

Consumer Awareness and Purchase Attitude Towards Green Products in Bangladesh

Shayala Yesmin Sharmin Akter
Southeast Business School, Southeast University, Dhaka-1213, Bangladesh

Abstract

The concept of green products is not very old in Bangladesh. This research paper is an endeavor to examine consumer level of awareness and perception towards green products in Bangladesh. The data has been collected by interviewing a total of 192 respondents in Dhaka city through well structured questionnaire. An increasing number of consumers have adequate knowledge about green products features, majority of them view green products as healthy and safe. Consumers prefer to believe that green products are offering high quality over conventional products but they are not having any precise opinion about the excessive prices of green products. The research results also find out consumers' disappointment towards the promotional measures taken by the marketer. This research will be a good cognizance for the marketers' and will increase their seriousness to focus more on making consumer more aware about green products benefits and bring about the adoption of green products.

Keywords: Global Warming, Green movement, Green Product, Conventional Product, Promotional Strategies, Availability, Purchase Intention

1. Introduction

The increasing threats of climate change and global warming are alternating consumer's attention to environmental degradation and adverse influences of their consumption on environment. Bangladesh is one of the most environmentally vulnerable countries in the world. Environmental protection is one of the major concerns in recent times in Bangladesh. Huge populations also create challenges for the country to meet unlimited demand with limited resources. To deal with those challenges government, individual and industries are now focusing more on green products production and marketing. Consumer interest and motivation can impel the marketer to expand the green movement in our market place. But the awareness level of customer towards green product requires more attention. Consumers are less concern about environmental issues but they will be more attracted to green consumption if marketers can incorporate more benefits and attractive pricing with this. As it is different from conventional product, this study is an attempt to find out whether consumers are able to differentiate between green products and non green products and also which factors act as persuasive determinant for consumers in buying green products.

2. Literature review

The American Marketing Association defines green marketing as the marketing of the products that ensures environmental safety and all the efforts taken by a firm for the purpose of production, promotion, packaging, products modification and introduction of new technologies are required to be responsive to ecological concerns. Green marketing is the exchange process of satisfying human needs and wants in which all included activities must be designed with minimum harmful impact on the natural environment with an intention to satisfy these needs (Polonsky, 1994). The holistic view of green marketing intended that environmental friendly strategies must be adopted by the marketers by considering the entire chain of the events that the company enlists in because of the nature of environmental issues (Hess and Timen, 2008). Consumers' growing concern for environment and their own protection drives the demand for green products which motivates to improve the environmental performances of many companies. Consumers are the key who can drive the green marketing process (Sudir Sachdev, 2011).

Consumers are not extremely bound to environment and they put too much responsibility on industry and government (Maheshwari and Malhotra, 2011) Tan Booi Chen and Lau Teck (2010) pinpointed that consumer favorable attitudes towards the environmental protection didn't accelerate consumer attitudes on green products. It can be contrasted from the study conducted by Rouf Ahmad and Dr. Rajendran (2014). They investigated that consumer buying behavior could be altered with the level of consumer awareness but marketer and marketing should focus on educating the consumers' about to how green products are more beneficial to them.

The realization of the consumers about their roles and responsibilities towards environmental protection is gradually changing and companies are looking forward to making more environmentally friendly products, lessening the wasted materials and performing more organized operation. (Jacob, Jolly, 2012). On the other hand, E.B. Khedkar (2015) pointed out that consumer think companies should act in accordance with the environmental laws set by the country but marketers' activities and advertisement were not act as influential factors to the decision regarding the purchase of green products.

Health consciousness preceded environmental concerns are the leading factors that motivate consumers' to purchase green products. Consumer's desire for organic food for the safety of health and environment influences their temptations towards organic foods.(C.Gan, G. Zhiyou and M.C. Tran ,2014). Customer's loyalty followed by global warming, products quality, price luxury and environmental awareness are regarded as the important influential factors in making green products purchase decision (Jesmin 2012).

A survey executed by Chang and Fong (2010) on consumers who were experienced in purchasing green products had identified that there is a positive association between green product quality with consumer satisfaction and consumer loyalty. They also explored that green corporate image can lead green consumer loyalty and consumer satisfaction. Sanjeev ,Radha and Anita (2012) assessed consumer awareness and perception towards green products on Indian youngsters and found that respondents who demanded to be informed about green products actually don't know as to what green products literally represent. Even they can't differentiate between green and non-green products. Gan, Wee, Zucie (2008) showed that there is a positive relationship between environmental consciousness and consumer purchase decision but brand consciousness negatively influences consumer's green products buying decision. They also found in their study that higher price and unfamiliar brand decrease the likelihood to purchase the green products.Patra and Dhani (2011) scrutinized that most of the consumers are aware of green marketing and they are ready to buy green products and willing to pay extra money for sustainable environment but the marketer should give more emphasize on consumer's personal benefits and make green products more economical compare to non green products.

Insufficient information about green products is the major reason that acts as a discouragement for the non purchaser in purchasing green products (C.Gan, G. Zhiyou and M.C. Tran ,2014). Almost identical result was found in the study of Jacob and Jolly (2012). In their research, they observed that insufficient communication is a major reason for commercial breakdown. Proper communication is a significant movement to create positive behaviors among customers. A study conducted by Jesmin (2012) on Bangladeshi consumers identified that, male respondents are more acquainted with holding favorable attitudes towards green marketing than that of female.

A study conducted by Johir Ishak and Tajimul (2014) on Bangladeshi consumers discovered that current distribution channel used by the marketers' to make green products available to consumer is disappointing and insufficient. They also proved that existing distribution channel and environmental awareness have a negative relationship.

So it is observed from the above discussion that many studies have been conducted on consumer perception towards green products. However, to the best knowledge of the researchers no comprehensive study has so far been conducted to explore and assess consumer awareness and purchase attitude towards green products. So the study in hand is an exploratory research on the above mentioned area.

3. Objective

- a. To know consumer's knowledge about various features of green product.
- b. To analyze consumer's intuitive understanding about the price of green product.
- c. To figure out if there is any misconception among consumers regarding the attributes of green product.
- d. To know customer's attitude towards the promotional strategies of green product.

4. Research methodology

The present study is a primary data based exploratory study. The data has been gathered using a well structured questionnaire. The questionnaire has been developed by getting ideas from various literatures related to this study. The data has been collected from the individual who have heard about the term green product. The sampling technique used for this study was convenience sampling, since it was difficult to reach the population. Likert scale placing from 1 to 5 has been subsumed in this research, where, '1' means strongly disagree and '5' means strongly agree, to analyze consumers' perception towards green products. The survey was conducted on 192 respondents of different ages in Dhaka city who met the objectives of the research. Both descriptive (frequency, percentage, mean, standard deviation) and inferential analysis (ANOVA) techniques have been used for the analyzing the data.

5. Results and discussion

It is obvious to know respondents' socio-economic profile for analyzing consumer awareness and purchase attitude towards green product because different socio-economic factors may have significant impact on consumer purchase attitude. Table 5.1 is a reflection of demographic profile of the respondents.

Table 5.1: Demographic information of the respondents

Variables	Categories	Percentage of respondents	Variable	Categories	Percentage of respondents
Gender	Male	75.0	Income	Below or Equal 10000 BDT	12.0
	Female	25.0		10001-25000 BDT	28.6
Age	<18	1.6		25001-40000 BDT	28.1
	19-25	34.9		40001-55000 BDT	15.6
	26-35	39.6		55001-70000 BDT	10.9
	36-45	14.1		Above 70000 BDT	4.7
	>45	9.9	Occupation	Student	16.1
Education	Primary or below	1.6		Businessman	18.8
	Secondary	30.2		Government service holder	6.3
	Graduation	39.1		Private service holder	41.7
	Post Graduation and Above	29.2		Unemployed	2.1
				Others	15.1

It is observed that, 75% were male and the rest 25% were female. In this table age has been categorized into five age groups. Most of the respondents participated in this study were in age group from 19 to 35. The level of education of majority of the consumers was secondary or higher. The study has been conducted on respondents with different occupations and a lion's portions of them are private service holder. Consumer's income has been classified into six categories.

Table 5.2: Sources from where consumer learns about green product

Sources	Percentage of respondents	Sources	Percentage of respondents
Advertisement	94%	Past experience of use	36%
Word of Mouth	82%	Shopkeeper's recommendation	29%
Peer group/colleges/friends	69%		

Table 5.2 reveals the sources from where consumers get to know about green products. The greater numbers of the respondents were informed of green products through advertisement and another important source that makes consumer aware about green products is word of mouth communication. 69% of the respondents become acquainted with green products from peer groups, colleague, and friends. 36% of the respondents have learned about green products from their past experience and 29% of them have got recommendation from shopkeepers.

Table 5.3: Customers' response towards the statement, "Green products are different form conventional product"

Response	Percentage of respondents
No	10.4%
Yes	68.8%
Not sure	20.8%
Total	100.0%

Table 5.3 shows consumers perceived differences between green products and conventional products. In totality 68% respondents were able to differentiate green products from conventional products. 20.08% had ambiguous knowledge regarding the differences and 10% of them were not able to sense anything that makes green products different from conventional products.

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Table 5.4: Consumers' knowledge about various features of green product

Features	Frequency	Percentage
Healthy and Safe	107	55.7%
Made with natural ingredients	73	38.0%
Energy efficiency	71	37.0%
Eco friendly packaging	60	31.3%
Low hazardous emission	43	22.4%
Biodegradability	38	19.8%
Free of toxic chemical	34	34.77%
Durability Originally grown	30	15.6%
Reusable	29	15.1%
Recyclability	29	
Renewable	21	10.9%

Table 5.4 displays that most of the respondents' comprehended green products as healthy and safe products. 38% of the respondents viewed green products as products produced with natural ingredients, 37% considered green products as energy efficient products, and 34% conceived green products as toxic chemical free products. A greater number of respondents were having indistinct knowledge about the other features of green products like biodegradability, durability, originally grown, reusability, recyclability and renewability.

Table 5.5: Most conventionally consumed green products

Product name	Frequency	Percentage
Furniture	72	37.5%
Herbal medicine	71	37.0%
Electrical appliances	61	31.77%
Organic food	56	29.2%
Household cleaning products	52	27.1%
Clothing	48	25.0%
Beauty products	46	24.0%
Automobile	7	3.6%

Table 5.5 represents the variety of green products purchased by the consumers. Of all types of green products listed in table 4, majority of respondents asserted that they mostly buy green furniture and herbal medicine. 31.8% of the respondents took into account green products while buying electrical appliances. Organic food, green household cleaning products, green clothing and green beauty products were also given preferences while buying green products but green automobile was the least preferable green product to the respondents.

Table 5.6: Consumer perceptions towards the pricing of green product

	Response	Frequency	Percentage	Average (SD)
1.Green products are overpriced	Strongly disagree	5	2.60%	2.97 (0.96)
	Disagree	66	34.4%	
	Neutral	67	35.9%	
	Agree	40	20.8%	
	Strongly agree	12	6.30%	
2.The Maximum price charged by the retailer is not fixed by the producer	Strongly disagree	10	5.20%	3.51 (1.00)
	Disagree	20	10.4%	
	Neutral	46	24.0%	
	Agree	93	48.4%	
	Strongly agree	22	11.5%	

Table: 5.6 uncovers the consumers' perception concerning the price of green products. As disclosed from table 5, the greater number of respondents was not sure about whether green products are overpriced or not. 36% of the respondents concluded that green products are not overpriced and rests 26% think the opposite of that. Of all the respondents, 60% accepted the fact that the maximum price charged by the retailer is not fixed by the producer.

Table 5.7: Consumer perception towards the benefits of green product

	Response	Frequency	Percentage	Average (SD)
1. Green product offers lower quality compare to conventional product	Strongly disagree	10	5.2%	2.34 (0.89)
	Disagree	37	19.3%	
	Neutral	75	39.1%	
	Agree	58	30.2%	
	Strongly agree	12	6.3%	
2.Green product has no long lasting positive effect	Strongly disagree	11	5.7%	3.13 (1.04)
	Disagree	43	22.4%	
	Neutral	66	34.4%	
	Agree	55	28.6%	
	Strongly agree	17	8.9%	
3.Green products lasted long time	Strongly disagree	15	7.8%	2.59 (0.93)
	Disagree	85	44.3%	
	Neutral	63	32.8%	
	Agree	21	10.9%	
	Strongly agree	17	4.2%	
4.Green products have partial effect or side effect	Strongly disagree	28	14.6%	2.37 (0.87)
	Disagree	84	43.8%	
	Neutral	62	32.3%	
	Agree	16	8.3%	
	Strongly agree	2	1.0%	

Table: 5.7 exhibits consumers' discernment regarding various attributes of green products. Consumers perception towards the quality comparison between green products and conventional products suggests that a significant part (36%) of the consumers believed that, green products offer lower quality compare to conventional products. A larger portion of the consumers were unaware regarding this matter. The results also represent that, although majority of respondents have the knowledge about the longevity of green products, a considerable percentage (37.5%) of them are ignorant about the long lasting positive effects of these products. A Larger part (65.6%) of the consumers was aware of that green products are innocuous in nature

Table 5.8: Consumer opinion regarding the promotional strategies of green products

	Response	Frequency	Percentage	Average (SD)
1. The promotional messages used to communicate green products are not easily understandable by consumer.	Strongly disagree	10	5.21%	3.09 (1.0)
	Disagree	49	25.5%	
	Neutral	55	28.6%	
	Agree	69	35.9%	
	Strongly agree	9	4.7%	
2. Marketer are not adequately communicate the benefits of green products	Strongly disagree	5	2.6%	3.89 (1.43)
	Disagree	13	6.8%	
	Neutral	40	20.8%	
	Agree	96	50%	
	Strongly agree	38	20%	
3. Green products are not well communicated and advertised compare to conventional products.	Strongly disagree	3	1.6%	3.99 (.84)
	Disagree	7	3.6%	
	Neutral	29	15.1%	
	Agree	102	53.1%	
	Strongly agree	51	26.6%	
4. Marketer claims regarding green products are skeptical and hard to believe.	Strongly disagree	4	2.1%	3.65 (1.01)
	Disagree	24	12.5%	
	Neutral	47	24.5%	
	Agree	75	39.1%	
	Strongly agree	40	20.8%	

Table: 5.8 represents consumers' judgment based on a five-point Likert scale towards the promotional strategies of green products. The analysis reveals that, majority of the respondents (40.6%) think that, the promotional messages regarding green products, communicated by the marketers are not easily understandable

by the consumer. A remarkable percentage of the consumers believe that, green products are not well communicated or advertised. They also feel that, marketer's strategies to communicate the benefits of green product with the customers are not adequate and sometimes, the claims made by them regarding these products are very skeptical and hard to believe. So it is clear that, consumers possessed very pessimistic opinion towards the promotional strategies of green products.

Table 5.9: Consumer opinion about the availability of green product

Response	Frequency	Percentage
Strongly disagree	8	4.2%
Disagree	35	18.2%
Neutral	50	26.0%
Agree	86	44.8%
Strongly agree	13	6.8%

Table: 5.9 shows consumer opinion about the availability of green products when they consider buying. 50% of the respondents assumed that green products are not readily available when they want to buy and 22 % of the consumers' opinion was that green products are available to buy.

Table 5.10: The most sought after features of green products

Features	Frequency	Percentage	Features	Frequency	Percentage
Eco friendliness	104	54.2%	Durability	28	14.6%
Safety	80	41.7%	Recyclable	18	9.4%
Less polluting	56	29.2%	Reusable	16	8.3%
Acceptable price	50	26.0%			
Long term health benefit	48	25.0%			
Energy efficiency	41	21.4%			
Longer lasting effect	35	18.2%			

Table 5.10, uncovers the findings concerning the most attractive features of green products to consumer. Majority of the respondents viewed eco- friendliness as the most attractive feature of green products followed by safety, less polluting, acceptable price, long term health benefit, energy efficiency, long lasting effects, durability, recyclability and reusability.

Table 5.11: Perceptual differences by Age and Education

	Average (SD)	Age	Education	Occupation	Gender	Income
		F value (Sig.)	F value (Sig.)	F value (Sig.)	F value (Sig.)	F value (Sig.)
1. Conventional products offers high quality compare to green products	3.13 (.97)	0.64 (0.59)	5.45 (0.00)	0.59 (.70)	0.14 (.70)	1.41 (.21)
2. Green products have no long lasting effect	3.12 (1.04)	2.72 (0.046)	2.41 (0.051)	1.55 (.17)	2.09 (.15)	0.55 (.77)
3. Green products are not lasted long time	2.59 (.93)	0.23 (0.87)	1.74 (0.14)	0.43 (.82)	0.07 (.79)	1.06 (.39)
4. Green products have side effect or partial effect compared to conventional product	2.37 (.87)	1.14 (0.33)	2.17 (0.07)	1.79 (.18)	0.33 (.57)	0.59 (.73)

Table: 5.11, represents ANOVA test results across several demographic factors regarding consumer's perception towards various benefits of green product. Based on the F-test score and corresponding p-values it is found that consumer's perception differs only in terms of age and level of education. No significant difference has been found in case of other demographic factors.

Table 5.12: Consumer's purchase intention while buying green products

	Response	Frequency	Percentage	Average (SD)
1. I take environment consideration into account while buying green product	Strongly disagree	6	3.1%	3.77 (2.41)
	Disagree	20	10.4%	
	Neutral	39	20.3%	
	Agree	73	38.0%	
	Strongly agree	54	28.1%	
2. While buying I read products label to see if contents are eco friendly	Strongly disagree	4	2.1%	3.46 (1.11)
	Disagree	28	14.6%	
	Neutral	38	19.8%	
	Agree	88	45.8%	
	Strongly agree	34	17.7%	
3. For healthy living I will buy green products if it is overpriced	Strongly disagree	10	5.2%	3.77 (1.06)
	Disagree	30	15.6%	
	Neutral	48	25.0%	
	Agree	69	35.9%	
	Strongly agree	35	18.2%	

Table 5.12 discloses that most of the consumer (66.1%) likes to take environmental consideration intensely while buying green products. Majority of them also prefer to find out whether the product's contents are eco-friendly or not. Only 54.1% of the customers agreed that they buy these products for healthy living.

Table 5.13: Green product purchase intention of respondents and ANOVA test across several demographic factors

	Average (SD)	Age	Occupation	Gender	Income	Education
		F value (Sig.)	F value (Sig.)	F value (Sig.)	F value (Sig.)	F value (Sig.)
1. I take environment consideration into account while buying green product	3.77 (1.07)	7.84 (.00)	4.21 (.00)	2.90 (.15)	1.50 (.18)	0.80 (.49)
2. While buying I read products label to see if contents are eco friendly	3.77 (2.41)	2.25 (.06)	3.34 (.01)	3.20 (.07)	1.00 (0.42)	0.41 (.75)
3. For healthy living I will buy green products if it is overpriced	3.46 (1.12)	3.03 (.02)	5.26 (.00)	1.92 (.17)	0.75 (0.61)	1.43 (.23)

Table 5.13 represents the results of ANOVA F-tests score with corresponding p-values which has been performed to know whether there is any significant difference in consumer's purchase intension in terms of age, income, education and occupation. Observing the test score it is found that, the purchase intension significantly varies by age and occupation of the respondent. On the other hand Consumer's level of education and income has no significant impact on purchase intension.

Conclusion

The study has been approached with an intension to explore the consumer awareness and purchase attitude towards green products in Bangladesh It can be inferred from the above study that consumer level of awareness about the differences between green products and conventional products found to be very favorable but consumers' have superficial knowledge about various features of green products. Advertisement and word of mouth communication observed to be the leading sources from where they get to know about it. From the analysis, it is found that consumer's knowledge is not so manifest about the various benefits of green products. Significant perceptual differences have been found among the consumers with different age and level of education in this regard. The research also explores that consumers' have assorted opinion concerning the price of the green products. But it was agreed by most of the consumers' that green products are not convenient to buy. So marketer should ensure green products obtainability to consumers. Consumers' are very negative regarding the promotional strategies taken by the marketer to communicate various benefits of green product. As a consequence, they are dubious about green claims. So products positioning messages used by the marketer need to be more explicit and green claims should be more convincing. Marketer should adequately communicate the benefits of green products that provide assurance of the maximal satisfaction to consumer. It has been also found by the study that environmental safety and eco-friendly product contents are the important factors that drive

consumer to buy green product. The overall analysis suggests that marketer should take initiatives in educating consumers' about green products and promote in that way so that consumers become more aware about several features, benefit and price of the products and get interested to buy the products.

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