

An Analysis of Consumer's Purchase Behavior on Organic Foods in Kathmandu Valley

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Abstract—This paper made an attempt to identify the major factor influencing the attitude and purchase decision among the consumers on organic foods in Kathmandu valley. The study depicts the product related and external drivers of organic foods by taking various demographic factors as intervening variables into the consideration. The populations for the study are the consumers of Kathmandu valley, with the sample size of one hundred and sixty respondents who have little, partial or complete idea about the organic food and have at least bought the organic food once. A close ended questionnaire has been developed to study awareness, attitude and the purchase behavior of customers towards the organic foods. Descriptive as well as inferential analyses (t-test, f-test, and correlation) have been used for the entire analysis of data. It is found that un-affordability of organic food is one of the major constraints/barriers of this study. It seems that organic sellers need to educate consumers about the reasons for charging premium price. By recognizing the appropriate customer segment, both the marketers and the sellers have to focus more on key marketing aspects for uphold the highest level of organic food consumers' satisfaction in Kathmandu valley. Finally, it will help to develop the trustworthy impression among all the stakeholders.

Keywords: organic food drivers, consumer's attitude, primary survey and descriptive statistics

1. INTRODUCTION

Present day customers have shown great to the healthy and tasty diet with high nutritional values, confidence in food safety, environment and animal welfare concern and sustainability. With the rising popularity of organic foods, food safety and quality issues have triggered the awareness and people are suspicious to conventional foods across the globe. The market of organic food has grown continuously over the last few decades, which represents a multi-billion industry (Organic Trade Association, 2011).

Still, the total share of organic food is still small compared with the total food market. At present, in Nepal, the market for organic products is not well developed but there exists a good opportunity for organic farming in the urban and semi-urban areas of Nepal as most of the affluent consumers have been

agglomerated around cities and cities are the popular destinations for the high income groups, business houses and tourists; who are considered to be the major consumers of organic foods. Organics future relies on the motivation of final users but very little is known about the organic food consumers' beliefs, motivations and values driving their decision-making process compared to other countries. Therefore, it is highly important to examine the underlying factors that might influence the tendency of consumer to purchase organic food and develop marketing strategies accordingly for rapid growth and development of organic market in the developing countries like ours.

At the moment, more people in urban areas are becoming conscious of health and environmental protection; which has led to a rapid and accelerating demand for organic food among people of various socioeconomic backgrounds. Gradually, with the increase in organic farming, the consumers with average and low income are also consuming the organic products from various places. So, are people really developing a positive attitude and purchase behavior for organic foods in Kathmandu Valley? Although the consumers from various economic segments are slowly influenced for consuming the organic foods, the maximum amount of organic food consumption is still limited to the high income and in well-established branded organic stores only. Therefore, is price only the factor or there are many other factors which are affecting the consumer's willingness to purchase the organic food? The majority of consumers tend to 'switch' between organic and conventional food rather than consuming a diet consisting mostly of organic food regularly. So, can we say health conscious is only the reason for purchasing the organic foods? Even though highly advanced mechanisms and mediums are being developed to share information, why do marketers lack effective marketing activities and promotional activities for organic products despite they are better for the individual, society and community as a whole?

Consumer interest in organic food products has grown enormously during the past ten years in many industrialized as

well as developing countries. Despite the growth trend of organic food products industry and continued support from various organizations, there is little research on organic food products in Nepal. Therefore the major objectives of this paper is i) To study the attitude and purchase behavior of organic foods for suggesting marketing strategies in Kathmandu valley ii) To identify the major factors influencing the consumers purchasing decision of organic foods in the Kathmandu valley .

Although, the study was limited within the Kathmandu valley by considering the sample size of 160 respondents, it helped the researchers to meet the desired objective at highest level. As per the survey, the major factor influencing the attitude towards buying the organic food was that people believed organic food as healthy for them and their family. Whereas, the reasons why every customers of Kathmandu valley is not buying organic foods regularly is due to the problem of unaffordability of organic food. Both attitudes positively influence the intention to purchase and the final decision. Marketers need to properly identify the customer segment and develop various marketing strategies related to product, place, price and promotion to enhance consumer retention and loyalty. Trustworthy factor is highly lacking in organic foods due to ineffective labeling and quality assurance practices.

Introduction chapter gave a brief outline of the topic of the study and also stated the background of the research studies, research problem statement and clarifies the objectives, purposes and limitations of this study. Second chapter reviews the previous writing, studies and related literatures that are relevant to the problem being explored, and then defines framework of the theory structure. The third chapter presents the research design and methodology, sample and the ways data are handled and used. Fourth chapter of the study embraces the result and discussion, which defined the type of analysis used to process the data gathered for the research. Finally, summary and conclusion chapter summarizes the whole research findings and appropriate recommendations are forwarded on the basis of the conclusion of the research.

2. LITERATURE REVIEW

The study was carried out with an assurance that the major factor influencing for attitude formation and buying decision in Kathmandu valley are also based on a pre-determined organic product drivers and external drivers from the literatures. The literatures are arranged as per the relevance with the topic of study, the objectives, methodologies and the outcome respectively.

Sallehet. al (2010) carried out a research entitled "Consumer's perception and purchase intentions towards organic food products: exploring attitude among academicians" attempted to gain knowledge about consumer attitude towards organic food products consumption and to see whether there is any potential for consumer to change their behavior. Likewise, Aygen (2012) carried out a research to examine the attitudes and behavior of Turkish consumers with respect to organic foods.

Furthermore, Padel and Foster (2005), Vlahovicet. al (2011), Saher et. al (2006), Shepard, Magnusson and Sjoden (2005) carried out researches in many parts of various countries to with the title focusing on the relationship between the attitude and purchase behavior of organic food consumers.

Padel and Foster (2005) conducted a research on "Exploring the gap between attitudes and behavior-Understanding why consumers buy or do not buy organic food" with the purpose to explore the values that underlie consumers purchasing decisions of organic food. The objective was to identify the major factors influencing the purchase decision of organic foods. Moreover, Shepherd, Magnusson and Sjöden (2005) also made an attempt to understand the factors influencing the consumer purchasing and consumption decision of organic foods. Sallehet. al (2010), Vlahovic et. al (2011), Paul et. al (2014), Manohar et. al (2012) also researched on organic foods with a similar objective in various parts of different countries.

Sangkumchalianga and Huang (2012) carried out a study to describe situation regarding Northern Thai consumers' perceptions about organic foods. The reasons of purchase, or not, were included. In a study conducted by Truong, Yap and Ineson (2012), quantitative data were collected from 264 potential Vietnamese consumers through a self-administered structured questionnaire and analyzed using frequencies, descriptive statistics, chi squared test, principal components analysis, t-tests and so on. Major methods used by Radman (2005), Paul et. al (2014) among 200 respondents for data collection were face-to-face interview, using a structured questionnaire, with closed-ended questions. Aertsens et. al (2009), in their study aimed to provide an overview, within a framework linking Schwartz' values theory and the theory of planned behavior (TPB).

Lea and Worsley (2005) conducted a research on "Australian's Organic food beliefs, demographics and values" and concluded that the majority of the participants believed organic food to be healthier, tastier and better for environment than the conventional food. However, expense and lack of availability were strong barriers to the purchasing of organic foods. Generally, women were more positive about organic food than men (e.g. women were more likely to agree that organic food has more vitamins/minerals than conventional food). Similarly, Paul et. al (2014), the results indicate that health, availability and education from demographic factors positively influence the consumer's attitude towards buying organic food. Furthermore, Padel and Foster (2005), Vlahovic et. al (2011), Chang et. al (2007), Truong, Yap and Ineson (2012) identified the health consciousness as the major factor influencing the purchasing decision of organic foods and most of the results showed the higher cost of organic food as major barrier for regular purchase.

Arya et. al (2009) made an effort to present consumers' willingness to pay a price premium for organic products in Kathmandu valley. The study identified that all respondents

were willing to pay price premium, but the level of acceptability varied considerably. A total of 58% of the consumers were willing to pay up to 6- 20% price premium, whereas 13% were willing to pay up to 50% premium. The average premium estimated was about 30%. survey also suggested that the consumption of organic products were increasing; however, product development and innovations in certification, processing, labeling and packaging were needed to further stimulate demand. Wang and Tsai (2014) conducted research and showed that both product quality and price fairness had direct effects on consumer trust, risk perceptions, and indirect effects (through trust in retailer and transaction risk perceptions) on the intent to revisit an organic food retailer. Consumer demand for organic food products are still under-developed in any parts of Nepal due to the lack of effective production, distribution, customer awareness and lack several marketing activities. Besides, the ongoing organic market targets the people with high income earnings. Therefore, the present paper aimed at understanding the awareness and attitudes towards organic food products in Kathmandu valley among customers of various segments. There was a need for investigation of the wider perspective of organic products and its knowledge, attitude and purchase decision through consumer's view point for marketing activities too. To the best knowledge of the researcher, it was believed that the study reviews a number of past studies, and by doing so, he was able to identify the inter linkage between two most important aspects - attitude and the consumers purchase behavior of organic food consumers in Kathmandu valley, in order to help the marketers to create effective marketing plans and programs. Additionally, the researcher also believes that the research outcome of the study has made a significant contribution to minimize the existing gap found in the literatures by providing new information about organic foods and its consumers in Kathmandu valley.

3. THE METHODOLOGY

3.1 Basic Theory

Theory of Planned Behavior (Ajzen 1991), was developed as an extension to the Theory of Reasoned Action (Fishbein and Ajzen 1975). TPB builds upon three variables, defined as attitude towards the behavior, subjective norm, and perceived behavioral control. Attitude towards the behavior (AB) is the first variable and it describes how the consumer views the behavior in question. The second variable is subjective norms (SN), and it considers factors in the surroundings of the consumer, such as the viewpoint of friends and family. Finally there is the perceived behavioral control (PBC), which illustrates ease of completion of the behavior that the consumer believes to have. The relative weight of factors within these variables is determined by the believed outcome's subjective value in direct correlation with the perceived probability of this outcome. The factors of TPB are dependent of each other. The reason for this is that for example ease of access in form of behavioral control, might also have a

positive impact on the attitude of the behavior and social norm, as well as behavioral intention.

According to Chris Fill, "Attitudes are learned through past experiences and serve as a link between thoughts and behavior". Attitudes may form out of the abundance or rate of involvement in the learning processes. Subsequently these pre-dispositions will shape people's experience in response to an object or situation. The product experiences, messages transmitted through various members of mass media, personnel, the three marketing communication volunteers namely opinion leaders, formers, and followers are all influences to attitudes. Attitudes which are clustered and often interrelated are referred to as consistent individuals.

Purchase behavior is defined as the study of the processes involved when individuals or groups select, purchase, use, or dispose of products, services, ideas, or experiences to satisfy needs and desires. All exchanging issues could affect the consumer before, during, and after a purchase. A consumer refers to "a person who identifies a need or desire, makes a purchase, and then disposes of the product during the three consumption process" (Solomon M., 2008).

Purchasing behavior is the result of the complex interaction of all the cultural, social, personal and psychological characteristics. In this context, to develop marketing strategies, marketers are supposed to understand many of those factors to understand consumers with unique cultural backgrounds, and needs of consumers in various markets (Kotler, 2005).

3.2 Conceptual Model

In this study, a simple framework was used to understand the attitude and consumer behavior towards food on the basis of organic food drivers and the external drivers identified from the various literatures.

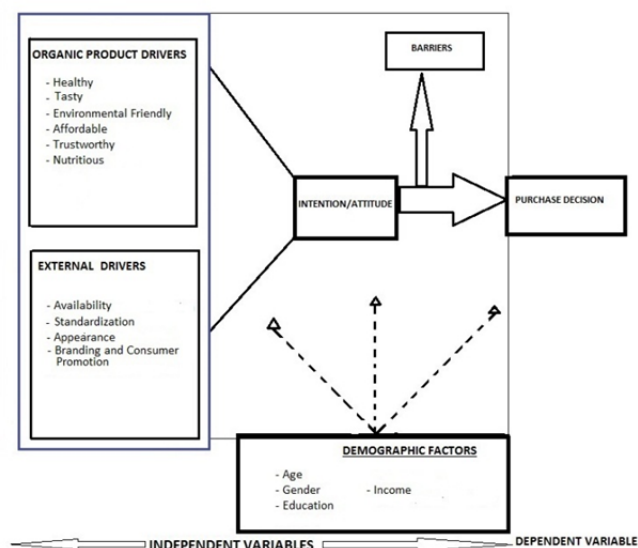


Fig. 1: Conceptual model of the study

Organic products or foods are those produced and processed through a system that encourages biological natural processes on the farm, allows farm animals to exhibit natural behavior and excludes the use of synthetic pesticides, chemical fertilizers, antibiotics and genetically modified organisms. Simply, Organic foods are foods produced by organic farming.

1) Organic Food Drivers:

a) Healthy

Nowadays consumers are being aware and concerned about their state of wellbeing and are motivated to improve or maintain their health and the quality of life. These consumers have the tendency to prevent ill health by engaging themselves in healthy behaviors. Such individuals tend to be aware of, and involved with nutrition and physical fitness.

b) Safety

Food safety represents consumers concern regarding residues in food resulting from chemical sprays, fertilizers, artificial additives and preservatives, which are often linked to farming methods. In terms of consumer decision-making, if a product is not safe, it will not be purchased and consumed.

c) Environmental Friendly

Various publications indicate that ethical consumerism is a growing trend worldwide and moral responsibility is a relevant buying motivation among various consumer. The results of many studies showed that environmental concerns were found to have the major influence of the purchasing behavior of consumers, indicating the important role of environmental and animal welfare concerns.

d) Trustworthy

Trust in the certification and labeling claims made on organic food packages is one the major factors influencing consumer willingness to buy organic products. Consumers are often blindly placing their faith in claims made by producers, marketers and supermarkets.

e) Nutritious

Something that provides nutrients -vitamins, minerals, and protein, for example -is nutritious. Our bodies need nutritious food to grow, heal, and stay healthy, however much we might crave tasty, non-nutritious snacks. According to Cambridge online Dictionaries: Nutrition are the substances that you take into your body as food and the way that they influence your health. People believe that the nutrition level in organic food is very high in comparison to the conventional foods.

f) Taste

As they are free from fertilizers and pesticides, they are nutritious and create natural taste. So, as the consumers think organic food does have a delicious taste, it is another barrier for them to purchase as much as organic food as they want.

2) External Drivers

a) Availability

Availability refers to the areas where consumers can purchase the organic foods. Nowadays, organic foods are not only available at farmers place. They have been distributed from specialized stores, departmental stores, agricultural farms, restaurants and hotels, open market and personal selling

b) Appearance

Appearance refers to the outer look of the organic foods. The shape, size, color and so on affect the attitude and purchase behavior of organic foods. Many consumers like the natural appearance of the food whereas some prefer to be modified by the marketers or the sellers.

c) Standardization

Standardization here refers to labeling, packaging, certifications and permission from quality inspecting authorities at local, regional, national and the international level. Highly standardized organic foods are demanded by the consumers so that they are not cheated for the payment they have made.

d) Branding and Consumer promotion

The process involved in creating a unique name and image for a product in the consumers' mind, mainly through advertising campaigns with a consistent theme is branding. Branding of consumer foods and stores aims to establish a significant and differentiated presence in the market that attracts and retains loyal organic customers.

The above mentioned independent variables provided the "input" which was modified by the model to change the "output. In questionnaire, these factors were included in likert scale statements for which scales were 1= strongly agree, 2 = Agree, 3= Neutral, 4= Disagree and 5= Strongly Disagree.

3.3 The Data

Sample of the study represented the whole population of the study. Sample size of this study was 160 respondents. Convenience sampling method of data collection was used. A close end questionnaire of 12 sets was developed to study awareness, attitude and the purchase behavior of customers towards the purchase of the organic foods. The survey was carried out during December 2015 to the customers by directly visiting these organic places such as specialized organic stores, open organic markets, agricultural farms, organic restaurants and bars and departmental stores with Kathmandu valley. On the other hand, secondary data was collected through various agricultural magazines and websites. After the completion of the data collection, all information were gathered, edited, coded, and recorded in Google docs, SPSS and Microsoft excel format. The responses were summarized using Microsoft Excel 2010 and SPSS PASW Statistics 18. Various statistical tools were used as part of data analysis to

test the hypotheses. Descriptive tools that were used in the study are mean, median, cross tabulation, trend lines, histograms, pie charts, bar graphs and so on. The tools for inferential study were T- test and F- test. For this research descriptive statistics, reliability analysis, correlation analysis were performed in order to accomplish the objectives of the study. The data analysis included the establishment of Cronbach's Alpha (0.79) for the reliability of the instrument used.

4. DATA ANALYSIS AND PRESENTATION

The main objectives of this research study were fulfilled with the outcomes derived from the analysis of the data. Considering the objective, the chapter was mainly based on the analysis of the data collected through the primary sources i.e. through questionnaires.

4.1 Descriptive Statistics

The study (Appendix: Table 1) depicts that maximum number of 92 respondents i.e. 57.1% understand the term "Organic food" as food without chemicals/pesticides. Surprisingly, there were no respondents who had no idea at all about organic foods. So, it can be decided that maximum number of respondents understood organic food as the food without the chemical fertilizers and pesticides.

Rather than just informing about the organic foods only, providing the knowledge of their benefits would be beneficial for organic consumer. In Kathmandu, with the growth of organic food demand and distribution, the sources of information for organic foods and organic stores are also gradually increasing. Word of mouth is the major source of information as 73.75% of the respondents received information about organic foods and store from it followed by the internet. Newspaper and promotional events are also growing as important sources of information as they can focus on mass consumers at once. Formal education has to be more focused on creating awareness about the importance of organic food consumption and its production procedures. Traditional media such as radio have less importance in promoting organic foods and stores. It is found that in order to buy the organic foods most respondents visit the specialized organic stores. It is found that among 160 respondents, 70 visits the specialized organic stores i.e. 43.5% followed by the 23% of respondents visiting open/street market to buy organic food (Appendix: Table 3). So, we can conclude that people prefer to buy organic food from the specialized stores at highest level followed by the open street/market. Therefore, effective management as well high level of promotional activities of these stores is a must. On the other hand, the practice of visiting the organic restaurant and cafes for organic food consumption is still low in Kathmandu valley. This may be because of the lack of trust as well as the unawareness of these locations.

Understanding the frequency of purchase of organic food of respondents was very necessary in the research to understand

the attitude and consumer behavior. It is known that 68 respondents i.e. 42.2% of the respondents' purchased organic foods 1-2 times a week from their respective organic places followed by 26.7% respondents purchasing organic foods 2-3 times a month. Consumers prefer to purchase the organic foods on alternate days rather than the on daily basis. But the consumers also did not tend to buy organic foods at the long interval of one month and more.

With the rise in demand and willingness to pay for organic foods, there is increase in the growth and supply of new groups of organic foods. Study (Appendix: Table 4) clarifies that among the various organic food groups, organic vegetables is consumed by the organic food consumers at maximum level. With the highest percentage of 90.63% vegetables are purchased by most of the respondents in Kathmandu valley. Secondly, 72.50% of the respondents purchased fruits. Focus on production and distribution of these group of organic foods will be more advantageous for organic farmers. The percentage of respondents buying the tea and coffee and herbs and spices are 26.88% and 23.75% respectively. These two products are not bought on regular basis as they can be stored for long term. The purchase of the beverages is the least as 15.63% respondents buy it. There is small segment who regularly buy the organic beverages. Demand of new organic food groups such as cereals, beans, pulses, meats and eggs is gradually increasing. People consider the government as most responsible organization for promotion and development of organic market as the mean score is 1.5436 and its standard deviation is 1.14840 (Appendix: Table 6). Conversely, respondents ranked the NGO's/INGO's 5th with highest mean score of 4.3625 believing that they are least responsible for the promotion and development of organic foods in Nepal. So, for the development and promotion of organic foods market in Nepal, government should focus on appropriate policy formulation as well as implementation by taking the various public private enterprises into consideration.

4.2 Attitude and buying behavior on organic food

In this section, we analyze the attitude and purchase behavior of organic consumers in Kathmandu Valley with the help of t test and the F test. F-test is used to find out if the variances between the two populations are significantly different. Whereas, the t-test assesses

whether the means of two groups are statistically different from each other. But for both these tests, understanding the relationship with p value is of utmost importance. In our study, p-value helped us to determine the significance of our results. Hypothesis tests are used to test the validity of a claim that is made about a population.

Table 1: Analysis of attitude towards buying the organic food

	N	Min.	Max.	Mean	Std. Deviation	t	p-value
They are healthy for me and my family	160	1	2	1.3313	.47214	-44.707	.000
They are more environmental friendly	160	1	4	1.9813	.82776	-15.568	.000
They have a trustworthy impression	160	1	5	3.3563	1.31439	3.428	.001
They are highly nutritious.	160	1	4	1.7188	.62618	-25.882	.000
They have a good natural taste.	160	1	4	2.0750	1.23140	-9.502	.000

Ho_{1a}: The results from Table No-1 shows that the major reason for the purchase of organic foods is that organic foods are healthy for the buyer as well as its family members. The mean score is 1.3313, which is less than the neutral point 3 and the standard deviation is 0.47214. The minimum value is 1 and the maximum value for this reason is 2. Since the p value is .000; null hypothesis Ho_{1a} is rejected. Therefore, there exists a significant relationship between health consciousness and attitude towards buying the organic foods.

Ho_{1b}: Secondly, the reason for the preference of purchasing the organic food is that they are highly nutritious as the mean score is 1.7188. Since the p value is 0.000 (less than the significance level 0.05); null hypothesis Ho_{1b} is rejected. Therefore, there exists a significant relationship between the nutritious content and the attitude towards buying the organic foods.

Ho_{1c}: Thirdly, as the mean score is 1.9813 and the standard deviation is 0.82776, the reason of buying the organic food is that they are environmental friendly. Since, the p value is 0.000; null hypothesis Ho_{1c} is rejected. Therefore there is a significant relationship between environmental friendly aspect of organic foods and attitude towards buying the organic foods.

Ho_{1d}: The reason is that they have good natural taste as the mean score here is 2.07 and the standard deviation is 1.23. There is also a significant relationship between the good natural taste of organic food and attitude towards purchase of organic foods. Table No.2 : Analysis of attitude towards not buying the organic food

	N	Min.	Max.	Mean	Std. Deviation	t	p-value
They are not widely available in market.	160	1	5	1.6813	.98652	-16.909	.000
They are not affordable.	160	1	4	1.4625	.63333	-30.708	.000
Their appearance is less appealing.	160	1	5	3.0500	1.48282	.427	.670
They lack branding and promotion	160	1	5	1.8813	.96721	-14.631	.000
They lack effective standardization.	160	1	4	1.5438	.76764	-23.996	.000

Ho_{2a}: From the Table No.2, it was found that the primary reason for not buying the organic foods was they are not affordable by everyone or they cost higher than the conventional foods. The mean score for this reason is 1.4625 and the standard deviation is 0.98652. Since, the p value is 0.000 (less than the significance level 0.05); null hypothesis Ho_{2a} is rejected. Therefore, there exists a significant relationship between the lack of affordability and the attitude towards not buying the organic foods

Ho_{2b}: Secondly, the barrier for purchasing the organic food is that they lack an effective standardization. There is no better way of processing, labelling, packaging and quality inspection due to which people hesitate to buy the organic foods on regular basis. The mean score for this statement is 1.5438 and the standard deviation is 0.76764. There exists a significant relationship between lack of effective standardization of organic foods and the attitude towards not buying the organic foods.

Ho_{2c}: With the mean score for this statement is 1.6813 and the standard deviation is 0.98652, the third major reason for not purchasing the organic foods in Kathmandu valley is that they are not widely available in the market. Although people may be willing to pay for the organic foods, they are not well distributed and are not available with convenience. Since, the p value is 0.000 (less than the significance level 0.05), null hypothesis Ho_{2c} is rejected.

Ho_{2d}: Fourthly, the barrier for the purchase of organic food is that they lack branding and consumer promotion activities as the mean score for this statement is 1.8813 and the standard deviation is 0.96721. The organic food producers, sellers, distributors all have limited focus on using promotional materials and retaining customers. Since, the p value is 0.000; null hypothesis Ho_{2d} is rejected.

Ho_{2e}: Finally, it was found that people do not believe that the appearance of organic food is less appealing. So, as the mean score is 3.05 and more towards disagree, the appearance of organic food is not a barrier. Since, the p value for this statement is 0.670, null hypothesis *Ho_{2e}* is accepted.

Ho_{3a}: It can be identified that with the lowest mean of 1.27, respondents in between the age group 31-40 mostly believed that the organic food is healthy for them as well as their family members (Appendix: Table 7). On the other hand, the highest mean value is in between the age group of 18-30 i.e. 1.45, so they least believed that the organic food is healthy for them and their family member in comparison to other age groups. Since, the p value is 0.651, we accept null hypothesis

Ho_{3a}. Therefore, there is no significant relationship between age group and health consciousness factor of organic foods. *Ho_{3b}*: It is known that the mean value of organic food being environmental friendly for male and female is 2.01 and 1.94 respectively (Appendix: Table 8). It seems that both the gender perceived organic food as environmental friendly, but female agreed more on this aspect than male. Since, p value is 0.624, which is greater than the significance level, therefore we accept null hypothesis *Ho_{3b}*. Thus, is no significant relationship between gender and environmental friendly aspect of organic food.

Ho_{3c}: It shows that respondents from higher secondary or below, who have the mean score of 3.58 mostly do not have a trustworthy impression and comparatively with the mean score of 3.21. Still, undergraduate respondents do not have a trustworthy impression on organic foods similar to that of graduates and post graduates who have mean value of 3.33 and 3.40 respectively. Therefore, as the total mean score is 3.53, respondents from every education level tend to perceive that organic foods do not have trustworthy impression. Since, the p value is 0.76, we accept null hypothesis *Ho_{3c}* (Appendix: Table 9). *Ho_{3d}*: The mean score of the organic foods being highly nutritious ranges from 1.6250 to 1.7750, so it shows that respondents from every age group believed that organic foods are highly nutritious. With the mean score of 1.6250 and the standard deviation of 0.49817, respondents from the age group between 51-60 accepted that organic food have nutritious value at highest level followed by the respondents with age 61 and above. So, there is no significant association between the nutritious value of organic food and age of respondents as we accept null hypothesis *Ho_{3d}* (Appendix: Table 10). *Ho_{3e}*: The respondents from every education level tend to believe that the organic foods have good natural taste. Among all education level groups, respondents from higher secondary and below tend to mostly agreed that organic food have good natural as their mean score is 1.8750. As the total mean score is 2.0750, all the respondents tend to agree that the organic food has good natural taste. Since, the p-value is 0.276, there is no significant relationship between education level and good natural taste of organic foods as we accept null hypothesis

Ho_{3e} (Appendix: Table 11). *Ho_{3f}*: There is no significant relationship between the gender and unavailability of organic foods in the market

Although both the gender equally agrees that they are not widely available, male respondents tend to strongly agree this statement than the female respondents as their mean value is 1.57. Since, the p value is 0.147, the null hypothesis *Ho_{3f}* is accepted (Appendix: Table 12).

Table 3: Analysis between monthly household income and unaffordability

	Monthly household income (Rs.)	N	Mean	Std. Deviation	Min.	Max.	F	p-value
	Up to 30000	16	1.0625	.25000	1.00	2.00		
They are not affordable	30000-45000	36	1.2778	.45426	1.00	2.00	5.816	.001
	45000-60000	45	1.4667	.62523	1.00	4.00		
	60000 and above	63	1.6667	.71842	1.00	4.00		
	Total	160	1.4625	.63333	1.00	4.00		

Ho_{3g}: In Table No. 3, the mean score showing the unaffordability of organic foods ranges from 1.06 to 1.6. From this, we can know that respondents earning any sorts of monthly household income believe that the organic foods are not affordable by everyone. With the mean score of 1.06, respondents earning up to 30000 mostly believe that the organic foods are not affordable followed by the respondents earning in between 30000 to 45000 who have the mean score of 1.2778. Since, the p value is 0.001, we reject null hypothesis *Ho_{3g}*. *Ho_{3h}*: The mean score for organic foods lacking effective standardization ranges from 1.5 to 1.6. From this, we can say that respondents from every education level believe that the organic foods lack in effective standardization. With the lowest mean score of 1.5, graduates mostly feel that the organic foods lack in effective standardization followed by post graduate who have the mean score of 1. Since, the p value is 0.908, there is no significant relationship between the lack in effective standardization and the education level as we accept null hypothesis *Ho_{3h}* (Appendix: Table 13).

Table 4: Analysis between age and lack of branding and promotion

	Age	n	Mean	Std. Deviation	Min.	Max.	F	p-value
They lack branding and promotion	18-30	24	2.0000	.88465	1.00	4.00	.470	.758
	31-40	36	1.7222	.84890	1.00	4.00		
	41-50	40	1.9500	1.06096	1.00	5.00		
	51-60	32	1.8125	1.06066	1.00	4.00		
	61 and above	28	1.9643	.96156	1.00	4.00		
	Total	160	1.8813	.96721	1.00	5.00		

H_{03i} : According to Table No.4, as the mean score is 1.7222; the respondents from age group 31-40 tend to highly agree that organic foods do lack effective branding and promotion followed by the respondents from the age group 41-50. Among all the respondents from different age group, people from age group 18-30 tend to less agree that organic foods lack branding and promotion as their mean score is 2.000. As the aggregate mean score of all the respondents is 1.88, all age group respondents equally agree that organic foods do lack in branding and promotion activities. Since the p-value is 0.758, there is no significant relationship between age and the lack of branding and promotion of organic foods as we accept null hypothesis H_{03} . H_{03j} : It is evaluated that both the gender has different belief towards the less appealing appearance of the organic foods. As the mean score of male respondents is 3.4, they tend to disagree that the appearance of organic food is less appealing. Whereas female respondents tend to somewhat agree that the appearance of organic food is less appealing as their mean score is 2.6579. Since the p value is 0.001 we reject the null hypothesis H_{03j} (Appendix: Table 14). Therefore, there exists a significant relationship between the gender and the less appealing appearance of organic foods. Table No. 5: Overall analysis between reasons for purchase and location of organic foods

	Location	N	Mean	Std. Deviation	Min.	Max.	F	p-value
	Departmental store	18	2.0222	.43866	1.20	2.80		
	Specialized organic stores	70	2.0971	.42766	1.40	2.80		
Reasons for buying organic foods	Open/street market	37	2.1135	.38164	1.20	2.80	.153	.961
	Agricultural farms	24	2.1083	.51745	1.20	3.00		
	Organic restaurant and cafes	11	2.0727	.47559	1.40	3.00		
	Total	160	2.0925	.43198	1.20	3.00		

H_{04a} : Table No. 5 shows the difference in mean value of respondents buying from different location is very low as all the mean scores are around 2. The overall mean score of 2.09 shows that no matter which location people visit, they prefer to buy the organic foods. Since p value is 0.96, we accept null hypothesis H_{04a} . Hence, there is no significant relationship between the reasons for purchasing the organic foods and location of buying the organic food. Table No.6: Overall analysis between reasons and duration of purchase of organic foods

	Duration	N	Mean	Std. Deviation	Min.	Max.	F	p-value
	5-7 times a week	33	2.1394	.37578	1.40	2.80		
	1-2 times a week	68	2.0206	.43591	1.20	2.80		
Reasons for buying organic foods	2-3 times a month	43	2.1721	.40375	1.40	3.00	1.025	.396
	Once a month	12	2.0500	.65017	1.20	3.00		

	Less than once in a month	4	2.2000	.23094	2.00	2.40		
	Total	160	2.0925	.43198	1.20	3.00		

$H_{0_{4b}}$: In Table No. 6, it shows that no matter in whatever duration, consumers equally prefer to buy the organic foods. The difference in mean value of people buying in different duration is very low. The overall mean score is 2.0925 which shows that, consumers buying in any duration equally prefer to purchase the organic foods. Time interval of purchase is not a major reason determining the reason for purchase of organic food. Since p-value is 0.396, null hypothesis $H_{0_{4b}}$ is accepted. Hence, there is no significant relationship between the reasons for purchasing the organic foods and duration of purchase of organic foods.

There is a positive correlation (0.163) between the trustworthy impression of organic food and healthy aspect of organic food. This means that if there is increase in trustworthy impression of organic food then there is increase in belief that organic foods are healthy for consumers and their family. Similarly the study shows that there is positive correlation (0.274) between the lack of effective standardization and lack of branding and promotion. It means that if the organic foods are not effectively standardized then they are not well branded and promoted.

In the case when there is more ineffective branding and promotion organic foods than people will perceive organic food to be less environmental friendly. There also exists a negative correlation (-0.043) between lack of effective standardization and environment friendly aspect of organic food. If there is increase in ineffective standardization of organic food then there is decrease in belief that organic food are environmental friendly. Likewise, there is negative correlation (-0.066) between lack of branding and consumer promotion activity and nutritious aspect of organic foods. If there is lack in effective branding and consumer promotion activity then people tend to believe that there is decrease in nutritious aspect of organic foods.

5. CONCLUDING REMARKS

Consumer concerns about healthy food and safety, quality and nutrition are becoming increasingly important in all around the world, which has provided increased opportunities for organic foods in recent years. In the survey, respondents from various demographic backgrounds such as age, gender, income, and education were taken into consideration to identify the relationship between the attitude and purchase behavior of organic foods. Although many literatures contributed in accepting that the food, of course, has to be tasty, nutritious, value-for-money; however, the major reason for purchase of

organic food in Kathmandu valley was that it is healthy for consumers and their family members followed by the nutritional factor present in organic foods. Identical to that of consumers in various parts of the world, the major barrier for not purchasing the organic foods regularly in Kathmandu valley was un-affordability. So, many people considered the organic food as very expensive in comparison to conventional foods. For those who can afford organic foods; lack of effective standardization has been a major constraint for consistent purchase. Therefore, the major priority should also be on labelling, packaging, quality standards and so on as lack of effective standardization was also seen as an important major barrier. Although the distribution channels are growing, unavailability of organic food was considered to be another barrier.

Besides the effective improvement in standardization and distribution, we believe that organic sellers need to educate consumers about the reasons for charging premium price they cannot be irradiated, genetically engineered, or fertilized with sewage sludge, which means it is more expensive to grow, to market and to transport than conventional food. People in Kathmandu valley, prefer to buy on specialized stores, the marketers should communicate more about these sorts of organic stores and develop trust and convenience for organic customer retention.

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REFERENCES

- [1] Aertsens, J., Verbeke, W., Mondelaers, K., & Huylenbroeck, V. G. (2009). Personal determinants of organic food consumption: a review. *British Food Journal*, Vol. 111(10), 1140-1167.
- [2] Aryal, K. P., Chaudhary, P., Pandit, S., & Sharma, G. (2009). Consumer's willingness to pay for organic products: A Case from Kathmandu Valley. *The Journal of Agriculture and Environment*, Vol. 10 (1), 12-22.
- [3] Aygen, G.F. (2012). Attitudes and behavior of Turkish consumers with respect to organic foods. *International Journal of Business and Social Science*, Vol. 3 (18), 263-273.
- [4] Fill, C. (2005). Marketing communications engagement, strategies and practice (Fourth edition). Harlow: FT Prentice Hall.
- [5] Kotler, P., & Armstrong, G. (2006). Principle of Marketing (11th edition). Pearson Prentice Hall, New Jersey.
- [6] Lea, E., & Worsley, T. (2005). Australian's organic food beliefs, demographics and values. *British Food Journal*, Vol. 8 (2), 855-869.
- [7] Leong, P.T., & Paim, L. (2015). Factors affecting intention to consume organic food products: a study among Chinese

-
- college students in Malaysia. *International Review of Management and Business Research*, Vol. 4(1), 352-360.
- [8] Manohar, J.S, Devaru, D.B.S. and Arundathi, S.V. Prof. (2012). Consumer perception towards organic food products: an exploratory study in Bangalore using factor analysis. *International journal of management research and review*. Vol. 2 (10), 1733-1747.
- [9] Padel, S., & Foster, C. (2005). Exploring the gap between attitudes and behavior: understanding why consumers buy or do not. *British Food Journal*, Vol. 107 (8), 606-625.
- [10] Paul, J., & Rana, J. (2012). Consumer behavior and purchase intention for organic food, *Journal of Consumer Marketing*, Vol. 29 (6), 412 - 422.
- [11] Peter, J.P., & Olson, J.C. 2010. *Consumer behavior & marketing strategy*, McGraw-Hill Higher Education, Boston.
- [12] Radman, M. (2005). Consumer consumption and perception of organic products in Croatia. *British Food Journal*, Vol. 107(4), 263-273.
- [13] Saher, M., Marjaana, L., & Kaisa, K.H. (2006). Attitudes toward genetically modified and organic foods. *Appetite*, Vol. 46, 324 - 33.
- [14] Sangkumchalianga, P., & Huang, W. (2012). Consumers' perceptions and attitudes of organic food products in Northern Thailand. *International Food and Agribusiness Management Review*, Vol. 15 (1), 87-101.
- [15] Shepherd, R., Magnusson, M., & Sjöden, P. O. (2013). Determinants of consumer behavior related to organic foods. *Royal Swedish Academy of Sciences*, Vol. 33 (4/5), 352-359.
- [16] Tarkiainen, A., & Sundqvist, S. (2005). Subjective norms, attitudes and intentions of Finnish consumers in buying organic food. *British Food Journal*, Vol. 107(11), 808-822.
- [17] Wang, E. S.-T., & Tsai, B. K. (2014). Consumer response to retail performance of organic food retailers. *British Food Journal*, Vol. 116(2), 212-227.

APPENDIX: Based on Results and Hypothesis**Table 1: Frequency distribution of understanding the term “Organic food”**

Meaning	Frequency	Percent (%)
Natural food	4	2.5
No Chemicals/Pesticides	92	57.1
Herbal food	1	.6
Healthy food	63	39.1
Traditional food	0	0
No idea at all	0	0
Total	160	99.4

Table 2: Sources of learning about organic food and organic stores

Sources	n	Frequency	Percent (%)
Television	160	46	28.75
Radio	160	18	11.25
Newspaper	160	75	46.88
Formal education	160	36	22.50
Promotional Events	160	46	28.75
Word of mouth	160	118	73.75
Internet	160	105	65.63

Table 3: Frequency of mostly visited organic place by the respondents

Organic Place	Frequency	Percent (%)
Departmental store	18	11.2
Specialized organic stores	70	43.5
Open/street market	37	23.0
Agricultural farms	24	14.9
Organic restaurant and cafes	11	6.8
Total	160	99.4

Table 4: Frequency of purchase of organic foods by respondents

Duration	Frequency	Percent (%)
5-7 times a week	33	20.5
1-2 times a week	68	42.2
2-3 times a month	43	26.7
Once a month	12	7.5
Less than once in a month	4	2.5
Total	160	99.4

Table -5: Organic food groups consumed by the respondents

Organic Food Groups	n	Frequency	Percentage (%)
Vegetables	160	145	90.63
Fruits	160	116	72.50
Meat and eggs	160	50	31.25
Herbs and spices	160	38	23.75
Milk and milk products	160	57	35.63
Tea and coffee	160	43	26.88
Cereals	160	52	32.50
Beans and Pulses	160	48	30.00
Beverages	160	25	15.63

Table 6: Analysis of party responsible for promotion and development of organic food

	n	Min.	Max.	Mean	Std. Deviation	Rank
The Government	160	1.00	5.00	1.5438	1.14840	1
Companies Buying from Farmers	160	1.00	5.00	2.4500	.79937	2
Group of producers	160	1.00	5.00	3.0250	.93802	3
NGO's/INGO's	160	1.00	5.00	4.3625	1.01862	5
The organic farmer	160	1.00	5.00	3.6000	1.22449	4

*Where, 1=most responsible and 5=least responsible

Table 7: Analysis between age and healthy aspect of organic food

They are healthy for me and my family	Age	n	Mean	Std. Deviation	Min.	Max.	F	p-value
	18-30	24	1.4583	.50898	1.00	2.00	.617	.651
	31-40	36	1.2778	.45426	1.00	2.00		
	41-50	40	1.3250	.47434	1.00	2.00		
	51-60	32	1.3438	.48256	1.00	2.00		
	61 and above	28	1.2857	.46004	1.00	2.00		

	Tot al	16 0	1.33 13	.47214	1.0 0	2.0 0		
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Table 8: Analysis between gender and environmental friendly aspects of organic food

Gender		n	Mean	Std. Deviation	t	p-value
They are more environmental friendly	Male	84	2.0119	.87114	0.491	0.624
	Female	76	1.9474	.78136		

Table 9: Analysis between education level and trustworthy impression of organic food taste

	Education	n	Mean	Std. Deviation	Min.	Max.	F	p-value
They have a trustworthy impression	Higher secondary or below	24	3.5833	1.21285	1.00	5.00	.388	.762
	Under graduate	37	3.2162	1.37710	1.00	5.00		
	Graduate	74	3.3378	1.35765	1.00	5.00		
	Post graduate	25	3.4000	1.22474	1.00	5.00		
	Total	160	3.3563	1.31439	1.00	5.00		

Table 10: Analysis between age and nutrition level of organic food

	Age	N	Mean	Std. Deviation	Min.	Max.	F	p-value
They are highly nutritious	18-30	24	1.7500	.67566	1.00	4.00	271	.897
	31-40	36	1.7222	.74108	1.00	4.00		
	41-50	40	1.7750	.61966	1.00	4.00		
	51-60	32	1.6250	.49187	1.00	2.00		
	Total	132	1.7111	.67444	1.00	4.00		

61 and above	28	1.7143	.59982	1.00	3.00		
Total	160	1.7188	.62618	1.00	4.00		

Table 11: Analysis between education level and good natural taste of organic foods

Education	n	Mean	Std. Deviation	Min.	Max.	F	p-value
Higher secondary or below	24	1.8750	.67967	1.00	4.00	1.300	.282
Under graduate	37	2.2432	1.47959	1.00	5.00		
Graduate	74	1.9459	1.13345	1.00	5.00		
Post graduate	25	2.4000	1.47196	1.00	5.00		
Total	160	2.0750	1.23140	1.00	5.00		

Table 12: Analysis between gender and unavailability of organic foods

Gender		N	Mean	Std. Deviation	t	p-value
They are not widely available in market.	Male	84	1.5714	.78057	-1.458	.147
	Female	76	1.8026	1.16642		

Table 13: Analysis between education level and lack of effective standardization

	Education Level	N	Mean	Std. Deviation	Min.	Max.	F	p-value
They lack effective standardization	Higher secondary or below	24	1.6250	.49454	1.00	2.00	.182	.908
	Under graduate	37	1.5676	.86732	1.00	5.00		
	Graduate	74	1.5000	.86405	1.00	5.00		
	Post graduate	25	1.5600	.50662	1.00	2.00		
	Total	160	1.5432	.76764	1.00	5.00		

Table 14: Analysis between gender and less appealing appearance of organic foods

Gender		N	Mean	Std. Deviation	Std. Error Mean	t	p-value
Their appearance is less appealing.	Male	84	3.4048	1.41523	.15441	3.278	0.001
	Female	76	2.6579	1.46563	.16812		

Abstract—This paper made an attempt to identify the major factor influencing the attitude and purchase decision among the consumers on organic foods in Kathmandu valley. The study depicts the product related and external drivers of organic foods by taking various demographic factors as intervening variables into the consideration. The populations for the study are the consumers of Kathmandu valley, with the sample size of one hundred and sixty respondents who have little, partial or complete idea about the organic food and have at least bought the organic food once. A close ended questionnaire has been developed to study awareness, attitude and the purchase behavior of customers towards the organic foods. Descriptive as well as inferential analyses (t-test, f-test, and correlation) have been used for the entire analysis of data. It is found that un-affordability of organic food is one of the major constraints/barriers of this study. It seems that organic sellers need to educate consumers about the reasons for charging premium price. By recognizing the appropriate customer segment, both the marketers and the sellers have to focus more on key marketing aspects for uphold the highest level of organic food consumers' satisfaction in Kathmandu

valley. Finally, it will help to develop the trustworthy impression among all the stakeholders.

Keywords: organic food drivers, consumer's attitude, primary survey and descriptive statistics

7. INTRODUCTION

Present day customers have shown great to the healthy and tasty diet with high nutritional values, confidence in food safety, environment and animal welfare concern and sustainability. With the rising popularity of organic foods, food safety and quality issues have triggered the awareness and people are suspicious to conventional foods across the globe. The market of organic food has grown continuously over the last few decades, which represents a multi-billion industry (Organic Trade Association, 2011). Still, the total share of organic food is still small compared with the total food market. At present, in Nepal, the market for organic products is not well developed but there exists a good opportunity for organic farming in the urban and semi-urban areas of Nepal as most of the affluent consumers have been agglomerated around cities and cities are the popular destinations for the high income groups, business houses and tourists; who are considered to be the major consumers of organic foods. Organics future relies on the motivation of final users but very little is known about the organic food consumers' beliefs, motivations and values driving their decision-making process compared to other countries. Therefore, it is highly important to examine the underlying factors that might influence the tendency of consumer to purchase organic food and develop marketing strategies accordingly for rapid growth and development of organic market in the developing countries like ours....