

Consumers' Awareness and Consumption: A Study of Organic Product

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Abstract: Over the last few years consumers became more health conscious which leads to increase in the consumption of environment friendly and healthy product. The paper aims at studying awareness and consumption of organic products. In order to provide insight into consumer awareness and consumption of organic products, 200 respondents were surveyed using a questionnaire. The study revealed that majority of consumers are aware about organic product but a very few out of them purchase it. The major reasons of non-consumption of organic products were unavailability of organic product, lack of information about benefits of organic product and its high price. Demographic factors like teenager in family, education and monthly income affect consumption of organic product. Consumer were facing problem while purchasing organic product like hard to differentiate organic product from conventional product, lack of certification and labeling. The findings of this paper may help marketers to better strategic and marketing decisions. It also helps government bodies in designing public awareness programs.

Key Words: Organic Product, healthy consumption, environment friendly consumption

I. INTRODUCTION

The organic way of producing food is growing rapidly across the globe looking to continuing scandals pertaining to contaminated food; further consumers also prefer organic food over genetically modified food. The good sign is land under organic farming is also increasing; else natural environment had posed various problems rising because of conventional farming system which in turn affects the health of environment and human beings. Therefore, organic farming not only helps to preserves the environment but it also improves the health of world and leads to development of economy and rural areas as well.

Organizations' around the world have responded to the problem by providing organic products to the consumers. Consumers are becoming more health conscious and prefer to purchase organic products looking to its health benefits. (Biao, 2015). Consumers are also very keen about the quality of the products they buy. Moreover, demand for organic products is increasing globally by over five billion US dollars a year in terms of sales quoted by (Willer, 2009).

Indian organic food sector is also growing at the faster pace in the world (Osswald et.al, 2013). It is found out that consumers with a greater awareness towards their own health and that of environment, demand more environmentally friendly merchandise (Montoro et al., 2006). The great attention towards producing products by farmers, business houses, and governments will help to protect overall health of environment, public and Nation.

Earlier studies revealed that consumer wants more information and freedom and are also interested to buy more natural product, although they need to be made aware of how organic production varies from conventional one. Further, because of lack of knowledge about the organic products and their methods of production hinders some of the respondents from buying organic product.

So, this studies aims at finding out respondents' awareness towards organic products and its usage.

II. REVIEW OF LITERATURE

Maria et al. (2017) have conducted research titled, "Assessments of the Quality of Organic versus Conventional Products, by Category and Cognitive Style". The research was conducted with the objective to develop a model which highlights perception of consumers on specific organic product attributes like protection of environment, health aspect and hedonic aspects. Quota sampling procedure was applied by the researcher for sampling. The data was collected from 209 respondents who were having responsibility to buy food for their households. The linear regression model, one sided t-test and two-sided t-test were used to test the hypothesis. The research found that the consumers' perception towards the quality of organic food product is affected by the factors like environmental protection, health aspect and hedonism. It also found that the health perception is one of the factors with highest effect on the quality perception of consumer. The research was having limitation as it just covers two categories with only two products.

Yadav et al. (2016) have conducted research on "Intention to purchase organic food among young consumers: Evidences from a developing nation". The research was conducted with objective to study the factors like consumer's

attitude, subjective norms, behavioral control, moral attitude, health consciousness affecting intention to purchase organic food. The data was collected with the help of questionnaire. To collect data, 380 questionnaires were distributed in college campuses and shopping malls. At the end of the survey, total 220 questionnaires were considered after avoiding the incomplete responses and extreme outlines. The structural model was used to test hypothesis. The study found that the health consciousness is emerging as a significant variable affecting attitude towards organic food. The environmental concern did not influence much to purchase intention of purchasing the organic food. It also found that the high price of the organic product is major barrier in purchasing organic product. The unavailability of organic food product nearby store is major issue faced by the consumers. The study is limited to measuring the intention to purchase organic food product, it doesn't consider the buying behavior. The study is also having limitation of sampling bias as the survey is limited to the young adults.

Natascha et al. (2016) have conducted research on "Communicating organic food quality in China: Consumer perceptions of organic products and the effect of environmental value priming". The study was focusing on consumers' expectation like taste, health, price and quality of the organic food products. The study is pertaining to evaluation of different fruits and vegetables. The data was collected with the help of questionnaire from 192 respondents. The study found that the consumer expect more from the organic labeled food. This study confirms that the consumers' expectation from organic food product was higher than the conventional food product. The consumers' expectation towards taste is stronger than that of towards health. The consumer always faces trade-off between health and taste of the food product. Limitation here is, it was limited to the fruits and vegetables.

Aleksandar et al. (2016) have conducted research titled "Organic food consumer profile in the Republic of Serbia". The main objective of study was to identify segment of consumer purchasing organic food product. The data was collected with the help of structured questionnaire and interviews. Survey was conducted with total 400 respondents. The market segmentations were conducted with the help of conjoint analysis and cluster analysis on consumer preferences. The study confirms that the different aspects of flavor are more important when respondents are open for innovation. With reference to the milk product, the consumers gave more importance to the health and nature preservation as compared to other factors. The respondents with higher education and higher income prefer more organic product. The research is limited to study only one product i.e. yogurt.

Xie Biao et al. (2015) have conducted research on "Consumer perception and attitudes of organic food products in Eastern China". The research aimed to explore the major

factors affecting purchasing process of organic food products. A survey was conducted to collect data from the respondents in two different stores specialist in selling the organic food product. Total of 388 responses were collected from various consumers visiting those two selected stores. The study found that the most important factor which affects the consumer purchase decision was that, the consumers consider it safe and healthier. The factors like income and education level was relatively positive with purchasing organic food products. The major barriers to the growth of organic food product market are high price of the organic product and lack of availability of the product. The consumers' awareness towards organic food product is not much; it is also one the major barrier in the growth of the organic food market share.

Teng and Wang (2015) have conducted research titled, "Decisional factors driving organic food consumption". It aimed to identify the factors like availability of information on the organic product, consumer trust and attitude towards the organic foods affecting the consumer purchase decision. The researcher have collected data with the help of a structured questionnaire from 693 respondents at four large scale supermarkets and three health food stores in Taiwan. The factor analysis and the path analysis were used to test the predated causal relationship among various determinants. The study found that the organic labeling information positively affect the consumer trust and attitude towards organic food. The study also revealed that the trust and attitude of consumer towards the organic food product plays the mediating roles in linking the knowledge of the consumers with their purchase decision. The research resulted that the good organic labeling and knowledge towards organic products have critical effect on consumers trust in the organic food product. The study also found in contrast of previous finding, the level of knowledge regarding organic food product cannot directly relate with the positive attitude.

Basha et al. (2015) have conducted research titled, "Consumers attitude towards organic food". The research aimed to study the motivating factors which influence the purchasing of organic food and to analyze various aspects related to the usage of organic food products. The data was collected from randomly selected 50 respondents. The study concentrated on the three factors namely environmental concern, health concern and consciousness towards lifestyle. The one way ANOVA was conducted to analyze the data and to identify the mean differences in the mean rating for the variables. The study found that there were no significant difference among the consumers with various religions on the different variables like health concern, food product quality and lifestyle. The study found that major reason for purchasing organic food product were consumers concern toward their health, food product quality and life style.

Bharthi et al. (2014) have conducted research titled "Buying behavior of urban residents towards organically

produced food products". The study aimed to examine how consumers perceive the organically produced food product. To collect data multistage sampling techniques have been applied. The study was conducted in two different places of Bangalore. The structured interview method has been used to collect data from 200 households, who are aware about the organic food product. The researchers have distributed the respondents into two category based on the Socio Economic Status and purchase behavior. The study concluded that there are majority of the customers willing to pay premium price for the organic food product above the conventional product. The awareness among consumer is most important criteria to construct consumer behavior but the research found that among respondents towards organic food product was low. The consumer purchase organic food product mostly from organic food stores, super market and processing centers.

Shashikiran & Madhavaiah (2014) have conducted research on the "Impact of Demographics on Consumers' Willingness to Pay Premium: A study of Organic food products". The research aimed to examine the profile of organic food buyer and to check their willingness to pay premium price for organic food product. To collect data, the researchers have selected 10 different retail stores from the four different zones of Bangalore. Total 150 responses were considered after avoiding the incomplete questionnaires. To analyze the data, one-way ANOVA was applied. The study found that the factors like age, gender, marital status, education qualification and family type don't affect the consumer's willingness to pay premium price for the organic food products. The study found that the consumers are highly positive towards organic food products and willing to pay the higher prices for such products.

Linda et al. (2006) carried out study in Unites States on "Consumer Perceptions and Preferences for Organic Aquatic Products: Results from the Telephone Survey" with the purpose to get better knowledge of potential market opportunities for organically grown fish and shellfish products. Further, it had also identified barriers to consumer acceptance and suggested ways to overcome those identified barriers. The said study is the combination of qualitative and quantitative data collected from four different target markets to study specific consumer purchase patterns. Information was collected from New Jersey Department of Agriculture and the Agricultural, Food and Resource Economics group at Rutgers University through telephonic survey. The collected data was about consumer awareness and knowledge of organic aquatic foods, willingness to pay premium for organic seafood, attitudes towards risks and benefits of different types of seafood. Further, data was also collected for knowing consumers' knowledge towards product labeling showing country of origin. To collect the data, services from professional telephone survey Company was used and phone numbers were randomly generated. Data from 800 telephone surveys was collected through computer assisted telephone

interview. The result indicated that 49 and 41 per cent of respondents consume seafood because of taste and health benefits respectively. Lower price may induce them to buy more, eighty-two per cent of the respondents indicated that country of origin label becomes useful to take wise decision. Majority of consumers make their purchase decision based on taste and healthy benefits of organic foods.

Roitner (2006) had undergone research study titled "Consumer's perception of organic foods in in Bangkok, Thailand". The study identified barriers for buying organic foods and amount of knowledge about organic production among consumers. The said study is exploratory in nature. The semi-structured questionnaire was used to take interview of 848 consumers from selected hypermarkets, supermarkets and small health food stores in Bangkok; further questionnaire was made in Thai language. The selected stores were Carrefour, Lemon Farm, Tops and Villa Market. The data was collected within the shops only and care was taken that respondents are selected based on their education level, which posed difficult problem for researchers. The gathered data were entered into MS Access database to analyze, later on descriptive analysis, cross-tables and the Chi-square test was performed on collected data. The results revealed that positive effects of organic products and absence of absence of pesticides in the same are the important reason for buying organic products. Further, because of lack of knowledge about the organic products and their methods of production are reasons why some of the respondents responded not to go for organic product. Respondents have shown negative attitude towards GMOs.

Annelieset. al (2002) conducted research study on "Are organic food consumers opposed to GM food consumers?" with the aim to find that whether organic food consumers are naturally opposed to GMO food or not. In short the intention was to find out that do organic food consumers have positive attitude towards GMO food or not, and if so to what extent. To start the study data was collected by way of two independent consumer surveys. First, in summer 2000, where in sample comprised of 800 Flemish consumers from Belgium. The respondent was selected with the help of random proportionate stratified sampling, while using age, family size and province as variables of stratification. The second consumer survey was done in spring 2001, and data was collected via face-to-face personal interviews of 90 Belgian organic consumers. The data was analyzed using SPSS, cross-tabulation was conducted in pair with Pearson chi-square test. ANOVA along with Ducan post hoc test was performed to compare means of two groups of samples, factor analysis was also performed. The result revealed that 40 percent of the respondents are in against of GM food. Further, all organic food consumers find organic food important, healthy, safe, eco-friendly and tasty. Even being highly priced, consumer didn't perceive it as expensive. Secondly, it can be said that consumer beliefs about animal

and environmental friendly character if contemporary food production, as well as consumer trust and perception of risks related to genetically modified food are positively linked with the attitude towards genetically modified food. Review clearly indicates that not every organic food consumer is naturally opposed to genetically modified food. The perception of organic food being healthy, safe and environmentally friendly is negatively linked with the attitude towards genetically modified food products.

Raffaele et al. (2002) had undergone research study titled "Consumer motivations in the purchase of organic food A means-end approach" with the aim to study consumer motivation and knowledge of organic food and related behavior, further, study aimed to evaluate and connect product knowledge and product experience. To conduct the said study means-end chain model was used to create linkage between attributes of products to the needs of consumers. In order to collect data, laddering approach was used and data is being collected from 60 consumers who were responsible for their household food purchases, later data was coded, consolidated and presented in a set of hierarchical structure value maps. This is been done to know to exact what degrees and the way consumers understand organic product information. The study found that there is relatively high degree of consumer involvement for organic food, though less expertise at the end because of lack of availability of adequate information. A structured questionnaire was framed to collect data regarding characteristics, product knowledge and another part consisted of consumer expertise and experience with organic food product. For qualitative data analysis content analysis was used. The Laddermap software was used to derive the implication matrixes. The result revealed that out of total 60 respondents, 35 purchases organic products more than once a week, 18 were labeled as occasional and 6 did not know. The result of the study revealed that consumer wants more information and freedom and are also interested to buy more natural product, though they need to be made aware of how organic production varies from conventional one.

III. RESEARCH METHODOLOGY

This study attempted to gain knowledge about consumers' awareness towards organic products, its consumption and various reasons for purchasing or not purchasing organic product. A survey was conducted with a sample comprising of 200 respondents from Surat city. A questionnaire was designed to collect data. The questionnaire was divided into five different sections. The first section consisted of the questions related to awareness of consumers towards organic product. Second section consisted of basic questions related to consumption of organic food. Third section consisted reasons for purchasing organic product. Fourth section consisted of various reasons for not using organic products and last fifth section was related to the demographic information of respondents. Various organized

food retail store served as the sampling site. The study used five point Likert scale with options like Strongly Disagree = 1, Disagree = 2, Neutral = 3, Agree = 4, and Strongly Agree = 5.

IV. RESULTS & DISCUSSION

It was observed from the study that a higher proportion of female (56%) shopped for food products than men (44%). Almost half of the consumers aged above 50 years. The majority of consumers (69%) were having monthly income more than Rs. 25,000. About 69% respondents were married. The majority of respondents (88%) were having education above school. Almost more than half of the respondents (58%) have teenagers in their family. The profile of the respondents is provided in Table 1.

There were total 78 percent respondents aware about organic products. The major sources of their awareness were books or magazines, newspaper advertisement which is followed by company website. Only 34 percent respondents purchase organic product. The respondents were asked to choose the type of organic product they frequently buy. The list of 10 organic products was provided to the respondents. The list included food additives, cosmetics, dairy products, bakeries, honey, sauces, fruits & vegetables, soaps & detergents, baby foods and fruit drinks. Majority of respondents (87%) says that they bought mostly baby foods followed by cosmetics (85%). The next most frequently bought item was fruits & vegetables (80%) followed by sauces (60%).

Table1. Demographic Profile and Situation factors of the Respondents

Demographics		Frequency
Gender	Male	89
	Female	111
Age	18-29	29
	30-49	58
	50-64	61
	65 or more	51
Monthly	Below 10,000	7
Income	10,000 to 25,000	53
	25,001 to 40,000	76
	More than 40,000	63
Marital	Single	62
Status	Married	138
Education	Below School	22
	High School Completed	46
	University Students	30
	Graduation	37
	Post Graduate	65

	Beyond Post-Graduation	1
Teenagers in family	Yes	85
	No	115

The major reason of consuming organic food is to protect environment from pollution and have healthier food as compared to conventional food. The consumers were facing problem in finding organic product. Consumers have suggested that there must be some speciality store to purchase organic product, as well as there must be benefits printed on the package of organic product. There were majority of the consumer facing problem in differentiation organic product from conventional product because of unavailability or improper labelling and certificate on the package.

Total 66 percent consumers were not purchasing organic product. Their major reasons for not purchasing organic product were unavailability of organic product and lack of information about potential benefits and high price of product.

To test association between variables, chi – square test was used to examine any statistical significant differences at 95% confidence interval. The analysis focused on the extent to which responses differed between gender, income, education, age, marital status and family with teenagers and without teenagers. Based on the results, we found that monthly income ($p = 0.003$), education ($p = 0.011$), and teenagers in the family ($p = 0.023$) were associated with the consumption of organic product. The demographic factors gender, age and marital status of consumers were not associated with consumption of organic product.

V. CONCLUSION

The study was conducted to examine awareness level of consumers towards organic product and to identify the impact of various demographic factors on usage of organic food. There were many respondents aware about organic product but very few out of them purchase it. Majority of them purchase organic product with the reason of either protecting health of environment or of oneself. Living with teenagers seems to be an important factor which brings positive attitude towards consumption of organic product. More awareness program and educational activities needed to create awareness towards various benefits of organic product. Innovation in certification, packaging and labelling is needed to increase consumption of organic product. Some dedicated speciality retailer store needed to create awareness as well as promote sale of organic products.

REFERENCES

[1]. Aleksandar, G., & Djokic, N. (2016). Organic food consumer profile in the Republic of Serbia. *British Food Journal*, 118(1), 164-182.

[2]. Bash, M. B., Mason, C., Shamsudin, M. F., Hussain, H. I., & Salem, M. A. (2015). Consumers Attitude Towards Organic Food. *Procedia Economics and Finance*, 31, 444-452.

[3]. Baz, M. H., Martos-Partal, M., & González-Benito, Ó. (2017). Assessments of the quality of organic versus conventional products, by category and cognitive style. *Food Quality and Preference*.

[4]. Bharthi, Ananthnag, & Nagaraja. (2014). Buying behaviour of urban residents towards organically Produced food Products. *International Journal of Research in Applied, Natural and Social Sciences*, 2(2), 33-38.

[5]. Loebnitz, N., & Aschemann-Witzel, J. (2016). Communicating organic food quality in China: Consumer perceptions of organic products and the effect of environmental value priming. *50*, 102-108.

[6]. Montoro, F. J., Fuentes, L. T., & Canadas, F. P. (2006). Improving attitudes toward brands with environmental associations: an experimental approach. *Journal of Consumer Marketing*, 26-33.

[7]. O'Dierno, L. J., Govindasamy, R., Puduri, V., Myers, J. J., & Islam, S. (2006). *Consumer Perceptions and Preferences for Organic Aquatic Products: Results from the Telephone Survey*. New Brunswick, NJ: Department of Agricultural, Food and Resource Economics.

[8]. Osswald, N., & Menon, M. K. (2013). Organic food marketing in urban centres of India. *ICCOA*.

[9]. Shashikiran, & Madhavaiah. (2014). Impact of Demographics on Consumers Willingness to Pay Premium: A study of Organic food products. *International Journal of Research and Development - A Management Review*, 3(3), 15-19.

[10]. Teng, C.-C., & Wang, Y.-M. (2015). Decisional factors driving organic food consumption. *British Food Journal*, 117(3), 1066-1081.

[11]. Verdurme, A., Gellynck, X., & Viaene, J. (2002). Are organic food consumers opposed to GM food consumers? *British Food Journal*, 610-623.

[12]. Verfasst, R. v., & Schobesberger. (2006). *Consumers' Perception of Organic Foods in Bangkok, Thailand*. Mai: Universität für Bodenkultur Wien.

[13]. Xie, B., Wang, L., Yang, H., Wang, Y., & zhang, M. (2015). Consumer perceptions and attitudes of organic food products in Eastern China. *British Food Journal*, 117(3), 1105-1175.

[14]. Xie, B., Wang, L., Yang, H., Wang, Y., & Zhang, M. (2015). Consumer perceptions and attitudes of organic food products in Eastern China. *British Food Journal*, 1105-1121.

[15]. Yadav, R., & Pathak, G. (2016). Intention to purchase organic food among young consumers: Evidences from a developing nation. *Appetite*, 96, 122-128.

[16]. Zanolli, R., & Naspetti, S. (2002). Consumer motivation in the purchase of organic food A means-end approach. *British Food Journal*, 643-663.