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RESEARCH ARTICLE

THE EFFECTS OF CONSUMER ATTITUDE TOWARDS THE PURCHASE OF ORGANIC FOOD PRODUCTS IN SIKKIM.

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Abstract

The intention of customers to purchase organic foods has been an interesting study area and number of researchers has conducted numerous studies in understanding what influences people to purchase organic food products. However, results of these study were contradictory. Hence this research study was conducted to overcome this research gap. The primary objective of this study was to identify the variables which affecting the consumer attitude to buy organic food which in turn affects the purchasing intention. This research has adapted descriptive research in the form of cross sectional design. A measuring instrument in the form of a structured questionnaire was distributed by means of convenience sampling to individual customers who intend to buy organic food. Around 573 consumers participated in the study and a questionnaire was administered with each of them separately using survey method. The study variables are health consciousness, environmental consciousness, Personal norms, subjective norm, Customer attitude and intentions to purchase organic food. The results of research study showed that all the four predictor variables were significantly influencing customer attitude towards organic purchase. Among four predictor environmental concern had the highest impact on customer attitude. Moreover customer attitude towards organic food purchase was positively predicting the customer purchase intention. Finally this study concludes with important implications for manufacturers and government.

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Introduction:-

Organic food industry has developing as one of the fastest emerging sector in the world and has assumed greater global awareness in the last decade. Organic food includes food products obtained from a farming system which avoids using synthetic fertilizers, pesticides, hormones, genetically modified organisms and irradiation. According to Jia et al. (2002) food is categorized as "organic" if the product does not contain artificial synthesized fertilizers, pesticides, livestock, growth regulators and poultry feed additives. In general, organic food refers to foods that are safe to be consumed, are of fine quality, are concerned with humane animal treatment, are nutritious foods and are produced under the principle of sustainable development (Liu, 2003). Organic food is perceived as being more nutritious, healthier, safer and environmentally friendly. The green environment and the developing of organic food are still in the infant stage in India. Therefore, there is a need to gain knowledge about the consumer's behaviour towards organic food products. India is one of the highly populous country with great potential in production and consumption of organic food, the understanding of organic food consumers' behaviour is critical for the global organic food market. Against this background, the aim of this research is to investigate the various determinants which influence consumers purchase intentions of organic food products. This study explored consumer's attitude toward purchasing organic food products based on four variables namely health consciousness, environmental consciousness, subjective norms and personal norms. This study also examines effects of customer attitude towards purchase intention of organic food products. This research study was conducted in Sikkim, North-east region of

India. Sikkim has been selected for research purpose because it has become India's first fully organic state by converting around 75,000 hectares of agricultural land into sustainable cultivation.

Literature review:-

There are several different factors have been found to have a certain influence on consumer attitude towards organic food. This section summarizes and discusses the influence of these factors on consumer attitude. Based on the review of each concept, hypotheses were developed.

Health Consciousness:-

Health consciousness is defined as an attitude in which people is aware of the healthiness in their diet and lifestyle (Oxford Dictionaries, 2014). In regard to the context of organic food, Suh, Eves and Lumbers (2012) concluded that positive attitude towards organic food of consumers is originated from the belief that organic food is good for health, thereby they can consume without any fear and suspicion. Generally, one of the major reasons of buying organic food is health consciousness and to support environmental preservation (Wandel and Bugge, 1997; Vindigni, et al., 2002). The result of Tarkiainen and Sundqvist's (2005) study mentioned that health consciousness positively affects the attitude to buy organic food. Chen (2009) showed that there is a strong significant relationship between health consciousness and attitude to organic food purchasing. It indicates that consumer's health consciousness encourages the consumer to have positive attitude to buy organic food. It occurs because the organic food is perceived as healthier, safer and environmental friendly than the conventional one. Based on the facts discussed above, the first hypothesis is proposed as follows:

H1:- Consumer health consciousness has a positive effect on consumer attitudes towards organic food purchase.

Environment Consciousness:-

According to Vermeir and Verbeke (2006) and Chen (2007) consumers that are more involved in organic and environmental friendly related issues, such as environmental protection tend to have positive attitude towards organic food and strong intention to purchase. Environmental behavior refers to all actions of people that are significantly related to the nature of environment, such as consumption of environmental resources. There is a broad range of behaviors that falls within the notion of environmental behavior such as the production and consumption of food, buying a house, transportation and shopping (Jager, 2000). Environmental consciousness affects the consumer attitude to purchase organic food positively (Vindigni, et al., 2002; Tarkiainen and Sundqvist, 2005; Chen, 2009; Kim and Chung, 2011). It indicates that the consumer's environmental consciousness encourages the consumer to have positive attitude towards organic food purchase. Considering the elaboration above, the second hypothesis is proposed below:

H2:- The environmental consciousness of consumers has a positive effect on consumer attitude towards organic food purchase.

Personal Norms:-

Schwartz (1973) defined personal norms as an individual's beliefs that acting or behaving in a certain way is right or wrong. Studies suggest that personal norms have a strong impact on consumer choice between organic and non-organic food, also influence on their attitude. In other words, consumer attitude towards an object is deemed to be influenced by consumer self-beliefs (Thøgersen, 2002). Based on these arguments, the third hypothesis is proposed below:

H3:- Personal norms of consumers has a positive effect on consumer attitude towards organic food purchase.

Subjective Norms:-

Subjective norms are defined as the social pressure for an individual to engage or comply with a group behavior such as family and friends. These norms are normative beliefs and expectation that the groups or important referents have on this person (Ajzen, 1991). In relation to attitude, Tarkiainen and Sundqvist (2005) concluded that subjective norms have a positive influence on consumer attitude towards organic food. It is aligned with the study by Bamberg et al. (2007), who claimed an indirect effect of social norms on consumer attitude. The influence caused by groups of people in society or people who close to consumers. Which may amplify the factors that influence on the people around them or people who're belief that he should doing behaviors. This factor will be a result in a consumer feeling wanted to do as much. Which is stimulated more if people in society believe in the same thing (Bearden, Netemeyer, & Teel, 1989). Considering the elaboration above, the fourth hypothesis is proposed below:

H4:- Subjective norms of consumers has a positive effect on consumer attitude towards organic food purchase.

Attitude to Buy Organic Food:-

The attitude refers to the extent to which an individual has good or bad evaluation or assessment on the concerned behavior. The more positive the consumer attitude to a product, the stronger is the intention to do such the behavior (Ajzen, 1991). Some studies on the relationship of attitude and intention to buy organic food consistently showed positive relations. For example Thøgersen (2007) and Chen (2009) indicate that positive attitude encourages the consumer's intention to purchase organic food. It occurs because positive attitude tends to be followed up with the intention to make it happens. Based on these arguments, the fifth hypothesis is proposed below:

H5:- The attitude to buy organic food positively affects consumer intentions to buy organic food.

Research methodology:-

This research has adapted descriptive research in the form of cross sectional design. A measuring instrument in the form of a structured questionnaire was distributed by means of convenience sampling to individual customers who intend to buy organic food. For the empirical investigation, a measuring instrument was adapted from Tarkiainen and Sundqvist (2005), Webster, (1975), Thøgersen and Olander (2006), Tarkiainen and Sundqvist (2005), Chen (2009) and (Ajzen, 1991). Respondents were asked to complete the questionnaire in a self-administered manner. The language of communication was English and the questionnaire consisted of two sections. First section gathered data on the possible influence of the independent variables on customer attitude and Purchase intention and second section gathered demographic data of respondents. Data processing was done by using Statistical Package for Social Sciences, (SPSS Version 21). After collecting data from the respondents, the questionnaires were checked for omissions to discard totally unfit or incomplete responses. A total of 600 self-administered questionnaires were distributed to there spondents, of which 573 questionnaires were found usable. The sample consisted of 573 respondents and was split between 286 male (49.9%) and 287 female respondents (50.1%). In terms of age group 35.8% were between the age group of 21 to 30 years, 29.8% were between the age group of 31 to 40 years, 19.5% were between the age group of 41 to 50 years and 14.8% were above the age of 51 years.

Test of Hypotheses:-

In order to test the hypotheses linear multiple regression analysis was used. To perform multiple regression on data, important statistical assumptions have to be met. Those are normality, linearity, independence of error terms and absence of multicollinearity.

Normality:-

The assumption of normality is a prerequisite for multiple regression analysis. Normality is important in knowing the shape of distribution as the normality helps to predict dependent variables scores. For this study the researcher decided to use skewness and kurtosis to test normality. The range for skewness and kurtosis is considered acceptable if it is in range +/- 3.

Table: 1:-

Normality Result		
Variables	Skewness	Kurtosis
Purchase intention	-.904	.644
Health consciousness	-.401	-.811
Subjective norms	-.573	.018
Environment concern	-.747	-.381
Personal norms	-.523	-.846
Attitude	-.874	.070

The result from Table:1 shows the data was normally distributed since the value of kurtosis and skewness were in range. Therefore, the assumption of normality has been met for data.

Linearity:-

Linearity represents the degree to which the change in dependent variable is associated with the independent variable. For the assumption of linearity, Hair, Anderson, Tatham and Black (1988) suggested that researchers may depend on the visual inspection of the relationships to determine whether linear relationships are present. The

scatterplot of standardized residual against the standardized predicted value of dependent variable would show a horizontal band of residuals. Results showed that the partial regression plots between each independent variable and dependent variable did not exhibit nonlinear patterns

Independence of error term:-

In multiple regression, it is assumed that each predicted value is independent, that is, it is not related to any other prediction, meaning that it is not sequenced by any variable. Independence of error term assumption can be examined with Durbin-Watson test. If the results less than 1 or greater than 3, it would be definitely cause for concern

Table 2:- Independent Errors of the predictor and Attitude, Purchasing intentions

Durbin Watson	Result
	1.971
	1.933

Durbin Watson coefficient test result concludes that the observations are independent.

Multicollinearity:-

Multicollinearity refers to the high association among the independent variables themselves. To assess Multicollinearity, each independent variable is treated as a dependent variable and is regressed against the remaining independent variables. Multicollinearity was examined by both tolerance and variances inflation factor (VIF). Tolerance is the amount of variability of the selected independent variable not explained by other independent variable. Hence tolerance value should be high. VIF is the inverse of tolerance value. High tolerance value and low VIF represents absence of multicollinearity.

Table 3:- collinearity Statistics

Collinearity statistics		
Variables	Tolerance	VIF
Healthconsciousness	.394	2.537
Subjectivenorms	.587	1.705
Environmentconcern	.371	2.699
Personalsnorms	.452	2.212

In our data all variables tolerance value was above 0.20 and exceed the cutoff value of .10 (Vogt, 2005) and VIF was less than the cut off value of 10 (Cohen et al, 2003 p.423). Results of VIF and tolerance value confirmed that absence of multicollinearity and predictors were fit to predict the customer attitude towards organic food purchase as showed in Table 3. Therefore all the assumptions for multiple regression analysis was met in our data.

Linear Regression:-

In this study, two linear regressions were conducted respectively. The first regression (Table 1) was to test the relationship between four predictor variables and customer attitude. Four predictor variables including health consciousness, environmental concern, personal norms and subjective norms were considered as independent variables while customer attitude was the dependent variable. The second regression (Table 2) aimed to investigate the relationship between customer attitude and purchase intention in which customer attitude is independent variable and purchase intention is dependent variable.

Table 4:- Model summary of Multiple Regression analysis.

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.895 ^a	.802	.800	1.53327	.802	574.528	4	568	.000	1.971
a. Predictors: (Constant), Personalsnorms, Subjectivenorms, Healthconsciousness, Environmentconcern										
b. Dependent Variable: Attitude										

Table 5:- Results of Multiple Regression results on the effect of customer perceived organic products towards customer attitude

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.274	.261		1.047	.295
	Healthconsciousness	.133	.022	.178	5.976	.000
	Subjectivenorms	.179	.028	.155	6.351	.000
	Environmentconcern	.314	.024	.401	13.061	.000
	Personalsnorms	.402	.037	.300	10.792	.000
a. Dependent Variable: Attitude						

Table 4 & 5 presents the multiple regression results of all the independent variables. The results revealed that model explains 80.2 % of variance on customer attitude which was statistically significant. The results indicate 80% of customer attitude was explained by the four predictor variables. The results showed that all the four predictor variables were found positively and significantly associated with customer attitude namely Health consciousness ($\beta = .178$, $p < .001$) Subjective norms ($\beta = .155$, $p < .001$) Environment concern ($\beta = .401$, $p < .001$) and Personal norms ($\beta = .300$, $p < .001$). Therefore, H1, H2, H3 and H4 was supported

Table 6:- Model summary of Multiple Regression analysis.

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.659 ^a	.434	.433	1.78064	.434	437.939	1	571	.000	1.933
a. Predictors: (Constant), Attitude										
b. Dependent Variable: Purchaseintention										

Table 7:- Results of Multiple Regression results on the effect of customer attitude towards purchase intentions.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.353	.260		12.907	.000
	Attitude	.454	.022	.659	20.927	.000
a. Dependent Variable: Purchaseintention						

Simple regression test was performed to examine the effect of customer attitude and purchase intention of organic food products. As shown in above table 6 & 7, customer attitude was positively and significantly related to customer purchase intention ($\beta = .659$, $p < .001$). Therefore, H5 was supported.

Discussion:-

The result of the study highlighted that consumers' perceived organic food products did affect their customer attitude towards the organic products. The result indicated that environment concern ($\beta = 0.401$) had the greater effect on customer attitude in the context of organic food purchase followed by personal norms ($\beta = 0.300$) and subjective norms $\beta = 0.155$ and Health consciousness ($\beta = 0.178$). Hypothesis 1 posits that customer health consciousness has a positive effect on customer attitude towards organic food purchase. This study has proven that the relationship was positively and significantly associated with customer attitude towards organic food purchase. Consumers who are more concerned about food safety and its effect on their health tend to hold a positive attitude towards organic food. This result is consistent with the previous findings of (Wandel and Bugge, 1997; Vindigni et al., 2002, Kim and chung, 2011).

Hypothesis 2 posits that customer environmental consciousness has a positive effect on customer attitude towards organics food purchase. Results indicate that the Consumers environmental consciousness encourages the consumer to have a positive attitude towards organic food purchase. This results is corroborate with the previous findings of Werner and Alvensleben (2011) and Huamg (1996).

Hypothesis 3 posits that personal norms has a positive effect on customer attitude towards organics food purchase. Results indicated that the more consumer perceive or consider that organic food is good, the more the positive it is in association with their attitude. This result also supported the study of Thøgersen (2002), stating that personal norm has a strong impact on consumer in choosing organic and non-organic food as well as their attitude.

Hypothesis 4 posits that subjective norms has a positive effect on customer attitude towards organic food purchase. This result indicated that people with positive attitude regarding a products will affect the attitude of their surrounding people. Among the small number of studies that studied the subjective norms related to the purchase of organic food, it was discovered that there is an important relationship between subjective norms and attitudes (Tarkiainen&Sundqvist, 2005).

Hypothesis 5 posits that the attitude towards organic food purchase positively affects consumer purchase intentions to buy organic food. Result revealed that the hypothesis between consumer attitude and purchase intention is accepted in high significance. The more customer positive attitude towards organic food, the more likely they are to purchase organic food. This result is identical with the findings from Chen (2007), Thøgersen (2007) and Dean et al., (2008) stating that consumer's attitude towards organic food has a positive impact on their intention to purchase organic food.

Conclusion and Managerial Implications:-

The awareness about organic food products is increasing among the people and their intention to buy organic food is shaped by various beliefs. Their purchase intention is direct result of positive attitude towards the organic food. An attempt has been made in this study to analyse what motivates customers to purchase organic food products. The results of the study shows that four predictor variables (health consciousness environment consciousness, personal norms and subjective norms) have a positive relationship with customer attitude, which in turn increases customer purchase intention of organic food products. Based on this findings, the implication of research is that in the future the marketers should convince the consumers to purchase organic food product because it is safe for consumer health and environment. In initial stages manufacturers should spend more money on advertising and promotional strategies to influence a customers to purchase organic food products. Moreover government should also initiate the organic food productions in other states of India. The result of this study could be served as a foundation for further research about organic food in the future. For instance, it would be of interest for future research to explore additional factors and explain about their positive impact on consumer attitude towards organic food products. In addition, Future research should focus on similar study by extending the scope to all states in India in order to obtain a more reliable and accurate research result. Lastly, other sampling method could be adapted for the generalization of the results.

References:-

1. Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
2. Arvola, A., Vassallo, M., Dean, M., Lampila, P., Saba, A., Lähteenmäki, L., & Shepherd, R. (2008). Predicting intentions to purchase organic food: The role of affective and moral attitudes in the Theory of Planned Behaviour. *Appetite*, 50(2), 443-454.
3. 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.
4. Chen, M. F. (2009). Attitude toward organic foods among Taiwanese as related to health consciousness, environmental attitudes, and the mediating effects of a healthy lifestyle. *British Food Journal*, 111(2), 165-178.
5. Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. Routledge.
6. Devcich, D. A., Pedersen, I. K., & Petrie, K. J. (2007). You eat what you are: Modern health worries and the acceptance of natural and synthetic additives in functional foods. *Appetite*, 48(3), 333-337.
7. Hair, J. F., Anderson, R. E., Tatham, R. L., & William, C. Black. 1988. *Multivariate Data Analysis*, 5.

8. Huang, C. (1996). Consumer preferences and attitudes towards organically grown produce. *European Review of Agricultural Economics*, 23, 331-342.
9. Jia, N. X., Liu, H. F., Wang, X. P., & Liu, Y. (2002). Discussion on the development of organic food, green food and hazard free food. *Journal of China Agricultural Resources and Regional Planning*, 23(5), 60-62.
10. Liu, P., Casey, S., Cadilhon, J. J., Hoejskov, P. S., & Morgan, N. (2007). A practical manual for producers and exporters from Asia. Regulations, standards and certification for agricultural exports. RAP Publication (FAO).
11. Mak, A. H. N, Lumbers, M. and Eves, A.(2012). Globalisation and food consumption in tourism. *Annals of Tourism Research*, 39(1), 171-196.
12. Schwartz, B. (1973). Maintenance of key pecking by response-independent food presentation: the role of the modality of the signal for food1. *Journal of the Experimental Analysis of Behavior*, 20(1), 17-22.
13. Soonthonsmai, V. (2007). Environmental Or Green Marketing As Global Competitive Edge: Concept. In Synthesis, And Implication, EABR (Business) & ETLC (Teaching) Conference Proceedings, Venice, Italy.
14. Tarkiainen, A., & Sundqvist, S. (2005). Subjective norms, attitudes and intentions of Finnish consumers in buying organic food. *British Food Journal*, 107(11), 808-822.
15. Thøgersen, J. (2010). Country differences in sustainable consumption: The case of organic food. *Journal of Macromarketing*, 30(2), 171-185.
16. Thøgersen, J., & Ölander, F. (2006). To what degree are environmentally beneficial choices reflective of a general conservation stance?. *Environment and Behavior*, 38(4), 550-569.
17. Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption: Exploring the consumer "attitude-behavioral intention" gap. *Journal of Agricultural and Environmental ethics*, 19(2), 169-194.
18. Vindigni, G., Janssen, M. A., & Jager, W. (2002). Organic food consumption: a multi-theoretical framework of consumer decision making. *British Food Journal*, 104(8), 624-642.
19. vonAlvensleben, R. (1998). Ecological aspects of food demand: the case of organic food in Germany. AIR-CAT 4th Plenary Meeting, Health, Ecological and Safety Aspects in Food Choice, 4(1), 68-79.
20. Wandel, M., & Bugge, A. (1997). Environmental concern in consumer evaluation of food quality. *Food quality and preference*, 8(1), 19-26.
21. Wandel, M., & Bugge, A. (1997). Environmental concern in consumer evaluation of food quality. *Food Quality and Preference*, 8(1), 19-26.
22. Yeon Kim, H., & Chung, J. E. (2011). Consumer purchase intention for organic personal care products. *Journal of consumer Marketing*, 28(1), 40-47.