

## **Ecologically Conscious Buying Behaviour of Organic Products: A Quantitative Study in Thimpu, Bhutan**

Chimi Yangzom, Jugindar Singh Kartar Singh  
Faculty of Business and Management, Asia Pacific University of  
Technology and Innovation, Malaysia

### **Abstract**

This paper will explore some of the key antecedents that drive consumers' purchasing intention of organic products in Thimpu, Bhutan. This was quantitative research and using a survey method, data was collected from a sample of 101 consumers in Thimpu, Bhutan. The AMOS software developed for analyzing the Structure Equation Modeling (SEM) and SPSS was used. Based on the standardized path coefficients of the structural model, the findings revealed that only availability of organic products and environmental concerns have a significant impact on the intention to purchase organic products. However, the results showed no significant direct relationship exists between attitude and intention to purchase organic products. The findings supported the results from some earlier studies and bring out several new ideas such as the importance of environmental concerns in Bhutan. The findings have significantly contributed to the advancement of knowledge in the ecologically conscious buying behaviour of organic products in Bhutan. The implications were in the areas of encouraging people in Bhutan on the purchase of organic products. Results of the research are useful for marketing professionals of green products to develop effective green marketing strategies. This research provides valuable insights into green consumer behaviour in Bhutan context by examining the factors that influence their purchase decisions towards organic products.

**Keywords:** Organic food, Buying behaviour, Environment concern, Availability, Attitude

### **Introduction**

Production activities are responsible for significant social and environmental impacts and over 50% of global greenhouse gas emissions (World Economic Forum, 2017). Consumption of goods and services is increasing, and the impact is on global warming, increased environmental damage and decline in flora and fauna (Chen and Chai, 2010). Today, there is unprecedented international support to address environmental issues and climate change and resolving these issues require unprecedented cooperation between companies, governments and civil society (World Economic Forum, 2017). Many countries understand the risks associated with climate change and see the benefits of taking action and the scale and pace of change need to rapidly increase (World Economic Forum, 2017). To achieve this, it

is critical that countries step up their efforts to implement smart policies and incentives that can drive the low-carbon transition (World Economic Forum, 2017).

The concern and support towards the environment are leading towards the emergence of 'sustainable development' which emphasizes minimal negative impact on the environment. The concept of sustainability is to "enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising the quality of life of future generations" (Jones, Clarke-Hill and Comfort, 2008). The emergence of green consumption is related to environmentally conscious consumption where society considers the environmental impact of purchasing and using products (Moisander, 2007). A survey by the Organic Trade Association's (2018) found that organic sales in the United States totalled around \$49.4 billion in 2017, reflecting new sales of almost \$3.5 billion from the previous year. Organic food now accounts for more than five per cent of total food sales in the United States. The Guardian (2018) also reported that organic food and drink sales rose by 6% to a record £2.2bn in the United Kingdom.

Bhutan is a model for sustainable living, but climate change and growing demands from its populace signal a challenging act. It is the only country in the world that is carbon negative (Rao, 2016). The constitution of Bhutan requires a minimum of 60% of its land must be forested always (Rao, 2016). There is much focus on organic food in Bhutan. According to key politicians in the Himalayan Kingdom, Bhutan could within a decade become the first country in the world to go wholly organic in its food production (The Guardian, 2014). However, this is dependent on the government of Bhutan being able to "demonstrate that the benefits outweigh the costs and people should be willing and happy about the transition and choices" (The Guardian, 2014). In 2011, the government of Bhutan launched the National Organic Program, which aims to make the country's agriculture 100 per cent organic by 2020 (Paul, 2015). Although people are aware of the benefits of organic products, the Bhutanese market has not yet fully blended with the concept of green/organic products. There is a lack of awareness and understanding on the concept and practices of organic farming among or within the research community, extension workers or policymakers and organic farming are often mistaken as traditional agriculture (Ministry of Agriculture, 2007).

There are several internal and external factors influencing the ecologically conscious buying behaviour of organic products. Research has shown that

consumer's attitude towards the environment and willingness to pay are some of the factors that influence buying behaviour (Ker Li et al., 2013; Khare, 2014). Willingness to pay is also one of the main factors that will influence the consumption of organic products. Some other research stated that consumers are willing to pay higher price if they get more information such as product characteristic, feature, price and safety about the product (Ker Li et al., 2013; Thøgersen et al., 2015). Providing information to consumers about organic production methods, the price and the availability of organic food products can be an effective strategy to develop the market for organic food products (Thøgersen et al., 2015). Another factor that influence purchase intention is consumer's attitude (Mondelaers, Verbeke and Van Huylenbroeck, 2010). Consumers attitude is affected by factors such as price, price, trust, social and personal values (Khare, 2014). Nuttavuthisit and Thøgersen (2015) argued that consumers' attitude towards buying organic food primarily depends on how healthy and environmentally friendly they believe organic food is. Researchers also stressed that the health factor is a strong predictor towards intention to purchase organic food (Spears & Singh, 2004; Mohamad et al., 2014). Irandoust (2016) found that consumer's choice for organic food depends on the perceived benefits of organic food and consumer's perception and attitudes towards labelling system, message framing, and local origin. A study by Honkanen et al. (2006), confirmed that environmental motives have a positive influence on intention to purchase organic food. Quality of organic produces has been stated and one of the key factors that can contribute towards increasing consumers' purchase of organic products (Basha, Mason, and Shamsudin, 2015; Irandoust, (2016).

However, studies have shown a discrepancy between consumers' actual purchasing action and expressed favourable intention (Vermeir and Verbeke, 2008; Lee and Hwang, 2016). The 'green purchasing inconsistency' and consumer positive attitude towards green products does not always translate into action (Joshi and Rahman, 2015). Hughner (2007) indicated that many consumers expressed a positive attitude towards the intention to purchase organic food products but only a small number of consumers (4%) purchased organic products. According to Young et al. (2010), the 'attitude-behaviour gap' is where 30% of consumers' report that they are very concerned about environmental issues, but they are struggling to translate this into purchases. An "attitude-behaviour gap" exists because although 30% of consumers' report that they are very much concerned about environmental

issues, but this does not necessarily include in their purchasing habits (Akehurst, Afonso and Gonçalves, 2012). Although there is a slight increase in sustainability marketing and awareness of organic products, there is a visible gap between purchase intention and actual purchasing of organic products (Lee and Hwang, 2016).

Bhutan's objective to go wholly organic in its food production is dependent on the government of Bhutan being able to "demonstrate that the benefits outweigh the costs and people should be willing and happy about the transition and choices" (The Guardian, 2014). Although people are aware of the benefits of organic products, the Bhutanese market has not yet fully blended with the concept of green/organic products. Past research has also shown that positive consumer attitude towards the environment has failed to convert into an actual green purchase (Joshi and Rahman, 2015; Gupta and Ogden, 2009). A lot of past research has been done in several countries (e.g., Brantsæter et al., 2017; Young et al., 2010). However, there is a dearth of research on conscious buying behaviour of organic products in Bhutan. The factors that contribute towards ecologically conscious buying of organic products in Bhutan have not been empirically tested in Bhutan. Exploring the factors that contribute to consumers' ecological behaviour in Bhutan can provide valuable insights both to practitioners and marketers. This study will identify whether environmental concern, green product availability and attitude affect the buying intention of organic food products by regular consumers in the capital city of Bhutan.

## **Literature Review**

### **Sustainable Consumer Buying Behaviour toward Organic Products**

Consumer buying behaviour has received attention from several researchers (Solomon, 2013; Kotler and Armstrong, 2010). Kotler (2001) stated that consumer purchasing behaviour is how consumers make decisions to select, purchase and use products and services to meet the consumers' demand. Kotler and Armstrong, (2010) further stated that buying behaviour is the decision processes and acts by people involved in buying and using products which include social and mental process. Spears and Singh (2004) defined buying behaviour as "an individual's conscious plan to try to purchase a product". Similarly, Madhavan and Kaliyaperumal (2015) stated that in the buying decision process, the consumer ranks his/her choices and he/she does not have to choose the one that is ranked high as pressure from other people

and unexpected situational factors affect the purchase decision. Luo (2005) also found out that the presence of other people significantly influences a customer's purchase decision. A decision-making process starts with the recognition of the need that can be triggered by internal or external stimuli. Internal stimuli are human's basic needs (Kotler and Armstrong, 2010). The stimulus-response model (Kotler, 2001) is useful to understand the buying behaviour of individual consumers.

Several more theories and models were developed to explain the variables and processes that trigger buying behaviour. In this research, the purchasing behaviour as the dependent variable is based on Ajzen and Fishbein (1980) Theory of Reasoned Action (TRA) which posits that beliefs influence attitudes, which lead to intentions, and finally to behaviours. Behaviour intention refers to an individual's subjective likelihood of performing some certain behaviour (Ajzen and Fishbein, 1980). In this research, the TRA can be used to predict how individuals will behave based on their pre-existing attitudes and behavioural intentions towards organic products. Several other models are related to this study. A relevant model will be that Psychoanalytic Model which states that consumer behaviour is a function of sub-conscious and the conscious (Jisana, 2014).

Research has identified several factors that influence consumers buying behaviour. The external environment and several human internal factors plus problem-solving processes are identified when trying to understand consumer behaviour (Wright, 2006). Attitudes of others or beliefs about the brand created by marketers can affect the consumer's buying decision (Kotler and Armstrong 2010). Fung et al., (2004) stated that consumer's feelings attached to the packaging and design affect their purchasing intention. Payne and Holt (2001) asserted that buying intention is influenced by the perceived value of the product. Lai et al. (2016) stated that purchasing intention might be influenced by price, quality and value perception. Madhavan and Kaliyaperumal (2015) indicated that sub-purchase decisions that encompass a time of purchase, volume, price, payment method and the means of sale are still to be considered among consumers. Rani (2014) looked at personal factors and indicated that these factors include age, personality, gender, occupation and other demographical characteristics of an individual. Bhasin (2012) looked at social factors and stated that family, social groups are some of the factors affecting consumers' purchasing decisions. Rani (2014) also identified psychological factors that encompass perception, motivation, beliefs and attitudes. However, in some

cases, customers base their decisions on habitual decision process where little or no evaluation of alternatives is used (Solomon, 2013). Therefore, consumer buying behaviour is a decision process which follows through different stages and several factors are affecting consumer buying behaviour.

#### Availability of Products and Consumer Buying Intention of Organic Products

The organic foods are perceived as more nutritious, healthy, and nature-friendly than conventional food and consumers, therefore, are switching over to organic food products and are willing to pay a premium price (Singh and Verma, 2017). Due to the growing demand for organic foods in the market, conventional supermarkets have added organic foods to their shelves to make organic foods available to their customers. As stated by Dettmann and Dimitri (2007), organic foods are now more accessible to consumers due to greater marketing strategies involved in promoting organic products through conventional supermarkets and large retail stores. Past studies showed that consumers who tend to see green products at retail stores with information regarding the product are more prone to buying those organic products (Khare, 2015). A study by Tarkiainen and Sundqvist (2005) found that the availability of organic products had a positive relationship with purchasing intention. However, although the sales volume of organic food products has been increasing consistently over recent years, only a small number of households are responsible for most of the organic purchases (Buder et al., 2014).

Research findings suggest that it is not easy to get organic food. The availability of organic products has been cited as one of the reasons that affect the intention to purchase (Aschemann-Witzel and Niebuhr Aagaard, 2014). Buder et al. (2014) stated that the most important reasons for not purchasing organic products among regular organic food consumers were price, insufficient availability, and the quality of the product. Xie et al. (2015) also stated that one of the main barriers to increasing the market share of organic food products is the lack of availability of organic food products. Another study by Young et al. (2010) revealed that the consumer intention to purchase organic products is affected by the limited availability of organic products. One of the main problem affecting organic product consumption in developing countries is the lack of market information and access to markets (Zundel and Kilcher, 2007). Most studies showed that limited availability of organic food products is a major barrier to purchasing the organic product. Therefore, an effective strategy to increase

the consumption of organic food is through increasing the availability of organic products to customers. Based on the past research findings discussed above and logically extending them, the following hypothesis was formulated for testing in the present study.

H1. There is a relationship between green product availability and sustainable buying behaviour towards organic products in Thimphu.

#### Environmental Concern and Consumer Buying Behavior

As stated by Sharma and Bhansal (2013), environmental concern is a multi-dimensional construct that represents the mental state of an individual. Sharma and Bhansal (2013) concluded that differences in environmental consciousness can be traced back to either one or more of the conditions such as demographics, psychographics, media and general political that are related to the consumer, the product, media or general political views. Kang and James (2007) further stated that environmental consciousness or concern is the degree to which a product is advantageous to the environment. Environmental concern was also defined as a belief, stance and the degree of concern an individual hold towards the environment (Mat Said et al., 2003). For instance, green products are regarded as environment-friendly and cause less damage to the environment (Chan and Chai, 2010). Based on past research, consumers who are more involved in environmental protection issues tend to have a stronger intention to purchase organic products (Vermeir and Verbeke, 2006). Consumers are now more aware that through the consumption of organic foods, they can contribute towards the reduction of environmental contamination (Saleki and Seyedsaleki, 2012). Consumers are also now increasingly aware of the lesser damage caused by organic products to the environment and this is demonstrated in their willingness to cooperate towards the protection of the environment (Petrescu and Petrescu-Mag, 2015). Therefore, due to the increased societal attention to environmental issues, the demand for environmentally friendly products is increasing (Zeng, Meng, Yin, Tam, & Sun, 2010).

Several past studies found a positive relationship between environmental concern and intention to purchase organic food (Thøgersen et al., 2015; Chan and Lau, 2000). The growing environmental concern is contributing to the purchase intention of organic products (Chan and Lau, 2000). A study by Ahmad (2010)

concluded that concern for the environment was found as one of the key determinants of the willingness to buy organic products. Another study by Wee et al. (2014) indicated that intention to purchase organic food was significantly influenced by the consumer's perception of safety, health, environmental factors and animal welfare of the products. Another study by Basha et al. (2015) predicted that one of the purchasing intentions of consumers was environmental. On the contrary, a study by Ramayah et al. (2010) found that environmental consequences did not have significant effects on green purchase intention. Therefore, despite some inconsistencies in past research findings, environmental concern plays an important role in consumer behaviour. Based on the past research findings discussed above and logically extending them, the following hypothesis was formulated for testing in the present study.

H2. There is a relationship between environmental concerns and sustainable buying behaviour towards organic products in Thimphu

#### 2.4 Attitude of Consumers and Buying Intention of Organic Products

Based on the Theory of Planned Behavior, one of the factors that influence behavioural intention is attitude (Ajzen, 1991). Attitude refers to the degree to which a person has positive or negative feelings of the behaviour of interest and entails a consideration of the outcomes of performing the behaviour (Ajzen, 1991). Lee and Yun (2015) looked at utilitarian and hedonic attitudes towards the purchase of organic food. According to Lee and Yun (2015), consumers' perceptions of nutritional content, ecological welfare, and price attributes of organic food have strong effects on utilitarian attitudes as well as hedonic attitudes toward buying organic food, while perceptions of the sensory appeal attribute have a strong effect on hedonic attitudes. Researchers have also shown that attitude plays a fundamental role both in terms of the direct impact on the intention to buy and the indirect impact on how the health consciousness, environmental concern and food safety concern affect the intention to buy (Cabuk et al., 2014; Yazdanpanah and Forouzani, 2015). Based on a study by Irianto (2015), health consciousness and environmental consciousness were the determinants of an individual's positive attitude to buying organic food.

Several researchers found that a positive attitude encourages the consumer's intention to purchase organic food (Yazdanpanah and Forouzani, 2015; Teng and

Wang, 2015). A positive attitude towards the consumption of organic food originated from the belief that organic food is better for health (Suh, Eves and Lumbers, 2012). As a result, one major reason for the increased demand is the perception that organic food is more environmentally friendly and healthier than conventionally produced food (Brantsæter et al., 2017). Similarly, another study by Hsu et al. (2016) found that subjective knowledge of organic food, health consciousness, and food safety concern are important factors impacting organic food purchase intentions. Results of a study by Yazdanpanah and Forouzani (2015) confirmed that consumer's attitude was the main predictor of their intention to purchase organic foods. Teng and Wang (2015) found that both attitudes towards organic foods and subjective norms significantly influence consumer organic food choices. However, the impact of perceived organic knowledge on consumer attitudes was found to be insignificant, indicating that the increase in perceived knowledge cannot create positive attitudes towards organic foods (Teng and Wang, 2015). Thus, a focus on how to use knowledge to enhance consumer trust in organic foods is suggested as an effective marketing strategy for the organic food industry. Another study by Aertsens et al. (2009) argued that even if consumers have a positive attitude towards organic food, the number of consumers who regularly purchase organic food is low. Aschemann-Witzel and Niebuhr Aagaard (2014) also argued that even though most consumers hold positive attitudes towards organic food, attitudes appear not to translate into respective behaviour to the same extent. Also, attitude depends on consumer price perception (Minnens and Verbeke, 2013). Based on the past research findings discussed above and logically extending them, the following hypothesis was formulated for testing in the present study.

H3. There is a relationship between the attitudes of consumers and sustainable buying behaviour towards organic products in Thimphu.

## **Methodology and Research Design**

### **Research Design**

This research is based on positivism philosophy. Positivism relates to the philosophical stance of the natural scientist (Saunders, Lewis and Thornhill, 2012). According to Saunders et al. (2012), research approaches are mainly based on the research philosophies, whereby the deductive approach is commonly used by researchers with traditional natural-scientific views (positivism), while the inductive

approach is usually based on phenomenology (interpretivism). In this study, with a deduction approach, theory and hypotheses were developed. This is a quantitative study where quantitative analysis technique that ranges from providing simple descriptive of the variables involved to establishing statistical relationships among variables through complex statistical modelling was used (Saunders et al., 2012). This is a cross-sectional study and a research strategy using the survey method was designed to collect data and test the hypotheses. Collection of primary data was done using a self-administered questionnaire. For this study, a self-administered questionnaire was chosen due to its convenience, inexpensive and greater anonymity (Saunders et al., 2012). The purpose of the questionnaire was to generalize from a sample to a population to make inferences about the characteristics of the population (Saunders et al., 2012). The self-administered questionnaires were administered directly and delivered by hand and collected at a later date. The emphasis here was on studying to explain the relationships between the independent variables and the dependent variable. The reliability of a measure is established by testing for both consistency and stability and this was based on Cronbach's alpha which is a reliability coefficient that indicates how well the items in a set are positively correlated to one another. For validity, the testing was through expert review and by pilot testing involving 20 respondents. Data analysis was based on descriptive and inferential statistics that were generated using SPSS and SEM AMOS tools.

### Sampling

The target population were consumers residing around Thimpu, Bhutan. A sample of consumers who were aware of organic food was selected to genuinely represent the study population. The sample selected through accidental sampling were consumers who can provide a fairly true reflection of the sampling population. Non-probability sampling design was used because the number of elements in a population was unknown (Kumar, 2011). Accidental sampling was used due to lower cost and convenience in accessing the sampling population (Kumar, 2011). A face-to-face survey was conducted in bazaars and shops in Thimpu, Bhutan. The sampling units were approached and asked about the consent to participate in the study. Initially, the respondents were asked a qualifying question on whether they are aware of organic food. Self-administered questionnaires were distributed by hand to the qualified respondents who are aware of organic food. Ethical consideration of

confidentiality and privacy was assured. Tabachnick and Fidell (2013), provided a formula for calculating sample size requirements, taking into account the number of independent variables that researcher wishes to use:  $N > 50 = 8m$  where  $m =$  number of independent variables). According to Hair et al. (2010), the minimum sample size should be 100. The target sample size for this study was 100.

#### Instrumentation

Self-administered questionnaires were used to collect virtually all data that was analysed by computer (Saunders et al., 2012). Three demographic variables (gender, marital status and age) were included. The fixed alternative questions required the respondents to choose the best answer based on a five-point Likert-type scale. The questions were adopted and adapted from past studies. The questions to measure purchase intention were adapted from studies by Magnusson et al. (2001), Tarkiainen and Sundqvist (2005) and Thøgersen and Ölander (2006). Questions to measure attitude were adapted from studies by Tarkiainen and Sundqvist (2005) and Thøgersen (2007). For the environmental concerns, questions were adapted from studies by Chen (2007), Dean, Raats and Shepherd (2008) and Tsakiridou, et al. (2008). The questions to measure the availability of organic produces were adapted from studies by Magnusson et al. (2001), Tarkiainen and Sundqvist (2005), Chen 2007 and O'Donovan et al. (2002).

#### Data Collection

In this study, direct distribute and collect survey was the preferred method because the sample population consists of respondents with low educational levels. The self-administered survey instrument was composed of personal information questions and closed-ended questions. The direct distribute and collect method was used and each question was explained, and the response noted. Initially, a total of 118 questionnaires were completed. A total of 17 questionnaires were removed due to omissions or errors. Only 101 questionnaires were usable, and the rest were incomplete or inappropriate. The data was further edited to locate omissions and check consistency across respondents.

## Data Analyses

The completed questionnaires were checked and coded for statistical analysis. As stated by Sekaran (2003), in data analysis there were three objectives: getting a feel for the data, testing the goodness of data, and testing the hypotheses developed for the research. The feel for the data gave preliminary ideas of how good the scales were, how well the coding and entering of data have been done, and so on (Sekaran, 2003). Descriptive statistics were used to acquire a feel for the data by checking the central tendency and the dispersion. The mean, the range, the standard deviation, and the variance in the data gave the researcher a good idea of how the respondents have reacted to the items in the questionnaire and how good the items and measures are (Sekaran, 2003). The AMOS software developed for analysing the Structure Equation Modelling (SEM) and SPSS were used to present the model in a causal path diagram to show the hypothesized relationships among constructs of interest. SEM is an efficient method to perform analyses of the causal relationships in a structural model and tests the hypotheses (Awang, 2012). Using Amos Graphic interface, the structural model was created to test causal effects. The two sets of text output namely the standardized regression weights and the regression weights were examined.

## Results

### 4.1 Demographic Profiles of the Respondents

The study population was from Thimpu. The respondents included 49% (n=49) males and 51% (n=51) females. Majority of the respondents, 78% (n=88) were married. The respondents' age included 10% between the age ranges of 51-60 years, 21% between the age range of 41-50 and 69% were between the age ranges of 21-40 years. The respondents were mainly low-income earners. Around 60% of the respondents earn less than \$1,000. Another 20% earned up to \$2,000.

### Reliability

Reliability is the extent to which a variable is consistent in what it is intended to measure (Hair et al., 2006). The overall Cronbach alpha coefficient variable for the dependent variable was .717. The Cronbach alpha for Product availability, Environment awareness and Attitude was .656, .749 and .736 respectively. The Cronbach alpha value was around 0.7 and this is acceptable (Pallant, 2010). Pilot testing was done, and this provided with some idea of the questionnaire's face validity

(Saunders et al., 2012). For face validity, experts were asked to comment on the representativeness and suitability of the questions (Saunders et al., 2012).

### Descriptive Statistics

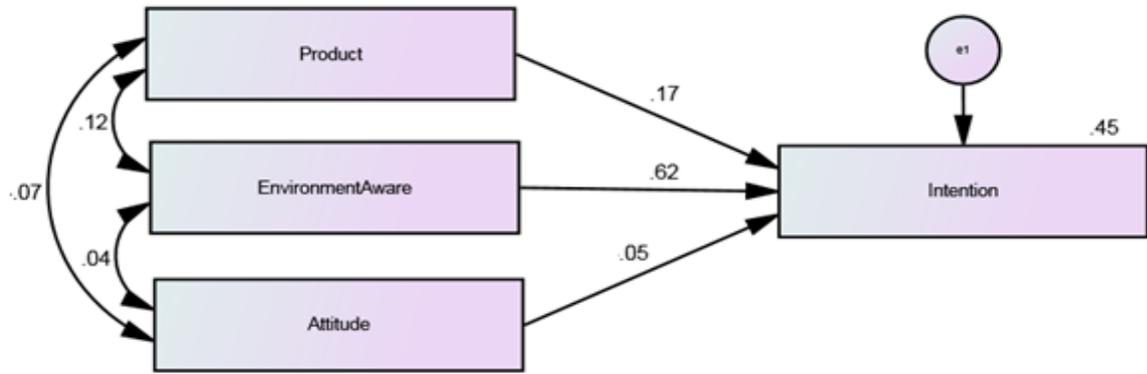
Based on Table 1, the values of skewness and kurtosis values are within +3 and -3 standard deviations from its mean (Zikmund et al., 2010). The mean of all the variables is above 4.1 and the standard deviation is low (less than one). Based on the values, it was concluded that that normality exists on the dependent variable and all the means of the variables can be considered normally distributed. Collinearity is the association, measured as the correlation between two independent variables (Hair et al., 2006). The results are presented in Table 1 and the two values are Tolerance and VIF. A common cut-off threshold is a tolerance value of .10, which corresponds to a VIF value of 10 (Hair et al., 2006). As shown in Table 1, the value of tolerance is not less than .10; therefore, the multicollinearity assumption is not violated. This is further supported by the VIF values which fall below the cut-off of 10.

**Table 1: Descriptive Statistics**

	Mean	Std. Deviation	Skewness		Kurtosis		Collinearity Statistics	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std Error	Tolerance	VIF
Intention to Purchase	4.3940	.42398	-.168	.241	-.304	.478		
Product Availability	4.3340	.31662	.640	.241	-.713	.478	.979	1.021
Environment	4.1400	.41341	.559	.241	.235	.478	.983	1.018
Attitude	4.6300	.35434	-.655	.241	-.554	.478	.992	1.008

### The Inter-relationships among the Observed Variables in a Model

The model is converted into Amos Graphic. It is drawn using rectangles as shown in Figure 1. The estimated beta, its standard error, and probability value are given in Table 2. The information given would be adequate for the researcher to test the hypothesis for the beta. The coefficient of determination (R squared) in multiple regressions indicates the percentage of variation in Y explained by the combination of all independent variables (Zikmund et al., 2010). In this study, the R square = .45 means that 45 per cent of the variance in the dependent variable was being explained by the three independent variables namely product availability, environmental concern and attitude.



**Figure 1: The Regression Path Coefficients among the Variables in the Model**

### Analysing the Causal Effects

The causal effects are shown in Table 2 below. The overall F-statistic value was 25.901 and the p-value was .000. This indicates the statistical significance of the regression model that was run. The t-statistics was 8.158, 2.270 and .629 for environment awareness, product availability and attitude respectively. The t-statistics helps to determine the relative importance of each variable in the model. Hypothesis 1 examined the relationship between product availability and sustainable buying behaviour towards organic foods and hypothesis H1 was accepted. A standardized regression value (Beta) of .17 indicated that product availability was responsible for explaining the dependent variable. The sig. value was less than 0.05 ( $p < 0.05$ ) and this shows that the variable was making a significant unique contribution to the equation (Pallant, 2010). Hypothesis 2 examined the relationship between environmental concerns and consumer sustainable buying behaviour towards organic foods and this hypothesis was accepted. A standardized regression value (Beta) of .62 indicated that environmental concerns were responsible for explaining the dependent variable. The sig. value was less than 0.05 ( $p < 0.05$ ) and this shows that the variable was making a significant unique contribution to the equation (Pallant, 2010). The environmental concern is one of the most predictive of the dependent variable. The path coefficient of an attitude of customers is 0.048 but the effects of attitude are not significant ( $p > 0.05$ ). Thus, the hypothesis H3 that predicts the attitude of customers towards sustainable buying behaviour of organic products was not supported.

**Table 2: The Regression Path Coefficients between the Constructs and its Significance**

Hypothesis Statement for Path Analysis	Beta Estimate	P	Significance	Result of Hypothesis
<b>H1.</b> There is a relationship between green product availability and sustainable buying behaviour towards organic products in Thimphu.	.174	.021	Significant	Supported
<b>H2.</b> There is a relationship between environmental concerns and sustainable buying behaviour towards organic products in Thimphu	.624	.000	Significant	Supported
<b>H3.</b> There is a relationship between the attitudes of consumers and sustainable buying behaviour towards organic products in Thimphu,	.048	.523	Not Significant.	Not Supported

### Discussion and Conclusion

The results of this study found that the most commonly expressed motive for purchasing organic food is the consideration for the environment and related health reasons. This shows that consumers in Bhutan want to decrease environmental damage by intending to purchase green products. Therefore, the environmental concern should be advocated to render the consumer's intention towards organic foods more positive. The results of this study found that the most commonly expressed motive for purchasing organic food is the consideration for the environment and related health reasons. The results are consistent with the vision of the government of Bhutan (Rao, 2016). There is a lot of focus on organic food and Bhutan could within a decade become the first country in the world to go wholly organic in its food production (The Guardian, 2014). The results are also consistent with several past studies that found a positive relationship between environmental concern and intention to purchase organic food (Wee et al., 2014; Ahmad, 2010). Availability of organic products also influenced the intention to purchase organic products in Bhutan. This is consistent with past research which found that the availability of organic products had a positive relationship with purchasing intention (Khare, 2015; Tarkiainen and Sundqvist, 2005). Past research has highlighted that one of the most important reasons for not purchasing organic products among regular organic food

consumers was insufficient availability (Aschemann-Witzel and Niebuhr Aagaard, 2014; Buder et al, 2014, and Xie et al., 2015).

The influence of customer attitude deviated from earlier studies. This may be due to several reasons. One of the possible reasons is based on some studies which stated that although there are better nutritional profiles in organic foods than in conventional foods, the differences are mostly small. Another possible explanation is the availability of knowledge. Past research on objective and subjective knowledge concerning organic food is positively related to a more positive attitude towards organic food, greater experience of it and more frequent use of information (Aertsens, et al., 2011). Padel and Foster (2005) also stated that insufficient information will affect consumers' attitude and deter consumers from purchasing organic food. Therefore, as stated by Joshi and Rahman (2015), there might be possible factors such as price and availability of the product, and social influences among others that lead to the discrepancy between consumer attitude and purchase behaviour. Minnens and Verbeke (2013) also stated that attitudes depend on consumers' price perception of organic food.

The findings of this study provide theoretical and practical implications for organic product marketers, retailers and consumers. This research showed that the main predictor is environmental concerns and the strategy in Bhutan should focus on specific consumer segments to increase their knowledge and awareness of organic products. This study shows that despite the environmental concern, the attitude of customers still needs to be further improved towards organic products. Consumers' awareness of the environment and knowledge about organically produced food can play a significant role in the intention to purchase organic products. This research provides valuable guidelines and suggestions for marketers and retailers engaged in selling organic foods. Also, this study can be useful for organic food manufacturers. This research helps to fill the research gaps, hence adds to the literature on the intention to purchase organic food in Bhutan. This study found that not all the factors in this study had a significant effect on the intention to purchase organic products. However, given the positive influence of environmental concerns, retailers and marketers of organic products should continuously provide consumers about its benefits of organic products. Additionally, the availability of the products is important, and consumers should be given information about the availability of organic produce as one of the main barriers found in studies is the limited availability of organic foods.

Practitioners should provide information on the health and environmental benefits of consuming organic food to consumers in Bhutan.

Despite the significant findings of this study, there are some limitations. Firstly, in the present study only selected factors were considered to study the influence on consumer intention to purchase organic foods. There are other moderators and mediators such as the price and age of borrowers that were not examined and should be examined in future studies. The data for this study was collected via a self-reported questionnaire that could be susceptible to bias. This study was carried out in Thimpu, Bhutan and the sample size of 101 respondents may not be sufficient to generalise the results. These limitations of this study provide directions for future research. For future studies, more in-depth research on factors that affect the intention to purchase organic food can be undertaken. Future research should incorporate factors like the promotion, knowledge and government regulation while studying consumer intention towards organic food products. This study was a cross-sectional study and for future research, a longitudinal study can be undertaken. Also, future research can include a larger sample size to get better results. It is also recommended that future research should include face to face interviews to obtain more in-depth and reliable results. Through qualitative research, more in-depth information can be obtained. Demographics such as age and income could be further investigated to test the differences towards purchase intention.

## References

- Aertsens, J., Mondelaers, K., Verbeke, W., Buysse, J. and Van Huylenbroeck, G. (2011). The influence of subjective and objective knowledge on attitude, motivations and consumption of organic food. *British Food Journal*, 113(11), 1353-1378.
- Ahmad, S. N. B. B. (2010). Organic food: A study on demographic characteristics and factors influencing purchase intentions among consumers in Klang Valley, Malaysia, *International Journal of Business and Management*, 5(2), 105.
- Ajzen, I. (1991). The theory of planned behaviour, *Organizational Behavior and Human Decision Processes*, 50(2),179-211.
- Akehurst, G., Afonso, C. and Martins Gonçalves, H. (2012). Re-examining green purchase behaviour and the green consumer profile: new evidences. *Management Decision*, 50(5), 972-988.
- Ajzen, I. and Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior*, Prentice Hall, Englewood Cliffs, NJ.
- Aschemann-Witzel, J. & Niebuhr Aagaard, E.M. (2014). Elaborating on the attitude–behavior gap regarding organic products: young Danish consumers and in-store food choice. *International Journal of Consumer Studies*, 38(5), 550-558.

- Awang, Z. (2012). *Research methodology and data analysis*. Shah Alam: Penerbit Universiti Teknologi MARA.
- Basha, M.B., Mason, C., Shamsudin, M.F., Hussain, H.I. and Salem, M.A. (2015). Consumers attitude towards organic food. *Procedia Economics and Finance*, 31, 444-452.
- Bhasin, H. (2012). Factors Affecting Consumer Buying Behavior. Retrieved February 10, 2018 from <http://www.marketing91.com/factors-affectingconsumer-buying-behavior>.
- Brantsæter, A.L., Ydersbond, T.A., Hoppin, J.A., Haugen, M. and Meltzer, H.M. (2017). Organic food in the diet: exposure and health implications. *Annual Review of Public Health*, 38, 295-313.
- Buder, F., Feldmann, C. and Hamm, U. (2014). Why regular buyers of organic food still buy many conventional products. *British Food Journal*, 116(3), 390-404.
- Çabuk, S., Tanrikulu, C. and Gelibolu, L. (2014). Understanding organic food consumption: attitude as a mediator. *International Journal of consumer studies*, 38(4), 337-345.
- Chan, R.Y.K., and Lau, L. B.Y. (2000). Antecedents of Green Purchases: A survey in China. *Journal of Consumer Marketing*, 17(4), 338-357.
- Chen, T. B., & Chai, L. T. (2010). Attitude towards the environment and green products: Consumers' perspective. *Management Science and Engineering*, 4(2), 27- 39
- Chen, M., F. (2007), Consumer attitudes and purchase intentions in relation to organic foods in Taiwan: moderating effects of food-related personality traits. *Food Quality and Preference*, 18(7), 1008-1021.
- Dean, M., Raats, M., M. and Shepherd, R. (2008), Moral concerns and consumer choice of fresh and processed organic foods. *Journal of Applied Social Psychology*, 38(8), 2088-2107.
- Dettmann, R.L. and Dimitri, C. (2007). *Organic consumers: A demographic portrayal of organic vegetable consumption within the United States*. Unpublished Doctoral, Thesis University of Minnesota.
- O'Donovan, P., McCarthy, M. (2002). Irish Consumer Preference for Organic Meat, *British Food Journal*, 104 (3/4/5), 353-370
- Fung, R. Y., Chong, S. P., & Wang, Y. (2004). A framework of product styling platform approach: Styling as intangible modules. *Concurrent Engineering*, 12(2), 89-103.
- Gupta, S., and Ogden, D. T. (2009). To buy or not to buy? A social dilemma perspective on green buying. *Journal of Consumer Marketing*, 26(6), 376-391.
- Hair, J. F., Black, W.C., Babin, J.B., Anderson, R.E., & Tatham, R.L. (2006). *Multivariate Data Analysis*. Upper Saddle River, New Jersey, U.S.A: Pearson Prentice-Hall International.
- Honkanen, P., Verplanken, B., and Olsen, S. O. (2006). Ethical values and motives driving organic food choice. *Journal of Consumer Behavior*, 5(5), 420-430.
- Hsu, S.Y., Chang, C.C. and Lin, T.T. (2016). An analysis of purchase intentions toward organic food on health consciousness and food safety. *British Food Journal*, 118(1), 200-216.
- Hughner, R. S., McDonagh, P., Prothero, A., Shultz, C. J., & Stanton, J. (2007). Who are organic food consumers? A compilation and review of why people purchase organic food. *Journal of Consumer Behavior*, 6(23), 94-110
- Irاندoust, M., (2016). Modelling consumers 'demand for organic food products: the Swedish experience. *International Journal of Food and Agricultural Economics*, 4(3), 77.

- Irianto, H. (2015). Consumers' attitude and intention towards organic food purchase: An extension of the theory of planned behavior in gender perspective, *International Journal of Management, Economics and Social Sciences*, 4(1), 17 – 31
- Jisana, T. K. (2014). Consumer behavior models: an overview. *Sai Om Journal of Commerce & Management: A Peer-Reviewed National Journal*. 1(5), 34-43.
- Jones, P., Clarke-Hill, C., Comfort, D. and Hillier, D. (2008). Marketing and sustainability *Marketing Intelligence & Planning*, 26(2), 123-130.
- Joshi, Y. and Rahman, Z., (2015). Factors affecting green purchase behaviour and future research directions. *International Strategic Management Review*, 3(1-2), 128-143.
- Kang, G. and James, J. (2007). Revisiting the concept of a societal orientation: conceptualization and delineation, *Journal of Business Ethics*, 73(3), 301-318.
- Khare, A. (2014). Consumers' susceptibility to interpersonal influence as a determining factor of ecologically conscious behaviour. *Marketing Intelligence & Planning*, 32(1), 2-20.
- Ker Li, W., Seow Wei, O., Weng May, C. and Li Hui, C. (2013). Research on Consumers' Willingness to Pay for Organic Products. (Unpublished dissertation, UNITAR, Malaysia).
- Kotler, P. & Armstrong, G. (2010). *Principles of Marketing*, N.J.: Prentice Hall,
- Kotler, P. (2001). *A Framework for Marketing Management*, 11th ed., N J: Pearson Prentice Hall
- Lai, Y.H.R., Chu, J.Y. and Petrick, J.F. (2016). Examining the relationships between perceived value, service quality, satisfaction, and willingness to revisit a theme park. *Tourism Travel and Research Association: Advancing Tourism Research Globally*. 52.
- Lee, H.J. and Hwang, J. (2016). The driving role of consumers' perceived credence attributes in organic food purchase decisions: A comparison of two groups of consumers. *Food Quality and Preference*, 54, 141-151.
- Lee, H.J. and Yun, Z.S. (2015). Consumers' perceptions of organic food attributes and cognitive and affective attitudes as determinants of their purchase intentions toward organic food. *Food Quality and Preference*, 39, 259-267.
- Luo, X. (2005). How does shopping with others influence impulsive purchasing? *Journal of Consumer Psychology*, 15(4), 288-294.
- Madhavan, M., & Kaliyaperumal, C. (2015). Consumer Buying Behavior-An Overview of Theory and Models. *St. Theresa Journal of Humanities and Social Sciences*, 1(1), 74-112.
- Magnusson, M. K., Arvola, A., Hursti, U. K. K., Åberg, L. and Sjöden, P. O. (2001). Attitudes towards organic foods among Swedish consumers, *British food journal*, 103(3), 209-227.
- Mat Said, A., Ahmadun, FR., Hj Paim, L., and Masud, J. (2003). Environmental Concerns, Knowledge and Practices Gap Among Malaysian Teachers. *Int. Journal of Sustainability in Higher Education*, 4(4), 305-313.
- Minnens, F., & Verbeke, W. (2013). Consumers' attitude on private label organic food products: a study of Flemish consumers. (Unpublished doctoral dissertation). *University of Ghent, Belgium*.
- Ministry of Agriculture, (2007). Improving livelihoods of small holder farmers during the 10FYP by following organic farming principles. A workshop output report. Ministry of Agriculture, Thimphu.

- Moisander, J. (2007). Motivational complexity of Green Consumerism. *International Journal of Consumer Studies*, 31(4), 404-409.
- Mohamad, S.S., Rusdi, S.D. and Hashim, N.H. (2014). Organic food consumption among urban Consumers: Preliminary results. *Procedia-Social and Behavioral Sciences*, 130, 509-514.
- Mondelaers, K., Verbeke, W. and Van Huylenbroeck, G. (2009). Importance of health and environment as quality traits in the buying decision of organic products. Retrieved January 16, 2018, from <http://www.emeraldinsight.com.ezproxy.staffs.ac.uk/doi/full/>
- Nuttavuthisit, K., & Thøgersen, J. (2017). The importance of consumer trust for the emergence of a market for green products: The case of organic food. *Journal of Business Ethics*, 140(2), 323-337.
- Organic Trade Association, (2018). Organic Market Analysis, Retrieved January 28, 2019, from <http://www.producenews.com/news-dep-menu/test-featured/>
- Padel, S., & Foster, C. (2005). Exploring the gap between attitudes and behavior: Understanding why consumers buy or do not buy organic food. *British Food Journal*, 107(8), 606-625
- Pallant, J. (2010). *SPSS survival manual: A step by step guide to data analysis using SPSS for Windows* (4th Ed.). Berkshire: Open University Press.
- Paul, S. (2015). Reuters. To build a greener economy, Bhutan wants to go organic by 2020. Retrieved March 20, 2018 from <https://www.reuters.com/article/us-bhutan-emissions-farming/to-build-a-greener-economy->
- Payne, A. & Holt, S. (2001), Diagnosing Customer Value: Integrating the Value Process and Relationship Marketing. *British Journal of Management*, 12(2):159 - 182
- Petrescu, D.C. and Petrescu-Mag, R.M., 2015. Organic food perception: fad, or healthy and environmentally friendly? A case on Romanian consumers. *Sustainability*, 7(9), 12017-12031.
- Ramayah, T., Lee, J. W.C., and Mohamad, O. (2010). Green Product Purchase Intention: Some Insights from a developing country. *Resources, Conservation and Recycling*, 54, 1419-1427.
- Rani, P. (2014). Factors Influencing Consumer Behavior. *Int. Journal of Current Research Aca. Rev.* 2(9), 52-61.
- Rao, K. (2016). How Bhutan became the world's greenest country. Live Mint e-paper, 15 February 2018. Retrieved May 20, 2018, from <http://www.livemint.com/Sundayapp/>
- Saleki, Z. S., & Seyedsaleki, S. M. (2012). The main factors influencing purchase behaviour of Organic products in Malaysia. *Interdisciplinary Journal of Contemporary Research in Business*, 4(1), 98.
- Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students*. Essex: Pearson
- Sekaran, U. (2003). *Research methods for business: A skill-building approach*. New York: Wiley & Sons.
- Sharma, K., & Bansal, M. (2013). Environmental consciousness, its antecedents and behavioural outcomes. *Journal of Indian Business Research*, 5(3), 198-214.
- Singh, A. and Verma, P. (2017). Factors influencing Indian consumers' actual buying behavior towards organic food products. *Journal of Cleaner Production*, 167, 473-483.
- Solomon, M. R. (2013). *Consumer behaviour: Buying, having and being* (10th Ed.). Essex, England: Pearson Education.

- Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions. *Journal of Current Issues & Research in Advertising*, 26(2), 56.
- Suh, B.W., Eves, A. and Lumbers, M. (2012). Consumer's Attitudes and Understanding of Organic Food: The Case of South Korea, *Journal of Foodservice Business Research*, 15(1), 49-63. The Guardian (2014). Bhutan could be world's first wholly organic nation within a decade. Retrieved January 12, 2018 from <https://www.theguardian.com/sustainable-business/bhutan-organic-nation-gross>
- The Guardian (2018). Organic food and drink sales rise to record levels in the UK. Retrieved January, 28, 2019 from <https://www.theguardian.com/environment/2018/feb/07/organic-food>
- Tabachnick, B.G. and Fidell, L.S. (2013). Using Multivariate Statistics. Pearson, Boston
- Tarkiainen, A., Sundqvist, S. (2005). Subjective norms, attitudes and intentions of Finnish consumers in buying organic food. *Br. Food Journal*. 107 (11), 808-822.
- Teng, C.C. and Wang, Y.M. (2015). Decisional factors driving organic food consumption: Generation of consumer purchase intentions. *British Food Journal*, 117(3), 1066-1081.
- Thøgersen, J., de Barcellos, M.D., Perin, M.G. and Zhou, Y. (2015). Consumer buying motives and attitudes towards organic food in two emerging markets: China and Brazil. *Int. Marketing Review*, 32(3/4), 389-413.
- Tarkiainen, A. and Sundqvist, S. (2005), Subjective norms, attitudes and intentions of Finnish consumers in buying organic food, *British Food Journal*, 107(11), 808-822.
- Thøgersen, J., and Ölander, F. (2006). The Dynamic Interaction of Personal Norms and Environment-Friendly Buying Behavior: A Panel Study1. *Journal of Applied Social Psychology*, 36(7), 1758-1780.
- Thøgersen, J. (2007). Consumer decision making with regard to organic food products, in Vaz, M.T.D.N., Vaz, P., Nijkamp, P. and Rastoin, J.L. (Eds), *Transitional Food Production Facing Sustainability: A European Challenge*, Farnham: Ashgate Publishing.
- Tsakiridou, E., Boutsouki, C., Zotos, Y., and Mattas, K. (2008), Attitudes and behaviour towards organic products: an exploratory study. *International Journal of Retail & Distribution Management*, 36(2), 158-175.
- Vermeir, I., and Verbeke, W. (2008). Sustainable food consumption among young adults in Belgium: Theory of planned behaviour and the role of confidence and values. *Ecological Economics*, 64(3), 542-553.
- World Economic Forum (2017). Accelerating Sustainable Production. Retrieved February 12, 2018 from <https://www.weforum.org/projects/accelerating-sustainable-production>.
- Wee, C.S., Ariff, M.S.B.M., Zakuan, N., Tajudin, M.N.M., Ismail, K. and Ishak, N. (2014). Consumers perception, purchase intention and actual purchase behavior of organic food products. *Review of Integrative Business and Economics Research*, 3(2), 378.
- Wright, R. (2006). *Consumer Behavior*. Cengage Learning EMEA.
- Xie, B., Wang, L., Yang, H., Wang, Y. and Zhang, M., 2015. Consumer perceptions and attitudes of organic food products in Eastern China. *British Food Journal*, 117(3), 1105-1121

- Yazdanpanah, M. and Forouzani, M. (2015). Application of the Theory of Planned Behavior to predict Iranian students' intention to purchase organic food. *Journal of Cleaner Production*, 107, 342-352.
- Young, W., Hwang, K., McDonald, S. and Oates, C.J. (2010). Sustainable consumption: green consumer behaviour when purchasing products. *Sustainable development*, 18(1), 20-31.
- Zeng, S.X., Meng, X.H., Yin, H.T., Tam, C.M. and Sun, L. (2010). Impact of cleaner production on business performance. *Journal of Cleaner Production*, 18(10-11), 975-983.
- Zikmund, W.G., Babin, B. J., Carr, J. C., & Griffin, M. (2010). *Business research methods* (8th ed.). Thousand Oaks, CA: Thomson/South-Western.
- Zundel, C., Kilcher, L. (2007). Issues paper: organic agriculture and food availability. In: Scialabba, N. (Ed.), *Organic Agriculture and Food Availability*. Paper Presented in International Conference on Organic Agriculture and Food Security during May 3-5, 2007. FAO, Rome, Italy, 1-25.