



# An analytical study of consumer behaviour towards eco friendly products with special reference to Nagpur city, India

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## Abstract

*Increasing awareness on the various environmental problems has led a shift in the way consumers go about their life. There has been a change in consumer attitudes towards a green lifestyle. People are actively trying to reduce their impact on the environment. However, this is not widespread and is still evolving. Organizations and business however have seen this change in consumer attitudes and are trying to gain an edge in the competitive market by exploiting the potential in the green market industry. The current study introduces the concept of green marketing and looks into the various environmental laws in India and environmental problems related to it. The present study is a descriptive research and it is based on the survey method. This study based on "Consumer behaviour towards eco friendly products". This study is based on primary and secondary data. Primary data have been collected from the respondents by using a well structured, non-disguised questionnaire. Secondary data for the study were collected from books, journals, research articles, magazines, reports, newspapers and websites. For the study sample size has been taken around 60 Respondents. Samples are drawn on convenience sampling technique/ method. The data for the study are drawn sample respondents through questionnaires and interview. Require information were also collected from Respondents. Data was analyzed through Table, Graph, and pie-chart. While analyzing data simple percentages was used. The present study is Descriptive in nature.*

**Keywords:** Consumer Behaviour, Eco Products, Green Marketing.

## Introduction

The continuous growth of the global economy has caused significant environmental problem for the planet and eco system. The natural forest has been lost or damaged. Many animals are extinct or in damage and the natural resources are over used. In order to achieve a sustainable and harmonious relationship between the economy and environment, it is the responsibilities of both consumer and businesses to consume natural resources efficiently, reduce pollution and protect the global environment and ecosystem for future generation.

Individual's responsibilities have major impact on both green market and environment protection. "Consumer behaviour and value can influence consumer's environment awareness, purchasing behaviour and recycling decisions. Thus it should be considered as a very good factor to increase the market share of green products. Environmental values play a primary role when consumer is purchasing green products. Values affect people beliefs which have an influence on personal norms that lead to consumer's behaviour to environmental protection.

Consumer behaviour is the study of individuals, groups or organisations and processes they use to select, secure and dispose of products, services, experience or ideas to satisfy needs and the impacts that there processes have on the consumer and society.

Choosing the eco friendly research project requires an understanding of what it means. It is a catch phrase that encompasses anything that is protective of nature or green, including goods that are made without chemicals and synthetics and services that have an very little negative impact on the environment, they are known as eco friendly products. Generally prices of these products are higher than non eco friendly products that are conventional or traditional products. This may be because of cost raise on material, production process, promotion and distribution cost etc.

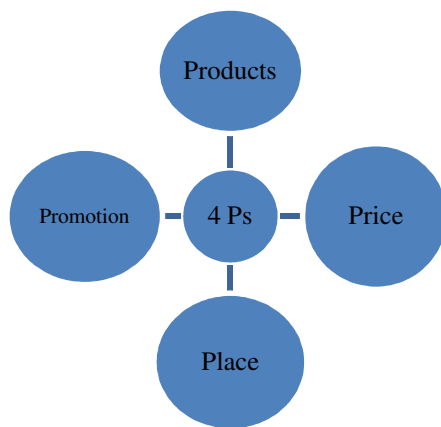
Green has become a mainstream issue driving millions of consumers to find out how they can live a more eco-friendly. As environmental concerns have increased, majority of customers prefer to buy greener products.

Environmental and economic concerns are changing the marketplace, customer's needs; Hence Companies are integrating green strategies into their product development, operational processes and marketing activities to find a new opportunity for competitive advantage.

This study focuses on the changing consumer behavior towards the usage of green products. A product may be considered as Eco friendly or Green if it is, i. Conserves water and energy. ii. Prevents contribution to air, water and land pollution. iii. Protects indoor air quality. iv. Uses renewable Sourced material.

v. Produces little environmental impact. vi. Manufactured in an environmental conscious way. vii. Using one's own bag rather than a plastic carrier provided by a shop.

Green marketing refers to the process of selling and purchasing product and services based on their environmental benefits. Such a product or service may be produced and/ or packaged in an environment friendly way. One of the major assumptions of green marketing is that the potential consumers significantly decide a product or service on the basis of its "greenness". Also the consumers are willing to pay more for green product than they would pay for a less-green comparable alternative product. According to the American marketing association, green marketing is the marketing of product that are presumed to be environmentally safe and long lasting. Green marketing has a large scope of activities including modification in product, production process, packaging changes, as well as change in advertising pattern. Growing competition in the marketing is alarming for new and established companies as well. Companies that are in the process of innovation for their product and services with environment input in mind give themselves access to new market, increase their profit sustainability, and enjoy a competitive advantage, brand value goodwill over the companies which are not concerned for the environment. There are basically five reasons for which a marketer should go for the adoption of green marketing. They are, i. Competitive Advantage, ii. Corporate Social Responsibility, iii. Government Pressure, iv. Competitive Pressure, v. Cost or Profit Issues The green marketing mix:



**Figure-1:** A model green marketing mix contains four "P's".

**Review of literature:** Consumer Behaviour: An Eco Friendly Approach'. In this study Researcher has taken Green purchase behaviour refers to consumption of products that are beneficial to the environment, recyclable or conservable and sensitive or responsive to ecological concerns. Different people have different views<sup>1</sup>.

Impact of Eco Friendly Products on Consumer Behaviour', Researcher concluded that consumer purchasing behaviour is related to their values and attitudes, and they need specific

information when they purchasing green products. He also studied on topics like green marketing, consumer behaviour, eco friendly products and its impact on environment<sup>2</sup>.

Green Marketing and Indian Consumer'. Here Researcher viewed that consumer is the king of the market and marketers must satisfy consumer needs, wants, preferences and requirements. In studies they have found that factors which influence the consumer behaviour regarding eco friendly products. Previous research also found that consumers are willing to pay higher price for eco friendly products rather than main stream products. This is because they may be concerned with environment<sup>3</sup>.

In this title 'an environmentally car and its impact on environment' suggested that consumer are convinced with the importance and benefits of eco friendly products, they are not willing to pay extra cost for the same<sup>4</sup>.

A Study on Determinants of Consumers Purchase Behaviour towards Green Products'. This research study focuses on the importance of information as public awareness, eco friendly products information and knowledge that would influence consumer behaviour and decisions on green products<sup>5</sup>.

**Objectives:** The main objectives of the study are, i. To understand consumer behaviour and their decisions regarding eco friendly products, ii. To know what strategies the marketer can adopt to influence the consumer purchasing behaviour, iii. To investigate the factors that influence consumer choice of eco friendly products over conventional products, iv. To find out the relation between consumer behaviour, attitudes and perceptions towards eco friendly products, v. To know the consumer awareness about eco friendly products, vi. To recognize different types of consumers and communicate accordingly.

**Scope and utility of the study:** The present study has been confined to Study on Consumer Behaviour towards Eco Friendly products. This study has been covered only Consumer from Central Nagpur. i. This study will help to understand the consumer buying behavior towards purchasing the Eco or Green Products. ii. It also opens the various factors which can affect the purchasing decisions of Consumer regarding Eco products. iii. This study also helps to the marketers to know about the Consumer mind set regarding purchasing the Green Products. iv. This project report will be helpful for the Retailer and Companies (which are manufacturer of the Eco Products) so that, they can easily understand the consumer buying behaviour and try to satisfy the consumer needs and requirements. v. This study project also helps to the consumer to analyze their purchasing decision. vi. This study will be very helpful to Consumers, Government, Companies, and Marketers.

**Limitations of the study:** There are some limitations of the human being which are reflected in Research study. The following are the Limitations of this research study are: i. This

study was conducted only for Consumer to understand their buying decision towards Eco friendly Products. ii. This Study was conducted only in Central Nagpur. iii. Selected Areas was taken for study. iv. Sample size was limited. v. Time factor and cost factor was limited. vi. Most of the concern Respondents was busy with their work. vii. Many of the Respondents did not Response properly. viii. Taking Interview of the Respondents was quite a difficult job for me because most of them could not able to understand English properly. ix. As Questionnaire method is used in the study, there may be chances that the respondent May give false answers.

**Methodology**

The present study is a descriptive research and it is based on the survey method. This study based on “Consumer behaviour towards eco friendly products” This study is based on primary and secondary data. Primary data have been collected from the respondents by using a well structured, non-disguised questionnaire. Secondary data for the study were collected from books, journals, research articles, magazines, reports, newspapers and websites. For the study sample size has been taken around 60 Respondents. Samples are drawn on convenience sampling technique/ method. The data for the study are drawn sample respondents through questionnaires and interview. Require information were also collected from Respondents. Data was analyzed through Table, Graph, and pie-chart. While analyzing data simple percentages was used. The present study is Descriptive in nature.

**Hypotheses of the study:** i. Consumers are ready to pay extra for eco friendly products. ii. Eco friendly products are replacing the existing non eco friendly.

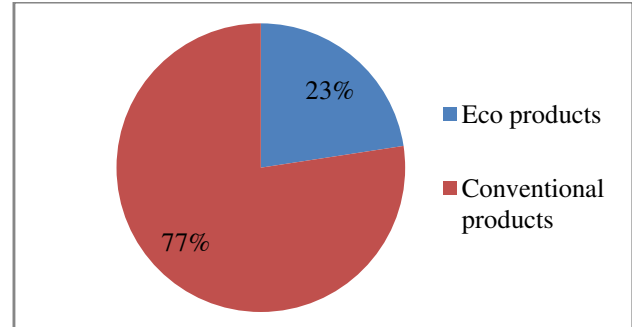
**Results and discussion**

From the Table-1 it shows about the Choices of purchases between Eco friendly and conventional products by consumers. 93.33% of consumers are ready to purchase Eco friendly products. As this shows that the consumers are concern about environment and they care for the nature. This also interprets that consumers get higher satisfaction while using eco friendly products.

**Table-1:** Choice between Eco and Conventional Products.

Eco Friendly	Conventional	Total
56	4	60
93.33%	6.67%	100%

If provided a choice between Eco Friendly Products and Conventional Products. i. Eco Friendly Products, ii. Conventional Products.



**Figure-2:** Choice between purchases.

**Null Hypothesis (H<sub>0</sub>):** There is no significant change in the consumer buying behaviour due to the advent of Eco friendly products. That is the Eco friendly products are not replacing the existing Conventional Products.

**Alternative Hypothesis (H<sub>1</sub>):** There is significant change in the consumer buying behaviour due to the advent of Eco friendly products. That is the Eco friendly products are replacing the existing Conventional Products.

$$\chi^2_c = \sum \frac{(O_i - E_i)^2}{E_i}$$

**Table-2:** Significant change in the consumer buying behaviour.

Particular	Obser. (O)	Expect. (O)	(O-E)	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E
Eco Friendly Products	56	30	26	676	22.533
Conventional Products	04	30	-26	676	22.533
					45.006

Calculated Value of Chi-Square.

Where:  $\Sigma$ =Sum of total, O=Observed Frequency, E=Expected frequency,  $\chi = 45.006$ .

Degree of Freedom1 (n-1) = 2-1 =1 Degree of Freedom.

Level of Significance = 5%. Tabulated value of  $\chi^2$  for 1 Degree of Freedom at 5% Level of Significance is 3.841

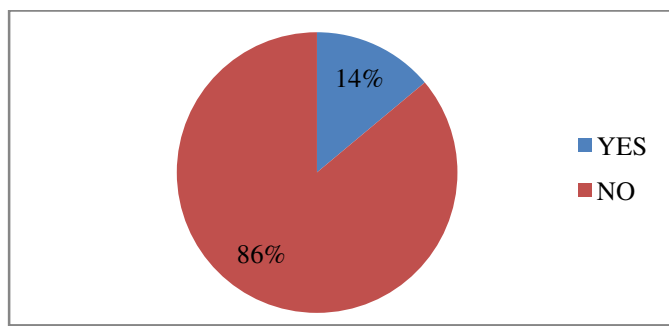
**Conclusion:** The calculated value of  $\chi^2$  is more than the tabulated value. Hence Null Hypothesis (H<sub>0</sub>) is rejected and alternative hypothesis is accepted. There is significant change in the consumer buying behaviour due to the advent of Eco friendly products. That is the Eco friendly products are replacing the existing Conventional Products. Hence our hypothesis proved.

The Table-3 indicates about the Consumers willingness to pay extra for eco friendly products. 51.66% of consumers are willing to pay extra for green products. The main reason is that companies are charging more for these products as its

production cost is high. On other side conventional products are less costly, so consumers will give preference to conventional products as they are cheap. Though consumers are aware of these products and they know about higher cost of eco friendly products they are willing to pay extra for it. As these consumers are having concern about the environment. They also know that the prices of these are increasing due to inflation in the country. Here we conclude Consumers are ready to pay extra for eco friendly products. Thus our hypothesis is proved.

**Table-3:** Willing To Pay Extra For Eco Friendly Products.

Yes	No	Total
31	29	60
51.66%	48.34%	100%



**Figure-3:** Willing to pay extra.

### Conclusion

Consumers Behaviour plays a major role in the choice of green products. After this study, we conclude that, i. Companies should start organized and unified campaigning to enhance the awareness about green marketing among Customers, keeping factors like age, region, and income among others in perspective. ii. Marketers and producer should develop their product and services according to the genuine need of the customers because merely producing the green product and services is not enough rather that must be well suited to the reality of customers need. iii. The research and development expenses should be increased as it will bring some new innovative and better ways to generate, communicate and deliver green product and services. iv. Government should promote green concept of product and services and eventually should move towards green economy. v. Government should subsidize the green efforts, so that marketer could avail green product and services at reasonable prices. vi. Organizations should introduce new ways of enhancing green efforts such as at the recruitment of new employee their green contribution should also be acknowledged with their academic qualification. vii. Organizations should adapt green policies as long term strategy because most of the green efforts took heavy initial cost but in long term it is beneficial and cost effective to the organizations as well as to conserve nature. viii. It could easily be concluded

here that much work and efforts are required on part of the government and industry for proper planning and implementation of green marketing. The attitude of the consumers towards better environment and subsequently their contribution in making the green marketing initiatives successful is of paramount importance. No amount of Endeavour vis-à-vis green marketing would be successful without their participation. ix. The marketers of green products and services need to be more innovative and dynamic to compete with the changing purchase behavior among customers.

**Suggestions:** i. Eco friendly products should be made easily available to consumer. ii. Today's market is very competitive hence better promotional efforts are required. iii. Awareness and education campaign should be undertaken seriously. iv. Government scheme should be made use of and attempt should be made to reduce the cost. v. TV and other electronic media should be used to increase the reach. vi. The various NGO'S should also take the initiative to improve the position of eco friendly product. vii. Special R& D work has to be done to modify this Product so as to increase the durability, utility, aesthetics And Flexibility. viii. Government should provide incentives to the manufacturers and importers. ix. Government should reward the genuine initiative Taken by companies to this effect. x. To assist consumer to become environmentally responsible.

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