

Consumer Perspectives on Chemical-Free Food Purchase: Identifying Determinant Factors

Bishal Rana

Abstract

In response to heightened consumer concern regarding long-term health and a trend towards health-beneficial purchases, this study seeks to scrutinize the influential factors dictating Chemical-free food purchase intentions in Butwal, Sub-Metropolitan City. The primary objective of this research is to examine the impact of health consciousness, knowledge, and trust on an individual's inclination to buy Chemical-free food. Using a randomly distributed self-administered questionnaire, data from 200 respondents were analyzed. The analysis, conducted through Pearson Correlation and Multiple Regression, aimed to discern the relationships and impacts of the various factors on the inclination to purchase organic products. This study found that knowledge was the most important factor that significantly increased people's intentions to buy organic foods. This was in contrast to trust and health consciousness, which had no discernible effect on people's buying habits. Given these findings, the paper suggests that enhanced government and policy interventions are necessary to foster organic farming and stimulate consumer awareness, thereby facilitating an increase in Chemical-free food purchases.

Keywords: Organic Nutrition, Confidence, Health Mindfulness, Expertise, Purchasing Intention

I. Introduction

The increasing popularity of organic foods can be attributed to their desirable taste, health advantages, and social significance, which align with the growing environmental awareness (Dimitri, C., Lohr L., 2007). The international demand for this arises from health concerns and the adverse impacts of certain agricultural chemicals. Organizations globally are transitioning their operations to manufacture organic goods, aiming to capitalize on this prevailing phenomenon and attain a competitive edge (Dudar, 2019). Despite the limited retail presence of these businesses in urban areas such as Kathmandu, their market share is growing due to the implementation of innovative marketing strategies (Aryal, P. K., Chaudhary, P., Pandit, S., & Sharma, G., 2009). Consumers are increasingly opting for organic products due to their heightened awareness of the adverse consequences associated with intensively produced goods (Popa, M., Mitelut, A., Popa, E., Stan, A., & Popa, V., 2018). The current shift towards increased awareness and rapid information sharing is playing a significant role in driving a surge in international demand, particularly in developing nations that possess ample natural resources. Urban consumers have a particular inclination towards organic products that offer a guarantee of high quality (Bhatta, Doppler, & KC, 2009). Irrespective of the developmental phase, organic farming is experiencing

growth in developing countries, despite its well-established presence in Western nations (Rehber, E., & Turhan, S., 2002). Companies are proactively disseminating information to the general public regarding the advantages associated with organic ingredients, with the aim of leveraging this trend and cultivating a brand image that aligns with environmentally conscious practices, which is increasingly gaining popularity on a global scale. Furthermore, the surge in demand for organic products not only attracts scholarly interest but also implies potential variations in consumer purchasing behaviour between developing nations, such as Butwal, Sub-Metropolitan City, Nepal, and developed nations. This study aims to address the existing research gap by examining the drivers of organic product purchases in Butwal, Sub-Metropolitan City, Nepal from a novel perspective. Specifically, the study will focus on trust, health consciousness, and knowledge, which have not been thoroughly explored in this particular context. In the current era characterized by rapid and convenient access to information, consumers have exhibited an increased discernment in their purchasing decisions, prioritizing the long-term health implications associated with the consumption of food products. In light of the recent surge in consumer demand for organic products, it is imperative to analyze the key determinants that shape these purchasing decisions. This study intends to address the following queries:

- a. Which elements shape the inclination towards buying Chemical-free food in Butwal, Sub-Metropolitan City?
- b. Which specific aspect plays a pivotal role in guiding the Chemical-free food purchase decisions in Butwal, Sub-Metropolitan City?

The primary aim of this investigation is to discern the motivations behind purchasing organic food. The study sets forth the following objectives:

- a. To investigate the elements influencing the buying decisions of Chemical-free food in Butwal, Sub-Metropolitan City.
- b. To delve into the specific factors that play a crucial role in shaping the buying tendencies towards Chemical-free food in Butwal, Sub-Metropolitan City.

In the forthcoming period, this investigation is poised to serve as a significant contributor in a few key aspects. Firstly, it aspires to furnish a deep-seated understanding of the crucial factors that dictate the propensity of consumers to opt for organic food, thereby painting a comprehensive picture of current market dynamics. Secondly, it stands as a valuable resource for emerging entrepreneurs with smaller setups, offering them a foresight into potential business avenues and helping them align their strategies effectively. Lastly, by setting a robust foundational groundwork, it paves the way for future scholarly endeavors seeking to dissect and analyze the evolving tendencies in Chemical-free food purchasing within the Butwal, Sub-Metropolitan City demographic, potentially spearheading a wave of insightful researches in this sector.

II. Literature Review

Trust

Trust, defined as the psychological readiness to accept potential vulnerabilities based on optimistic anticipations of others' actions, holds a central position in analyzing consumer behavior (Rousseau, M. T., Stikin, S. B., Burt, S. B., & Camerer, C., 1998). This element is critically instrumental

in scrutinizing the actual buying patterns of customers, yet its application in the Chemical-free food sector remains challenging (Akroush, M. N., & Al-Debei, M. M., 2015). When it comes to local produce and organic items, trust significantly influences tangible purchasing attitudes and behaviors, even though relying solely on product labeling and certification may not be sufficient (Lee, T.H., Fu, C. J., & Chen, Y.Y., 2019; Fernqvist, F., & Ekelund, L., 2014). Moreover, the presence of skepticism and questions about the authenticity of products marketed as organic can markedly deter purchasing actions (Nuttavuthisit, K., Thøgersen, J., 2017).

H1: There is no statistically significant link between trust and purchase intent.

Health Consciousness

Individuals gravitating towards secure and wholesome nutrition are notably inclined towards organic and green consumables, considering it a health investment (Alphonse, R., Alfnes, F., 2012). Lairon, D. (2011) denotes the remarkable ability of organic farming to generate products rich in beneficial phytonutrients and lower in adverse residues. Such a realization has spurred a trend where consumers view organic consumables as a healthcare investment. This preference for harmless food options, which extends benefits to society and the environment, reflects a deeper commitment to health preservation. Numerous studies accentuate this change, showcasing a significant drift from customary food choices to a health-centric diet (Denver, S., & Christensen, T., 2015).

H2: There is no statistically significant link between health consciousness and purchase intent.

Knowledge about the Chemical-free food

Consumer familiarity with specific products in certain contexts is referred to as product knowledge, which significantly sways their purchasing decisions (Brucks, M., 1985; Burton, S., Howlett, E., & Tangari, A., 2009). Knowing about Chemical-free food is very important for changing the market for these goods. Consequently, it's vital for producers or sellers to escalate awareness and disseminate information to cultivate a proclivity towards organic offerings (Demirtas, B., 2019). This knowledge essentially facilitates the consumer's buying conduct, given that a lack of awareness regarding the health and environmental boons of organic foods could potentially deter purchases, especially considering the time and effort involved. Furthermore, limited accessibility in various market areas impedes the recognition of the inherent attributes of organic products.

H3: There is no statistically significant link between knowledge and purchase intent.

Conceptual Framework

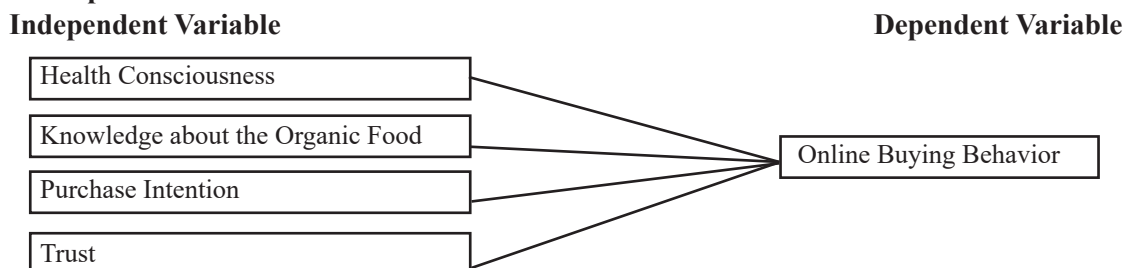


Figure 1: Conceptual Framework

III. Research Methodology

A questionnaire was developed to assess the four key aspects of trust, health consciousness, knowledge, and purchasing intent towards organic foods. This instrument comprised 14 questions based on the Likert scale, along with 6 inquiries pertaining to demographic details. Utilizing an online platform, data was garnered through a randomized sampling method, encompassing 385 distributed questionnaires, from which 200 responses were accrued. The study, grounded in a quantitative framework and relying solely on primary data, focused on the consumer base in Butwal Sub-Metropolitan City indulging in Chemical-free food consumption. The research findings were derived through the integration of descriptive and inferential statistical techniques.

IV. Results and Discussion

An analysis of the information gleaned from the survey replies is presented in this chapter. The current study is divided into one section that contains a thorough examination of the demographic traits of the respondents. The Statistical Package for the Social Sciences (SPSS) was used to perform this analysis, which also includes a descriptive analysis. The study also investigates the relationship between the independent and dependent variables. Additionally, this study uses multiple regression analysis to investigate the effects of various variables, culminating in a thorough discussion of the findings. The expected results of this analytical procedure should be consistent with the goals specified in this study.

Demographic Analysis

In this segment, the analysis and interpretation of data accumulated from survey responses are articulated. Comprised in a unified section, it includes an analysis of the respondents' demographic characteristics, coupled with a detailed analysis executed through the Statistical Package for the Social Sciences (SPSS). Furthermore, it scrutinizes the interrelations between dependent and independent factors, while also evaluating the implications of various elements via multiple regression analysis. This segment culminates with a discussion on the acquired results. The analysis seeks to generate insights that align with the primary objectives stipulated for this research endeavor.

Table 1

Demographic Characteristics of Respondents

Demography	Characteristics	Frequency	Percent
Age	15-29 years	60	30
	30-44 years	100	50
	45 and above	40	20
Gender	Male	150	75
	Female	50	25
Marital Status	Married	80	40
	Unmarried	120	60
Education Status	Plus 12	30	15

	Bachelors	70	35
	Masters and above	100	50
Occupation	Employed	80	40
	Unemployed	30	15
	Self-employed	60	30
	Student	30	15
Income	Less than 14,999	40	20
	15,000 to 29,999	35	17.5
	30,000 to 44,999	40	20
	45,000 to 59,999	35	17.5
	60,000 and above	50	25
Total		200	100.0

In the survey involving 200 individuals, 75% were males and the rest, 25%, were females. A majority (50%) belonged to the 30-44 age bracket, followed by 30% in the 15-29 range, and the remaining 20% were aged 45 and above. Marital status indicated that 40% were married and 60% were single. Education-wise, the highest proportion (50%) had a master's degree or higher, 35% were bachelor's degree holders, and a minor segment (15%) had education up to the Plus 2 level. Regarding earnings, 25% were earning Rs. 60,000 or more, with 40% being in employment. The study's reliability was confirmed with Cronbach's Alpha values for trust (0.772), health awareness (0.856), and knowledge (0.785), and purchase intention (0.890), all surpassing the 0.70 benchmark. The average scores on a five-point Likert scale highlighted the participants' purchase intentions influenced by knowledge (2.805), health awareness (3.350), and trust (3.750).

Correlation Analysis: Pearson Correlation results of the Variables

In Table 2, the connections between three key determinants - trust, health mindfulness, and awareness - and the inclination to acquire organic products are outlined. Noteworthy is the preeminent influence of knowledge, boasting a correlation coefficient of .550, succeeded by health consciousness at .370. Trust, however, stands as the least influential factor, with a correlation score of .360.

Table 2

Pearson Correlation Results of Variables

Variables		Purchase Intention
Trust	Pearson Correlation	.360**
	Sig. (2-tailed)	0.000
	N	200
Health consciousness	Pearson Correlation	.370**
	Sig. (2-tailed)	0.000
	N	200

Knowledge	Pearson Correlation	.550**
	Sig. (2-tailed)	0.000
	N	200
Purchase Intention	Pearson Correlation	1
	Sig. (2-tailed)	
	N	200
**. Correlation is significant at the 0.01 level (2-tailed).		

Multiple Regression Analysis

The Multiple Linear Regression analysis results are shown in Table 3. They show how trust, health consciousness, and knowledge affect the desire to buy organic food. There is a strong correlation between knowledge and the intention to buy, as shown by the coefficient of 0.490, which is statistically significant at a 99% confidence level. This finding shows that a single increase in knowledge has the potential to make people 49% more likely to buy something. The variables for trust and health consciousness, on the other hand, had coefficients of 0.079 and 0.038, respectively. With an increase of 7.9% and 3.8% per unit, these coefficients show a relatively smaller effect on the intention to buy. It is important to keep in mind, though, that these effects were not statistically significant at the 99% level of confidence. It was also found that the R-squared coefficient is 0.491, which means that the independent variables can explain 49.1% of the variation in the dependent variable. Each construct has a variance inflation factor (VIF) below 5, which also proves that there is no multicollinearity.

Table 3

Coefficient of Multiple Linear Regression of Variables

Model B	Unstandardized Coefficients	Standardized Coefficients Std. Error Beta		T	Sig.	VIF
(Constant)	1.048	0.220		4.76	0.00	
Trust	0.079	0.068	0.112	1.16	0.255	2.15
Health Consciousness	0.038	0.088	0.042	0.43	0.599	2.25
Knowledge	0.490	0.079	0.473	6.20	0.000	1.20
Dependent Variable: Purchase Intention						
Adjusted R Square: 0.409						

Hence, considering the aforementioned outcome, it is possible to formulate the subsequent regression equation.

The equation can be represented as $Y = b_0 + b_1X_1 + b_2X_2 + \dots + b_nX_n$. Similarly, the equation $PI = 1.048 + 0.079T + 0.038HC + 0.490K$ can be used to calculate the value of PI.

Where,

PI denotes purchase intent

T represents trust.
Health Consciousness (HC) and
Knowledge (K)

Summary of Hypothesis

Hypothesis	P-value	Remarks
H1: There is no statistically significant link between trust and purchase intent.	.255	Failure to Reject
H2: There is no statistically significant link between health consciousness and purchase intent.	.599	Failure to Reject
H3: There is no statistically significant link between knowledge and purchase intent.	.000	Rejected

V. Discussion

The research uncovers the pivotal factors influencing the propensity of Butwal Sub-Metropolitan City consumers to opt for organic products, pinpointing knowledge as the principal factor steering the inclination to purchase organic food. According to the study, a unit augmentation in knowledge escalates the likelihood of purchasing organic products by 51.4%. However, trust and health consciousness were not identified as significant influencers in shaping the buying intention for Chemical-free food in this region. This rise in purchasing inclination with enhanced knowledge mirrors the results from studies conducted by Wang, X., Pacho, F., Liu, J., & Kajungiro, R. (2019), Van Loo, E., My, N., Pieniak, Z., & Verbeke, W. (2013), and Kashif, U., Hong, C., Naseem, S., Khan, W. A., & Akram, M. W. (2020), and is evident in Butwal, Sub-Metropolitan City as well. Contrary to the observations in this locality, research from Carfora, V., Cavallo, C., Caso, D., Del, G. T., Devitiis, B., Viscecchia, R., Nardone, G., & Cicia, G. (2019) and Pham, T., Nguyen, N., Phan, H., & Nguyen, N. (2018) illustrate a notable influence of trust and health consciousness on Chemical-free food purchasing intentions respectively.

VI. Conclusion and Implications

In this era, buyers are showing heightened awareness during purchases, especially regarding health aspects for themselves and their family in the long run. Enhanced internet connectivity has honed their selection criteria and precision. The research highlights that in Butwal, Sub-Metropolitan City, consumers' acquaintance with Chemical-free food stands as a central factor dictating their willingness to buy such products. However, elements like trust and awareness about health benefits didn't exhibit a noteworthy influence on Chemical-free food buying tendencies in the area. Hence, it is prudent for vendors to kickstart initiatives to amplify awareness about the health-related merits of Chemical-free food intake and its importance. Furthermore, it's advisable to undertake varied marketing maneuvers to validate the quality standards of these food items, possibly showcasing quality certification, to build trust among prospective customers. This investigation holds significant repercussions for marketing professionals, policymakers, and community enterprises in devising initiatives to enhance Chemical-free food popularity. Utilizing

diverse channels to highlight sustainable dietary habits and address food-related concerns can be a stepping stone. Organizing awareness programs and educational events, primarily targeting the youth, can shift perceptions towards organic consumption, underscoring beneficial farming approaches, nutritional insights, and environmental gains. Local sustainability collectives could foster discussions on the perks of organic consumption. Moreover, governmental interventions are crucial in fortifying norms and protocols on product certification and branding to alleviate consumer perplexity about organic labels.

In addition, this study, centered on Butwal, Sub-Metropolitan City, proposes avenues for expansive research. Future endeavors could scrutinize other major Nepalese cities with a notable organic consumption trend, adding depth to the existing body of literature. Exploring different areas with unique consumer preferences can unearth fresh perspectives. Thus, a study comparing several key Nepalese cities could be an engaging research venture. Moreover, future inquiries can delve into elements like cultural influences, pricing dynamics, and lifestyle trends, utilizing statistical software like SPSS, AMOS, and Smart PLS for a rounded analysis.

Reference

- Akroush, M. N., & Al-Debei, M. M. (2015). An integrated model of factors affecting consumer attitudes towards online shopping. *Business Process Management Journal*, 21(6), 1353-1376.
- Alphonse, R., & Alfnes, F. (2012). Consumer willingness to pay for food safety in Tanzania: An incentive-aligned conjoint analysis. *International Journal of Consumer*, 36(1), 394-400.
- Aryal, P. K., Chaudhary, P., Pandit, S., & Sharma, G. (2009). Consumers' willingness to pay for organic products: A case from Kathmandu valley. *The Journal of Agriculture and Environment*, 10(1), 50-60.
- Bhatta, D. G., Doppler, W., & KC, K. (2009). Potentials of organic agriculture in Nepal. *The Journal of Agriculture and Environment*, 10(2), 60 -78.
- Brucks, M. (1985). The effects of product class knowledge on information search behavior. *Journal of Consumer Research*, 12(1), 1-16.
- Burton, S., Howlett, E., & Tangari, A. (2009). Food for thought: How Will the nutrition labeling of quick service restaurant menu items influence consumers' product evaluations, purchase intentions, and choices? *Journal of Retailing*, 85(2), 258-273.
- Carfora, V., Cavallo, C., Caso, D., Del, G. T., Devitiis, B., Viscecchia, R., Nardone, G., & Cicia, G. (2019). Explaining consumer purchase behavior for organic milk: Including trust and green self-identity within the theory of planned behavior. *Food Quality and Preference*, 76(3), 10-17.
- Denver, S., & Christensen, T. (2015). Organic food and health concerns: A dietary approach using observed data. *NJAS - Wageningen Journal of Life Sciences*, 12(3), 74-75.
- Demirtas, B. (2019). Assessment of the impacts of the consumers' awareness of organic food on consumption behavior. *Food Science and Technology*, 39(4), 881-888.
- Dimitri, C., & Lohr, L. (2007). The US consumer perspective on organic foods. In: Canavari M., Olson K.D. (eds) *Organic Food*. Springer, New York.
- Dudar, V. (2019). Competitive advantages of organic products feature from the marketing perspective. *Herald of Ternopil National Economic University*, 5(2) 131-140.
- Fernqvist, F., & Ekelund, L. (2014). Credence and the effect on consumer liking of food: a review. *Food Quality and Preference*, 32(1), 340-353.
- Kashif, U., Hong, C., Naseem, S., Khan, W. A., & Akram, M. W. (2020). Consumer preferences toward organic food and the moderating role of knowledge: a case of Pakistan and Malaysia. *Ciência Rural*, 50(5), 80-95.
- Lairon, D. (2011). Nutritional quality and safety of organic food. A review. *Médecine & Nutrition*, 47(1), 19-31.
- Lee, T.H., Fu, C. J., & Chen, Y.Y. (2019). Trust factors for organic foods: consumer buying behavior. *Journal of Strategic Marketing*, 122(3), 414-431.
- Nuttavuthisit, K., & Thøgersen, J. (2017). The Importance of Consumer Trust for the Emergence of a Market for Green Products: The Case of Organic Food. *J Bus Ethics*, 140(2), 323-337.

- Pham, T., Nguyen, N., Phan, H., & Nguyen, N. (2018). Evaluating the purchase behaviour of organic food by young consumers in an emerging market economy. *Journal of Strategic Marketing, 27*(3), 1-17.
- Popa, M., Mitelut, A., Popa, E., Stan, A., & Popa, V. (2018). Organic foods contribute to nutritional quality and value. *Trends in Food Science & Technology, 84*(3), 50-65.
- Rehber, E., & Turhan, S. (2002). Prospects and challenges for developing countries in trade and production of organic food and fibres: The case of Turkey. *British Food Journal, 104*(2), 371-390.
- Rousseau, M. T., Stikin, S. B., Burt, S. B., & Camerer, C. (1998). Not So Different After All: Across-Discipline View of Trust. *Academy of Management Review, 23*(3), 393-404.
- Van Loo, E., My, N., Pieniak, Z., & Verbeke, W. (2013). Consumer attitudes, knowledge, and consumption of organic yogurt. *Journal of Dairy Science, 96*(2), 1-12.
- Wang, X., Pacho, F., Liu, J., & Kajungiro, R. (2019). Factors Influencing organic food Purchase Intention in Tanzania and Kenya and the Moderating Role of Knowledge. *Sustainability, 11*(3), 209-223.