

# Green Product: A Study of Consumer Awareness in Kurukshetra and Panipat Districts

Sunil Kumari<sup>1</sup> and Ganesh Das<sup>2</sup>

<sup>1,2</sup>Dept. of Commerce, Kurukshetra University, Kurukshetra, Haryana  
E-mail: <sup>1</sup>raosunil77@gmail.com, <sup>2</sup>ganeshdas.sharma@gmail.com

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**Abstract**—Over the past few years, the demand for green products in India has been developed significantly due to environment friendly customers. Consumers today are increasingly “thinking green” and are willing to pay more for eco- friendly products. The current study introduces the concept of green marketing, green concept and looks into the various ways in which the different consumer attributes are related to the concept of green marketing. Hence, the present study is conducted to explore the opinion and awareness impact of consumers’ towards the marketing of green products in Kurukshetra and Panipat District of Haryana. In addition to this, I discusses the consumer awareness towards with green product with respects to age, gender and residential status of respondents. Random sampling method was used to select 200 respondents living in the district and who make purchases for the products. The primary data was collected from the respondents with the help of questionnaires. Data are analyzed with the help of Mean, S.D., T-test, F-test and ANOVA. The study reveals that most of the consumer’s have knowledge about green product. In case of sources of awareness about green products, consumers are equally aware.

**Keywords:** Green Marketing, Green Product, Consumer Buying Behaviour

## 1. INTRODUCTION: (GREEN MARKETING)

Green Marketing refers to the process of selling products and/or services based on their environmental benefits. Such a product or service may be environmentally friendly in it or produced and/or packaged in an environmentally friendly way. The obvious assumption of green marketing is that ordinal consumers will view a product or services “greenness” as a benefit and base their buying decision accordingly. According to the American Marketing Association, green marketing is the marketing of products that are assumed to be environmentally safe. Yet defining green marketing is not a simple task where several meanings intersect and contradict each other; an example of this will be the extant of varying social, environmental and retail definitions attached to this term. Other similar terms used are Environmental Marketing and Ecological Marketing.

## 2. GREEN MARKETING: CONSUMER ATTITUDE–BEHAVIOR CONNECTION

### 1. Consumer perspective towards the Environment

Environmental attitude is identified as the perception of an individual towards the protection of the environment.

Conflicting results have been published with regards to the relationship that currently exists between attitude towards the environment and the resultant behaviour (Kotchen and Reiling, 2000) [1]. Green marketing depends on the consumer’s attitude towards the environment. If there is no strong demand for such a shift in consumer attitude, businesses will not put in the extra effort to move towards introducing green products and services.

## 2. Perceived Seriousness of Environmental Problems

In recent times a lot of attention has been paid to the effect that mass media has on the audience’s perceived seriousness of environmental hazards. An example of one such study is the research done by Moser and Uzzell (2003) [2]. In that study, the authors stated that the audiences are influenced by the way the mass media interprets the pollution levels. A study on perception of environmental risks revealed that women were more perceptible to the risks involved in global warming and other related unsound wastes when compared to the males.

## 3. Consumer Behavior towards Eco Labeling

One important tool of green marketing involves the promotion of eco labels on eco- friendly products (D Souza et al., 2006) [3]. Eco labeling is an effective measure which helps in bridging the gap between sellers and buyers by providing information on two aspects: Information functions presenting intangible quality measures including product quality and Value function which presents the recyclability and CSR related brand prestige (Sammer and Wustenhagen, 2006) [4].

## 4. Consumer Behavior towards Environmental Advertisements

Along with the process of labeling their products, arriving at measures which promote manufacturing of eco friendly products and reduction of environmental pollution there is a growing trend among corporations across the world to present environmental advertisements.

## 5. Green Product

In general, green product is known as an ecological product or environmental friendly product. Green product as the product

that will not pollute the earth or deplete natural resources, and can be recycled. It is a product that has more environmentally sound content or packaging in reducing the environmental impact. In other words, green product refers to product that incorporates the strategies in recycling, reduced packaging or using less toxic materials to reduce the impact on the natural environment. Consumers who are aware of and interested in environmental issues are called green consumers.

### 3. REVIEW OF LITERATURE:

**Driessen (2005)** [5] stated that the companies have started to incorporate green issues in product innovation strategies. A three-stage approach is followed. In the first stage, the topic is explored and a preliminary research framework is identified. The second stage involves theory-building, using case studies and literature interactively. This stage leads to the identification of elements of product innovation strategy that are easily overlooked from a traditional, non-green, perspective. The third stage applies a rigorous case study approach to test the developed theoretical model.

**Beckford et al. (2010)** [6] found that green purchase intention is a significant predictor of green purchase behavior, that means purchase intention is positively affecting the probability of a customer decision that he will buy green products.

**Andrés et al. (2009)** (7) emphasized that many customers are more worried about environmental problems, and those organizations that do not take actions to confront the environmental issue by offering green products, will possibly lose credibility in the eyes of their customers. As social concerns and environmental regulations are most influential pressure factors on management commitment. Thus, managers tend to have a deeper involvement in environmental protection that receive more pressure and experience more strict regulations from customers about environmental expectations.

**Kasap et al. (2011)** (8) examined that interacts with the environment throughout the entire life cycle- from the design phase to disposal phase- and every product makes different environmental impacts in different life cycle stages. Thus, reducing the environmental impact of a product by just focusing on the waste that is produced after the production process is not possible. For this study, a holistic and proactive approach adoption is required which considers the entire life of a product from raw materials that will be used in production to wastes.

**Luca et al. (2011)** [9] investigated the relationship between attitude and consumer behavior toward green products, in order to understand the reasons of the reoccurring low attitude-behavior consistency in green consumption. The study is rooted in the framework of constructed preferences, and assumes that task and context variables can influence green decision making and also the relationship between green attitude and buying behavior. In particular, the role of time pressure and visual prime, not yet investigated in this

perspective, are examined in order to understand if these factors can affect attitudes and purchasing decisions toward green products and the relationship between them analyzed specifically three disciplines for studying about green products, which were designed for environment, design for supportability, and design for supply chain, to assess particularly their interactions and collaborations in the new product development, and also to explain briefly how their activities can green new products and supply chains.

### 4. OBJECTIVES OF THE STUDY

1. To study the perception of consumers towards green products.
2. To study the consumers purchasing behaviour towards green products on the basis of age and residential status.
3. To study the awareness level of consumers about Green product.

### 5. RESEARCH HYPOTHESIS

H<sub>1</sub> there is no significant difference for using green product on the basis of age.

H<sub>2</sub> there is no significant difference for using green product on the basis of residential status.

### 6. METHODOLOGY

**Data source and sample size** - The research design used in the present study is Exploratory cum Descriptive in nature. For the present study, a convenient sampling technique has been adopted. The 200 respondents of Panipat and Kurukshetra districts of Haryana have been taken into consideration. However efforts have been made to include different respondents on the basis of age, gender, education, marital status, occupation and residential status to give representation to different section of society. The present study is based on primary as well as secondary data.

#### Sample Profile

Table 1

Age	Respondents	Percentage
Below 25	159	79.5
Above 25	41	20.5
Total	200	100
Education		
Upto 10+2	17	8.5
Graduation	56	28.0
Post-Graduation	88	44.0
Professional	39	19.5
Total	200	100
Gender		
Male	87	43.5
Female	113	56.5
Total	200	100
Residential Status	Respondents	Percentage

Rural	51	25.5
Urban	149	74.5
Total	200	100

## 7. RESULTS AND DISCUSSION

The present study has been designed to investigate the consumers purchasing behaviour towards green products. In order to fulfill the objective of the study, the obtained data has been analyzed with the help of statistical tools, like ANOVA, arithmetic mean, standard deviation, etc.

### Consumers Opinion about Green Product

Table 2

Statement	Yes	No	% (yes)	% (no)
Knowledge about Green Product	199	1	99.5%	0.5%
Desire for Green Product	199	1	99.5%	0.5%
Pay Extra for Green Product	131	69	65.5%	35.5%
Recommend to Green Product	194	6	97%	23%

From table, it can be seen that 99.5% respondents have idea about this term. And 99.5% respondents have desire for green products. But only 65.5% consumers are paying extra for green product. It is clear that 97% respondents are ready to recommend green products to their friends and family indicating that most of the people are satisfied from the performance of green products.

### Consumers awareness about Green Product

Table 3

Sr. No.	Variables	Mean	S.D.
1	TV Programs	4.16	.91
2	Newspaper	3.58	1.04
3	Magazine	4.18	.85
4	Friends/Reference Group	3.61	.99
5	Internet	4.51	.79

Table shows that consumers are aware from all the sources of green products as their mean score is more than average i.e. 3. These sources have been put in two groups. The first group comprises of those sources whose mean score varies "between" 3 to 4. First group of sources includes 'Internet', 'Magazine' and 'TV programmers' etc. Consumers are moderately aware because of all these sources. Second group of sources comprises 'Newspaper' and 'Friends/Reference Group', indicating thereby that consumers have highly aware because of these.

### Descriptive statistics on features of green product (on the basis of age)

Table 4

Sr. No.	Variables	Age			
		Below 25		Above 25	
		Mean	S.D.	Mean	S.D.
1	The product is pollution free	4.33	.61	4.24	.54
2	Use of recyclable package	3.94	.78	4.00	.77
3	Re-useable	3.88	.90	4.12	.71
4	Eco-Friendly	4.33	.68	4.29	.60

### Summary of ANOVA (on the basis of age)

Table 5

Variables	Source of Vari.	Sum of square	Df	Mean square	F	Sig.
The product is pollution free	Between Groups	0.26	1	0.26	0.73	0.40
	Within Groups	70.90	198	0.36		
	Total	71.16	199			
Use of recyclable package	Between Groups	0.10	1	0.10	0.17	0.68
	Within Groups	120.49	198	0.61		
	Total	120.59	199			
Re-useable	Between Groups	1.90	1	1.90	2.52	0.11
	Within Groups	149.12	198	0.75		
	Total	151.02	199			
Eco-Friendly	Between Groups	0.04	1	0.04	0.09	0.77
	Within Groups	87.48	198	0.44		
	Total	87.52	199			

The summary of ANOVA (Table 2.5) indicates that F-value for 'Use of recyclable package' is significant whereas F-value for 'Product is pollution free', 'Re-useable' and 'Eco-friendly' are not significant.

### Descriptive statistics on features of green product (on the basis of residential status)

Table 6

Sr. No.	Variables	Residential Status			
		Rural		Urban	
		Mean	S.D.	Mean	S.D.
1	The product is pollution free	4.45	.54	4.27	.61
2	Use of recyclable package	3.75	.89	4.03	.73

3	Re-useable	3.84	.95	3.96	.85
4	Eco-Friendly	4.22	.86	4.36	.58

### Summary of ANOVA (on the basis of residential status)

Table 7

Factor	Source of Vari.	Sum of square	df	Mean square	F	Sig.
The product is pollution free	Between Groups	1.27	1	1.27	3.59	0.06
	Within Groups	69.89	198	0.35		
	Total	71.16	199			
Use of recyclable package	Between Groups	3.02	1	3.02	5.08	0.03
	Within Groups	117.58	198	0.59		
	Total	120.60	199			
Re-useable	Between Groups	0.52	1	0.52	.68	0.41
	Within Groups	150.50	198	0.76		
	Total	151.02	199			
Eco-Friendly	Between Groups	0.75	1	0.75	1.70	0.19
	Within Groups	86.78	198	.44		
	Total	87.53	199			

The summary of ANOVA (Table 2.5) indicates that F-value for 'Use of recyclable package' is significant whereas F-value for 'Product is pollution free', 'Re-useable' and 'Eco-friendly' are not significant.

## 8. CONCLUSION

Consumers have different buying behaviour and this behaviour is constantly changing as a result of the availability of best alternatives to choose from. One thing that is being reiterated is that the current consumption levels are too high and are unsustainable. Therefore there is a need for green marketing and a need for a shift in the consumer's behavior towards green product. The research findings reveal that most of consumers are knowledge about green product. And most of consumers are agree to pay extra for green products. In case of buying green products there exist difference between the consumer behaviour having different age & sex. In case of sources of awareness about green products, consumers are equally aware.

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