

**Consumers Purchase Behaviour towards Environment Friendly Products in  
Thiruvananthapuram district**

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**Abstract**

The environment has been exploited extensively which resulted in climate change, global warming, pollution, depletion of the ozone layer etc. These issues have raised concerns to protect our environment which has led to the concept of going Environment Friendly. Government has introduced policies to save the environment from further degradation and introduce products that were supposed to environmental friendly and had utilitarian status for consumers. These products have positive effects on the environment as they are less toxic, biodegradable, recyclable, energy efficient, renewable due to which they are termed as “Environment Friendly Products”. The present study finds out that, consumers are motivated to use Environment Friendly products because of environmental sustainability and their personal consciousness towards the environment. However, unavailability of such products and unawareness refrain them from using such products. The present study was mainly focused to study the purchasing approach of consumers towards Environment Friendly products. Purchasing behavior of consumers depends on their level of satisfaction towards the products. The concern for environment has been found to be more among the young consumers. Consumers regard the features of the Environment Friendly products to be most important while purchasing them. They are even willing to pay more for the Environment Friendly products to protect their environment. Consumers are motivated to buy Environment Friendly products not only because of their concern for the environment but also because they believe these can be healthier option for them. Organizations need to focus more on improving the quality of Environment Friendly products and also need to provide high quality Environment Friendly products at genuine prices.

**Key Words: Environment Friendly Products, Environment Friendly Marketing, Environmental Degradation, Sustainable development.**

**INTRODUCTION**

With the increase in the technologies there has been an increase in the industrial activities which has affected the environment adversely. The environment has been exploited extensively; this over exploitation of environment has resulted in climate change, global warming, pollution, depletion of the ozone layer etc. These issues have raised concerns to protect our environment which has led to the concept of going Environment Friendly. Government has introduced policies to save the environment from further degradation and so has the corporations opted for environmentally friendly practices. One of the earliest steps that were taken regarding this environmental concern was to introduce products that were supposed to environmental friendly and had utilitarian status for consumers. These products have positive effects on the environment as they are less toxic, biodegradable, recyclable, energy efficient, renewable due to which they are termed as “Environment Friendly Products”. Because of the negative effects on environment,

Environment Friendly marketing activities have been a major tool that is utilized by various organizations, which have brought about a change in buyers' purchasing approach towards Environment Friendly items.

Environment Friendly behavior is the choice made by the consumers whether to buy an eco-friendly product or not. A consumers concern towards a safe environment has been frequently increasing. Nowadays the market contains a wide variety of products that are environmentally safe. The purchase behavior of the consumers depends on the beliefs and the consciousness of the consumer towards environmental concerns. If a consumer opts for a Environment Friendly product it not only has personal benefits for the consumer but also many long term environmental benefits. The decision to purchase these products depends on the behavior which the consumer might adopt towards these products. However, it is likely that many customers, who are environmentally conscious, are not routinely making these ecofriendly purchases as the result of what has been called the "value-action gap". The value action gap is the disparity between the knowledge of consumer about the environment and the behavior he adopts towards such products. A study was conducted in 2004 in Canada which showed that there is gap between acceptance and adoption of Environment Friendly products.

The process of selling products and/or services based on their environmental benefits is called Environment Friendly marketing. A lot of companies promote their products by enhancing the consciousness of the consumers towards the environmental issues which makes a consumer move from a convectional product to a Environment Friendly product. This helps the firms to not only market their products but also increase the awareness of the consumers. Environment Friendly lifestyle has become common in developed countries than in developing countries. Many firms have started Environment Friendly marketing and strategies for the development of Environment Friendly products to save the environment and to gain long term profits. Nowadays, we have lot of Environment Friendly products in the market e.g. CFL bulbs, Electric home appliances, jute bags, rechargeable batteries, solar chargers.

## **REVIEW OF LITERATURE**

Cherian and Jacob (2017) studied consumer's attitude towards environment-friendly products. They presented a conceptual framework of Environment Friendly marketing and various ways in which different consumer attributes are related to the concept of Environment Friendly marketing. It was concluded that there is a need for Environment Friendly marketing and a need for a shift in consumer behavior and attitude towards an environmental friendly lifestyle. The researchers recommended exploring the factors that encourage consumers to cooperate with Environment Friendly marketing, that is, through Environment Friendly product usage.

D'souza, Taghian and Lamb (2016) attempted to empirically investigate how consumers who differ in terms of environmentalism respond to labels. The data was collected from 155 consumers through telephone administered questionnaires and analysed it using descriptive measures and

correlation. The findings suggest that there are consumers who would buy Environment Friendly products even if they are lower in quality but have environmental information on labels.

Kumar (2015) made an effort to know how we can create awareness among consumers about Environment Friendly marketing and to probe consumer attitude towards eco-friendly/Environment Friendly products. The study stressed that marketers need to emphasise on Environment Friendly marketing as consumers are ready to pay a premium price for Environment Friendly products. The major setback to Environment Friendly products in India is lack of education and insufficient research work in the field of eco-friendly products.

Gilbert (2015) examined the recent trends in Environment Friendly marketing and an offered insights into the future of Environment Friendly marketing. The study assessed the value that students and faculty members at the University of Wisconsin-La Crosse placed upon Environment Friendly marketing. It was found that UW-L does not place sufficient emphasis on Environment Friendly business practices. Thus, it was suggested that inclusion of Environment Friendly business topics in the curriculum would benefit students' attitude towards Environment Friendly business, ultimately benefitting the university.

Sheikh, Mirza, Aftab, and Asghar (2014) investigated the consumer behavior towards Environment Friendly products and how they will make their Environment Friendly purchase decision. The data was collected from 200 respondents through questionnaire and hypotheses were tested using Pearson correlation. It was found that brand and gender difference have a very weak relationship with consumer Environment Friendly behavior while price, quality and Environment Friendly marketing have a strongly positive one.

#### **Research Gap:**

From the above review, it can be inferred that there is a need for Environment Friendly marketing and a need for a shift in consumer behavior and attitude towards an environmental friendly lifestyle. An advantage of these reviews is that they are often conducted by experts who have a thorough knowledge of the research field; however, disadvantage lies in the authors possibly having preconceived notions or biases leading them to overestimate the value of some studies. Even though some of the studies conducted so far are subject to some criticisms on the ground that relatively small sample size, short time period, scope limited to specific products, the literature survey reveals that there is still further scope for advanced research in this area. The present study peeps into the consumer purchase intention of Environment Friendly products by taking samples from Thiruvananthapuram district, which is a maiden attempt. The objective of the present study is to identify consumers' buying intentions regarding Environment Friendly products, to know the relationship of Environment Friendly consumption behavior with consumer demographics and to

analyze the factors motivating as well as demotivating Environment Friendly product usage/purchase.

### **Need and Significance of the Study**

With growing markets and increasing consumer volumes, the production, as well as consumption patterns are degrading the environment drastically. The government, consumers and producers have realised the worth of this issue. The research and development department of industries are continuously working to develop products that are environment-friendly and cause less environmental destruction. Products which are capable of being recycled, and possess healthy disposal are often termed as Environment Friendly products. The manufacturing, marketing, and consumption of such products are being promoted by the government as well as non-governmental organisations. The present study is undertaken to know the intention of consumers to purchase Environment Friendly products. The study also investigates the relationship of Environment Friendly product usage and purchase intention with demographic variables (age, gender, income and educational qualification).

### **Statement of Problem**

In India in 2017-18 alone, India consumed 16.5 million tonnes of plastic. According to industry body FICCI, 43 per cent of India's plastics are used in packaging and are single-use plastic. Consumption has clearly outstripped India's capacity to recycle. In India, 70 percent of total plastic consumption is discarded as waste. Around 5.6 million tonnes per annum (TPA) of plastic waste is generated in country, which is about 15,342 tonnes per day (TPD). Our environment is wasted because households, public and private offices and industries use more energy than is actually necessary to fulfill their needs. One of the reasons is that they use old and inefficient plastic products. The other reasons are unwholesome practices that lead to wastage. The lack of efficient behaviour among Indians is due to a clear inconsistency between attitudes towards Environment Friendly consumption and actual behaviour. This phenomenon is called the attitude-behaviour-gap.

The reasons for this behaviour gap have not yet been sufficiently researched. On the one hand it is possible that the respondents answer to comply with accepted social norms and this is not reflected in their individual consumption behaviour. On the other hand there may be special barriers emanating from anti-Environment Friendly beliefs which spur negative or low environmental concern, social influence from a community that is not Environment Friendly oriented, lack of recognized competing Environment Friendly brands and low enforcement of Environment Friendly regulation by government. All these factors; especially in everyday consumption complicate sustainable behaviour.

Evidence in the extant literatures investigated influential factors such as concern for environment, social influence, brand strength and Environment Friendly regulations and their relationship towards Environment Friendly purchase intentions but studies relating to how Environment Friendly

awareness from these factors influences consumption in a more efficient manner through the purchase of environmentally-friendly products in India are still lacking. Therefore it is urgent and legitimate to carry out a context specific study on the subject matter. It is against this backdrop that this study analyzed the consumers purchase intention of environmentally-friendly Environment Friendly products in Thiruvananthapuram district, Kerala state.

### **Objectives of the Study**

The important objectives are as follows:

- To identify consumers' buying intentions regarding Environment Friendly products.
- To know the relationship of Environment Friendly consumption behavior with consumer demographics.
- To analyze the factors motivating as well as demotivating Environment Friendly product usage/purchase.

### **METHODOLOGY**

The research design used for the study was a descriptive design that describes the concept of Environment Friendly product and the intention of consumers towards Environment Friendly products. The present

study is based on primary data collected through questionnaires distributed to 206 respondents in Thiruvananthapuram district out of which 125 respondents were selected for analysis. The sampling was done using convenience sampling method in Thiruvananthapuram districts of Kerala. Descriptive statistics were used to analyse the data and Pearson's chi-square test for independence was used to test the hypotheses.

### **Hypotheses**

**H01:** There is no significant relationship between Environment Friendly product usage and gender of the respondents.

**H02:** There is no significant relationship between Environment Friendly product usage and age of the respondents.

**H03:** There is no significant relationship between Environment Friendly product usage and educational qualification of the respondents.

**H04:** There is no significant relationship between Environment Friendly product usage and income of the respondents.

**H05:** There is no significant relationship between Environment Friendly product buying intention and gender of the respondents.

**H06:** There is no significant relationship between Environment Friendly product buying intention and age of the respondents.

**H07:** There is no significant relationship between Environment Friendly product buying intention and educational qualification of the respondents.

**H08:** There is no significant relationship between Environment Friendly product buying intention and income group of the respondents.

## **ANALYSIS AND DISCUSSION**

### **Demographic profile of the respondents**

Table 1 shows the demographic profile of 125 respondents for the study. The variables measured are gender, age, educational qualification, Annual income etc.

<b>Table 1</b>			
<b>Demographic profile of the respondents</b>			
Variable		Frequency(%)	Percentage
Gender	Male	57	45.6
	Female	68	54.4
Age	15-25	44	35.2
	25-35	69	55.2
	35-Above	12	9.6
Educational Qualification	SSLC	10	8
	Graduate	20	16
	Post graduate	69	55.2
	Doctorate	26	20.8
Income	Below Rs 2 lakhs p.a	58	46.4
	Rs 2 lakh-Rs 4 lakhs p.a	33	26.4
	Rs. 4 lakhs-Rs 6 lakhs p.a	18	14.4
	Above Rs. 6 lakhs p.a	16	12.8

### **Factors motivating for Environment Friendly product usage/purchase**

Table 2 shows the factors that usually motivate the respondents for buying/ using Environment Friendly products. It is clearly seen that environment sustainability is the most effective factor followed by personal consciousness of the respondents that persuaded them to buy Environment Friendly product.

**Table 2**  
**Factors motivating for Environment Friendly product usage/purchase**

Factor	Frequency	Percentage (%)
Social recognition	25	20
Government incentives/policies	15	12
Environment sustainability	101	80.8
Personal consciousness	85	68
Peer pressure	3	2.4
Cost of installation/ usage	6	4.8

#### **Factors demotivating Environment Friendly product usage**

Table 3 shows the main factors responsible for demotivating or hindering Environment Friendly product usage or purchase. Consumers mainly refrain from using Environment Friendly products due to their unavailability as well as unawareness about such products. However, 31.2% of the respondents feel that the cost of installation/ usage of Environment Friendly products is higher than regular products of the same category.

**Table 3**  
**Factors demotivating Environment Friendly product usage**

Factor	Frequency	Percentage (%)
Unawareness	50	40
Unavailability	86	68.8
Resistance to change	13	10.4
Inefficiency perception	17	13.6
Peer/social	3	2.4

pressure		
Cost of		
installation/	39	31.2
usage		

### Usage and purchase intention statistics

Table 4 shows that 65.6 per cent of the sample is already using some or the other Environment Friendly products while 99.2 per cent of them intend to purchase one of them in the near future. It shows that consumers do have Environment Friendly product purchase intention.

**Table 4**  
**Usage and purchase intention statistics**

Variable	Percentage	
	Usage (%)	
Environment		
Friendly product		
usage	82	65.6
Purchase intention	124	99.2

### Hypotheses Testing

Table 5 deals with the hypotheses testing using Pearsons Chi square test for independence to analyse the relationship of Environment Friendly consumption behavior with consumer demographics and to analyze the factors motivating as well as demotivating Environment Friendly product usage/ purchase.

**Table 5**

#### Testing of Hypotheses using Pearson's chi-square test for independence

Variables tested	Pearson chi-square value	Degree of freedom	Sig.
Gender X usage	0.022	1	0.882
Age X usage	1.49	2	0.475
Educational qualification X usage	10.888	3	0.012
Income X usage	1.121	3	0.772
Gender X purchase intention	1.203	1	0.273



Age X purchase intention	1.856	2	0.395
Educational qualification X purchase intention	5.292	3	0.152
Income X purchase intention	1.164	3	0.762

**H01: There is no significant relationship between Environment Friendly product usage and gender of the respondents.**

Table 5 shows that significance of chi-square is 0.882, which is greater than 0.05 (5%). So, the null hypothesis failed to reject at 5% significance level, concluding that there is no significant relationship between the Environment Friendly product usage and gender of consumers.

Consumers use Environment Friendly products irrespective of their gender.

**H02: There is no significant relationship between Environment Friendly product usage and age of the respondents.**

Table 5 shows that significance of chi-square is 0.475 which is greater than 0.05 (5%).

So, the null hypothesis failed to reject at 5% significance level, concluding that there is no significant relationship between the Environment Friendly product usage and age of consumers.

Consumers use Environment Friendly products irrespective of their age.

**H03: There is no significant relationship between Environment Friendly product usage and educational qualification of the respondents.**

Table 5 shows that significance of chi-square is 0.012, which is less than 0.05 (5%). So, the null hypothesis failed to accept at 5% significance level, concluding that there is a significant relationship between Environment Friendly product usage and educational qualification of consumers.

**Table 6**  
**Usage statistics based on educational qualification**

Educational Qualification	SSLC	Graduate	Post Graduate	Doctorate
Usage Percent	20%	65%	68%	77%

Table 6 shows individual breakdown of usage pattern among consumers based on their educational qualification. It shows that 77% of the respondents who are doctorates use Environment Friendly products followed by post graduates (68%), graduates (65%) and lastly intermediates (20%). A very important inference is drawn here stating that educational level has a direct relation on the Environment Friendly product usage.

**H04: There is no significant relationship between Environment Friendly product usage and income of the respondents.**

Table 6 shows that significance of chi-square is 0.772, which is greater than 0.05 (5%). So, the null hypothesis is failed to reject at 5% significance level, concluding that there is no significant relationship between the Environment Friendly product usage and income of consumers.

Consumers use Environment Friendly products irrespective of their income.

**H05: There is no significant relationship between Environment Friendly product buying intention and gender of the respondents.**

Table 6 shows that significance of chi-square is 0.273 which is greater than 0.05 (5%). So the null hypothesis is failed to reject at 5% significance level concluding that there is no significant relationship between the Environment Friendly product buying intention and Gender of the consumer.

The consumers intend to purchase Environment Friendly products irrespective of their gender.

**H06: There is no significant relationship between Environment Friendly product buying intention and age of the respondents.**

The table 6 shows that significance of chi- square is 0.395, which is greater than 0.05 (5%). So, the null hypothesis is failed to reject at 5% significance level, concluding that there is no significant relationship between the Environment Friendly product buying intention and age of consumers.

Consumers intend to purchase Environment Friendly products irrespective of their age.

**H07: There is no significant relationship between Environment Friendly product buying intention and educational qualification of the respondents.**

Table 6 shows that significance of chi-square is 0.152, which is greater than 0.05 (5%). So, the null hypothesis is failed to reject at 5% significance level, concluding that there is no significant relationship between the Environment Friendly product buying intention and educational qualification of consumers.

Consumers intend to purchase Environment Friendly products irrespective of their educational qualification.

**H08: There is no significant relationship between Environment Friendly product buying intention and income of the respondents.**

Table 6 shows that significance of chi-square is 0.762, which is greater than 0.05 (5%). So, the null hypothesis is failed to reject at 5% significance level, concluding that there is no significant relationship between the Environment Friendly product buying intention and income of consumers.

Consumers intend to purchase Environment Friendly products irrespective of their income.

### **Summary of Findings:**

- Environment sustainability is the most effective factor followed by personal consciousness of the respondents that persuaded them to buy a Environment Friendly product.
- The main factors responsible for demotivating or hindering Environment Friendly product usage or purchase. Consumers mainly refrain from using Environment Friendly products due to their unavailability as well as unawareness about such products.
- Consumers do have Environment Friendly product purchase intention.
- Consumers use Environment Friendly products irrespective of their gender.
- Consumers use Environment Friendly products irrespective of their age.
- There is a significant relationship between Environment Friendly product usage and educational qualification of consumers.
- Consumers use Environment Friendly products irrespective of their income.
- The consumers intend to purchase Environment Friendly products irrespective of their gender.
- Consumers intend to purchase Environment Friendly products irrespective of their age.
- Consumers intend to purchase Environment Friendly products irrespective of their educational qualification.
- Consumers intend to purchase Environment Friendly products irrespective of their income.

### **Conclusion**

In the present era of development and growth, environment is being degraded at a rapid rate. It is hence, necessary to worry now rather than regret later. Environment Friendly products can lower the negative impact on environment and ensure a sustainable future for the coming generations. The study highlighted that except for educational qualification, other demographic variables such as age, gender and income have no relationship with consumers' purchase decision of Environment Friendly products. Moreover, irrespective of demographic variables, most consumers intend to purchase such products to safeguard the environment. The present study finds out that, consumers are motivated to use Environment Friendly products because of environmental sustainability and their personal consciousness towards the environment. However, unavailability of such products and

unawareness refrain them from using such products .The present study was mainly focused to study the purchasing approach of consumers towards Environment Friendly products. It is evident that the purchase behavior and customer satisfaction towards Environment Friendly products is not influenced by age, gender, income or educational qualifications of the consumers. Purchasing behavior of consumers depends on their level of satisfaction towards the products. The concern for environment has been found to be more among the young consumers. Consumers regard the features of the Environment Friendly products to be most important while purchasing them. They are even willing to pay more for the Environment Friendly products to protect their environment. Consumers are motivated to buy Environment Friendly 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 Environment Friendly products and also need to provide high quality Environment Friendly products at genuine prices. As the high price and low quality of the Environment Friendly products are the two most important factors that prevent and demotivate the consumers while thinking about purchasing such products.

### **Suggestions**

The results of the present study can be used by marketers, manufacturers as well as the government to promote Environment Friendly products efficiently. Unawareness and unavailability of the Environment Friendly products should be countered so as to remove the obstacle in its usage. Advertisements and promotional activities must be taken to make people aware, focusing on the environmental aspect as it is found to be the most influential factor motivating Environment Friendly product purchase and usage. Moreover, personal consciousness of consumers must be given due consideration, besides promotion, as it is also found to be a motivating factor. Awareness programs of environmental degradation and benefits of Environment Friendly products must be launched along with the different types of such products that consumers can use.

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