can be met.

### **References**

- Anonymous., 2008, Participatory Guarantee Systems. Case studies from Brazil, India, New Zealand, USA. Study report, IFOAM. Germany.
- Arpita Mukherjee., 2017, Promoting Organic Food Products and Exports: Status, Issues and Way Forward. Indian Council for Research on International Economic Relations, New Delhi.
- Mohan, 2015, Production and Market Opportunities of Organic Agricultural Produce – An Economic Analysis, *M.Sc. (Agri.) Thesis (Unpub.)*, Uni. Agri. Sci., Bengaluru.
- Petersen, S. B., Morten, A. R., Stream, M. and Thorhallur, I. H., 2011, Socio demographic characteristics and food habits of organic consumers – A study from the Danish National Birth Cohort. *Journal of Public Health Nutrition*.10 (3):1-10.
- Sarumathi.,2015, A Study On Consumer Behavior Towards Organic Food Products In Pondicherry, *PhD Thesis (Unpub)*,Pondicherry University Pondicherry.
- Suganya, S. and Aravinth, S., 2014, Analysis of consumers' preference towards organic food products based on product price, *Journal of Business Management and Social Science Research*, 3(12): 73-77.



**How to cite this article:**

Tanweer Ahmed, K. P. Raghuprasad and Devakumar, N. 2019. Multi Dimensional Analysis of Consumer Preference for Organic Products. *Int.J.Curr.Microbiol.App.Sci.* 8(09): 1479-1487.  
doi: <https://doi.org/10.20546/ijcmas.2019.809.170>