



# INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

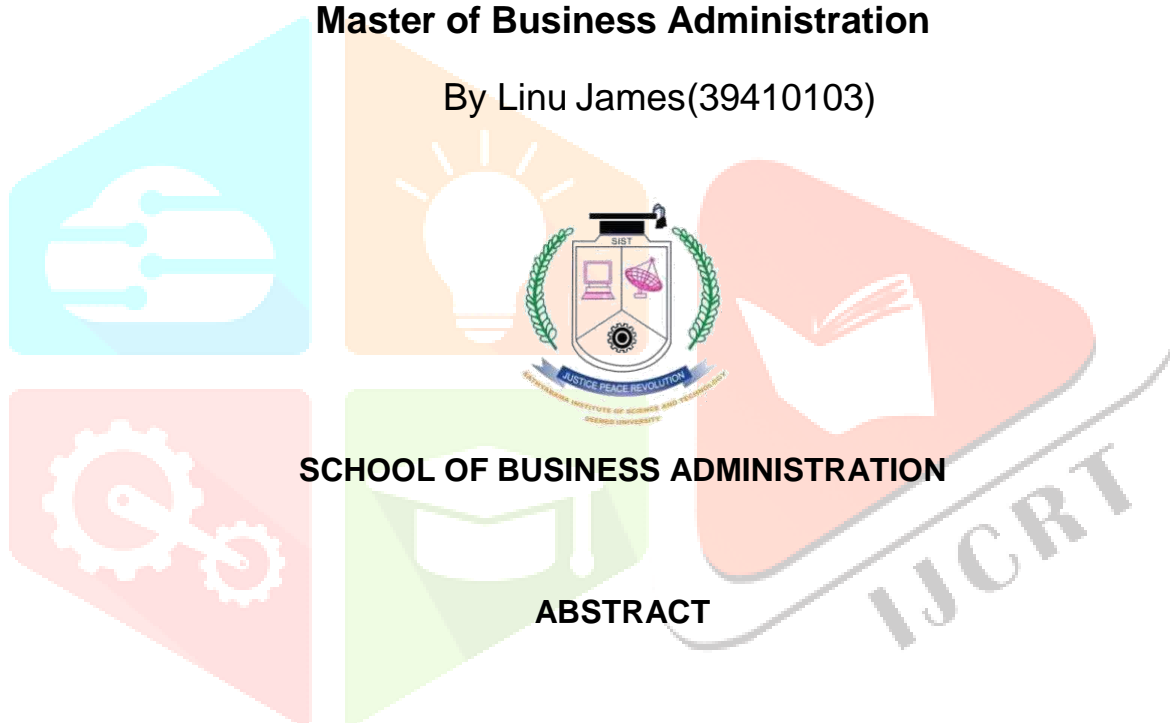
An International Open Access, Peer-reviewed, Refereed Journal

## A STUDY ON CONSUMER PERCEPTION TOWARDS GREEN MARKETING

Submitted in partial fulfillment of the requirements for the award of

**Master of Business Administration**

By Linu James(39410103)



In current business scenario environmental issues plays an important role in business. In most of the country's government is concerned about the environmental problems. In today's business environmentally sustainable development has become a key issue.

Green Marketing refers to the process of selling products and services based on their environmental benefits. Such a product or service should be eco-friendly in itself for product modification, changes to the production process, sustainable packaging, as well as modifying advertising. The present paper reviews the green marketing literature in various aspects, which include customer awareness, relationship between the customer awareness and usage of green products, effect of green products and benefits of the green products.

Green Marketing has been defined by AMA as "The study of the positive and negative aspects of marketing activities on pollution, energy depletion and non-energy resource depletion".

The study tries to analyse the awareness and willingness of the consumer to buy green products. However, one of the basic assumptions of green marketing is that potential consumers would be willing to pay more for a "green" product. For the study well-structured and close-ended questionnaire was used to collect the data from 114 respondents. The data was analyzed using percentage analysis, chi-square test and Friedman test. The results of the study show a bright future for green products in the present-day situations and the factors which enhancing the green products attractiveness in consumers.

## CHAPTER 1

### 1. INTRODUCTION:

#### 1.1 INTRODUCTION ABOUT THE STUDY

Green marketing is a modern concept which evolves in recent years. But Marketing is the holistic approach towards identifying and satisfying need and wants of consumer and potential consumer. Green Marketing means manufacturing and marketing of products and services which are manufactured through green processes. According to the American Marketing Association, "green marketing is the marketing of products that are presumed to be environmentally safe". Thus, green marketing incorporates a wide range of activities such as modification of product, changes to the production process, packaging changes, as well as modifying advertising etc.

Green Marketing is also known as Environmental Marketing and Ecological Marketing. Thus, Green Marketing is a holistic marketing concept wherein the production, marketing consumption and disposal of products and services happen in a manner that is less detrimental to the environment with growing awareness.

Green Marketing is not limited to adding green theme to brand name or making websites or product/packaging design with green color. It is the overall efforts of a company to eliminate processes which are detrimental to the environment and use environmentally friendly processes and packaging for manufacturing and presenting the products. By doing this a firm may have to spend few extra bucks initially but in the long run this will pay in terms of increased sales. Recently due to changes in policies for corporate results compliance procedure by SEBI all companies are using mail channels for reporting of financial results which has saved lot of paper and trees.

The firms benefited in terms of reduced cost. Such innovative practices can reduce waste, greenhouse gas emission and cost also. Today we all face a lot of environmental problems, one of the reasons why the green marketing emerged. Green marketing has now evolved as one of the major areas of interest for

marketers as it may provide competitive advantage. Green marketing will be successful only if the marketer understands the consumer behaviour. Hence it is essential to conduct a study on attitude and awareness of customers towards green products and factors influencing the buying behaviour of customers. So, this study is conducted to find out the attitude and awareness level of customers and their buying behaviour of eco-friendly product.

### ***Green marketing***

Green marketing involves developing and promoting products and services that satisfy customers' wants and needs for Quality, Performance, Affordable Pricing and Convenience without having a detrimental impact on the environment.

According to the American Marketing Association, green marketing is the marketing of products that are presumed to be environmentally safe. Thus, green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. Yet defining green marketing is not a simple task where several meanings intersect and contradict each other; an example of this will be the existence of varying social, environmental and retail definitions attached to this term. Other similar terms used are Environmental Marketing and Ecological Marketing.

### ***Evolution of green marketing***

The green marketing has evolved over a period of time. The term Green Marketing came into prominence in the late 1980s and early 1990s. The evolution of green marketing has three phases. First phase was termed as "Ecological" green marketing, and during this period all marketing activities were concerned to help environment problems and provide remedies for environmental problems. Second phase was "Environmental" green marketing and the focus shifted on clean technology that involved designing of innovative new products, which take care of pollution and waste issues. Third phase was "Sustainable" green marketing. It came into prominence in the late 1990s and early 2000.

### ***Why green marketing?***

As resources are limited and human wants are unlimited, it is important for the marketers to utilize the resources efficiently without waste as well as to achieve the organization's objective. So green marketing is inevitable. There is growing interest among the consumers all over the world regarding protection of environment. Worldwide evidence indicates people are concerned about the environment and are changing their behavior.

## **1.2 INDUSTRY PROFILE**

### ***Plastics***

Plastic is a word that originally meant “pliable and easily shaped.” It only recently became a name for a category of materials called polymers. The word polymer means “of many parts,” and polymers are made of long chains of molecules. Polymers abound in nature. Cellulose, the material that makes up the cell walls of plants, is a very common natural polymer.

Over the last century and a half human have learned how to make synthetic polymers, sometimes using natural substances like cellulose, but more often using the plentiful carbon atoms provided by petroleum and other fossil fuels. Synthetic polymers are made up of long chains of atoms, arranged in repeating units, often much longer than those found in nature. It is the length of these chains, and the patterns in which they are arrayed, that make polymers strong, lightweight, and flexible. In other words, it's what makes them so plastic.

These properties make synthetic polymers exceptionally useful, and since we learned how to create and manipulate them, polymers have become an essential part of our lives. Especially over the last 50 years plastics have saturated our world and changed the way that we live

## ***The Development of New Plastics***

In 1907 Leo Baekeland invented Bakelite, the first fully synthetic plastic, meaning it contained no molecules found in nature. Baekeland had been searching for a synthetic substitute for shellac, a natural electrical insulator, to meet the needs of the rapidly electrifying United States.

Bakelite was not only a good insulator; it was also durable, heat resistant, and, unlike celluloid, ideally suited for mechanical mass production. Marketed as “the material of a thousand uses,” Bakelite could be shaped or molded into almost anything, providing endless possibilities.

Hyatt's and Baekeland's successes led major chemical companies to invest in the research and development of new polymers, and new plastics soon joined celluloid and Bakelite. While Hyatt and Baekeland had been searching for materials with specific properties, the new research programs sought new plastics for their own sake and worried about finding uses for them

## ***The Future of Plastics***

Despite growing mistrust, plastics are critical to modern life. Plastics made possible the development of computers, cell phones, and most of the lifesaving advances of modern medicine. Lightweight and good for insulation, plastics help save fossil fuels used in heating and in transportation. Perhaps most important, inexpensive plastics raised the standard of living and made material abundance more readily available. Without plastics many possessions that we take for granted might be out of reach for all but the richest Americans. Replacing natural materials with plastic has made many of our possessions cheaper, lighter, safer, and stronger. Since it's clear that plastics have a valuable place in our lives, some scientists are attempting to make plastics safer and more sustainable. Some innovators are developing bioplastics, which are made from plant crops instead of fossil fuels, to create substances that are more environmentally friendly than conventional plastics. Others are working to make plastics that are truly biodegradable. Some innovators are searching for ways to make recycling more efficient, and they even hope to

perfect a process that converts plastics back into the fossil fuels from which they were derived. All these innovators recognize that plastics are not perfect but that they are an important and necessary part of our future.

### **Indian Plastic Industry**

Indian plastic industry has made significant achievements in the country ever since it made a promising beginning with the start of production of polystyrene in 1957. The industry is growing at a rapid pace and the per capita consumption of plastics in the country has increased several times as compared to the earlier decade. The chronology of production of polymers is summarized as under -

- 1957 - Polystyrene
- 1959 - LDPE
- 1961 - PVC
- 1968 - HDPE
- 1978 - Polypropylene

Currently, the Indian plastic industry is highly fragmented with an estimate of around 25,000 firms and over 400,000 employees. The top 100 players of Indian plastic industry account for just 20% of the industry turnover. Barring 10 to 15% of the firms that can be categorized as medium scale enterprises, most of the unit's operation is on a small-scale basis.

The immense potential of Indian plastic industry has motivated Indian manufacturers to acquire technical expertise, achieve superior quality standards and build capacities in different facets of the booming plastic industry. Substantial developments in the plastic machinery sector coupled with matching developments in the petrochemical sector, both of which support the plastic processing industry, have facilitated the plastic processors to develop capacities to cater both the domestic as well as overseas exports.

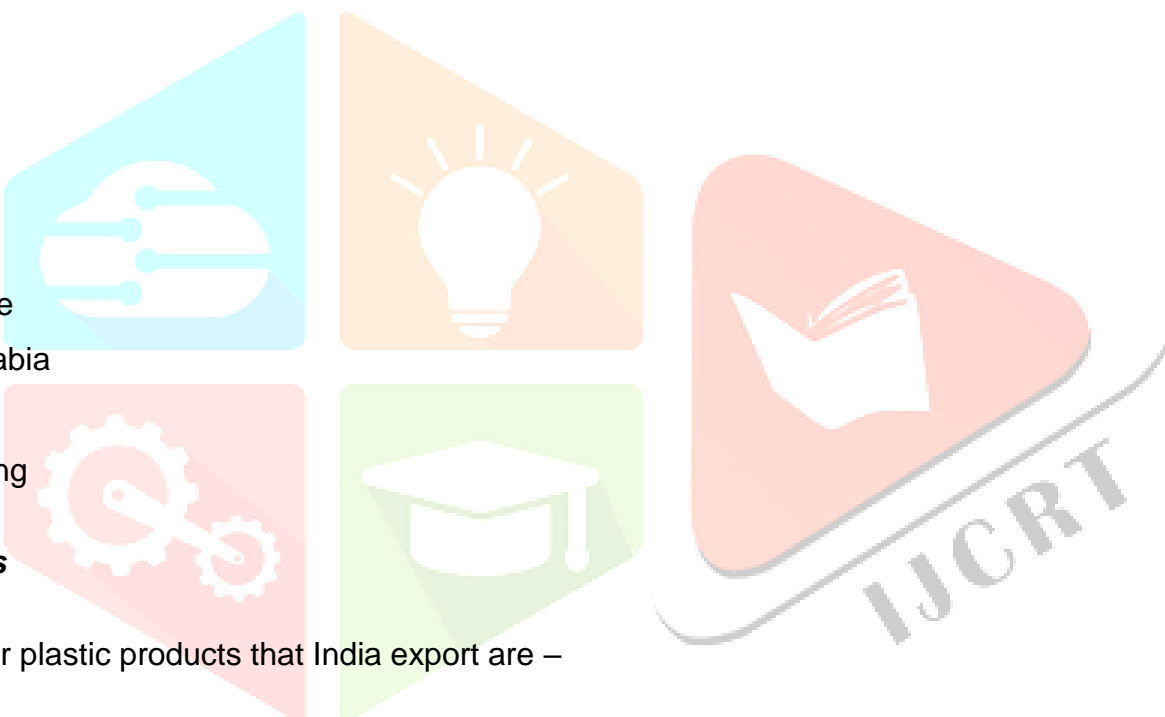
### **Exports**

In the calendar year 2006, the value of world plastic export was US\$ 375

billion. However, the share of India was less than 1 % with exports of worth US\$ 3.187 billion. The percentage of growth in export was 21 %. During this trend of growth in exports, the export of plastics raw material increased from 55 % to 60 % of the total export of plastic goods, while the export of processed plastic goods has registered a negative growth from 45 % to 9 %. According to recent reports, the industry is said to be losing an opportunity of USD 300 million through value addition on the raw materials that are exported.

### The top 10 trading partners for Indian plastic industry are

- USA
- UAE
- Italy
- UK
- Belgium
- Germany
- Singapore
- Saudi Arabia
- China
- Hong Kong



### Products

The major plastic products that India export are –

- Raw Materials - PVC, polypropylene, polyethylene, polystyrene, ABS, polyester chips, urea / phenol formaldehyde, master batches, additives, etc
- Packaging - PP / HDPE woven sacks / bags / fabrics, poly-lined jute goods, box strapping, BOPP tapes, a range of plastic sheeting / films (of PVC, PP, HDPE, nylon, FRP, PTFE, acrylic, etc.), pouches, crates, bottles, containers, barrels, cans, carboys, shopping / carrier / garbage bags.
- Films - Polyester film, BOPP film, mesh, metallised / multilayer films and photo films



- Consumer Goods - Toothbrushes, cleaning brushes, hair brushes, nail / cosmetic brushes, combs, moulded furniture (chairs, tables, etc.) house ware, kitchenware, insulated moulded house ware, microwave re-heat able containers, mats and mattresses, water bottles, gifts and novelties, a range of stationery items like files, folders, mathematical instruments, etc.
- Writing Instruments - Pens, ball pens, markers, sign pens, refills, etc.
- Travel ware - Moulded luggage, soft luggage, a range of bags like school bags / ladies handbags, wallets, etc.
- Leather Cloth / Artificial Leather Floor Coverings - Vinyl floor coverings and linoleums
- Foam Boards Drip Irrigation Systems / Components Pipes & Pipe Fittings - Made of PVC, HDPE, PP, FRP, nylon
- Water Storage Tanks Toys and Games Engineering Plastics - Auto components, parts for various machinery / equipment in telecommunications, railways, electronics, etc.
- Electrical Accessories FRP / GRP Products - Safety helmets / equipment, pipes, storage tanks, etc.
- Sanitary Fittings - Cisterns, toilet seats, bathroom fittings, etc.
- Construction - PVC profiles, doors, windows, etc.
- Tarpaulins Laminates Fishnets / Fishing Lines Cordage / Ropes / Twins Eyewear - Lenses, spectacle frames, goggles, etc.
- Laboratory Ware Surgical / Medical - Disposable syringes, blood / urine bags, I.V. sets, etc.

The Indian plastics market is comprised of around 25,000 companies and employs 3 million people. The domestic capacity for polymer production was 5.72m tones in 2009. The State of Gujarat in Western India is the leading plastics processing hub and accounts for the largest number of plastics manufacturers, with over 5,000 plastics firms.

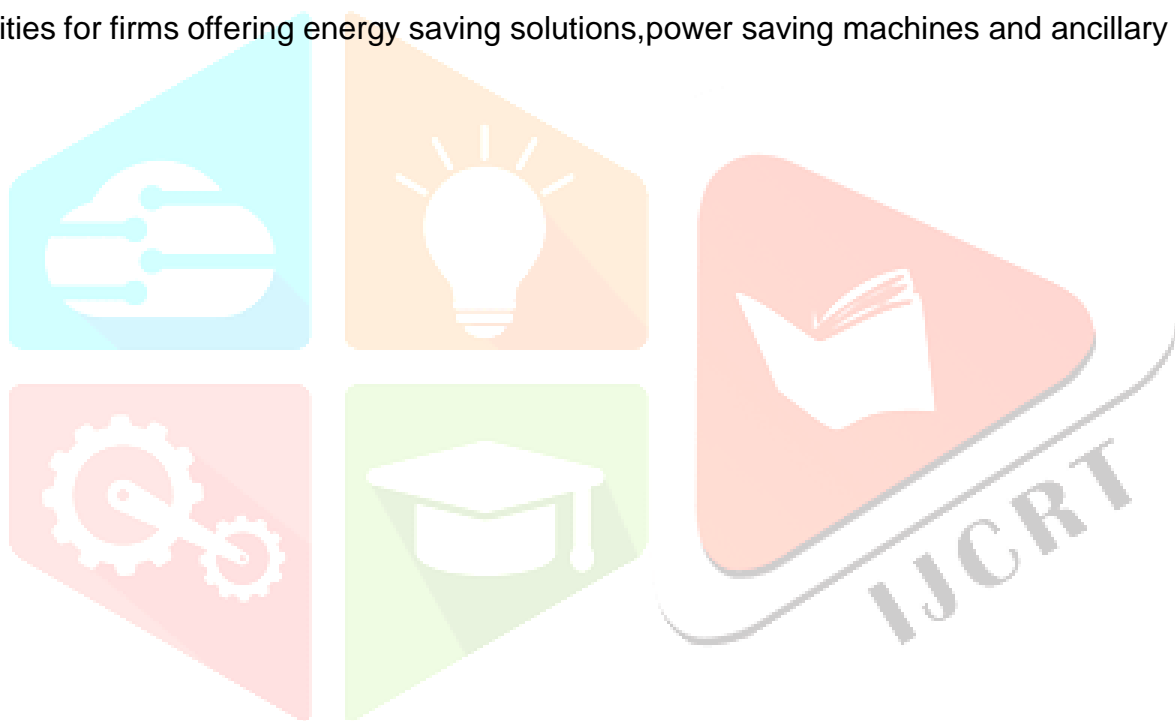
The growth rate of the Indian plastics industry is one of the highest in the world, with plastics consumption growing at 16% per annum (compared to 10% p.a. in China and around 2.5% p.a. in the UK). With a growing middle class (currently estimated at



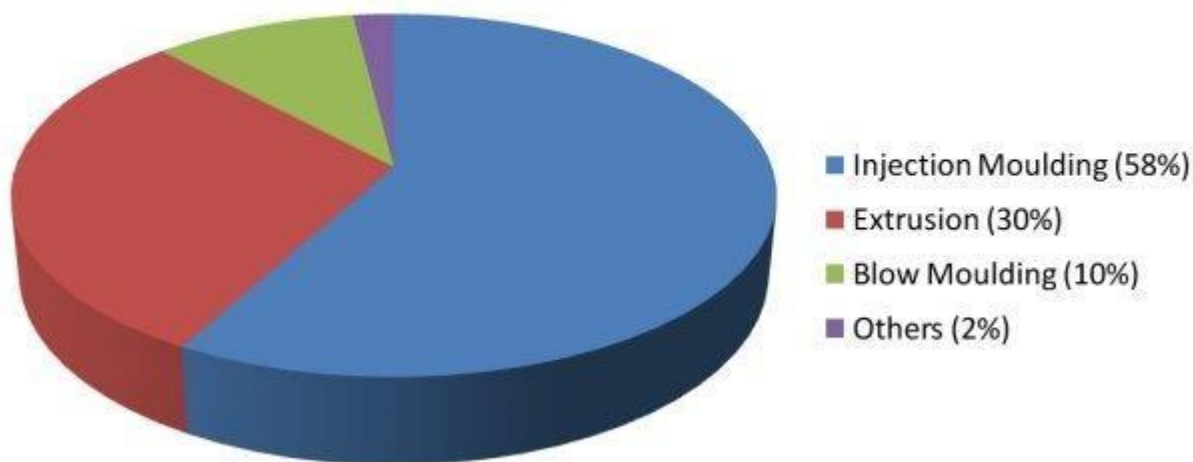
50 million) and a low per capita consumption of plastics, currently 8kg per head, this trend is likely to continue. The Plastindia Foundation estimate that plastics consumption is likely to reach 16kg per head by 2015.

Despite India having a population of 1.15 billion and a work force of 467 million, plastics companies have reported problems with labor shortages. This has led to increased investment in technology such as automation and conveyor belt systems.

Apart from the shortage of a skilled labor, the plastics industry is also facing the problem of a nationwide power deficit. The electricity demand deficit is 12-13 per cent. This provides excellent opportunities for firms offering energy saving solutions, power saving machines and ancillary equipment.



## Main Plastics Processing Technologies in India



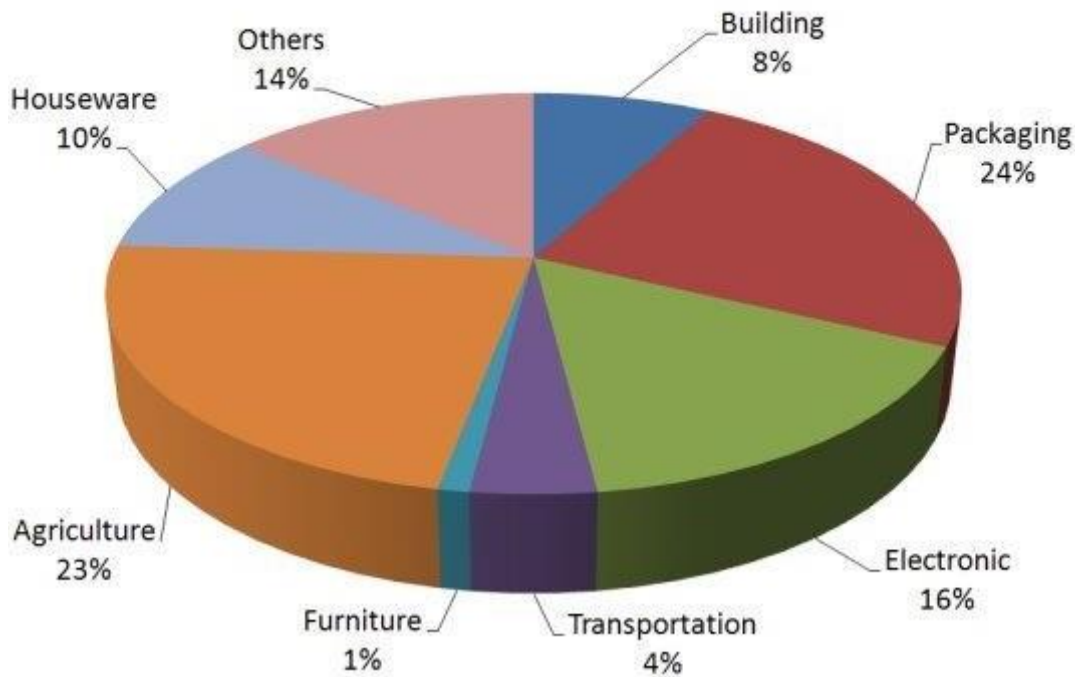
### Raw Material Supply and Demand

Reliance Industries, India's largest private sector conglomerate company, stated in January that India's polyolefins market is expected to grow 12 percent to about 7.5 million metric tons in 2011 with double-digit growth in consumption of both polypropylene and polyethylene. Polypropylene will account for the largest growth at 18% (with consumption growing from 2.2 million metric tons to 2.6 million metric tons).

It is estimated that between 75-80% of Polypropylene demand in India is met by Reliance Industries with around 20% coming from four Government run companies Indian Oil Corporation Ltd (IOCL), Haldia Petrochemicals, Bharat Petroleum Corporation LTD (BPCL) and the Gas Authority of India Ltd (GAIL).

Partially due to the growth of the Indian construction industry (which is growing at approx. 20% p.a.) the demand for PVC is exceptionally high with domestic production barely meeting 50% of the demand. Again, of the domestic suppliers, Reliance is the largest followed by Chemplast and Finoflex (with the latter two accounting for about 5% of demand).

## Plastics Consumption By Application (India)



EVA is also in high demand, with barely 10% of the demand being met by domestic supply, in this case by Reliance (a division of Reliance).

Even though India has one of the highest plastics recycling rates in the world (an estimated 47% of all plastics is recycled) the demand for recycled plastics is huge, especially for commodity plastics such as PP, PET, PS, LDPE and HDPE.

### **Automotive Market**

India is the second fastest growing consumer market for Automobiles in the world (after China) and the seventh largest producer, with over 2.6 million motor vehicles being manufactured in India in 2009.

According to forecasts, automobile manufacturing in India is set to raise 7% year on year until 2015. Car manufacturers in India have reported significant increases in output over the last 12 months, specifically Tata Motors reporting a 32% increase in sales, Toyota Kirloskar Motor at 26% and Ford India, a staggering 220% - due, in large part to the highly successful Ford Figo model.

## **Packaging Industry**

Packaging currently accounts for the largest consumption of plastics in India, at 24% of overall consumption. In January 2011 India's Corporate Affairs Minister indicated that the country was set to lift foreign direct investment (FDI) restrictions for supermarket giants such as Tesco and Walmart (which currently has just six stores in India).

The Indian Government has highlighted the need for foreign investment to bring in new technology such as cold chain logistics systems, warehousing facilities and packaging technology. This will assist in improving the rate at which food perishes before it reaches market – currently at around 40% per annum. This issue offers huge opportunities for plastics packaging manufacturers wishing to enter the market.

## **Future Forecast**

The Indian plastic industry clearly has the potential to continue its fast growth. However, over the next few years, competition in the industry is expected to increase considerably, as a result of global trends, which will become applicable to the liberalizing economy of country. To survive the competition, both polymer manufacturers and processors will need to adopt radically new methods and approaches to reduce costs, improve market and customer service and management of performance.

The per capita consumption of plastics in India is well below the world average. However, it also reflects the many years of growth ahead, as the country's economy continues to grow and upgrade the usage of products. Translating the expected growth rate into incremental demand, it is obvious that the country will remain one of the largest sources of additional demand for almost all kinds of plastics. Hence, plastics will continue to be a growth industry, with boosting prospects for fresh investments in polymerization and downstream processing capacity.

## **1.3 NEED FOR THE STUDY**

Green marketing covers more than a firm's marketing claims. While firms must bear much of the responsibility for environmental degradation, ultimately it is customers who demand goods, and thus create environmental problems. Green marketing has been widely adopted by the firms worldwide and the

following are the possible reasons cited for this wide adoption. There are basically five reasons for which a marketer should go for the adoption of green marketing. They are Opportunities or competitive advantage, corporate social responsibilities (CSR), Government pressure, Competitive pressure and Cost or profit issues.

Any marketing activity of the firm that is intended to create a positive impact or to lessen the negative impact of a product on the environment, in order to capitalize on the customer's concern about environmental issues is known as 'Green Marketing'.

Green marketing help to utilize the limited resources, while satisfying customers wants, both of individuals and industry, as well as achieving the selling organization's objectives.

Though by knowing the increasing of the importance, benefits and opportunities of green marketing, this study is made to analyse the benefits and opportunities of the green marketing. The firm need to personalize the benefits of environment friendly actions, normally, through letting the customers take part in environment friendly actions.

#### 1.4 SCOPE OF THE STUDY

Green marketing is not just setting products based on their environmental benefits, but it is a wider concept. Green marketing involves developing products and packages that are environment friendly or less harmful to the environment. It includes many areas ranging from conservation to control of pollution. Companies should make every possible effort to undertake research and development in order to come

up with eco-friendly products in the interest of the customers wellbeing in particular and that of societies in general.

As resources are limited and human wants are unlimited, it is necessary for marketers to use resources efficiently, so that organizational objectives are achieved without waste of resources. So green marketing is inevitable. There is growing interest among people around the world regarding protection of natural environment. People are getting more concerned for environment and changing their behaviour for the protection of environment. As a result of this, the term "Green Marketing" has emerged. Hence, marketers are feeling their responsibility towards environment and giving importance to green marketing.

Not only marketers but customers are also concerned about the environment, and customers are also changing their behaviour pattern. Now, individual as well as industrial customers are becoming more concerned about environment-friendly products.

## 1.5 OBJECTIVES OF THE STUDY

### *Primary objective*

To conduct an empirical study on Green marketing based on customer's perception.

### *Secondary objectives*

- To study the awareness of customers for eco-friendly products.
- To measure the green values of the customers
- To study the customer satisfaction towards green products.
- To understand the issues and challenges in Green Marketing.
- To study the Green Marketing strategies of a few marketing concerns

## 1.6 LIMITATIONS OF THE STUDY

- Feedback is just the representative of the entire population; it only states the opinion of a few respondents.

- Time constraint was a major limitation.
- The people are not very responsive.
- The Sample size used for the research is less.





## CHAPTER 2

### 2. REVIEW OF LITERATURE

The following are some literature has been reviewed from the reputed journals of both National and International Journals pertaining to Green Marketing and its related issues. The literature has also been reviewed from Textbooks, Magazines, & Websites.

**Charles W Lamb et al (2004)** explained that —Green Marketingll has also become an important way for companies to build awareness and loyalty by promoting a popular issue. By positioning their brands as ecologically sound, marketers can convey concern for the environment and society as a whole.

The study by **Meenakshi Honda (2006)** has indicated that Activist groups and the media have played a major role in enhancing the environmental awareness and consciousness of consumers in recent years. Most studies on the subject show that although the awareness and environmental behaviour of consumers across countries, educational levels, age and income groups may differ, environmental concerns are increasing worldwide.

The study by **Jacquelyn A. Ottoman (2006)** explained that Green Marketing must satisfy two objectives: Improved Environmental Quality and Customer Satisfaction. Research indicates that many green products have failed because of green marketing myopia—marketers ‘myopic focus on their products ‘—greennessll over the broader expectations of consumers or other market players (such as regulators or activists.

According to **Roger a Kerin et al (2007)**, Green Marketing takes many forms. It comes from product development opportunities that emanate both from consumer research and its —Pollution Prevention Paysll program. This program solicits employee suggestions on how to reduce pollution and recycle materials.

**Sherlekar (2007)** has identified that using a tiled earthen pitcher as its symbol, the Eco mark label is intended to enable consumers to choose products which are environmentally friendly. The products demanding immediate Eco marking are textiles, toilet soaps, detergents, paper, paints, packages, pesticides, drugs etc

**MulchandSen (2007)** explored that Green Marketing covers more than a firm 's marketing claims. has pointed out that Green Marketing should not neglect the economic aspect of marketing. Marketers need to understand the implications of Green Marketing. Thus, Green Marketing is a golden goose, and can be a very powerful marketing strategy though when it is done right.

According to **Vemuri Lakshmi Narayana&Dhinesh Babu (2008)**, A clever marketer is one who not only convinces the consumer, but also involves the consumer in marketing his product. Green marketing should not be considered as just one more approach to marketing, but has to be pursued with much greater vigor, as it has an environmental and social dimension to it.

The study by **Sudhanshu Joshi et al (2008)** identified the Examples of Corporates Initiatives towards green branding in Banking. India 's largest private bank ICICI asks its customers to sign up for paperless bank statements and the bank plants a tree for each complying customer. In Brazil Unilever and WalMart have built sustainable houses within stores made from recycled products and showing how to make everyday living eco-friendlier.

**Arun Kumar & N. Meenakshi (2009)**: Consumers have to play an important role if companies have to be made responsible for preservation of the environment. They should stop buying products of companies which are polluting the environment. Apart from companies, NGOs also have very important roles to play. NGOs should carry out research and tell the companies how they can make their process more environment friendly.

The research by **Anup Sinha & Jamie Gilpin (2009)** primarily focused on finding inefficiencies in the carbon value chain of energy production using renewable methods. By utilizing anaerobic digestion and gasification technology, one could produce biogas from cattle, swine, and other farm animals.

**Biji P Thomas & H Nanje Gowda (2010)** highlighted that environmentally friendly buildings are also known as Green Buildings. Some of the visible —green features, such as exterior window shading, good daylighting, green (landscaped) roofs, and natural ventilation chimneys are often considered as the signals of being green.

**Dileep Kumar (2010)** analysed that how far the hotel business organizations in the tourism sector meet the customer 's needs through green marketing effort and how they influence the consumer behaviour and their satisfaction by inducing environmentally responsible behaviour.

**Vijay Jain et al (2010)** summarized the three C 's process for green marketing implementation as Consumer Value Positioning, Calibration of Consumer Knowledge and Credibility of product.

**ArteeAggrawal et al (2010)** outlined that Eco-responsible (Green) organizations have a tough task to optimise their product offering mix in such a way so that they cannot only attract customer towards them but also can have their products price competitive.

The study by **Sanjit Kumar Dash(2010)** identified the marketing strategies for green marketing include Marketing Audit (including internal and external situation analysis)It was found that Challenges ahead include green products require renewable and recyclable material, which is costly requires a technology, which requires huge investment in R&D. You must find an opportunity to enhance your product's performance and strengthen your customer's loyalty and command a higher price.

The study by **Project Guru (2010)** indicated that India is still at nascent stage in using eco-friendly products. It is the responsibility of the individuals, organizations and Government to take further steps to increase the awareness on benefits of eco- friendly products.

**RajanSaxena (2010)** maintained that Green products and services are today increasingly being accepted by both the companies and customers. Following are some of the arguments in favour of green marketing which makes it profitable for the firm/organisation.

- An aware customer now insists on a \_\_green' product and packaging material.

- Aware customers are joining together to form interest groups which lobby for eco-friendly products and legislation to protect their environment.
- Given the choice, customers tend to buy eco-friendly products.

In their study by **Pavan Mishra & Payal Sharma (2010)** conceptualized that Green Marketing should not be considered as just one more approach to marketing, but has to be pursued with much greater vigor, as it has an environmental and social dimension to it.

The survey on **Green Brands despite recession (2010)** focused on the global brands and attitudes, there is learning for local green brands as well. The good news is that consumers generally trust green advertising, especially in developing markets.

The study by **Habib Ahmad et al (2010)** reveal that Pakistani customers have adequate exposure to print and broadcast media, but television advertising is preferred. Besides print and electronic media, outdoor advertising is also an important part of advertising green products in Pakistan.

The study by **Welling & Anupama S Chavan (2010)** analysed Green marketing is not going to be an easy concept. The firm has to plan and then carry out research to find out how feasible it is going to be. Green marketing has to evolve since it is still at its infancy stage. Adoption of Green marketing may not be easy in the short run, but in the long run it will definitely have a positive impact on the firm.

**Robert Dahlstrom (2011)** examined that Green Marketing has positive influences on multiple participants in the economy. The environment, developing economies, consumers, corporate strategy, the product, production processes, and supply chain benefit from green marketing. Green marketing firms establish strategic alliances with government, local communities, nongovernmental organizations (NGOs), industry experts, and competitors.

**Philip Kotler & Kevin Lane Keller (2011)**: Companies that mount —green programs can face two main problems: consumers may believe that product is of inferior quality of being green and consumers feel the product is not really that green to begin with.

The study by **Dharmendra Mehta (2011)** indicated that Indians are not only conscious about their environment but also health conscious as well. This paradigm shift in attitude has made Indian consumers attractive to green marketers. It has made the population more responsive and aware towards green marketing appeals.

The study by **Sandhya Joshi (2011)** pointed that Environmental issues have gained importance in business as well as in public life throughout the world. Clearly green marketing is part and parcel of overall corporate strategy; along with manipulating the traditional marketing mix - product, price, promotion and place. Smart business houses have accepted green marketing as a part of their strategy

The study by **BanumathiMannarswamy (2011)** proved that Worldwide evidence shows people are concerned about the environment and are changing their behavior accordingly. As a result, there is a growing market for sustainable and socially responsible products and services.

The study by **Vinay et al (2015)** determined that the concept of green marketing has been around at least since the first earth day in 1970. But the idea did not catch on till 1980's, when rising public interest in the environment led to a demand for more green products and services. The companies like Wipro, HCL, TNPL, IBM, ONGC etc., implemented the concept of green marketing in their organization.

The study by **Nandini Deshpande (2016)** has pointed out that Green Marketing should not neglect the economic aspect of marketing. Marketers need to understand the implications of Green Marketing. Thus, Green Marketing is a golden goose, and can be a very powerful marketing strategy though when it is done right.

The study by **Saranya (2017)** analyses that Green Marketing mainly focuses on promoting the consumption of green products. Marketers also have the responsibility to make the consumers understand the need for and benefits of green products than non-green products.

**AjitUpadhyaya and Rajeev Shukla (2018)** highlighted that Environmental concerns and influences on green consumers refer to the practice of practicing – selling or using products/services based on their environmental benefits.

The study by **Altat Khan (2018)** about the Indian companies practicing the Green Marketing Concepts as follows:

- Samsung Electronics has adopted modern environmental conservation activities, such as the developing of environmental-friendly products and service and maintaining a safe and pleasant working environment at factories, based on Green Management and the Life-Cherishing philosophy.
- Toyota, the most popular automobile industry, introduced the Prius, which is the first hybrid car that is more environmental-friendly compared to other cars.
- Xerox, the pioneer photo copier company introduced a —high qualityll recycled photocopier in an attempt to satisfy the demands of firms for less environmentally harmful product.

**Arun Kumar and N. Meenakshi (2018)** believed that Sustainable innovation and marketing is the key to future profitability and companies need to adopt the following practices:

- Companies that comply with the most stringent standards do not have to manage separate processes for different markets. norms of each country in which its manufacturing facilities are located.
- Smart companies reduce the consumption of non-renewable resources such as coal, petroleum and natural gas as well as renewable resources such as water and wood.
- To design eco-friendly products, companies examine product life cycles and understand consumer concerns. Preserving the environment is vital through the eco-friendly products and which is vital for our own preservation.

According to Joseph & **Rupalikorlekar(2019)**, there is a scope for in-depth studies on green marketing to be conducted in developing countries like India, not only on understanding consumers' perception but to study the detailed profile of such

consumers who have a more positive attitude towards green marketing and green products.

The study by **Ann Kronrod et al (2019)** highlighted and explained the surprising prevalence of assertive environmental messages in the media. Environmental agencies, which are populated with people who perceive protecting the environment as a highly important issue, should understand that not all consumers are as informed and concerned about the environment.





## CHAPTER 3

### 3. RESEARCH METHODOLOGY

#### 3.1 RESEARCH DESIGN

In the previous chapter a brief review of related literature was presented. The review of related literature helped the investigator to have a clear background about the subject of study and also a method and procedures to be adopted for the present study.

In the present chapter it deals with the methodology of the concerned study in terms of statement of the problem, operational definitions sampling procedures, size of the sample and description of the tool have been explained.

Research design is a logical and systematic plan prepared for directing a research study. It is quest for knowledge. Research may be defined as a process of knowing new facts and verifying old ones by application of scientific methods to a natural or social phenomenon.

**Meaning** – Research design or methodology is simply a plan for study. It is called a blueprint to carry out the study. It is like plan made by an architect to build the house, if research is conducted without a blueprint, the result is likely to be different from that what is expected at the start. It specifies the objectives of the study and techniques to be adopted to achieve the stated objectives

#### 3.2 SAMPLE TECHNIQUE

For the study Nonprobability sampling used. And respondents are randomly selected. Especially who are within the area of Chennai city were selected for primary data collection.

### 3.3 SOURCE OF DATA

There are two types of data Primary and Secondary.

**Primary data** - primary data is gathered from direct observation or data personally collected. It refers to that data which is collected for a specific purpose from the field of enquiry and are original in nature. For the project primary data were collected mainly through survey method, using the tool questionnaire

**Secondary data** - on the other hand, are those which have already been collected by someone else and which have already been passed through the statistical process. Here the secondary data was obtained from. Various textbooks, registers, magazines, journals. Dissertations etc. Websites of the organization.

### 3.4 STRUCTURE OF QUESTIONNAIRE

For data collection a well-structured questionnaire is used. With easy and understandable questions. And the questions are multiple choice questions, Likert scale questions closed ended questions and also ranking questions.

### 3.5 SAMPLE SIZE

A Sample of 114 customers both male and female drawn from Chennai have given back the fully filled up questionnaire. Out of the total population of customers in Chennai 114 respondents have been taken as the sample size.

### 3.6 POPULATION

Population is a complete of person or objects that possess some common characteristics. A sum of 1150 customers was considered as population for the study and the data is collected from the sample is selected randomly from the population for evaluation and analysis.

### 3.7 ANALYTICAL TOOLS

**PERCENTAGE ANALYSIS:**

Percentage analysis is the method which is used for finding the average of collected information. Percentage analysis can be calculated as follows:

First the number of respondents is noted in a tabular form and then the percentage is calculated by dividing the number of respondents by total number of respondents which is then multiplied by 100.

No. of respondents

Percentage = \_\_\_\_\_ \* 100

Total no. of respondents

### **CHI-SQUARE TEST:**

Chi-square Test is a useful measure of comparing experimentally obtained results with those expected theoretically and based on hypothesis. The Expected frequencies are the frequencies that should be uniformly distributed over a given period of time.

$$X^2 = \sum [(O-E)^2 / E]$$

Where O-Observed frequency E-Expected frequency.

### **CORRELATION ANALYSIS**

Correlation analysis is the statistical tool used to measure the degree to which two variables are linearly related to each other. Correlation measures the degree of association between two variables.

### **ANOVA**

Analysis of variance (**ANOVA**) is a collection of statistical models and their associated estimation procedures (such as the "variation" among and between groups) used to analyze the differences among means

## CHAPTER 4

## DATA ANALYSIS AND INTERPRETATION

TABLE 4.1.1: Gender of the respondents

Gender	No respondents	Percentage
Male	89	78%
Female	25	22%
Total	114	100%

Sources: Primary Data

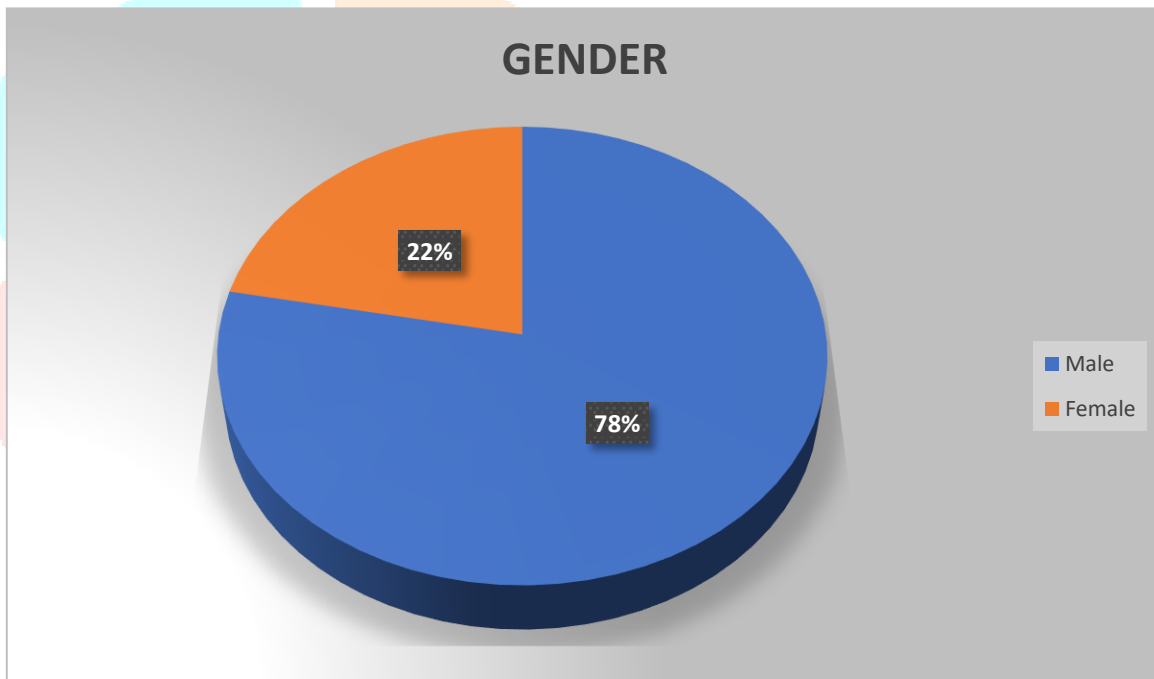


CHART 4.1.1: Gender of the respondents

## INTERPRETATION

The above diagram shows that out of the total 100 respondents 78% of the respondents are male and 22% are female.

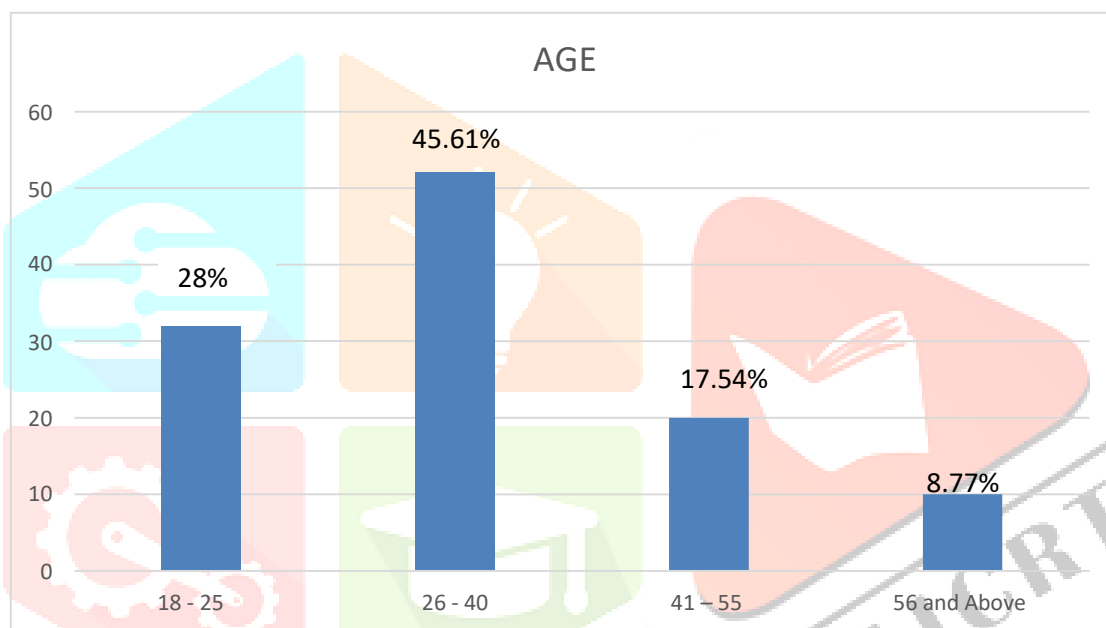
## INFERENCE:

Majority of the respondents are male

**TABLE 4.1.2: Age of the respondents**

Age	No of Respondents	Percentage
18 - 25	32	28
26 - 40	52	45.61
41 – 55	20	17.54
56 and Above	10	8.77
Total	114	100

Sources: Primary Data

**CHART 4.1.2: Age of the respondents****INTERPRETATION**

The above diagram shows that out of the total 114 respondents 28% of the respondents are belongs to 18-25 years.45.6% of the respondents are belongs to 26- 40 years, 17.5% of the respondents are belongs to 41-55 years, and 8.77% of the of the respondents are belongs to 56 and above years old.

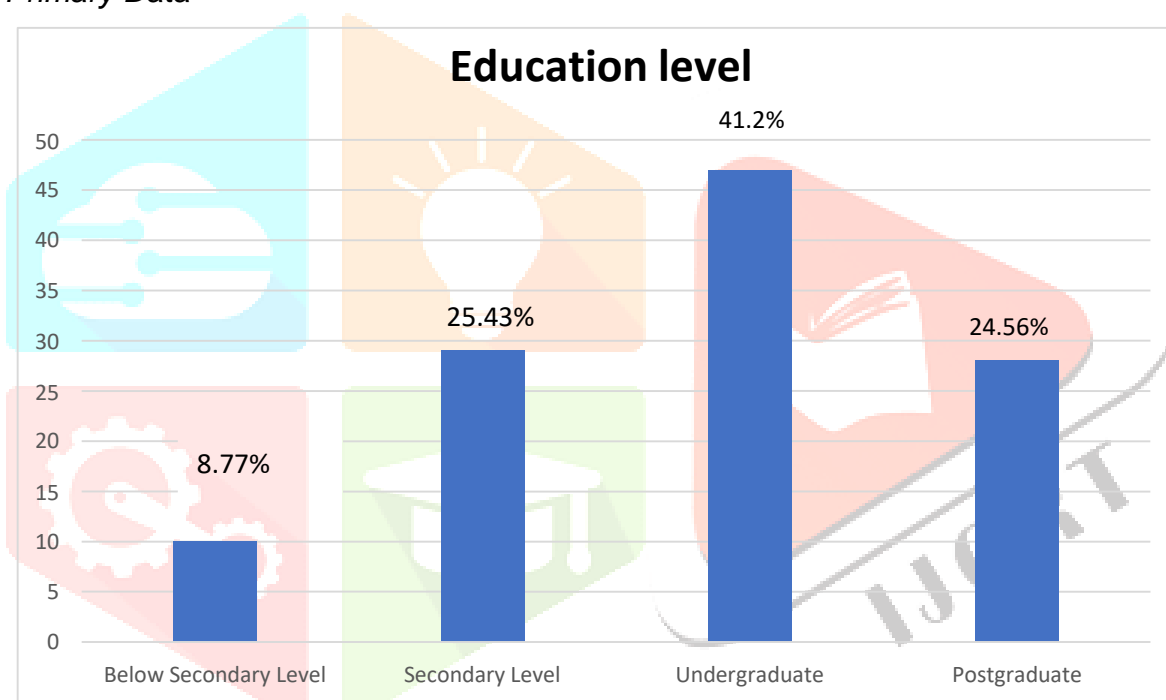
**INFERENCE:**

Majority of the respondents belongs to 26-40 age group

**TABLE 4.1.3: Education level**

Education level	No of Respondents	Percentage
Below Secondary Level	10	8.77
Secondary Level	29	25.43
Undergraduate	47	41.2
Postgraduate	28	24.56
Total	114	100

Sources: Primary Data

**CHART 4.1.3: Education level****INTERPRETATION**

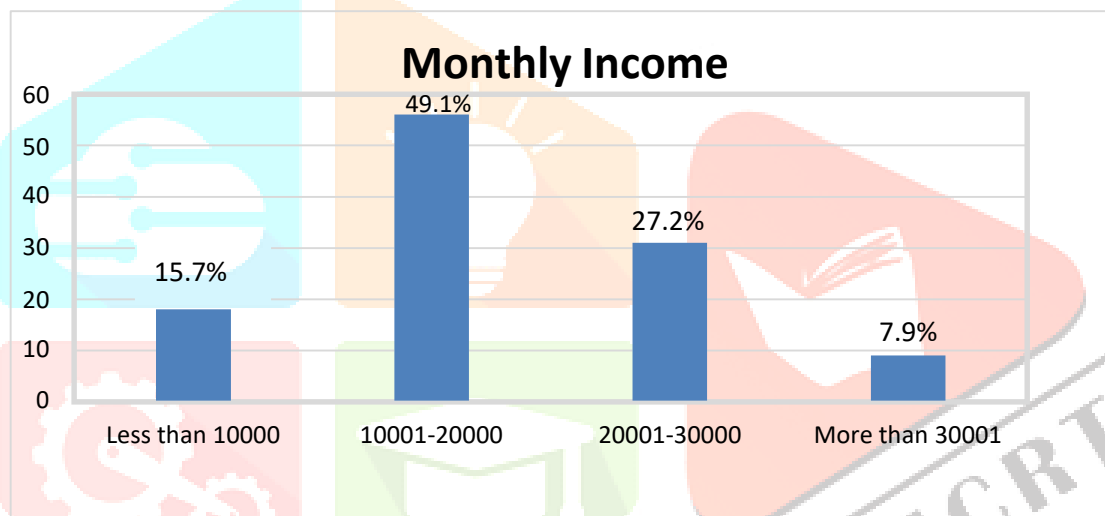
The above diagram shows that, 8.77% of the respondents have below secondary level education, 25.43% have secondary level education, 41.2% of respondents are undergraduate and 24.56% respondents are postgraduate.

**INFERENCE:** Majority of the respondents are undergraduate.

**TABLE 4.1.4: Monthly income of the respondents**

Monthly income	No of Respondents	Percentage
Less than 10000	18	15.7
10001-20000	56	49.1
20001-30000	31	27.2
More than 30001	9	7.9
Total	114	100

Sources: Primary Data

**CHART 4.1.4: Monthly income of the respondents INTERPRETATION**

The above diagram shows that out of the total 100 respondents 15.7% of the respondents' monthly income is below 10000. 49.1% of the respondents' monthly income is between 10001-20000. 27.2% of the respondents' monthly income is between 20001-30000 and 7.9% of the of the respondents' monthly income is more than 30001.

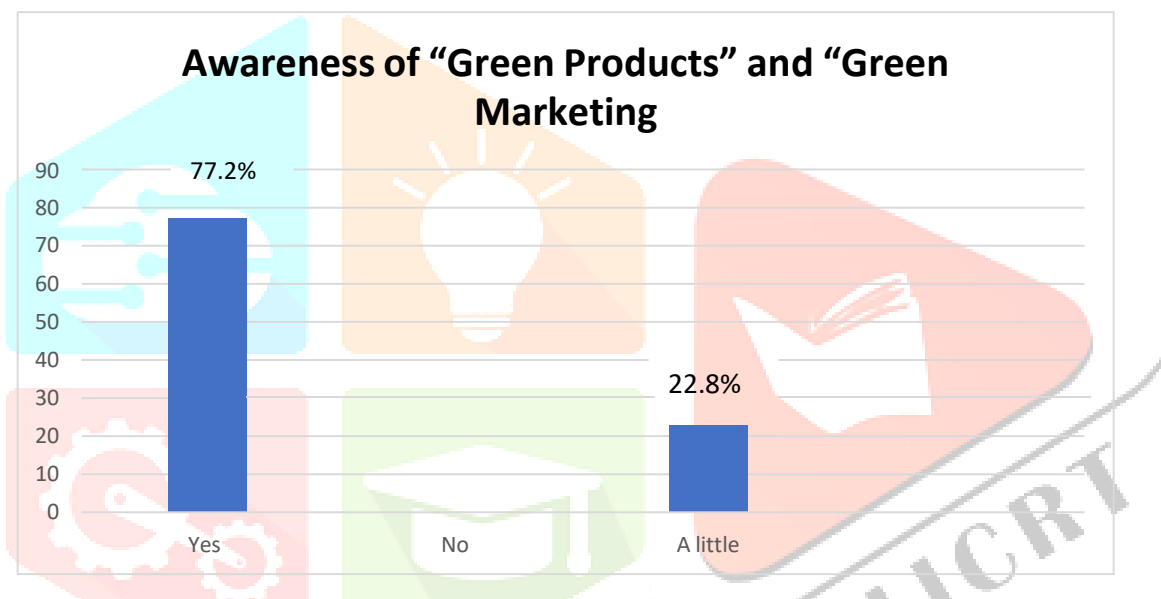
**INFERENCE:** 49.1% of the respondents' monthly income is between 10001-20000



**TABLE 4.1.5: Awareness of “Green Products” and “Green Marketing”.**

Opinion	No of Respondents	Percentage
Yes	88	77.2
No	0	0
A little	26	22.8
Total	114	100

Sources: Primary Data

**CHART 4.1.5: Awareness of “Green Products” And “Green Marketing” INTERPRETATION**

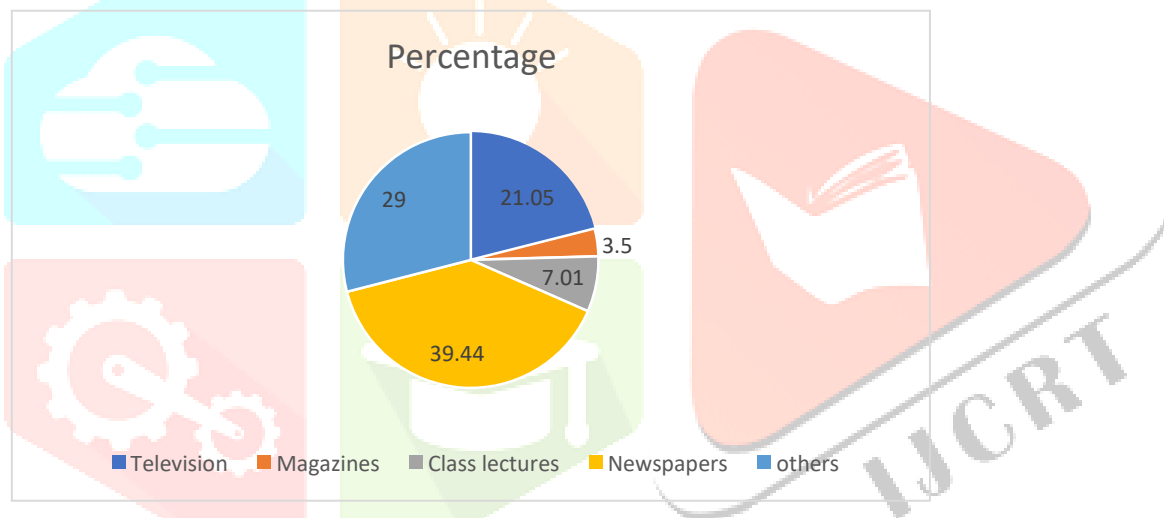
The above diagram shows that out of the total 114 respondents 77.2% of respondents are aware about Green Product and Green Marketing. 22.8% is a little aware about Green Product and Green Marketing.

**INFERENCE:** Majority of the respondents are aware about Green marketing and Green products.

**TABLE 4.1.6: How become aware about Green Products.**

Opinion	No of Respondents	Percentage
Television	24	21.05
Magazines	4	3.50
Class lectures	8	7.01
Newspapers	45	39.47
Others	33	28.94
Total	114	100

Sources: Primary Data

**CHART 4.1.6: Awareness of “Green Products” And “Green Marketing”**

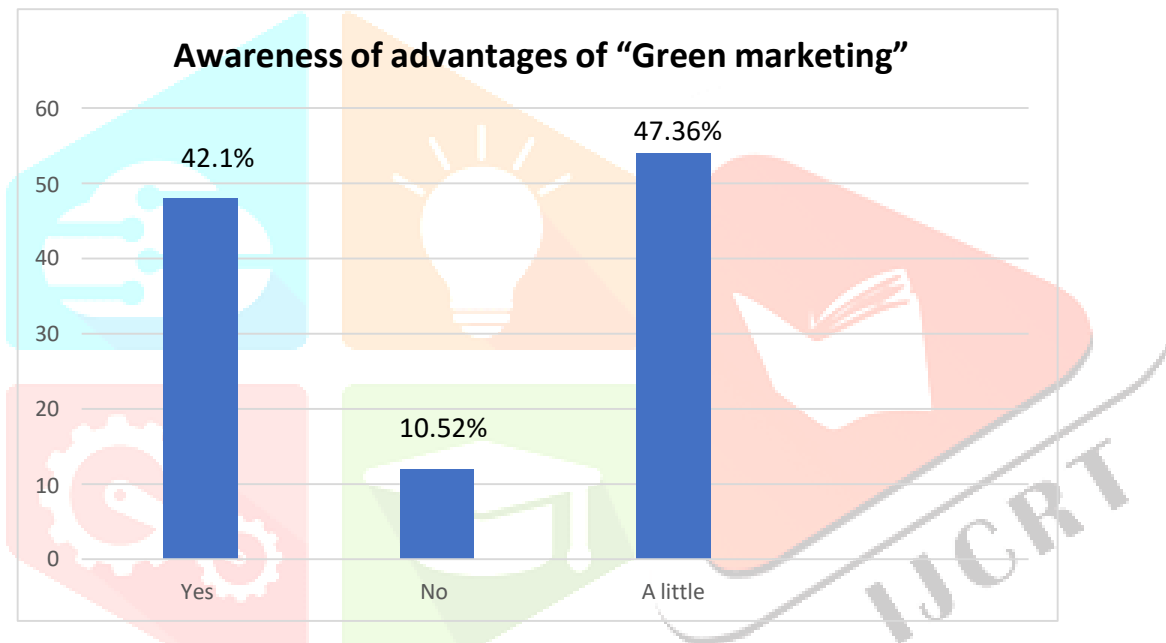
The above Diagram shows that 39.47% of respondents aware about Green marketing and Green product through other media. Mainly social media. 28.94% awarded through Newspapers, 21.05% awarded through Television 7.01% awarded through Class lectures and 3.50% awarded through magazine.

**INFERENCE** 39.47% of respondent's aware e about “Green marketing” and “Green product “through other media, mainly social media.

**TABLE 4.1.7: Awareness of advantages of “Green marketing”**

Opinion	No of Respondents	Percentage
Yes	48	42.1
No	12	10.52
A little	54	47.36
Total	114	100

Sources: Primary Data

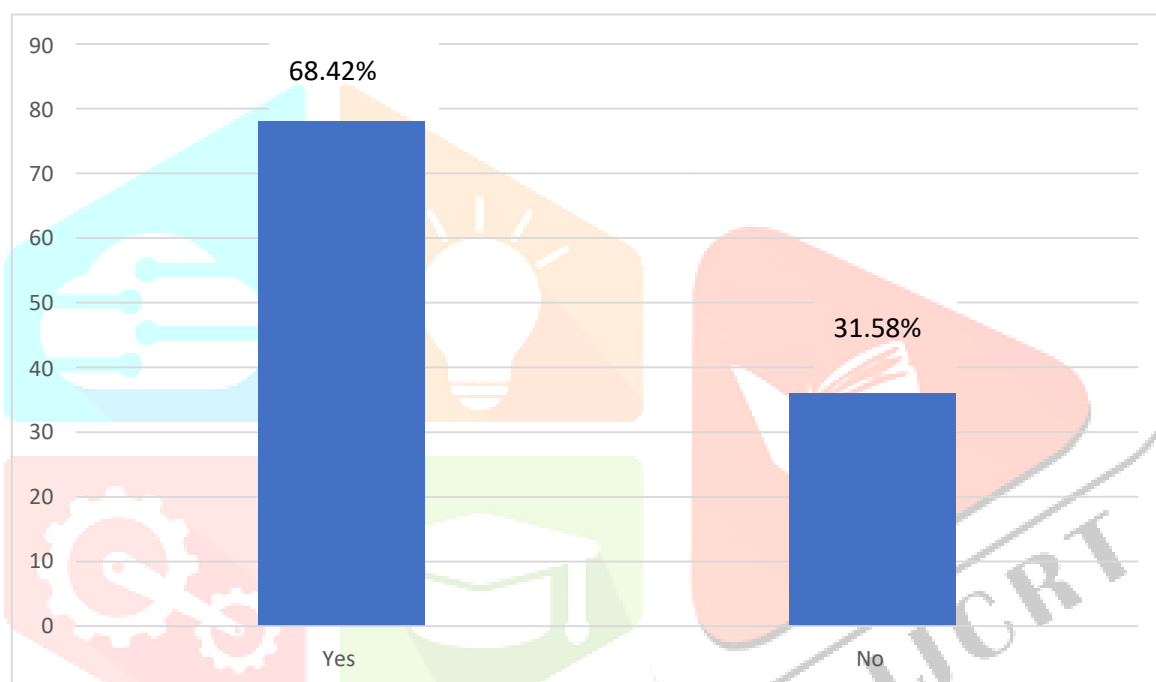
**CHART 4.1.7: Awareness of advantages of “Green marketing” INTERPRETATION**

The above diagram shows that out of the total 114 respondents 42.1% of respondents are aware of advantages of “Green marketing”. 10.52% of respondents are not aware of advantages of “Green marketing”. And 47.36% of respondents are a little aware of advantages of “Green marketing”.

**INFERENCE:** Majority of respondents are little aware about the advantages of Green marketing.

**TABLE 4.1.8: Have you bought any green product recently?**

Opinion	No of Respondents	Percentage
Yes	78	68.42
No	36	31.58
Total	114	100



Sources: Primary Data

#### **CHART 4.1.8: Have you bought any green product recently? INTERPRETATION**

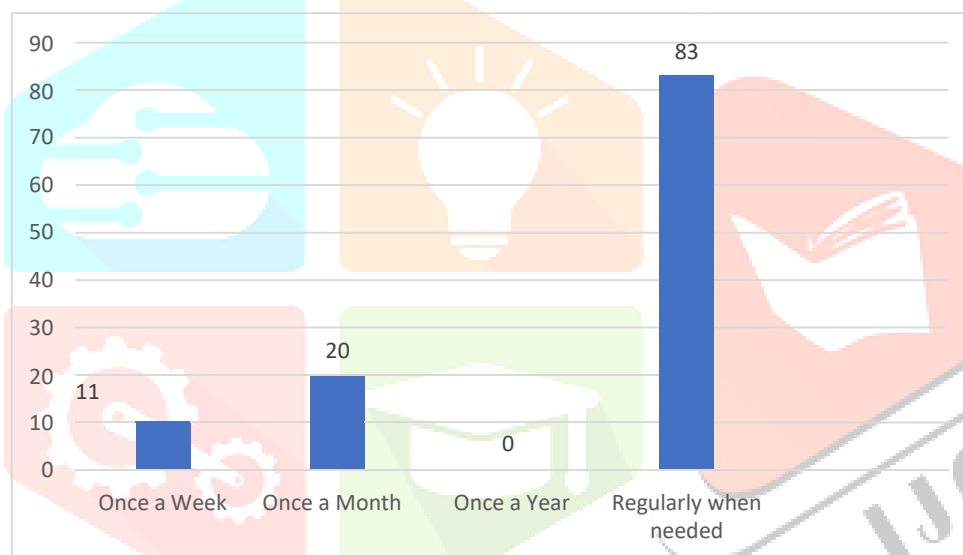
The above diagram shows that out of the total 114 respondents 68.42% of respondents are bought green product recently. And 31.58% not bought any green product recently

**INFERENCE:**68.42% of respondents are bought “Green product” recently.

**TABLE 4.1.9: How frequently do you buy Green products?**

Opinion	No of Respondents	Percentage
Once a Week	11	9.64
Once a Month	20	17.54
Once a Year	0	0
Regularly when needed	83	72.8
Total	114	100

Sources: Primary Data

**CHART 4.1.9: How frequently do you buy Green products?INTERPRETATION**

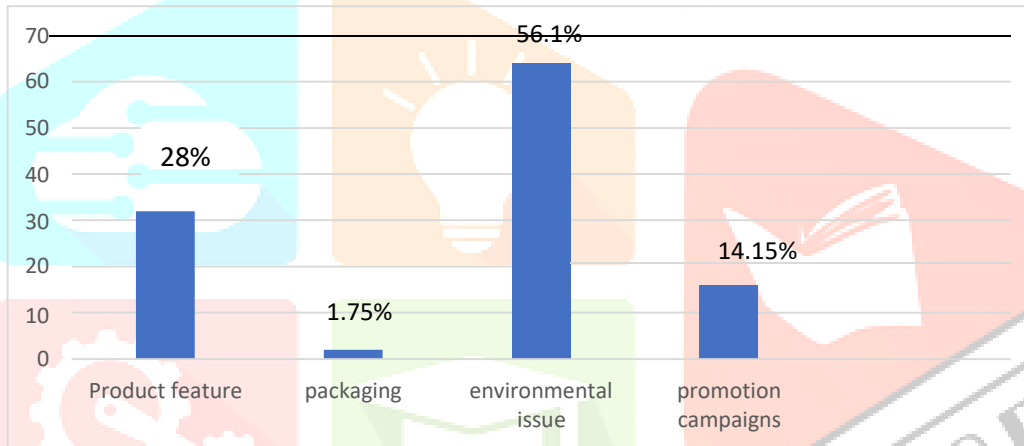
The above diagram shows that out of the total 114 respondents, 72.8% of respondents are bought green product Regularly when needed. 17.54% of respondents are bought green product in monthly, 9.64% of respondents are bought green product once a week.

**INFERENCE:** 72.8% of respondents are bought green product Regularly whenneeded.

**TABLE 4.1.10: What make you buy a green product?**

Opinion	No of Respondents	Percentage
Product feature	32	28
packaging	2	1.75
environmental issue	64	56.1
promotion campaigns	16	14.15
Total	114	100

Sources: Primary Data

**CHART 4.1.10: What make you buy a green product?INTERPRETATION**

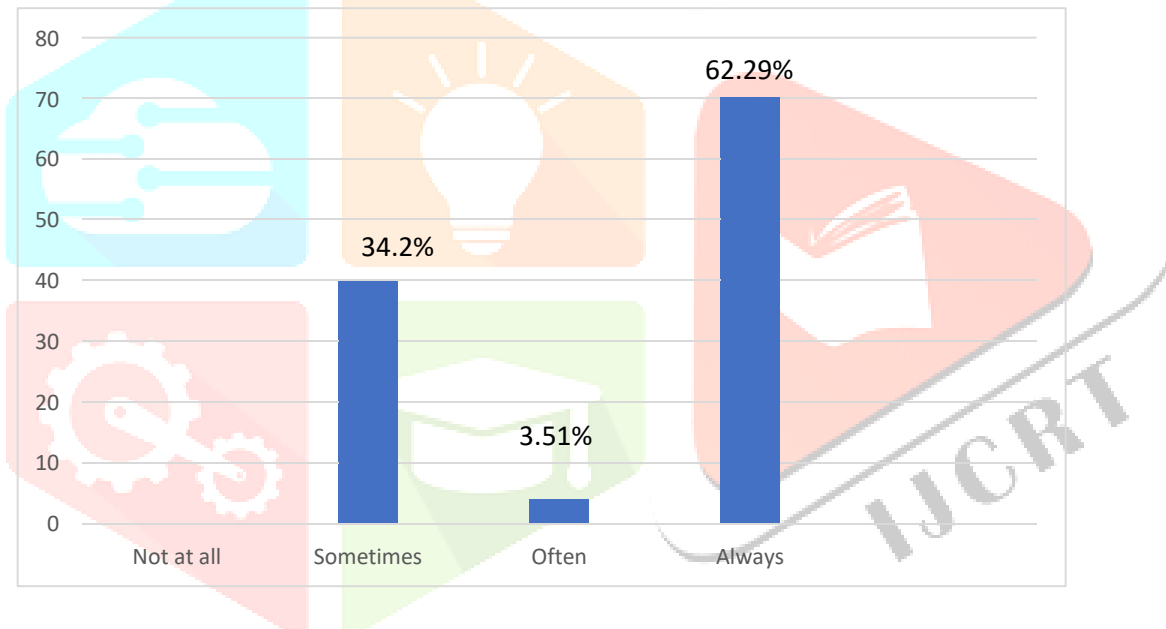
The above diagram shows that out of the total 114 respondents, 56.1% of the respondents are buying the product because of the environmental issues, 28% because of the product feature, 14.15% by seen promotion campaigns and 1.75% by considering the package.

**INFERENCE:** 56.1% of the respondents are buying the product because of the environmental issues.

**TABLE 4.1.11: Do you repeat your purchase of Green products?**

Opinion	No of Respondents	Percentage
Not at all	0	0
Sometimes	39	34.2
Often	4	3.51
Always	71	62.29
Total	114	100

Sources: Primary Data

**CHART 4.1.11: Do you repeat your purchase of Green products?INTERPRETATION**

The above diagram shows that out of the total 114 respondents, 62.29% of customers repeat their purchase always, 34.2 will purchase sometimes, and 3.51% will often.

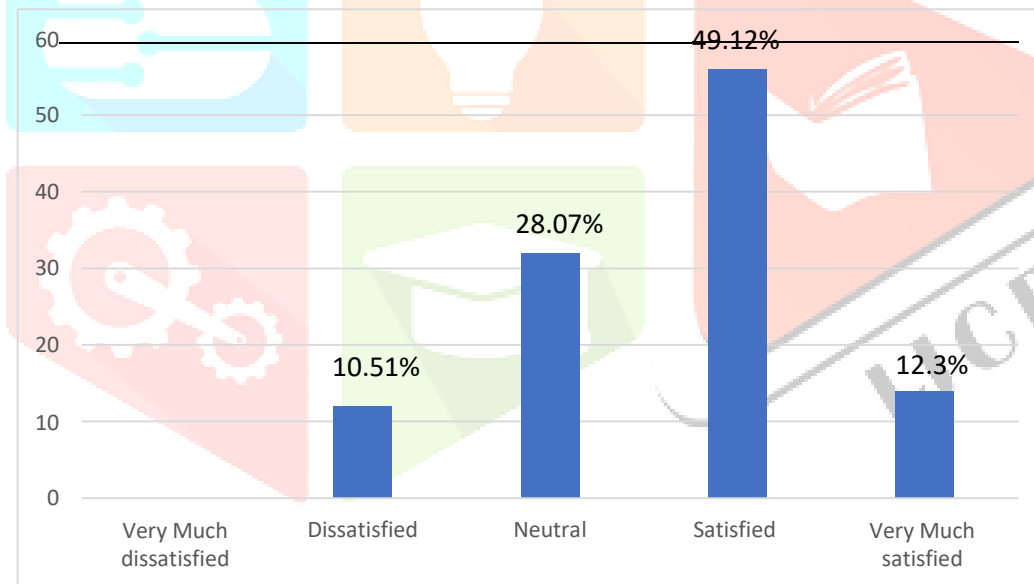
**INFERENCE:** 62.29% of customers repeat their purchase always.



**TABLE 4.1.12: Level of satisfaction regarding green products**

Opinion	No of Respondents	Percentage
Very Much dissatisfied	0	0
dissatisfied	12	10.51
Neutral	32	28.07
Satisfied	56	49.12
Very Much satisfied	14	12.3
Total	114	100

Sources: *Primary Data*

**CHART 4.1.12: Level of satisfaction regarding green products**

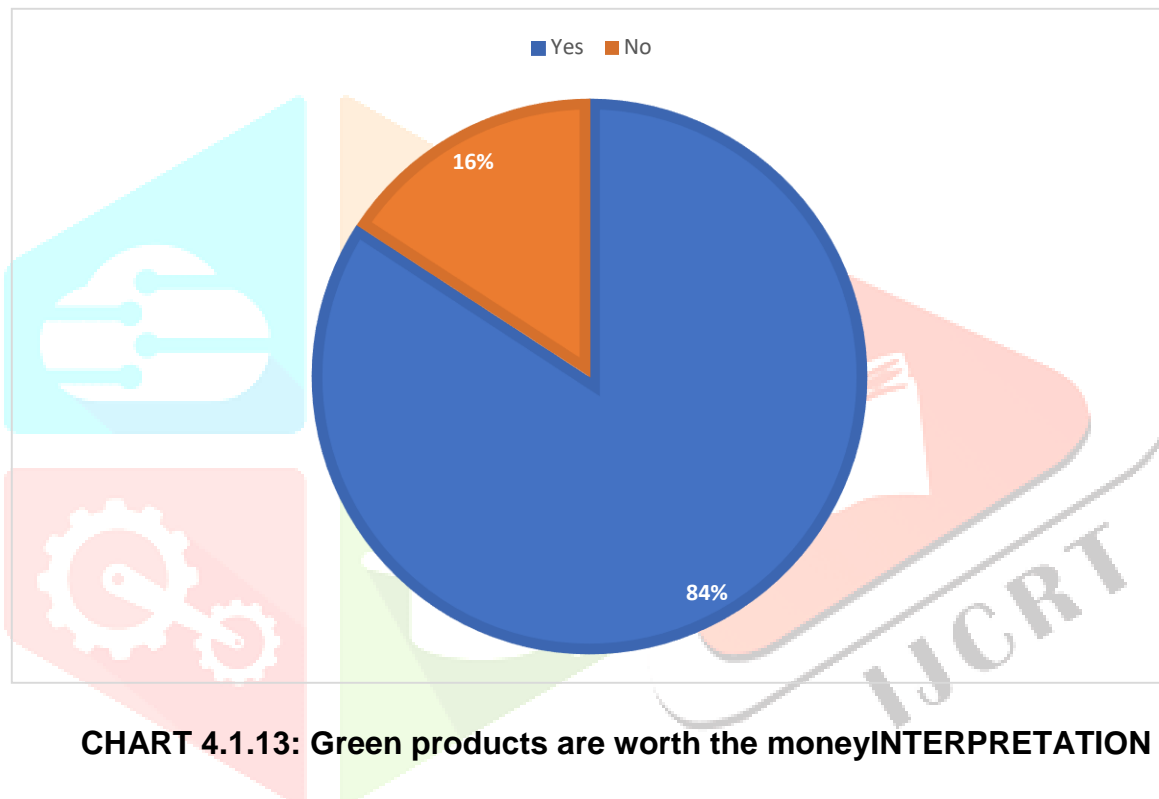
The above diagram shows that out of the total 114 respondents, 49.12% of respondents are satisfied with green product, 28.07% respondents' opinion is neutral, 12.3% very much satisfied, and 10.51% is dissatisfied.

**INFERENCE:** Majority of the respondents are satisfied with green products.

**TABLE 4.1.13: Green products are worth the money**

Opinion	No of Respondents	Percentage
Yes	96	84.21
No	18	15.79
Total	114	100

Sources: *Primary Data*

**CHART 4.1.13: Green products are worth the moneyINTERPRETATION**

The above diagram shows that out of the total 114 respondents, 84.21% respondents are believe that green products are worth the money. and 15.79% says not worth the money.

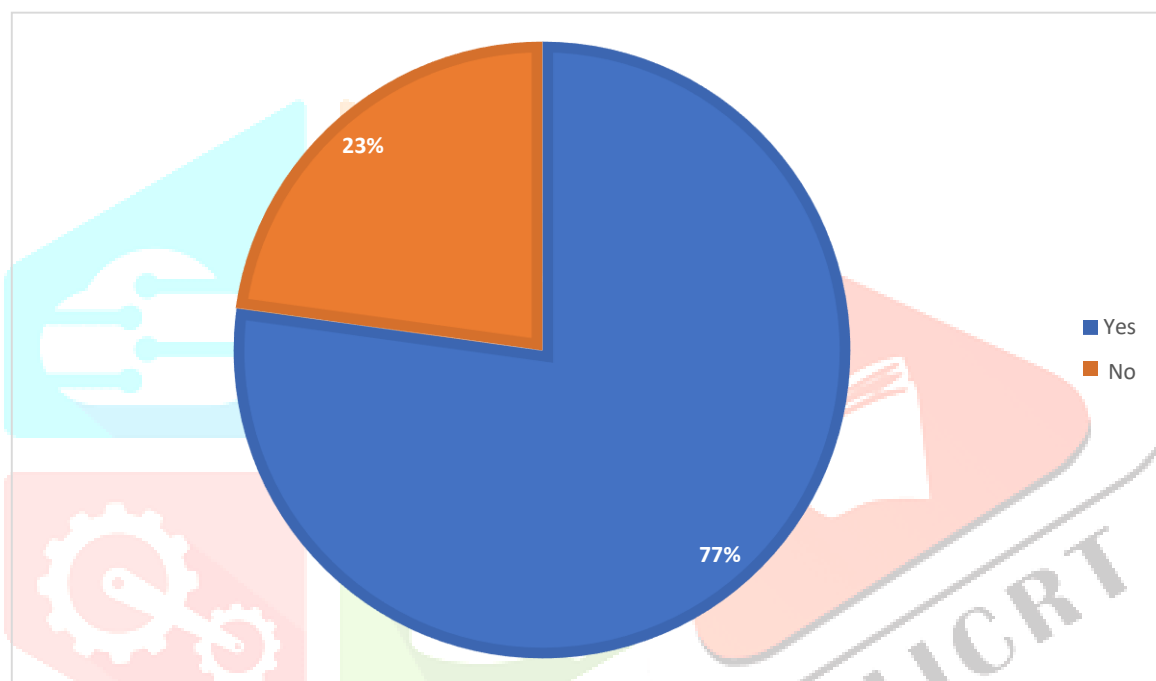
**INFERENCE:**

Majority of the respondents are feels that green product is worth money

**TABLE 4.1.14: If green features increase the price of the product, are you willing to pay more?**

Opinion	No of Respondents	Percentage
Yes	88	77.19
No	26	22.81
Total	114	100

Sources: *Primary Data*

**CHART 4.1.14: If green features increase the price of the product, are you willing to pay more?**

### INTERPRETATION

The above diagram shows that out of the total 114 respondents, 77% of is willing to pay more and 22.81% are not willing to pay more.

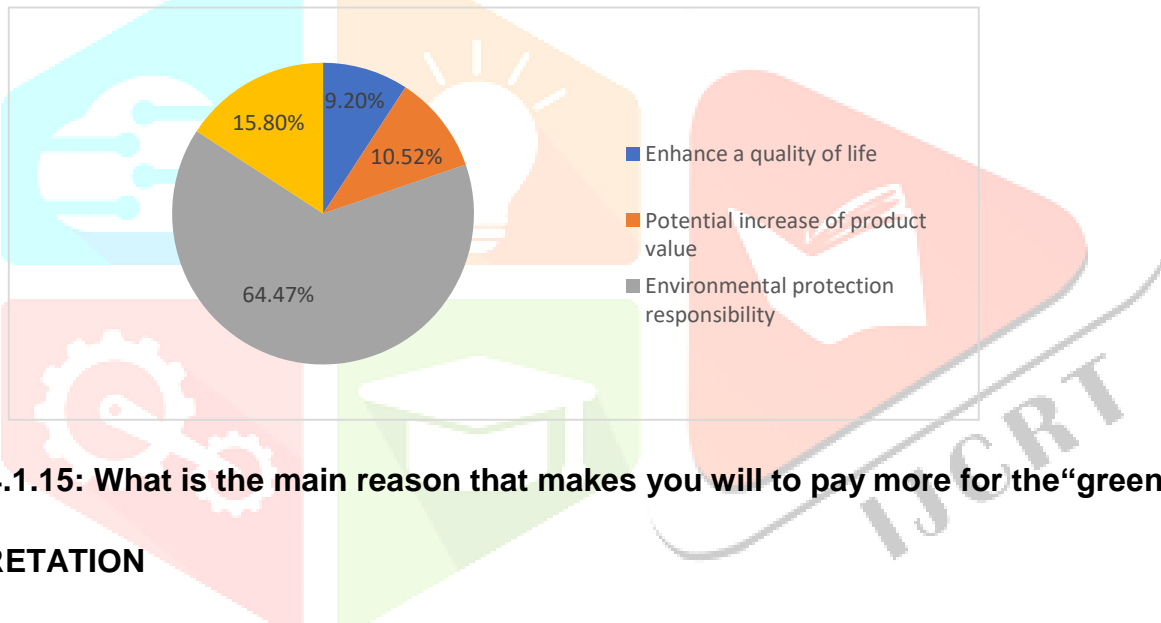
### INFERENCE:

77% of the respondents are willing to pay more for the product

**TABLE 4.1.15: What is the main reason that makes you will to pay more for the “green” products?**

Opinion	No of Respondents	Percentage
Enhance a quality of life	7	7.95
Potential increase of product value	8	9.09
Environmental protection responsibility	61	69.3
Getting high level of satisfaction	12	13.66
Total	88	100

Sources: Primary Data

**CHART 4.1.15: What is the main reason that makes you will to pay more for the “green” products?****INTERPRETATION**

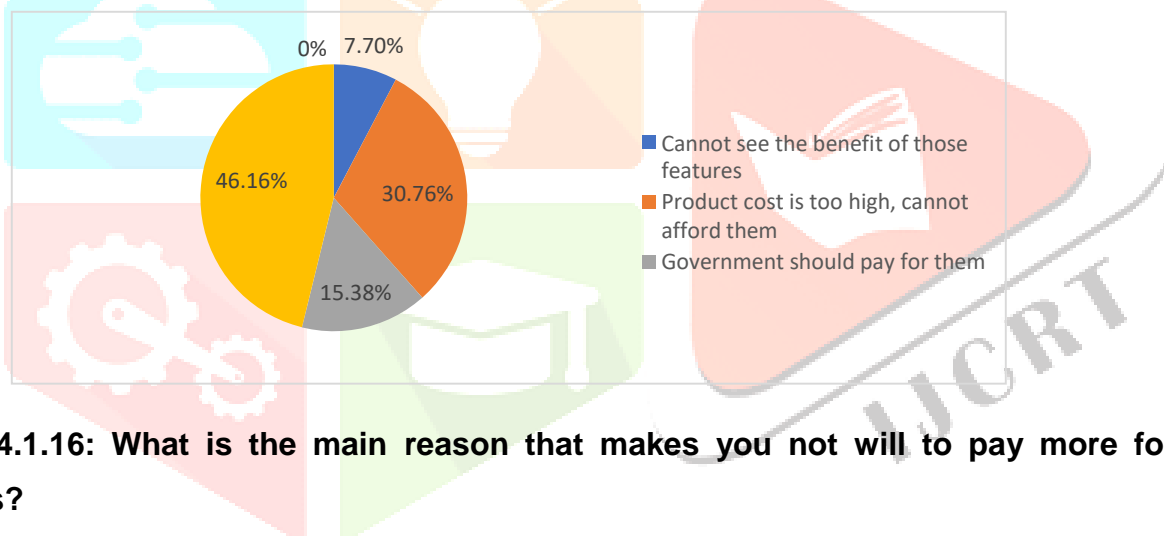
The above diagram shows that out of the total 88 respondents who are willing to pay more for green product, 69.3% willing to pay because of “Environmental protection responsibility”. 13.66% because of “Getting high level of satisfaction”. 9.09% because of “Potential increase of product value”. And 7.95% are because of Enhance a quality of life.

**INFERENCE:** In 88 respondents 69.3% willing to pay because of “Environmental protection responsibility”.

**TABLE 4.1.16: What is the main reason that makes not you will to pay more for the “green” products?**

Opinion	No of Respondents	Percentage
Cannot see the benefit of those features	2	7.7
Product cost is too high, cannot afford them	8	30.76
Government should pay for them	4	15.38
Producer should pay for them	12	46.16
Environmental issues are gimmick for commercial only	0	0
Total	26	100

Sources: *Primary Data*



**CHART 4.1.16: What is the main reason that makes you not will to pay more for the “green” products?**

### INTERPRETATION

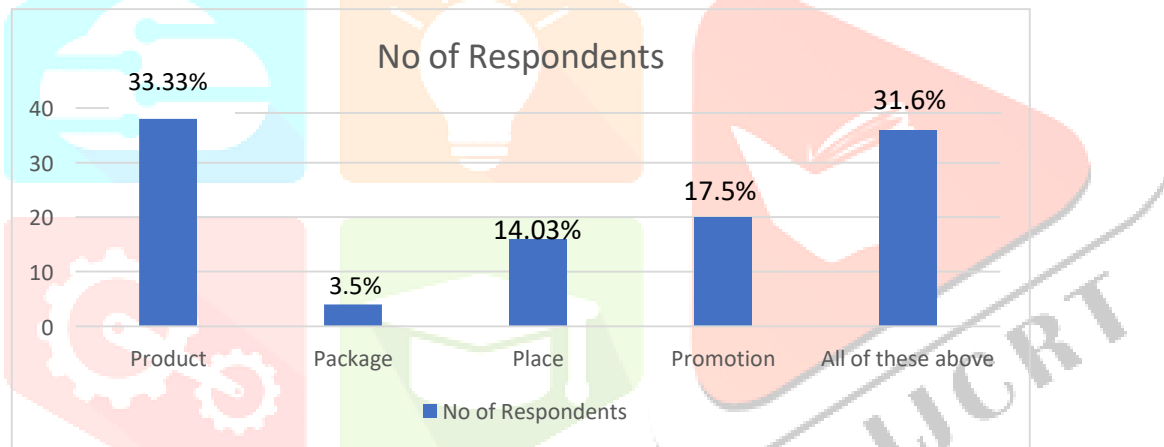
The above diagram shows that out of the total 26 respondents who are not willing to pay more for green product, 46.16% of them not willing say that “Producer should pay for them”. 30.76% says that “Product cost is too high, cannot afford them”. 15.38% says that ‘Government should pay for them’. And 7.7% says that cannot see the benefit of those features

**INFERENCE:** In 26 of the respondents 46.16% of them not willing say that “Producer should pay for them.

**TABLE 4.1.17: Which marketing elements strongly influences your buying behavior of green product?**

Factors	No of Respondents	Percentage
Product	38	33.33
Package	4	3.5
Place	16	14.03
Promotion	20	17.54
All of these above	36	31.6
Total	114	100

Sources: Primary Data



**CHART 4.1.17: Which marketing elements strongly influences your buying behavior of green product?**

### INTERPRETATION

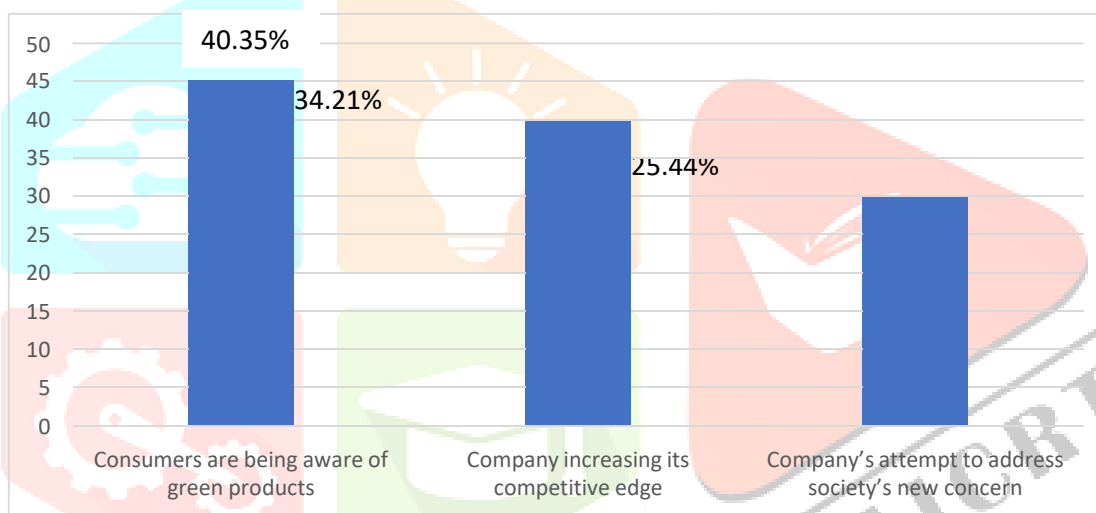
The above diagram shows that out of the total 114 respondents, 33.33% of respondents buying green product based on product, 17.54% based on promotion 14.03% based on place, 3.5% based on promotion and 31.6% based on all of the factors.

**INFERENCE:** 33.33% of respondents are buying “Green products” based on “Product”.

**TABLE 4.1.18: Why do you think green marketing is in headlines nowadays?**

Opinion	No of Respondents	Percentage
Consumers are being aware of green products	46	40.35
Company increasing its competitive edge	39	34.21
Company's attempt to address society's new concern	29	25.44
Total	114	100

Sources: Primary Data



S

#### CHART 4.1.18: Why do you think green marketing is in headlines nowadays? INTERPRETATION

The above diagram shows that out of the total 114 respondents, 40.35% says that 'Consumers are being aware of green products' that's why green marketing is headlines now a days. 34.21% says that 'Company increasing its competitive edge 'and 25.44% says 'Company's attempt to address society's new concern'

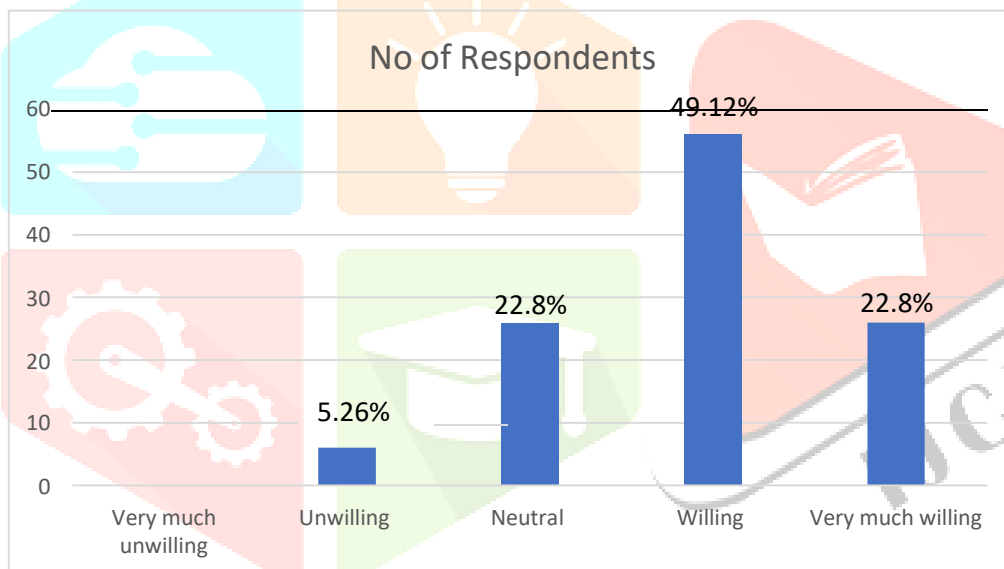
#### INFERENCE:

40.35% says that 'Consumers are being aware of green products' that's why greenmarketing is headlines now a days.

**TABLE 4.1.19: Willingness to recommend green products?**

Opinion	No of Respondents	Percentage
Very much unwilling	0	0
Unwilling	6	5.26
Neutral	26	22.8
Willing	56	49.12
Very much willing	26	22.8
Total	114	100

Sources: Primary Data

**CHART 4.1.19: Willingness to recommend green products?INTERPRETATION**

The above diagram shows that out of the total 114 respondents 49.12% of them willing to recommend green products to others, 22.8% very much willing to recommend it.22.8% of respondent's opinion is neutral. And5.26% respondents are unwilling

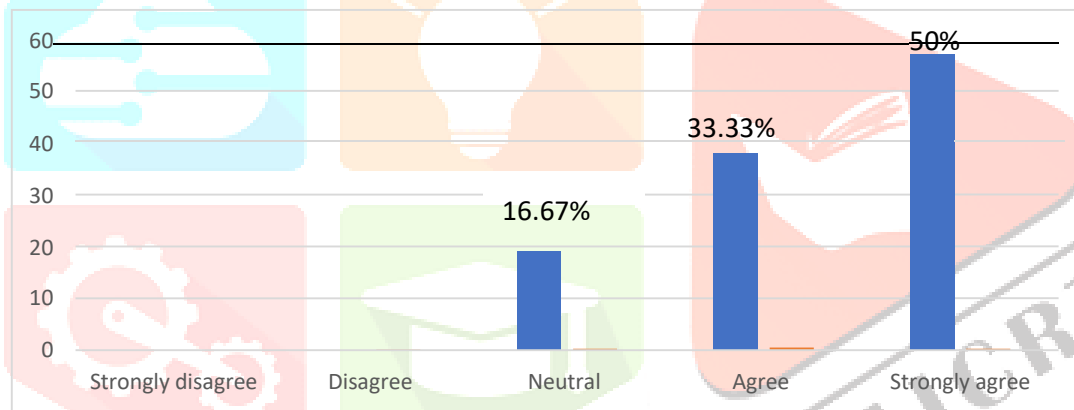
**INFERENCE:** 49.12% of them willing to recommend green products to others.



**TABLE 4.1.20: Do you think government should take initiative in making companies to go green?**

Opinion	No of Respondents	Percentage
Strongly disagree	0	0
Disagree	0	0
Neutral	19	16.67
Agree	38	33.33
Strongly agree	57	50
Total	114	100

Sources: Primary Data

**CHART 4.1.20: Do you think government should take initiative in making companies to go green?****INTERPRETATION**

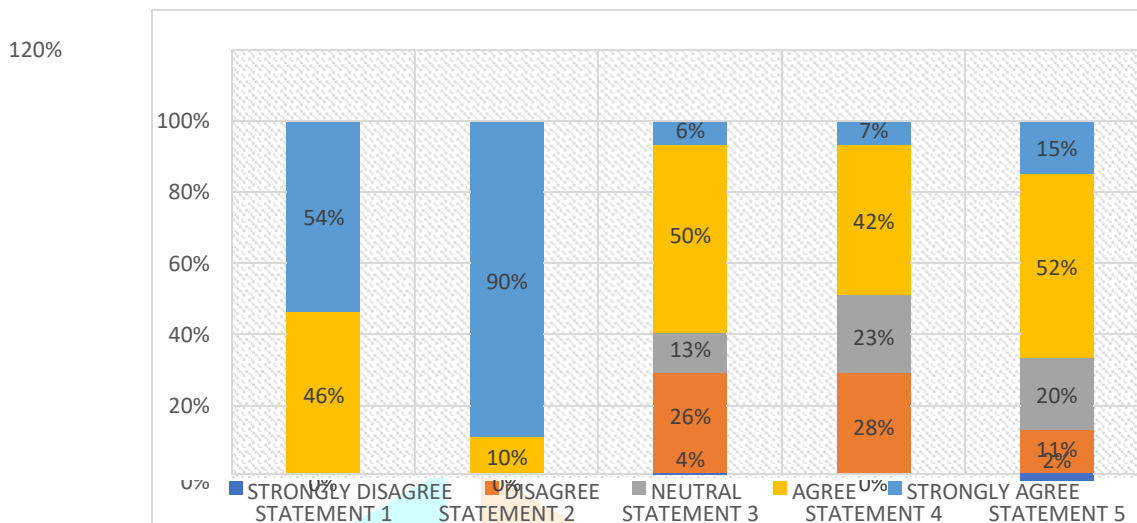
The above diagram shows that out of the total 114 respondents 50% of them strongly agree that government should take incentives in making companies to go green, 33.33% of hem strongly agree to that, and 16.67% respondent's opinion is neutral.

**INFERENCE:** 50% of them strongly agree that government should take incentives in making companies to go green

**TABLE 4.1.21: Level of awareness about green marketing dimensions**

STATEMENT	TOTAL	STRONGLY DISAGREE (%)	DISAGREE (%)	NEUTRAL (%)	AGREE (%)	STRONGLY AGREE (%)	TOTAL
Aware of the benefits of green products for health	100	0%	0%	0%	46%	54%	100%
Aware of the benefits of green products for the environment	100	0%	0%	0%	10%	90%	100%
Aware of the point of purchase for green products	100	4%	26%	13%	50%	6%	100%
Aware of various brands offering green product	100	0%	28%	23%	42%	7%	100%
Aware of various symbols which declare the product as green product	100	2%	11%	20%	52%	15%	100%

Sources: Primary Data



#### CHART 4.1.21: Level of awareness about green marketing dimensions? INTERPRETATION

The above diagram shows that out of the total 114 respondents, 54% of respondents are strongly agree that they are aware the benefits of green product for health and 46% of the respondents agree that. 90% of respondents are strongly agree that they are aware about green product for environment, and 10% agree with that. 50% of the respondents agree that they are aware the point of purchase of green product, 26% disagree and not aware about it and 4% strongly disagree. 13% opinion is neutral, and 6% is strongly agree that. 42% is agree that they aware about brands offering green product and 7% is strongly agree that. 28% is disagree and 23% opinion is neutral. 52% of the respondents are agree that they are aware about various symbols, certifications, other identifiers which declare the product as green product. 15% strongly agree that 20% opinion is neutral 11% disagree to that statement 2% is strongly disagree to it.

#### INFERENCE:

54% of respondents are strongly agree that they are 'aware the benefits of green product for health'. 90% of respondents are strongly agree that they are 'aware about green product for environment', 50% of the respondents agree that they are 'aware the point of purchase of green product', 42% is agree that they 'aware about brands

offering green product', 52% of the respondents are agree that they are 'aware about various symbols, certifications, other identifiers which declare the product as green product'

#### 4.2 CHI- SQUARE TEST ANALYSIS

**Null hypothesis (Ho):** There is no relationship between customer satisfaction towards green product and willing to pay more for green product.

**Alternate hypothesis (H1):**

There is relationship between customer satisfaction towards green product and willing to pay more for green product.

#### Case Processing Summary

Cases

	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Willingness to pay more * Satisfaction towards green products	114	100.0%	0	0.0%	114	100.0%

#### Satisfaction towards green products \* Willingness to pay more Crosstabulation

		Willingness to pay more		Total	
		YES	NO		
Satisfaction towards green products	DISSATISFIED	Count	5	7	12
		Expected Count	9.3	2.7	12.0
	NUTRAL	Count	21	11	32
		Expected Count	24.7	7.3	32.0
	SATISFIED	Count	50	6	56
		Expected Count	43.2	12.8	56.0
VERY MUCH SATISFIED	Count	12	2	14	
	Expected Count	10.8	3.2	14.0	
Total	Count	88	26	114	
	Expected Count	88.0	26.0	114.0	

## Chi-Square Tests

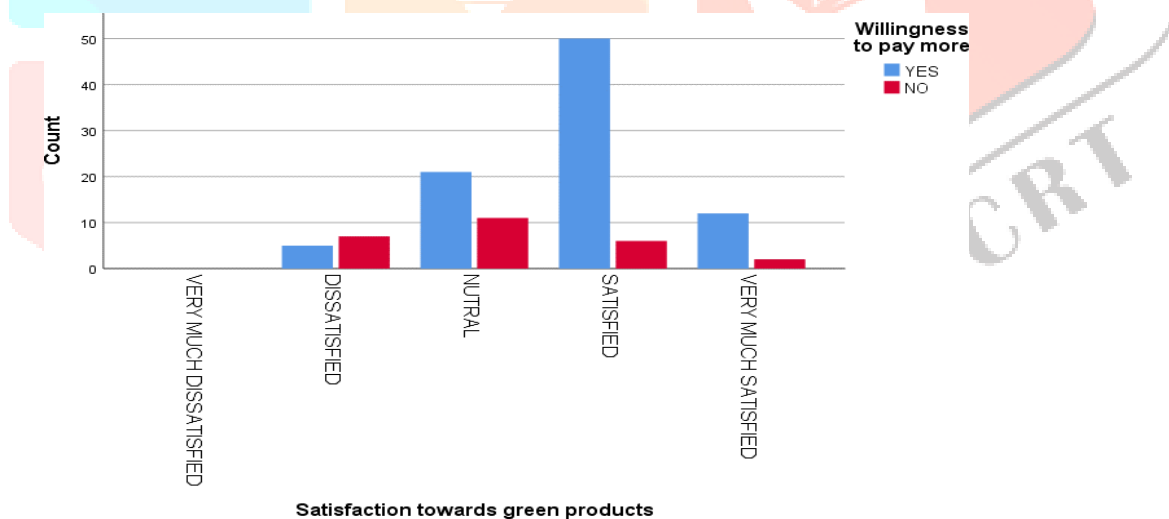
	Value	df	Asymptotic significance(2- sided)
Pearson Chi-Square	16.264 <sup>a</sup>	3	.001
Likelihood Ratio	15.318	3	.002
N of Valid Cases	114		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 2.74.

Pearson Chi-square <  $\alpha$

0.001 < 0.002

Hence, Reject the null hypothesis [ $H_0$ ] and accept alternative hypothesis [ $H_a$ ].



## INFERENCE:

Since Pvalue (.001) is less than 0.05,  $H_0$  rejected and  $H_1$  accepted. Hence there is association between customer satisfaction towards green product and willing to pay more for the green product.

**Null hypothesis (Ho):**

There is no association between customer income and frequency of buying green product.

**Alternate hypothesis (H1):**

There is association between customer income and frequency of buying green product.

**Case Processing Summary**

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
income * green	115	100.0%	0	0.0%	115	100.0%

**income \* green Crosstabulation**

Count

		green				Total	
		1	2	3	4		
income	1	24	2	49	13	0	88
	3	8	0	16	2	0	26
Total		32	2	65	15	1	115

**Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	116.577 <sup>a</sup>	8	.000
Likelihood Ratio	13.583	8	.093
Linear-by-Linear Association	.143	1	.705
N of Valid Cases	115		

a. 10 cells (66.7%) have expected count less than 5. The minimum expected count is .01.

**INFERENCE:**

Since Pvalue is .000 is less than 0.05, H0 rejected and H1 accepted. Hence there is association between customer income and frequency of buying a green product.

**4.3 CORRELATION ANALYSIS**

Correlation analysis is the statistical tool used to measure the degree to which two variables are linearly related to each other. Correlation measures the degree of association between two variables.

**Null hypothesis (H0):**

There is no relationship between Awareness about Green Marketing and Willingness to pay more for Green product.

**Alternate hypothesis (H1):**

There is relationship between Awareness about Green Marketing and Willingness to pay more for Green product.



		Awareness of Green Marketi ng	Willingness T o Pay More
Awareness of Green M arketing	Pearson Correlation	1	.701**
	Sig. (2-tailed)		.000
	N	114	114
Willingness To Pay Mor e	Pearson Correlation	.701**	1
	Sig. (2-tailed)	.000	
	N	114	114

\*\* . Correlation is significant at the 0.01 level (2-tailed). Correlation is 0.701

#### INFERENCE:

Since Pvalue is .000 is less than 0.05, H0 rejected and H1 accepted. Hence there is relationship between awareness and willingness to pay more for green product.

#### 4.4 ANOVA:

##### Null hypothesis (H0):

There is no relationship between age and awareness of the benefits of the green product for the environment.

##### Alternate hypothesis (H1):

There is relationship between age and awareness of the benefits of the green product for the environment.

ANOVA					
How do you agree with that the age is having an awareness of the benefit of the green product for the environment.					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.725	4	2.181	2.692	.035
Within Groups	89.135	110	.810		
Total	97.861	114			

#### INFERENCE:

Since Pvalue is .035 is greater than 0.05, H0 accepted and H1 rejected. Hence there is no relationship between awareness and willingness to pay more for green product



## CHAPTER 5

### 5.1 FINDINGS

- 78% of the respondents are male
- 45.6% of the employees belong to the age group of 26 to 40 years.
- 41.2% of respondents are undergraduate.
- 49.1% of the respondents' monthly income is between 10001-20000.
- 77.2% of respondents are aware about Green Product and "Green Marketing".
- 39.47% of respondents aware about "Green marketing" and "Green product" through other media, mainly social media.
- 47.36% of respondents a little Awarded of advantages of "Green marketing".
- 68.42% of respondents are bought "Green product" recently.
- 72.8% of respondents are bought green product Regularly when needed.
- 56.1% of the respondents are buying the product because of the environmental issues.
- 62.29% of customers repeat their purchase always.
- 49.12% of respondents are satisfied with green product.
- 84.21% respondents are believing that green products are worth the money.
- 77% of the respondents are willing to pay more for "Green products".
- In 88 respondents 69.3% willing to pay because of "Environmental protection responsibility".
- In 26 of the respondents 46.16% of them not willing say that "Producer should pay for them".
- 33.33% of respondents are buying "Green products" based on "Product".
- 40.35% says that 'Consumers are being aware of green products' that's why green marketing is headlines now a days.
- 49.12% of them willing to recommend green products to others

- 50% of them strongly agree that government should take incentives in making companies to go green
- 54% of respondents are strongly agree that they are 'aware the benefits of green product for health'. 90% of respondents are strongly agree that they are 'aware about green product for environment', 50% of the respondents agree that they are 'aware the point of purchase of green product', 42% is agree that they 'aware about brands offering green product', 52% of the respondents are agree that they are 'aware about various symbols, certifications, other identifiers which declare the product as green product'.
- There is relationship between customer satisfaction towards green product and willing to pay more for green product.
- There is positive relationship between Awareness about 'Green Marketing' and Willingness to pay more for 'Green product'.
- Most of the respondents ranked first for 'concern for environment', and that is the main reason for buying green product.
- Majority of the respondents are feeling satisfied with green products and green marketing.
- majority of the respondents are strongly agreed that government should take initiative to in making companies to go green.

## 5.2 SUGGESTION

- Most of the customers are aware about green marketing concept but few need more awareness. For that need to make new marketing strategies.
- A customer firstly checks the website of the company. To attract and give information company need to add more details about the green marketing factors that the company following.
- Most of the customers know the green factors increase the price of the product and they are ready to pay more, and if required company can increase the price of the product.
- Customer satisfaction is very important for existence and goodwill of the company, so company need to give more importance to making them satisfied by giving quality goods and making the product eco-friendly.

### 5.3 CONCLUSION

In this study, analysed the perception and behaviour of the plastic bottles consumers towards the green marketing concept. And concluded that most of them aware about it. And they are also believing that for a better future we need to do something now. Mainly to do something to the environment and going green way the company need to make some change in production process and in production material. That make increase in the product price and find that the respondents are ready to pay more for the green product.

As environmental issues continue to affect human activities, society is now regarding them with much concern. Most firms have started using sustainable development framework which is known as green marketing and most of the organizations have acknowledged green products which are environmentally friendly. Marketing managers can use green marketing to earn profits. In addition, green marketing is able to preserve the environment while satisfying customers' needs. Therefore, green marketing is a tool now used by many companies to increase their competitive advantage as people is presently very concerned about environmental issues. In the time applying green marketing, the companies have to comply with the consumers' needs and wants. Consumers want to recognize themselves with companies that are green compliant and are willing to pay more for a greener lifestyle. For this reason, green marketing is not only an environmental protection tool but also a marketing strategy (Yazdanifard, 2011).

We can conclude that the company can go green by provide training to their employees, especially sales representative. This is to give them knowledge on how to promote the green product effectively by clearly presenting the main message to the consumers., and company need to make new strategies and marketing mix to go green. For the better future of the company and to overcome the competition in market. For all of it company need to make aware the concept to their customers.

Companies that carry out green marketing in the right place and on the right person may support the company to achieve their competitive advantage.

**APPENDIX-1 (QUESTIONNAIRE)**

1. Name:

2. Gender:

- a) Male                      b) Female

3. Age

- a) 18-25 Years      b) 26-40 Years

c) 41-55 Years

d) 56 Years & above

4. Education Level:

a) Below Secondary Level

b) Secondary Level

c) Undergraduate

d) Postgraduate

5. Monthly income:

a) Less than 10000

b) 10001-20000

c) 20001-30000

d) More than 30001

6. Are you aware of "Green products" and "Green marketing"?

a) Yes                      b) No

c) A little

7. How do you become aware of Green products?

a) Television              b) Magazines

c)                      Class lectures

d) Newspapers

e)                      Others\_\_\_\_\_

8. Are you aware about the advantages of green marketing products?



a) Enhance a quality of life

b) Potential increase of product value

c) Environmental protection responsibility

d) Getting high level of satisfaction

17. What is the main reason that makes you not willing to pay more for the “green” products?

- a) Cannot see the benefit of those features
- b) Product cost is too high, cannot afford them
- c) Government should pay for them
- d) Producer should pay for them
- e) Environmental issues are gimmick for commercial only

18. Which marketing elements strongly influences your buying behaviour of green product?

- a) Product
- b) Package
- c) Place
- d) Promotion
- e) All of these above

19. If you don't use green products. Will you consider using green products in the future?

- a) Not at all
- b) Intend to consider
- c) Consider using sometime
- d) Consider using always
- b) Consider but not in the immediate future

20. Why do you think green marketing is in headlines nowadays?

- a) Consumers are being aware of green products

b) Company increasing its competitive edge

c) Company's attempt to address society's new concern

21. How would you express your willingness to recommend green products to friends and relatives?

a) Very much unwilling

b) Unwilling

c) Neutral

d) Willing

e) Very much willing

22. Do you think government should take initiative in making companies to go green?

a) Strongly disagree

b) Disagree

c) Neutral

d) Agree

e) Strongly agree

23. If you use green products, what is your motive?

No	Motive	Rank
1	Concern for Health	
2	Concern for status	
3	Concern for the environment	
4	To use better quality products	

24. How would you describe your level of awareness about following dimensions of green products?

No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I am aware of the benefits of green products for health					
2	I am aware of the benefits of green products for the environment					
3	I am aware of the point of purchase for green products					
4	I am aware of various brands offering green products					
5	I am aware of various symbols / certifications / other identifiers which declare the product as green product					



25. If you don't use Green products please rate your reasons for non-usage?

No	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Lack of awareness about green products.					
2	Green products are very expensive.					
3	Green products are not promoted properly.					
4	Lack of confidence in the performance of green products					
5	Green products are not available in full range of variety					
6	Green products are not easily available in shopping outlets					
7	Labels of green products are not informative; they don't fully inform about their greenness.					

26. With reference to environmental problems that we are currently facing, do you think the creation and development of environmental-friendly products could help alleviate these growing concerns? Why?

a) Yes

b) No

## REFERENCES

1. Anu Varghese and Santhosh, J. (2015). A study on consumers' perception on eco-friendly product with reference to Kollam district in Kerala. EPRA International Journal of economic and business review. Retrieved from <http://epratrust.com/articles/upload/25.Anu%20Varghese%20&%20Santhosh%20J..pdf>
2. Aseem Prakash (2002). Green Marketing, Public Policy and Managerial Strategies. Retrieved from <http://www.greeneconomics.net/GreenMarketing.pdf>
3. Bhatia Mayank and Amit Jain (2013). Green Marketing: A Study of Consumer Perception and Preferences in India. Retrieved from <http://escholarship.org/uc/item/5mc39217.pdf>
4. customer perception towards green marketing by D. Manimala  
<https://www.slideshare.net/DMANIMALA/customer-perception-on-green-marketing>
5. Dr. Gunjan Malhotra (2011). Green marketing a study on Indian youth, International Journal of Management and Strategy. Retrieved from [www.academia.edu/10125307/Gunjan\\_Malhotra\\_IMT\\_Gzd](http://www.academia.edu/10125307/Gunjan_Malhotra_IMT_Gzd)
6. [www.greenmarketing.net/stratergic.html](http://www.greenmarketing.net/stratergic.html)  
[https://en.wikipedia.org/wiki/Green\\_marketing](https://en.wikipedia.org/wiki/Green_marketing)

## ARTICLE

## A STUDY ON CONSUMER PERCEPTION TOWARDS GREEN MARKETING

Linu James and Nithya Shankar

Student, Sathyabama Institute of Science and Technology

Assistant Professor, Sathyabama Institute of Science and Technology

## ABSTRACT

In current business scenario environmental issues plays an important role in business. In most of the country's government is concerned about the environmental problems. In today's business environmentally sustainable development has become a key issue.

Green Marketing refers to the process of selling products and services based on their environmental benefits. Such a product or service should be eco-friendly in itself or product modification, changes to the production process, sustainable packaging, as well as modifying advertising. The present paper reviews the green marketing literature in various aspects, which include customer awareness, relationship between the customer awareness and usage of green products, effect of green products and benefits of the green products.

Green Marketing has been defined by AMA as "The study of the positive and negative aspects of marketing activities on pollution, energy depletion and non-energy resource depletion".

The study tries to analyse the awareness and willingness of the consumer to buy green products. However, one of the basic assumptions of green marketing is that potential consumers would be willing to pay more for a "green" product. For the study well-structured and close-ended questionnaire was used to collect the data from 114 respondents. The data was analysed using percentage analysis, chi-square test and Friedman test. The results of the study show a bright future for green products in the present-day situations and the factors which enhancing the green products attractiveness in consumers

## INTRODUCTION

Green marketing is a modern concept which evolves in recent years. But Marketing is the holistic approach towards identifying and satisfying need and wants of consumer and potential consumer. Green Marketing means manufacturing and marketing of products and services which are manufactured through green processes. According to the American Marketing Association, “green marketing is the marketing of products that are presumed to be environmentally safe”. Thus, green marketing incorporates a wide range of activities such as modification of product, changes to the production process, packaging changes, as well as modifying advertising etc.

Green Marketing is also known as Environmental Marketing and Ecological Marketing. Thus, Green Marketing is a holistic marketing concept wherein the production, marketing consumption and disposal of products and services happen in a manner that is less detrimental to the environment with growing awareness.

Green Marketing is not limited to adding green theme to brand name or making websites or product/packaging design with green colour. It is the overall efforts of a company to eliminate processes which are detrimental to the environment and use environmentally friendly processes and packaging for manufacturing and presenting the products. By doing this a firm may have to spend few extra bucks initially but in the long run this will pay in terms of increased sales. Recently due to changes in policies for corporate results compliance procedure by SEBI all companies are using mail channels for reporting of financial results which has saved lot of paper and trees.

## REVIEW OF LITERATURE

**Charles W Lamb et al (2004)** explained that —Green Marketing has also become an important way for companies to build awareness and loyalty by promoting a

popular issue. By positioning their brands as ecologically sound, marketers can convey concern for the environment and society as a whole.

**Meenakshi Honda (2006)** has indicated that Activist groups and the media have played a major role in enhancing the environmental awareness and consciousness of consumers in recent years. Most studies on the subject show that although the awareness and environmental behaviour of consumers across countries, educational levels, age and income groups may differ, environmental concerns are increasing worldwide.

**Roger a Kerin et al (2007)**, Green Marketing takes many forms. It comes from product development opportunities that emanate both from consumer research and its —Pollution Prevention Pays program. This program solicits employee suggestions on how to reduce pollution and recycle materials.

**Sherlekar (2007)** has identified that using a tiled earthen pitcher as its symbol, the Eco mark label is intended to enable consumers to choose products which are environmentally friendly. The products demanding immediate Eco marking are textiles, toilet soaps, detergents, paper, paints, packages, pesticides, drugs etc

**Vemuri Lakshmi Narayana & Dhinesh Babu (2008)**, A clever marketer is one who not only convinces the consumer, but also involves the consumer in marketing his product. Green marketing should not be considered as just one more approach to marketing, but has to be pursued with much greater vigor, as it has an environmental and social dimension to it.

## OBJECTIVES OF THE STUDY

### *Primary objective*

To conduct an empirical study on Green marketing based on customer's perception.

### *Secondary objectives*

- To study the awareness of customers for eco-friendly products.
- To study the customer satisfaction towards green products.
- To understand the issues and challenges in Green Marketing.

## RESEARCH METHODOLOGY

The sample size of the study is 114 and both primary and secondary data is used in this study. This study adopted convenience sampling method to collect data. The data collection was done through the questionnaire method and closed ended questions were asked to the respondents



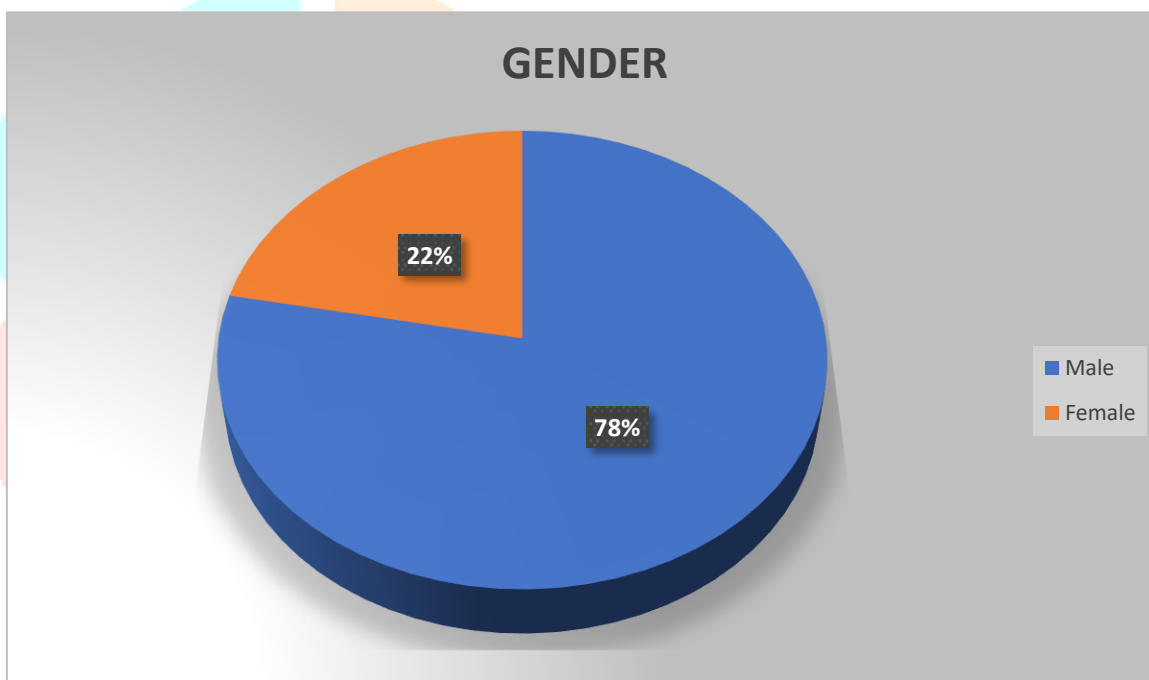
## DATA ANALYSIS AND INTERPRETATION

### Percentage analysis

#### i. Gender of the respondents

Gender	No respondents	Percentage
Male	89	78%
Female	25	22%
Total	114	100%

Sources: Primary Data



Gender of the respondents

## INTERPRETATION

The above diagram shows that out of the total 100 respondents 78% of the respondents are male and 22% are female.

**INFERENCE:** Majority of the respondents are male

### ii. Awareness of advantages of “Green marketing”

Opinion	No of Respondents	Percentage
Yes	48	42.1
No	12	10.52
A little	54	47.36
Total	114	100

**Sources:** Primary Data

### Awareness of advantages of “Green marketing”

## INTERPRETATION

The above diagram shows that out of the total 114 respondents 42.1% of respondents Awareness of advantages of “Green marketing”. 10.52% of respondents not Awarded of advantages of “Green marketing”. And 10.52% of respondents a little Awarded of advantages of “Green marketing”.

**INFERENCE:** Majority of respondents little aware about little aware about the advantages of Green marketing.



### 4.3 CORRELATION ANALYSIS

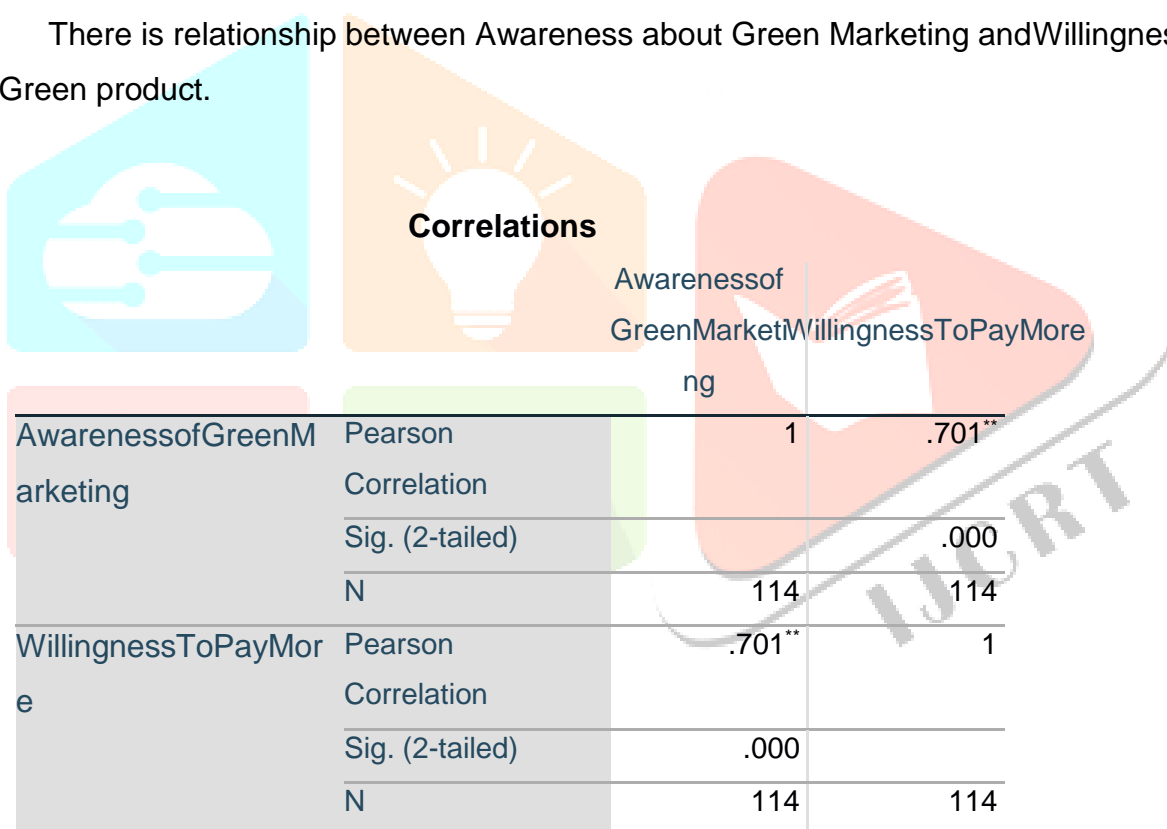
Correlation analysis is the statistical tool used to measure the degree to which two variables are linearly related to each other. Correlation measures the degree of association between two variables.

#### Null hypothesis (H0):

There is no relationship between Awareness about Green Marketing and Willingness to pay more for Green product.

#### Alternate hypothesis (H1):

There is relationship between Awareness about Green Marketing and Willingness to pay more for Green product.



		Awareness of Green Marketing	Willingness To Pay More
Awareness of Green Marketing	Pearson Correlation	1	.701**
	Sig. (2-tailed)		.000
	N	114	114
Willingness To Pay More	Pearson Correlation	.701**	1
	Sig. (2-tailed)	.000	
	N	114	114

\*\* . Correlation is significant at the 0.01 level (2-tailed). Correlation is 0.701

#### INFERENCE:

Since P value is .000 is less than 0.05, H0 rejected and H1 accepted. Hence there is relationship between awareness and willingness to pay more for green product.

## SUGGESTIONS

- Most of the customers are aware about green marketing concept but few need more awareness. For that need to make new marketing strategies.
- A customer firstly checks the website of the company. To attract and give information company need to add more details about the green marketing factors that the company following.
- Most of the customers know the green factors increase the price of the product and they are ready to pay more, and if required company can increase the price of the product.
- Customer satisfaction is very important for existence and goodwill of the company, so company need to give more importance to making them satisfied by giving quality goods and making the product eco-friendly.
- For making the product eco-friendly, company need to focus on waste management, it helps to reduce waste and maximum utilisation of resources.

## CONCLUSION

In this study, analysed the perception and behaviour of the plastic bottles consumers towards the green marketing concept. And concluded that most of them aware about it. And they are also believing that for a better future we need to do something now. Mainly to do something to the environment and going green way the company need to make some change in production process and in production material. That make increase in the product price and find that the respondents are ready to pay more for the green product.

As environmental issues continue to affect human activities, society is now regarding them with much concern. Most firms have started using sustainable development framework which is known as green marketing and most of the organizations have acknowledged green products which are environmentally friendly. Marketing managers can use green marketing to earn profits. In addition, green marketing is able to preserve the environment while satisfying customers' needs. Therefore, green marketing is a tool now used by many companies to increase their

competitive advantage as people is presently very concerned about environmental issues. In the time applying green marketing, the companies have to comply with the consumers' needs and wants. Consumers want to recognize themselves with companies that are green compliant and are willing to pay more for a greener lifestyle. For this reason, green marketing is not only an environmental protection tool but also a marketing strategy (Yazdanifard, 2011).

We can conclude that the company can go green by provide training to their employees, especially sales representative. This is to give them knowledge on how to promote the green product effectively by clearly presenting the main message to the consumers., and company need to make new strategies and marketing mix to go green. For the better future of the company and to overcome the competition in market. For all of it company need to make aware the concept to their customers. Companies that carry out green marketing in the right place and on the right person may support the company to achieve their competitive advantage.

## REFERENCES

7. Anu Varghese and Santhosh, J. (2015). A study on consumers' perception on eco-friendly product with reference to Kollam district in Kerala. EPRA International Journal of economic and business review. Retrieved from <http://epratrust.com/articles/upload/25.Anu%20Varghese%20&%20Santhosh%20J..pdf>
8. Aseem Prakash (2002). Green Marketing, Public Policy and Managerial Strategies. Retrieved from <http://www.greeneconomics.net/GreenMarketing.pdf>
9. Bhatia Mayank and Amit Jain (2013). Green Marketing: A Study of Consumer Perception and Preferences in India. Retrieved from <http://escholarship.org/uc/item/5mc39217.pdf>
10. customer perception towards green marketing by D. Manima