Buying Behaviour of Consumers towards Eco-friendly Products

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By

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ABSTRACT

The environmental problems have become critical now as the destruction due to human intervention in the eco-system is grave and it should be addressed soon. It is imperative that the carbon foot print leaves behind by extraction, production and consumption of consumer goods to be addressed and reduced. Fortunately, customers started to realize the importance of eco-friendly products which inflict less or no harm to the environment. Manufacturers very well understand this scenario and ready to include eco-friendly marketing and products in their marketing and production streams. Hence, it is very important for the manufacturers and marketers of eco-friendly products to understand and analyse the factors which decides the buying behaviour of eco-friendly customers.

Kerala State is selected for the study and the data from 711 samples have been collected from four major district; Kollam, Trivandrum, Ernakulam and Alleppey. Convenience sampling method is adopted for data collection due to feasibility. The socio-economic profile of the customers is explained using frequency distribution and percentage analysis. The factors influencing the buying behaviour are explored by exploratory factor analysis method. ANOVA is used to find any significant difference between socio-economic profile of the eco-friendly customers and their attitude, awareness and perception.

It is found from the analysis that product features, environmental concerns, health consciousness, and values are factors affecting the buying behaviour of consumers for eco-friendly products. The attitude, awareness and perception of the customers are positively correlated. It is also found that there no significant difference between demographic profile of the eco-friendly customers and their attitude, awareness and perception except certain factors.

This study will help the marketers, producers and policy makers in identifying the potential area and take adequate steps to promote eco-friendly consumption of goods and services.

Key words: *Environmental friendly, Sustainability, Demographics, bio-degradable*.

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LIST OF ABBREVIATIONS

Acronym	Full form
ANERT	Agency for New and Renewable Energy Research and Technology
SAPCC	State Action Plan on Climate Change
NAPCC	National Action Plan on Climate Change
KSDMA	Kerala State Disaster Management Authority
UIAI	Unique Identification Aadhar India

CHAPTER – I

INTRODUCTION

Chapter-1
Introduction

1.1 Overview

The consumers, now a day, are aware of the environmental issue they face and are ready to actively participate and take responsibility in the measure the organization and government take.

But sometimes, customer's lack of awareness, or their attitude, knowledge, and perception regarding the eco-friendly products due to various socio, cultural, economic, or personal factors leads to low consumption of eco-friendly products. Hence producers and marketers of eco-friendly products are confronting problems like unawareness of customers regarding eco-friendly products and their utilities, their dynamics in buying behaviour, heavy investment in product development, variation in demand, etc. Given the changes in consumer's buying patterns due to environmental responsibility, the companies should concentrate on this segment because it provides a competitive advantage in the future.Ambika (2020) revealed in her thesis that eco-friendly customers are environmentally conscious, but exhibit restrained behaviour when it comes to purchase due to lack of awareness, perception and trust. According to Bhatia & Jain (2013), consumers have shown positive attitude towards eco-friendly products, at the same time they are concerned with availability and price.

The success of the companies operation and strategies to promote eco-friendly products depends on the buying behavior of consumers and understanding their preferences. To have a deeper understanding of consumer's preference and factors affecting their buying behaviour, this research study is carried out to know their demographic profile and thus their socio-economic condition under which they purchase and consume. This demographic profile is examined to know their knowledge, attitude, perception, and buying behavior towards eco-friendly products.The study to know any significant difference between the demographic profile and awareness, attitude, perception, and buying behavior will give an insight into the underlying solution to the problem and help the companies to incorporate the eco-friendly marketing mix in their marketing strategies.

As consumers are more willing to buy eco-friendly products with reliable information, companies should provide trustworthy information for their consumers to reduce their consumer's perceived risk. Thus, the companies improve the eco-friendly buying behavior of consumers through eco-friendly perceived value, eco-friendly perceived risk, and eco-friendly trust(Sehgal, 2010). Besides, companies must bear in mind that consumers are unlikely to compromise on product attributes such as value, quality, price, and performance.

To influence the eco-friendly buying behavior of consumers, messages through eco-friendly advertising must be informative and convincing enough in reaching the desirable targeted business outcomes. The advertising claims namely “eco-friendly” and “biodegradable” are the general terminology available in the market, but its effectiveness in convincing eco-friendly purchase action is still insignificant (Peattie, 2001). As a result, companies have started to identify the factors affecting the buying behavior of consumers for eco-friendly products to provide valuable products to various segments of consumers.

Environment-friendly consumers are responsive to environmental effects when they buy products and are actively involved in the conservation of energy and eco-friendly behavior.

1.2 ECO-MARKETING

The producers as well as consumers of eco-friendly products started to include the concept of environmental issue in their business activities and consumption pattern respectively. The environmental friendliness is the key aspect of products and services.

Environmental marketing means the promotion of selling of products and/or services based on their environmental features and advantages. AMA (American Marketing Association)conducted the first workshop on environmental marketing in 1975 and this concept became prominent after the publication of book on green marketing by Ken Peattie and Jacquelyn Ottman. Eco-marketing or sustainable marketing is the method of improving the economy and environment through sustainable marketing practices and business methods and the creation of partnerships with environmentally accountable and eco-conscious sellers.

Environmental marketing can be illustrated as a change in managerial ideas from seeing the physical and environment natural as an exterior influence on decision making to seeing it as vital to management and marketing strategy (Menon and Menon, 1997).

The consumers at the bottom level compare not only products and prices and how they are eco-friendly and they evaluate companies that create them and whether they use eco-friendly methods and business practices in production in a sustainable manner. The eco-friendly concept is not just a description of the product, but a business that will increase the market share of companies and their growth.

1.3 ECO- MARKETING MIX

It focuses on ideal marketing mix which includes the environmental factors to achieve maximum profit potential. The demand by the consumers for environmentally friendly products and services is due to the rising concern for environmental problems. The concept, environmental sustainabilityhas generated terms namely offsetting, carbon footprint etc. The marketing strategists of the companies which produce eco-friendly products devise the strategies considering the concern and anxiety of the consumers in their mind. Thus, the marketing mix has an important role in the company strategies to satisfy the emotions and needs of the customer.

1.3.1 Environmental Product Strategies

The environmental problems we face now significantly influence the process of production of goods and services by producers. The cost of production can be increased or decreased based on the production technology they adopt. The increase in cost can be neutralised by production technology and the lower fuel cost while employing the production of eco-friendly products. The increased sales volume due to consumer acceptance can also contribute to lower production cost. The company may be capable to pass the increased cost of production to consumers. Nonetheless, this will rely on the degree of increase, type of consumer, competitiveness, and the potency of the economy.

1.3.2 Environmental Place Strategies

All companies need to cautiously time when their product arrives consumers; but, the exact time of distribution will rely on the product or service which is offered. Such timing

may have an environmental repercussion. Some products will need to need the consumer shortly after production to hold freshness, flavor, or nutritional value.

The distribution method that mixes speed with environment-friendliness may raise the cost of distribution. In addition to the kind of transport facilities for distribution, companies will need to appraise distribution techniques. Some companies put effort to create fewer deliveries, whilst others support concentrated products as they enlarge the number of products that can carry in each delivery channel.

1.3.3 Environmental Promotional Strategies

Different promotional measures have been taken by the companies which produces eco-friendly materials and Governmental organization working on the field on green. Thecertification like NPOP, HACCP, Jaiv-Bharat certification, ISO 14001; certifies the company has certain environmental standards and are strictly monitoring the set standard and taking steps against violation of concerned organisation. The expiry, recyclability properties and other information will have to be there on the packing through proper labeling.

1.3.4 Environmental Pricing Strategies

Product demand is the main criteria for pricing of a product in the economic point of view. If the manufacturers do not consider this demand factor while pricing, the product demand will come down. The market force will determine an ideal product price. If the product pricing is high by the producers based only on profit maximization will lead to a catastrophic effect on the whole effort we take(Woolverton, 2010).

The environmental marketing mix is imperative in present-day business operations because of demand from consumers and pressure from government agencies. Companies

have to vigilantly handle the environmental marketing mix if they are to effectively function in a market that is becoming progressively more aware of environmental issues.

1.4 MEANING OF ECO-FRIENDLY PRODUCTS

Eco-friendly products are products that contribute to conserving resources like energy and water.Eco-friendly refers to anything that is not harmful to the environment. This means preventing air, land, and water pollution which harms natural ecosystems and wildlife. Many people are adopting eco-friendly habits to protect the environment in addition to their health and safety(Thomson, 2020).

The terminology, eco-friendly used to explain services and activities that are beneficial for the environment. Planning and executing the behavioural changes and life style of an individual along with environmentally friendly products manufactured can be defined as eco-friendly or ecological friendly activities (Jha et al, 2017).

The effect of eco-friendly products are significantly less when compared to traditional products. Eco-friendly products have a positive benefit, depending on how the companies do business activities and the actions taken by the consumer after buying the product.

The eco-friendly consumer's action is also important along with their consumption. Their changes in life style, the resource consumption based on sustainability are also vital factors which protects the natural resources for future along with present need.

1.5 DIFFERENCE BETWEEN ECO-FRIENDLY, GREEN, AND ORGANIC PRODUCTS

Green products can be simply defined as a product that leaves a smaller eco-footprint in its production, use, or disposal – either because it is made by recycling existing products or

because it is made using fewer resources or it is less polluting than its mainstream counterpart.No product can be 100% green as all products have some impact on the environment. It all comes down to the degree of impact a product has on the environment. In general, green products are biodegradable, energy-efficient; mostly made up of recycled material, contain non-toxic byproducts, and don't include ozone-depleting chemicals.

Mary Jane(2018), states that organic refers to (natural matter) such as food and meat grown or raised without chemicals and pesticides. The term organic is also used with other domains such as organic business, Organic chemistry, etc.Organic crops must be grown without the use of artificial pesticides, petroleum-based fertilizers, bioengineered genes (GMOs), and sewage sludge-based fertilizers. Vegetables and fruits must be grown with natural fertilizers.

"**Sustainable**" is concerned with environmental health, economic vitality, and social benefits.

1.6 ECO-FRIENDLY PRODUCTS CHARACTERISTIC

Different characteristics are listed below:

- They are no toxic in nature.
- Resource utilization is minimum; thus keeping the sustainability.
- Recyclable material is the production input.
- Low energy consumption due to unconventional power utilisation.
- Efficient utilisation of energy source.
- Carbon emission is comparatively nil or less.
- Packed using recycled materials.

- Reusability and recyclability is there.

1.7 IMPORTANCE OF ENVIRONMENTAL FRIENDLY PRODUCTS

It is important to use eco-friendly products in this era because of the environmental degradation we see and feel today in terms of unexpected natural calamities. The carbon footprint we left behind is to be checked in order to avoid such catastrophe. Hence, it is imperative to use minimum natural resource and preserve with maximum efficiency without harming the environment. Sustainability is the new mantra that places itself above green and eco-friendly products. Sustainable development is the need of the hour to preserve the scarce resources for the future generation and meeting the demands for the current generation with minimum and efficient utilization of scarce resources. The greenhouse gas emission is also slashed down and therefore the intensity of pollution is also held under control. The use of various eco-friendly products is also essential because the products are usually biodegradable and could not take a long time to break down for the benefit of the planet.

Eco-friendly products improve sustainability and attract new customers as a cause of their environmental responsibility. This product induces product differentiation which is beneficial for the company. The health benefit derived from the eco-friendly products is a major advantage for the users which helps them to stay healthy so they can avoid huge hospitalization expenses. Improvement in the quality of life is an additional benefit derived by the customers.

1.8IMPORTANT ADVANTAGES OF ECO-FRIENDLY PRODUCTS

The eco-friendly product brings healthy life to human beings individually and public health is preserved. It helps to decrease pollution and contamination. Energy saving and

healthy life style out of using environmental friendly products saves lot of money. Eco-friendly products ensure better contentment and satisfaction derived out of the thing we do to be eco-friendly. It also ensures a better future for the generation to come.

Reduction of contamination and pollution

The reduction of contamination and pollution is one of the advantages of using environmental friendly products. Reduction in toxicity in the production of materials and distribution process is a major achievement for a green and sustainable environment.The COVID-19 has confined us to our four walls and as a result air pollution has drastically come down and the sea, river, ponds, and water bodies have become clearer and fresher day by day(Kannadasan, 2020). It seems nature has given us a warning sign to evoke our sense of commitment towards preserving nature and its resources or else the future generation has to suffer immensely.

Personal Health

The products manufacturing cycle is causing many health related problem to humans and other species due to the toxic waste it expels(Laumbach, 2015). But eco-friendly products manufacturing reduces these ill effects and the products give a fresher and greener life to the consumers. This will increase health and boost the immune system of customers. This is very important in the wake of the COVID-19 spread.

Long-Term Savings

The major savings by the eco-friendly products are money and energy saving. The current COVID-19 scenario demands more caution against public health due to pollution and contamination. The most affected organ of human being due to COVID-19 is lungs related

deceases. The exposure to this pollution will aggravate the situations of the affected person and cause unwanted situations. COVID has forced us to stay indoors which changed our life style and exposure to outside atmosphere there by reducing the cost of living and reduction of hospital visits.

1.9GOVERMENTAL MAJOR INITIATIVES FOR ECO-FRIENDLY PRODUCTS

Governmental agencies are taking different steps and measures to address the problem of environmental degradation and to create a better atmosphere for the general public to live with.The policy by government on the environmental guidelines in production and services has led to increase in and companies weave in this concept eco-friendliness in to their organizational culture.

The Government policy has generated number of industry which are in tune with its policy of environmental protection, some of them are listed below.

Selco: It was founded in 1995 to provide Selco solar-renewable energy solutions to the poor in India.

Claro Energy: It was started in 2011 to give solar-powered water pumping solutions to meet aeration, fisheries, irrigation, and drinking water requirements in off-grid areas.

Used 2 Useful: It includes spiritual, motivational, educational, and business books and novels printed out of recycling materials.

Ekgaon Technologies: It deals with the problems of agriculture by encouraging farmers to join its “One Village One World Network”, through which they can get farm advisory services through their mobile to increase agricultural productivity and it also links the farmers to customers who require natural and healthy organic food.

Solar Mosquito Destroyer: It is an eco-friendly apparatus to catch mosquitoes that do not use any harmful chemicals or electricity.

PCRA: Petroleum Conservation and Research Association (PCRA) has put many ads that focus on the conservation and efficiency of energy through different media that concentrate on the need to save oil resources.

Videocon: It changes its logo to green color V and the new logo of Videocon has a `V', which is comprised of two vibrant green, lava-like shapes. The color of the logo reflects its ecological mission and these initiatives help to relocate Videocon as a fresher, younger, eco-friendly brand.

Lifebuoy: The eco-friendly initiative by lifebuoy is recognized by FMCG companies in India to create awareness about cleanliness and greenness.

Panasonic's Eco-Ideas: It produces eco-friendly products such as televisions without lead and is a captivating initiative to generate and increase awareness about the need for safeguarding the environment both nationally and internationally through its eco-ideas.

The Eco-friendly Alternative – Paper Bags: The paper bags are forever environment friendly and easily biodegradable. These paper bags are produced from recycled paper or virgin wood pulp or handmade papers and majority of paper bags are produced from Kraft paper.

Eco Wheels: The use of eco wheels namely electric vehicles (EVs) can decrease air pollution and also for saving energy consumption.

Hand Made Papers: They save trees and decrease pollution because it uses non-wood raw materials.

Eco Shoes: Eco shoes are made of materials from recycled plastics, recycled rubber, textiles, and recyclable waste, and synthetic products.

Mitticool: It is a refrigerator that functions with no electricity. It also produces a variety of products from clay.

Solar Products: Solar products are innovative instruments that conserve energy, and maintain the health of the ecosystem, and are generally cost-effective.The products are water heaters, flash lights, solar panels and so on.

Eco-Friendly Paints: The use of eco paints assures a healthier life and a clean environment to live and these are non-toxic with zero VOC (Volatile Organic Content).

1.10 CONSUMERS BEHAVIOR TOWARDS ECO-FRIENDLY PRODUCTS

The economic growth after industrialisation is gradually increased and more consumers were added through theincrease inconsumption. This over utilization and pattern of consumption of available resources caused immense environmental degradation. The increased consumption of private households, ozone layer depletion, desertification of land, annual increase of global temperature, pollution of water body due to industrialization and technological advancement has contributed to environmental degradation drastically.

Environmental pollution is an environmental problem as a result of rapid economic growth. Green movement such as Friday for future, Climate Justice Alliance, Extinction Rebellion is some of the movements working in the field of green. People are slowly realizing the significance of sustainable actions, such as production and consumption, to the long-term development of the environment and the lives of human beings.Consumer behavior is important to the effect that society has on the environment. The actions,those consumers

take and prefer certain products and services which have indirect or direct effects on the environment and wellbeingof individuals (Junaedi, 2007).

Eco-friendly products are produced with the thought that the procedure of producing and distributing such products will not be having any kind of negative impacts or harm to the environment. In today's world, people are becoming more concerned with global warming and the declining health of ecosystems, it’s only natural to come across people interested in buying eco-friendly products. The importance of caring for the environment is being acknowledged across the globe today.

The most significant role of consumers is not decreasing their environmental effects, but put up the support for leadership from business and government (Bonini and Oppenheim, 2008). Consumers buy environmentally-friendly products daily and this buying behavior is stated as environmentally preferable purchasing (EPP). It means the deliberation of environmental effects in the buying of products and services. The eventual objective is to diminish the environmental effects of sourcing and to improve resource use efficiency.

Besides government actions to practice eco-friendly buying, consumers are also demonstrating their growing intention to eco-friendly buying. Across the world, consumers are highly interested in eco-friendly products and many of them are ready to switch to more environmentally friendly products when they have knowledge and concern for environmental problems (Kim, 2011).

Environmentally responsive behavior involves the consumer’s efforts to restrict negative activities that may be harmful to the environment. This could be done by reducing the use of energy and resource, or by using anti-toxic chemicals, or by reducing the production waste. One kind of environmentally responsive behavior is eco-friendly buying

behavior which can be noticed in those consumers who scrutinize labels, who use eco-friendly groceries, cosmetics, medicinal products, stationeries, apparel, toiletries, paper cups, bio-degradable bags, soaps, and detergents.

1.11 MOTIVATION FOR THE STUDY

The consumer's awareness, attitude and perception of eco-friendly products is useful to know their knowledge of eco-friendly products.. The factors that affect the buying behavior of consumers for eco-friendly products are useful to identify the key factors for formulating and implementing effective eco-friendly promotional strategies. The influence of personal and ethical values on the buying behavior of consumers for the eco-friendly product is helpful to understand the extent of influence of personal and ethical values on consumer's buying behavior for eco-friendly products.

The outcome of this study is useful to producers and retailers of eco-friendly products to replicate their production and marketing strategies and compete efficiently in the dynamic market environment. In realistic terms, it is also anticipated that the present study can provide a better understanding of the environment and moral values of consumers by producers and policymakers.

1.12 SCOPE OF THE STUDY

Eco-friendly food and cosmetic products are taken for the study to examine the buying behaviour of eco-friendly customers towards eco-friendly products. Eco-friendly food has a wide range starting from lentils to meat. But meat is the largest carbon content food (360gm/Kg) while preparing lentils (2%) the lowest. The eco-friendly cosmetic products

areknown to be non-toxic (eco-friendly) and do not harm the health of customers whether it is natural or synthetic formation.

Purpose of the study is to (1) Understand and grapple about the consumerattitude, perception and awarenesstowards eco-friendly products(2) to identify and analyse the items affecting eco-friendly product's buying behaviour, and (3) to understand the personal and ethical values of consumers on buying behavior for eco-friendly products.This research would help to find ways to improve the buying behavior of respondents for eco-friendly products in Kerala. The scope of the study is for the respondents regarding eco-friendly products and nonusers of eco-friendly products in the State of Kerala.

1.13 Research Approach and Methodology

The research approach is organized in such a way that the importance of the demographic profile of consumers to understand the economic and social conditions under which they buy and consume eco-friendly products is searched out. The demographic of consumers will affect the consumption pattern of eco-friendly products because of their cultural and social values and responsibilities. The economic conditions of consumers have a large impact on their buying behavior. A thorough literature review which includes magazines, articles and review papers based on eco-friendly products is found to help identify the research gap. Discussion with NGOs working in the field of eco-friendly activities, Government bodies such as ANERT, the expert from SAPCC, KSDMA, and Eco-shops under Krishi Bhavan in Panchayat, and private organizations in the field of eco-friendly activities like Viswas Foundation and Thanal helped to devise the Research Instrument for field survey.

To segment the market in which a survey is conducted, the demographic profile is generally a practical means to identify and segregate a market, analyzing these will regularly give more significant segments and promotional strategies. Keeping this in view, an attempt is made to examine the demographic profile of consumers of eco-friendly products.

A demographic profile such as Gender, Age, Education, Occupation, Working Experience, Monthly income, Marital status, Type of family, Size of family, Source of information about eco-friendly products, Availability of the product in the market, Category of products, Frequency of buying eco-friendly products, Money spent in a month on buying the product, Price of the product, Food brands and Cosmetic brand used by the eco-friendly consumers and others to know about their buying behavior, attitude, awareness and perception towards food products and cosmetic products *(hereafter eco-friendly products)* in Kerala State.

This research study is concentrated in the Kerala state. Kollam, Aleppey, Thiruvananthapuram, and Kottayam districts in Kerala State are chosen for the present studyand the personal survey conducted showed that these four districts comprise major customers and sales for eco-friendly products compared to other districts in Kerala. The convenience sampling method is adopted to select the consumers of eco-friendly product.

1.14 Relevance of the Projected Finding

It is imperative to study the demographic profile of the customers as the information about the socio-economic condition under which they purchase and consumeisimportant. This will help marketers to segment the market and devise the strategy to do the eco-marketing. The influence of socio-economic profile on awareness, attitude, perception, andbuying behavior is

helpful for a broad understanding of consumer's insights, feeling, and compassion and consumer buying pattern and activities towards eco-friendly products.

Factors affecting the buying behaviour of consumers are useful in identifying the key factors for devising and implementing effective promotional strategies.

This study is imperative and beneficial for eco-friendly consumers especially in the wake of COVID pandemic situation, which highlights the importance and acknowledgement of personal health by them to have fresh air and environment free of chemicals and pollution. It is also anticipated that the present study can provide a better understanding of the environmental and their moral value of consumers by producers, distributors and policymakers.

1.15 WORK PLAN -: The work plan is as follows:

1st Chapter consists of the introduction, motivation of the study, scope of the study, demographic profile of consumers, of eco-friendly products, and the organisation of the study and chapter scheme.

2nd chapter narrates on the introduction and the review of the literature with citations on the topic, Research gap, and conceptual framework, and summary.

3rd chapter consists of the Research Questions, problem statement, and objectives,Hypotheses, Research Design, Sampling Plan, Data Collection and Pilot Study.

4th chapter includesa mention on Scale of assessment of awareness, attitude, and behaviour of consumers for products which are eco-friendly and the facets affecting the buying behavior and hypotheses testing.5th chapter consists of the introduction, the result and discussion, implication (managerial and social), and limitation of the present study.

CHAPTER-II

REVIEW OF LITERATURE

Chapter-II

REVIEW OF LITERATURE

2.1Overview

A review of literature is an organization of earlier studies that aims to review the important points for current research and methodology in a specific area. A well-structured literature review is characterized by a systematic arrangement of research studies with references with consistent, appropriate referencing style, proper use of terms, and accurate and complete information of the previous research on the topic. A clear and detailed literature survey is done to identify the gap in research and the researchable problem for the study.

2.2 Ecological Behaviour and Environmental Attitude

Lee and Green (1991) similarly, McCarty and Shrum (1994) concluded that people who had collectivistic cultures were highly worried about environmental problems in comparison with people from individualistic cultures.Thus, it was anticipated that consumers who valued personal fulfillment to have a less positive attitude toward environment-friendly products and vice versa.People who had collectivistic culture also listened to the relevant features of eco-friendly products during their buying process. Dagnoli (1991) concluded that there were a growing number of people that preferred to purchase environmentally friendly products would lead to an increase in the number of green customers. In other words, consumers were more concerned about the business that played more environmental efforts and they would support companies that excel in and master with their green marketing. Ottman (1992) revealed that consumers would choose the eco-friendly brand when the

quality and satisfaction were similar to the other brand not providing eco-friendly attributes.Simon (1992) indicated that definite factors namely convenience and habitual purchasing let consumers attached to their type of shopping. Price was also a factor to not select for eco-friendly brands to a greater extent because of the high pricing of those brands.

Singh (2008) revealed that most of the consumers (92.80%) had a favorable attitude toward enterprises that were sensitive to environmental matters. This attitude represented mainly women of bigger age, married with children, housewives, and pensioners. 96.40 percent declared that the enterprises were compelled to contribute to the safeguard of the environment, while 56 percent of these avoid products made by enterprises that did not respect the environment. The results also indicated that the enterprises strategically supported the guarding the environment was their image improvement (4.54%), differentiation (3.92%), publicity (3.84%), increase in sales (3.63%), favorable taxation (3.54%), and contribute to the safeguard of the environment (3.47%).

Krause (1993) showed that consumers were becoming more concerned about their everyday habits and their impact on the environment. The outcome of this was that some of the consumers translated their environmental concern into actively purchasing green products commitment. Grunert (1993) found that the necessity for environmentally friendly products was slowly growing on the explanation of the unrelenting increase in the anxiety for environmental problems. Providentially, environmentally friendly consumption and expenditure prototypes had led the marketers to know the eco-friendly attitude of the consumers and moved toward the marketing mix which protected environmental and natural resources and value addition to products.

2.3 Value Significance

Sharma et al (1995) indicated that consumers perceived products differently in terms of whether those products are necessary to them or the domestic economy. Two product categories are examined; these are luxury and necessity items. When a product is perceived as a necessity, consumer's attitudes toward environmentally friendly products play a relatively minor role in affecting purchase behavior (willingness to buy environmentally friendly products). On the other hand, consumer's attitudes towards ecological products that are dispensable or luxury (non –necessary) will have a more substantial impact on purchase behavior. Peattie (1995) showed that the production of goods generally engaged two costs namely economic and socio-environmental and majority of the consumers viewed that safeguarding the environment was somewhat of value significance paying a higher price.

Hallin (1995) found that consumers involving in environmental behavior as an outcome of their aspiration to resolve issues related environment, to be role models, and confident that they could assist to conserve the environment. Conversely, the positive attitude of consumers on environmental problems did not essentially lead to the purchasing of eco-friendly products. Schlegelmilch et al (1996) examined environmental attitudes concerning environmental quality and knowledge, recycling behavior, and politically motivated activities to uncover the relationships between these factors and pro-environmental purchasing behavior consisting of both general purchasing decisions toward green products. Their study showed that the linkage between environmental attitudes and overall purchase behavior was the strongest among the researched linkages.

2.4 Attitudes-Behavioural Gap

Mainieri et al (1997) concluded that where consumers did not show their apprehensions about environmental problems when they purchase products although

generally, they had a favorable perception toward the environment. Precisely, the proportion of their consumers who had bought any green products was only 14-30 percent. Such a weak relationship between attitudes and actual purchase behavior had been reported as an attitude-behavior gap in green consumerism.

Johri and Sahasakmontri (1998) revealed that consumers did not base their purchasing decision on environmental concerns alone. The attributes of the product namely price, availability, convenience, and quality played a more significant role in the consumers' purchasing decision process. If any one of the above mentioned attribute is missing, it leads to the attitude-behavioural gap.

Yam-Tang and Chan (1998) indicated that majority of consumers did not purchase products based on environmental problems alone and they would not be ready for the trade-off between attributes of the product and a healthier environment which increases the attitude behavioural gap.

Maronick and Andrews (1999) found that three-fourth of consumers saw themselves as environmentalists who were willing to purchase ecologically sound products or goods and services and made ecologically conscious decisions and had shown a willingness to pay a little more for environmentally safe packaging, on the other hand, consumers did not understand many of the environmental claims they encountered in the market place lack an in-depth understanding of environmental claims and tend to overgeneralize the level of safety from environmental claims. This lead to an attitude-behavioural gap in purchasing of eco-friendly products

Prothero and Fitchett (2000) indicated that where consumers differed in their choices for the quality of the product, the eagerness of consumers to give a premium price for the

environment could be homogeneously or heterogeneously dispersed. This apprehension of quality develops attitude-behavioural gap.

Ottman (2000) showed that consumers were price-sensitive to green products and the price attributes affected consumers' purchasing decisions on green products. To satisfy green consumers, a green product must also be priced competitively with alternatives or else, behavioural gap develops

Laroche et al (2001) found that the education of the consumer was observed as a suitable means for enhancing perceived expediency and creating reliability in terms of being environment friendly. This was stated as ecoliteracy which was used to gauge the ability of respondents to locate or describe some ecologicallyrelated signs, ideas, and behaviors. It was found to be associated with favourable attitudes and consequent behavior toward the environment which reduces purchasing gap.

Ryan (2001) concluded that the choices of consumers and buying behavior depended on the idea of the individual and her/his beliefs for the wrong and right for the products or brands in the markets. The results showed that there was an association between social control and environmental behavior.Here social control supersedes buying behaviour.

Ewing (2001) revealed that peers and family consumers affected the buying decisions and it depended on the product features for instance necessity, luxury, privately used, and publicly displayed.

Kasapoglu and Ecevit's (2002) indicated that more wealthy people were more engaged in responsible environmental behavior than unemployed individuals and students, who rarely had a regular income. The study's results also showed that older people were

more sensitive to the environment than were young people, there was no significant relation between responsible environmental behavior and verbal commitment. The attitude-behaviour gap among them seems low.

Kollmus and Agyeman (2002) found that consumers looked for minimizing the negative effect of an individual's activities on the environmental resources and minimum consumption of energy and resource, usage of non-toxic substances, and decrease the production of wastes. The findings showed that environmentally alert consumers were fairly educated and selected a product that was sustainable environmentally which reduces the purchasing gap.

Clark et al (2003) showed that there were two major streams of thoughts investigating green behavior at the individual level. There was a set of economists who had examined the influence of external factors on individual behavior and their suggestions to the environmental problem were of reward or penalty. On the other hand, psychologists had linked psychological variables to behavior and suggested tools such as awareness, education, and persuasion for behavioral change and gap.

Basu et al (2003) found that if consumers viewed labeled products as private products, then labeling helped in changing the incentives for producers in developing nations to move to eco-friendly practices of production. They argued that an increase in income reached through global trade could only be beneficial to the environment. But, producers must be careful with wrong labeling for eco-friendly products. If this happened, eco-friendly products could be in equilibrium with conventional products which increases the purchasing gap for eco-friendly products.

2.5 Consumer Satisfaction

Kumar and Nandhini (2018) revealed that brand, quality, expectation, value, past experience and usefulness were positively and significantly influencing level of satisfaction and purchasing of environment friendly products among consumers.

Rahman (2017) showed that price, availability, quality and usefulness were significantly and positively affecting satisfaction of consumers on environment friendly products.

Shaw (2008) concluded that satisfaction from behaviors namely recycling, which was more probable to be a depiction of the society directly influenced by the extent of the social norm or social pressure and the direction of those relationships were positive in nature and eco-friendly products.

Diamantopoulos et al (2003) concluded that communications could highlight collectivistic arguments, political issues, deontological claims, traditional messages, and legal statements. Ecologically responsive producers must also systematically evaluate the pro-environmental behavior of their existing and potential customers to regulate their marketing programs accordingly. It was also imperative to gauge customer satisfaction at both the product level and the life level at normal intervals, thus, as to expand and keep the company's customer base.

Jain and Kaur (2004) revealed that various issues relating to the consumer's environmental attitudes, awareness, and behavior had been examined in the past. They analyzed the consumer's awareness towards environment and attitudes width from evaluating the environmental knowledge to understand the importance of environment, being environmentally friendly, consumer effectiveness, or the level to which the consumer felt she

or he could create a distinction in the environment quality and ready to pay higher for their satisfaction for environmentally friendly products.

Vermeir and Verbeke (2004) indicated that a positive attitude towards a product that was environmentally sustainable added to satisfactory buying and consumption behavior.

David and Jaypee (2004) showed that low per capita income countries did not exhibit any improvement in the readiness to spend more on eco-friendly products that were of a premium price for social responsibility. Park and Oh (2005) found that environmentally friendly consumers were responsive to the environmental effects when they bought products and were personally active in their engagement in the conservation of energy and eco-friendly behavior. Such behavior provided consumers a logic of actions and involvement in environmental initiatives that assured satisfaction and conservation of the environment for future generations.

Greenbiz (2005) concluded that nearly three-fourths of online consumers in India are ready to pay highly for socially accountable products. Fascinatingly, this premium price that consumers in India were willing to pay with satisfaction was significantly higher as compared to consumers of the United Kingdom. It was clear that Indian consumers believed in the real need to think about environmental problems and the willingness for green steps to reorganize environmental issues. They also reported a high degree of concern for the environment and behavior and willingness to purchase green products but felt limited in their attempts because of a scarcity of those products in the market.

Kim and Choi (2005) revealed that collectivistic people were likely to generate environmentally-friendly attitudes more and satisfaction because they tended to show cooperative behavior, provide their help punctually to others, and provide priority to the

objectives of the group than their objectives. Vermeir and Verbeke (2006) indicated that the availability of a product was the level of ease or difficulty in identifying and getting a product for consumption. The non-availability of an environmentally sustainable product might give as a constraint for a consumer prompted to do the environmentally friendly purchase of products. The real or unavailability of those products might create a negative impression on the change of positive purchase intention into real behavior. This could be an important cause behind the low level of conversion of intention to purchase those products into real behavior. Ottman et al (2006) showed that green customers took up and supported products that not only meet their requirements but that had the least impact on the environment. Each person's behavior was created when young, as Habits were decided in childhood. Fraj and Martinez (2006) found that people with different personality features responded differently towards some environmentally friendly actions. In particular, it was suggested that consumers who were conscientious and environmental concerned had bought ecological products or have shifted to products for environmental rationales.

Gronhoj and Olander (2007) revealed that there was no significant difference between them and it was recommended that there should give a higher concentration on environment-oriented practices that were accepted and transformed among family members. Tilikidou (2007) indicated that majority of respondents adopted energy and waste conservation, reduction of overall consumption and they avoid products that are genetically modified. They prefer environment-friendly products to others when there is not much price difference.

Sarigollu (2009) indicated that long-term-oriented people tended to create positive attitudes relating to the preservation of the natural environment. Those attitudes might affect the activities taken for eco-friendly within the household and society. Dierksmeier and Pirson

(2009) showed that consumers were satisfied with their lives when they complement their inner and outer world to live in a self-sufficient way, and the acceptance of environmentally-friendly behavior helped to achieve the harmonization. Cheah and Phau (2009) found that the purchasing behavior was needed that demographic features, perception of raw materials, quality, price, information, trust, and availability of the eco-friendly products. Attitudes and readiness for purchasing eco-friendly products were largely affected by various factors namely interpersonal influence, eco-literacy, and value perception.

2.6 Eco-consciousness

Saxena and Khandelwal (2008) showed that 90 percent of the consumers were aware of environmental issues and the need to safeguard them. Consumer knowledge of environmental problems had been connected to favorable environmental behaviors.

Picket-Baker and Ozaki (2008) found that environmentally conscious consumers were likely to pick or purchase brands they knew produced by companies whose goods and production method was more "environmentally friendly". The experience and satisfaction of green products had a great impact on the feeling and action of the consumers' attitude. Kaiser et al (1999) showed that knowledge ofthe environment and awareness of existing environmental issues as the prior condition for the creation of attitude about the environment, environmental issues, and consumers' role in the issue or viewed effects of their performance towards the environment.Amyx et al (1994) revealed that subjective environmental knowledge was the best forecaster of environmental purchasing intentions as compared to objective knowledge. Otherwise, consumers who had higher knowledge and concern for the environment were likely to purchase eco-friendly products more as compared to those who had lesser knowledge of environmental problems. Manaktola and Jauhari (2007) concluded

that most customers exhibited a higher level of awareness about the environment and tendency for eco-friendly products, revealing their eagerness to purchase and ready to give a higher price for eco-friendly products. Nik and Rashid (2009) concluded that practiced an environment management system. The findings showed that there would be a positive response towards eco-label when consumers were prepared aware of environmental problems.

Brosdahl and Carpenter (2010) revealed that the awareness of the production process among consumers of textiles and apparels led to purchasing behavior towards environment-friendly products.

Cherian and Jacob (2012) revealed thatthe existing level of consumption was too high and was not sustainable. Majority of consumers were lacking in green' knowledge and due to low awareness towards green products and organizations were still not approaching the developing more green products nor were they functioning hard on green packaging. Murali and Kumudhini (2013) indicated that only middle-aged consumers had a high level of awareness of green marketing. The purchase decision of consumers was highly affected by the quality of eco-friendly products. Most of the consumers recognized the symbols and eco-labels on packages of products and felt even though the price was high; eco-products were good for health.

Testa et al (2015) concluded that knowledge and awareness of consumers on eco-labels influenced their purchase decision. Being mindful of eco-labels might well sensitize consumers to the considerable effect on green products, marketing of green products, and consumption in sustainable ways could have on the environment and concomitantly on the long-run welfare of consumers and society. Varghese and Santhosh (2015) revealed that

quality was the major attracting factor for eco-friendly products followed by the availability of products and all the consumers were aware of eco-friendly products. Three fourth of consumers consider the effect on the environment as an important factor before purchasing eco-friendly products.

Isaacs (2015) indicated that when customers purchased a particular brand in yesterdays, they were more probably to continue purchasing brands, even though when the price was increased. Few customers were not ready to recycle electronic materials even if more drop-off recycling facilities were available. The socially responsible actions of a business could create awareness that green products and recycling of e-waste were important for an environmentallysecure future.

2.7 Consumer Purchase Intention

Pathak (2017) narrated the rise in interest of the young consumers of India in purchasing eco-friendly packaged products. Yusuf and Fatima (2015) showed that consumers had a positive attitude and favorable perception towards green products or eco-friendly products and they were positively and significantly related to each other. Dubihlela and Ngxukumeshe (2016) found that the attitude of consumers toward eco-friendly products was a significant factor in the repeat purchase intentions of consumers. The attributes of eco-friendly products had a moderate effect on their responses to the environment and repeat purchase intentions in South Africa.Islam and Xiaoying (2016) concluded that customers were ready to give higher prices for environmentally friendly jute. At the same time, they were not willing to compromise product quality. Thus, marketers should recognize the attitude or perception of customers while producing products and marketing, it would generate an advantage and win-win situation for the customers and entrepreneurs. And it was

also considered that customers had a good trend to purchase eco-jute goods and in reply to this marketers want to address all problems relating to green marketing practices to create customer satisfaction. Pillai and Junare (2016) revealed that respondents did not have a favorable perception of eco-friendly products. It was because eco-friendly products were highly-priced, were not well promoted, and were not properly labeled thus consumers were not able to differentiate between the traditional ones. Consumers were aware of the availability of such products but awareness needed to be made clear about the advantages, labels, and availability of those products to enhance their consumption. The annual family income was significantly influencing the perception of the respondents towards eco-friendly products. The demographic features namely gender, age, education, and occupation were not significantly impacting the perception of respondents for eco-friendly products.

Prabusankar (2016) indicated that there was a significant difference between the socio-economic profile of consumers and their perception of eco-friendly products. The results showed that safety was positively and significantly influencing on purchase intentions of consumers for eco-friendly products followed by quality, healthiness, and worthiness. This indicated that consumers were excited to buy eco-friendly products due to their safety, healthiness, and quality.

2.8 Green Customer Segmentation

Das et al (2020) showed that solid waste management, waste management practices, water and energy saving practices were adapted by different customer segment including hospitality industry. Zhu and Sarkis (2016) pointed out that the buying of eco-friendly products has increased and green purchasing method that has spread awareness among customers to protect the environment.Cronin et al (2010) showed that consumers could be

categorized into three market segments based on their concerns for environmental and skepticisms. 1) Consumers who had a high level of environmental concerns, but were very skeptical about the environmental claims (keen skeptics) could feel uncomfortable because of the exaggerated claims even though they purchased environmentally friendly (green) products. Therefore, companies should try to relieve these customers by clearing their minds and make them believe in their claims in the advertisements; 2) consumers who had an average level of concerns for the environment and skepticisms (hesitant) either did not attempt to purchase these kinds of products. These consumers were not expected to purchase environmentally friendly products regularly or showed any environmentally sensitive consumer action, and 3) consumers who had a high level of environmental concerns and low level of skepticisms (fanatics) may insist on purchasing environmentally-friendly (green) products as they thought their purchase approaches can help to solve the environmental problems of the world. Albayrak et al (2010) found that the consumers' environmentally sensitive purchase behavior was influenced positively by their environmental concerns, but negatively by their skepticisms. In the first stage of the research, this assumption was confirmed by a regression analysis while in the second stage consumers were clustered by their level of environmental concerns and skepticism about the environmental claims. Sachdev (2011) concluded that there was mounting interest among consumers across the globe for the conservation of the environment. It was their apprehension for the environment and their well-being that led to the demand for eco-friendly products, which in turn supported developments in the environmental performance of several products and firms. Chang (2011) revealed that some consumers viewed the price of eco-friendly products as more expensive than the conventional ones and others viewed it not due to the healthy part of the products. The benefits of the products made some of the consumers went extra to pay more for the

products. They believed that it would preserve the deterioration of the earth so spending or bearing extra cost was worthy of the cause.

Sachdev (2011) indicated that the past decades had shown a progressive rise in environmental consciousness across the globe as the environment shifted from edging to a mainstream problem and consumers became more worried about it. Though, despite positive expectations, demand for environment-friendly products did not rise as expected and both attitude-behavior and intention-behavior gaps appeared. Ishaswini and Datta (2011) showed that the pro-environmental apprehensions of consumers significantly influenced their green purchasing behavior. And consumers were ready to purchase eco-friendly products but not many were ready to give a premium price for those products. The awareness of consumers for eco-friendly products and their environmental distress impacted their green buying behavior. Boztepe (2012) found that when the price was maintained at an equal level with its non-green alternatives, positive features of the product about the environment could be used as a competitive advantage component. If the price of the product was higher, weightage must be given to promote the unique attributes and after use advantage of eco-friendly product and also there must be consumers willing to pay the additional money for the product.

Sharma and Shukul (2012) concluded that homemakers had a moderate level of eco-friendly buying behavior and the major cause for the buying of selected products in various packaging was convenience and economy with very little imitating environmental distress. Park, et al (2013) showed that factors namely recycling, public participation and conservation of resources had a positive impact on environment-friendly attitudes. Zainudin (2013) found that consumers with a high degree of awareness and knowledge about the environment had associated positively with a good attitude on green purchasing behavior. Knowing purchasing decisions and preferences of products of consumers helped in creating market strategies and

correct government policies. Consumer's practices for green purchases were vital to minimize negative impacts on the environment through safeguarding environmental resources, reducing waste and energy use, and enhancing safety and health. Sachdev and Mahna (2014) concluded that consumers did not buy green products due to their worries about the decreasing quality of eco-friendly products and there was no improvement in their quality over the period. Still, majority of the consumers accepted that eco-friendly products were healthier as compared to traditional ones. The perception could affect the decision-making and buying behavior of the consumers. Geetha and Jenifer (2014) revealed that quality, health, variety, reliability, ambiance, advice from friends, environment, and quantity were the factors that influence the purchasing behavior of consumers. Consumers were willing to pay higher prices for products that create less pollution to the environment, but they were not willing to compromise the quality aspects of products for the environment. Ramkumar and Soundarajan (2014) indicated that pro-environmental apprehensions and awareness of consumers affected green purchase decisions but higher prices were discouraged the preferences of customers.Chen and Chai (2010) indicated that the attitude of consumers on the role of government and their values for the environment significantly contributed to their attitude toward the green product. The results further showed that personal value was the major factor in the attitude about the green product. Though, environmental protection did not contribute to the attitude of consumers towards green products significantly.

Rajput et al (2014) showed that promotion and or advertising, satisfaction from prior experience, and word of mouth influenced the consumers' decisions for purchasing environmental-friendly products. Therefore, companies would have information about how to outline consumers of environmental-friendly products in India and to make effective

information that would emotionally appeal and functionally to their target customers. Knoskova (2014) found that the attitudes and behaviors of citizens in Slovakia towards environmentally-friendly products, views of respondents, buying criteria of consumers, and actions on how to tackle environmental issues, their trust in environmental labels, social values behind purchasing and utilizing the environment-friendly products. The results showed that attitude, environmental impact, and health benefits affected sustainable consumer behavior.

2.9 Variables Derived from Literature Review

2.9.1 Demographic Variables

The researcher has found from the Literature Review the demographic such as Gender, Age, Income, Educational characteristics, marital status, Type and Size of family, etc. These variables have been included in the present study also as this study examines the influence of socio-economic profile on buying behavior, attitude, awareness, and perception of the customers in Kerala.

2.9.2 Psychographic Variable

From the literature reviewed, psychographic variables obtained as the study of personality, values,attitude, interest, lifestyle**,** Social status

2.10 Identified Independent and Dependent Variable

Table 2.10

Sl. no.	Independent Variables	Dependent Variables

1	Age	Purchase Intention and Selection
2	Gender	Eco-consciousness
3	Income	Cultural Behaviour
4	Marital status	Eco-friendly Commitment
5	Occupation	Value Significance
6	Source of Information	Attitude-behaviour Gap
7	Type of family	Environmental Behaviour
8	Size of family	Consumer Belief
9	Preference for green attribute	Purchase Intention
10	Brand name	Ecological Behaviour
11	Energy Saving	
12	Eco-friendly product categories	Socio-economic status
13	Eco-friendly Brands	Culture
14	Safety	knowledge on environment
15	Healthiness	personal beliefs
16	Environmental issues	Psychological Factors

17	Price	
18	Quality	
19	Variety	
20	Availability	
21	Peer and Family influence	
22	Social and Economic factors	
23	taste and aroma	
24	Affordability	
25	Nutritional Value	
26	Attractiveness	
27	Degradable	

Source- Compiled from existing literature reviewed

2.11 Brief Survey of Literature Reviewed

A brief survey of the literature reviewed has been presented in the following Table.

Table 2.11

Sl. No.	Literature Reviewed (Title of the paper, article, etc. along with the source)	Literature Type (Research Paper, Review Paper, Chapter of a Book, etc.)	Author/s	Publishing Year	The gist of Points gained	Linkage to own research
1.	**Title:** "Why Eco-Labels Can Be Effective Marketing Tools: Evidence from a Study on Italian Consumers", *Business Strategy and the Environment*, Vol. 24, pp. 252 - 262. l. 3(2)	Journal Article	Testa et al.	2015	Authors test whether eco-label information, knowledge, and awareness leads to purchasing choice of eco-friendly products	Yes. The research work includes the aspect of awareness among eco-friendly products. Awareness of availability is a gap
2.	**Title.** " A Study on Consumer Perception on Eco-Friendly Products Regarding Kollam District in Kerala", *EPRA International Journal of Economic and Business Review*, Vol.3, No.7, pp. 146-1	Journal Article	Varghes et al.	2015	The aim is to understand consumer Awareness and factors affecting the buying behavior of eco-friendly customers in the	Both the finding are important as factors affecting buying behavior is a point of study and analysis The research gap is

					Kollam district	that the lack of clarity on the way to create awarene ss of eco-friendly products
3	**Title.** "Consumer Perception Regarding Eco-Friendly Fast Moving Consumer Goods in India", *International Journal of Engineering, Business and Enterprise Applications (IJEBEA)*, Vol.9, No.1, pp. 40-43.	Journal Article	Sachdev et al.	2014	The purpose of the study is to learn the impedim ent in the way customer s buy eco-friendly products Research gap is the awarene ss among the customer s have not been indicated	Impedim entsin the way of buyingb ehavior are analysed and the point is consider ed in this research
4	**Title.** A Study on Consumers' Perception towards Eco-friendly Products in Ahmedabad", *International Journal of Research in IT and Management (IJRIM)*, Vol.6, No.7, pp. 14-28.	Journal	Preeti et al.	2016	To Study the consume r awarene ss, demogra phic profile, and their percepti	The finding is consider ed while doing Researc h work. Percepti on of eco-

					on towards eco-friendly products. The finding of the study is that perception differs in the higher-income group. Products are not well promoted and not easily distinguishable	friendly customers is one of the realms of my study Research gap is that factors influencing attitude and purchase decision
5	**Title.** " A Study on Consumer's Perception and Purchase Intentions towards Eco-Friendly Products", *Asian Journal of Research in Social Sciences and Humanities*, Vol. 6, No. 8, pp. 1794-1802.	Journal Article	Prabusankar, R.	2016	The finding of the study is that Safety, Healthiness, Quality, and Worthiness are the factors determining the purchase intention.	The finding of the study is incorporated as these variables are included in the study and the questionnaire is formed accordingly.The research gap observed

						is the influence of ethical and personal values on buying behavior
6	**Title.** Impact of Eco-friendly Products on Consumers" CBS E-Journal Biz n Bite, Vol. 6 pp. 1 – 26	Research Paper	Preeti et al.	2000	Study the concept of eco-friendly products and the influence of eco-friendly products on consumer behavior. Study findings are Eco-friendly consumers purchase only when their expected price and quality matches	Finding is included in the study. Quality, Price which is some of the factors that shape the buying behavior of eco-friendly customers.The research gap found is the influence on attitude and perception of the customer on consumer behavior

7	**Title.** "A Study on Consumer Awareness towards Eco-Friendly Products at Coimbatore", *International Journal of Current Research and Modern Education (IJCRME)*, Vol. 2, No.1, pp. 237- 241.	Journal	Sugany a et al.	2017	The findings of this study are that consume rs have a poor level of awarene ss about eco-friendly products and it affects their purchasi ng	The awarene ss part is a major part of my study and hence incorpor ated in the study.Re search gap is another aspect influenc e on consume r's purchasi ng behavio ur of eco-friendly products and their percepti on.
8.	**Title.** "Eco-marketing & Eco-labeling: A Study On Consumer Awareness For Eco-Products In Chennai", *Indian Streams Research Journal*, Vol.3, No.7, pp.1-7	Journal Article	Murali et al.	2013	Custome rs in Chennai are aware of Eco-labeling and are easily identifie s the product The research gap is	This aspect is not included in my study. The result shows the need of making the consume rs more

					their attitude towards eco-friendly products	aware of Eco-friendly products and attribute
9.	Title. **"Green consumer behavior in an emerging economy: confusion, credibility, and compatibility"**Journal of Consumer MarketingISSN: 0736-3761Publication date: 26 October 2012	Review Journal	Lorena et al.	2012	The purpose of this research is to contribute to a better understanding of deeper motivations and inhibitors of green consumer behavior in the context of emerging economies. Based on the findings, it aims to provide implications for marketers and policymaking	This subject is very important and applicable to our present study. Research gap is the factors affecting their intention-behavioral pattern
10.	**Title.** ”Study of Application of Permission Marketing in the awareness of Green Marketing on Sale ”RJSSM: Vol.5 (4), pp.	Research Journal	Ravneet et al.	2015	Eco-friendly products on	The customer in Amritsar

	93-111				consumers buying behavior, problem faced by consumers as well as the use of permission marketing in creating awareness and sales promotion	city has awareness on env.problem, but no knowledge to tackle it. The attitude part in the paper is taken for clarity of the construct in our study
11.	**Title.** "To buy or not to buy? A social dilemma perspective on green buying" Journal of Consumer Marketing, 26/6, 376-391.	Research Journal	Gupta et al.	2012	Perceived risks towards GPs could be one of the explanations for the 'green gap' – the difference between pro-environmental attitudes and purchasing behaviour. The Green	The point that attitude-behavioral gapfor Factors affecting buying behaviour is taken into consideration for the study

					Gap found. consumers perceive greater risk concerning the functional, financial, and temporal aspects of GPs than to their physical and psychos	
12.	**Title.** Targeting consumers who are willing to pay more for environmentally friendly products, *Journal of Consumer Marketing*, 18(6), 503-520	Research Journal	Laroche et al.	2001	Education of the consumer was observed as a suitable means for enhancing perceived expediency and attitudes and behavior toward the environment	Education as a demographic variable is included in the study to check the buying behavior and attitude towards eco-friendly products
13.	**Title.** The peer group as a context for the development of young adolescent motivation and	Journal	Ryan	2001	The results showed	Environmental behaviour and purchase

	achievement. *Child Development*, 72(6), 1135-1150.				that there was an association between social control and environmental behavior.	intention as a result of belief is considered in the study
14	Attitude and behaviour toward the environment: The case of hake Burdur in Turkey. *Environment and Behaviour*, Sage Publication, London, 34(3), 363-377.	Publication	Aytul et al.	2002	Indicated that more wealthy people were more engaged in responsible environmental behaviour than unemployed individu	The attitude and buying behavior demographic variables included as part of my study

					als and students	

Shah (2017) indicated that consumers were interested in buying environment-friendly products and they were ready to pay extra money for them and constituents of the marketing mix were significantly influencing their buying behavior for environment-friendly products.

Rahman (2017) showed that price, availability, quality, and usefulness were significantly and positively affecting the satisfaction of consumers on environment-friendly products.

Sruthiya (2017) found that most of the consumers were not aware of environmentally friendly products in the FMCG sector and they were ready to pay extra amounts for environmentally friendly products. Price, quality, and health-conscious were affecting their purchasing decision.

Goyal and Bansal (2018) concluded that consumers had a modest level of perception of environment-friendly products and healthiness, easiness, nature of products and accessibility were significantly influencing purchasing of the behavior of consumers for environmentally friendly products.

Kumar and Nandhini (2018) revealed that brand, quality, expectation, value, experience, and usefulness were positively and significantly influencing the purchasing of environmentally friendly products among consumers.

Musova et al (2018) indicated that quality, price, safety, values, and suggestions of friends were affecting the purchasing behavior of consumers for environment-friendly products.

Nivetha et al (2018) showed that brand image, quality, health consciousness, availability, package, and distribution strategy were influencing the purchasing of eco-friendly FMCG products among consumers.

Vidhyakala (2019) found that concern for the environment; attitude, effectiveness, and intention were positively influencing purchasing behavior on environment-friendly products among consumers.

Razak et al (2019) concluded that consumers were moderately aware of environment-friendly products and a significant difference was there among the profile of consumers and their awareness for eco-friendly products.

Hojnik et al (2019) revealed that concern for the environment, familiarity, and responsibility were positively and significantly influencing the consciousness of consumers on eco-friendly products and it was significantly and positively affecting the purchasing intention of consumers for eco-friendly products.

Albloushy and Connell (2019) indicated that female consumers had a positive attitude towards environment-friendly products and quality, price, brand name, and concern, and sustainability of the environment was affecting their purchasing intention for apparel.

Eldesouky et al (2020) showed that consumers were having a positive attitude and perception towards eco-friendly products and quality, price, brand name, eco-label, social and environmental features were affecting purchasing decisions of consumers for eco-friendly food products.

Yue et al (2020) found that concern for the environment, responsibility, and price sensitivity was significantly and positively affecting the green consumption behavior of consumers.

Kumar and Muruganandam (2020) concluded that concern, knowledge, and attitude on the environment, consciousness on health, effectiveness, fair marketing practices, advertisements, packages, and information about products were significantly influencing the buying behavior of consumers for green or eco-friendly products.

Wong et al (2020) revealed that attitude toward environment and product, the consciousness of health, and social influence were positively and significantly affecting purchase intention for green products among consumers.

Wen Zheng (2021) discovered that attitude mediates the association between the perceived environmental responsibility and green buying behavior.

2.12 List of Independent and Dependent Variable studied based on the Research Gaps

1. Environmental awareness
2. Environmental product advantages
3. Eco-friendly product features
4. Eco-friendly product quality
5. Eco-literacy
6. Eco-labeling
7. Eco-friendly product placement
8. Environmental attitude
9. General perception of eco-friendly products
10. Buying behavior pattern

11. Healthy consciousness

12. Eco-friendly product price

13. Eco-friendly product value

14. Environmental sensitivity

15. Green product purchase commitment

16. Price-sensitivity

17. Environmental-sustainability

18. Price and quality perception

19. Environmental product scarcity

19. Eco-friendly product equilibrium

20. Environmentalconsciousness

21. Interpersonal influence

22. Environmental knowledge

23. Product quality

24. Personal safety

So the variables found in the research gap which are studied in the research project for green food products are environmental awareness, environmental product advantages, eco-friendly product features, product quality, eco-literacy, eco-labeling, eco-friendly product placement, environmental attitude, general perception of eco-friendly products, Buying behavior pattern, healthy consciousness, price, eco-friendly product value, environmental sensitivity, green product purchase commitment, price-sensitivity, environmental-sustainability, environmental product scarcity, eco-friendly product equilibrium, environmental-consciousness, interpersonal influence, environmental knowledge, product quality, personal safety.

Similarly, the variables which are studied in the research project derived from the research gap for green cosmetic products are environmental awareness, environmental product advantages, eco-friendly product features, product quality, eco-literacy, eco-labeling, eco-friendly product placement, environmental attitude, the general perception of eco-friendly products, Buying behavior pattern, healthy consciousness, price, eco-friendly product value, environmental sensitivity, green product purchase commitment, price-sensitivity, environmental-sustainability, environmental product scarcity, eco-friendly product equilibrium, environmental-consciousness, interpersonal influence, environmental knowledge, product quality, personal safety.

Demographic variables are also found which may influence the dependent and independent variables above. Another gap found was in the consumption and its pattern of eco-friendly products cosmetics and food products in Kerala.It is also found that there has been no thesis submitted in the State of Kerala concerning the demographic profile of the customers and its effect on the buying behaviour of eco-friendly product. Based on this finding, the objectives and hypotheses are made for the current study. The literature reviewed gave an insight into the problems and action taken by foreign and Indian scenarios under the influence which they purchase.

At present, eco-friendly product's usage is not matching or compensating the carbon footprint humans are making. We need to come up together with Government efforts and NGOs working on the environmental issue to obtain a necessary outcome to save the environment from further deterioration for the present and future mankind. However, the magnitude of the usage of green products is much behind the ideal one to safeguard the consumers and the environment at large. Thus the usage of green products to their depth and width is a must. To achieve the pious objective, it is necessary to know the factors which insisted the users go for the green products and prioritize the factors so identified so that the same can be ventilated to the masses for extending the consumer base for the green products.

2.13 RESEARCH GAP

Existing literature reveals that the research findings are with a few dimensions of the cause of customer purchasing behaviour problem and states like Kerala are deprived of such published findings other than government notifications. Moreover, few dimensions such as; product affectivity and look (for cosmetic) and quality of the Product (for food) which play a vital role have not been under the purview of any existing literature studied. Hence, the research gap derived from the existing literature review; the dependent variables from the research gap viz., customers buying behaviour, their awareness, attitude and perception towards the eco-friendly products against their demographics, need to be examined and studied which will help the marketers to segment and to devise marketing strategies for manufacturers and formulation of notifications and laws by the Government bodies. The relation between the dependent variables with regard to eco-friendly products also need to examine as review of literature brings up.

Also, very few researches have been done to explore the aspects of awareness, attitude, perception and buying behaviour of eco-friendly customers towards eco-friendly food and cosmetic products against the demographic profile in the study area. Apart from this the influence of personal value, as well as the ethical value of respondents in the buying behaviour towards eco-friendly products, has also been not studied.Further,the factors' affecting buying behaviour of eco-friendly products is also needed to be studied. This research will try to address these problems.

This research will also try to explore if any relationship exists between Attitude, Awareness, and Perception of eco-friendly customers towards eco-friendly products. The insights provided in this research will be useful for the businessmen, NGOs working in the field of Green (eco-friendly) and Government bodies in taking the appropriate steps and action in approaching the customers for creating more awareness about eco-friendly products and the importance of using them in the current scenario. Measuring the level of attitude and thereby perception which will help them to take necessary steps to increase the customer confidence and lower customer perceived risk.

2.14 Conceptual Framework of Analysis

As per the research gap mentioned above, the association or dissociation between the demographic profile of consumers and awareness towards eco-friendly products, the association or dissociation between the demographic profile of consumers and attitude towards eco-friendly products, the association or dissociationbetween the demographic profile of consumers and perception towards eco-friendly products, the association or dissociationbetween the demographic profile of consumers and factors affecting their buying behavior for eco-friendly products, personal values influencing their buying behavior for eco-friendly products and ethical values influencing their buying behavior for eco-friendly products is to be examined. Similarly to study the relationship between awareness, attitude, and perception of consumers' towardsthe eco-friendly product is also helpful for producers of eco-friendly products.

2.15 Summary

Review of Literature provides us with an insight into the various research conducted in the domain nationally and internationally to have a pointer towards further study on the same or the area where we find the gap lies. This chapter also develops on these backgrounds and future direction of research to develop our conceptual framework which will guide the rest of our research. This chapter also identifies the various independent and dependent variables already studied for the various categories of the green products leading to the concept of the Research Gap and the Statement of the problem.

CHAPTER – III

RESEARCH METHODOLOGY

CHAPTER – III

RESEARCH METHODOLOGY

3.1 Overview

The research methodology is the organization of methods used from framing the research question to developing the questionnaire, forming a hypothesis, data collection, analysis of data to hypothesis testing, and summary. Research methodology needs to be framed and checked before proceeding with the study.

Here, eco-friendly customers' awareness, attitude, and perception towards green food and cosmetic products are planned measuresto know the customer behavior and their interrelation which in turn affect the purchase decision effectively. The demographic profile of customers in Kollam, Alleppey, Trivandrum, and Kottayam along with ethical and personal values is also measured using five points Likert scale to study to have a clarified version of factors affecting buying behavior towards eco-friendly customers. The reliability of the questionnaire is checked using Cronbach's Alpha. The data collected is used for the analysis and interpretation of the obtained result.

3.2 RESEARCH QUESTION

The study examines:

(1) Is there any influence by the demographic profile of customers on awareness of the customers towards eco-friendly products?

(2) Is there any influence by demographic profile on the attitude of the customers towards eco-friendly products?

(3) Is there any influence on demographic profiles on the perception of the customers towards eco-friendly products?

(4) What are the factors affecting the buying behaviour of eco-friendly products?

(5) Is there any influence on demographic profile on the personal and ethical values of the customers towards eco-friendly products?

Apart from this study also try to explore if any meaningful relationship exists between respondents'awareness, attitude, and perception of consumers towards eco-friendly products?

3.3 STATEMENT OF THE PROBLEM

Nowadays, the environment is emerging as a significant issue for business, society, government. Its importance emerges from increasing environmental deprivation namely ozone depletion, solid wastes, pollution, global warming, and climate change. It is detected that different activities of companies such as sourcing, producing, distributing and marketing have an unpleasant effect on the environment and are also believed to be the main source of almost all environment-related issues.

To tackle environmental problems, consumers believe that eco-friendly is the way to integrate with their buying behavior that can protect the environment. The result of this attitude is that an increasing number of companies are accepting their responsibility towards the environment.

The lack of awareness, attitude and perception of consumers towards eco-friendly products are the main factors that affect understandingthe buying behavior of consumers for eco-friendly products. At the same time, cultural, social, personal, and ethical values are also influencing the buying behavior of consumers for eco-friendly products.

The influence of demographic profile on the attitude of eco-friendly product customers, their awareness, perceptionand buying behavior of eco-friendly productsare to be studied separately in Kerala. The factors affecting buying behaviour are also a concern for

marketers and agencies.This study attempts to see the factors which promote eco-friendly buying along with measuring their knowledge, their intuition, awareness, etc. Understanding these factors will contribute to the eco-friendly market for eco-friendly products including food and cosmetics. With this background, the study "Buying Behavior of Consumers towards Eco-Friendly Products in Kerala" is carried out.The product categories selected for this study are food and cosmetic.

3.4 OBJECTIVES OF THE STUDY

Research objectives are derived from the research problem statement and after an in-depth study of the domain and review of literature detailed in chapter 2 research gaps have been developed for this research.The research objective has been taken to critically examine the environmental friendliness and factors of consumer behaviour. The researches objectives that have been developed accordingly are as follows: The specific objectives of the study concerning food and cosmetic products are:

1. Examine the influence of the demographic profile ofthe consumers on awareness towards eco-friendly products.

2. Explorethe influence of the demographic profile of the consumers on attitude towards eco-friendly products.

3. Study the influence of the demographic profile of the consumers ontheir perception of eco-friendly products.

4. Factors that affect the buying behavior of consumers for eco-friendly products and the influence of demographic profile on buying behaviour of eco-friendly products.

5. To find out the relationship that existsbetween the consumer's awareness of eco-friendly products to attitude towards eco-friendly products and his perception towards eco-friendly products.

6. Influence of consumers'personal and ethical values on the buying behavior of eco-friendly products.

3.5 HYPOTHESES

Hypotheses have been developed because of the research problem and objectives of the research.Null Hypotheses have been mentioned below:-

The hypotheses of the study are:

H1. Demographic factors do not have any influence on the awareness level towards eco-friendly products.

H2. Demographic factors do not have any influence on the attitude of consumers towards eco-friendly products.

H3. Demographic factors do not have any influence on the perception of consumers towards eco-friendly products.

H4. Demographic factors do not have any effect on the buying behaviour of consumers towards eco-friendly products.

H5. There is no significant relationship betweeneco-friendly consumer’s awareness, attitude, and perception regarding eco-friendly products.

3.6 RESEARCH DESIGN

The descriptive research method is adopted for this research project. The main purpose of descriptive research is to describe, explain, and validate findings of the domain in which research is conducted(buying behaviour).Variables in the study are not manipulated in descriptive research.This study aims to derive the factors affecting buying behaviour towards eco-friendly products and examinesthe influence demographic profile on awareness, attitude, and perception of consumers towards eco-friendly products and to know the personal and ethical values of individuals in influencing the buying behavior for eco-friendly products and also to check whether any relation between awareness, attitude, and perception of consumers towards eco-friendly products exist. Demographic data collection includes anything that identifies and differentiates a customer including, gender, age, location, etc. Demographic data is important when performing research.

The key benefit that provides is an insight into customer purchasing patterns, behaviors, and needs. With demographic data, data analysts and marketers can better predict the actions of their existing customers, as well as apply that information to strategies for attracting new customers.

3.7 SAMPLING PLAN

3.7 1. PROFILE OF THE SAMPLING STUDY AREA

Bordered between Karnataka and Tamilnadu state, Kerala is located on southwestern part of the Indian peninsula. Kerala has contributed with its “Kerala model development”, Kudumbasree, a trendsetter in tourism sector to other states in India and to the world. Its population is 3.57 crores and an area covering 38,862sq.km. Kerala has 14 districts namely;Alappuzha, Kottayam, Idukki, Ernakulam, Thiruvananthapuram, Kollam,

Pathanamthitta, Trissur, Palakkad, Malappuram, Kozhikode, Wayanad, Kannur, and Kasaragod.

The state has a 95 percent literacy rate and life expectancy of 75 percent. The largely spoken language in the state is English and Kerala's per capita income, skilled manpower; three international airports have contributed to its economic growth along with 18 seaports including one International Container Transshipment Terminal at Kochi. The power supply is stable with less power cut and has a super specialty health system that attracts foreigners to come to India for medical treatment at comparatively cheaper rates.The service sector, tourism, banking and finance, business process outsourcing and transportation contributes highly to the economy with 63.80 % of state GDP while the agriculture and fishing industry accounted for 17.20% of state GDP. About three million Keralans work mainly in Persian Gulf countries, the USA, Canada, Europe and Australia. The biggest contributor has been the remittance of Non-Resident Keralites; the average remittance is Rs.200 crore per day which would work out 62,400 crores every year.

Kerala's major population belongs to the lower-middle-income groups and, concentrating on their profile will throw light into the consumption pattern for eco-friendly products. Kerala has four international airports and they are exposed to the whole world. The remittance from Gulf and Europe has much contributed to the growth of its economy along with tourism, banking and finance. Lifestyle changes of the consumers seem to swing towards green products as a result of the calamities which stroked Kerala in the form of Okhi, and consecutive floods. We here consider two products; eco-friendly food and cosmetic productsand theirconsumption factorsin Kerala.

3.7.2 POPULATION

Kerala is 3 times as densely settled as the rest of India. It is 2.76% of India's population and holding 859 persons per sq.km. The total population of Kerala inthe 2020 census is estimated to be 3.56 crores according to UIAI, Government of India, and updated May 2020 with religion Hindu, Christian, and Muslim.The total population in our research sample area for the 4 districts is 1.03 crores and the sample population for our study is taken as 711 and the sample size calculation is narrated in the same section.

3.7 .3 SAMPLING PROCEDURE

Kerala state is selected for the study conducted. Kollam, Alleppey, Thiruvananthapuram, and Kottayam districts in Kerala State are chosen for the present study as the field study before sample collection showed that these district centers are at the forefront for more sales and consumption of eco-friendly products compared to other districts in Kerala.

Eco-friendly products consumers are selected using a convenience sampling method. This sampling method is used because gathering the information is uncomplicated and is easily accessible. The convenience sampling method is efficient, economically viable, quick, simple to implement, readily available participants, and is almost a representation of the target population.

3.7.3.1 SAMPLE SIZE CALCULATION

The sample size for the present study is determined by using the following formula:

$$\mathbf{n = [t^2 \times p\,(1 - p)] / m^2}$$

n=required sample size

t = confidence level at 95% (standard value of 1.96)

p =response from the consumers of eco-friendly products in the pilot study

m =margin of error at 5% (standard value of 0.05)

Step - 1:

$n = (1.96)^2 \times 0.7 (1 - 0.7) / (0.05)^2 = 323$

Step - 2:

To correct the difference in the field survey, the sample size is multiplied by the design effect (**D**) and it is considered to be **2.00**.

$n \times D = 323 \times 2.00 = 646$

Step - 3: Contingency

The sample is further increased by 10% to account for contingencies viz., non-response, or recording error.

$n + 10\% = 646 + (646 \times 0.10) = 646 + 65 = 711$

Hence, the sample size for the present study is 711.

3.8 PILOT RESEARCH

A total of 71 consumers are chosen for the pilot study (10% of the total sample size) and the questionnaire method and personal discussion method were implemented for the collection of data. The feedback received is checked for ambiguities and difficult questions, checked the time

taken to fill up is reasonable or not, responsiveness, and checked the need for re-scale. The questionnaire size was reduced from 14 pages to 6 pages without excluding vital factors for response adequacy through the questionnaire schedule.

3.9 DATA COLLECTION TOOL

The population considered for the study consistsof five sets of people as follows:

(a) Users of eco-friendly/green Cosmetic Products in Kerala.

(b) Users of eco-friendly/green Food Products in Kerala.

(c) NGOs working in the field of environmental stability.

(d) The organisation whichworks in the field of green products.

(e) Non-users/occasional users of eco-friendly food and cosmetic products but aware of the green products in Kerala are also considered in the study.

Also, a hundredincluding non-users and occasional users of Green Cosmetic and Food products who know about green products are surveyed.Data is collected from primary and secondary sources.

Secondary sources are various, journals, articles, books, newspapers, magazines, and the internet. Discussions and interviews with NGOs in the eco-friendly domain, Government bodies like ANERT, organizations like Thanal, Vishwas Foundation helped to get in-depth knowledge about the ground realities to devise the research instrument constructively.

Personal interviewsand discussions with NGOs and Government bodies were conducted to have an idea about their suggestions and problems faced by them on working in the concept

The discussion helped to devise the questionnaire constructively.

The primary source – questionnaire, formed based onthe literature review and variables found from the facts andthe pilot study conducted.The primary data is collected using the questionnaire to test the hypotheses formed and to answer the research questions.

Certain changes are made based on the experience gathered while doing the pilot study which helped to improve the final survey with factual accuracy.

During the pilot study, some respondents were reluctant to attend the questionnaire citing the reason for fatigue, disinterest, and giving excuses merely when they saw the lengthy questionnaire.

The changes made in the questionnaire are briefed below-

- Certain wording which creates ambiguity in the minds was eliminated by simple words.
- Some changes are made in the questionnaire by avoiding repeated constructs and keeping the questionnaire foolproof without losing validity.

GoogleDocswas used to create an online questionnaire and was sent to the respondents for the collection of data. The questionnaire is developed and structured based on prior research studies conducted, variables derived from the literature review, experts' opinions, and pilot study. The structured questionnaire consists of eight parts and is given as an appendix.

The questionnaire formed is distributed among the customers of eco-friendly products by visiting the Malls, Hypermarkets, Supermarkets (Name and places of data collection are described in detail in the above section) where eco-friendly food and cosmetic products brands are available. The questionnaire was handed over in person and requested the customers to fill up in which most of them co-operate. Some of the customers cleared their doubts in answering the questionnaire and was clarified to them there itself.

A Likert scale with fivepoints is used to measure the agreement levels of awareness, attitude, perception, factors affecting buying behavior, and influence of personal and ethical values on the buying behavior of consumers for eco-friendly products. The questionnaire was administered directly by visiting malls, educational institutions, railway stations in the mentioned four districts, and through the mail using an online form of data collection.The structured questionnaire has the following parts (shown in the appendix)

A five-point Likert scale is used to measure various factors with the following details (5=stronglyagree (SA), 4=agree (A), 3=Neutral(N), 2= Disagree (DA), 1 = Strongly Disagree(SDA))

3.10 VARIABLES CONSIDERED IN THE STUDY CONCERNING THE FACTORS USED IN THE QUESTIONNAIRE

The variables obtained from the literature review and group discussion were included in the study for making the research instrument for the survey. The variables are organized to know the objective to know the general awareness of eco-friendly products, the general attitude, perception, and belief regarding the eco-friendly products. Value significance, customer satisfaction in terms of ethical and personal values, and buying behaviour of eco-friendly products are also included in the questionnaire development.

3.11 SAMPLES COLLECTED FROM DIFFERENT DISTRICTS SURVEYED

(Samples collected from users of cosmetic and food eco-friendly products)

Table 3.11

Sl. No	Name of the district	Number of samples

1	Trivandrum	201
2	Kollam	165
3	Alleppey	155
4	Kottayam	190

3.11.1SAMPLES COLLECTED FROM DIFFERENT DISTRICTS SURVEYED

(Samples collected from nonusers of cosmetic and food eco-friendly products)

Table 3.11.1

Sl. No	Name of the district	Number of samples
1	Trivandrum	35
2	Kollam	40
3	Alleppey	25

3.12 RELIABILITY OF THE QUESTIONNAIRE

Table 3.12

Particulars	Number of Items	Value of Cronbach's Alpha
Awareness towards eco-friendly products	6	0.76
Attitude towards eco-friendly products	9	0.80

Perception towards eco-friendly products	10	0.82
Factors that affect buying behaviour for eco-friendly products	14	0.78
Personal values influencing buying behaviour for eco-friendly products	8	0.74
Ethical values influencing buying behaviour for eco-friendly products	3	0.72
Overall	**50**	**0.77**

Source: Primary Data

The value of Cronbach's Alpha for the overall questionnaire is 0.77 and it reveals it has internal consistency in the acceptable level. The value of Cronbach's Alpha is varying from 0.82 for perception towards eco-friendly products to 0.72 for ethical values influencing buying behaviour for eco-friendly products. It implies that various components in the questionnaire have internal consistency atthe acceptable level.

3.13 DETAILS ABOUT DATA COLLECTION

Data are collected using offline and online questionnaires.

Hard copies were distributed from the below-mentioned area for data collection.

- Eco Shop Kollam
- Wellgate Organic, Kollam
- Green Mart, Kollam
- I Mall, Kollam
- Thanal Organic Bazaar, Tvm

- Organic India, Tvm
- Pranathi Eco products, Tvm
- Mall of Travancore, Tvm
- Abtec Eco shop, Kottayam
- INFACT, Kottayam
- MILLIONS, Kottayam
- Kottayam City Centre, Kottayam
- Neeveta Shopping Mall, Alleppey
- Empire Mall, Alleppey
- Eco shop, Alleppey

An online questionnaire was made using Google doc and sent to customers. The database for this was obtained from NGOs and the organisation working on the field of green, and also the customer data on professional networking websites

Google Docs was used to formulate the online questionnaire to be distributed to the existing consumers of green products. NGOs, Environmental organisation working in the same field and professional networking sites were the sources for the data collection.

3.14 DATA ANALYSIS TOOL

The data collected is analyses using SPSS software for the result. The measures of central tendencymeanmedian, mode, and standard deviationare used for the descriptive statistic.

To find out the factors affecting buying behavior, factor analysis is considered, and correlation is used to find out the relation between perception, attitude, and awareness. Details of these techniques have been mentioned below.

Descriptive statistics are used to measure the central tendency of the sample.The three measures of central tendency have been used – mean median, mode, and standard deviation

Mean is the average score of the collected data of the sample. The mean is given by the following formula:

$\bar{x} = \sum x / N$ where $\sum x$ = sum of all data and

N = total number of data of the given sample.

Mean is the average of the numbers a calculated central tendency of a set of numbers. It is derived by the sum of total numbers or data divided by how many numbers there are.

3.14.1. ANOVA

To determine if any significant difference in mean exist between three independent groups;Analysis of Variance (ANOVA) is used.The one-way ANOVA compares the Means between the groups and determines whether any of those means are statistically significantly influenced or differfrom each other. When the probability p-value is less than the specified threshold level, α, there is a significant difference between the group means and vice versa

The following terms are obtained from ANOVA result:

F-ratio: The F-ratio is used to test whether your results are enough to accept the hypothesis. The F-ratio is the ratio of between-group variability to the within-group variability.

ANOVA test and t-test are employed in this study to find influence or difference between the demographic profile of consumers and awareness towards eco-friendly products, between the demographic profile of consumers and attitude towards eco-friendly products, between the demographic profile of consumers and perception towards eco-friendly products, and influence or difference between the demographic profile of consumers and factors affecting their buying behaviour for eco-friendly products,

3.14.2 Correlation

Correlation is a measure of the extent to which two variables are related. There are 3 possible results of a correlation study: a positive correlation, a negative correlation, and no correlation.Pearson's coefficient is the measurement of correlation and ranges between +1 and -1, based on the correlation. The strongest positive correlation possible is +1 and -1 indicates the strongest negative correlation. "0" indicates no correlation. This particular type of analysis is useful when we want to establish if there are chances of connection between variables (here Awareness, Attitude, and perception). It is often misunderstood that correlation analysis determines cause and effect; however, this is not the case because other variables that are not present in the research may have impacted the results.

If the correlation is found between two variables it means that when there is a systematic change in one variable, there is also a systematic change in the other; the variables alter

together over a certain period. If there is a correlation found, depending upon the numerical values measured, this can be either **positive** or **negative**.

- a **positive correlation** is a relationship between two variables in which both variables move in the same direction. Therefore, when one variable increases as the other variable increases or one variable decreases while the other decreases.
- a **negative correlation** is a relationship between two variables in which an increase in one variable is associated with a decrease in the other.

Correlation provides information about the strength of the relationship between two or more variables.

In the present study, we do the Correlation Analysis between the variables – Awareness, Attitude, and Perception of the respondents for the positive or negative correlation.

3.14.3 Factor Analysis

Exploratory factoranalysis isused to determine factors that affect the buying behavioural pattern and decisions of consumers of eco-friendly products.Principal Component Analysis is employed to obtain factors through varimax or oblimin rotation. The sampling adequacy is measured using the Kaiser-Meyer-Olkin test, chi-square value for the test of Sphericity of Bartlett will be used to test whether the method of factor analysis is apt. Cronbach's Alpha value is used to measure the acceptable level of internal consistency.The measure of KMO and Bartlett's Test describes the suitability of factor analysis.

3.15SUMMARY

This chapter explains the method adopted and the formation of a research instrument to conduct the data collection for the research question developed. Hypotheses have been formed based on the research questions and literature review. A detailed description of research design, research samples size and unit, sampling method, sampling adequacy, pilot stud, and data collection is given in this chapter. Mean is employed for descriptive method and detailed description of the multivariate tools and techniques such as correlation, factor analysis, etc is also elaborated.

CHAPTER – IV

DATA ANALYSIS AND INTERPRETATION

CHAPTER – IV
DATA ANALYSIS AND INTERPRETATION

DEMOGRAPHIC PROFILE OF CONSUMERS OF ECO-FRIENDLY PRODUCTS

4.1 Overview

The demographic profile of consumers is important to understand the especially their economic and social conditions to examinethe'buying behaviour towards eco-friendly products.Consumer's cultural and social values and responsibilities will influence the consumption pattern for eco-friendly products. The social and economic conditions of consumers have a large impact on their buying behaviour.

The demographic profile is used by marketers to study and analyse the market which help them to concentrate on the segment which needed attention.

4.2 GENDER DETAILS OF CONSUMERS

TABLE 4.2

GENDER DETAILS

Gender	Frequency	Percentage (%)
Male	382	53.73
Female	329	46.27

Total	**711**	**100.00**

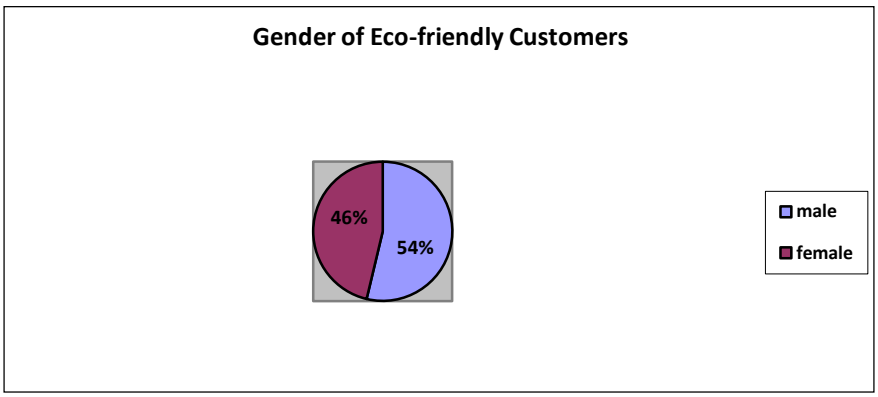


Figure 1

53.73 percent male and 46.27 percent were female.

4.3 AGE OF THE CONSUMERS

TABLE 4.3

DETAILS OF AGE

Age	Frequency	Percentage (%)
Below 25 years	106	14.91
26 to 35 years	273	38.40
36 to 45 years	188	26.44
46 to 55 years	87	12.23
Above 55 years	57	8.02

Total	**711**	**100.00**

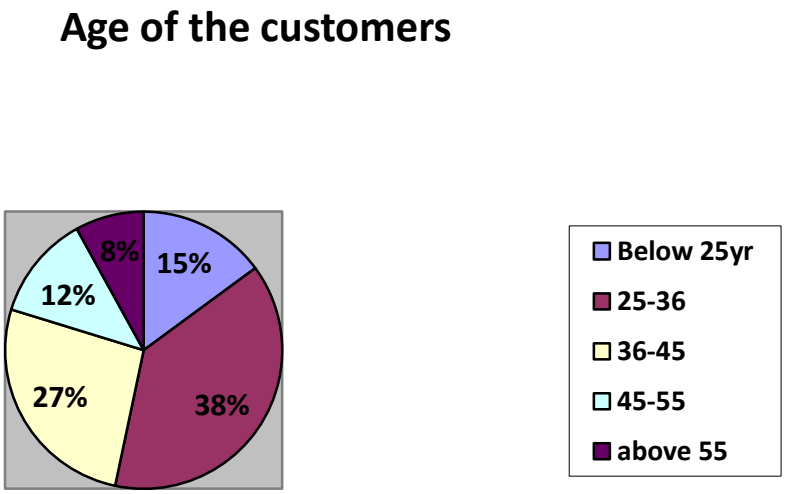


Fig.2

38.4 percent is 26-35 years, 26.44 percent between 36-45 years, 14.91 percent below 25years, and 12.23 percent is 46-55 years.

4.4 EDUCATION OF THE COSTUMERS

TABLE 4.4

EDUCATION DETAILS

Education	Frequency	Percentage (%)
Secondary	35	4.92
Higher Secondary	66	9.28

Diploma	71	9.99
Graduation	297	41.77
Post Graduation	242	34.04
Total	**711**	**100.00**

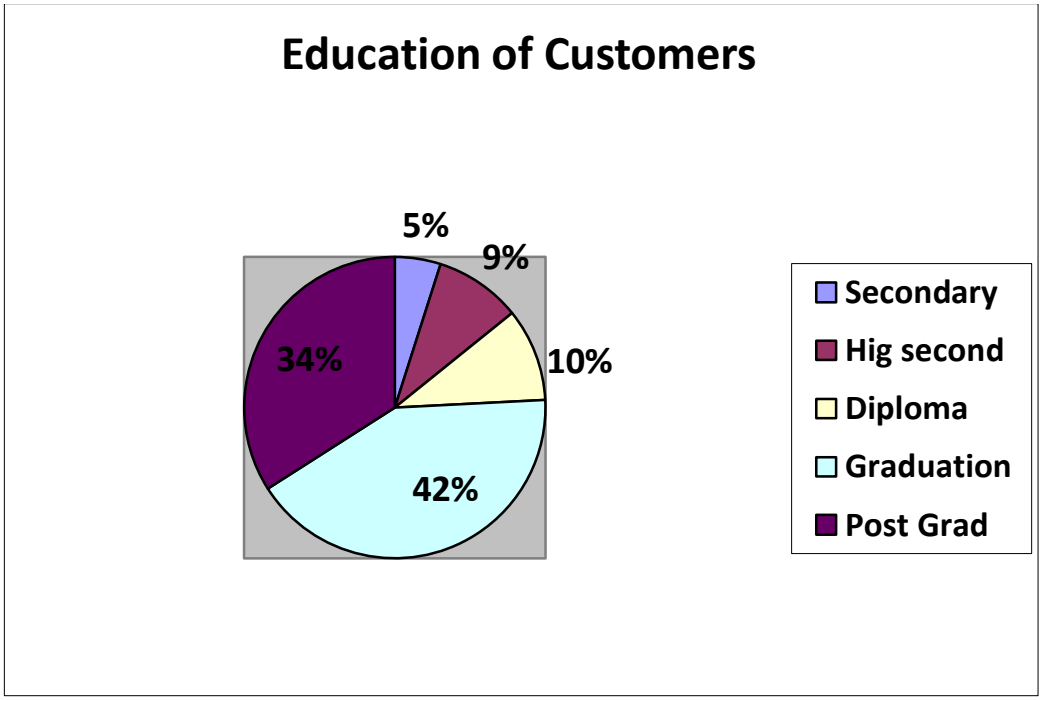


Figure 3

41.77 percent Graduates, 34 percent are post-graduate, and 10 percent diploma holders.

4.5 OCCUPATION OF THE CUSTOMERS

TABLE 4.5

OCCUPATION DETAILS

Occupation	Frequency	Percentage (%)
Business	65	9.14
Government Sector	199	27.99
Private Sector	293	41.20
Professional	99	14.00
Retired	55	7.70
Total	**711**	**100.00**

41.20 percent belong from Private Sector employees, 27.99 percent are Government sector employees, 14 percent belong from Professional sector, 9.14 percent are Business people and 7.70 percent belong to the retired group.

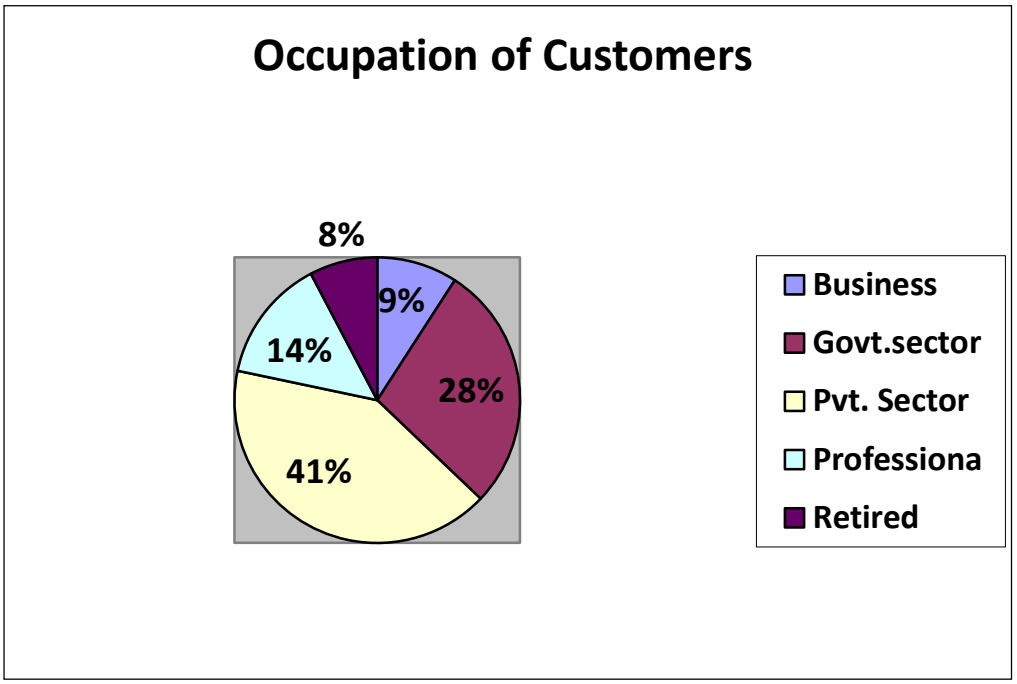


Figure 4

4.6 WORKING EXPERIENCE OF THE CONSUMERS

TABLE 4.6

WORKING EXPERIENCE

Working Experience	Frequency	Percentage (%)
Below 5 years	63	8.86
6 to 10 years	145	20.39
11 to 15 years	276	38.82
16 to 20 years	141	19.83
Above 20 years	86	12.10

Total	**711**	**100.00**

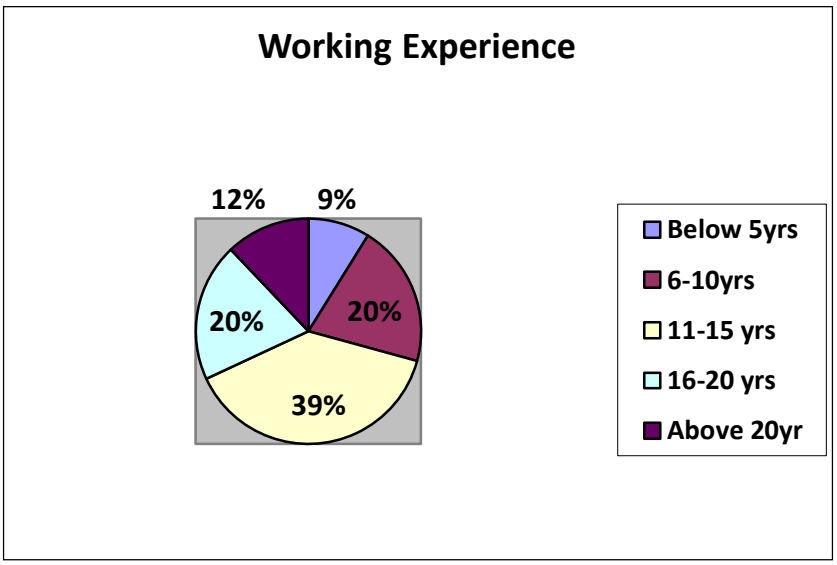


Figure 5

38.82 percent have 11-15 years,20.39 percent have 6-10 years, 19.93 percent have 16-20 years, and 12.10 percent have above 20 years of experience.

4.7 MONTHLY INCOME OF THE CONSUMERS

TABLE 4.7

MONTHLY INCOME DETAILS

Monthly Income in rupees	**Frequency**	**Percentage**
Less than 20,000	130	18.28
20,001 to 30,000	177	24.90

30,001 to 40,000	265	37.27
40,001 to 50,000	91	12.80
More than 50,000	48	6.75
Total	**711**	**100.00**

37.27 percent have a income Rs.30,001 to 40,000,24.90 percent of the respondents income is Rs.20,001to 30,000, 18.28 percent have a income below Rs.20,000, 12.80 percent of the respondents income of Rs.40,001 to 50,000 and 6.75 percent have more than Rs.50,000 income

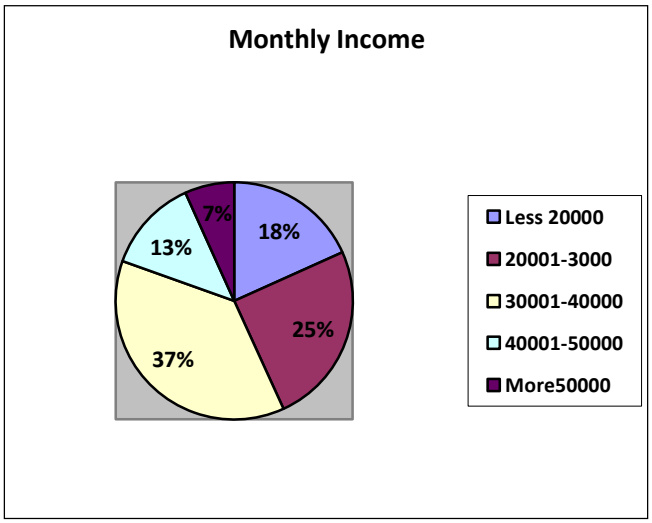


Figure 6

4.8 MARITAL STATUS DETAILS

TABLE 4.8

Marital Status	Frequency	Percentage (%)
Married	552	77.64
Unmarried	159	22.36
Total	**711**	**100.00**

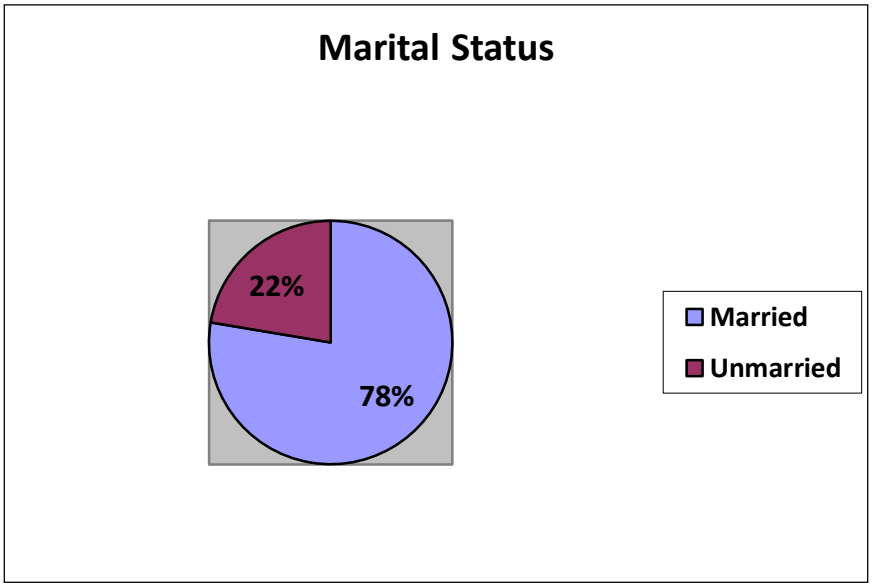


Figure 7

77.64 percent are married and, 22.36 percent of them, unmarried.

4.9 DESCRIPTION OF FAMILY OF THE RESPONDENTS

TABLE 4.9

Type of Family	Frequency	Percentage (%)

Nuclear Family	440	61.88
Joint Family	271	38.12
Total	**711**	**100.00**

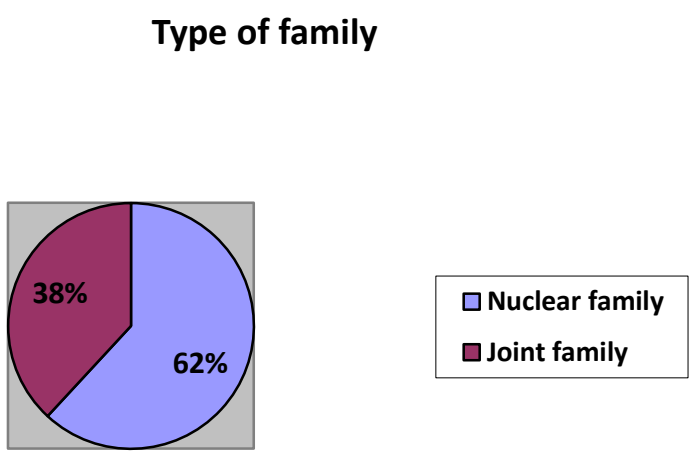


Figure 8

61.88 percent have a nuclear familyand 38.12 percent of them have a joint family.

4.10 SIZE OF FAMILY OF THE CONSUMERS

TABLE 4.10

FAMILY SIZE

Size of Family	Frequency	Percentage (%)

2 to 3 Members	289	40.65
4 to 6 Members	305	42.90
Above 6 Members	117	16.45
Total	**711**	**100.00**

Source: Primary Data

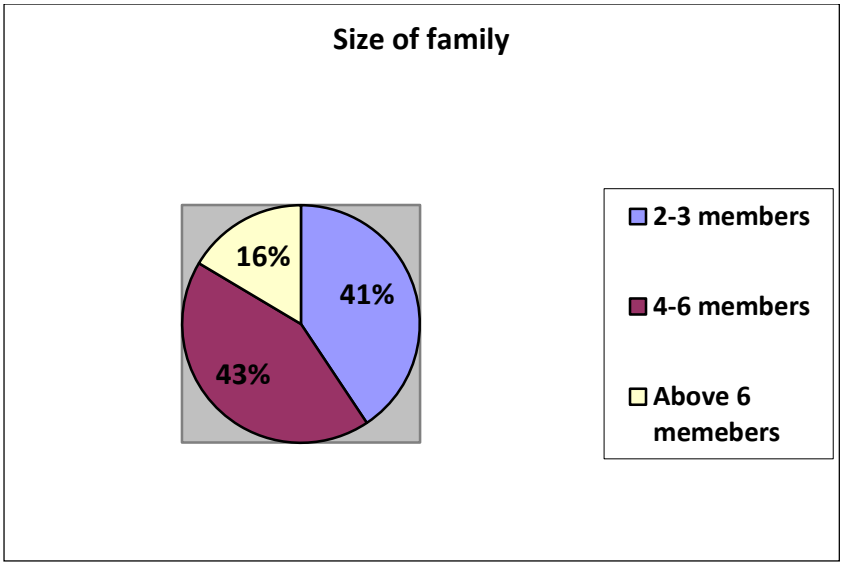


Figure 9

42.90 percent have a family size of 4-6 members, 40.65 percent have 2-3 members and 16.45 percent have more than 6 members.

4.11 SOURCES OF INFORMATION ABOUT USERS OF ECO-FRIENDLY PRODUCTS

TABLE 4.11

SOURCE OF IFORMATION

Source of Information about the product	Frequency	Percentage (%)
Family	131	18.43
Friends	191	26.86
Neighbours	111	15.61
Colleagues	80	11.25
Advertisements	198	27.85
Total	**711**	**100.00**

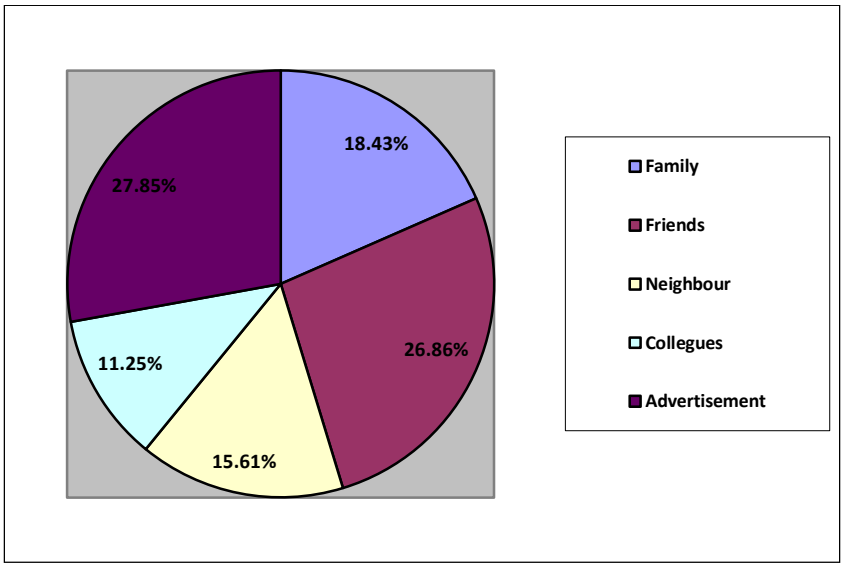


Figure 10

Advertisements are the source of information for 27.85 percent of consumers, friends for 26.86 percent, family is for 18.43 percent, neighbours are the source of information for 15.61 percent and colleagues are the source for 11.25 percent.

4.12 AVAILABILITY OF ECO-FRIENDLY PRODUCTS IN THE MARKET

TABLE 4.12

OPINION ABOUT AVAILABILITY

Availability of the product	**Frequency**	**Percentage**
Easily Available	284	39.94
Not Easily Available	123	17.30
Available	304	42.76
Total	**711**	**100.00**

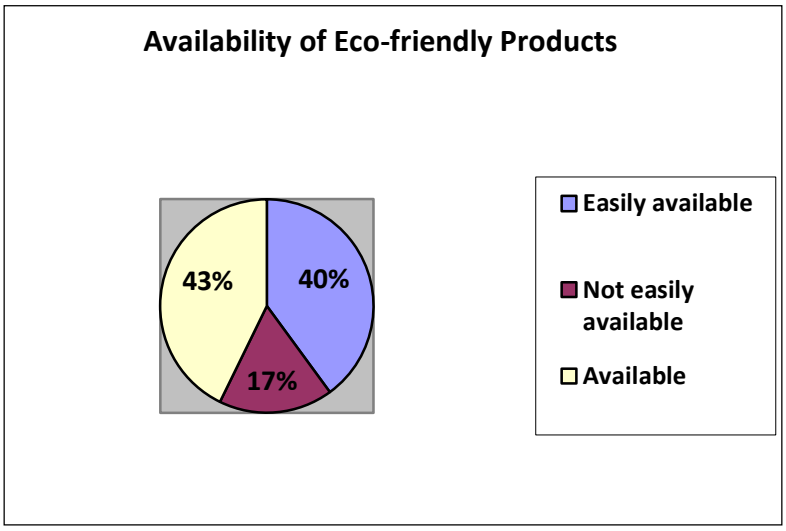


Figure 11

42.76 percent said it is available, 39.94 percent said it is easily available but, 17.30 percent of them opined eco-friendly products are not easily available.

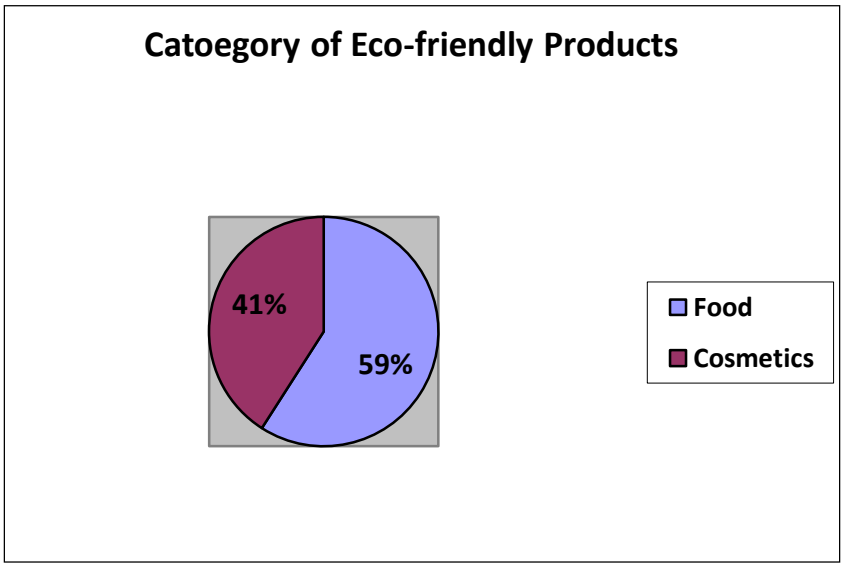
4.13 CATEGORY (TYPE) OF ECO-FRIENDLY PRODUCTS BOUGHT

TABLE 4.13

CATEGORY BOUGHT

Category (Type)	Frequency	Percentage
Food	420	59.07
Cosmetics	291	40.93
Total	**711**	**100.00**

Figure 12



59.07 percent of them bought food and 40.93 percent of them bought cosmetics.

4.14 FREQUENCY OF BUYING ECO-FRIENDLY PRODUCTS

TABLE 4.14

BUYING FREQUENCY

Frequency of Buying	Frequency	Percentage
Daily	50	7.03
Weekly	210	29.54
Fortnightly	319	44.87
Monthly	76	10.69
Quarterly	38	5.34
Half Yearly	18	2.53

Total	**711**	**100.00**

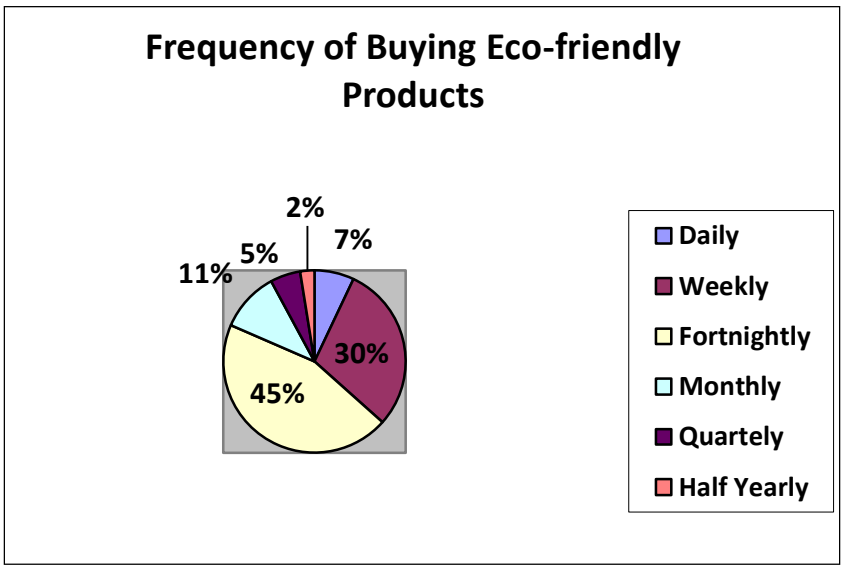


Figure 13

44.87 percent of them are buying eco-friendly products fortnightly, 29.54 percent buy it weekly, 10.69 percent are buying monthly, 7.03 percent of them are buying daily, 5 percent quarterly and 2.53 are buying eco-friendly products half-yearly.

4.15 AMOUNT SPENT IN A MONTH FOR BUYING ECO-FRIENDLY PRODUCTS IN A MONTH

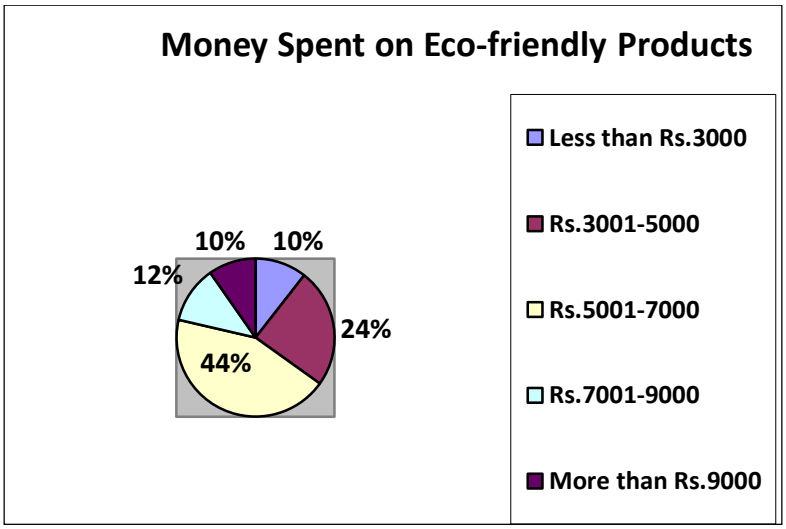
TABLE 4.15

MONEY SPENT

Money Spent in rupees	Frequency	Percentage
Less than 3000	75	10.55

Rs.3001 to Rs.5000	173	24.33
Rs.5,001 to Rs.7,000	311	43.74
Rs.7,001 to Rs.9,000	83	11.67
More than Rs.9,000	69	9.71
Total	**711**	**100.00**

Figure 14



43.74 percent of respondents spend Rs.5,001 – Rs.7,000, 24.33 percent of them spend Rs.3,001 – Rs.5,000 in a month, 11.67 percent of them spend Rs.7,001 – Rs.9,000 in a month, 10.55 percent spend below Rs3000 and 9.71 percent of them spend more than Rs.9,000 in a month for buying eco-friendly products.

4.16 PRICE OF ECO-FRIENDLY PRODUCT

TABLE 4.16

PRICE DETAILS

Price of Eco-Friendly Product	Frequency	Percentage (%)
Less than non-eco-friendly products	33	4.64
Very less than non-eco-friendly products	26	3.66
Prices are equal to non-eco-friendly products	44	6.19
Higher than noneco-friendly products	367	51.62
It is very higher than noneco-friendly products	241	33.89
Total	**711**	**100.00**

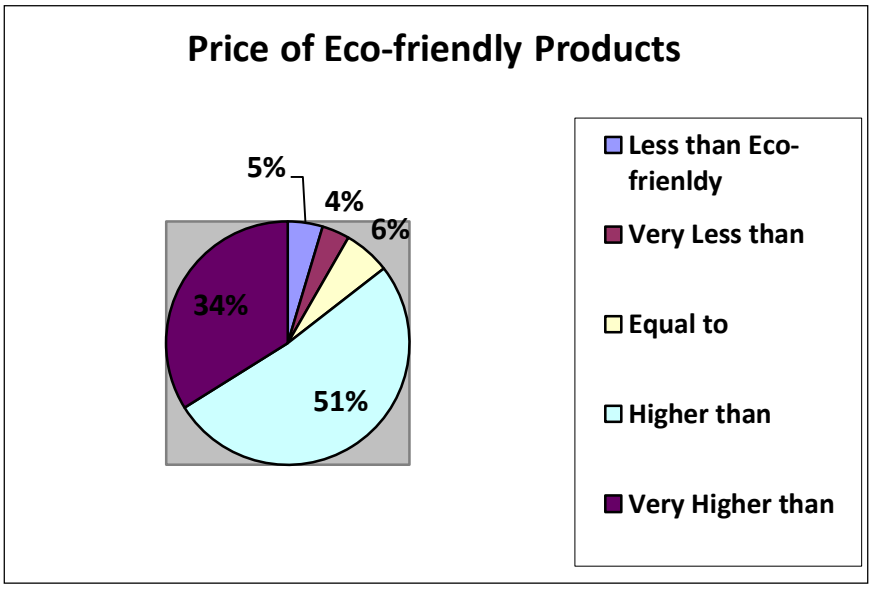


Figure 15

51.62 percent opined price is more, 33.89 percent opined price of eco-friendly products are very higher than noneco-friendly products, 6.19 percent has opined price ofthe eco-friendly products are equal to the non-eco-friendly products, 4.64 percent has opined price of eco-friendly products are less than the non-eco-friendlyand 3.66 percent of them opined price of eco-friendly products is very less than non-eco-friendly products.

4.17 ECO-FRIENDLY FOOD BRANDS USED

The above food product brands are considered for the study based on the demand and availability of these brands in shopping malls and big bazaars in Kerala state. The food brand categories considered in the study are Cereals and Dairy Products. The pilot study conducted among merchants and consumers indicated that these are the brands which most of them sell and use.

The eco-friendly food brands used by consumers are shown in Table 4.17

TABLE 4.17

ECO-FRIENDLY FOOD BRANDS

Food Brands	Frequency	Percentage (%)
Nestle	95	22.62
Conscious Food	37	8.81
Vision Fresh	60	14.28
24 Mantra	58	13.81
Ashirwad	85	20.24
Walgreen Farm	28	6.67
Organic India	24	5.71
Just Organics	33	7.86
Total	**420**	**100.00**

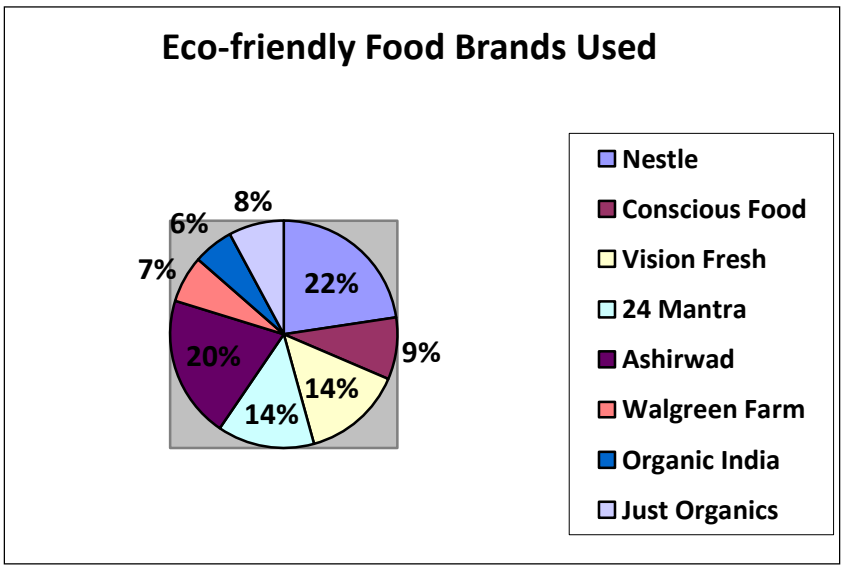


Figure 16

22.62 percent of them use Nestle food brand, 20.24percent of them use Ashirwad brand, 14.28 percent of them use Vision fresh food brand, 13.81 percent of them use 24 Mantra food brand, 8.81 percent of them use Conscious Food brand 7.86 percent of them use Just Organics food brand, 6.67 percent of them use Walgreen Farm food brand and 5.71 percent of them use Organic India brand.

4.18 ECO-FRIENDLY COSMETIC BRANDS USED

The above cosmetic product brands are considered for the study based on the demand and availability of these brands in shopping malls and big bazaars. The product categories considered in the study are face wash and moisturizing cream as it is used by all irrespective of gender. The pilot study conducted among merchants and consumers indicated these are the brands which most of them sell and use.

The eco-friendly cosmetic brands used by consumers are shown in Table 4.18

TABLE 4.18

COSMETIC BRANDS USED

Cosmetic Brands	Frequency	Percentage (%)
Garnier	63	21.65
Himalaya Herbals	28	9.62
O' Loreal	39	13.40

Lakme	58	19.93
Biotique	38	13.06
Rustic Art	24	8.25
Jovees	27	9.28
Just Herbs	14	4.81
Total	**291**	**100.00**

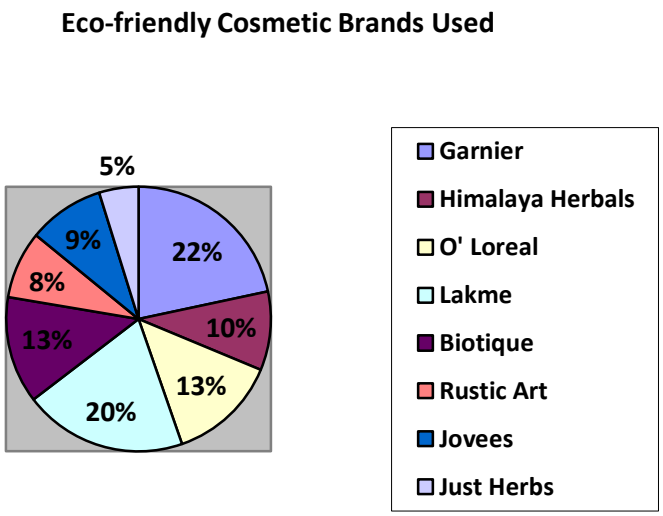


Figure 17

21.65 percent use Garnier cosmetic brand, 19.93 percent use Lakme cosmetic brand,13.40 percent O' Loreal cosmetic brand,13.06 percent use Biotique cosmetic brand,9.62percent of

them use Himalaya Herbals brand, 9.28 percent Jovees cosmetic brand, 8.25 percent of them use Rustic Art brand and 4.81 percent Just Herbs.

In the respondents group, most are male and majorities arebetween the ages of 26 – 35 years. Majority of consumers are undergraduates and many of them are private-sector employees Majority of them have working experience of 11 – 15 years and most of the consumers are in a monthly income of Rs.30,001 – Rs.40,000. Most of them are married and majority of consumers have a nuclear family. Majority of them have a family size of 4 – 6 members, advertisements are the sources of information about eco-friendly products to most of the consumers.

Majority of consumers opine eco-friendly products are available and most of the consumers bought eco-friendly food. Most of them are buying eco-friendly products fortnightly and majority of consumers spend Rs.5, 001 – Rs.7, 000 in a month for buying eco-friendly products, and most of the consumer's opine price of eco-friendly products are higher than noneco-friendly products. Most consumers use the Nestle food brand and Garnier cosmetic brand.

4.19. SOURCE OF INFORMATION OF NON USERS OF ECO-FRIENDLY PRODUCTS

The data collected from the occasional users or non-users through a questionnaire (given as Annexure IX) are based on the assumption that if they are using the eco-friendly products, what would have been their preferences and choices.

Table 4.19

SOURCE OF INFORMATION

Source of Information	Frequency	Percentage (%)
Family	5	5.00
Friends	5	5.00
Neighbours	4	4.00
Colleagues	8	8.00
Advertisements	78	78.00
Total	**100**	**100.00**

Source: Primary Data

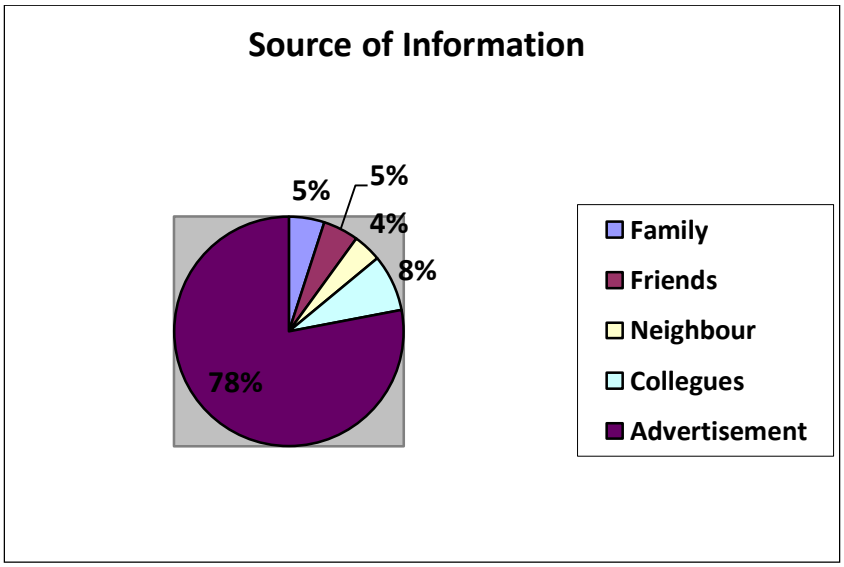


Figure 18

Advertisements are the sources of information for 78 percent of the respondent, friends are for 5 percent, the family is only 5 percent, and neighbours are the source of information for 4 percent and colleagues for 8 percent.

4.20 AVAILABILITY OF ECO-FRIENDLY PRODUCTS IN THE MARKET

TABLE 4.20

AVAILABILITY

Availability	Frequency	Percentage (%)
Easily Available	6	6
Not Easily Available	71	71
Available	23	23
Total	**100**	**100.00**

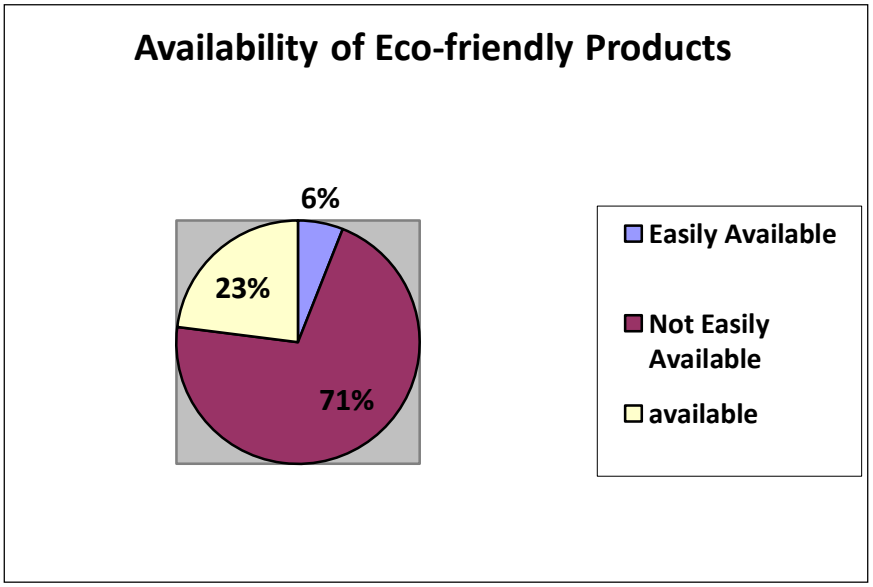


Figure 19

23 percent said it is available, 6 percent said it is easily available but, 71 percent of them stated that there is problem with respect to the availability of eco-friendly products.

4.21 CATEGORY (TYPE) OF ECO-FRIENDLY PRODUCTS BOUGHT

The category (type) of eco-friendly products bought by the respondent is shown

TABLE 4.21

CATEGORY (TYPE) OF ECO-FRIENDLY PRODUCTS BOUGHT

Category (Type)	Frequency	Percentage (%)
Food	84	84
Cosmetics	16	16
Total	**100**	**100.00**

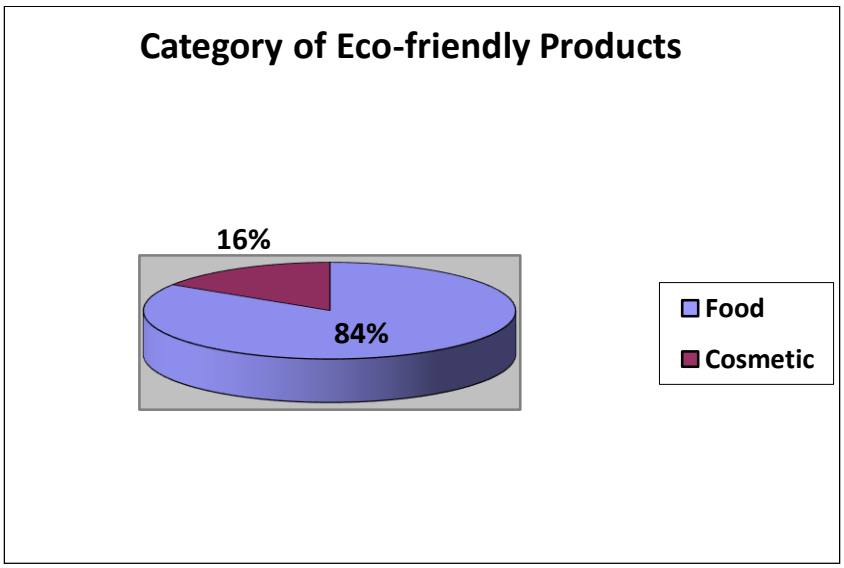


Figure 20

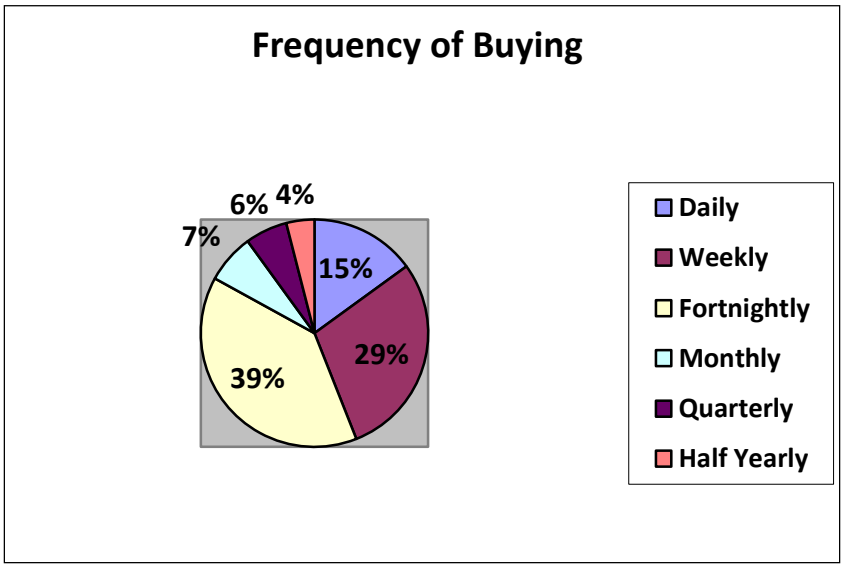
84 percent of bought foodand 16 percent bought cosmetics.

4.22 FREQUENCY OF BUYING ECO-FRIENDLY PRODUCTS

TABLE 4.22

Frequency of Buying	Frequency	Percentage (%)
Daily	15	15
Weekly	29	29
Fortnightly	39	39
Monthly	7	7
Quarterly	6	6
Half Yearly	4	4
Total	**100**	**100.00**

Figure 21



39 percent buy fortnightly, 29 percent buy it weekly, 7 percent are buying monthly, 15 percent of them are buying daily, and 6 percentquarterly and 4 percent buy eco half-yearly.

4.23 MONEY SPEND IN A MONTH FOR BUYING ECO-FRIENDLY PRODUCTS

TABLE 4.23

MONEY SPENT

Money Spent in rupees	Frequency	Percentage (%)
Less than 3000	26	26
3001 to5000	34	34
5,001 to7,000	18	18
7,001 to9,000	13	13
More than 9,000	9	9

Total	**100**	**100.00**

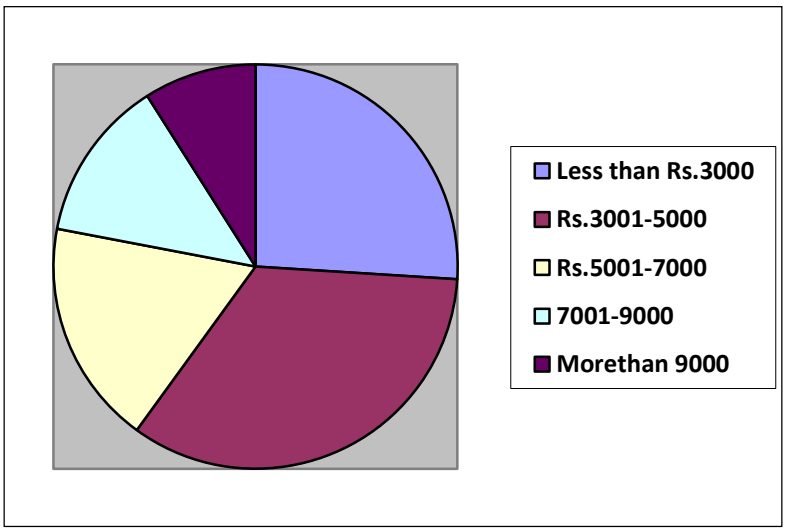


Figure 22

Among the respondents, 18 percent spend Rs.5, 001 – Rs.7, 000, 34 percent of them spend Rs.3, 001 – Rs.5, 000, 13 percent of them spend Rs.7,001 – Rs.9,000, 26 percent spend below Rs3000, 9 percent of them spend more than Rs.9,000 in a month for buying eco-friendly products.

4.24 PRICE OF ECO-FRIENDLY PRODUCT

TABLE 4.24

OPINION ON PRICE

Price of Eco-Friendly Product	Frequency	Percentage (%)
Less than non-eco-friendly products	9	9

Very less than non-eco-friendly products	4	4
Price equal to non-eco-friendly products	9	9
Price is higher than non-eco-friendly products	47	47
Price is very high non-eco-friendly products	31	31
Total	**100**	**100.00**

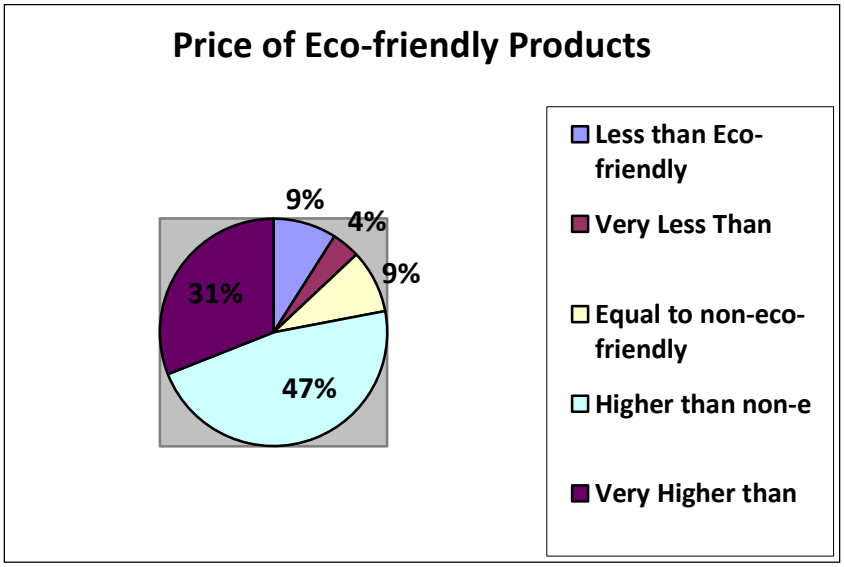


Figure 23

47 percent of them opined price of eco-friendly products is higher than noneco-friendly products, 31percent has opined price is very higher than non-eco-friendly products, 9percent

has opined price are equal tothe non-eco-friendly products, 9percent said it is less than the non-eco-friendly and 4 percent of them opined price of eco-friendly products is very less than non-eco-friendly products.

4.25 ECO-FRIENDLY FOOD BRANDS USED

The food product brands are considered for the study based on the demand and availability in shopping malls and big bazaars in Kerala state. The food brand categories considered in the study are Cereals and Dairy Products.

The eco-friendly food brands used by respondents are shown in Table 4.25

TABLE 4.25

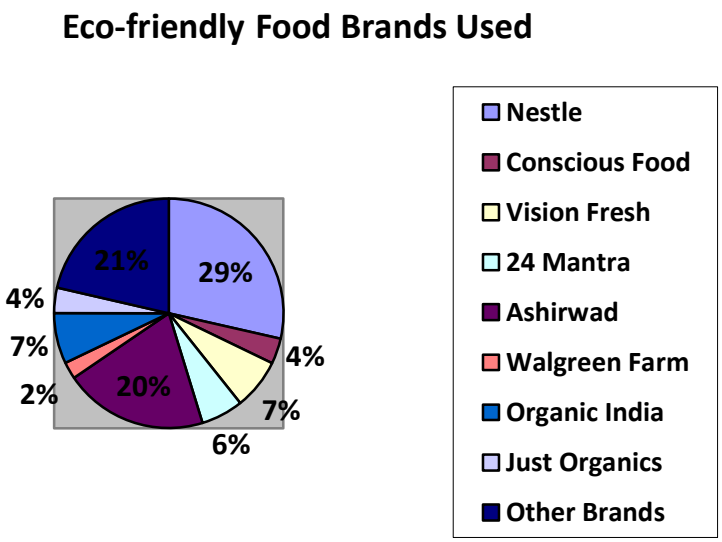
ECO-FRIENDLY FOOD BRANDS USED

Food Brands	Frequency	Percentage (%)
Nestle	24	28.56
Conscious Food	3	3.60
Vision Fresh	6	7.14
24 Mantra	5	5.95
Ashirwad	17	20.24
Walgreen Farm	2	2.40
Organic India	6	7.14

Just Organics	3	3.57
Other local brand-Avees	18	21.40
Total	**84**	**100.00**

Source: Primary Data

Figure 24



28.56 percent of them use Nestle food brand, 20.24 percent use Ashirwad brand, 7.14 percent Vision fresh food brand, 5.95 percent of them use 24 Mantra food brand, 3.60 percent Conscious Food brand 3.57 percent use Just Organics food brand, 2.40 percent Walgreen Farm food brand and 7.14 percent of them use Organic India brand and 21.40 percent use another brand Avees.

4.26 ECO-FRIENDLY COSMETIC BRANDS USED

The cosmetic product brands are considered for the study based on the demand and availability and choices of these brands found in shopping malls and big bazaars during pilot study. The product categories considered in the study are face wash and moisturizing cream.

The eco-friendly cosmetic brands used by respondents are shown in Table 4.26

TABLE 4.26

COSMETIC BRANDS USED

Cosmetic Brands	Frequency	Percentage (%)
Garnier	3	18.75
Himalaya Herbals	3	18.75
O' Loreal	2	12.50
Lakme	4	25.00
Biotique	---	00.00
Rustic Art	---	00.00
Jovees	4	25.00
Just Herbs	---	00.00
Any other brand	----	00.00
Total	**16**	**100.00**

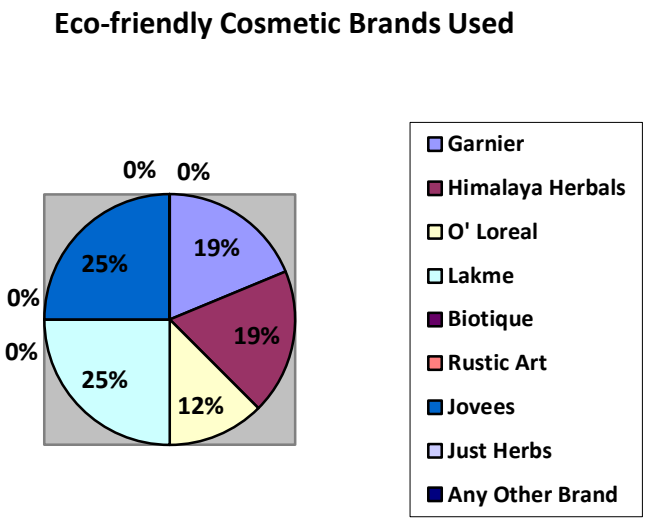


Figure 25

18.75 percent use Garnier cosmetic brand, 25 percent Lakme cosmetic brand,12.50 percent of them use O' Loreal cosmetic brand, 18.75 percent Himalaya Herbals brand, 25 percent of them use Jovees cosmetic brand, zero percent Biotique cosmetic brand, zero percent of them use Rustic Art brand, Just Herbs, and Biotique.

Most of the respondents are males and are between the ages of 36 – 45 years. Majority of respondents are undergraduates and are government-sector employees and advertisements are the sources of information about eco-friendly products to most of the respondents including eco-friendly food and cosmetic products.

Majority of respondents opined that eco-friendly products including eco-friendly food and cosmetic products are not easily available and they bought eco-friendly food like cereals and dairy products occasionally. Many preferred to buy eco-friendly products fortnightly and spent Rs.3, 001 to Rs.5, 000 in a month for buying eco-friendly products. Most of the consumer opined price of eco-friendly products ishigher than non-eco-friendly products. The

respondents use the Nestle food brand most and majority of consumers use Lakme cosmetic brand occasionally.

4.27AWARENESS, ATTITUDE, AND PERCEPTION OF CONSUMERS TOWARDS ECO-FRIENDLY PRODUCTS

INTRODUCTION

The environment conservation movement has been growing rapidly around the world including India. Marketers are interested to study consumer consciousness and motivation to tap the markets, amazingly through the introductory stages of eco-friendly products. Indian consumers have much low knowledge of environmental problems when compared to major economically developed nations. Consumer awareness is increasing towards the anxiety over dealing with environmental issues and is giving attention o eco-friendly activities and products developed by organisation and government.These expanding opportunitiesopen doors for marketers to convince Indian consumers about their products and services with regard to environmental benefits.

The belief system of the consumer, theirfeelings and buying plans will decide his attitude and behavior for eco-friendly products. Differing level of belief, availability, and accessibility occurs within, his leniency towards eco-friendly products generates. Thus, we can come to a conclusion that the consumer's attitude towards eco-friendly products is one the main factors for a buying decision of goods and services.

When a consumer making a buying decision, she or he evaluates the benefits make out from a specific eco-friendly product and assess them based on their values. The value a consumer enjoys when buying eco-friendly products go further than the direct utility. There is a bunch of sensational ideals as well, namely reputation, exclusiveness, acceptance, and compassion, or the level to which personal expectancy is met. In current dynamic market settings, the perception of consumers is becoming more important for achieving a

competitive advantage in the long term for marketers. Therefore, it is important to understand the awareness, attitude, and perception of consumers.

4.28AWARENESS OF CONSUMERS TOWARDS ECO-FRIENDLY PRODUCTS

Consumer's Awareness towards eco-friendly products is given in Table 4.28

TABLE 4.28

CONSUMERS AWARENESS TOWARDS ECO-FRIENDLY PRODUCTS

Consumer awareness	Mean	Standard Deviation
I am aware of companies producing eco-friendly products	4.07	0.84
I understand the advantages of eco-friendly products	4.09	0.80
I know the features of eco-friendly products	3.38	1.13
Eco-friendly products reduce environmental pollution	4.02	0.78
Eco-friendly products enhance the quality of life	3.61	0.98
Eco-friendly products are more effective as compared to non-eco-friendly products	3.32	1.09
Overall Mean Score	3.74	

Table 4.18 infers the mean and standard deviation of the variables considered for thestudy. It is found from the table that, advantages of eco-friendly products in the awareness aspect had the highest mean score followed by companies producing eco-friendly products, pollution awareness, quality of life enhancement, features, Effectiveness of eco-friendly products, The mean value of 4.07, 4.09, 4.02, and 3.61 of the above result shows that customers have enough awareness about eco-friendly products.

Thus, from the above analysis in the above table 4.18, it is also found that –

a) The consumers are aware of companies producing eco-friendly products

b) They understand the advantages of eco-friendly products.

c) They know that eco-friendly products reduce environmental pollution

d) Eco-friendly products improve quality of life.

4.29. CONSUMERSDEMOGRAPHIC PROFILE AND AWARENESS TOWARDS ECO-FRIENDLY PRODUCTS

Thedemographic profile of consumers and awareness towards eco-friendly products and its relation is mentioned here.Independent sample t-test and F-test are used to know the relationship between the consumers' demographic profile and their awareness

4.29.1 AWARENESS AND, GENDER TOWARDS ECO-FRIENDLY PRODUCTS

TABLE 4.29.1

AWARENESS ANDGENDER

Gender	Frequency	Mean	Standard Deviation	t-value	Sig.
Male	382	22.48	3.17	.054[NS]	.957
Female	329	22.50	3.65		

[NS] Non-Significant

Ho: The awareness level of the respondent does not differ based on their gender

Interpretation: Independent sample t-test was conducted to find anysignificant difference of opinion exists among the respondents on their awareness towards eco-friendly products based on their gender. It is clear from the table that, the t-value of 0.054 is not significant, at 5% level of significance here (p=0.957) and, hence, the null hypothesis is accepted stating that "*The awareness level of respondents does not differ based on their gender"*.

4.29.2. AGE AND, AWARENESS TOWARDS ECO-FRIENDLY PRODUCTS

TABLE 4.29.2

AGE AND, AWARENESS

Age	Frequency	Mean	Standard Deviation	F-value	Sig.
Below 25 years	106	22.99	3.78		
26 to 35 years	273	22.47	3.47		
36 to 45 years	188	22.43	2.89		

46 to 55 years	87	22.66	3.44	1.754[NS]	.136
Above 55 years	57	21.54	3.45		

[NS] Non-Significant

Ho: There is no difference of opinion among the respondents on their awareness level towards eco-friendly products based on their age.

Interpretation: ANOVA test was conducted to find any difference of opinion exists on the awareness level of respondents based on their age. It is clear from the table that, The F-value of 1.754 is not significant at 5% level here (p=0.136). Hence we accept the null hypothesis.

4.29.3. EDUCATION AND, AWARENESS TOWARDS ECO-FRIENDLY PRODUCTS

TABLE 4.29.3

Education	Frequency	Mean	Standard Deviation	F-value	Sig.
Secondary	35	22.86	1.87	2.062	.084
Higher Secondary	66	22.80	4.24		
Diploma	71	21.49	2.84		
Graduation	297	22.43	3.63		
Post	242	22.71	3.12		

Graduation					

Significant

Ho – There is no difference of opinion among the respondents on their awareness level towards eco-friendly products based on their education.

ANOVA test was conducted to find anydifference of opinion exists on the awareness level of respondents based on their education. It is clear from the table that, The F-value of 2.062 is significant, at 5% level (p=0.136). Hence we reject the null hypothesis.

The mean value of awareness towards eco-friendly products for consumers with secondary, higher secondary, diploma, graduation, and post-graduation are 22.86, 22.80, 21.49, 22.43, and 22.71respectively which explains consumers with secondary education have high awareness, while, consumers with a diploma have significantly lesserawareness towards eco-friendly products.

4.29.4. OCCUPATION AND AWARENESS TOWARDS ECO-FRIENDLY PRODUCTS

TABLE 4.29.4

Occupation of the customers	Frequency	Mean	Standard Deviation	F-value	Sig.
Business	61	22.93	3.72		
Government Sector	199	22.39	3.12		

Private Sector	289	22.69	3.17	1.141^{NS}	.336
Professional	91	22.10	3.88		
Retired	71	22.06	4.02		

^{NS} Non-Significant

Ho – There is no difference of opinion among the respondents on their awareness level towards eco-friendly products based on their occupation.

ANOVA test was conducted to find anydifference of opinion exists on the awareness level of respondents based on their occupation. It is clear from the table that, The F-value of 1.141 is not significant, at 5% level (p=0.336). Hence we accept the null hypothesis.

4.29.5. WORKING EXPERIENCE AND, AWARENESS TOWARDS ECO-FRIENDLY PRODUCTS

TABLE 4.29.5

Working experience	**Frequency**	**Mean**	**Standard Deviation**	**F-value**	**Sig.**
Below 5 years	63	22.89	3.39	.967^{NS}	.425
6 to 10 years	145	22.42	3.07		
11 to 15 years	276	22.37	3.43		
16 to 20 years	141	22.84	3.52		

Above 20 years	86	22.12	3.61		

[NS] Non-Significant

Ho – There is no difference of opinion among the respondents on their awareness level towards eco-friendly products based on their working experience.

ANOVA test was conducted to find anydifference of opinion exists on the awareness level of respondents based on their working experience. It is clear from the table that, The F-value of 0.967 is not significant at 5% level (p=0.425). Hence null hypothesis is accepted.

4.29.6. MONTHLY INCOME AND, AWARENESS TOWARDS ECO-FRIENDLY PRODUCTS

TABLE 4.29.6

Monthly Income in rupees	Frequency	Mean	Standard Deviation	F-value	Sig.
Less than Rs.20,000	130	22.67	3.44	2.824*	.024
20,001 to 30,000	177	23.03	3.33		
30,001 to 40,000	265	22.01	3.43		
40,001 to 50,000	91	22.34	3.13		
More than 50,000	48	22.92	3.58		

[*] Significant at 5% level

Ho – There is no difference of opinion among the respondents on their awareness level towards eco-friendly products based on their monthly income.

.

ANOVA test was conducted to find anydifference of opinion exists on the awareness level of respondents based on their monthly income. It is clear from the table that, The F-value of 2.824 is significant, at 5% level (p=0.024). Hence we reject the null hypothesis.

The mean value of awareness for eco-friendly products for consumers state that monthly income of less than Rs.20,000, Rs.20,001 to Rs.30,000, Rs.30,001 to Rs.40,000, Rs.40,001 to Rs.50,000 and more than Rs.50,000 are 22.67, 23.03, 22.01, 22.34 and 22.92 respectively which further states consumers get monthly income of Rs.20,001 to Rs.30,000have high awareness, while, consumers get monthly income of Rs.30,001 to Rs.40,000 have significantly lesserawareness towards eco-friendly products.

4.29.7. MARITAL STATUS AND, AWARENESS TOWARDS ECO-FRIENDLY PRODUCTS

TABLE 4.29.7

Marital Status	Frequency	Mean	Standard Deviation	t-value	Sig.
Married	552	22.30	3.34	2.806**	.005
Unmarried	159	23.15	3.51		

** Significant at 1% level

Ho – There is no difference of opinion among the respondents on their awareness level towards eco-friendly products based on their marital status.

.

The researcher has used T-testto find whether anydifference exists between the opinionson awareness level of respondents based on marital status. It is clear from the table that, The F-value of 2.806 is significant at 1% level (p=0.005). Hence we reject the null hypothesis.

The mean value of awareness towards eco-friendly products for unmarried consumers (23.15) is higher in comparison with married a consumer (22.30 percent) which explainsunmarried consumers have high awareness, while, married consumers have significantly lesser awareness towards eco-friendly products.

4.29.8. AWARENESS AND, TYPE OF FAMILY TOWARDS ECO-FRIENDLY PRODUCTS

TABLE 4.29.8

Type of Family	Frequency	Mean	Standard Deviation	t-value	Sig.
Nuclear Family	440	22.36	3.49	1.313^{NS}	.190
Joint Family	271	22.70	3.24		

^{NS} Non-Significant

Ho – There is no difference of opinion among the respondents on their awareness level towards eco-friendly products based on their type of family

.

A t-test was conducted to find anydifference of opinion exists on the awareness level of respondents based on their type of family. It is clear from the table that, The t-value of 1.313 is not significant at 5% level (p=0.190). Hence the null hypothesis is accepted.

4.29.9. SIZE OF FAMILY AND, AWARENESS TOWARDS ECO-FRIENDLY PRODUCTS

TABLE 4.29.9

Size of the Family	Frequency	Mean	Standard Deviation	F-value	Sig.
2 to 3 members	289	22.43	3.58	.111^{NS}	.895
4 to 6 members	305	22.50	3.36		
Above 6 members	117	22.61	3.04		

^{NS} Non-Significant

Ho – There is no difference of opinion among the respondents on their awareness level towards eco-friendly products based on their family size

.

A t-test was conducted to find anydifference of opinion exists on the awareness level of respondents based on their size of the family. It is clear from the table that, The F-value of 0.111 is not significant at 5% level (p=0.895). Hence we accept the null hypothesis.

4.30ATTITUDE OF CONSUMERS TOWARDS ECO-FRIENDLY PRODUCTS

TABLE 4.30

Attitude	Mean	Standard Deviation
I understand the information on eco-friendly packaging	4.12	0.85
I am pleased with the design of eco-friendly products	3.36	1.11
I trust in the information on the package of eco-friendly products	3.95	1.03
I give attention to advertisements for eco-friendly products	3.84	0.98
I believe in the eco-friendly advertising	3.30	1.05
I easily locate eco-friendly products positioned in shops	3.40	0.89
I give attention to the opinions of my family and friends about eco-friendly products	3.67	1.04
I am ready to pay a premium price for eco-friendly products	3.83	0.75
I suggest eco-friendly products to others	3.82	1.06
Overall Mean Score	3.69	

Source: Primary Data

Table 4.28 infers the mean and standard deviation of the variables considered for thestudy. It is found from the table that, information on eco-friendly packing of eco-friendly products in attitude aspect had the highest mean score followed by trust of information on eco-friendly products, attention to the advertisement, readiness to pay premium price, the suggestion of eco-friendly products to others, attention to the opinion of family and friends, ease of eco-friendly product location in-store, design of eco-friendly products, belief in eco-friendly product advertising.

4.31CONSUMER DEMOGRAPHIC AND,ATTITUDE TOWARDS ECO-FRIENDLY PRODUCT

GENDER AND ATTITUDE

Table 4.31.1

Gender	Frequency	Mean	Standard Deviation	t-value	Sig.
Male	382	32.99	4.56	1.685^{NS}	.092
Female	329	33.63	5.51		

^{NS} Non-Significant

Ho: The attitude level of the respondent does not differ based on their gender

Interpretation: It is clear from the table that, the t-value of 1.685 is not significant at a level of significance of 5% (p=0.092). Hence null hypothesis is accepted stating that "*The attitude level of respondents does not differ based on their gender".*

AGE AND, ATTITUDE TOWARDS ECO-FRIENDLY PRODUCTS

Table 4.31.2

Age of the customers	Frequency	Mean	Standard Deviation	F-value	Sig.
Below 25 years	106	34.85	5.18	4.893**	.001
26 to 35 years	273	33.58	4.88		
36 to 45 years	188	32.40	5.16		
46 to 55 years	87	32.91	4.16		
Above 55 years	57	32.44	5.51		

** Significant at 1% level

Ho: There is no difference of opinion among the respondents on their attitude level towards eco-friendly products based on their age.

.

Interpretation: ANOVA was conducted to find anydifference of opinion exists on the attitude level of respondents based on their age. It is clear from the table that, The F-value of 4.893 is significant, at 1% level (p=0.001). Hence we reject the null hypothesis.

The mean value of attitude towards eco-friendly products for consumers in the age of below 25 years, 26 – 35 years, 36 – 45 years, 46 – 55 years, and above 55 years is 34.85, 33.58, 32.40, 32.91, and 32.44respectively which clarifies consumers in the age of below 25 years have the high attitude, while, consumers in the age of 36 – 45 years have a low attitude towards eco-friendly products.

EDUCATION AND ATTITUDE

Table 4.31.3

Education of the customers	**Frequency**	**Mean**	**Standard Deviation**	**F-value**	**Sig.**
Secondary	35	32.49	3.91	4.885**	.001
Higher Secondary	66	32.61	4.94		
Diploma	71	31.52	4.40		
Graduation	297	33.20	5.16		
Post Graduation	242	34.21	5.05		

** Significant at 1% level

Ho: There is no difference of opinion among the respondents on their attitude level towards eco-friendly products based on their education.

Interpretation: ANOVA was conducted to find anydifference of opinion exists on the attitude level of respondents based on their education. It is clear from the table that, The F-value of 4.885 is significant, at 1% level (p=0.001). Hence we reject the null hypothesis.

The mean value of attitude towards eco-friendly products for consumers with secondary, higher secondary, diploma, graduation, and post-graduation are 32.49, 32.61, 31.52, 33.20, and 34.21 respectively which clarifies consumers with post-graduation have high attitude, while, consumers with a diploma have a low attitude towards eco-friendly products.

OCCUPATION ANDATTITUDE

TABLE 4.31.4

Occupation of the customers	**Frequency**	**Mean**	**Standard Deviation**	**F-value**	**Sig.**
Business	61	33.64	5.22	4.130**	.003
Government Sector	199	34.08	4.59		
Private Sector	289	33.38	4.94		
Professional	91	32.22	5.45		
Retired	71	31.73	5.38		

** Significant at 1% level

Ho: There is no difference of opinion among the respondents on their attitude level towards eco-friendly products based on their occupation.

.

Interpretation: ANOVA was conducted to find anydifference of opinion exists on the attitude level of respondents based on their occupation. It is clear from the table that, The F-value of 4.130 is significant, at 1% level (p=0.003). Hence we reject the null hypothesis.

The mean value of attitude towards eco-friendly products for consumers with the occupation of business, government sector, private sector, professional and retired are 33.64, 34.08, 33.38, 32.22, and 31.73respectively which clarifies consumers with occupation in the government sector have high attitude, while, consumers with the occupation of retired have a low attitude towards eco-friendly products.

WORKING EXPERIENCE AND ATTITUDE

TABLE 4.31.5

Working experience	**Frequency**	**Mean**	**Standard Deviation**	**F-value**	**Sig.**
Below 5 years	63	35.08	4.82		
6 to 10 years	145	33.23	4.91		

11 to 15 years	276	32.85	6.32	4.491**	.001
16 to 20 years	141	34.06	4.50		
Above 20 years	86	32.19	4.82		

** Significant at 1% level

Ho: There is no difference of opinion among the respondents on their attitude level towards eco-friendly products based on their working experience.

.

Interpretation: ANOVA was conducted to find anydifference of opinion exists on the attitude level of respondents based on their working experience. It is clear from the table that, The F-value of 4.491 is significant, at 1% level (p=0.001). Hence we reject the null hypothesis.

The mean value of attitude towards eco-friendly products for consumers with below 5 years, 6 – 10 years, 11 – 15 years, 16 – 20 years, and above 20 years of working experience are 35.08, 33.23, 32.85, 34.06, and 32.19respectively which clarifies consumers with below 5 years of working experiencehave a high attitude, while, consumers with above 20 years of working experience have a low attitude towards eco-friendly products.

MONTHLY INCOME AND ATTITUDE

TABLE 4.31.6

Monthly Income	Frequency	Mean	Standard	F-value	Sig.

in rupees			Deviation		
20,000	130	34.64	5.53		
20,001 to 30,000	177	33.98	4.95		
30,001 to 40,000	265	32.28	5.13		
40,001 to 50,000	91	32.86	4.28		
More than 50,000	48	33.40	3.30	6.170**	.000

** Significant at 1% level

Ho: There is no difference of opinion among the respondents on their attitude level towards eco-friendly products based on their monthly income.

.

Interpretation: ANOVA was conducted to find anydifference of opinion exists on the attitude level of respondents based on their monthly income. It is clear from the table that, The F-value of 6.170 is significant at 1% level (p=0.001). Hence we reject the null hypothesis.

The mean value of attitude towards eco-friendly products for consumers state monthly income of less than Rs.20,000, Rs.20,001 to Rs.30,000, Rs.30,001 to Rs.40,000, Rs.40,001 to Rs.50,000 and more than Rs.50,000 are 34.64, 33.98, 32.28, 32.86 and 33.40respectively further stating consumers get monthly income of less than Rs.20,000have high attitude, while, consumers get monthly income of Rs.30,001 to Rs.40,000 have low attitude towards eco-friendly products.

MARITAL STATUSANDATTITUDE

TABLE 4.31.7

Marital Status of the customers	Frequency	Mean	Standard Deviation	t-value	Sig.
Married	552	33.21	5.06	.784[NS]	.433
Unmarried	159	33.60	4.91		

[NS] Non-Significant

Ho: There is no difference of opinion among the respondents on their attitude level towards eco-friendly products based on their marital status.

.

Interpretation: The researcher used Independent sample t-test to find if any difference of opinion exists between attitude level of respondents and their marital status. It is clear from the table that, The t-value of 0.784 is not significant, at 5% level (p=0.433). Hence we accept the null hypothesis.

TYPE OF FAMILYAND ATTITUDE

TABLE 4.31.8

Type of the Family	Frequency	Mean	Standard Deviation	t-value	Sig.
Nuclear Family	440	32.99	5.21	2.001*	.046
Joint Family	271	33.76	4.68		

* Significant at 5% level

Ho: There is no difference of opinion among the respondents on their attitude level towards eco-friendly products based on their family type.

.

Interpretation: Here also, the researcher used Independent sample t-test to test whether anydifference of viewpoints exists on the attitude level of respondents based on their type of family. It is clear from the table that, The t-value of 2.001 is significant, at 5% level (p=0.046). Hence we reject the null hypothesis.

The mean value of attitude towards eco-friendly products for consumers with a joint family (33.76) is higher in comparison with consumers with nuclear family type(32.99 percent) which clarifies consumers with a joint family have a high attitude, while, consumers with nuclear family typehave a low attitude towards eco-friendly products.

SIZE OF FAMILYAND ATTITUDE

TABLE 4.31.9

Size of the Family	**Frequency**	**Mean**	**Standard Deviation**	**F-value**	**Sig.**
2 to 3 members	289	32.48	5.09	6.473**	.002
4 to 6 members	305	33.75	4.90		

Above 6 members	117	34.06	4.99		

** Significant at 1% level

Ho: There is no difference of opinion among the respondents on their attitude level towards eco-friendly products based on their family size.

.

Interpretation: ANOVA test was conducted to find any difference of opinion exists on the attitude level of respondents based on their size of the family. It is clear from the table that, The F-value of 6.473 is significant, at 1% level (p=0.002). Hence we reject the null hypothesis.

The mean value of attitude towards eco-friendly products for consumers with 2 to 3 members, 4 to 6 members, and above 6 members are 32.48, 33.75, and 34.06respectively which clarifies consumers with above 6 members have a high attitude, while, consumers with 2 to 3 members have a low attitude towards eco-friendly products.

4.32PERCEPTION OF CONSUMERS TOWARDS ECO-FRIENDLY PRODUCTS

TABLE 4.32

Perception	**Mean**	**Standard Deviation**
Eco-friendly products are good for the	4.03	0.86

environment		
Eco-friendly products have a better quality	3.92	0.93
Eco-friendly products have a reasonable price	3.34	1.17
Eco-friendly products are promoted well	3.63	0.97
Eco-friendly products are easily identifiable	3.39	1.12
Eco-friendly products are well packed	3.75	0.94
Eco-friendly products are easily available	3.73	0.96
Eco-friendly products are good for health	3.82	0.90
Eco-friendly products have good taste	3.80	0.98
Eco-friendly products have a good smell	3.35	1.11
Overall Mean Score	3.67	

Table 4.38 infers the mean and standard deviation of the variables considered for thestudy. It was found from the table that the eco-friendly products are good for the environment in perception aspect had the highest mean score followed by quality of eco-friendly products, eco-friendly products are good for health good tasteand are well packed and eco-friendly products are easily available, are promoted well, easily identifiable, good smellof eco-friendly products, perception that eco-friendly products are reasonable priced.

The analysis showed above table 4.38, the mean value of 4.03, 3.92, 3.82, and 3.83 shows that customers have a reasonable perception of eco-friendly products.

.

4.33. CONSUMER DEMOGRAPHICS AND THEIR PERCEPTION TOWARDS ECO-FRIENDLY PRODUCTS

Consumer demographics and their perception towards eco-friendly products is given below. The t-testor F-test is conducted to know any significant difference exists between the demographic profile of the customers and their attitude toward eco-friendly products.

GENDER AND PERCEPTION

TABLE 4.33.1

Gender of the customers	Frequency	Mean	Standard Deviation	t-value	Sig.
Male	382	36.64	4.90	.674^{NS}	.501
Female	329	36.89	5.03		

^{NS} Non-Significant

Ho: The perception level of the respondent does not differ based on their gender

Interpretation: Independent sample t-test was used to identify whether any significant difference exists among the respondents on their perception towards eco-friendly products based on their gender. It is clear from the table that, the t-value of 0.674 is not significant, at a

level of significance at 5% (p=0.501). Hence null hypothesis is accepted stating that "*The perception level of respondents does not differ based on their gender".*

AGE AND PERCEPTION

TABLE 4.33.2

Age of the customers	**Frequency**	**Mean**	**Standard Deviation**	**F-value**	**Sig.**
Below 25 years	106	36.57	4.87	.664^{NS}	.617
26 to 35 years	273	37.08	5.17		
36 to 45 years	188	36.71	4.51		
46 to 55 years	87	36.47	5.40		
Above 55 years	57	36.09	4.86		

^{NS} Non-Significant

Ho: There is no difference of opinion among the respondents on their perception level towards eco-friendly products based on their age.

.

Interpretation: ANOVA was conducted to find anydifference of opinion exists on the perception level of respondents based on their age. Since P-value is 0.617 we accept the null hypothesis.

EDUCATION AND PERCEPTION

TABLE 4.33.3

Education of the customers	Frequency	Mean	Standard Deviation	F-value	Sig.
Secondary	35	35.80	5.55	.482[NS]	.749
Higher Secondary	66	36.59	5.35		
Diploma	71	37.17	4.49		
Graduation	297	36.83	4.79		
Post Graduation	242	36.72	5.12		

[NS] Non-Significant

Ho: There is no difference of opinion among the respondents on their perception level towards eco-friendly products based on their education.

.

Interpretation: ANOVA was conducted to find anydifference of opinion exists on the perception level of respondents based on their education. Since p-value is 0.749 we accept the null hypothesis.

OCCUPATION AND PERCEPTION

TABLE 4.33.4

Occupation	Frequency	Mean	Standard Deviation	F-value	Sig.
Business	61	36.13	4.94	.606[NS]	.658
Government Sector	199	36.57	4.66		
Private Sector	289	36.82	5.21		
Professional	91	36.87	5.24		
Retired	71	37.37	4.36		

[NS] Non-Significant

Ho: There is no difference of opinion among the respondents on their perception level towards eco-friendly products based on their occupation.

.

Interpretation: ANOVA was conducted to find anydifference of opinion exists on the perception level of respondents based on their occupation. It is clear from the table that, The

F-value of 0.606 is not significant, at 5% level (p=0.658). Hence we accept the null hypothesis.

WORKING EXPERIENCE ANDTHE PERCEPTION

TABLE 4.33.5

Working experience	**Frequency**	**Mean**	**Standard Deviation**	**F-value**	**Sig.**
Below 5 years	63	35.05	5.65	2.761*	.027
6 to 10 years	145	36.75	4.71		
11 to 15 years	276	37.22	4.67		
16 to 20 years	141	36.92	4.98		
Above 20 years	86	36.24	5.47		

* Significant at 5% level

Ho: There is no difference of opinion among the respondents on their perception level towards eco-friendly products based on their working experience.

.

Interpretation: ANOVA was conducted to find anydifference of opinion exists on the perception level of respondents based on their working experience. It is clear from the table that, The F-value of 2.761 is significant, at 5% level (p=0.027). Hence we reject the null hypothesis.

The mean value of perception towards eco-friendly products for consumers with below 5 years, 6 to 10 years, 11 to 15 years, 16 to 20 years, and above 20 years of working experience are 35.05, 36.75, 37.22, 36.92, and 36.24respectively which demonstrates consumers with 11 to 15 years of working experiencehave a high perception, while, consumers with below 5 years of working experience have low perception towards eco-friendly products.

MONTHLY INCOME AND,THE PERCEPTION

TABLE 4.33.6

Monthly Income in rupees	**Frequency**	**Mean**	**Standard Deviation**	**F-value**	**Sig.**
Less than 20,000	130	35.59	5.06	6.886**	.000
20,001 to 30,000	177	36.51	4.74		
30,001 to 40,000	265	37.89	4.80		
40,001 to 50,000	91	35.58	4.83		
More than 50,000	48	36.69	5.34		

** Significant at 1% level

Ho: There is no difference of opinion among the respondents on their perception level towards eco-friendly products based on their monthly income.

.

Interpretation: ANOVA was conducted to find anydifference of opinion exists on the perception level of respondents based on their monthly income. It is clear from the table that, The F-value of 6.886 is significant, at 1% level (p=0.000). Hence we reject the null hypothesis.

The mean value of perception towards eco-friendly products for consumers get monthly income of less than Rs.20,000, Rs.20,001 to Rs.30,000, Rs.30,001 to Rs.40,000, Rs.40,001 to Rs.50,000 and more than Rs.50,000 are 35.59,36.51, 37.89, 35.58 and 36.69respectively which demonstrates consumers get monthly income of Rs.30,001 to Rs.40,000 have high perception, while, consumers get monthly income of Rs.40,001 to Rs.50,000 have low perception towards eco-friendly products.

MARITAL STATUSANDTHE PERCEPTION

TABLE 4.33.7

Marital Status of the consumers	**Frequency**	**Mean**	**Standard Deviation**	**t-value**	**Sig.**
Married	552	36.64	5.08	1.132^{NS}	.258
Unmarried	159	37.15	4.50		

^{NS} Non-Significant

Ho: There is no difference of opinion among the respondents on their perception level towards eco-friendly products based on their marital status.

.

Interpretation: Independent t-test was conducted to find anydifference of opinion exists on the perception level of respondents based on their marital status. It is clear from the table that, The t-value of 1.132 is not significant, at 5% level (p=0.258). Hence we accept the null hypothesis.

TYPE OF FAMILYAND THE PERCEPTION

TABLE 4.33.8

Type of the Family	Frequency	Mean	Standard Deviation	t-value	Sig.
Nuclear Family	440	37.07	4.85	2.185*	.029
Joint Family	271	36.24	5.10		

* Significant at 5% level

Ho: There is no difference of opinion among the respondents on their perception level towards eco-friendly products based on their family type.

Interpretation: Independent t-test was conducted to find anydifference of opinion exists on the perception level of respondents based on their type of family. It is clear from the table that, The t-value of 2.185 is significant, at 5% level (p=0.029). Hence we reject the null hypothesis.

The mean value of perception towards eco-friendly products for consumers with nuclear family type(37.07) is higher in comparison with consumers with a joint family (36.24 percent) which demonstrates consumers with nuclear family typehave a high perception, while, consumers with joint family have low perception towards eco-friendly products.

SIZE OF FAMILYAND THE PERCEPTION

TABLE 4.33.9

Size of the Family	Frequency	Mean	Standard Deviation	F-value	Sig.
2 to 3 members	289	37.31	4.79	3.509*	.030
4 to 6 members	305	36.50	5.07		
Above 6 members	117	36.03	4.96		

* Significant at 5% level

Ho: There is no difference of opinion among the respondents on their perception level towards eco-friendly products based on their family size.

.

Interpretation: ANOVA test was conducted to find any difference of opinion exists on the perception level of respondents based on their size of the family. It is clear from the table that, The t-value of 3.509 is significant, at 5% level (p=0.030). Hence we reject the null hypothesis.

The mean value of perception towards eco-friendly products for consumers with 2 – 3 members, 4 – 6 members, and above 6 members are 37.31, 36.50, and 36.03respectively

which demonstrates consumers with 2 – 3 members have a high perception, while, consumers with above 6 members have low perception towards eco-friendly products.

4.34AWARENESS, ATTITUDE, AND PERCEPTION AND THE RELATION AMONG THE CONSUMERS TOWARDS ECO-FRIENDLY PRODUCTS

Relation between awareness, attitude, and perception of consumers towards eco-friendly products was analyzed by using correlation analysis and the results are given in Table 4.34

TABLE 4.34

Particulars	Awareness	Attitude	Perception
Awareness	**1.00**		
Attitude	0.64**	**1.00**	
Perception	0.49**	0.45**	**1.00**

Source: Primary Data

** Significant at 1 % level

Ho that there is no significant relationship between customer's awareness, attitude, and the perception towards eco-friendly products proved to be wrong (null hypothesis proved to be wrong) as per table 4.28 above.

The correlation coefficient is 0.64 and it states that it is positive and highly related. Attitude and perception 0.45 and awareness and perception 0.49 show that in both cases are positively and moderately related.

Moderately associated correlation coefficient range from 0.45 to 0.60

The highly associated correlation coefficient ranges from 0.60 to 0.80

4.35 CONCLUSION

The awareness and attitudes towards eco-friendly products are highly and positively related (0.64). Awareness and perception of consumers are moderately and associated (0.49). The attitude and perception of consumers towards eco-friendly products are moderately and positively related (0.45).

A significant difference prevails between the monthly income, the marital status and education ofconsumers on their awareness. Again, significant difference prevails between the age, education, occupation, working experience, monthly income, type and size of family on attitude. Also, significant difference prevails between working experience, monthly income, type of family, and size family of consumers on their perception towards eco-friendly products.

THE FACTORS AFFECTING BUYING BEHAVIOUR OF CONSUMERS TOWARDS ECO-FRIENDLY PRODUCTS

4.36. Overview

The environmental problems have become critical now as the destruction due to human intervention in the eco-system is grave and it should be addressed soon. It is imperative that the carbon foot print leaves behind by extraction, production and consumption of consumer goods to be addressed and reduced. Fortunately, customers started to realize the importance of eco-friendly products which inflict less or no harm to the environment. Manufacturers very well understand this scenario and ready to include eco-friendly marketing and products in their marketing and production streams.

Personal values are held as abstract, trans-situational aggregate cognitive categories at the top of hierarchical cognitive structure. Personal values in a product's buying are the super ordinate goals that lead to activation of subordinate goals and behaviour routines that help achieve these super ordinate goals, implying that it is the product-specific personal values that dictate buying behaviour.

During recent decades, economic and social problems have a great influence on society in shaping its ethical behaviour. Consumers start to perceive ethical consumption as a tool to lead society to a better and healthier world. Therefore, companies have reacted to changing consumer preferences and offered various ethical products.

Hence, it is very important for the manufacturers and marketers of eco-friendly products to understand and analyse the factors which decides the buying behaviour of eco-friendly customers.

FACTORS AFFECTING THE BUYING BEHAVIOUR

Exploratory factor analysis is carried out and the result is given in Table 5.1 and KMO test to find out sampling adequacy Chi-Square value for the test of Sphericity of Bartlett are

0.709 (Vitalina, 2018) and 0.0027 (Rajiv Kumar, 2018) respectively indicate the method of factor analysis is apt. Communalities above 0.4 is acceptable (Kellow, 2008).Principal Component Analysis is done to get factors through varimax rotation and is converged in 6th iterations.There are different studies which indicate that cutoff value factor loading should be greater than 0.5 for best result (Hulland, 1999).The Cronbach's Alpha value is 0.78 and it indicates each measure has an acceptable level of internal consistency(Cortina, J. M., 1993). Four factors are obtained and have a 60.50 percent variation on variables included in the study.

Table 4.36

SAMPLE SIZE = 711

Reliability Statistics

Cronbach's Alpha	N of Items
.779	14

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.709
Bartlett's Test of Sphericity	Approx. Chi-Square	91
	Df	21
	Sig.	.000

Communalities

	Initial	Extraction

Brand image	1.000	.718
Safety feature	1.000	.590
User friendliness	1.000	.613
Fetches incentive	1.000	.665
Degradability	1.000	.428
Package attractiveness	1.000	.438
Easily degradable	1.000	.755
Peer pressure	1.000	.753
Env. Concern	1.000	.442
Health Consciousness	1.000	.617
Nutritional value	1.000	.564
Price sensitivity	1.000	.671
Quality assurance	1.000	.582
Affordability	1.000	.633

Extraction Method: Principal Component Analysis.

Rotated Component Matrix

	Component			
	1	2	3	4

VAR00001	.229	.095	-.039	**.810**
VAR00002	.447	.062	.110	**.612**
VAR00003	-.079	.037	**.737**	.249
VAR00004	-.165	**.617**	.250	.441
VAR00005	.038	.067	.369	**.535**
VAR00006	.323	.194	**.521**	.156
VAR00007	.126	-.008	**.855**	-.084
VAR00008	-.107	**.726**	.448	-.115
VAR00009	**.634**	.105	.032	.165
VAR00010	**.750**	-.032	.218	.074
VAR00011	**.741**	-.030	-.011	.086
VAR00012	.412	**.663**	-.129	-.212
VAR00013	**.532**	.509	-.060	.193
VAR00014	.044	**.694**	-.029	.385

Extraction Method: PCA Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Factor	Variables	Rotated Factor Loading	Eigen Values	Variation (%)	Factor Name
I	Eco-friendly products have the good brand image	0.63	3.70	17.10	**Features**
	Eco-friendly products are safe	0.75			
	Eco-friendly products are user friendly products	0.74			
	I buy eco-friendly products because I get incentives	0.53			
II	I have good knowledge of environmental degradation	0.62	1.94	15.42	**Environmental Concern**
	Packaging of eco-friendly products are attractive	0.73			
	Eco-friendly products are easily degradable	0.66			
	I buy eco-friendly products due to peer pressure	0.69			
III	I am concerned about the environment	0.74	1.56	14.50	**Health Consciousness**
	I buy eco-friendly products because I am health-conscious	0.52			

	Eco-friendly products have high nutritional values	0.86			
IV	Decision for buying eco-friendly products is not influenced by price	0.81	1.26	13.48	**Product Value**
	The quality of eco-friendly products is important for me	0.61			
	Eco-friendly products are affordable	0.54			
	Cumulative Value	-	-	60.50	-

Factor-I includes eco-friendly products that have a good brand image, eco-friendly products are safe, eco-friendly products are user friendly products and I buy eco-friendly products because I get incentives. Hence, this factor is stated as **Features** and it has17.10 percent variation.

Factor-II consists of I have good knowledge of environmental degradation, packaging of eco-friendly products are attractive, eco-friendly products are easily degradable and I buy eco-friendly products due to peer pressure. Therefore, this factor is described as **Environmental Concern** and it has 15.42 percent of the variation.

Factor-III comprises of I am concerned about the environment; I buy eco-friendly products because I am health conscious and eco-friendly products have high nutritional values. Thus, this factor is denoted as **Health Consciousness** and it has 14.50 percent of the variation.

Factor-IV contains my decision for buying eco-friendly products that are not influenced by price, the quality of eco-friendly products is important for me and eco-friendly products are affordable. So, this factor is denoted as **Product Value** and it has 13.48 percent of the variation.

From the above analysis, it is found thatFeatures, environmental concerns, health consciousness, and values are factors affecting the buying behaviour of consumers towards eco-friendly products.The results obtained are in consistent with Yatish et al, 2015; and he found that Environmental concerns, product attributes, and environmental knowledge and subjective norms emerged as major drivers whereas high price, low availability and lack of consumer trust in green products emerged as major barriers towards purchase of green products. These results are consistent with those of Smith and Paladino (2010) and Chen (2011),who identified environmental concern and subjective norm as major drivers, and also with those of Young et al. (2010).

According to (Iravani, 2012),consumer belief, social influence, environmental attitude, and perceived quality of green product significantly and positively influence the green purchasing intention of young Malaysian consumers and are considered significant predictors. (Kumar et al, 2015) found from their study that supporting environmental protection, drive for environmental responsibility, green product experience, environmental friendliness of

companies and social appeal as important factors affecting green product purchase decisions.Our research finding is additional factors and information for the marketers to explore the potential in eco-friendly market.

From awarenessanalysis of eco-friendly customers, it is found that the consumers are aware of companies producing eco-friendly products and they understand the advantages of eco-friendly products. They know that eco-friendly products reduce environmental pollution and eco-friendly products enhance the quality of life, but are apprehensive about thefeatures and effectiveness of eco-friendly products compared to non-eco-friendly products. Hence these two factors also have to take into account while analyzing the factors affecting eco-friendly customer behaviour towards eco-friendly products.

From the analysis of the Attitude of the eco-friendly customers, it is found that consumers as a whole are agreed that they understand the information on labels on eco-friendly packaging.The consumers trust in the information on the package and advertisementsfor eco-friendly products.They consider opinions of family and ready to pay a specialprice and even suggest eco-friendly products to others.Hence these three factors also have to take into account while analyzing the eco-friendly customer behaviour towards eco-friendly products.

From the analysis of the Perception of eco-friendly customers, it is found that consumers are agreedwith eco-friendly products are good for the environment. They agree eco-friendly products have better quality, are promoted well, and well packed, easily available, good taste, and good for health, but are apprehensive about eco-friendly products that have a reasonable price, are easily identifiable and eco-friendly products have a good

smell. Hence these three factors also have to take into account while analyzing the eco-friendly customer behaviour towards eco-friendly products**.**

4.37THE DEMOGRAPHIC PROFILE OF CONSUMERS AND,THE FACTORS AFFECTING BUYING BEHAVIOUR FOR ECO-FRIENDLY PRODUCTS

Relation between the factors affecting buying behaviour ad demographic profile for eco-friendly products is given below.

THE GENDER AND,BUYING BEHAVIOUR FOR ECO-FRIENDLY PRODUCTS

TABLE 4.37.1

Gender of the consumers	Frequency	Mean	Standard Deviation	t-value	Sig.
Male	382	49.88	6.71	.182^{NS}	.855
Female	329	49.79	6.77		

^{NS} Non-Significant

Ho: Gender does not have any influence on buying behaviour of respondents of eco-friendly products.

Interpretation: Independent sample t-test was used to find out whether any difference exists betweengendersof the respondents on their buying behaviour towards eco-friendly products. It is clear from the table that, the t-value of 0.182 is not significant, at a level of significance of 5% (p=0.855). Hence null hypothesis is accepted stating that "*The buying behaviour of*

respondents does not differ based on their gender in deciding the buying behaviour of eco-friendly product."

THE AGE AND, BUYING BEHAVIOUR FOR ECO-FRIENDLY PRODUCTS

TABLE 4.37.2

Age	Frequency	Mean	Standard Deviation	F-value	Sig.
Below 25 years	106	49.93	6.57	.528^{NS}	.715
26 to 35 years	273	50.08	6.63		
36 to 45 years	188	49.92	7.12		
46 to 55 years	87	49.52	6.66		
Above 55 years	57	48.74	6.43		

^{NS} Non-Significant

Ho: Age does not have any influence on buying behaviour of respondents of eco-friendly products.

Interpretation: F-test was conducted to find if any difference exists betweenthe age of the respondents on their buying behaviour towards eco-friendly products. It is clear from the table that, the F-value 0.528 is not significant, at a level of significance 5% (p=0.715). Hence null hypothesis is accepted stating that "*The buying behaviour of respondents does not differ based on their age in deciding the buying behaviour of eco-friendly product."*

EDUCATION AND,BUYING BEHAVIOUR FOR ECO-FRIENDLY PRODUCTS

TABLE 4.37.3

Education	Frequency	Mean	Standard Deviation	F-value	Sig.
Secondary	35	48.63	7.36	0	
Higher Secondary	66	49.79	6.44	1.047^{NS}	.382
Diploma	71	49.32	6.62		
Graduation	297	49.59	6.63		
Post Graduation	242	50.48	6.87		

^{NS} Non-Significant

Ho: Education does not have any influence on buying behaviour of respondents of eco-friendly products.

Interpretation: F-test was conducted to find any difference exist with the education of the respondents on their buying behaviour towards eco-friendly products. It is clear from the table that, the F-value 1.047 is not significant, at a level of significance 5%(p=0.382). Hence null hypothesis is accepted stating that "*The buying behaviour of respondents does not differ based on their education in deciding the buying behaviour of eco-friendly product."*

OCCUPATION AND,BUYING BEHAVIOUR FOR ECO-FRIENDLY PRODUCTS

TABLE 4.37.4

Occupation	Frequency	Mean	Standard Deviation	F-value	Sig.
Business	61	49.13	7.42	1.878^{NS}	.112
Government Sector	199	49.51	6.28		
Private Sector	289	49.80	6.99		
Professional	91	51.55	6.50		
Retired	71	49.31	6.38		

^{NS} Non-Significant

Ho: Occupation does not have any influence on buying behaviour of respondents of eco-friendly products.

Interpretation: F-test was conducted to find any difference exist with the occupation of the respondents on their buying behaviour towards eco-friendly products. It is clear from the table that, the F-value 1.878 is not significant, at a level of significance of 5% (p=0.112).

Hence null hypothesis is accepted stating that "*The buying behaviour of respondents does not differ based on their occupation in deciding buying behaviour.*

WORKING EXPERIENCE AND,BUYING BEHAVIOUR FOR ECO-FRIENDLY PRODUCTS

TABLE 4.37.5

Working experience	Frequency	Mean	Standard Deviation	F-value	Sig.
Below 5 years	63	50.37	6.95	1.218^{NS}	.302
6 to 10 years	145	49.90	6.97		
11 to 15 years	276	49.86	6.32		
16 to 20 years	141	50.33	7.13		
Above 20 years	86	48.44	6.77		

^{NS} Non-Significant

Ho: Working experience does not have any influence on buying behaviour of respondents of eco-friendly products.

Interpretation: F-test was conducted to find any difference exist with the working experience of the respondents, on their buying behaviour towards eco-friendly products. It is clear from the table that, the F-value 1.218 is not significant, at a level of significance of 5% (p=0.302). Hence null hypothesis is accepted stating that "*The buying behaviour of respondents does not*

differ based on their working experience in deciding the buying behaviour of eco-friendly product."

MONTHLY INCOME AND,BUYING BEHAVIOUR FOR ECO-FRIENDLY PRODUCTS

TABLE 4.37.6

Monthly Income in rupees	Frequency	Mean	Standard Deviation	F-value	Sig.
Less than 20,000	130	49.60	6.47	.489^{NS}	.744
20,001 – 30,000	177	50.42	7.20		
30,001 – 40,000	265	49.75	6.72		
40,001 – 50,000	91	49.42	5.99		
More than 50,000	48	49.61	7.20		

^{NS} Non-Significant

Ho: Monthly income does not have any influence on buying behaviour of respondents of eco-friendly products.

Interpretation: F-test was conducted to find any difference exist with the monthly income of the respondents on their buying behaviour towards eco-friendly products. It is clear from the table that, the F-value 0.489 is not significant, at a level of significance of 5% (p=0.774). Hence null hypothesis is accepted stating that "*The buying behaviour of respondents does not*

differ based on their monthly income in deciding the buying behaviour of eco-friendly product."

MARITAL STATUSAND,BUYING BEHAVIOUR FOR ECO-FRIENDLY PRODUCTS

TABLE 4.37.7

Marital Status of the customers	Frequency	Mean	Standard Deviation	t-value	Sig.
Married	552	49.86	6.84	.134[NS]	.258
Unmarried	159	49.77	6.38		

[NS] Non-Significant

Ho: Marital status does not have any influence on buying behaviour of respondents of eco-friendly products.

Interpretation: Independent t-test wasused to test the difference between themarital status of the respondents on their buying behaviour towards eco-friendly products. It is clear from the table that, the t-value of 0.134 is not significant, at a level of significance of 5%(p=0.258). Hence null hypothesis is accepted stating that "*The buying behaviour of respondents does not differ based on their marital status in deciding the buying behaviour of eco-friendly product."*

TYPE OF FAMILYAND,BUYING BEHAVIOUR FOR ECO-FRIENDLY PRODUCTS

TABLE 4.37.8

Type of the Family	Frequency	Mean	Standard Deviation	t-value	Sig.
Nuclear Family	440	50.03	6.77	.961^{NS}	.337
Joint Family	271	49.53	6.68		

^{NS} Non-Significant

Ho: Type of family does not have any influence on buying behaviour of respondents of eco-friendly products.

Interpretation: Testing was done to see whether anydifference exists with family type of the respondents on their buying behaviour towards eco-friendly products. It is clear from the table that, the t-value of 0.961 is not significant, at a level of significance of 5% (p=0.337). Hence null hypothesis is accepted stating that "*The buying behaviour of respondents does not differ based on their type of family in deciding the buying behaviour of eco-friendly product."*

SIZE OF FAMILYAND,BUYING BEHAVIOUR FOR ECO-FRIENDLY PRODUCTS

TABLE 4.37.9

Size of the Family	Frequency	Mean	Standard Deviation	F-value	Sig.
2 to 3 members	289	50.19	6.87	.923^{NS}	.337
4 to 6 members	305	49.63	6.44		
Above 6 members	117	49.51	7.14		

^{NS} Non-Significant

Ho: Size of family does not have any influence on buying behaviour of respondent of eco-friendly products.

Interpretation: F-test was conducted to find any difference exists with size of family of the respondents on their buying behaviour towards eco-friendly products. It is clear from the table that, the F-value of 0.923 is not significant, at a level of significance of 5% (p=0.337). Hence null hypothesis is accepted stating that "*The buying behaviour of respondents does not differ based on their size of family in deciding the buying behaviour of eco-friendly product."*

4.38. CONCLUSION

The null hypothesis that no significant difference prevails between the demographic profile of consumers and, factors affecting buying behaviour for eco-friendly products is proved to be valid.

4.39. PERSONAL VALUES INFLUENCING BUYING BEHAVIOUR OF CONSUMERS FOR ECO-FRIENDLY PRODUCTS

The personal values influencing buying behaviour of consumers for eco-friendly products are given in Table 4.39

TABLE 4.39

PERSONAL VALUES INFLUENCING BUYING BEHAVIOUR OF CONSUMERS FOR ECO-FRIENDLY PRODUCTS

Personal Values of the respondents	Mean	Standard Deviation

I buy eco-friendly products as they are dependable	3.71	1.10
I buy eco-friendly products to match my personal needs	3.88	0.80
I buy eco-friendly products as they have commitments towards society	3.23	0.99
I sense the significance of eco-friendly products personally	3.60	0.92
I buy eco-friendly products from companies with a reputation	3.63	0.90
I have a good personal image because of buying eco-friendly products	3.76	0.87
I buy eco-friendly products with health-conscious	3.68	0.96
I have secured a personal life because of using eco-friendly products	3.21	1.17
Overall Mean Value	3.58	

We can find that the mean and standard deviation of the variables considered for the personal factors influencing the buying behaviour of eco-friendly products. It was also observed that the eco-friendly products are purchased to satisfy the personal need the highestmean score followed by personal image gets by buying of eco-friendly products, eco-

friendly products are dependable, health consciousness products from the reputed companypersonal sensing of the significance of eco-friendly productscommitment towards society, personal security derived from the consumption of eco-friendly products.

a) The consumers are agreed with they buy eco-friendly products as they are dependable.

b) They buy eco-friendly products to match their personal needs.

c) They sense the significance of eco-friendly products personally.

d) They buy eco-friendly products from companies with a reputation.

e) They have a good personal image because of buying eco-friendly products.

f) They buy eco-friendly products with health-conscious.

g) They are neutral with buying eco-friendly products as they have commitmentstowards society.

h) They have secured personal life because of using eco-friendly products and are dependable.

4.40. ETHICAL VALUES INFLUENCING BUYING BEHAVIOUR OF CONSUMERS FOR ECO-FRIENDLY PRODUCTS

The ethical values influencing buying behaviour of consumers for eco-friendly products are given in Table 4.40

TABLE 4.40

ETHICAL VALUES INFLUENCING BUYING BEHAVIOUR OF CONSUMERS FOR ECO-FRIENDLY PRODUCTS

Ethical Values of respondents	Mean	Standard Deviation
Eco-friendly products are produced through ethical practices	3.38	1.02
I am in favour of buying eco-friendly products because of ethical values	3.94	0.86
Eco-friendly products have ethical standards	3.78	0.80
Overall Mean Value	3.7	

Table 4.40 infers that mean and standard deviation of the variables considered for the ethical factors influence the behaviour for buying eco-friendly products. Eco-friendly products are bought because ethical values have the highest mean value; eco-friendly products have ethical standards and eco-friendly products believed to be produced through ethical practice to satisfy the ethical aspect has mean score.

From the above table 4.69, the mean value of 3.94 and 3.78 shows that theethical values of consumers are high which are influencing the buying behaviour of consumers towards eco-friendly products.

a) The consumers are agreed with they are in favour of buying eco-friendly products because of ethical values.

b) They think that eco-friendly productshave ethical standards.

c) They are neutral with eco-friendly products are produced through ethical practices.

4.41. CONCLUSION

From the study and analysis, it is found the following outcomes mentioned below:

A significant difference prevails between the monthly income, the marital status and education of consumers on their awareness. Again, significant difference prevails between the age, education, occupation, working experience, monthly income, type and size of family on attitude. Also, significant difference prevails between working experience, monthly income, type of family, and size family of consumers on their perception towards eco-friendly products. From the analysis it is also found that no significant difference prevails between the demographic profiles of consumers and, factors affecting buying behaviour for eco-friendly products are proved to be valid.

From the analysis of awareness factors of eco-friendly customers, it is found that the consumers are aware of companies producing eco-friendly products and they understand the advantages of eco-friendly products. They know that eco-friendly products reduce environmental pollution and eco-friendly products enhance the quality of life, but are apprehensive about the features and effectiveness of eco-friendly products compared to non-eco-friendly products. Hence these two factors also have to take into account while analyzing the factors affecting eco-friendly customer behaviour towards eco-friendly products.

From the analysis of the Attitude of the eco-friendly customers, it is found that consumers as a whole are agreed that they understand the information on labels on eco-friendly packaging. The consumers trust in the information on the package and advertisements for eco-friendly products. They consider opinions of family and ready to pay a special price and even suggest eco-friendly products to others. Hence these three factors also have to take into account while analyzing the eco-friendly customer behaviour towards eco-friendly products.

From the analysis of the Perception of eco-friendly customers, it is found that consumers are agreed with eco-friendly products are good for the environment. They agree eco-friendly products have better quality, are promoted well, and well packed, easily available, good taste, and good for health, but are apprehensive about eco-friendly products that have a reasonable price, are easily identifiable and eco-friendly products have a good smell. Hence these three factors also have to take into account while analyzing the eco-friendly customer behaviour towards eco-friendly products**.**

With regard to the factors affecting buying behaviour for eco-friendly products, it is found from the analysis that Features, environmental concerns, health consciousness, and values are factors affecting the buying behaviour of consumers towards eco-friendly products.

CHAPTER – V

RESULTS DISCUSSIONS, AND CONCLUSION

Chapter-V

Results, Discussion, and Conclusion

5.1 Overview

The environmental problems have become critical now as the destruction due to human intervention in the eco-system is grave and it should be addressed soon. It is imperative that the carbon foot print leaves behind by extraction, production and consumption of consumer goods to be addressed and reduced. Fortunately, customers started to realize the importance of eco-friendly products which inflict less or no harm to the environment. Manufacturers very well understand this scenario and ready to include eco-friendly marketing and products in their marketing and production streams. Hence, it is very important for the manufacturers and marketers of eco-friendly products to understand and analyse the factors which decides the buying behaviour of eco-friendly customers.

Kerala State is selected for the study and the data from 711 samples have been collected from four major district; Kollam, Trivandrum, Ernakulam and Alleppey. Convenience sampling method is adopted for data collection due to feasibility. The socio-economic profile of the customers is explained using frequency distribution and percentage analysis. The factors influencing the buying behaviour are explored by exploratory factor analysis method. ANOVA is used to find any significant difference between socio-economic profile of the eco-friendly customers and their attitude, awareness and perception.

5.2 RESULTS

5.2.1 DEMOGRAPHIC PROFILE OF USERS OF ECO-FRIENDLY PRODUCTS

From the analysis of the demographic profile of the customers, it is found that

a) 53.73 percent of the consumers are male, 38.40 percent of consumers are between the ages of 26 – 35 years, 41.77 percent of consumers are graduates and 40.65 percent of consumers are private-sector employees, 38.82 percent is in the working experience of 11 – 15 years, 37.27 percent of consumers are in a monthly income of Rs30, 001 to Rs40, 000, 77.64 percent of consumers are married, 61.88 percent of consumers have a nuclear family, and larger than two-fifth of consumers have a family size of 4 – 6 members.

5.2.2 INFORMATION OF USERS

27.85 percent say advertisements are the sources of information about eco-friendly products

42.76 percent of consumers opine eco-friendly products are available.

59.07 percent of consumers bought eco-friendly food.

44.87fifths of consumers are buying eco-friendly products fortnightly.

43.7 percent of consumers spend Rs.5,001 – Rs.7,000 in a month for buying eco-friendly products.

51.62 percent of the consumers opine the prices of eco-friendly products are higher than non-eco-friendly products.

22.62 percent of consumers use the Nestle food brand.

21.65 percent, larger than one-fifth of consumers use Garnier cosmetic brand.

5.2.2.1 INFORMATION OFNON-USERS

The data collected from the non-users through a questionnaire (given as annexure) are based on the assumption that if they are using the eco-friendly products, what would have been their preferences and choices.

Most of the consumers are males and majority of them are between the ages of 36 – 45 years.

Majority of consumers is undergraduates and most of the consumers are government-sector employees

Advertisements are the sources of information about eco-friendly products to most consumers including eco-friendly food and cosmetic products.

Majority of consumers opine eco-friendly products including eco-friendly food and cosmetic products are not easily available.

Most of the consumers bought eco-friendly food like cereals and dairy products.

Most of the consumers have bought eco-friendly products fortnightly.

Majority of consumers spent Rs.3, 001 – Rs.5, 000 in a month for buying eco-friendly products.

Most of the consumers opine price of eco-friendly products is higher than non-eco-friendly products.

Majority of consumers use the Nestle food brand most majority of consumers use Lakme cosmetic brand.

5.2.3 Specific Objective of the study - 1

1) To examine the influence of the demographic profile of the consumer's on their awareness of eco-friendly products

DEMOGRAPHICS AND AWARENESS TOWARDS ECO-FRIENDLY PRODUCTS

HYPOTHESIS - The null hypothesisthat demographic factors do not have any influence on the awareness level of consumers towards eco-friendly products exceptthe education, income, and marital status of consumers is true.

Gender of consumers and awareness do not have any difference towards eco-friendly products as t-value is only 0.054 and hence the null hypothesis is accepted.

Age and awarenessdo not have any difference towards eco-friendly productsas F-value is only 1.754 and hence the null hypothesis is accepted.

Education of consumers and awarenessdo have a difference towards eco-friendly productsas F-value is 2.062, and hencethe null hypothesis is rejected.

Occupation of consumers and awarenessdo not have any difference towards eco-friendly products as F-value is only 1.14, and hencethe null hypothesis is accepted.

Working experience of consumers and awareness do not have any difference towards eco-friendly productsas F-value is only 0.967, and hence the null hypothesis is accepted.

Monthly income of consumers and awareness do have a difference towards eco-friendly products as F-value is 2.824, and hence the null hypothesis is rejected.

Marital status of consumers and awarenessdo have a difference towards eco-friendly productsas F-value is 2.806, and hence the null hypothesis is rejected.

Consumers and awarenessdo not have any difference towards eco-friendly products as t-value is 1.131, and hencethe null hypothesis is accepted.

Family size of consumers and awarenessdo not have any difference towards eco-friendly products as F-value is 0.111, and hence the null hypothesis is accepted.

5.2.4 Specific Objective of the study - 2

2. Exploring the influence of the consumers' demographic profile and his attitude for eco-friendly products.

DEMOGRAPHICS AND ATTITUDE TOWARDS ECO-FRIENDLY PRODUCTS

HYPOTHESIS -The null hypothesis that demographic factors do not have any influence on attitude level towards eco-friendly products except eco-friendly consumer's age, education, occupation, working experience, monthly income, type of family, and size of the family is true.

Gender of consumers and attitudedo not have any difference towards eco-friendly products as t-value is 1.685, and hencethe null hypothesis is accepted.

Age of consumers and attitudedo have a difference towards eco-friendly products as F-value is 4.893, and hence the null hypothesis is rejected.

Education of consumers and attitudedo have a difference towards eco-friendly products as F-value is 4.885, and hencethe null hypothesis is rejected.

Occupation of consumers and attitudedo have a difference towards eco-friendly products as F-value is 4.130, and hencethe null hypothesis is rejected.

Working experience of consumers and attitudedo have a difference towards eco-friendly productsas F-value is 4.49, and hence the null hypothesis is rejected.

Monthly income of consumers and attitudedo have a difference towards eco-friendly products as F-value is 6.170, and hencethe null hypothesis is rejected.

Marital status of consumers and attitudedo not have any difference towards eco-friendly productsas t-value is 0.784 and hence the null hypothesis is accepted.

Family type of consumers and attitudedo have a difference towards eco-friendly products as t-value is 2.001, and hencethe null hypothesis is rejected.

Family type of consumers and attitudedo have a difference towards eco-friendly products as F-value is 6.473, and hencethe null hypothesis is rejected.

5.2.5 Specific Objective of the study - 3

3. Study the influence of the demographic profile of the consumer's on their perception of eco-friendly products.

DEMOGRAPHICS AND THE PERCEPTION TOWARDS ECO-FRIENDLY PRODUCTS

HYPOTHESIS - The null hypothesis that demographic factors do not have any influence on perception level towards eco-friendly products except eco-friendly consumer's working experience, monthly income, type of family, and size of the family is true.

Gender of consumers and the perceptiondo not have any difference towards eco-friendly products as t-value is 0.674, and hencethe null hypothesis is accepted.

Age of consumers and the perceptiondo not have any difference towards eco-friendly products as F-value is 0.664 and hence the null hypothesis is accepted.

Education of consumers and the perceptiondo not have any difference towards eco-friendly products as F-value is 0.482, and hence the null hypothesis is accepted.

Occupation of consumers and the perceptiondo not have any difference towards eco-friendly products as F-value is0.606, and hence the null hypothesis is accepted.

Working experience of consumers and the perceptiondo have a difference towards eco-friendly productsas F-value is 2.671, and hence the null hypothesis is rejected.

Monthly income of consumers and the perceptiondo have a difference towards eco-friendly productsas F-value is 6.886, and hencethe null hypothesis is rejected.

Marital status of consumers and the perceptiondo not have any difference towards eco-friendly products as t-value is 1.132, and hencethe null hypothesis is accepted.

Family type of consumers and the perceptiondo have a difference towards eco-friendly products as t-value is 2.185, and hencethe null hypothesis is rejected.

Family size of consumers and the perceptiondo have a difference towards eco-friendly products as F-value is 3.509, and hencethe null hypothesis is rejected.

5.2.6 Specific Objective of the study – 4

4. To examine the influence of demographic profile of the consumer's on their buying behaviour towards eco-friendly products.

HYPOTHESIS - The null hypothesis that demographic factors do not have any influence on buying behaviour towards eco-friendly products.

Genders of consumers and buying behaviourdo not have any difference towards eco-friendly products as t-value is 0.182, and hencethe null hypothesis is accepted.

Ages of consumers and buying behaviourdo not have any difference towards eco-friendly products as F-value is 0.528, and hence the null hypothesis is accepted.

Education of consumers and buying behaviourdo not have any difference towards eco-friendly products as F-value is 1.047, and hencethe null hypothesis is accepted.

Occupations of consumers and buying behaviourdo not have any difference towards eco-friendly products as F-value is 1.878, and hencethe null hypothesis is accepted.

Working experience of consumers and buying behaviourdo not have any difference towards eco-friendly products as F-value is 1.218, and hencethe null hypothesis is accepted.

Monthly incomes of consumers and buying behaviourdo not have any difference towards eco-friendly products as F-value is 0.489, and hencethe null hypothesis is accepted.

Marital status of consumers and buying behaviourdo not have any difference towards eco-friendly products as t-value is 0.134, and hence the null hypothesis is accepted.

Family type of consumers and buying behaviourdo not have any difference towards eco-friendly products as t-value is 0.961, and hencethe null hypothesis is accepted.

No significant difference exists between the family size of consumers and buying behaviour towards eco-friendly products as F-value is 0.963, and hence the null hypothesis is accepted.

5.2.7 Specific Objective of the study – 5

5. To understand consumer's awareness, attitude and perception and the relation among them towards eco-friendly products.

AWARENESS, ATTITUDE AND,PERCEPTION OF CONSUMERS

HYPOTHESIS - There is no significant relationship between their awareness, attitude, and perception of consumers towards eco-friendly products.

From the analysis of the data, the following results were obtained:

Correlation ofthe attitudes and awareness of consumers towards eco-friendly products are positively and highly related.

Correlation of perception and awareness of consumers towards eco-friendly products are positively and moderately associated.

Correlation between attitude and perception of consumers towards eco-friendly products are positively and moderately interrelated.

Thus the null hypothesis (Ho) is rejected.

5.2.8 Specific Objective of the study - 6

5. To identify the factors that decides the buying behavior of consumers for eco-friendly products.

FACTORS INFLUENCING BUYING BEHAVIOUR

From the analysis of data, **product features, environmental concerns, health consciousness, and product value** are factors that decide the buying behaviour of consumers towards eco-friendly products.

5.2.9 Specific Objective of the study - 7

6. Influence of personal and ethical values on the buying behavior of consumers for eco-friendly products.

The result obtained from the observation is as follows:

a) The consumers are agreed with they buy eco-friendly products as they are dependable.

b) They buy eco-friendly products to match their personal needs.

c) They sense the significance of eco-friendly products personally.

d) They buy eco-friendly products from companies with a reputation.

e) They have a good personal image because of buying eco-friendly products.

f) They buy eco-friendly products with health-conscious.

g) They are neutral with buying eco-friendly products as they have commitments towards society.

h) They are neutral with they have secured personal life because of using eco-friendly products and are dependable.

i) The consumers are agreed with they are in favour of buying eco-friendly products because of ethical values.

j) They think that eco-friendly products have ethical standards.

k) They are neutral with eco-friendly products are produced through ethical practices.

5.3. Comparison of the finding of users and non-users (occasional users) of eco-friendly products

Sl. No	Users of Eco-friendly Products	Occasional/Non-users of Eco-friendly Products
1	27.85 percent say advertisements are the sources of information about eco-friendly products.	78 percent respondents say advertisements are the sources of information about eco-friendly products.
2	42.76 percent of consumers opine eco-friendly products are available.	71 percent, majority of respondents opine eco-friendly products including eco-friendly food and cosmetic products are not easily available.
3	59.07 percent of consumers bought eco-friendly food products.	Majority of the respondents bought cereals and dairy products only.
4	44.87 percent of consumers are buying eco-friendly products fortnightly.	39 percent of the respondents have abought eco-friendly products fortnightly.
5	43.7 percent of consumers spend Rs.5, 001 – Rs.7, 000 in a month for	60 percent of respondents spend Rs.3, 001 – Rs.5, 000 or less in a month for buying

	buying eco-friendly products.	eco-friendly products.
6	51.62 percent of the consumers opine the prices of eco-friendly products are higher than non-eco-friendly products.	78 percent of respondents opine price of eco-friendly products is higher or very higher than non-eco-friendly products.
7	22.62 percent of consumers use the Nestle food brand. 21.65 percent, larger than one-fifth of consumers use Garnier cosmetic brand.	29 percent of respondents use the Nestle food brand 25 percent use Lakme cosmetic brand.

Here occasional users are considered as non-users as they are in an evolving stage only

5.4.Barriers/Impediments in the path of non-users to purchase Eco-friendly Products

Majority of the non-users of eco-friendly consumers opine price of eco-friendly products isvery higher than non-eco-friendly products. The income of non-users is the main reason for not forcing them to buy especially eco-friendly food products, which is presumably a healthy choice.

They also opined that eco-friendly products are not easily available in the market. According to them, they do not come across eco-friendly products very often in the store or marketplace from where they purchase food and cosmetic items. According to non-users, they do not even trust the claim by manufacturers about the attributes of the products. They also think that the satisfaction level they derived from conventional products is more than their eco-friendly counterparts.

They are cynical about the product claim like bio-degradable, green on the product label displayed in the store citing the reason for an inadequate standardized body and improper stringent legal action for those products and their manufacturers for not meeting the eco-friendly claim on the product label.

5.5 DISCUSSION

From the research study, it is found that awareness and subsequent attitude seem to have a positive relationship with higher education, monthly income, and marital status. State policy like free education to all, providing loan scholarship for the needy and eligible one and making higher education more reachable to all strata will help to increase the awareness and attitude which in turn the eco-friendly consumption of food and cosmetic products while keeping in my that attitude of the eco-friendly customer changes in all demographic factors except gender and marital status. Liquidity seems to have an impact on eco-friendly consumption and hence government should take steps to have more disposable income on hand for the customers through financial measures.

As per the findings of the study variables such as awareness, attitude and perception correlate them. This again underlines the fact that steps shall be taken to make awareness for the eco-friendly products among the population more and its benefit for the individual and to the planet, we live in.

The important outcome of the research is the identification of factors affecting buying behaviour of eco-friendly consumers against eco-friendly products. The increase in the level of awareness, attitude, and perception of the customers has a positive impact on consumption and eco-friendly products demand, which is a positive sign for the producers who can thereby invest in innovations for more eco-friendliness in their product attributes. Apart from this, the derived factors such as features, health-consciousness, eco-consciousness, and price are the main factors affecting buying behaviour of eco-friendly customers towards eco-friendly products. Eco-consciousness and health consciousness are achieved through their awareness and perception about the products mainly the environmental concern and their health. But product features needed to be originally generated, effectively communicated, and conveyed to the minds of eco-friendly customers and non-users also through trustworthy information, providing a certificate from approved agencies such as eco-labels, ISO, etc about the product attributes.

5.6.Theoretical Implication

It is important and valuable for the domain to know the theoretical implication of the study concerning the existing literature to examine for any deviations in the result obtained. This current study in Kerala is the first of its kind and is therefore important to know the reason for deviation behind.

Lee and Green (1991) found that people who had collectivistic cultures were highly worried about environmental problems in comparison with people from individualistic cultures. As per our study, the size of family and type of family has a great influence on customer perception towards the environment and their attitude also shows concern for the environment. Hence our study matches with the existing literature.

The Literature study revealed that consumers would choose the eco-friendly brand when the quality and satisfaction were similar to the other brand not providing eco-friendly attributes. But as per our study, the buying behaviour is also shaped up by environmental consciousness apart from features of the eco-friendly products. Johri and Sahasakmontri (1998) revealed that consumers did not base their purchasing decision on environmental concerns alone. The attributes of the product namely price, availability, convenience, and quality played a more significant role in the consumers' purchasing decision process. Our study also found that purchasing behaviour is determined by others factors such as product value, health consciousness.Ottman (2000) showed that consumers were price-sensitive to green products and the price attributes affected consumers' purchasing decisions on green products. To satisfy green consumers, a green product must also be priced competitively with alternatives, which our finding fully agrees with. A Survey of literature also found that the customers are concerned about their everyday habits and the outcome of this was that some of the consumers translated their environmental concern into actively purchasing green product commitment. Geetha and Jenifer (2014) revealed that quality, health, variety,

reliability, ambiance, advice from friends, environment, and quantity were the factors that influence the purchasing behavior of consumers. Consumers were willing to pay higher prices for products that create less pollution to the environment, but they were not willing to compromise the quality aspects of products for the environment. Our study indicated that customer buying behaviour is also influenced by eco-friendly customer's healthy consciousness apart from environmental consciousness.

The customer belief and their purchasing behaviour in the purchase of eco-friendly products seem to be different due to factors such as lack of convincing information about the product features, high cost compared to conventional products, and non-attractive packing as that of non-green products and other attributes.

The literature and the information, usage, benefits, and features of eco-friendly products are still limited to the literate and educated section of people. This lack of awareness is creating an impediment in the path of eco-friendly consumption. Jain and Kaur (2004) revealed that various issues relating to the consumer's environmental attitudes, awareness, and behavior had been examined in the past. He analyzed the consumer's awareness towards environment and attitudes width from evaluating the environmental knowledge to understand the importance of environment, being environmentally friendly, consumer effectiveness, or the level to which the consumer felt she or he could create a distinction in the environment quality and ready to pay higher for environmentally friendly products. Zainudin (2013) found that consumers with a high degree of awareness and knowledge about the environment had associated positively with a good attitude on green purchasing behavior. Our study showed that customer awareness, attitude, and perception are positively related, which matches with the literature reviewed.

The factors such as Environmental awareness, Environmental product advantages, Eco-friendly product features, Eco-friendly product quality, Eco-literacy, Eco-friendly product placement, Environmental attitude, General perception of eco-friendly products, Buying behavior pattern, Healthy consciousness, Eco-friendly product price, Eco-friendly product value, Environmental sensitivity, Green product purchase commitment, Price-sensitivity, Environmental-sustainability, Price and quality perception, Environmental product scarcity, Environmental consciousness, Interpersonal influence, Environmental knowledge, Product quality, and Personal safety; the findings of the study matches with that of the existing literature. But, for the Age, Monthly income, Gender, type of family, Education, and Occupation of the consumers, the finding of the study does not match with that of the existing literature. The Age of the respondent is influenced by their attitude on cosmetic products, and genderinfluences ethical purchasing behaviour for eco-friendly food and cosmetics products shows the peculiar nature of the eco-friendly market in Kerala. The family has a great influence on their perception and thereby attitude towards green food products. Gender-wise, there is no significant difference in perception towards cosmetic products.

For studying income and occupation of the respondents', the sample units considered in this study are customers both from the sophisticated organized retail outlet inmalls like Mall of Travancore and local brands from small outlets in supermarkets.

5.7.MANAGERIAL IMPLICATIONS

The research finding will help the organizations to identify the key factors leading to more acceptability of the green cosmetic and food products in the Indian market, more specifically in Kerala and the districts taken inside the state. It will also help all the concerned

persons to identify the factors which act as barriers to green products' popularity and take corrective actions to overcome these barriers.

The customers can be made more aware of the positive aspects of the green cosmetic and food products as a result of which they will be accepting these for their daily use. While comparing the results of the literature reviewed, contrary to the awareness stated in that, awareness in this study of the customers regarding eco-friendly products is high for consumers with more education, monthly income, and marital status. Nonetheless, the awareness can be further increased with the latest technological advancement in the future. But as found in the literature review – age, education, occupation, working experience, monthly income, and family plays a substantial role in their attitude towards eco-friendly products. From the thesis, it is found that consumer perception leads to the attitudein most situations except gender, education, and occupation. Another finding isthat the implication of this research carried out is that the outcomes of this study are highly helpful to producers of eco-friendly products to improve or modify their production strategies and features of eco-friendly products. These findings give ideas for marketers of eco-friendly products for revisiting and enhancing their marketing and promotional strategies to increase awareness and attitude of consumers for eco-friendly products and also their perception. The results of this study pave the means and ways for eco-friendly products and marketers to fulfill the requirements and needs of consumers of eco-friendly products.

Furthermore, it is useful to marketers and retailers to formulate and implement efficient advertisement strategies to increase awareness among consumers about products and brands of eco-friendly products. The results of this study provide suggestions for producers and retailers to adopt effective pricing and quality improvement strategies to improve the

buying behaviour of consumers towards eco products. The findings of this study are also helpful to producers of eco-friendly products for providing competent and value addition to consumers by adopting innovative production and marketing practices.

The educated customers are skeptical about the claim by manufacturers of its feature. Hence the producers of eco-friendly products have to take proper initiative to manufacture products with attractive features and trustworthy information to customers in gaining their confidence. The green certification boards and institutionssuch as Jaiv-Bharat certification, Eco-mark also need to gain customer confidence through their service and action.

Male is predominant in using eco-friendly food and cosmetics aged between 26-35 years. Hence companies' produce eco-friendly products and NGOs working in the field of green and Governmental organisation shall concentrate on conveying the benefits of this product at the age group below 26 years and above 35 years through a social media campaign, endorsement by a celebrity, and advertisement. Governmental and labor unions shall take initiative to make the employees the customers of eco-friendly products through their societies and structured work as this segment lacks in the consumption of eco-friendly products

5.8 Suggestions

As per the study and analysis among the customers, advertisements are the sources of information about eco-friendly products to 27.85 percent of consumers, friends are the source of information for 26.86 percent, the family is for 18.43, neighbours are the source of information for 15.61 and colleagues are for 11.25.

As per the finding of the study, producers and marketers of eco-friendly products shall improve awareness of consumers on features and effectiveness of eco-friendly products through efficient and attractive advertisements and may increase the intensity of campaigns, and promotional measures.

As per the study and analysis among the consumers, 42.76 percent of them opine eco-friendly products are available, 39.94 percent said it is easily available but, 17.30 percent of them opine eco-friendly products are not easily available.

Also, producers shall make consumers identify eco-friendly products easily through product and brand features and they may produce eco-friendly products with a good smell. Manufacturers can improve the features of the green products including design to make it more attractive.

The study finds that among the consumers, 51.62 percent of them opined the price of eco-friendly products is higher than non-eco-friendly products, 33.89 percent has opined price of eco-friendly products is very higher than non-eco-friendly products. Manufacturers should be concerned about quality of eco-friendly products and mayprice rationally and further shall make eco-friendly products easily available to consumers.

Manufacturers of eco-friendly products shall have commitments towards society and they may give security to the personal life of consumers in using eco-friendly products.

Manufacturers shallprovide all the information about the product to consumers.Simultaneously, consumers shall also put little extra effort to buy and consume eco-friendly products to decrease the damage to the environment and conserve scarce natural and environmental resources.

Marketers can use attractive tag lines namely “bio-degradable”, “eco-friendly”, “safer the family’, for attracting more consumers towards buying eco-friendly products.

In general, the steps taken by organizations in a segmented way where appropriate attention is needed varies depending on the socio-economic profile will ultimately increase the number of customers for eco-friendly products.

New Way of Working virtually in the current COVID scenario and changes in the work culture, product positioning by knowing the pulse of customers now and foresee the market condition after six months will be an added advantage apart from differentiating capabilities, dynamic and resilient strategies. Improving online presence, building a virtual relationship with customers through social media, get creative with an online demo on eco-friendly subjects, reassure the customers with positive messages through dashboards, social media, and email updates will enhance eco-friendly customer confidence during this pandemic crisis.

5.9 LIMITATIONS & SCOPE FOR FURTHER RESEARCH

5.9.1 Limitations of the Study

1. The data collected from the consumers of eco-friendly products are subject to recall bias.

2. Present study is limited to respondents related to only green food and cosmetic products in Kerala State.

3. The research study is limited to data collected over a period from 2017 to December 2018.

5.9.2 Scope for future research

1.The present study is carried out on the buying behaviour of consumers towards eco-friendly products in four major districts inKerala. So in other districts, the study can be conducted.

2. A comparative study on consumer behaviour towards eco-friendly products between urban and rural areas in Kerala may be studied in future research work.

3. The knowledge, expectation, and purchase intention of women towards eco-friendly products in Kerala may be extensively examined as future research work.

4. The impact of advertisements and celebrity endorsements on the buying behaviour of consumers towards eco-friendly products in Kerala may be investigated as a separate study in the future.

5.10. CONCLUSION

Advertisements are the sources of information about eco-friendly products to 27.5% of consumers and 42.76% of consumers opine eco-friendly products are available.

Advertisements are the main source of information for non-users of eco-friendly products also.

Among the eco-friendly customers, 59.07% of consumers bought eco-friendly food and 44.87% of consumers are buying eco-friendly products fortnightly.

84% percent of non-users prefer to buy eco-friendly food products.

Out of the total consumers,43.74% spend Rs.5,001 – Rs.7,000 in a month for buying eco-friendly products.

Majority of non-users of eco-friendly products are willing to spend only3001-5000 per month.

Most of the customers, that is, 51.62% opine price of eco-friendly products is higher than non-eco-friendly products.

Majority of the non-users of eco-friendly products customers, opine price of eco-friendly products is higher than non-eco-friendly products.

22.62% of consumers use the Nestle food brand and 21.65% of consumers use Garnier cosmetic brand.

Most non-users prefer to use the Nestle food brand and Jovees cosmetic brand.

Demographic factors do not have any influence on the awareness level of consumers towards eco-friendly products exceptthe education of consumers, monthly income, and marital status.

Demographic factors do not have any influence on the level of attitude of consumers towards eco-friendly products except age, education, occupation, working experience, monthly income, type of family, and size of the family.

Demographic factors do not have any influence on the perception level of consumers towards eco-friendly products exceptthe working experience of consumers, monthly income, type of family, and size of the family.

The awareness and attitude of consumers towards eco-friendly products are positively and highly related. Awareness and perception of consumers towards eco-friendly are positively and moderately associated.The attitude and perception of consumers towards eco-friendly products are positively and moderately interrelated.

Demographic factors do not have any influence on the buying behaviour of consumers towards eco-friendly products.

Demographic factors do not have any influence on the personal value and ethical value, which influencesthe buying behaviour of consumers towards eco-friendly products except gender and age.

5.11. CONTRIBUTION OF THE STUDY

This study primarily concentrates on awareness, attitude, perception of consumers ofeco-friendly products, factors that buying behaviour of consumers of eco-friendly products, and the influence of personal and ethical values on buying behaviour of consumers of eco-friendly products. This study makes additional knowledge in these areas and also contributes to existing literature. It provides a valuable research structure for research scholars, academicians, Government, and environmentalists to find out various features of buying behaviour of consumers towards eco-friendly products. This study also gives an empirical confirmation for the interrelation between awareness, attitude, and perception of consumers towards eco-friendly products.

Furthermore, this study has a high level of credentials for generalization of findings due to very limited analytical and quantitative aspect in the current research studies regarding buying behaviour of consumers towards eco-friendly products particularly in Kerala state and this research develop new and creative thoughts to researchers for doing research works in this area in future and discovering other facets of buying behaviour of consumers towards eco-friendly products and using the advanced and accurate methodology.

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APPENDICES

SURVEY QUESTIONNAIRE

SURVEY QUESTIONNAIRE (Offline)for Anil Kumar. N, Research Scholar, ICFAI University

Dear Respondent,

This survey questionnaire is prepared for my Ph.D. program at ICFAI University, Jharkhand on Eco- friendly products. I shall be highly grateful if you can spare a few minutes to complete the questionnaire. There is no right or wrong answers to the questions. Answers given by you will be kept confidential and used for academic purposes only. Please tick any option from the following questions below. You can tick multiple options also.

I. Demographic Profile

1. Name of the Consumer :

2. Gender :

a) ☐Male b) ☐Female

3. Age :

a) ☐Below 25 years b) ☐26 – 35 years c) ☐36 – 45 years d) ☐46 – 55 years e) ☐Above 55 years

4. Education :

a) ☐Secondary b) ☐Higher Secondary

c) ☐Diploma d) ☐Graduation e) ☐ Post-Graduation

5. Occupation :

a) ☐Business b) ☐Government Sector c) ☐Private Sector

d) ☐Professional e) ☐Retired

6. Working Experience :

a) ☐Below 5 years b) ☐6 – 10 years c) ☐11 – 15 years d) ☐16 – 20 years e) ☐Above 20 years

7. Monthly Income :

a) ☐Less than Rs.20, 000 b) ☐Rs.20,001 – Rs.30,000

c) ☐Rs.30,001 – Rs.40,000 d) ☐Rs.40,001 – Rs.50,000

e) ☐More than Rs.50,000

8. Marital Status :

a) ☐Married b) ☐Unmarried

9. Type of Family :

a) ☐Nuclear Family b) ☐Joint Family

10. Size of Family :

a) ☐2 – 3 Members b) ☐4 – 6 Members

c) ☐Above 6 Members

II. Particulars about Eco-Friendly Products

1. What is your source of information about eco-friendly products?

a) ☐Family b) ☐Friends c) ☐Neighbours d) ☐Colleagues
e) ☐Advertisements

2. What is your opinion about the availability of eco-friendly products in the market?

a) ☐Easily Available b) ☐Not Easily Available c) ☐Available d) ☐Not Available e) ☐Never Available

3. Which category (type) of eco-friendly products you have bought?

a) ☐Food b) ☐Cosmetics

4. What is your frequency of buying eco-friendly products?

a) ☐Daily b) ☐Weekly c) ☐Fortnightly d) ☐Monthly e) ☐Quarterly f) ☐Half yearly

5. How much money you spend in a month for buying eco-friendly products?

a) ☐Less than - Rs.3000 b) ☐Rs.3001 – Rs.5000 c)☐ Rs.5,001 – Rs.7,000

d) ☐Rs.7,001 – Rs.9,000 e) ☐More than Rs.9,000

6. According to you price of the eco-friendly product is:

a) ☐Less than non-Eco friendly products

b) ☐Very less than non-eco-friendly products

c) ☐Equal to Eco-friendly products

d) ☐Higher than Eco-friendly products

e) ☐Very High than Eco-friendly products

7. Which of the following eco-friendly food brands you have used?

a) ☐Nestle b) ☐Conscious food c) ☐Vision Fresh
d) ☐24 Mantra e) ☐Ashirwad f) ☐Walgreen Farm

g) ☐Organic India h) ☐Just Organics

i) ☐Please specify if any other……

8. Which of the following eco-friendly cosmetic brands you have used?

a) ☐Garnier b) ☐Himalaya herbals c) ☐O' Loreal d) ☐Lakme e) ☐Biotique f)☐ Rustic Art g) ☐Jovees h) ☐Just herbs i) ☐Any other please specify……

III. Kindly indicate your level of agreement/disagreement about awareness towards eco-friendly products

SA = Strongly Agree **A = Agree** **N = Neutral**

DA= Disagree **SDA = Strongly Disagree**

Sl. No.	Awareness	Level of Agreement				
		SA	A	N	DA	SDA
1.	I am aware of companies producing eco-friendly products	☐	☐	☐	☐	☐
2.	I understand the advantages of eco-friendly products	☐	☐	☐	☐	☐
3.	I know the features of eco-friendly products	☐	☐	☐	☐	☐
4.	Eco-friendly products reduce environmental pollution	☐	☐	☐	☐	☐
5.	Eco-friendly products enhance the quality of life	☐	☐	☐	☐	☐
6.	Eco-friendly products are more effective as compared to non-Eco friendly products	☐	☐	☐	☐	☐

IV. Kindly indicate your level of agreement/disagreement about the attitude towards eco-friendly products

SA = Strongly Agree **A = Agree** **N = Neutral**

DA= Disagree **SDA = Strongly Disagree**

Sl. No.	Attitude	Level of Agreement				
		SA	A	N	DA	SDA
1.	I understand the information on eco-friendly packaging	☐	☐	☐	☐	☐
2.	I am pleased with the design of an eco-friendly product	☐	☐	☐	☐	☐
3.	I trust in the information on the package of eco-friendly products	☐	☐	☐	☐	☐
4.	I give attention to advertisements for eco-friendly products	☐	☐	☐	☐	☐
5.	I believe in the eco-friendly advertising	☐	☐	☐	☐	☐
6.	I easily locate eco-friendly products positioned in shops	☐	☐	☐	☐	☐
7.	I give attention to the opinions of my family and friends about eco-friendly	☐	☐	☐	☐	☐

	products					
8.	I am ready to pay a premium price for eco-friendly products	☐	☐	☐	☐	☐
9.	I suggest eco-friendly products to others	☐	☐	☐	☐	☐

V. Please indicate your level of agreement/disagreement on perception towards eco-friendly products

SA = Strongly Agree **A = Agree** **N = Neutral**

DA= Disagree **SDA = Strongly Disagree**

Sl. No.	**Perception**	**Level of Agreement**				
		SA	**A**	**N**	**DA**	**SDA**
1.	Eco-friendly products are good for the environment	☐	☐	☐	☐	☐
2.	Eco-friendly products have a better quality	☐	☐	☐	☐	☐
3.	Eco-friendly products have a reasonable price	☐	☐	☐	☐	☐
4.	Eco-friendly products are promoted well	☐	☐	☐	☐	☐
5.	Eco-friendly products are easily identifiable	☐	☐	☐	☐	☐
6.	Eco-friendly products packaging are perfect	☐	☐	☐	☐	☐
7.	Eco-friendly products are easily available	☐	☐	☐	☐	☐
8.	Eco-friendly products are good for health	☐	☐	☐	☐	☐
9.	Eco-friendly products have good taste	☐	☐	☐	☐	☐
10.	Eco-friendly products have a good smell	☐	☐	☐	☐	☐

VI. Kindly indicate your level of agreement/disagreement for the following factors that affecting buying behaviour for eco-friendly products

SA = Strongly Agree **A = Agree** **N = Neutral**

DA= Disagree **SDA = Strongly Disagree**

Sl. No.	Factors	Level of Agreement				
		SA	A	N	DA	SDA
1.	My decision for buying eco-friendly products is not influenced by price	☐	☐	☐	☐	☐
2.	The quality of eco-friendly products is important for me	☐	☐	☐	☐	☐
3.	I am concerned about the environment	☐	☐	☐	☐	☐
4.	I have good knowledge of environmental degradation	☐	☐	☐	☐	☐
5.	Eco-friendly products are affordable	☐	☐	☐	☐	☐
6.	I buy eco-friendly products because I am health-conscious	☐	☐	☐	☐	☐
7.	Eco-friendly products have high nutritional values	☐	☐	☐	☐	☐
8.	Packaging of eco-friendly products are attractive	☐	☐	☐	☐	☐
9.	Eco-friendly products have a good brand image	☐	☐	☐	☐	☐
10.	Eco-friendly products are safe	☐	☐	☐	☐	☐
11.	Eco-friendly products are user friendly	☐	☐	☐	☐	☐
12.	Eco-friendly products are easily degradable	☐	☐	☐	☐	☐
13.	I buy eco-friendly products because I get	☐	☐	☐	☐	☐

	incentives					
14.	I buy eco-friendly products due to peer pressure	☐	☐	☐	☐	☐

VII. Kindly indicate your level of agreement/disagreement for the following personal values influencing buying behaviour for eco-friendly products

SA = Strongly Agree **A = Agree** **N = Neutral**

DA= Disagree **SDA = Strongly Disagree**

Sl. No.	Personal Values	Level of Agreement				
		SA	A	N	DA	SDA
1.	I buy eco-friendly products as they are dependable	☐	☐	☐	☐	☐
2.	I buy eco-friendly products to match my personal needs	☐	☐	☐	☐	☐
3.	I buy eco-friendly products as they have commitments towards society	☐	☐	☐	☐	☐
4.	I sense the significance of eco-friendly products personally	☐	☐	☐	☐	☐
5.	I buy eco-friendly products from companies with a reputation	☐	☐	☐	☐	☐
6.	I have a good personal image because of buying eco-friendly products	☐	☐	☐	☐	☐
7.	I buy eco-friendly products with health-conscious	☐	☐	☐	☐	☐
8.	I have secured a personal life because of using eco-friendly products	☐	☐	☐	☐	☐

VIII. Kindly indicate your level of agreement/disagreement for the following ethical values influencing buying behaviour for eco-friendly products

SA = Strongly Agree **A = Agree** **N = Neutral**

DA= Disagree **SDA = Strongly Disagree**

Sl. No.	Ethical Values	Level of Agreement				
		SA	A	N	DA	SDA
1.	Eco-friendly products are produced through ethical practices	☐	☐	☐	☐	☐
2.	I am in favour of buying eco-friendly products because of ethical values	☐	☐	☐	☐	☐
3.	Eco-friendly products have ethical standards	☐	☐	☐	☐	☐

Place :

Date : **Signature of the Consumer**

Online Survey Questionnaire (for the online survey)

SURVEY QUESTIONNAIRE for Anil Kumar. N, Research Scholar, ICFAI University

Dear Respondent,

This survey questionnaire is prepared for my Ph.D. program at ICFAI University, Jharkhand on Eco- friendly products. I shall be highly grateful if you can spare a few minutes to complete the questionnaire. There is no right or wrong answers to the questions. Answers

given by you will be kept confidential and used for academic purposes only. Please tick any option from the following questions below. You can tick multiple options also.

I. Demographic Profile

1. Name of the Consumer :

2. Gender :

a) ☐Male b) ☐Female

3. Age :

a) ☐Below 25 years b) ☐26 – 35 years c) ☐36 – 45 years d) ☐46 – 55 years e) ☐Above 55 years

4. Education :

a) ☐Secondary b) ☐Higher Secondary

c) ☐Diploma d) ☐Graduation e) ☐ Post-Graduation

5. Occupation :

a) ☐Business b) ☐Government Sector c) ☐Private Sector

d) ☐Professional e) ☐Retired

6. Working Experience :

a) ☐Below 5 years b) ☐6 – 10 years c) ☐11 – 15 years d) ☐16 – 20 years e) ☐Above 20 years

7. Monthly Income :

a) ☐Less than Rs.20, 000 b) ☐Rs.20,001 – Rs.30,000

c) ☐Rs.30,001 – Rs.40,000 d) ☐Rs.40,001 – Rs.50,000

e) ☐More than Rs.50,000

8. Marital Status :

a) ☐Married b) ☐Unmarried

9. Type of Family :

a) ☐Nuclear Family b) ☐Joint Family

10. Size of Family :

a) ☐2 – 3 Members b) ☐4 – 6 Members

c) ☐Above 6 Members

II. Particulars about Eco-Friendly Products

1. What is your source of information about eco-friendly products?

a) ☐Family b) ☐Friends c) ☐Neighbours d) ☐Colleagues
e) ☐Advertisements

2. What is your opinion about the availability of eco-friendly products in the market?

a) ☐Easily Available b) ☐Not Easily Available c) ☐Available d) ☐Not Available e) ☐Never Available

3. Which category (type) of eco-friendly products you have bought?

a) ☐Food b) ☐Cosmetics

4. What is your frequency of buying eco-friendly products?

a) ☐Daily b) ☐Weekly c) ☐Fortnightly d) ☐Monthly e) ☐Quarterly f) ☐Half yearly

5. How much money you spend in a month for buying eco-friendly products?

a) ☐Less than - Rs.3000 b) ☐Rs.3001 – Rs.5000 c)☐ Rs.5001 – Rs.7000

d) ☐Rs.7001 – Rs.9000 e) ☐More than Rs.9000

6. According to you price of the eco-friendly product is:

a) ☐Less than non-Eco friendly products

b) ☐Very less than non-eco-friendly products

c) ☐Equal to Eco-friendly products

d) ☐Higher than Eco-friendly products

e) ☐Very High than Eco-friendly products

7. Which of the following eco-friendly food brands you have used?

a) ☐Nestle b) ☐Conscious Food c) ☐Vision Fresh
d) ☐24 mantra e) ☐Ashirwad f) ☐Walgreen Farm

g) ☐Just organic h) ☐Organic India

i) ☐Please specify if any other……

8. Which of the following eco-friendly cosmetic brands you have used?

a) ☐Garnier b) ☐Himalaya Herbals c) ☐O' Loreal d) ☐Lakme e) ☐Biotique

f)☐Rustic Art g) ☐Jovees h) ☐Just Herbs i) ☐Any other please specify……

III. Kindly indicate your level of agreement/disagreement about awareness towards eco-friendly products

SA = Strongly Agree **A = Agree** **N = Neutral**

DA= Disagree **SDA = Strongly Disagree**

Sl. No.	Awareness	Level of Agreement				
		SA	A	N	DA	SDA
1.	I am aware of companies producing eco-friendly products	☐	☐	☐	☐	☐
2.	I understand the advantages of eco-friendly products	☐	☐	☐	☐	☐
3.	I know the features of eco-friendly products	☐	☐	☐	☐	☐
4.	Eco-friendly products reduce environmental pollution	☐	☐	☐	☐	☐
5.	Eco-friendly products enhance the quality of life	☐	☐	☐	☐	☐
6.	Eco-friendly products are more effective as compared to non-Eco friendly products	☐	☐	☐	☐	☐

IV. Kindly indicate your level of agreement/disagreement about the attitude towards eco-friendly products

SA = Strongly Agree **A = Agree** **N = Neutral**

DA= Disagree **SDA = Strongly Disagree**

Sl. No.	Attitude	Level of Agreement				
		SA	A	N	DA	SDA
1.	I understand the information on eco-friendly packaging	☐	☐	☐	☐	☐
2.	I am pleased with the design of the eco-friendly product	☐	☐	☐	☐	☐
3.	I trust in the information on the package of eco-friendly products	☐	☐	☐	☐	☐
4.	I give attention to advertisements for eco-friendly products	☐	☐	☐	☐	☐

5.	I believe in the eco-friendly advertising	☐	☐	☐	☐	☐
6.	I easily locate eco-friendly products positioned in shops	☐	☐	☐	☐	☐
7.	I give attention to the opinions of my family and friends about eco-friendly products	☐	☐	☐	☐	☐
8.	I am ready to pay a premium price for eco-friendly products	☐	☐	☐	☐	☐
9.	I suggest eco-friendly products to others	☐	☐	☐	☐	☐

V. Please indicate your level of agreement/disagreement on perception towards eco-friendly products

SA = Strongly Agree **A = Agree** **N = Neutral**

DA= Disagree **SDA = Strongly Disagree**

Sl. No.	**Perception**	**Level of Agreement**				
		SA	**A**	**N**	**DA**	**SDA**
1.	Eco-friendly products are good for the environment	☐	☐	☐	☐	☐
2.	Eco-friendly products have a better quality	☐	☐	☐	☐	☐
3.	Eco-friendly products have a reasonable price	☐	☐	☐	☐	☐
4.	Eco-friendly products are promoted well	☐	☐	☐	☐	☐
5.	Eco-friendly products identification is easy	☐	☐	☐	☐	☐
6.	Eco-friendly products are well packed	☐	☐	☐	☐	☐
7.	Eco-friendly products are easily available	☐	☐	☐	☐	☐
8.	Eco-friendly products are good for health	☐	☐	☐	☐	☐

9.	Eco-friendly products have good taste	☐	☐	☐	☐	☐
10.	Eco-friendly products have a good smell	☐	☐	☐	☐	☐

VI. Kindly indicate your level of agreement/disagreement for the following factors that affecting buying behaviour for eco-friendly products

SA = Strongly Agree **A = Agree** **N = Neutral**

DA= Disagree **SDA = Strongly Disagree**

Sl. No.	**Factors**	**Level of Agreement**				
		SA	**A**	**N**	**DA**	**SDA**
1.	My decision for buying eco-friendly products is not influenced by price	☐	☐	☐	☐	☐
2.	The quality of eco-friendly products is important for me	☐	☐	☐	☐	☐
3.	I am concerned about the environment	☐	☐	☐	☐	☐
4.	I have good knowledge of environmental degradation	☐	☐	☐	☐	☐
5.	Eco-friendly products are affordable	☐	☐	☐	☐	☐
6.	I buy eco-friendly products because I am health-conscious	☐	☐	☐	☐	☐
7.	Eco-friendly products have high nutritional values	☐	☐	☐	☐	☐
8.	Packaging of eco-friendly products are attractive	☐	☐	☐	☐	☐
9.	Eco-friendly products have a good brand image	☐	☐	☐	☐	☐
10.	Eco-friendly products are safe	☐	☐	☐	☐	☐

11.	Eco-friendly products are user friendly	☐	☐	☐	☐	☐
12.	Eco-friendly products are easily degradable	☐	☐	☐	☐	☐
13.	I buy eco-friendly products because I get incentives	☐	☐	☐	☐	☐
14.	I buy eco-friendly products due to peer pressure	☐	☐	☐	☐	☐

VII. Kindly indicate your level of agreement/disagreement for the following personal values influencing buying behaviour for eco-friendly products

SA = Strongly Agree **A = Agree** **N = Neutral**

DA= Disagree **SDA = Strongly Disagree**

Sl. No.	Personal Values	Level of Agreement				
		SA	A	N	DA	SDA
1.	I buy eco-friendly products as they are dependable	☐	☐	☐	☐	☐
2.	I buy eco-friendly products to match my personal needs	☐	☐	☐	☐	☐
3.	I buy eco-friendly products as they have commitments towards society	☐	☐	☐	☐	☐
4.	I sense the significance of eco-friendly products personally	☐	☐	☐	☐	☐
5.	I buy eco-friendly products from companies with a reputation	☐	☐	☐	☐	☐
6.	I have a good personal image because of buying eco-friendly products	☐	☐	☐	☐	☐
7.	I buy eco-friendly products with health-conscious	☐	☐	☐	☐	☐

8.	I have secured a personal life because of using eco-friendly products	☐	☐	☐	☐	☐

VIII. Kindly indicate your level of agreement/disagreement for the following ethical values influencing buying behaviour for eco-friendly products

SA = Strongly Agree **A = Agree** **N = Neutral**

DA= Disagree **SDA = Strongly Disagree**

Sl. No.	Ethical Values	Level of Agreement				
		SA	A	N	DA	SDA
1.	Eco-friendly products are produced through ethical practices	☐	☐	☐	☐	☐
2.	I am in favour of buying eco-friendly products because of ethical values	☐	☐	☐	☐	☐
3.	Eco-friendly products have ethical standards	☐	☐	☐	☐	☐

Place :

Date : **Signature of the Consumer**

APPENDIX 3

PUBLICATIONS AND PRESENTATIONS BY THE SCHOLAR IN THE RESEARCH AREA

1. N. Anil Kumar and Mridanish Jha "Role of Ethics and Personal Value of Younger Generation Customers in Buying Behavior of Eco-Friendly Products - A

Study in Kollam District" in International Journal of Advanced Science and Technology Vol.29, No.8, (2020),pp5220 – 5226.

2. N. Anil Kumar and Mridanish Jha "A Study on Attitude of Consumers Towards Eco-friendly Products"in International Journal of Management (IJM), volume 8,Issue 3,May – June 2017,pp116-126.

3. N. Anil Kumar and Mridanish Jha "A Study on the Factors Affecting Buying Behaviour of Consumers towards Eco-friendly Products" in International Journal of Inter-Disciplinary Research in Arts and Humanities,Volume2,Issue1,Page Number227-231,2017.

Conference and seminars

1 Attended the International Conference of Emerging Management & Technology for Economic Sustainability at Al HOSN University, Abu Dhabi in 2017.

2 Participated in Second Webinar organized by Viswa Bharati Library Network on 16-18, 22-27, 29 June 2020 on Raxter, JASP, Grammarly, and Dspace.

3 Participated in a conference conducted by Institute of Technology & Scienceon top of "An insight of global competitiveness and sustainable development" on April 2021, vol.8, issue2, and page220-224.