

## FACTORS DETERMINING CONSUMER PURCHASE INTENTION FOR GREEN & SUSTAINABLE PRODUCTS – AN EMPIRICAL STUDY

---

Manita Matharu\*  
Dr. Ruchi Jain\*\*  
Dr. Hemantkumar P. Bulsara\*\*\*

### ABSTRACT

*'Going green'- phrase commonly used to face the challenges of the environment prevalent in today's world. This phrase doesn't only mean to help the environment but also means to keep yourself happy and healthy. This attempts to examine and explain empirically the factors determining consumer behaviour towards green products. This paper first identifies the awareness level of the consumers towards green products. And analyse the factors that influence consumer buying behaviour towards the green products. Collection of data is done through a questionnaire filled from 100 individuals who are consumers' selected through convenience sampling from Delhi. Findings of the study indicates consumers environmental awareness, social influence, psychological factors and product attitude as significant determinants for consumer behaviour towards green products. Consumers are motivated to buy green products not only because of their concern for the environment but also because they believe these can be healthier option for them. Thus, organizations need to focus more on improving the quality of green products and need to provide high quality green products at genuine prices.*

---

**Keywords:** Green Products, Consumer Intention, Attitude, Green Marketing.

---

### Introduction

The alarming issue in today's world is the concern towards the environment problems like resource depletion and global warming. The government has also introduced various environmental policies to safeguard the environment, some policies are to be followed by the corporates also. The United Nations Environment Program has estimated that the market for green products double annually. Because of which, companies have now started making green products which can satisfy needs of the consumers and at the same time protect the environment. They have started using methods and techniques to encourage consumers to switch to green products over regular products.

Biswas & Roy (2014) said that consumers are concerned with the product they consume and hence develop a positive attitude towards environment and changing their taste and preferences. Howard & Sheth (1969), theory of buying behaviour explains how consumers make decisions depending on their behaviour which is developed by the attitude towards the brand. A study has shown that an estimate of at least 30% increase in the greenhouse gas emission will be there by 2050. This led consumers and producers to consume and produce green products. Some studies have shown that consumers look for the major factors like cost, durability, comfort, quality, healthiness etc. The consumers are even ready to pay premium price for the green products.

### Green Marketing & Green Products

According to American Marketing Association, green marketing is marketing of products that are environmentally safe. Green marketing is not only about making eco-friendly goods, but companies also

---

\* Ph.D. Scholar and Asst. Professor, Amity University, Sector 125, Noida, UP. India.

\*\* Associate Professor, Amity University, Sector 125, Noida, UP. India.

\*\*\* Assistant Professor, Dept. Head - S.V.N.I.T, (NIT Surat), Surat, Gujarat - India.

have to think about the methods and process they use to make the goods as well as their packaging and distribution. So, it refers to the process of selling products and services on the benefit of the environment, wherein either the product or production/packaging can be eco-friendly. Also termed as environmental marketing and ecological marketing.

As per Peattie (2001), there are 3 phases of green marketing evolution i.e.

- **Ecological Green Marketing:** Started in 1980s, to help environmental problems and provide remedies for the problems.
- **Environmental Green Marketing:** 1990s, focus now on new and innovative technology to take care of pollution and waste disposal.
- **Sustainable Green Marketing:** Started in 2000, more advanced technology, new regulations and policies form the government, inspection from environmental organizations and media, good quality green products and many more things came during this period. More focus on preservation of environment through sustainable development.

Green products are now becoming popular and are used by the consumers as they are aware about the toxins and hazards present in food and the environment. The important thing is to educate ourselves about environment impact and how it is affecting our life. So, going green means living life in a way that is friendly to environment and sustainable for Earth. In practice, going green means adapting five basic principles in daily life:

- Reduce pollution
- Reduce waste
- Conserve energy
- Conserve resources
- Protect ecological resources

#### Literature Review

**Table 1: Provides a Summarized Review of Literature in the Context of Present Research**

S. No.	Author name	Title	Objectives	Findings
1.	Reshmi R. & Dr. B. Johnson (2014)	A study on the buying behaviour of green products	Buying behaviour among different income groups of green products. Comparison of purchase decision between government and private sector employees.	The major factor influencing their purchase decision is cost then durability, comfort, quality, attractiveness, service healthiness, advertisement. The least considered factor are concern for environment and promoted by government.
2.	Collins Marfo Agyeman (2014)	Consumers buying behaviour towards green products: an exploratory study	Relationship between variables that affect consumer buying behaviour towards green products. Factors that affect the buying behaviour and Identify price level consumers are willing to pay for green products.	Positive relationship between factors that affect consumer buying behaviour for green products. Price, environmental concern and quality are key factors influencing their purchase decision for green products.
3.	Yi Chang Yang (2017)	Consumer behaviour towards green products	To explore how brand knowledge influences consumers' perceptions and brand evaluation, and to identify the relative importance of different product features used by consumers when evaluating and choosing cosmetic brands.	This study indicated that brand knowledge in terms of brand image and brand awareness had a positive influence on consumers' perceived quality. This study stated that the perceived quality of green products had a positive influence on consumers' purchasing intention.

4.	Dr. sanjay Keshaorao Katait (2014)	Green marketing in India and its impact on consumer behaviour	Consumer attitude towards green marketing. Relationship between consumer purchase and green marketing. Identify consumer behaviour towards education level, price, quality, advertisement and green labelling.	Green marketing plays an important role in encouraging consumers to buy green products. Advertisement is the main awareness generating media to buy green products. Green products manufacture require materials which are costly and even R&D water treatment is costly.
5.	Olinjo Samuel Imbambi (2017)	Consumer buying behaviour & adoption of green products in large supermarkets in Nairobi city Kenya	Factors influencing behaviour adoption. Types of buyer decision behaviour that influence consumers.	Social cultural and personal factors influence was less. Types of consumer behaviour influence the selection of green products.
6.	Sasikala.N&Dr. R. Parameswaran (2018)	Green products purchase behaviour – an impact study	Consumer awareness and buying behaviour of consumers. Analysis consumer purchase decision of green product.	Doesn't consider paying premium price for green products. Some consumer are ready to start purchasing green products so no harm is done to environment.
7.	Chih-Cheng Chen, Chien-Wen Chen & Yi-Chun Tung (2018)	Exploring the consumer behaviour of intention to purchase green products in belt and road countries: an empirical analysis	Consumer behaviour of intention to buy green products based on a decision making model.	Both cognitive and affective attributes influence consumer intention to buy green products.
8.	Jacob Cherian & Jolly Jacob (2012)	Green Marketing: A study of consumers attitude towards environment friendly products	Green marketing Relationship between various consumer attitude and green marketing.	Lack of green knowledge and low awareness some organizations are still not ready to manufacture green products.
9.	Sheik M. Isaacs (2015)	Consumer perception of eco-friendly products	Relationship between level of e-waste and consumer preference for green products.	Quality and price are important to attain customer loyalty.
10	Tanushree Bhowmick (2014)	Green marketing – An analysis of consumer behaviour towards green products	Factors influence consumer choice towards green products. Buying intention of consumer towards price and quality.	Not loyal towards green products due to expensive nature and not much difference between green and traditional products.

From the study of literature review, it's evident that most of the studies entailed about the four green marketing mix variables on how it influence the consumer buying behaviour. One study was done by Muntaha & Marike (2014) in South Africa focusing on the green product purchase behaviour in relation to the attitude. Another study was conducted by Olinjo Samuel Imbambi (2017) on the consumer buying behaviour and adoption of green products in large supermarkets in Nairobi city Kenya, studied about the factors influencing behaviour adoption and the types of buyer decision behaviour that influence consumers. Another study done by Chih-Cheng Chen, Chien-Wen Chen & Yi-Chun Tung (2018) on exploring the consumer behaviour of intention to purchase green products in belt and road countries, focused on the consumer behaviour of intention to buy green products based on a decision making model. This therefore represent research gap and we can conclude that there was no specific research conducted specifically in the Delhi NCR region for consumer buying behaviour towards green products.

#### Objectives of the Study

- To identify the awareness level of the consumers towards green products.
- To analyse the factors that influence consumer buying behaviour towards the green products.

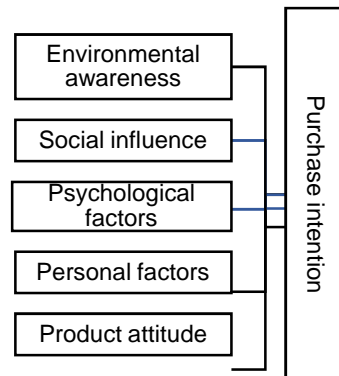
## Research Methodology

### Sources of Data

The data was collected from both primary and secondary sources. For primary data, I have made a google doc and distributed in social media and among my friends. Secondary data was collected from websites, journals, textbooks etc.

**Tool for Analysis:** Used SPSS for analysis.

### Proposed Conceptual Model & Hypothesis (Fig. 1)



### Factors Influencing Green Consumer Buying Behaviour

- **Environmental Awareness**

The awareness of the consumers towards the environment issues can determine their behaviour towards the eco-friendly goods. Roberts (1996) concluded that there is a positive relationship between awareness and attitude on the purchasing behaviour of consumers. Petty & Cacioppo (1990) stated that the individual involvement is very important and the motivation on information processing depends on the individual's degree of involvement. Based on all the findings it can be concluded that consumers who have knowledge and are aware about environment issues are more likely to buy green products.

- **Social Influence**

It includes reference groups, family, role and family and status. It is the situations that person shares same thoughts, beliefs and values as the person with whom he/she is communicating with. According to Baker et al. (2008), the study found that social influence has a strong connection with eco-friendly products because it significantly drives people to purchase green products. Chen-Yu & Seock (2002) stated that to purchase any clothing teenagers look for confirmation from their peers before buying it. The peers group also plays an important part in influencing green purchasing behaviour.

- **Psychological Factors**

It comprises of motivation, beliefs, attitudes and learning. Brown (2006) stated that all consumers have different perception towards the products and services and which they develop from the nearby surrounding. The result from a study conducted by Mostafa (2007) shows that consumers' attitude towards green purchase can directly affect their actual green purchase behaviour. According to Gupta and Ogden (2009), sense of environmental deterioration makes consumers willing to pay more for green products in order to protect their environment and this forms their attitude and creates green purchasing behaviour among them. Squirea, Juris and Cornwell (2001) found that consumers who have positive attitude towards environment are more likely to purchase organic foods.

- **Personal Factors**

It includes economic situation, personality, lifestyle and the occupation. Lifestyle, in most areas, has been defined simply as "how one lives." It includes the products one buys, how one uses them, how one thinks about them and how one feels about them. Lifestyles are also an expression of an individual's self-concept. It is the total image one has of him or herself, which is a result of how one was socialized in

his or her culture. Essentially, it is the culmination of a person's past decisions and future plans (Hawkins, et al., 2004). Individuals and families exhibit unique lifestyles. Frequently these lifestyles are labeled as "career oriented individuals" or "family oriented." These lifestyle orientations are generally determined by conscious and unconscious decisions. Eventually, lifestyles produce needs and desires that ultimately affect the decision-making of each consumer (Hawkins et al., 2004). Feelings and emotions are very important in consumer purchase decisions and have effect on the analysis of product attributes (Hawkins et al., 2004).

- **Product Attitude**

Product attitude can be described as "consumer evaluations of green products." Tan indicated that it is contradictory to predict environmental behaviours based on environmental attitudes. Bamber indicated that the difference between attitude and behaviour relates to considering products and environmental safety when purchasing products. Thus, purchase intention can be predicted more accurately according to product recycling or reuse than according to environmental attitude. Sun and Wilson suggested dividing attitude into general and specific attitudes; they also suggest that consumers are more affected by specific attitudes than by general attitudes.

- **Purchase Intention**

Purchase intention is the possibility that a person performs a specific behaviour. Research on green products has shown that numerous variables can be applied to explain behaviours. Mostafa indicated that environmental concerns and knowledge affected consumer intention to purchase green products. Kaiser and Gutscher reported that more than 50% of the explanation capacity for the intention to purchase green products can be used to explain consumer purchase behaviours toward green products. These data can be used to explain consumer purchase behaviours toward green products in the Chinese and American markets, which are consistent with the results of a previous study. In this study, purchase intention is defined as the willingness of consumers to purchase green products.

#### Hypothesis

- H<sub>1</sub>:** There is positive relationship between environmental awareness and purchase intention of consumer towards green products.
- H<sub>2</sub>:** There is a positive impact of social influence on the purchase decision/intention of consumer towards green products.
- H<sub>3</sub>:** There is a positive impact of lifestyle on the purchase intention towards green products.
- H<sub>4</sub>:** There is a positive effect of personal factors towards purchase intention of consumers towards green products.
- H<sub>5</sub>:** There is a positive influence of the product attitude of consumers towards the purchase intention of green products.

#### Reliability Test

Reliability test of Cronbach's Alpha of all the 17 questions mentioned above that were asked with the respondents:

**Table 2: Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.844	.847	17

From the above table we can conclude that the test conducted are reliable, as the result of Cronbach's Alpha is .844 which is more than 0.7.

**Table 3: Profile of the Respondents**

		No. of Respondents
<b>Gender</b>	Female	55
	Male	45
<b>Age</b>	Less than 30	31
	31-40	14
	41-50	28
	51-60	19
	Above 60	8

<b>Education</b>	High School	3
	Graduate	50
	Post Graduate	41
	PhD	6
<b>Monthly Income</b>	Below 30000	17
	31000-40000	6
	41000-50000	4
	Above 50000	12
<b>Awareness about green products</b>	Yes	90
	No	10

**Table 4: Hypothesis Testing**

S. No.	Hypothesis	Accepted/ Rejected	Findings
1.	There is positive relationship between environmental awareness and purchase intention of consumer towards green products.	Accepted	F (3, 96) = 10.1, p < 0.005, R <sup>2</sup> = 0.25, taking the three factors in group they predict that consumers advise others to buy green products.
2.	There is a positive impact of social influence on the purchase decision/intention of consumer towards green products.	Accepted	F (3, 96) = 3.62, p < 0.005, R <sup>2</sup> = 0.102, taking the three factors in group they predict that consumers advise others to buy green products.
3.	There is a positive impact of psychological factors such as lifestyle on the purchase intention towards green products.	Accepted	F (3, 96) = 18.1, p < 0.005, R <sup>2</sup> = 0.36, taking the three factors in group they predict that consumers advise others to buy green products.
4.	There is a positive effect of personal factors towards purchase intention of consumers towards green products.	Rejected	F (3, 96) = 1.40, p < 0.005, R <sup>2</sup> = 0.042, taking the three factors in group they predict that consumers advise others to buy green products.
5.	There is a positive influence of the product attitude of consumers towards the purchase intention of green products.	Accepted	F (4, 95) = 16, p < 0.005, R <sup>2</sup> = 0.40, taking the four factors in group they predict that consumers advise others to buy green products.

The collected data was analysed using regression and chi-square test. The findings of the report are as follows:

- Out of 100 respondents, 90 of them are aware about the green products and the main source of awareness is through family, friends and television. And the least awareness generating source is cinema and radio.
- Most of the people strongly agree about the environmental issues and hence motivates them to buy green products because of environmental concerns.
- According to the survey, friends & family has more impact on green buying as compared to the social class and status of the respondents.
- People have a positive attitude towards the environment and the green products over their substitutes.
- Additionally, change in Psychological factors such as lifestyle motivates to buy green products.
- The recyclable nature of the product and the green advertisement also motivates them to buy the green products over non-green products.
- 81 out of 100 have used green product, and the factor that influence them to buy it is the environmental concern and the quality of green product.
- 19 out of 100 have not used any green product, and the reason is its expensive nature, not easily available and limited varieties.
- In total, 86 people will buy again or would like to experience green product on the near future.

### Conclusion

Green marketing and green products are quite new and innovative concepts and steps have to be taken to enhance the awareness and buying behaviour of green products among consumers in order to live a pollution free environment in near future. The study was conducted to analyse the relationship between variables that affect consumer buying for green products. From the research study we can conclude that most of the people are aware about green products through their friends and family. And also a positive attitude towards green products can be analysed. Green product awareness is very important to guide consumers to buy green products over non-green products.

Though the manufacture of green products require use of additional technology. As per the survey, most people are aware about the environmental issues of the products they purchase, so in future they can be a shift in consumer buying of green products from non-green products. In future only those companies and Government will reap the greatest reward that innovates with new products, materials, technologies with reasonable price which are eco-centric that brings combined effort among consumers to seek the value of collective gain over self-interest.

#### Limitations & Future Scope of the Study

Due to limited time and resources, the sample that could be collected is only limited to 100 respondents. The study is restricted to Delhi NCR and hence the result may not be applicable to other places in India. The result obtained is based on respondent's opinion hence there can be a chance of consumer bias. Further in-depth study should be conducted to find out what influence consumer attitude so as to prove worth to manufacturers, businesses and marketers.

#### References

- Ayadi, N.; Lapeyre, A. Consumer purchase intentions for green products: Mediating role of WTP and moderating effects of framing. *J. Mark. Commun.* **2016**, *22*, 367–384. Bloom. N. P. & Gundlach. T. G. (2008). *Handbook of marketing and society*, Sag publications.
- Chih-Cheng Chen, Chien-Wen Chen & Yi-Chun Tung (2018) Exploring the consumer behaviour of intention to purchase green products in belt and road countries: an empirical analysis. *MDPI Journal*.
- Collins Marfo Agyeman. (2014) Consumers buying behaviour towards green products: an exploratory study. *International Journal of Management Research and Business Strategy*, *3*(1), 188-197.
- D'Souza, C.; Taghian, M., & Lamb, P. (2006). "An empirical study on the influence of environmental labels on consumers". *Corporate Communications: An International Journal*.
- Dr. Sanjay Keshao Rao Katakait. (2014) Green marketing in India and its impact on consumer behaviour. *International Journal of Research in commerce and management*, *5*(12), 71-74.
- Dr. T. Vasanthi & N. Kavitha (2016) Consumer Awareness and purchasing behaviour of green products – an analytical study. *Intercontinental journal of marketing research review*, *4*(02), 5-12.
- Durif, Bovin & Julien. 2010 "In search of a green product definition". *Innovative Marketing*, volume 6, Issue 1.
- Firas Jamil Al-Otoun & Rawan S. Nimri. (2015) Antecedents of Environmental Buying Behaviour: Case of the Jordanian market. *Canadian Center of Science & Education*, *10*(09), 240-250.
- Gan C, Wee H Y, Ozanne L and Kao T H (2008), "Consumers' Purchasing Behavior towards Green Products in New Zealand", *Innovative Marketing*, Vol. 4, No. 1, pp. 93-102.
- Golkonda, S. B. (2013). Bioproducts: Consumers' perception and buying behavior. *Hanas, J.* (2007). *A world gone green. Advertising Age*, *78*(24), S1-2.
- Jacob Cherian & Jolly Jacob. (2012) Green Marketing: A study of consumers attitude towards environment friendly products. *Canadian Center of Science and Education*, *8*(12), 117-126.
- Mangali Morel & Francis Kwakye. 2012 "Green Marketing: Consumers Attitude Towards Eco Friendly Products and Purchase Intention in the Fast Moving Consumer Goods (FMCG) sector", *UMEA School of Business*.
- Olinjo Samuel Imbambi (2017) Consumer buying behaviour and adoption of green products in large supermarkets in Nairobi city Kenya.
- Reshmi R. & Dr. B. Johnson. (2014) A study on the buying behaviour of green products. *International journal of research in commerce & management*, *5*(12), 39-45.
- Sasikala. N. & Dr. R. Parameswaran. (2018) Green products purchase behaviour – an impact study. *Paripex – Indian Journal of Research*, *7*(7), 43-47.
- Sheik M. Isaacs. (2015) Consumer perception of eco-friendly products. *Walden University*.
- Ursil Majid Makhdoomi & Ulfat Nazir (2016) Consumer Purchase Behaviour towards green products.
- Yi Chang Yang (2017) Consumer Behaviour towards green products. *Journal of Economics, Business and Management*, *5*(04), 160-167.

