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Consumer Perception of Consumption of Organic Food Products: Evidence from Karnataka

B. R. Roopashree[1]* and M. Rizwana[2]

Department of Management Studies, M S Ramaiah Institute of Technology, Bengaluru - 560054, Karnataka, India; roopapraveen2004@gmail.com, rizumehar@gmail.com

Abstract

The food market in India is one the biggest market growing at the faster pace. Economic and political stability has enhanced the economic growth making India as most promising market for the future investments in all the sectors especially food industry. The innovations in terms of food products, packaging, and enhancement of self-life are the major drivers leading to such robust growth. Ecological changes, increasing health ailments being significant contributors to the strengthening of Organic Food Industry across the globe. Numerous factors contribute to the low penetration of organic products, some of which are internal to consumers and others of which are external. Among the internal issues are a lack of information, authenticity and vivacious perceptions about the organic food products. Consumers have perceived organic food products; costly, meant for working (higher income) class people, authenticity and quality assurance, limited availability of products, and claims & certifications in usual retail establishments. Having said this, current research focuses to ascertain the perceived perception of consumers and its impact on consumption of organic food products and to identify the challenges (hindrances) and its impact on consumption of Organic Food Products in Karnataka with special reference to Bengaluru.

Keywords: *Actual Purchase, Barrier, Consumption, Factors Influencing, Organic Food Products, Perception, Purchase Intention*

1.0 Introduction to Consumption of Organic Food Products

The food market in India is one the biggest market growing at the faster pace. Economic and political stability has enhanced the economic growth making India as most promising market for the future investments in all the sectors especially food industry. The innovations in terms of food products, packaging, and enhancement of shelf-life are the major drivers leading to such robust growth. Ecological changes, increasing health ailments being significant contributors to the strengthening of Organic Food Industry across the globe. In the years to come, there will likely be a huge amount of demand because of the rising rate of food adulteration. Potential customers have started to find the emergence of the e-commerce business as a major platform and their lucrative promotional techniques to be intriguing.

Despite of the challenges to be faced, USDA reports that the organic Agricultural, food and Retail sectors of India are expected to grow strongly. India exports organic food products worth over $ 1 billion, where 54% of the exports are absorbed by the domestic market and market will be driven by growing preference for healthy and immunity building foods says report by Expert market research[1].

In India, Organic food production accounts for 46% of the world's organic farmers and organic food production has reached 3.2 billion metric tons, according to APEDA. The food market in India is one the biggest

*Author for correspondence

market growing at the faster pace. Economic reports[2]. The health benefits of organic food are well perceived and are the prime factor affecting consumer inclination on route for organic food products compared with further aspects such as consumer ideology and gratis from chemicals. In this regard, researcher aims studying the perception of consumer's perception with respect to consumption of organic food products.

2.0 Statement of the Problem

Global food consumption patterns are changing as a result of environmental and health concerns. Indian customers are getting more and more concerned with their health, and the industry there is expanding its opportunity for areas of the food market that are health-conscious, including organic food. Individuals' inclination to consume organic foods depends greatly on awareness levels, financial resources, and accessibility to the products. On the other hand, India's market for organic food is still very young. Numerous factors contribute to the low penetration of organic products, some of which are internal to consumers and others of which are external. Among the internal issues are a lack of information, authenticity and vivacious perceptions about the organic food products. Consumers have perceived organic food products; costly, meant for working (higher income) class people, authenticity and quality assurance, limited availability of products, and claims & certifications in usual retail establishments. Based on the gathered theoretical and literary evidences, this study seeks to examine customer perception towards the consumption of organic food products in Bengaluru.

3.0 Research Gap

The literature survey reveals that there are studies conducted benefits of consuming organic food products (Chinnci, 2002)[3], effect of food safety (Buzy J. C., 2001)[4], examining consumer's beliefs on OFP, their relationship with socio-demographics, Factors influencing consumer awareness (Kumar & Ali, 2011, Jayanthi M, 2015, Gnasundari *et al.*, 2015), Consumer's attitude (Umamaheshwari and Chandrasekar, 2015)[6,7], consumer's purchase intentions (Rghavan & Megeh, 2013). Kutnohorska's (2013)[12] did study the consumer's perception towards the organic food products in Czech. There is negligible amount of research has been carried out in the area of understanding and analyzing consumer's perception of consumption of Organic Food Products in Bengaluru and as the study is of immense importance for the marketers to carefully design market penetration and development strategies, for academicians; generating huge literature on the entire framework and suggestions made helps bring in academia (researchers) and industry (marketers) for betterment of the people.

4.0 Literature Review

Chinnici *et al.,* (2002)[3] says there is no common definition of "Organic" as standards of products to be certified organic vary across globe. In simpler words, organic food is minimally processes to maintain integrity of food without artificial ingredients, chemicals/preservatives. Organic foods are grown and processed without the usage of synthetic fertilizers, pesticides, artificial ingredients, preservatives or irradiation. Buzby J. C. (2001)[4] aimed studying the effect of food safety perceptions on food demand and global trade; found that the consumers are immensely concerned about food safety. There has been a shift in the behavior of consumers over conventional food products.

Lea and Worsley (2005)[5] conducted a study investigating consumer perceptions of organic food and their correlation with sociodemographic factors and personal values related to self-transcendence (universal,

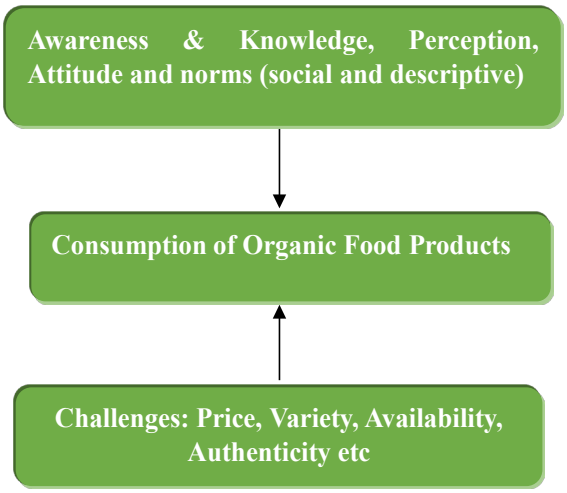


Figure 1. Summary of literature review.

Source: Literature Survey

benevolence) personal values. The study revealed that the majority of the participants held the belief that organic food is healthier, more flavorful and environmentally superior than conventional food. Kumar and Ali (2011)[6] conducted a study examining the determinants influencing consumer awareness of organic food in India. Their findings indicated a notable correlation between the literacy levels and the adoption of organic food products, with higher awareness observed among literate individuals compared to those with lower levels of literacy. Jayanthi M (2015)[7] elucidated that nearly 40% of the consumers were aware of organic food products in Coimbatore district. Umamaheshwari & Chandrasekar (2015)[8] ascertained the perception and attitude of consumers towards organic products. The research revealed that there is a paradigm shift and consumers are reluctant to buys organic products due to cost, availability and authenticity.

Gunasundari K. & Sathiyabama (2016)[9] studies the factors influencing awareness and knowledge on organic food among the customers. Their study reveals that factor; price, attitude, perception, availability, certification, quality have a strong influence on purchase intention. Radhika P *et al*., (2012)[10] found that organic is the buss among wealthier class. Price, authenticity, verity, right information, supply were the concerns. Raghavan and Megeh (2013)[11] conducted research on consumers' purchase intentions regarding organic products within Chennai city. Their results highlighted that consumers' attitude towards organic food products exhibited the most significant correlation with an intension to purchase such items. Tomsik and Kutnohorska's (2013)[12] conducted a study to examine how Czech Republic perceive the health- related aspects of organic food. Their research revealed the variations in consumer attitude, beliefs and behavior regarding the health benefits associated with organic food products. Additionally, the majority of consumers considered their health to be a significant aspect of their lives and viewed organic food as healthier than conventional alternatives.

Organic Food Product market is growing day by day due to the increased health concerns among the consumers. People are looking out for healthier, safer options than just consuming conventionally grown food products. The change in the consumption is driven by the enhanced awareness of benefits of organic products, availability online & offline, and pricing and promotional activities of marketers. Above all, government has also taken the initiatives to build healthier nation by supporting organic farming and by providing the platforms for farmers to market the produce along with strengthening the supply chain.

Crinnion WJ (2010)[14] highlighted that organic food options offer elevated levels of levels of vitamin C, iron, magnesium, and phosphorus compared to non-organic counterparts, while also containing fewer pesticides and high nutrient content. Organic fruits & Vegetables are noted for their abundance of antioxidants, reduced presence of toxic compounds, and potential to inhibit cancer cell proliferation. Furthermore, the consumption of organic dairy products is associated with health advantages, particularly concerning allergic dermatitis.

5.0 Objectives of the Study

It has been observed that the consumers have perceived Organic Food Products as healthier and immunity-

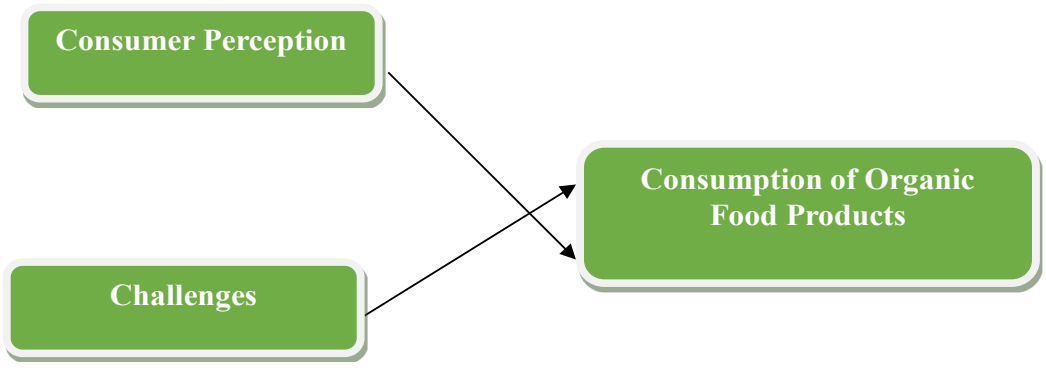


Figure 2. Conceptual frame of the research.

Source: Developed by Author

builders over the costly and unhealthy (conventionally grown) food products. As the government has taken initiatives, even Grameen produce are also certified organic produce and such initiatives are building the confidence among the consumers to grab the organic food products. Organic Food Products are no more perceived as costly but the best healthier option. Having said this, current research focuses to-

1. Ascertain the perceived perception of consumers and
2. Its impact on consumption of organic food products and
3. Identify the challenges (hindrances) and its impact on consumption of Organic Food Products in Karnataka with special reference to Bengaluru.

For the current research, conceptual framework adopted by the researcher has three variables namely perceived perception (independent variable), Challenges of consumption of OFP and Consumption of organic food products (dependent variable) to measure the impact of Consumer perception on actual buying of organic food products.

Consumer Perception: Perceived perception is all about how a consumer has perceived a particular product, process, event etc. Perceived Perception encompasses the thoughts, emotions, feelings or opinion related to particular aspect. Balaji & Bhama (2012)[13] have critically analyzed the role of consumer perception towards organic food products and found out that the there is a significant relationship between the perception and buying of OFP. For the current study, researcher aims at understanding the perception of consumers about the consumption of organic food products by identifying the attributes related to quality, health, nutrition, safety and authenticity, challenges, marketing strategies etc.

Consumption: Consumption is the actual buy of the product or services. For the current study, consumption means buying the organic food products which includes intention, preference, willingness and actual buy).

Challenges: challenges in consumption of OFP which includes attributes on price, availability, quality, variety etc. Researcher has measured the impact of Perceived Perception of consumption of OFP and challenges on consumption.

6.0 Hypothesis

Ho: There is no Significant Impact on Consumer Perception and Challenges of Consumption of OFP.
H1: There is a Significant Impact of Consumer Perception and Challenges of Consumption of OFP.

7.0 Methodology

For the current study, researcher has collected primary data through a scientifically tested questionnaire which was introduced as Google form (due to pandemic) to the sample size of 519 consumers (chosen randomly) who obtain Organic Food Products from the various retailer spread across Bengaluru city. Research tool consists of attributes related to demographics, perceived perception, consumption of organic food products and challenges in consumption of the organic food products using dichotomous questions along with five-point Likert Scale to measure the attributes of perception, consumption and challenges. Thus, collected data is supported with secondary information collected through various research papers, thesis, reports etc. analyzed adopting descriptive stats (describing data) and regression analysis to understand the relationship between the variables and their impact by testing the significance of hypothesis constructed.

8.0 Limitations of the Study

Current research is limited to measure the impact of consumer perception and challenges of consumption of organic food products by considering the opinion of the consumers spread across Bengaluru city. Consumers are chosen randomly and hence might have led to sampling errors. Due to the time and schedules during the Pandemic, responses might be biased and varied.

9.0 Statistical Validations

I. Mapping of Challenges of Consumption of Organic Food Products

Even though the consumers aspire to buy organic food products due to certain obstacles they may not prefer to

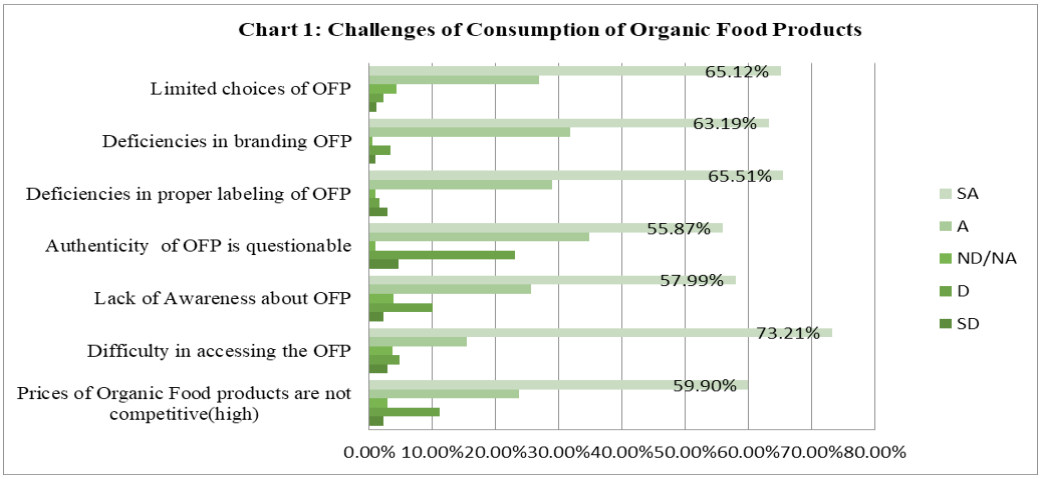


Chart 1. Challenges of consumption of organic food products.

buy the OFP. Researcher has identified such hindrances as Challenges which is the abridgment of 7 attributes which are measured on the five-point Likert Scale ranging from Strongly Disagree to Strong Agree. These attributes have been mapped for the better understanding of the expressions of the consumers. From the Chart-1, it is evident that 59.90% of the consumers strongly agree that the organic food products are not competitively priced in the sense; they are highly priced and difficult for the middle-class families to consume them. 73.21% of strongly agree to the fact that OFP are difficult access till Covid-19 surge. Accessibility has become easier after the pandemic as there was no option than going online. 57.99% of the consumers strongly agree that there is a huge scope for the awareness to be created among the middle class and below. 55.8% are of the responses obtained strongly agreeing that authenticity of the OFP is questionable. As people buy OFP due to the less toxic chemicals compared to inorganic products, 65.5% of them believe labeling lacks details n preservatives/adhesives used. 63.19% of the consumers strongly believe that many people go with brands and organic food products lack apt branding. 65.12% of the consumers strongly believe that OFP lack variability (varieties offered) compared to inorganic food options.

II. Mapping of Consumption of Organic Food Products

Chart-2 elucidate the mapping of Consumption of Organic Food Products where 6 attributes are measured

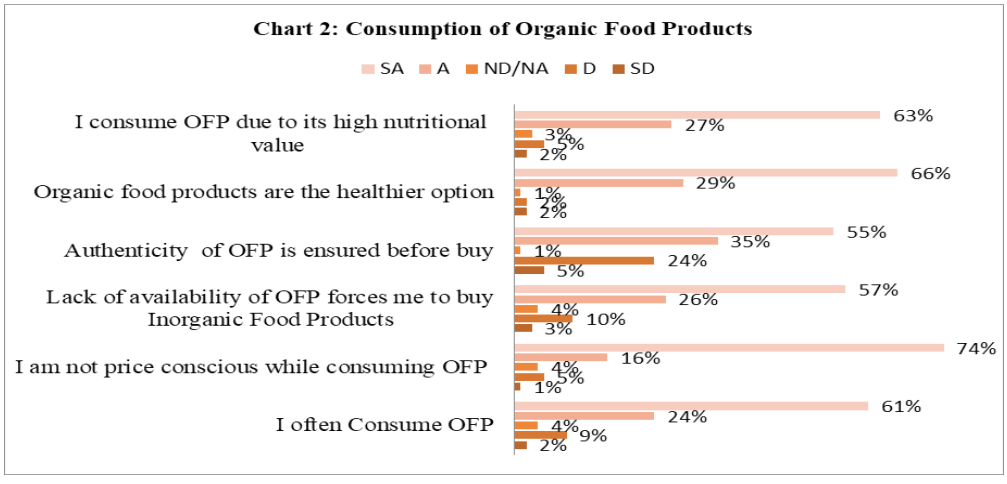


Chart 2. Mapping of consumption of organic food products

adopting five-point Likert Scale ranging from strongly disagree to strongly agree. 63% of the consumers strongly deem to consume OFP due to its high nutritional value. 66% of the responses obtained strongly agree that OFP are the healthier option. 55% of the consumers ensure the authenticity of the OFP by checking the label; certifications etc. 57% of the consumers buy inorganic food products only in the absence of availability of OFP. 74% of the consumers strongly agree that they are not price conscious while buying, as health is more important. 61% of the respondents consume OFP very often.

III. Hypothesis Testing to Measure the Impact of Consumer Perception and Challenges on Consumption of OFP

Consumer behavior is a complex term to understand as it is not a single concept but pool of concepts related to norms (descriptive subjective), psychographics, social behavior, demographics, economical attribution and many more. It is important to know how the consumer perceives things, factors influencing their perception, actual reasons of consuming organic food products and the challenges faced in consumption of OFP as organic food industry is gaining momentum since a decade and lot of awareness being created in favor of organic food consumption. With this perceptive researcher has identified variable; Perception, Challenges and Consumption to how they influence each other and impact of Perception and Challenges on Consumption of OFP. To measure the impact researcher has adopted regression model & tested the hypothesis-

Ho: There is no Significant Impact on Consumer Perception and Challenges of Consumption of OFP.

H1: There is a Significant Impact of Consumer Perception and Challenges of Consumption of OFP

From the Table 1, it is evident that all the 519 respondents have embraced their opinions about the perception with mean value 1.36 with std. Deviation of 0.38 and challenges with mean value 1.63 and standard deviation of 0.35 faced in consumption of Organic Food Products (OFP) with the mean value of 2.55 and standard deviation of 0.35.

Table 2 displays the model summary of the impact of perception and Challenges on the Consumption of OFP. For the current study, predictor variables are Perception and challenges in consumption of OFP and the dependent variable is the Consumption. R square values are used to identify the percentage of total change in the consumption

Table 1. Descriptive statistics of consumption, perception and challenges

Variables	Mean	Std. Deviation	N
Consumption	2.5507	.3508	519
Perception	1.3638	.3867	519
Challenge	1.6389	.3508	519

Table 2. Model summary for impact of consumer perception and challenge on consumption of OFP

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.746	.557	.538	.47094	.557	29.952	3	516	.000
a. Predictors: (Constant), PP, Challenge									

Table 3. Regression analysis for impact of consumer perception and challenge on consumption of OFP

Model B		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	.770	.290		2.652	.005
	Perception	.462	.068	.512	6.782	.000
	Challenge	.378	.049	.413	5.652	.000
Dependent Variable: Consumption						

Source: Primary Data

of OFP (Dependent variable). The determining factor was found to be R^2: .557 which indicates a significant positive relationship between the variables. The determining factor showed 55.7% (F=29.95) of Consumption of Organic Food Products is dependent of Perception of consumer about OFP and Challenges faced by consumers in consumption of OFP.

It is known that standardized regression coefficients measure the degree of influence of each predictor variable on the criterion variable. Higher the beta value greater is the influence of variables. Table 3 reveals that coefficient of Perception is .462 which is greater than the coefficient of Challenge. From the regression coefficients it is substantiated that Perception and Challenges have an impact on consumption of OFP and Consumer Perception has a greater more influence than the challenges faced.

10.0 Findings/Results

- Demographic Profiling reveals; Majority (59%) of the respondents are male, majority of the respondents belong to the age group between 15-25 & 25-35(27.02% &27.9%) years age group, 44.5% and 23% of the respondents are graduates and post-graduates, 27%, 23% and 25% of the respondents are students, private employees and self-employed, 70% of the respondents are married and 70% of the respondents belong to the income group of less than 30,000-60,000.
- The findings of the mapping of challenges of consumption organic food products reveal; 73.21% of strongly agree to the fact that OFP are difficult accessing OFP, 57.99% of the consumers strongly agree that there is a huge scope for the awareness, 55.8% are of the responses obtained strongly agreeing that authenticity of the OFP is questionable, 65.5% of them believe labeling lacks details n preservatives/adhesives used, 63.19% of the consumers strongly believe that many people go with brands and organic food products lack apt branding and 65.12% of the consumers strongly believe that OFP lack variability.
- Findings of the mapping of Consumption of organic food products reveal; 63% of the consumers strongly deem to consume OFP due to its high nutritional value, 66% of the responses obtained strongly agree that OFP are the healthier option, 55% of the consumers ensure the authenticity of the OFP by checking the label; certifications etc, 57% of the consumers buy inorganic food products only in the absence of availability of OFP and 74% of the consumers strongly agree that they are not price conscious
- Result of Hypothesis tested; Null hypothesis is rejected as there is a significant impact of Perceived Perception and Challenges on Consumption of OFP.

11.0 Suggestions

- Consumer awareness among the middle age group and above is the concern. Marketers, producers, universities and government must have a collaborative approach to create awareness and educated consumers about the benefits of organic farming and consumption of organic food products.
- Marketers have to adopt belligerent product strategies where they meet the expectation of consumers of having varied product basket to satisfy consuming food products of their choice at ease.
- The pricing strategy must be revised by the marketers to relate to price conscious consumers. This can be achieved by government and marketers collaborating with farmers and strengthening retailers.
- Packaging strategies are to be innovative to enhance the shelf-life and labeling must include all the details of ingredients.
- Retailers should also take the initiative in educating the customers walking to stores about the benefits of consumption of OFP. Consumers are interested to know the vitamins & Minerals composition in OFP, the detail information about the same to be provided.
- Authenticities of the OFP are to be educated by making customers' walk-in the farm/production units/processing. The Visit to point of production creates trust about the method of production, so that consumer believe OFP contains higher level of certain nutrients and lower level of usage of pesticides.

12.0 Conclusion

India is going to witness enormous growth of Organic Food Production lead by organic farming, marketing of Organic produce and changing consumer preference for healthier life style. One of the important aspects affecting the consumption is the consumer's perception which is acquired after consuming the products. With this regard, researcher aims studying the perception of consumers and challenges faced & their impact on consuming the organic food products in Bengaluru. Study reveals the fact that many consumers are still price conscious, finding difficulty in locating organic stores, not many variants of product are available and at the same time agree that organic food products are healthier and safer than inorganic food products. Further study can be done to explore the actual nutrients, minerals, antioxidants present in organic foods in comparison with non-organic, very few studies have conducted in this regard and failed to show exact difference. Very few studies have found organic foods contain higher level of antioxidants, micronutrients, like vitamin C, Zinc, and Iron.

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