

**“A STUDY ON CONSUMER BUYING BEHAVIOUR TOWARDS ECO-FRIENDLY/ GREEN PRODUCTS WITH SPECIAL REFERENCE TO COCHIN CITY”**

**Project Report**

**Submitted by**

**GOPIKA GANGADHARAN (REG.NO.AM20COM006)**

**Under the guidance of**

**Mrs. ELIZABETH RINI K. F**

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**MASTER OF COMMERCE AND MANAGEMENT**



**ST. TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM  
COLLEGE WITH POTENTIAL FOR EXCELLENCE**

**Nationally Re-Accredited at 'A++' Level (Fourth Cycle)**

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**ST. TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM**

**COLLEGE WITH POTENTIAL FOR EXCELLENCE**

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**CERTIFICATE**

This is to certify that the project report titled **“A STUDY ON CONSUMER BUYING BEHAVIOUR TOWARDS ECO-FRIENDLY OR GREEN PRODUCTS WITH SPECIAL REFERENCE TO COCHIN CITY”** submitted by **GOPIKA GANGADHARAN** in partial fulfillment for the award of Master of commerce and Management is a record of Bonafide project work carried out during the academic year 202-22.

**Name and designation of the guide**

**Head of the Department**

**Mrs. Elizabeth Rini K.F**

**Smt. Ann Thomas kiriyanthan**

**Assistant professor**

**Assistant professor**

**Department of commerce**

**Department of Commerce**

**Place: Ernakulam**

**Date:26.03.2022**

## **DECLARATION**

I hereby declare that project entitled **“A STUDY ON CONSUMER BUYING BEHAVIOUR TOWARDS ECO-FRIENDLY/ GREEN PRODUCTS WITH SPECIAL REFERENCE TO COCHIN CITY ”**is the Bonafede record of work done by me in partial fulfilment of the requirement for the award of degree of Master of Commerce and Management under Mahatma Gandhi University. I further declare that this report has not been previously for the award of any degree, diploma or other similar title to any other universities, institutions and societies to the best of my knowledge and belief.

Place: Ernakulam

GOPIKA GANGADHARAN

Date:26.03.2022

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In convey I regard to staff of library, who help to utilize the library facility in my college and also, I highly intended to the respected teachers of Department of commerce for their help and support.

In the preparation of this project work "**A STUDY ON CONSUMER BUYING BEHAVIOUR TOWARDS GREEN OR ECO-FRIENDLY PRODUCT WITH SPECIAL REFERENCE TO COCHIN CITY**". I received valuable guidance and encouragement from many and taking this opportunity to thank all of them.

Place: Ernakulam

GOPIKA GANGADHARAN

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## **CHAPTER:1 INTRODUCTION**

## 1.1 INTRODUCTION

Product is the soul of the market. It might be anything, such as commodities, services, or ideas, that could meet market demands and wants. The success or failure of the market determines the effectiveness of the product in meeting the demands and wishes of customers. As a result, it's critical to ensure that the product both satisfies the customer's desires and protects the environment. The best answer is an eco-product, also known as a green product.

Any product or service that is not destructive to the environment or surroundings is termed "eco-friendly." As a result of the expansion of greener, more suitable, and environmentally friendly products, consumer preferences have changed due to the awareness of ongoing environmental issues among consumers. There are so many factors that are incorporated in green products. It requires few raw materials and releases a small amount of containment to the environment as compared to other non-green products.

A green product is one which is designed with as little environmental impact throughout its entire life cycle, also after it is no further in use.

Green products are typically determined by two primary tasks:

- waste minimization and
- Resource efficiency optimization.

They are built with non-toxic ingredients and environmentally friendly procedures, and they are certified by leading institutions such as Energy Star, Forest Stewardship Council, and many others.

The following are some of the characteristics that define a product as green or eco-friendly:

- It's recyclable, reusable, and biodegradable in nature. 3
- Its packaging is in an eco-friendly manner.
- It requires the least number of available resources.
- Focus on generating revenue thereby making a responsible contribution to the environment.
- It is an ecological friendly product

- Collected raw materials from the local producers ensure the sustainability expansion of the region.
- It minimizes the carbon footprint.
- It minimizes plastic footprint.

Consumers' green behaviour refers to their decision to purchase an environmentally friendly product or not. Consumers' concern for a safe environment has risen in recent years. Nowadays, the market offers a wide range of ecologically friendly items. Consumers' purchasing decisions are influenced by their opinions and awareness of environmental issues. When a consumer chooses a green product, they gain not only personal benefits but also several long-term environmental benefits. The consumer's decision to acquire these products is influenced by the consumer's attitude toward them.

However, due to what has been referred to as the "value-action gap," it is likely that many environmentally concerned buyers do not consistently make these eco-friendly choices. The value action gap is the disparity between the knowledge of consumer about the environment and the behaviour he adopts towards such products.

Green marketing is the technique of selling products and/or services based on their environmental benefits. A lot of companies sell their products by raising customer awareness of environmental issues, which leads to a consumer switching from a conventional to a green product. This aids businesses in not just marketing their products but also raising consumer awareness. In affluent countries, green living is more common than in poor countries. Many businesses have begun green marketing and product development methods in order to save the environment while also making long-term profits. CFL bulbs, electric home appliances, jute bags, rechargeable batteries, and solar chargers are just a few examples of green items available today.

On a national and international level, today's environmental conditions have become a threat to human health. Plastic use, air pollution, and other factors contribute to the worsening of our economic situation. Green products help to contribute a sustainable environment by minimizing the wastage and efficient use of resources. Nowadays, the demand for green products is high in the market.

Contemporary commercial promotional efforts and other factors make demand for green products in the modern-day. As a result of this trend, customers are more concerned about environmental protection and they are willing to pay more for green items additional cost for the same. The advantage of a green product is that it aids in the reduction of environmental matters and it is beneficial to the company, consumer society. People today are more worried about the environment, and they are looking for producers and governments to create fewer damaging products for society.

However, every society bears a moral responsibility to safeguard the generation's long-term survival, which can only be achieved by executing long-term growth plans for the country. Green products have a major role in the sustainable development of the nation. In order to track our society's progress, we need to discover sustainable development goals and benefits through consumers. This study is focused on the buying behaviour of customers towards green products. This is to be considered by examining the following objective.

### **1.1 STATEMENT OF THE PROBLEM:**

The study is to determine the buying behaviour of consumers towards green products in Cochin city. It analyses the factors that influence the buying behaviour of green products among customers. The study focused on how consumers make choices about green products and wanted to figure out what variables affect their behaviour and purchase behaviour. The factors of environmentally friendly purchase behaviour, such as intention to buy, purchase decisions, actual purchase behaviour, and willingness-to-pay, were the focus of these behavioural studies. Further, the aim of the study is to find out how and where their income goes toward buying green or eco products. The economy's income inconsistencies have created a scenario of financial instability among consumers, which may restrict individuals from making green purchase decisions.

The present research is the focus to examine the level of awareness about the green products, factors influencing towards the usage of green products, consumers attitude and behaviour towards the green products and satisfaction level of consumers about the uses of green products. Further, the study focuses on post-purchase behaviour about the green products in the study area. The results of the study on a local problem presume great significance for further studies related to environment-friendly 'Green Marketing.

## **1.2 SIGNIFICANCE OF THE STUDY**

The study is undertaken in Cochin city. The present research is the focus to examine the level of awareness about the green products, factors influencing towards the usage of green products, consumers attitude and behaviour towards the green products and satisfaction level of consumers about the uses of green products. The results of the study on a local problem presume great significance for further studies related to environment-friendly 'Green Marketing.'

## **1.3 SCOPE OF THE STUDY:**

The sample unit of the study is from various parts of Cochin city. The study was based on all recognized or trending product items in the market which were available among various purchasing groups. It studies the relationship between demographic characteristics and buying behaviour. A Google form questionnaire is prepared in order to collect the data from various respondents.

## **1.4 OBJECTIVES OF THE STUDY**

- ❖ To determine the extent to which consumers are aware of eco-friendly/ green products.
- ❖ To know the buying motives of the consumers towards green products.
- ❖ To determine the challenges of green products.
- ❖ To measure the satisfactory level of customers by using green products.
- ❖ To understand the role of green products in improving quality of life.

## **1.5 RESEARCH METHODOLOGY**

Research methodology refers to the methods followed by researcher for conducting particular project report. It not only discusses on methods but also the logic behind conducting the study. It includes specific procedure and techniques used to identify select and analyze information on a topic.

### **DATA COLLECTION:**

Data is collected through primary and secondary sources.

- **Primary data:** This includes information gathered from first-hand sources. This information is gathered directly from respondents using questionnaires and surveys.

- **Secondary data:** These were obtained from newspapers, journals, magazines, browsers and other sources.
- **Sampling technique:** Convenient sampling method
- **Population:** The study is conducted among the consumers in Ernakulam district.
- **Sample size:** the sample size of the study is 100 consumers.
- **Research type:** Academic research based on primary and secondary data.
- **Area of study:** The area of study is restricted to cochin city.
- **Statistical tool used:** Likert scale, Rank analysis, ANOVA test, Pie diagram, Bar diagram, tables.
- **Period of the study:** 3 months

### **Hypothesis**

H<sub>0</sub>: Level of satisfaction and pricing do not have an effect on willingness to purchase green products.

H<sub>1</sub>: Level of satisfaction and pricing has a significant effect on willingness to purchase green products.

### **LIMITATIONS OF THE STUDY**

- ❖ The study is restricted to cochin city.
- ❖ The 110 respondents may not reveal the true trend in the market regarding the buying behaviour of green products.
- ❖ The accuracy of data collected from the respondents influences the research work's quality. As a result, so do the conclusions.
- ❖ There may be a chance of unwillingness to share the data among respondents.
- ❖ The failure of statistical tools was not reversed.

## **CHAPTER 2: REVIEW OF LITERATURE**

## **2.1 REVIEW OF LITERATURE**

The literature survey is the description of information found in the literature related to the research area of study. The reviews describe the concept, summarise the research related area, evaluate and clarify this literature. It furnishes a theoretical base for the research and helps the researcher determine the nature of the study. This chapter is designed to give detailed literature through an analysis of previous research conducted relating to green marketing, green marketing mix, consumer's attitude towards the green products and satisfaction of using the green products. For the purpose of literature survey, the researcher collected the reviews from the well reputed national and international journal India and abroad green marketing, importance of green products, benefits of the green products, consumer attitude and consumer buying behaviour towards the green products.

### **REVIEW OF LITERATURE ON GREEN PRODUCTS**

**Roberts, J. A., & Bacon, D. R. (1997)<sup>1</sup>**, the purpose of this research was to investigate and measure the relationship between the New Environmental Paradigm (NEP) and eco-conscious consumer behaviour (ECCB). NEP is a set of beliefs and values focused on environmental protection and living peacefully with nature. ECCB is described as a person's behaviour in which he or she purchases (avoids) things and services that he or she feels have a positive (bad) environmental impact. As per the findings, man's need to adapt to the natural environment seems to be a motivating factor behind decisions to avoid (select) things that have a negative (positive) environmental impact.

**Shula, S., Shah, D., Mehra, P., Krishna, M., & Gupta, A. K. (1998)<sup>2</sup>** their research was performed on their campus to see how their peer group reacted to products like organically grown wheat, pulses, and oil seeds, among other things. The study was undertaken to investigate problems such as customers' mental images of eco-friendly items, qualities that consumers look for in green products, factors that influence green product purchases, actual purchasing behaviour, and the premium they were prepared to pay for green products.

**Chan R Y K (2001)<sup>3</sup>**, the purpose of this research is to impact numerous cultural and psychological aspects on Chinese consumers' green purchasing behaviour. The findings suggest that the individuals' attitudes about green purchasing are influenced by their man-nature orientation, collectivism, ecological effect, and, to a minor extent, ecological



knowledge. Their attitudes toward green purchases, in turn, play a role in influencing their purchase behaviour. The findings suggest that cultural and psychological factors have a great impact on the behaviour under investigation.

**Grundey D (2009)<sup>4</sup>**, the researchers examined environmental marketing and eco-labelling to ensure that consumers have access to environmentally friendly products and services and that their preferences could be shifted toward environmentally friendly behaviour. The survey was done in Lithuania to determine whether customers are loyal to environmentally friendly 8 products and whether marketing campaigns and ecological labelling practices influence their buying decisions. The study found that the main incentive for Lithuanians to purchase eco-products is a deep concern for their health, followed by quality and advertising. Higher individual income, cheaper pricing for eco-products/eco-processed foods, informing/educating the society, and more advertising are the most influencing elements in their loyalty to eco products in the country. The main de-motivators of buying eco-products in Lithuania are high Prices, low availability and doubts if the product is green or its green washing.

**Faison Afar Sheikh, Ashfaq Ahmed Mirza, Anam Aftab, Bilal Asghar (2014)<sup>5</sup>** conducted a study on Consumer green behaviour toward green products and green purchase decision. This research paper discusses how our economy's customers will buy green products and how they could make decisions while doing it and. Customers who really are eco-friendly are more likely to buy eco-friendly products. It discusses what factors can influence customer green behaviour and decision-making. The overall aim of this study was to determine how customers will make green buying decisions and respond toward green products. The findings of this study where Consumer green behaviour has a great positive link with price, quality, and green marketing. Whereas brand and gender differences have a very weak effect on consumer green behaviour.

**Prashant Kumar, Bhimrao M Ghodeswar (2015)<sup>6</sup>** the purpose of the study was to focus on green consumer buying behaviour among the Asian market. The focus of recent study on green consumer behaviour has been on Asian markets. Even though there is information of environmental awareness among Indian customers in the research, their purchasing behaviour toward green products is yet unexplored. As a result, the focus of this research is to examine the factors that influence customers' green product buying decisions in India. The

findings of the first one is that they participate actively in environmental protection by adopting and consuming environmentally friendly products. Second one, Indian consumers attempt to learn about green products, acquire information about them, and trial them out. They get it by conducting research and seeking information from their friends about green products. Third one is that green products have to be integrated to consumers' functional, emotional, and experiential, according to marketing professionals. Also, green product marketing needs to provide consumers with facts on companies' environmental performance, information about green products, similarity with their intended social image, and relevance to current lifestyles.

**Yang Y C (2017)**<sup>7</sup> conducted a study on Consumer Behaviour towards Green Products. This research focused on changing consumer behaviour towards the usage of green products. Connecting sustainability. With the core business operations and consumers means that the CR team must work with other parts of the business, including brand, marketing, and R&D. This enables opportunities for innovation. They concluded that green marketing has to be pursued to a higher level.

**Suman Kumari (2018)**<sup>8</sup> conducted a study on Factor Affecting the Purchasing Behaviour of the Public about the Green Product (LED) in state Haryana. Environmental issues are a widely discussed topic, as almost each country's government and society has started to become even more aware of them. As an outcome, the company has implemented a green marketing strategy as one of its financial gains and environmental-protection strategies. Whenever a green marketing plan is in place, the company will benefit. This research will examine the factors that affect people's purchase decisions with regard to green products like LEDs. This is a perfect opportunity to implement a technology and expand the features of green products. It really is essential to examine the factors that influence public purchase behaviour. As a result, this paper will discuss the variables that impact public buying behaviour in relation to green marketing.

**Shin, J., Kang, S., Lee, D., & Hong, B. I. (2018)**<sup>9</sup> conducted a Study Analysing the failure factors of eco-friendly home appliances based on a user-centred approach. This research focuses on the elements that lead to eco-friendly product failures from the consumer's perspective, with such a specific attention on detergent-free washing machines. This research focus on two things: (1) the attitude-behaviour gap that emerges during the consumer decision making

process, and (2) consumer preference for core aspects. A repetitive model was used to consider the decision-making stage. This study's analysis technique is able to develop long-term policies for boosting environmentally friendly items.

**NS Kripa, L Vinod (2021)**<sup>10</sup> conducted a Study on Consumer Behaviour towards Green Products and Barriers in Consumer Purchase Decision. The purpose of this research paper was to determine the scope to which consumer perceptions are favourable toward purchasing and eco-friendly products, as well as how to publish proposals to promote the utilization of these products. It also examines the social barriers that obstruct the use of environmentally friendly products. The study focuses on customer perceptions of green products and also social barriers and factors that restrict the utilization of green products. The findings of this research paper are that due to the huge cost of green products consumers are restricted from buying green products. Price of the green product is one of the factors that influence the buying behaviour of green products among customers. Absence of green shops and products is another factor which is affecting the buying behaviour of customers.

**Goswami (2008)**<sup>11</sup> looked at whether Indian shoppers were drawn to apparel bearing eco-labels. 400 consumers were chosen at random from each of the two major cities, i.e., Kolkata and Mumbai and two non-metro cities viz. Guwahati and Bhubaneswar. Cluster analysis was applied on the data to identify various segments of the consumers on the basis of their environmental consciousness, involvement in the environmental certification and perception about the importance of the eco-label. According to the analysis's findings, there are three categories of consumers: 'Light Green segment' (64.2%), 'Dark Green segment' (19.8%) and 'Non-Green Apparel consumers' (16%). The study also highlighted that segment of consumers which was motivated for eco-labelled clothes included both males and females, post graduate and self-employed professionals.

**Karipidiset al (2010)**<sup>12</sup> studied consumers' purchasing behaviour and their willingness to pay for eco-certified food products. Results of the study reported that the level of awareness about the production conditions, eco-mark experience, attributes associations, household income and occupation were the major factors determining consumers' intention to purchase eco-certified product. Further the study also advocated that the most preferred retailer could add value to the purchasing decision of consumers regarding eco-certified products.

**Joshi and Mishra (2011)<sup>13</sup>** conducted a study in India (Maharashtra) to study consumers' level of awareness about environment friendly car (EFC). The study examined the impact of geography and age on the degree of awareness using a sample of 500 customers. Results of the study showed that age was insignificant, whereas geographical area was significant in determining the differences in awareness level of consumers regarding EFC. It was also concluded that the awareness level of consumers was very generic and therefore, the government and the marketers should put in more efforts to increase the level of awareness. Moreover, effective use of media should be made to publicize the benefits of EFC.

**Sirangi (2012)<sup>14</sup>** investigated green consumer behaviour of post graduate teachers of arts, Commerce, science and technology and pharmaceutical sciences of Andhra Pradesh University, Andhra Pradesh, India. The study found that university teachers preferred Magazines and TV as most important sources of environmental information of products. Also, 82.5% respondents were found to be aware of all of the green products. Quality was the primary factor which contributed the most in purchase decision, followed by price. 67.5% respondents reported that they buy green products, whereas 34% respondents were found to buy lowest priced products without taking into consideration their impact on the environment. In addition to this, the study looked at eight variables, including energy saving, eco-label, need for environmental information, shopping behaviour, purchase criteria, purchasing behaviour, preference of green outlet and awareness of green outlets.

**Dr.S.M Yamuna<sup>15</sup>**, A Study on Consumer Preference towards Green Marketing Products; says that according to research consumer demographic and socio-economic characters respond positive in purchasing green products moreover, respondents suggested that green products are low priced and eco-friendly. Green products generally use eco-friendly materials and energy-efficient means of production, thereby causing less or no detrimental impact on the environment.

**According to Elkington (1994: 93)<sup>16</sup>**, a "green consumer" is someone who steers clear of goods that could endanger their own or others' health, significantly harm the environment during production, use, or disposal, consume an excessive amount of energy, produce unnecessary waste, use materials sourced from endangered species or environments, involve the needless use of animals, or have a negative impact on other nations.

**Yasmin Begum R, Nadaf and Shamsuddin M Nadaf (2014)<sup>17</sup>** Examined the necessity and significance of green marketing in the 21 centuries. The research strives to capture some of these initiatives in India, which may provide ideas for other companies in both developing and matured markets. The study concluded that the greening of business is not a fad; it is a fundamental change in how commerce is managed given new energy and environmental realities.

**R. Shrikanth, D.Surya Narayana Raju (2012)<sup>18</sup>** aims at finding out what actually Green Marketing is all about and how can a business firm be more competitive by using green marketing strategies to gain a competitive edge over others. It explores the main issues in adoption of green marketing practices.

## **CHAPTER 3: THEORITICAL FRAME WORK**

### **3.1 CONSUMER BUYING BEHAVIOR FOCUSING MORE ON INDIAN CONSUMERS' ATTITUDE**

The success of any product in a market solely depends on whether it is capable of creating utility amongst its consumers. So, the consumers make the purchase decision considering the various utilities from the same. Accordingly, the producers and the service providers in the market have to ensure that the products and services being offered are capable of satisfying the needs of the consumers while at the same time giving priority to environmental protection. This is due to the rising trend of green purchasing behaviour amongst modern-day consumers in the market.

The rising trend of promoting green products and services can be easily seen in the present marketing strategy of the various marketing firms so as to capture the attention of the consumers and cash in on the green purchasing trend amongst the consumers. The advantage of this green marketing strategy is that it will ensure sustainable and balanced growth in society, giving focus to the long-term survival of the economy and its resources.

According to a spokesperson of consumer durables giant Hindustan Unilever, in 2018, their sustainable living brands grew 69% than the rest of their products which is a clear indicator of the rise in preference towards green products in the Indian economy

A study conducted by Economics Times also revealed that almost 63% of the Indian population is aware of green products and their benefits. The research was conducted in twelve major cities in India with 1270 respondents. This indicates the progress in the market for green products in the Indian economy. However, when compared to other developed nations such as the United States and Canada, India lags far behind. With a population of 132 million, it is past time for India to transition to a green market structure.

the rapid promotion given to green products in the media. Green purchasing behaviour is not just confined to the purchase of green-labelled products, but also ensuring the products are genuine and that their production and other processes are non-polluting as the marketers may use the marketing trick of labelling just about any product green to profit. It is important that consumers not be fooled by such claims.

The green initiative is not just the responsibility of producers, as sustainability is a common goal and is not just concerned with pollution-free production activities. Consumers have to

take it upon themselves to use non-plastic bags at point of purchase, dispose of scrap properly and avoid those products which are not environmentally friendly so as to ensure there is a stable and peaceful environment for all.

The prime factor that influences the purchasing decision of a product in India is still price. The main reason for this situation is the widespread poverty in the Indian economy due to the unequal distribution of income amongst the population. So, the unprivileged class of society is not ready to purchase a green product as it could be overpriced. As a result, the poorer sections cannot afford such a high-end product.

### **3.2 ECO-FRIENDLY PRODUCTS/GREEN PRODUCTS**

The economic, social, or psychological satisfaction capacity of a product lies in its utilities. Hence, a product can be anything; a tangible or intangible item that has the potential to satisfy the needs of consumers in the market. So, the marketers of each product focus on adding value to their product. In today's competitive environment, if marketers fail to do so, they risk losing the business as well as the opportunity to ensure customer satisfaction. Constant market research and development of new products or product modifications.

In a modern market structure where consumers are said to be the kings, the role of marketers is not trivial. They persuade customers to purchase new products by creating demand. Therefore, both consumers and marketers/developers of a product can be a part of the development and promotion of green products in a market structure.

The resource utilization for production as well as making those products available to the consumers should be made effective and optimized as the resource availability of our nation is limited and the problems of overpopulation are adding to the already worse situation.

So, it is our collective responsibility to ensure the optimized and sustainable use of resources in the production as well as in the marketing aspects of various products, which will ensure the promotion of green products and their market in the modern economy. In order to address various issues related to the environment, a product needs to be assessed based on its impacts on the environment at every stage of its life cycle, from raw material extraction and procurement to its disposal and end of life. Any product that has fewer environmental impacts as compared to any other product with a similar function or application is considered a "green product."



So, going green is not just about the development of the product in an eco-friendly manner but also ensuring that the product does not harm nature in any way throughout its life. This includes ensuring there is no harm to the environment in its development, marketing, use, and disposal for a better and cleaner world for everyone in society.

### **3.3 GREEN WASHING**

In a market structure where consumers demand green products, their needs must be met by adhering to the basic market equation: demand equals supply, which means demand creates supply. When consumers are ready to move towards a green product culture, the marketers should make them available to the consumers. The question is, how genuine is the product being offered in the market?

So, when there is a demand for green products, there is a supply for the same, but what we need to see is that the cost of production may go up due to the use of environmentally stable raw materials and eco-friendly production techniques. But in a highly competitive environment, the sellers are more focused on earning more profit.

There is no morale in the modern market structure because the concept of "consumers are king" no longer exists. There is only one goal in mind: maximizing profit. Marketers may falsely label their products as green in order to mislead customers into purchasing these "green products. —This practice of marketers using false claims about a product's being a green product is known as "green washing."

This problem needs to be addressed with great caution as the ultimate aim of marketing green products, which is sustainable growth and development, depends on the successful promotion of green products. If fake products seep into the market, the success of the entire venture is lost. So, dependence on various certifications to ensure the authenticity of the products is necessary.

### **3.4 EMERGING INDIAN LIFESTYLE & GREEN PRODUCTS**

If we look at the makeup of Indian society, the most striking feature would be its diversity in various fields like language, religion, demography, economy, etc. So, in a country like India, in order to accommodate a green product in the minds of its people, the product should be versatile and capable of satisfying the various needs of a diverse society.

As mentioned earlier, the other important matter that requires the main focus is the various income groups, as a great part of the Indian economy is poverty-stricken. So, they may not be willing to purchase a premium-priced eco-friendly product. Their main focus should be on day-to-day survival. To effect change in the Indian economy as a whole, sustainable goals should take into account the needs of the needy and deserving population, as the entire concept of Indian democracy is to ensure equality.

This can be ensured by making the less privileged groups involved in the development and production of eco-friendly products so that they can also be informed about the benefits of such sustainable ventures and take an active part in them, which will ensure that the upper echelons of society do not monopolies the benefits of green developments.

In a corporate-driven economy, it is difficult to ensure equal treatment and to provide the weaker sections with the benefits of sustainable development.

The whole success of the idea of sustainable development rests on the development of a nation as a whole. In a country like India, the responsibility of the government is not just limited to eradicating poverty, but also ensuring sustainable development for all. But what makes it a herculean task is the country's vast population. So, resource utilization should be made effective and equitable as a greater percentage of our population is living in poverty.

The whole success of the idea of sustainable development rests on the development of a nation as a whole. In a country like India, the responsibility of the government is not just limited to eradicating poverty, but also ensuring sustainable development for all. But what makes it a herculean task is the country's vast population. So, resource utilization should be made effective and equitable as a greater percentage of our population is living in poverty.

Even in such a situation, consumers are willing to purchase green products because of the promotions given for sustainable developments in the new media platform and the awareness amongst the educated population about the requirement for sustainable growth. So, the prime focus needs to be imparting knowledge about sustainable growth. Rather than focusing on short term growth or profitability, the whole idea about sustainable development is to ensure long term survival and growth through green or eco-friendly products.

### **3.5 SUSTAINABILITY IN THE ENVIRONMENT THROUGH GREEN PRODUCTS**

Resource utilization is required for any sort of development that takes place in the economy. But the concern is not on the use, but the effect and outcomes of such utilization. There is indeed no situation of cent percent environmental accountability while indulging in any sort of development activity but what we are focusing on is not on cent percent environment accountability but ensuring minimum impact on the environment.

In India, the rapid growth of population, poverty, urbanization, industrialization and several related factors have been the main reason for the degradation of the environment and its resources.

At the same time, a developing nation like India cannot avoid industrialization and urbanization as the economic growth of a nation is purely depended on it. But it should be kept in mind that all we have is limited resources and once it is exhausted, we have no way of filling this vacuum.

Environmental problems have always been a headache for India. This is especially true when we consider the polluted cities on the rise, like Delhi. The role of the government in ensuring a solution to the same is not limited, but it should ensure that the attitude of the people is also addressed in this regard. When people are least bothered about environmental protection. An awareness drive should be initiated in this regard to educate the population about the importance of an eco-friendly lifestyle.

The only solution to the same is through the promotion of green products so that consumers are aware of their use and benefits and can start using them. Today, the concept of sustainability is ubiquitous. Even the corporate sectors are addressing the importance of sustainable development in the economy as there has been a significant change in the natural life and vegetation throughout the environment, which has caused catastrophic changes in the environment that threaten the lives of millions around the world.

So, the only solution to this problem is through sustainable development, which is possible only through the promotion of green or eco-friendly products throughout the nation. However, the most difficult aspect of its promotion is the large population of our country and its underdeveloped areas, which are unaware of the world's environmental problems.

It's true that when a significant part of the population is suffering from poverty, their priority is to survive, and they have no time to worry about environmental problems. So, it all begins with the privileged class of our society. There should be a proper system for the development of the nation as a whole. For this, the initiative to promote eco-friendly products should start from the bottom class. The development and production of eco-friendly products should benefit the unprivileged class of our society, whose active participation is required in the development and production stage of green products. This ensures two main important goals for sustainable development: employment for all and bringing together every section of society toward an eco-friendly environment.

Effective communication of green products to consumers in India is also one of the major challenges, taking into consideration the limited knowledge of green products and minimal information disclosure on the same.

Even though nowadays people are willing to purchase more green products as the manufacturers or marketers have been promoting their products as eco-friendly and trying to differentiate themselves from the competing brands, the situation can never be favourable as in a cutthroat competitive market, the marketers are only aiming to increase profits, so there can be a situation of green washing.

The lack of understanding of environmental label usage for products makes it difficult for consumers to differentiate between the nationally or internationally accepted Eco labels and the phone claims made by the manufacturers.

Environment protection in India should not be just a governmental priority but a collective goal for the nation. There must be legal norms to ensure that there is a proper check on green products and their marketing so that false claims about a product can be checked with great accuracy. Hence, the government has a significant role in bringing up statutory obligations in the development of eco-friendly products and their promotion. But what is to be kept in mind in a country like India is that a better position needs to be offered to the economically weaker sections, as mentioned earlier, so that active participation of all classes of society can be brought towards sustainable development.

### **3.6 INDIA'S RANK IN THE ENVIRONMENTAL PERFORMANCE INDEX**

An Environmental Performance Index (EPI) is a method of quantifying and numerically rating a country's environmental policies. As a result, countries can be ranked according to their environmental stability on a global basis, and this enables a comparison of various countries in the context of their environmental stability and ensures there is a constant check on environmental concerns of the member states. The rankings of the various countries are based on numerous variables on the importance given from an environmental perspective. Considerations such as air quality, health impacts, water availability, and sanitation are being studied and are given a weight of 40%. The next factor under consideration is ecosystem vitality, and the weight given to it is sixty percent. The various factors under consideration for ecosystem vitality are: water resources, agriculture, forests, fisheries, biodiversity and habitats, climate and energy. The ranking is given to 180 countries based on the above-mentioned parameters.

The significance of the Environmental Performance Index in relation to green products and consumers' preference for green products can be easily co-related in a simple manner, as green products ensure that there is a constant check on the factors under study by the Environmental Performance Index. A higher ranking in the Environment Performance Index is critical for our country because it will indicate the trend or direction of GDP growth if there is a higher ranking in the Environment Performance Index that shows a positive contribution of economic growth where there are balanced and systematic growth plans that give equal importance to economic growth and, at the same time, equal importance to environmental protection and national stability.

So, it is clear that the positive trend of GDP growth can be indicated by the Environmental Performance Index, but the question is, what is the present rank of our nation in the same ranking procedure? As per the 2018 ranking, India is ranked in the bottom five of the total rank of 180 countries, in the 177th position. This may be due to poor performance of environmental health policies, but it must be addressed with extreme caution because when a country is ranked low in the Environment Performance Index, it indicates negative GDP growth. What we mean by negative GDP growth is that economic growth has caused a lot of destruction to nature and the eco-system. In short, economic growth is not in a sustainable way. So, there is no balance between GDP growth and environmental protection. So, to

ensure there is positive growth in the economy along with equal importance to the ecological aspects of the nation, there must be a proper framework of environmental health structure through building a market for green products and promoting the green market in the Indian economy, which will ensure there is ecological stability and, in turn, help in achieving better ranks in the Environmental Performance Index.

When we deal with green products, we come to an understanding that green products are not just about developing products in an eco-friendly way but also ensuring that throughout the life cycle of the product there is no negative impact on the environment, so that through the promotion of green products in the Indian market there are chances of improving the current lower rank of our nation. So, there is a need to establish a market for green products so that there is less impact on the environment. This will also ensure the factors for the consideration under the ranking procedure of the Environmental Performance Index, like health, sanitation, availability of water, and the various eco-system vitality factors, including forest eco-system, fisheries, biodiversity, climate, etc., are considered in the development and promotion of green products so that there is an effective and balanced sustainable development in the economy, which will ensure there is an improved Environmental Performance Index.

### **3.7 GREEN PRODUCTS CERTIFICATIONS**

There are various certifications which will assist in making a green purchasing decision. This is to ensure consumers are not being deceived regarding green products. The certifications can be both national and international that will help in differentiating between what's original and fake.

Some of the certifications provided to green products are listed below

**Energy Star:** A labelling program for energy-efficient homes, building products, electronics, and appliances.

**Green Seal:** An eco-label used by producers and service providers in order to pinpoint products and certain services like restaurants hotels etc. follows a sustainable standard.

**Forest Stewardship Council:** A certification program for wood products that come from forests that are managed in an environmentally responsible, socially beneficial and economically viable way.

**Leadership in Energy and Environmental Design (LEED):** The LEED certification was created by the U.S. Green Building Council in 2000. It is an internationally recognized standard for green building and design.

**USDA Organic Product:** A labelling used to ensure that the food or agricultural products have been produced through approved methods.

### **3.8 THE CURRENT INDIA ECONOMY POTENTIAL FOR GREEN PRODUCTS**

When we consider the present-day advertisement campaigns for products and services, there is a prominent space for green products and services. This is a clear indicator showing the change in the market towards green purchasing culture amongst the consumers.

As a result, the manufacturers and the marketers of products are coming up with green substitutes and much more environmentally sound product ideas and products in the market.

In a report by the Economic Times published in 2014 based on the nationwide survey conducted in India by DuPont, an American chemical company, with the objective of better understanding the awareness and attitudes of Indian consumers towards green and bio-based products, pointed out that majority of Indian consumers are familiar with green products, have confidence that green products are better for the environment, and feel that bio-based ingredients enhance the desirability of a product.

The survey was the third such study by the company, with the first conducted in North America (the US and Canada) and the second in China. The research took place in 12 major Indian cities, with 1,270 respondents giving face-to-face interviews. The observation of the survey was that more than 63 percent of consumers are familiar with green products, and of those, 85 percent have confidence that they are better for the environment. Compared with the surveys conducted in other parts of the country, India's confidence in green products being better for the environment (85 percent) is higher than other countries surveyed by DuPont in previous years, as per the said survey. Previous studies found China to be 70 percent confident, Canada to be 65 percent confident, and the United States to be 60 percent confident. However, Canada (78 percent) and the United States (76 percent) outnumber India (63 percent) and China (43 percent) in terms of overall familiarity with green products.

This trend can be easily understood from the change in consumer preference towards LED lighting, recycled wood, energy-saving air conditioners, solar products, eco-friendly paints, etc. in the economy.

This change has just begun a few years back. When we consider the market situation five to ten years back, consumers did not have much knowledge or awareness about these products. The trend started a few years back as a result of the rapid promotion given to LED bulbs and eco-friendly paints, etc. through effective marketing campaigns amongst the prospective consumers in the market.

The market for environmentally sound products and services has grown significantly with regard to establishing new products in an eco-friendly way and making existing products and services environmentally sound. Then too, there exists a huge untapped business potential in the environmental sector. This could be due to the lack of support and orientation for entrepreneurs looking to enter into environmental sector ventures, so there are various support schemes for the benefit of eco-entrepreneurs. This includes the various schemes offered by the various governments in the centre and state in sectors like IT-enabled services, electronics, agriculture, manufacturing, industry-agnostic, etc. Some of the examples of the schemes include the following:

- ❖ Support for International Patent Protection in Electronics and Information Technology (SIP-EIT)
- ❖ MGS stands for Multiplier Grants Scheme.
- ❖ Software Technology Park (STP) Scheme
- ❖ Newbern Innovation and Entrepreneurship Development Centre (Newbern
- ❖ IEDC)
- ❖ SIDBI's Sustainable Finance Scheme, for example.

There are various other initiatives by various other organizations for the development of industrial establishments in the environmental sector. One such initiative is New Ventures India, a joint initiative of the CII (Confederation of Indian Industries) and the World Resources Institute that provides financial support to entrepreneurs. The sectors in which they provide support include clean technology, green building materials, renewable energy, organic agriculture, energy efficiency, and eco-tourism.



As per their financial assistance scheme, they came to a conclusion regarding the average investment required by a green start-up initially, which would be in the range of Rest one-ten core.

The above trend shows the potential market for green products in the Indian market. Henceforth, it is clear to draw a conclusion from the above paragraphs. Starting and carrying on a business in an environmentally sound manner is possible because there are various support schemes from various sources that will ensure a stable business.

### **3.9 MARKET PRESENCE OF GREEN PRODUCTS AND SERVICES IN THE INDIAN ECONOMY IN DIFFERENT PRODUCT AND SERVICE SECTIONS**

As per the International Lifestyles Survey 2019 conducted by Euro monitor, clearly states that words like "eco-friendly", "recyclable", "charity" and "natural" are the new buzzwords influencing purchases of consumer products in India—from soaps and cosmetics to tea and soft drinks and more. According to the findings of a Euro monitor study conducted among Indian consumers to learn about the parameters influencing green purchase decisions, environment-consciousness and eco-friendliness of brands were ranked as the highest parameters influencing shoppers (67%), followed by natural and organic ingredients (66%) and 65%), respectively.

This is a clear indicator of the shift of consumer groups towards green products and services in the consumer product segment. But green or eco-friendly products and services are not just confined to consumer products and services; their scope is very broad in various product and service classes. Likewise, one such prominent product or service class is the infrastructure development industry. What makes it a prominent industry in the economy is due to its economic contribution to society.

Simultaneously, infrastructure developments are a barometer of a country's economic progress and development. So, it is clear what makes the infrastructural industry important, but at the same time, there can be various problems associated with this industry, as there is always a social cost associated with this industry, so it is important to keep the social costs in constant check.

The main reason behind adding up social costs in the real estate business is the fact that real estate development is one of the biggest consumers of natural resources and generates significant amounts of waste and pollutants. According to a report by India's leading property consultant firm, ANAROCK Property Consultants, Business Line published an article in 2018 stating that the real estate sector alone consumes approximately 40% of natural raw materials, 25% of water, and 35% of energy resources. Furthermore, it emits 40% of waste and 35% of greenhouse gases, indicating the existence of a social cost for real estate or infrastructure projects.

The most effective way in which the social cost can be addressed in the most environmentally sound way is through adopting a green building culture amongst society. Green building is a unique concept in the development of infrastructural undertakings where both structure and processes are environmentally responsible and resource-efficient throughout a building's life cycle.

Ana rock Property Consultants also reported that green buildings can improve the environment in numerous ways. The consultant said that they can reduce energy consumption by 20–30 percent, water usage by 30–50 percent, and significantly reduce waste generation through extensive recycling. However, green buildings may cost up to 15% more than conventional buildings. Still, the long-term benefits, such as low operating costs, along with potential health benefits for the occupiers, make it a viable option.

Their report said that the growth of green buildings in India would be driven by increasing awareness, environmental benefits, government support, subsidies, and compulsions. Improving affordability is also a factor in growth. The report also pointed out that countries with a larger population and limited resources should adopt green building practices faster to have sustainable development.

The main finding of the study conducted by ANAROCK Property Consultants was that the green building market in India is estimated to double by 2022 to 10 billion sq. ft., valued at around USD 35–50 billion, driven by increasing awareness level, environmental benefits, and government support.

The studies mentioned above are clear indicators of the increase in the market presence of green products, but when we try to understand the overall presence of green products

in the market, there are various difficulties in drawing an overall conclusion. As there exist both heterogeneous and homogeneous product classes in a market structure, so, there is always a practical difficulty in drawing a general conclusion about the market for green products, because of which we have to separately identify the presence of green products in various product groups or segments.

However, the overall goal of our study is to learn about general consumer awareness of green products and purchasing behaviour, the effects of premium pricing on green products, and consumer satisfaction levels.

overall, the consumers are having the positive attitude towards the consumption of the green products. Further, the consumers are absolutely satisfied with the green products quality, price, and features. The study also found that the consumers are willing to consuming the green products a long time and they are happily recommending using the green products friends, relatives, and neighbours. The consumer's buying behaviour is good enough to use the green products in the study area.

**CHAPTER 4**  
**DATA ANALYSIS AND**  
**INTERPRETATION**

## 4. DATA ANALYSIS AND INTERPRETATION

Analysis and interpretation of data is necessary to understand the problem and arrive at a conclusion. Data analysis transform the data into the information of the research. Data interpretation draws the conclusion from the data collected.

This chapter includes the responses obtained from 110 respondents of Cochin city in the forms of tables, graphs and diagram.

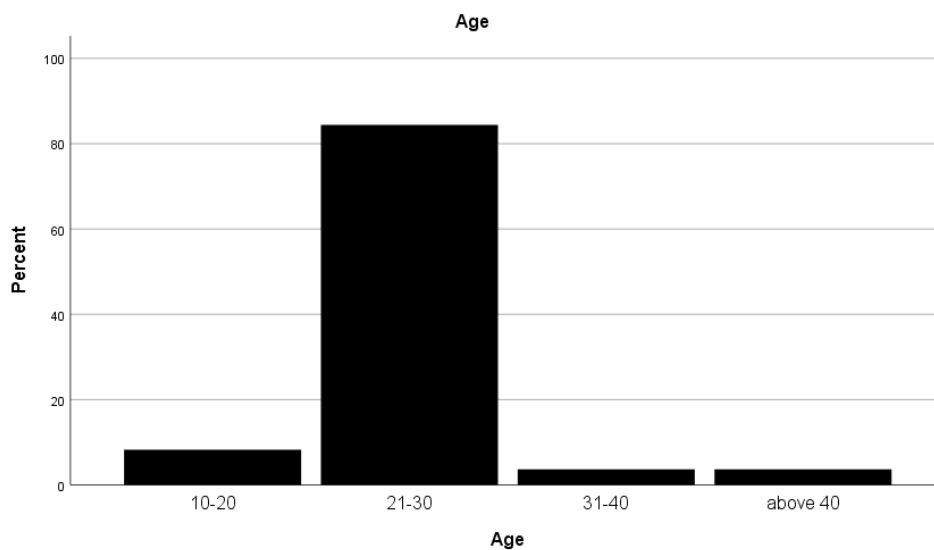
### 4.1.AGE

Table 4.1 Age Wise Classification of Respondents

Age					
		Freque ncy	Percent	Valid Percent	Cumulative Percent
Valid	10-20	9	8.3	8.3	8.3
	21-30	92	84.4	84.4	92.7
	30-40	4	3.7	3.7	96.3
	>40	4	3.7	3.7	100.0
<b>Total</b>	<b>109</b>	<b>100.0</b>	<b>100.0</b>		

Source of Data: Online Survey

Fig 4.1 Age wise classification of Respondent



## Interpretation

From the above figure and table 4.1, it can be inferred 84.4 percent of the respondents belong to the age category of 21 and 30, 8.3 percent belong to the age category between 10 and 20, 3.7 percent belong the age category between 30 and 40 and 3.7 percent of the respondents belong to the age category of above 40

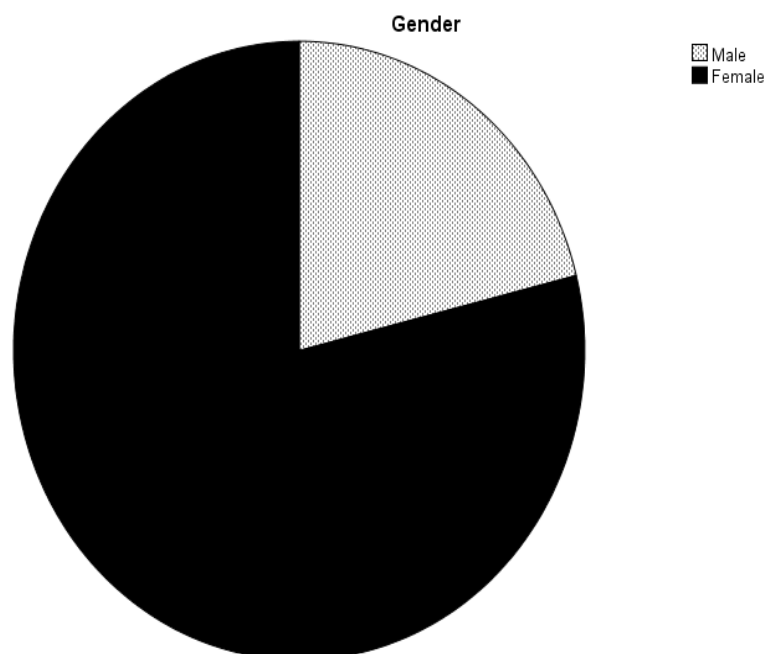
## 4.2. GENDER

Table 4.2 Gender wise classification of Respondents

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	23	21.1	21.1	21.1
	Female	86	78.9	78.9	100.0
	<b>Total</b>	<b>109</b>	<b>100.0</b>	<b>100.0</b>	

Source of Data: online survey

Fig 4.2 Gender wise classification of Respondents



## Interpretation

From the above figure and table4.2, it can be understood that 78.9 percent of the respondents are female and 21.1 percent are male.

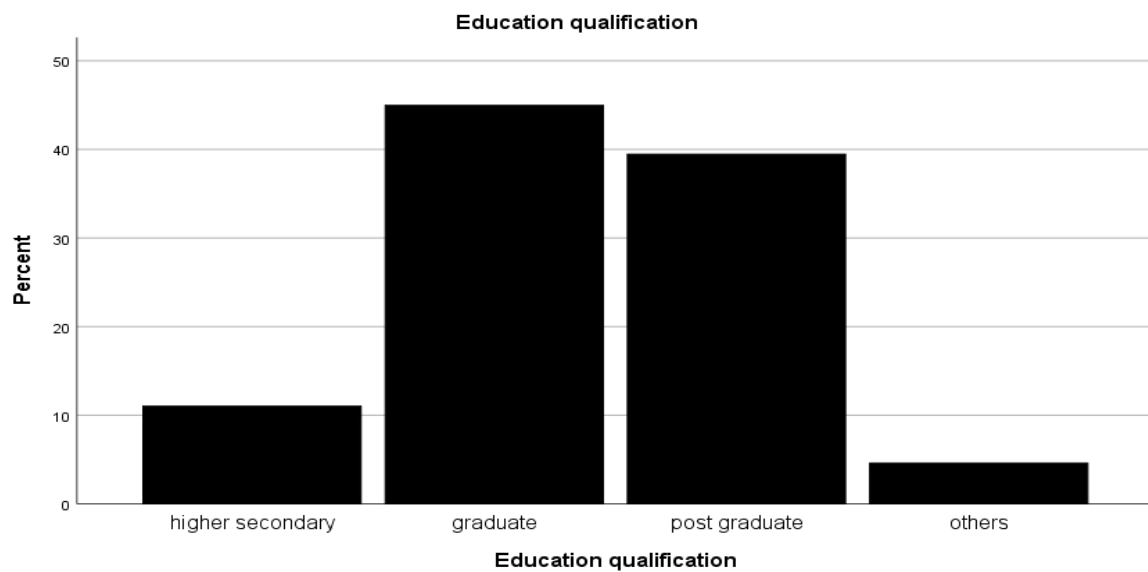
### 4.3 Educational Qualification of Respondents

Table 4.3 Educational qualification of Respondents

Educational qualification					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Higher Secondary	12	11.0	11.0	11.0
	Graduate	49	45.0	45.0	56.0
	Post Graduate	43	39.4	39.4	95.4
	Others	5	4.6	4.6	100.0
	<b>Total</b>	<b>109</b>	<b>100.0</b>	<b>100.0</b>	

Source of Data: Online survey

Fig 4.3 Educational qualification of Respondents



#### Interpretation

From the above figure and table 4.3, it is evident that 45 percent of the respondents were graduates, 39.4 percent of the respondents were post-Graduates, 11 percent completed higher secondary and 4.6 percent of the respondents belong to other education qualification.

#### 4.4 Classification on the basis Occupation of Respondents

Table 4.4 Occupation of Respondents

		Occupation			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	69	63.3	63.3	63.3
	Business	3	2.8	2.8	66.1
	Professional	17	15.6	15.6	81.7
	Others	20	18.3	18.3	100.0
	<b>Total</b>	<b>109</b>	<b>100.0</b>	<b>100.0</b>	

Source of Data: Online survey

Fig 4.4 Occupation of Respondents



#### Interpretation

From the above figure and table 4.4, 63.3 percent of the respondents were students, 18.3 percent of the respondents belong to other category of occupation, 15.6 percent were professionals and 2.8 percent of the respondents were doing business.



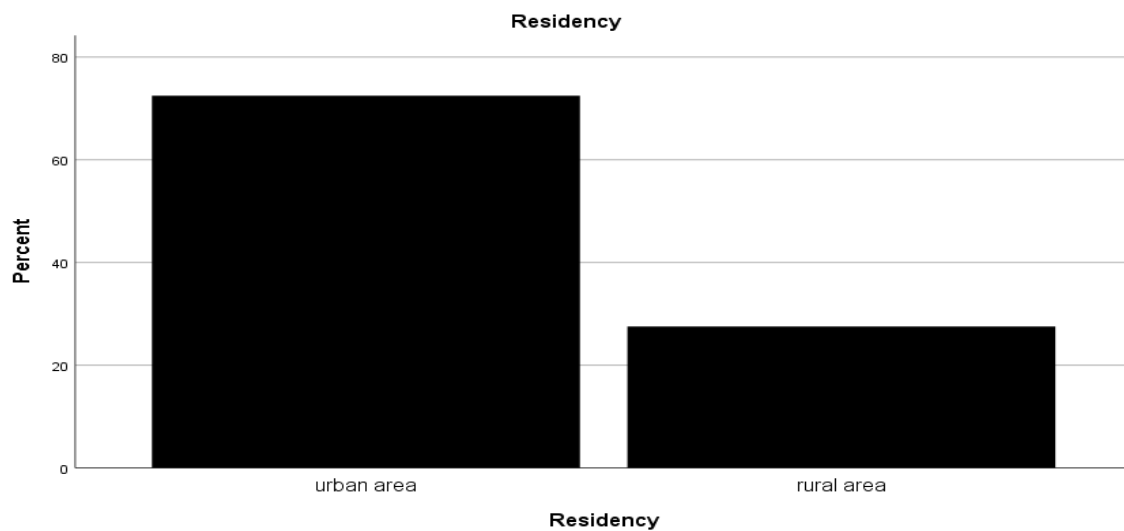
#### 4.5 Classification on the basis of Residency

Table 4.5 Residency of Respondents

		Residency			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Urban area	79	72.5	72.5	72.5
	Rural area	30	27.5	27.5	100.0
<b>Total</b>		<b>109</b>	<b>100.0</b>	<b>100.0</b>	

Source of Data: Online survey

Fig 4.5 Residency of Respondents



#### Interpretation

From the above figure and table 4.5, it can be inferred that 72.5 of the respondents were from Urban area and 27.5 percent of the respondents were from Rural area.

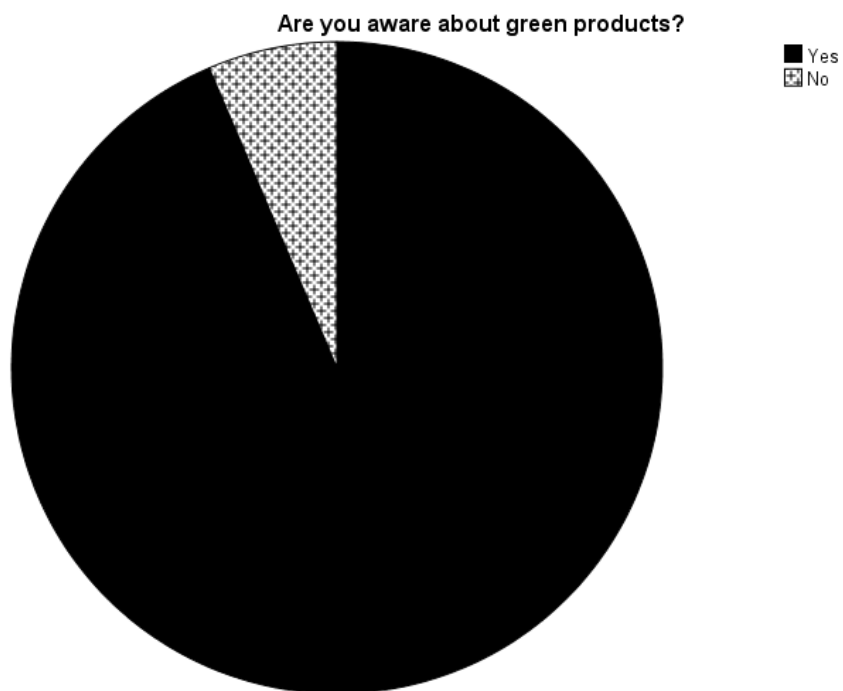
#### 4.6 Classification on The Basis Awareness of Respondents About Green Product?

Table 4.6 Awareness about green products

Awareness about green products					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	102	93.6	93.6	93.6
	No	7	6.4	6.4	100.0
<b>Total</b>		<b>109</b>	<b>100.0</b>	<b>100.0</b>	

Source of Data: Online survey

Fig 4.6 Awareness about green products



#### interpretation

From the above figure and table 4.6, it can be inferred that 93.6 percent of the respondents have awareness about the green products and 6.4 percent of the respondents do not have awareness about green products.

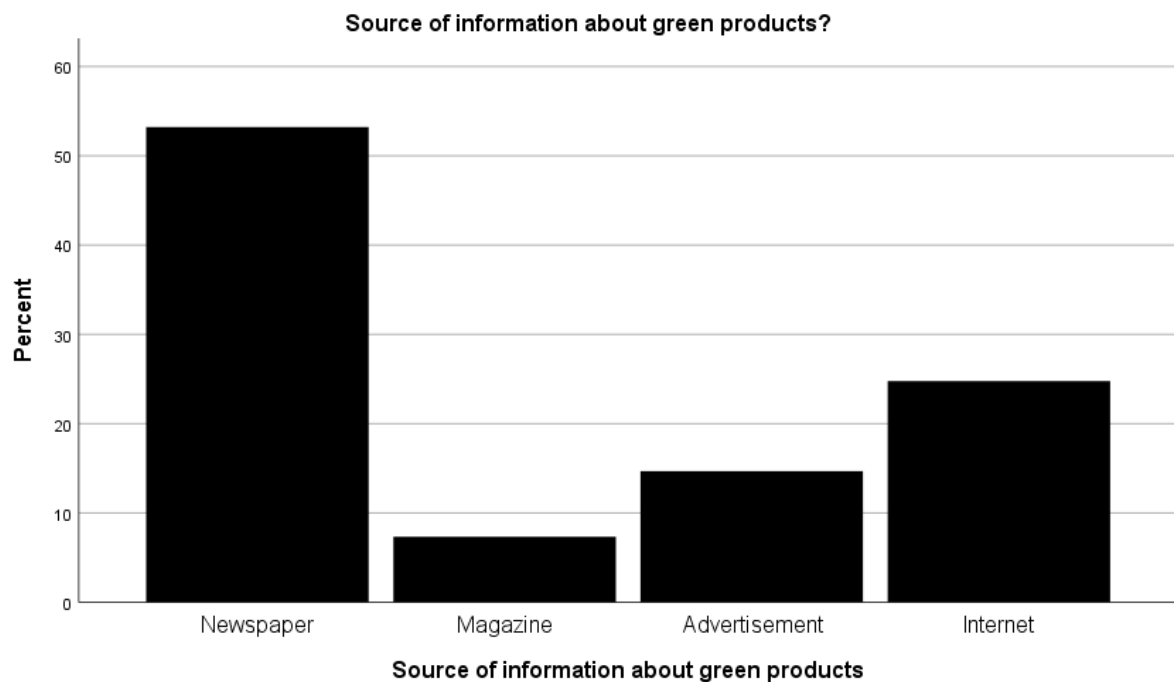
#### 4.7 Classification on The Basis of Source of information about green products.

Table 4.7 Source of information about green products

Source of information about green products					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Newspaper	58	53.2	53.2	53.2
	Magazine	8	7.3	7.3	60.6
	Advertisement	16	14.7	14.7	75.2
	Internet	27	24.8	24.8	100.0
	<b>Total</b>	<b>109</b>	<b>100.0</b>	<b>100.0</b>	

Source of Data: Online survey

Fig 4.7 Source of information about green products



#### interpretation

From the above figure and table 4.7, it can be inferred that 53.2 percent of the respondents received information about the green products from Newspaper, 24.8 percent from Internet, 14.7 percent from Advertisement and 7.3 percent of the respondent's received information from Magazine.

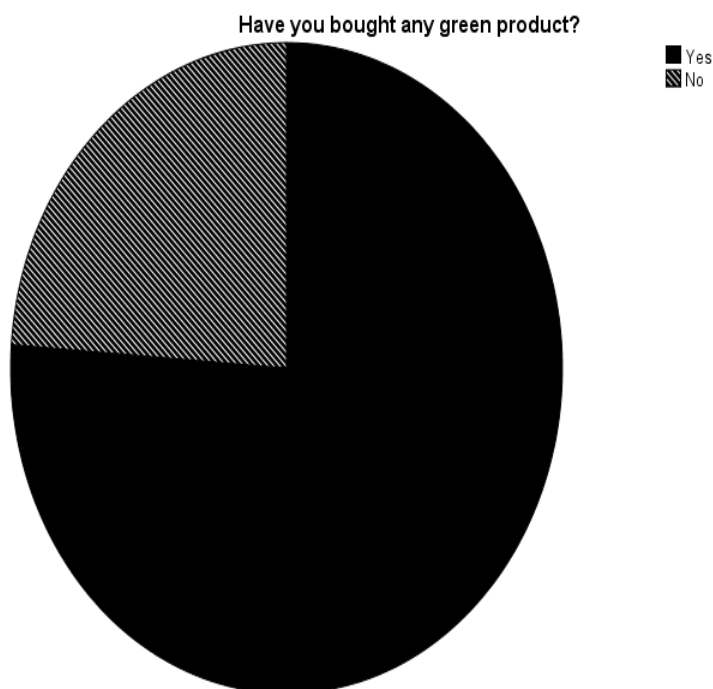
#### 4.8 Classification on The Basis of Buying Green Products

Table 4.8 Classification on the basis of buying green products

Classification on the basis of buying green products					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	83	76.1	76.1	76.1
	No	26	23.9	23.9	100.0
<b>Total</b>		<b>109</b>	<b>100.0</b>	<b>100.0</b>	

Source of Data: Online survey

Fig 4.8 Classification on the basis of buying green products



#### Interpretation

From the above figure and table 4.8, it can be inferred that 76.1 percent of the respondents have purchased green product and 23.9 percent of the respondents did not purchase any green product.

#### 4.9 Cross tab calculation for green products that you are aware

Table 4.9 Cross tab calculation for green products that you are aware

\$Green_products*Gender Crosstabulation						
			Gender		Total	
			Male	Female		
\$Green_product s <sup>a</sup>	solarpoweredproducts	Count	12	42	54	
		% Within	52.2%	48.8%		
		Gender				
	sustainableshoppingba g	Count	11	59	70	
		% Within	47.8%	68.6%		
		Gender				
	ElectricstepsLEDampOt herappliances	Count	7	37	44	
		% Within	30.4%	43.0%		
		Gender				
	conceptualelectricvehi clesdesigns	Count	6	22	28	
		% Within	26.1%	25.6%		
		Gender				
	CO2madehandsanitize r	Count	8	23	31	
		% Within	34.8%	26.7%		
		Gender				
	woodenandbamboopr oducts	Count	10	60	70	
		% Within	43.5%	69.8%		
		Gender				
	<b>Total</b>		<b>Count</b>	<b>23</b>	<b>86</b>	<b>109</b>
	Percentages and totals are based on respondents.					
	a. Dichotomy group tabulated at value 1.					

Source of Data: Online survey

## Interpretation

From the table 4.8, it can be inferred that 23 male and 86 female responded for the survey. Regarding awareness about solar power 52.2 percent of the male have awareness and 48.8 percent of the female have awareness. With regards to sustainable shopping bag 47.8 percent male and 68.6 percent of female have awareness. With regards to Electric steps LED and Other appliances 30.4 percent of male and 43 percent of female have awareness about it.

Regarding conceptual electric vehicle designs 26.1 percent of the male respondents have awareness about it and 25.6 percent of the female respondents have awareness about it. With regards to CO2 made hand sanitizer 34.8 percent of the male respondents have awareness about it and 26.7 percent of the female respondents have awareness about it. Regarding wooden and bamboo products 43.5 percent of the male respondents have awareness about it and 69.8 percent of the female respondents have awareness about the green product bamboo products.

### 4.10 Classification on the basis of reasons to buy green products

**Table 4.10 Classification on the basis of reasons to buy green products**

Classification on the basis of reasons to buy green products					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Product features	52	47.7	47.7	47.7
	Packaging	13	11.9	11.9	59.6
	Environmental issues	41	37.6	37.6	97.2
	Promotional campaigns	3	2.8	2.8	100.0
	<b>Total</b>	<b>109</b>	<b>100.0</b>	<b>100.0</b>	

Source of Data: Online Survey

**Fig 4.10 Classification on the basis of reasons to buy green products**



**Interpretation**

From the above figure and table 4.10, it can be inferred that 47.7 percent of the respondents purchase a green product due to its product features, 37.6 percent of the respondents purchase to reduce environment issues, 11.9 of the respondents purchase due to its packaging feature and 2.8 percent of the respondents purchase green products under the influence of promotional campaigns.

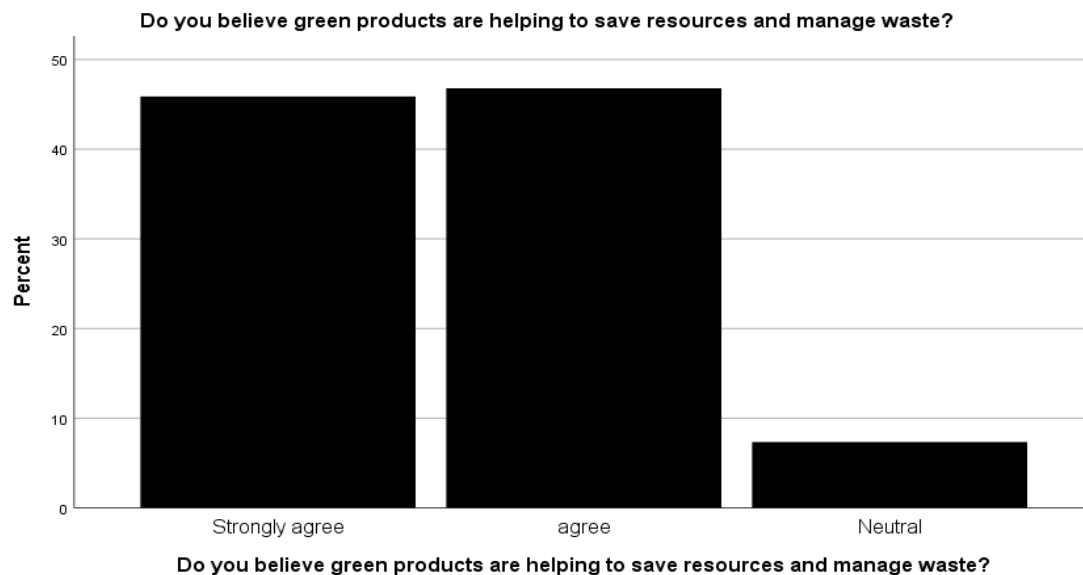
**4.11 Classification on the basis of opinion of respondents about green products are helping to save resources and manage waste**

Table 4.11 Classification on the basis of opinion of respondents about green products are helping to save resources and manage waste

Classification on the basis of opinion of respondents about green products are helping to save resources and manage waste					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	50	45.9	45.9	45.9
	agree	51	46.8	46.8	92.7
	Neutral	8	7.3	7.3	100.0
	<b>Total</b>	<b>109</b>	<b>100.0</b>	<b>100.0</b>	

Source of Data: Online survey

Fig 4.11 Classification on the basis of opinion of respondents about green products are helping to save resources and manage waste



### Interpretation

From the above figure and table 4.11, it can be inferred that 46.8 percent of the respondents agree that green products are helping to save resources and manage waste, 45.9 percent of the respondents agree and 7.3 percent of the respondents have a neutral opinion.

### 4.12 Classification on the basis of challenges of green products

Table 4.12 Classification on the basis of challenges of green products

Challenges*Gender Crosstabulation					
			Gender		Total
			Male	Female	
Challenges <sup>a</sup>	Costly	Count	8	50	58
		% within Challenges	13.8%	86.2%	
		Count	6	26	32



require huge investment	% within \$Challenges	18.8%	81.3%	
lack of awareness	Count	10	43	53
	% within \$Challenges	18.9%	81.1%	
time consuming	Count	4	24	28
	% within \$Challenges	14.3%	85.7%	
lack of proper support	Count	9	46	55
	% within \$Challenges	16.4%	83.6%	
<b>Total</b>	<b>Count</b>	<b>23</b>	<b>86</b>	<b>109</b>

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

Source of Data: Online survey

### Interpretation

From the above table 4.12, it can be inferred that there were 23 male respondents and 86 female respondents. 13.8 percent of the male respondents and 86.2 percent of the female respondents mention that cost of the green product would be a challenge that they might face. 18.8 percent of the male respondent's 81.3 percent of the female respondents mention that they might require huge investment.

18.9 percent of the male respondents and 81.1 percent of the female respondents mention that lack of awareness about the green products might be one of the challenges they face. 14.3 percent of the male and 85.7 percent of the female respondents mention that one of the challenges that they might face was time consumption. 16.4 percent of the male and 83.6 percent of the female respondents mention that lack of proper support might be another challenge.

#### 4.13 Classification on the basis of factors that influenced to purchase green products

Table 4.13 classification on the basis of factors that influenced to purchase green products

\$Factors*Gender Crosstabulation					
			Gender		
			Male	Female	Total
\$Factors <sup>a</sup>	Enhance quality of life	Count	11	55	66
		% within	16.7%	83.3%	
		\$Factors			
	Environmental protection responsibility	Count	15	61	76
		% within	19.7%	80.3%	
		\$Factors			
	Potential increase of product value	Count	3	20	23
		% within	13.0%	87.0%	
		\$Factors			
	High level of satisfaction	Count	3	28	31
		% within	9.7%	90.3%	
		\$Factors			
<b>Total</b>		<b>Count</b>	<b>23</b>	<b>86</b>	<b>109</b>
Percentages and totals are based on respondents.					
a. Dichotomy group tabulated at value 1.					

#### Interpretation

From the above the table 4.13, it can be inferred that there were 23 male respondents and 86 female respondents. 16.7 percent of the male and 83.3 percent of the female respondents mentioned that one of the factors that influenced to purchase green product was that the green products enhance quality of life. 19.7 percent of the male and 80.3 percent of the female respondents mentioned that factor that influenced them was environmental protection responsibility.

13 percent of the male and 87 percent of the female respondents mentioned that Potential increase of product value was another factor that influenced them. 9.7 percent male

and 90.3 percent female respondents mentioned that high level of satisfaction was another factor that influenced to purchase green products.

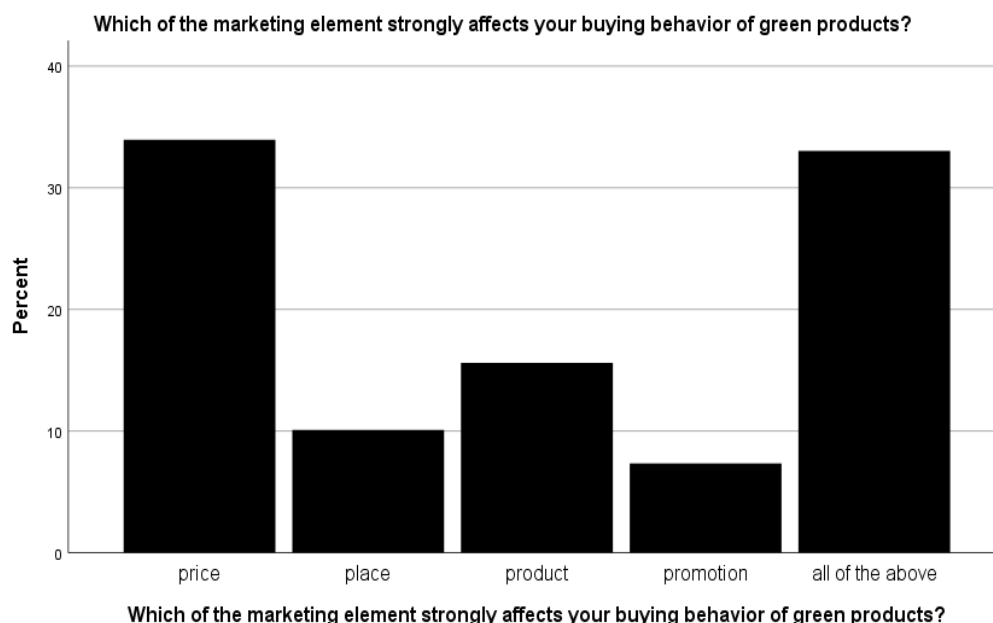
#### 4.14 classification of marketing element which affects the buying behaviour of respondents

Table 4.14 classification of marketing element which affects the buying behaviour of respondents

classification of marketing element which affects the buying behaviour of respondents					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Price	37	33.9	33.9	33.9
	Place	11	10.1	10.1	44.0
	Product	17	15.6	15.6	59.6
	Promotion	8	7.3	7.3	67.0
	All of these	36	33.0	33.0	100.0
	<b>Total</b>	<b>109</b>	<b>100.0</b>	<b>100.0</b>	

Source of Data: Online survey

Fig 4.14 classification of marketing element which affects the buying behaviour of respondents



## Interpretation

From the above figure and table 4.14, it is evident that 33.9 percent of the respondents mention that marketing element price affects their buying behaviour, 33 percent of the respondents mention that all of these have strong influence, 15.6 percent mention that product was the marketing element which influenced them, 10.1 percent mentioned that place was another element that influences them and 7.3 percent mentioned that promotion was another element which influenced their buying behaviour.

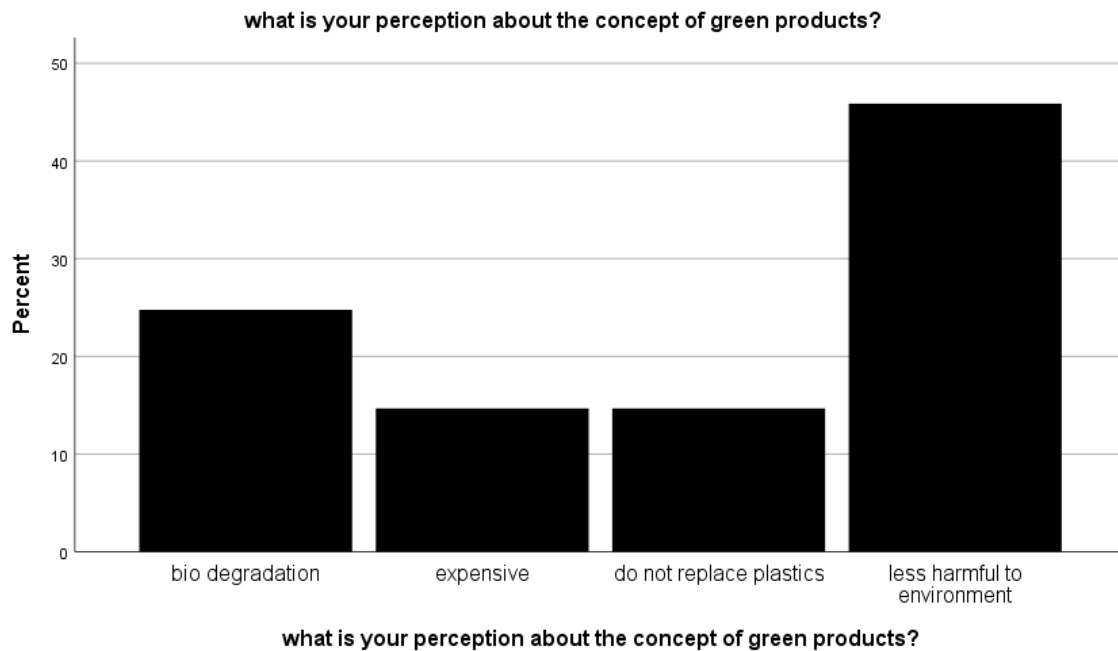
## 4.15 classification on the basis of perception of respondents about the concept of green product

Table 4.15 classification on the basis of perception of respondents about the concept of green product

classification on the basis of perception of respondents about the concept of green product					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bio degradation	27	24.8	24.8	24.8
	Expensive	16	14.7	14.7	39.4
	Do not replace plastics	16	14.7	14.7	54.1
	Less harmful to environment	50	45.9	45.9	100.0
	Total	109	100.0	100.0	

Source of Data: online survey

Fig 4.15 classification on the basis of perception of respondents about the concept of green product



### Interpretation

From the above figure and table, it can be inferred that 45.9 percent of the respondents mentioned that they perceive that the green products might be less harmful to environment, 24.8 percent mention that they perceive green products as bio degradation, 14.7 percent mention that they perceive that green products do not replace plastics and 14.7 percent mentioned that they perceive that green products might be expensive.

#### 4.16 Descriptive Statistics

Table 4.16 Descriptive statistics

Descriptive Statistics			
	N	Mean	Std. Deviation
Price_1	109	2.22	.599
Price_2	109	2.50	.661
Price_3	109	2.25	.611
Will_1	109	2.28	.654
Will_2	109	1.99	.700
Will_3	109	2.09	.674
Will_4	109	2.39	.719
Will_5	109	1.80	1.325
Will_6	109	1.87	.695
Satisfac	109	1.91	.727
Valid N (listwise)	109		

#### Interpretation

Three constructs have been measured. The dependent variable taken was Willingness to Purchase and Independent variables are pricing of green products and level of satisfaction. N = sample size, in this study it is 109. Mean and Standard Deviation was also measured which can be seen from the above table.

#### Hypothesis 1

H<sub>0</sub>: Pricing do not have an effect on willingness to purchase green products.

H<sub>1</sub>: Pricing has a significant effect on willingness to purchase green products.

Table 4.17 Model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.214 <sup>a</sup>	.046	.037	.51257

a. Predictors: (Constant), Price

Source of Data: Online survey

Table 4.18 ANOVA

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.348	1	1.348	5.132	.026 <sup>b</sup>
	Residual	28.112	107	.263		
	Total	29.461	108			

a. Dependent Variable: Willing\_to\_Purchase  
b. Predictors: (Constant), Price

Source of Data: Online survey

Table 4.19 Coefficients

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.484	.263		5.638	.000
	Price	.252	.111	.214	2.265	.026

a. Dependent Variable: Willing\_to\_Purchase

Source of Data: Online Survey

### Interpretation

A simple linear regression was calculated to analyse the pricing of green products on willingness to purchase green products. A significant regression equation was found ( $F(1,107) = 5.132, p = 0.02$ ), with an  $R^2$  of 0.046. The predictor was found to be significant ( $B=0.214, p$

=0.026). The model explained approximately 4.6 % of the variability. Therefore, null hypothesis is rejected and alternative hypothesis is retained.

### Hypothesis 2

H<sub>0</sub>: Level of satisfaction do not have an effect on willingness to purchase green products.

H<sub>1</sub>: Level of satisfaction has a significant effect on willingness to purchase green products.

Table 4.20 Model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.220 <sup>a</sup>	.049	.040	.51182
a. Predictors: (Constant), Satisfac				

Source of Data: Online survey

Table 4.21 ANOVA

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.431	1	1.431	5.461	.021 <sup>b</sup>
	Residual	28.030	107	.262		
	Total	29.461	108			
a. Dependent Variable: Willing_to_Purchase						
b. Predictors: (Constant), Satisfac						

Source of Data: Online survey



Table 4.22 coefficients

Coefficients <sup>a</sup>						
Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	1.768	.138		12.790	.000
	Satisfac	.158	.068	.220	2.337	.021

a. Dependent Variable: Willing\_to\_Purchase

Source of Data: Online survey

### Interpretation

A simple linear regression was calculated to analyse the level of satisfaction on willingness to purchase green products. A significant regression equation was found ( $F(1,107) = 5.461$ ,  $p = 0.021$ ), with an  $R^2$  of 0.049. The predictor was found to be significant ( $B = 0.220$ ,  $p = 0.021$ ). The model explained approximately 4.9 % of the variability. Therefore, null hypothesis is rejected and alternative hypothesis is retained.

**CHAPTER 5: FINDINGS, SUGGESTIONS AND  
CONCLUSIONS**

## 5.1 FINDINGS

- ❖ The majority of the respondents belonged to 21-30 age group (84.4%) & who were mainly students.
- ❖ The male to female ratio of the study was maintained at 2:3. Females make up the vast majority of respondents, as compared to male.
- ❖ Majority of respondents have a graduate qualification.
- ❖ 72.5% of the respondents were from Urban area and 27.5% of the respondents were from Rural area.
- ❖ Majority of the respondents have awareness about the green products (93.6%) and 6.4% of the respondents do not have awareness about green products.
- ❖ 53.2 percent of the respondents received information about the green products from Newspaper, 24.8 percent from Internet, 14.7 percent from Advertisement and 7.3 percent of the respondent's received information from Magazine.
- ❖ Majority of the respondent have purchased green products (76.1%). 23.9 percent of the respondents did not purchase any green product.
- ❖ The majority of the respondents are influenced by the high potential value of the product.
- ❖ Majority of the respondents agree that green products are helping to save resources and manage waste (92.7%). 7.3% of the respondents have a neutral opinion.
- ❖ Lack of awareness, high costs and time consuming are the major challenges for green products, according to the majority of respondents.
- ❖ Majority of the respondents agree that High level of satisfaction and potential increase of product value are the main factor that influenced to purchase green product.
- ❖ Most of the respondents affect price elements through marketing.
- ❖ Majority of the respondents mentioned that they perceive that the green products might be less harmful to environment.
- ❖ Most of the respondents (66.7%) have a less harmful-to-the-environment perception of green products.
- ❖ It is clear that the majority of the respondents (36.7%) agree with the opinion that they create a positive impact on society by switching into green products.
- ❖ Most of the respondents have recommended green products to their friends.

- ❖ Majority of the respondents are satisfied by using green products.
- ❖ Around 80per cent of the respondents are of the opinion that green products last longer compared to other products
- ❖ Most of the respondent's willingness to purchase green product for an eco-friendly
- ❖ Most of the respondents prefer to use green products over non-green products.

## 5.2 SUGGESTIONS

- ❖ There must be more campaigns including larger section of the society towards green lifestyle practices.
- ❖ Consumers have felt deceived by fake green products. So, it is the responsibility of the concerned authorities to monitor the green market.
- ❖ Proper monitoring of green product/services market by authorities will also help in avoiding a situation of exorbitant pricing for green products.
- ❖ The economically weaker section of the society shall come in the ambit of green products and services. This can pave the way for new job opportunities for them.
- ❖ Consumers should be given more incentives by the concerned towards the promotion of green products.

### **5.3 CONCLUSION**

The topic of the study is “A Study of the Buying Behaviour of Consumers towards Green Products in Cochin City”. This study has high relevance in the modern economy due to the impact of environment degrading products. Sampling technique used was purposive sampling from 110 individuals. The objectives were to study the awareness about green products, purchase behaviour of consumer with respect to green products, to analyse the impact of premium pricing, and to measure the satisfaction level of consumers towards green products. The major finding of the study is that majority of people are aware of the existence of green products and its benefits in the consumer market. Consumers prefer green products as a result of its benefits and features but still, they are concerned about the price of green products. Even then, consumers were ready to pay more for green products considering its features. The effective utilization of marketing mix has contributed to the improved awareness towards the green products in the market. The shift in purchase behaviour towards the green products surmises that the society is ready to lead a green lifestyle. Even so, lack of monitoring and high cost deters the shift to this segment from traditional product line. All that we need is a change in the mindset of people. To see for them and accept what is important.

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## **APPENDIX**

## QUESTIONNAIRE

1.Name

2.Age

- 10-20
- 21-30
- 31-40
- above 40

3.Gender

- male
- female
- others

4)Education qualification

- higher secondary
- graduate
- post graduate
- others

5.Occupation

- student
- business
- professional
- others

6.Residency

- urban area
- rural area

7.Are you aware about green products?

- Yes
- No

8.From where you came to know about green products?

- Newspaper
- Magazine

- Advertisement
- Internet
- others:

9. Have you bought any green product recently?

- Yes
- No

10. What makes you buy a green product?

- Product features
- packaging
- Environmental issues
- promotion campaigns
- others:

11. Do you believe green products are helping to save resources and manage waste?

- strongly agree
- agree
- neutral
- disagree
- strongly disagree

12. What are the challenges of green products, in your perception?

- costly process
- require huge investment
- lack of awareness
- time consuming
- lack of proper support
- others:

13. What are the factors that influenced to purchase green products?

- enhance quality of life
- environmental protection responsibility
- potential increase of product value
- high level of satisfaction
- others:

14. From the following, which are the green products you are aware of?

- solar powered products
- sustainable shopping bag
- Electric steps (LED& Other appliances)
- conceptual electric vehicles designs
- CO2 made hand sanitizer
- wooden and bamboo products
- others:

15. Do you believe green products are overpriced?

- strongly agree
- agree
- neutral
- disagree
- strongly disagree

16. are you willing to pay higher price to green products?

- strongly agree
- agree
- neutral
- disagree
- strongly disagree

17. while purchasing, do you compare the price of green products with other normal products?

- strongly agree
- agree
- neutral
- disagree
- strongly disagree

18. do you prefer to use green products over non green products?

- strongly agree
- agree
- neutral
- disagree
- strongly disagree

19. rate your satisfaction on green products.

- extremely satisfied
- satisfied
- dissatisfied
- extremely dissatisfied

20. are you willing to purchase green product for an eco-friendly?

- strongly agree
- agree
- neutral
- disagree
- strongly disagree

21. which is the marketing element strongly affects your buying behaviour of green products?

- price
- place
- product
- promotion
- all of the above

22. what is your perception about the concept of green products?

- bio degradation
- expensive
- do not replace plastics
- less harmful to environment
- others:

23. does lack of awareness on green products affect purchase?

- strongly agree
- agree
- neutral
- disagree
- strongly disagree

24. do green products last long compared to other common products?

- strongly agree
- agree

- neutral
- disagree
- strongly disagree

25. do you recommend green products to your friends?

- strongly agree
- agree
- neutral
- disagree
- strongly disagree

26. does switching into green product create a positive impact on society?

- strongly agree
- agree
- neutral
- disagree
- strongly disagree

27. Do you have any suggestions?