

BUYING BEHAVIOUR OF ECO-FRIENDLY PRODUCTS

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PREFACE

Over the past decades, concern for the ecological issues has been growing due to increased media exposure, more awareness of environmental pollutions, the impact of major industry disasters and the increase of activist groups on the environment. Researchers have indicated that the increased environmental concern in the recent decades is mainly due to the instances like depletion in natural resources, global warming, depletion of ozone layer, degradation of land, acid rain, etc., and this make the consumers to think about their own survival which seems to be in danger if the environment is not properly taken care of. At present, the producers, sellers and consumers are more concerned about the safeguarding the environmental resources and are understanding that their production, consumption and purchasing behavior have direct impact on the environment. Due to this, many producers /consumers have started to rethink about the protection of environment as a major factor to include in their production /purchase decisions. They have also realized that protection of environment is not only the duty of the Government and social organizations, but also the duty of each and every citizen of the country. The eco-friendly products satisfy the demands and needs of the consumers. It protects the environment by providing more benefits to the society in an environment friendly way. This book is the outcome of the research work carried out to study and analyze the consumers' level of awareness, preference and satisfaction towards eco-friendly products in Tiruppur District.

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CHAPTER I

BUYING BEHAVIOUR OF ECO-FRIENDLY PRODUCTS

1.1 Introduction and Design of the Study

In today's business world environmental issues plays an important role in marketing. All the governments around the world have concerned about green marketing activities that they have attempted to regulate them. There is escalating awareness among the consumers all over the world concerning protection of environment. Various studies by environmentalists indicate that people are more concerned about the environment. Now most of the consumers, both individual and industrial are becoming more concerned about environment-friendly products. As a result, green marketing has emerged, which aims at marketing sustainable and socially responsible products and services in the society. This has become the new mantra for marketers to satisfy the needs of consumers and earn better profits. The issue of environmental protection has brought the consumers, the industry, and the government to a common platform where each has to play its own role. The government and legislatures are using their influence to reduce environmental and health hazards due to industrialization and to stimulate the development of cleaner technologies. The time has come for consumers to take the lead in prompting manufacturers to adopt clean and eco-friendly technologies and environmentally-safe disposal of used products, along with preventive and mitigate approaches. To increase consumer awareness, the Government of India launched the eco-labeling scheme known as 'Ecomark' in 1991 for easy identification of environment-friendly products. Any product which is made, used or disposed of in a way that significantly reduces the

harmit would otherwise cause the environment could be considered as Environment-Friendly Product. The criteria follows a cradle-to-grave approach, i.e. from raw material extraction, to manufacturing, and to disposal. The 'Ecomark' label is awarded to consumer goods which meet the specified environmental criteria and the quality requirements of Indian Standards. Any product with the Ecomark will be the right environmental choice.

Green consumers are defined as those who avoid products that are likely to endanger the health of the consumer or others; cause significant damage to the environment during manufacture, use or disposal; consume a disproportionate amount of energy; cause unnecessary waste; use materials derived from threatened species or environments. Green marketing was given prominence in the late 1980s and 1990s after the proceedings of the first workshop on Ecological marketing held in Austin, Texas (US), in 1975. Several books on green marketing began to be published thereafter. According to the Joel makeover green marketing faces a lot of challenges because of lack of standards and public consensus to what constitutes "Green". The green marketing has evolved over a period of time. According to Peattie (2001), the evolution of green marketing has three phases. First phase was termed as "Ecological" green marketing, and during this period all marketing activities were concerned to help environment problems and provide remedies for environmental problems. Second phase was "Environmental" green marketing and the focus shifted on clean technology that involved designing of innovative new products, which take care of pollution and waste issues. Third phase was "Sustainable" green marketing. It came into prominence in the late 1990s and early 2000. Organizations are now aware with the fact that without adopting green in the core of their

strategy they cannot survive in the present competitive era. Indian FMCG companies are also adopting green to retain their image in the market. The companies are involved in various activities to show their concern for environment as well as society, but at the same time it is necessary for the companies to understand that Green marketing should not overlook the economic aspect of marketing. Green marketing helps in the effective outcomes like cost cutting, employee satisfaction, waste minimization, society welfare for the companies as well for society also. Only thing required is the determination and commitment from the all the stakeholders of the companies.

The idea of green marketing is very much important in this decade to popularize among all sections of society to save the planet Earth. Green consumerism is a movement to encourage people to buy food and other products such as organic food, lead-free petrol etc. which are considered as environmental friendly. It refers to recycling, purchasing and using eco-friendly products that minimize damage to the environment. More and more business and industries are joining in the green movement, either out of a real interest in saving the planet or a desire to capitalize on the growing consumer demand for greener ways.

Eco-friendly products consumer is someone who is environmentally and socially conscious and which leads him/her to purchase the products that are eco-friendly. Over the last few decades, it is being observed that people are changing their trends and lifestyle in a more environment conscious way paying more responsiveness towards green oriented behavior worldwide.

1.2 Statement of the Problem

Successful marketing has always been about recognizing trends and positioning products, services and brand in a manner that supports buyer intentions. Today, "Green" marketing has moved from a trend to a way of doing business and businesses that tell should recognize the value of going green and incorporating this message into their marketing program and communicating enough to the consumers. The growing consumer awareness about the origin of products and the concern over impending global environmental crisis there are increasing opportunities to marketers to convince consumers. Firms have increasingly introduced (GPIs) Green Product Innovations into their product developments over recent decades. Studies on the consumption of environmentally sustainable products have demonstrated that perceived product performance is a significant barrier to their selection. So, if the market for environmentally sustainable products is to become main stream, it is important to look at what factors influence the consumer's selection process. To forecast consumer environmental conscience, it is necessary to investigate the social demographic variables so that government and the industry can achieve a better policy mapping for the placement of green products and the determination of the strategy of a marketing - mix that will be the most suitable for the green marketing efforts. The present study helps to understand the concept of green marketing and its theoretical and practical aspects with the special regards of the product and services. It is also helpful to understand the current scenario of green marketing in Tirupur such as consumers awareness about green marketing, their attitude, preferences, and readiness to adapt sustainable and eco friendly products and services. This research work gives some vital suggestions to industries to enhance their image,

profitability, and customer and also to fulfill their social responsibility through adapting some modified green strategies. With increasing environmental consciousness, companies need to understand not only green consumers' behaviour but also the factors that influence green purchases and those factors that act as barriers to green purchases. This will not only help the marketers in segmenting the market appropriately and developing strategies to meet green consumers' needs but also the policy makers in enforcing sustainability in marketing of goods and services. At this juncture, it is imperative to find,

1. What is the level of environmental concern of the consumers?
2. How far the factors influence the consumer buying behaviour on eco-friendly products?
3. What is the level of satisfaction of the consumers on eco-friendly products?
4. What are the barriers in purchasing eco-friendly products?

As India is one of the biggest consumer markets and has great potential for green products, knowledge of predictors of green purchasing may help in development of appropriate marketing strategies to address consumers' attitude-behaviour gap thereby increasing the purchase of eco-friendly products. This study will to be significance and beneficial to business in terms of knowing the green market capabilities, especially the market targeted to green consumers.

To support the business to better understanding the potential of the green market. To assist business to well understanding the tendency of eco-friendly product

purchasing. To assist business to better understanding the buying behavior of green consumer. How marketers to promote and increase awareness for youth consumers toward eco-friendly products.

1.3 Objectives of the Study

To study makes an attempt to seek solution to the questions raised in the statement of problems. Accordingly, the following objectives have been framed

1. To analyse the level of environment concern among the consumers.
2. To evaluate the factors influencing consumer buying behavior on eco-friendly products.
3. To measure the consumer's satisfaction towards eco-friendly products.
4. To examine the barriers in purchasing eco-friendly products.

1.4 Methodology

Methodology of the study includes i) Data, ii) Sampling and iii) Framework of analysis.

(i) Data

The study was based on both primary and secondary data. Primary data has been collected from the consumer who are using of eco-friendly products in Tirupur district by issuing a well framed questionnaire. The secondary data was collected from books, journals, newspapers, magazines and from related websites.

(ii) Sampling

A sample is a small proportion selected for observation and analysis. The sampling procedure can be compared to a mirror which gives a reflection true to the original

(Gupta, 2005). Tirupur is the sixth largest city of Tamil Nadu and one of the fastest growing cities in the state. Since experiencing explosive growth from the 1980s, Tirupur has become a successful cotton knitwear export hub. The city's hosiery industry counts global fashion retailers among its clients, contributes to the country's export earnings and generates jobs. But its fortunes in a globalised era have always been accompanied by severe environmental degradation. Though Tirupur's growth story has tapered off in recent years, the people living in and around the export hub continue to pay an enormous environmental price for its industry's appetite for profit. Specifically, the city's dyeing and bleaching units that add colour and flair to its apparel have turned the once-beautiful Noyyal river into a toxic sewer, and destroyed vast areas of agricultural land the water body once sustained.

Hence, the present study has been taken up in this area. With this notion it's imperative to understand the consumers buying behaviour and satisfaction on eco-friendly products in Tirupur District.

For the present study, the universe comprises the consumers, who are using eco-friendly products in Tirupur District. The sampling units were selected by covering the nine Taluks of Tirupur district. The nine taluks are Tirupur North, Tirupur South, Avinashi, Uthukuli, Palladam, Dharapuram, Kangayam, Udumalpet and Madathukulam. The snowball sampling has been adopted to identify the sample of consumers. The present study is based on primary data collected through questionnaire distributed to 750 consumers, out of which, 650 responded and the data collected from them were analysed.

(iii) Framework of Analysis

The collected data have been analyzed by Simple Percentage Analysis, Garrett Ranking Test, Weighted average ranking method, Chi-square test, Analysis of Variance, 't' test, Correlation, Multiple Regression Analysis and Step Wise Regression.

1.5 Significance of the Study

There is a global awareness and realization on the part of the government about the importance of environmental conservation, and several laws have been passed, international treaties have been signed, common regulations have been imposed and policies agreed upon which are all meant to protect the physical natural environment that is affected or endangered by the activities of humans in a global perspective. The present research is such an attempt to analyse the environmental knowledge of the respondents along with the awareness, attitude and purchase behaviour in conserving the environment by purchasing the eco - friendly products. Further the study identifies the factors and problems in determining the eco - friendly purchase of the respondents in the Tirupur district. The study may be informative to the academicians, policy makers and diplomats who seek the related information.

1.6 Scope of the Study

The aims of this study mainly attempts to (a) examine the consumer's attitude, perception and buying behaviour towards eco-friendly products (b) identify the factors affecting buying behaviour of consumers for eco-friendly products and (c) measure the consumer's satisfaction towards eco-friendly products. This research would help to re-examine and make changes in the present production and marketing strategies in

order to improve the purchase behaviour and satisfaction of consumers towards eco-friendly products. The scope of study is limited to the eco-friendly products in Tirupur district only.

1.7 Limitations of the Study

The data collected is primary data, which is based on the questionnaire and hence the results would bear all the limitations of primary data. The data collected from the consumers residing in Tirupur District. The findings are applicable only to the consumers of Tirupur District. Hence care has to be exercised while extending this result to other areas.

1.8 Chapter Scheme

- First Chapter deals with the Introduction and Design of the Study
- Review of Previous Studies has been traced out in the Second Chapter
- An overview of Eco-friendly Products has been described in the Third Chapter
- Fourth Chapter discloses Socio Economic Profile and Environmental Concern of the Consumers
- Consumer Buying Behaviour is dealt in Fifth Chapter
- Findings and Suggestions appear in the Sixth Chapter

CHAPTER II

REVIEW OF LITERATURE

2.1 Introduction

Increasing awareness of environmental issues leads to display environment friendly buying behavior. Development of green marketing has opened the door of opportunity for companies to co-brand their products into separate line, lauding the green-friendliness of some while ignoring that of others. Such marketing techniques will be explained as a direct result of movement in the minds of the consumer market. As a result of this businesses have increased their rate of targeting consumers who are concerned about the environment. A number of studies have examined the associations between environmental concern and socio-demographic factors. There has been extensive literature review on green marketing and Attitudes toward environmentally friendly products. An attempt has been made to trace out the research gap in this area of study.

2.2 Studies abroad

Alba and Hutchinson (1987) in their study entitled, "Dimensions of Consumer Expertise". states that consumer knowledge is considered a relevant and significant construct that affects how consumers gather and organize information how much information is used in decision making. As such, the role of product knowledge and education affecting purchase decision is of primary importance from an environmental perspective.

Bearden (1989) in his article entitled, "*Measurement of Consumer Susceptibility to Interpersonal Influence*," reveals that an important determinant of an individual's behavior is the

influence of others Portrayal of products being consumed in social situations and the use of prominent or attractive spokespersons endorsing products is evidence of this belief. This process proposes that such decisions are strongly influenced by our social networks which include family, friends, and peer networks (normative susceptibility) and relationships between opinion leaders and professionals.

Fisk (1998) in his research paper entitled, 'Green Marketing: Multiplier for Appropriate Technology Transfer?' The effectiveness of "reward and reinforcement" strategy used in marketing activity is compared to a strategy of "mutual coercion mutually agreed upon" as a means for accelerating acceptance of environmentally appropriate production and consumption technologies. The risk and reward consequences of green marketing tactics are traced to identify their implications in pursuing globally sustainable development. Together, reward and reinforcement strategies and coercive regulatory activities are more promising for attaining sustainable development than either one alone.

Moisander, et al (2000) opines that, environmental management systems and green marketing programmes have gained increasing popularity in western market economies. They are viewed as cost-efficient, effective and just means of tackling problems associated with the impact of economic activity on the environment. It is argued in this article, however, that these optimistic views are based on a number of ideas, images and metaphors that retain many and centric and inadequate assumptions about self, society and nature that may be incompatible with long-term environmental protection goals.

Madsen and Ulhoi (2003) in their articles entitled, "Have Trends in Corporate Environmental Management Influenced Companies' Competitiveness?" opines that in over the past

two or three decades, corporate environmental management concept has gradually developed. Many companies have incorporated environmental considerations into their activities in order to eliminate or minimize the impact of these activities on the natural environment. The question is, however, whether managers perceive corporate environmental initiatives as a challenge leading to new strategic method and, eventually, increased competitiveness or whether they regard it as yet another problem. Based on a number of surveys, this paper discusses contemporary trends in the implementation of environmental management systems in Danish industry up to the beginning of the new millennium in an attempt to identify any related impacts on competitiveness.

Ginsberg JM et al. (2004) show that green marketing, environmental justice, and industrial ecology are conceptual linked. This argues for greater consciousness of environmental fairness in the practice of green marketing. In current era, most of the companies have accepted their incumbent not to toxic the environment. Therefore, more companies “go green”, and they are considered cleaner products and production processes because they realize that they can decrease pollution and goes up margin at the same time.

Ricky Y.K. Chan(2004) examined how consumers in China perceive and respond to company-sponsored environmental advertising claims. Based on a survey of 914 Chinese respondents in Beijing and Guangzhou, the study has derived some important findings. First, it confirms the casual observation that environmental advertising has already been widely used in the country. Second, it indicates that Chinese consumers, in general, rate print environmental advertisements more favorably than broadcast ones. Regression analyses on the collected data further reveal that “perceived credibility of the claim”, “relevance of the

advertised product to daily lives”, “education level” and “media type” are all significant factors that would positively affect green purchase intention of Chinese consumers.

Emma Rex and Henrike Banumann (2006) in their article entitled, “Beyond eco labels: What green marketing can learn from conventional marketing”, the eco- labels emerged as one of the dominant means of market communication for green credentials of products, but a sustainable production and consumption system is still far away.

To achieve greener production and consumption patterns we need to address a wider range of consumers than the deep green segment.

Dainora Grundey et al. (2008) opines that, the issues of environmental (eco-) marketing and ecological labeling to ensure that consumers have access to ecological products and services and they might adjust their preferences towards environmentally-friendly business practices. For business worldwide, ecological marketing and its applications in practice have become a competitive prerogative for modern business performance.

Ertepinar et al (2008) investigated elementary school students' environmental knowledge and attitudes, the effects of socio demographic variables on environmental knowledge and attitudes, and how self-reported environmentally friendly behaviour is related to environmental knowledge, behavioral intentions, environmental affects, and the students' locus of control. Data were gathered by administration of the Children's Environmental Attitudes and Knowledge Scale and Locus of Control scale to 1140 students from 18 randomly selected elementary schools located in urban areas of Ankara, the capital of Turkey. Descriptive results indicated low levels of knowledge, but favourable attitudes toward the environment. The three-way ANOVA provided a significant

main effect on students' environmental knowledge of education level of fathers. The sex difference regarding students' attitudes toward the environment was statistically significant in favour of girls. In addition, multiple regression analysis results showed that behavioural intentions, environmental affects, and locus of control, could be accounted as significant predictors of self-reported environmentally friendly behaviour. On the other hand, the present study showed that elementary school students' behaviors toward the environment were independent from their knowledge of environmental issues.

Nai-Jen Chang and Cher-Min Fong (2010) in their article entitled, "Green product quality, green corporate image, green customer satisfaction, and green customer loyalty", indicate that green product quality could bring about green customer satisfaction and green customer loyalty. Additionally, green corporate image contributes to green customer satisfaction and green customer loyalty. In recent year, business ethics, social responsibility, sustainable development, and environmental issues have become important strategic concerns among companies. At the same time, customers in major international markets were demanding that companies produced higher quality products that are consistent with societal and environmental values if they wish to remain competitive in global markets.

Christian Fuentes (2012) in their article entitled, 'Green marketing at the store the socio-material life of a t-shirt', illuminates the process of green making. Departing from an understanding of marketing as socio material practice I analyzed how a green outdoor product - a t-shirt - was constructed as green through the marketing practices of the Nordic Nature Shops. To promote green products, to make them part of everyday life, companies need only to find and

categorize green consumers, develop offering that will fit this segments and communicate the benefits of the green products effectively. In this literature, green marketing is simply a matter of adapting traditional marketing to environmental issues.

Michel Laroche (2012)in his articleentitled, 'Targeting consumers who are willing to pay more for environmentally friendly products' They reported that today's ecological problems are severe, that corporations do not act responsibly toward the environment and that behaving in an ecologically favorable fashion is important and not inconvenient. An important finding of this research is that consumers who consider environmental issues when making a purchase are more likely to spend more for green products. In fact, 80 percent of these respondents said they refuse to buy products from companies accused of being polluters.

Adeline Kok Li-Ming (2013)found that, the respondents of the age between 20 – 24 will be selected being the largest internet users in Malaysia with 90% of Malaysian consumers concern about green and environmental issues and the upward trend of internet users in Malaysia, it is imperative to conduct studies to understand the green purchase behaviour of Malaysian consumers towards online green advertising.

Novera Ansar (2013)found that, age and education have positive relation with Eco- literacy. Socio demographic variables are not significantly related with green purchase intention. Besides this Environmental advertisements, Price and Ecological packaging were found to be positively related with the Green purchase intention. Recommendations are presented for the existing and new companies to exploit the opportunities by investing in corporate social responsibility and advertisement as well as in improving and greening the marketing program.

Mohammad Muzahidul Islam and Jian Xiaoying(2016) found that, customers have positive attitudes to jute diversified products but necessary initiatives should be taken to make customer's satisfaction. Hence, the understanding consumers buying factors or consumer behavior are very significant to entrepreneurs for successful green marketing.

Yi Chang Yang (2017)portrays that, consumers brand knowledge in terms of brand image and brand awareness had a positive influence on consumers' perceived quality. It was similar to the finding of consumers who have adequate brand knowledge and eco friendly products are perceived as higher quality. Specifically, consumers tend to consider as higher quality when the green product is under a better-known brand name.

Zillur Rahman Siddique and Afzal Hossain (2018) found that, promotional activities on eco-friendly products and reference groups significantly influence consumers green products awareness. Majority of the respondents are aware of green products. This study also reveals that green products awareness as the critical factor, which significantly affects consumers green purchasing decision.

Ullah (2018)found that, majority of consumers know about the green marketing and well known consumers try to spread the information to unaware people in society. Maximum number of respondent are satisfied to use green product and they will try to stimulate other consumers for using green products and services.

Pham Thi Thuy Mien (2019) found that, green product is the most powerful factor, followed by green promotion and finally green place. In addition, the model uses demographics as a moderator variable.

Xiaoyun Zhang and Feng Dong(2020) opines that, Green purchase behavior, as a kind of pro-environment behavior in

the private field, is influenced by psychological factors and external situational factors. The lifestyle, attitude, social norms, area of residence, and other internal and external factors have been combined to study consumers' purchase behavior in respect of sustainable food, the empirical result of which showed that the above factors had a significant impact on consumers' green purchase behavior. Attitude and environmental concern had the greatest effect and were followed by lifestyle.

2.3 Studies in India

Azhagaiah et al (2006) opines that, environmental condition is deteriorating at an alarming rate, mostly due to consumption-oriented marketing. Therefore, it will require a proactive corporate marketing strategy and active government involvement to encourage green marketing. In addition, it must encourage reconsumption of products through re-cycling of waste and increase the usage of capacity. Further, it must re-orient its marketing mix to develop and promote environmentally safe products and re-organise to achieve this aim.

Santhi and Jerinabi et al (2007) opines that, the future that marketers could convert into opportunity include health, globalization, water, chemicals, fair trade etc.

Sheenu Jain (2007) found that, highlights elements of tragedy in how the opportunities to make substantive progress towards sustainability have been squandered because of the inappropriate focus of much "Green Marketing" activity. The longer we take to address the issue, and to make progress towards more sustainable marketing, the greater the disruption and effort will be. The sooner substantive progress is made, the more likely the story will be to have a happy ending.

Pavan Mishra and Payal Sharma (2010) in their article entitled, "Green Marketing in India: Emerging Opportunities and Challenges" discuss how businesses have increased their rate of targeting green consumers, those who are concerned about the environment and allow it to affect their purchasing decisions. To know about the Reduce production of harmful goods or by products, Modify consumer and industry's use and consumption of harmful goods; or ensure that all types of consumers have the ability to evaluate the environmental composition of goods.

Sanjeev Kumar et al (2012) found that, the majority of the respondents are ready to pay 11-20 percent more prices than the prices of non-green products. Thus conclude that the consumers does not have environment concern only, but also have positive and high intentions to buy green products. The study brings out interesting insight that, though consumer were environmentally concerned and ready to pay high yet they were not aware as to what constitutes environmentally friendly products.

Keshav Sharma and Deepak Raj Gupta (2012) found that, 75% of consumers says that business is at fault for not developing consumer products that are friendly to environment. on the other hand, a typical survey by a 1991 issue of 'The Wall Street Journal' found that more than 80% of consumers find it more important to protect the environment than to keep price down. It covers the Green manager, who understands the need to stimulate the development, production and sale of eco-friendly products in order to drive out the more environmentally undesirable products. Role of Government to promote the development of green business is very important. These have vital role to play in shaping up the green attitudes at the consumer levels and at the corporate level.

Aysel Boztepe (2012) found that, unmarried consumers are affected only from promotion and hence weight should be given to promotion activities in environment-friendly products oriented to unmarried consumers and in advertisements, instead of its price, feature and environment-friendliness it should be made to make the advertisement charming.

Ramakrishna (2012) portrays that, environmental marketing satisfies human needs with minimal detrimental impact on the natural environment. At the same time it should be noted that in the era of green marketing, each and every stakeholder should take part in this access a social responsibility. The terms like “Green Marketing”, “Ecological Marketing” and “Environmental Marketing” are getting popular in modern days. The American Marketing Association (AMA) conducted its first workshop on “Ecological Marketing”. The studies analyze the concept of green marketing across the globe in general and with special reference to India. To analyze the legal environment of green marketing across the globe, with special reference to the Indian researcher also intended to draw the attention of traditional customers towards green marketing. Now – a-days, the consumers are getting quite aware about the importance of the protection of the earth. Protecting the ozone layer, pollution of air, water and environment from print and non-print media. Therefore, in order to survive in the present era of cut-throat competition, firms need to go greener than their competitors.

Singh and Kamal Pandey (2012) opines that, green marketing is still in infancy stage and lot of research needs to be done by the companies to project a green Corporate Image rather than focusing on the environmental benefits. In future only those companies will reap the greatest reward that

innovates with new products, materials, technologies which are eco-centric and address the challenge by walking their talk.

Shrikanth and Surya Narayana Raju (2012) in their article entitled, "Contemporary green marketing - Brief reference to Indian scenario", states that Green marketing should not be considered as just one more approach to marketing, instead should be pursued with greater vigor as it has societal and environmental dimensions. Marketers also have the responsibility to make the stakeholders aware about the need and the advantages of green products.

Mayank Bhatia and Amit Jain (2013) in his article entitled "Green Marketing: A Study of Consumer Perception and Preferences in India" this study was conducted on 106 respondents. High level of awareness about green marketing practices and products was found among the consumers. Green values were also found to be high among the respondents. Results of regression analysis reveals the view that overall green values, awareness about green products and practices and the perception regarding seriousness of marketing companies towards green marketing had positive significant impact on consumer persuasion to buy and prefer green products over conventional products.

Purushotham and Saaranga Paani (2014) in his article entitled, "Green energy technologies: Key to India's energy independence" highlights the national energy policy, agriculture policy, transport policy and fiscal policies should go hand in hand such that they mutually aid and reinforce the objective of achieving sustainable development. Green technologies offer vast scope for decentralizing power generation by which the renewable energy technology boom could do to power industry what the internet did to the depth, range, speed and cost of media.

Susmitha Mohan and Philo Francis (2014) stated that, companies have developed and adopted GM strategies as a part of their corporate social responsibility (CSR) strategies in order to meet the economic development. At the same time, they also consider environmental protection. Thus there is an inter connection between CSR, sustainable development and GM activities and this will lead to green growth and will develop a green economy.

Shruti Maheshwari (2014) found that, consumer preference for greener goods could be influenced by marketing. Products given greater exposure will be more likely to sell in greater numbers. Pro- environmental values are more likely to result in more pro-environmental behavior when values and beliefs are specific enough, the green action aligns with consumers' subjective interests, and product attributes are positively perceived.

Shweta Singh (2014) conclude that, consumers already buying eco-friendly products and those who are satisfied by the previous purchases were willing to repeat purchases. Indeed satisfaction goes with purchase intention. Advertisement about green products the fact that consumers believe in green claim explain the variance of the purchase intention. Positive attitudes concerning willingness to pay an extra price for green products are also correlated with purchase intention.

Seema Laddha and Mayur Malviya (2015) conducted a small survey of 150 samples from Navi Mumbai. Questions related to Environment and buying behaviour were asked to the respondents. From this survey it is clear that there is growing concerns about environment and increasing. The samples were selected through Convenience sampling in Navi Mumbai region with the age group of 15 years to 60 years. Green marketing is still in its infancy and a lot of research is to be done on green marketing to fully explore its potential.

Anu Varghese and Santhosh (2015) made a study on consumers' perception with reference to Kollam district in Kerala. 80 consumers were selected on a convenience basis. According to the study the majority of the respondents are aware about eco-friendly products. Organic vegetables and food products were mostly preferred by customers. The major factor influencing the buying behaviour of consumers is quality of the product, and the problem faced, by the consumers are lack of availability of products, high price and low promotion.

Bhagwan Singh and Sachin Kumar (2015) revealed that, most of the respondents from North India are familiar with Green Marketing. Respondents, income, occupation, marital status and district have a strong relationship with awareness about Green Marketing, irrespective of their age, education, area and state. The marketers should plan out the strategies as per the respondent's characteristics to achieve better results. The genders from North India possess similar awareness about Green Marketing, so the gender specific strategies perhaps may not work in India. Rather, other demographic variables like income, occupation, marital status and district of respondents, if focused and targeted may provide better results. The study also explored that customer rising awareness about green or eco-friendly products; promotion of green or eco-friendly products by Web Based Marketing Internet; consumer focus on the environmental issues and necessary initiatives taken by the government and corporate are the main reasons for highlighting Green Marketing. They also suggest that customers at the time of purchase must consider the environmental financial results which has saved lot of paper and trees.

Mahesh and Gomathi(2016) reveals that, even though there are few difficulties like high price,non availability etc.,

majority of the respondents desire to purchase the product which do not harm their health and also protect the environment.

Jaganath (2016) found that, 'Consumer Beliefs', 'Environmental Attitude', and 'Social Influence' have a positive influence on the green purchasing behaviour. The influential factor on green purchasing behaviour namely 'Consumer Beliefs', 'Environmental Attitude', 'Social Influence' and 'Quality of Products' are significantly related with the overall green purchasing behaviour of the respondents. The findings of the study also insist the importance of educating the young consumers about the green environment.

Nagaraju and Thejaswini (2016) reveal that, Product label and outdoor advertisement are major sources of awareness towards eco-friendly products. The consumers are aware of the eco-friendly products and are having a positive attitude towards eco-friendly products. It was found that the lack of knowledge and not aware of the benefits are barriers for purchasing eco-friendly products. Majority of the respondents buy eco-friendly products for health purpose.

Singh and Ramneek Kaur (2016) reveal that, majority of the respondents were aware of the concept of green marketing. Television is most effective advertisement media in promoting green marketing.

Unnamalai (2016) found that, there is no relationship between Consumer attitudes such as Green Products usage is the status symbol in the society, Green Products do not create any harm to society, health, create any pollution, Green Products prefer by consumer near future, availability, can be easily identify, costlier one and availability of the products and frequency of purchase of the products.

Karpagavallia and Ravi (2017) found that, consumers are aware of green products and accept the fact that processed

food products are little expensive. The analysis shows there is significant difference between the educational background and the attitude of consumers towards processed food products. 48% of the respondents are agreed that it's individual responsibility to address the environment problems. The chi square results states that there is significant difference between total family income of consumers and factors motivating them to buy processed products.

Mohanasundaram and Sumathi Sankari (2017) found that, the majority of the customers have a place with high month to month pay level considers ecological issue in their day by day life contrasted with low month to month pay gathering. Also they expect that green items were not tough and difficult to deal with.

Dhanjit Pathak (2017) reveals that, customers have a high level of involvement regarding environmental issues as a consequence of growing environmental consciousness. The study has shown the significant influence of environmental knowledge and consciousness on consumer environmental attitude. Consequently, companies that communicate their 'green product' in their packaging, advertisement or manufacturing process, gain satisfied customers.

Simranjit Singh et al (2017) found that, green marketing promotes marketing of such products which are safer for the planet & people. This changing attitude of buying behaviour is forcing many firms to incorporate green processes. It is uncovered that Indian customers' star ecological concerns, information of natural issues, familiarity with eco-accommodating items, and instructive levels influence on green purchasing conduct.

Arpita Khar (2018) underwent a study, to find out the factors that influence organic clothing buying behaviour like past green buying, green attitudes, values, green self-

identity and peer influence on green buying. It investigates the role of these factors on organic clothing purchase. The study reveals that Specific green apparel brands, their prices, styles and promotions can be taken to understand their influence on consumers' attitude towards green apparel.

Afzal Hossain (2018) in his article entitled, "Green marketing mix effect on consumers buying decisions in bangladesh" opines that green marketing is a modern philosophy that can be applied to end user goods, manufacturing goods and even services. Green marketing is the marketing of products that are acknowledged to be ecologically safe. Green marketing integrates a wide range of activities, comprising product modification, production method changes, packaging change, price change as well as modifying the promotional theme. As a result, consumption patterns will be inevitably enhanced and created demand for forthcoming consumers in Bangladesh.

Sudha (2019) portrays that, there is an increasing awareness on the various environmental problems which has led a shift in the way consumers go about their life. There has been a drastic change in consumer attitudes towards a green lifestyle. People are actively trying to reduce their impact on the environment. It is a challenge for industries to keep consumers and environment safe. Green marketing in a broader sense is corporate social responsibility because it helps business to become a socially responsible as well.

Subhashree (2019) found that, Green Marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment.

Robinson Sivaranjani (2019) states green marketing refers to marketing where ecological issues are the point of

marketing decision-making. It ranges from change in raw material to change materials. It includes amendment in product style or perhaps substitution of one product by another. It is also encompasses disposal of packing after the use of the product. There is sample scope for green marketing at both the manufactures end and marketers end.

Megavannan et al. (2019) divided the factors influencing consumers' green product purchase behavior into two categories: ecological consistency of green products and challenges to buy green products. Their empirical result indicates that the credibility of the eco-label, identity of the green products, quality, and awareness about green products all have significant impacts on green purchase behavior, but the influence of environmental consciousness is insignificant.

Ravi Kumar and Shaheeda Banu (2020) found that promotional activities on eco- friendly products considerably influence consumers green products awareness. Majority of the respondents are aware of green products. This study reveals that green products awareness as the critical factor, which significantly affects consumers green products purchasing decision.

2.4 Conclusion

Green marketing as a broad marketing concept that involves the production, marketing, consumption and disposal of products in a way that is less harmful to the natural environment. The overriding premises towards the adoption of eco-friendly products is to be enhance customer satisfaction in a manner safeguard the well-being of the natural environment. It is more over also emphasized that eco-friendly products should not be constructed as only not limited to environmental protection but rather as also an

integral element of the market strategy. However, literature reviewed acknowledged that, in the long term, green marketing may prove to be viable strategy, as it is enhance corporate image, reduces wastage, increase market share and communication, supportive organization structure and systems approach are identified as critical success factors in green marketing implementation. Overall, although this study identified challenges that impede the implementation of green marketing, there is still more research efforts needed to find ways addressing such challenges.

CHAPTER III

ECO-FRIENDLY PRODUCTS-OVERVIEW

3.1 Introduction

Eco-friendly products is used to satisfy the wants and needs of consumers and protect the environment and benefits to the society in a more environmental friendly way (Welford, 2000)⁵. If companies are keen to adopt eco-friendly marketing successfully, they should incorporate the concept of eco-friendly marketing into all aspects of marketing activities. Companies should apply eco-friendly marketing strategies to increase perceived value of their eco-friendly products and reduce perceived risk of their products with respect to environmental consideration to enhance their competitive advantage. Consumers are becoming fairly educated about their environmental responsibility and gravity of environmental problems and are willingly to choose eco-friendly products over traditional products.

3.2 Eco-Marketing

The environment movement has generated a flourish of eco-conscious consumers and new problems for eco-friendly businesses to lift the bar on their efforts to include the concept of environment in their business activities. The friendliness to environment is the key aspect in products and services.

The American Marketing Association (AMA) conducts the first Workshop on Ecological Marketing in 1975. Two tangible landmarks for the first idea of green marketing comes in the appearance of published books, both of which are called Green Marketing by Ken Peattie (1992) in the United Kingdom and the other by Jacquelyn Ottman (1993) in the United States of America. Environment marketing means to the practice of

selling products and / or services on the basis of their environmental benefits. Those product or service may be environmentally friendly in it or and it is produced or and packaged in an environment-friendly way (Singh, 2013).

3.3 Eco-Marketing Mix

The raising concern for environmental problems has contributed to increase in the demand for environment friendly products and services. The limelight on sustaining the environment has generated term namely offsetting and carbon footprint. Many companies have modified their marketing strategies to capitalize the desire of consumer for environment friendly products and services. Environment friendly marketing strategy gets into account supplementary factors which are not generally element of the marketing mix. Hence, the components of marketing mix lead learn marketing to create the environmental marketing mix (Das et al, 2012).

3.4 Environmental Product Strategies

There are a huge number of environmental problems significantly influencing the production of goods and services. Environmentally friendly products can decrease and increase cost of production. It may increase costs for companies and their suppliers but this may be equalize by lower fuel cost through energy efficiency measures or an increase in sales volume created by good and positive product image.

3.5 Environmental Promotional Strategies

Because of the consumers, government and celebrity are involving in protection of the environment and environment friendly methods are adopted as promotional measures. The award of ISO 14001 that certifies the company has certain

environmental standards, as certified by an independent external auditing agency.

The packaging of product that can be recycled will have information on the packaging obviously initiating the recycling properties for the packaging. Similarly products will be labelled, not only on the packaging but also around the shelves exhibiting the eco-friendly products. Besides, retailers encourage consumers for using the reusable bags that have a lot of benefits.

3.6 Environmental Pricing Strategies

Pricing should imitate the demand for the product, a wrongly priced product will decrease demand and these further cause difficulties by the effect of environmental problems have on pricing. The ideal price for eco-friendly products is decided by the target market. On the other side, companies try to reduce cost and increasing profit at the cost of the environment are creating negative publicity, sanctions, fines or may lose confidence among consumers.

3.7 Aim of Eco-Friendly Products

Environment-friendly or environmentally friendly or eco-friendly, (nature-friendly and green) are marketing and sustainability concept referring to goods and services, guidelines, laws and policies that claim decreased, minimal, or no harm upon the environment or ecosystems.

The terminology- eco-friendly is used to explain activities which are good for the environment. It is a short version of ecologically friendly or environmentally friendly or green used to illustrate alike activities. There are a variety of means in which activities can be eco-friendly, varying from products which are build in an environmentally friendly mean to

creating changes in lifestyle that are planned to benefit the environment.

3.8 Characteristics of Eco-Friendly Products

- The characteristics of eco-friendly products are:
- They have no toxic or little chemicals.
- They are produced efficiently by utilizing the least resources possible through environment friendly practices, processes and policies.
- They are produced with easily recyclable materials.
- They use low energy and also use wind or solar power.
- They use energy sources efficiently.
- They save gas and produce low carbon emissions.
- They are packaged in 100 per cent recycled materials.
- They are easily recycled and reused.

3.9 Importance of Eco-Friendly Products

The eco-friendly initiatives that are largely accepted across the world do have positive impact on lives across species, this shows that the initiative have confirmed to be imperative to people in many ways. The largest effect of the tendency of selling eco-friendly products is that the products assist in saving a lot of energy, which means that the carbon footprint that is generated by the people is cut down to a great extent.

3.10 Advantages of Eco-Friendly Products

The eco-friendly products can assist to decrease toxic wastes and avoid environmental pollution. The major benefits of using eco-friendly products are saving energy, money and decreasing harmful substances.

Reduction of Pollution

The reduction of pollution is the most important advantage of using eco-friendly products. They assist in reducing the quantum of toxic wastes and non-degradable materials on the earth that means low pollution.

Personal Health

The use of eco-friendly products may eliminate chemicals and other substances that cause many health problems from the production stage to consumption stage. These products give fresher and greener life to the consumers.

Long-Term Savings

The eco-friendly products create savings and most of them are energy saving and efficient.

3.11 Major Initiatives for Eco-Friendly Products

Efforts are on by different environmental agencies in India to preserve and safeguard the environment. The growing emphasis on environment has led to eco-friendly advertising as more number of companies are including the concept of environment into their organizational culture.

Advertisers are using different types of media to concentrate their ads on this socially responsible and innovative concept. Furthermore apart from making a good image, advertisements that promote eco-friendly products can generate awareness about what the people should do for conservation energy and environmental resources. The promotions of eco-friendly products are, thus, beneficial to both the companies and the environment in the long run. The initiatives for eco-friendly products in India are (Nanda et al, 2016).

3.12 Consumers Behavior Towards Eco-Friendly Products

The past decades bear witness to the rapid economic growth through increasing consumers' consumption worldwide. This, in turn, causes environmental deterioration through over-consumption and utilization of natural resources. The consequences of environmental degradation are global warming, depletion of stratospheric ozone layer, pollution of sea and rivers, noise and light pollution, acid rain and desertification reported that about 40 per cent of environmental degradation has been brought about by the consumption activities of private households.

Pollution is another vital environmental problem as a result of economic growth. Waste from industrial units and untreated sewage (Schlegelmilch et al, 1998), gas and diesel powered vehicles and coal fired power plants are the primary causes of this pollution (Shahnaei, 2012) Those environmental problems have gained prevalence and have consistently become of more interest to the mainstream received attention worldwide.

3.13 Conclusion

As far as environment concern the consumers strongly expressed that they are familiar with eco-friendly products, brand products and they are keen on buying the products. At present situation it is difficult to transform from regular marketing to green market but the consumers realize the importance of eco-friendly products. It shows that there is a positive sign for the environment and for the business also. Eco-friendly products is a good way to the producers for increase our selling their products but it should be done in a good way. Next chapter deals with analysis and interpretation of the study.

CHAPTER IV

SOCIO ECONOMIC PROFILE AND ENVIRONMENTAL CONCERN OF THE CONSUMERS

4.1 Introduction

This chapter deals with the Socio-Economic Profile and Environmental Concern of the Consumers. This chapter presents the data analysis based on the responses received from the consumers.

4.2 Socio - Economic Profile of the Consumers

Table 4.1
Socio - Economic Profile of Consumers

FACTORS	NUMBER OF RESPONDENTS(N=650)	PERCENTAGE
i) Age		
Up to 25	193	29.7
26- 35	252	38.8
36 - 45	161	24.8
Above 45	44	6.8
ii)Gender		
Male	356	54.8
Female	294	45.2
iii)Marital status		
Married	225	34.5
Un Married	423	65.07
iv)Area of respondents		
Rural	385	59.2
Urban	265	40.8
v) Educational		

FACTORS	NUMBER OF RESPONDENTS(N=650)	PERCENTAGE
Qualification		
Up to Higher Secondary	107	16.5
Up to Graduation	272	41.8
Post Graduate	195	30.0
Professional	63	9.7
Diploma Holders	13	2.0
vi) Occupation		
Government Employees	147	22.6
Private Employees	284	43.7
Business	93	14.3
Professional	49	7.5
Agriculture	50	7.7
Students	27	4.2
vii) Type of family		
Nuclear	412	63.4
Joint	238	36.6
viii) No. of family members		
Up to 3	230	35.4
3 to 5	287	44.2
Above 5	133	20.5
ix) Monthly income		
Up to 30000	289	44.5

FACTORS	NUMBER OF RESPONDENTS(N=650)	PERCENTAGE
30001-60000	296	45.5
Above 60000	65	10.0
x) Family Income		
Up to 50000	229	35.2
50001to 100000	280	43.1
Above 100000	141	21.7
xi) Health ailments		
Sugar	123	18.9
BP	113	17.4
Allergy	52	8.0
Coronary Troubles	2	.3
Cholesterol	17	2.6
Overweight	34	5.2
Others	5	.8
Nil	304	46.8
xii) Member is association/Club of respondents		
Yes	144	22.2
No	506	77.8
xiii) Types of Association		
Rotary Club	65	45.1
Lions Club	29	20.1
Eco Club	28	19.4
Consumer forum	15	10.4
Others	7	4.9

4.2.1 Age

The age wise classification of the consumers shows that, 193(29.7%) of the consumer belong to the age group ranging

up to 25 years. The number of consumers belong to the younger age group is found to be high. 252(38.8%) of the consumers belong to the age group ranging from 26 to 35 years. 161(24.8%) of the consumers belongs to the age group ranging from 36 to 45 years 44(6.8%) of the consumers are above 45 years of age. Hence, it can be inferred that majority of the consumers belongs to the age group ranging from 26 to 35 years.

4.2.2 Gender

Gender wise classification reveals that, out of 650 consumers taken for the study 356 (54.8%) consumers are male and remaining 294(45.2%) are women consumer.

4.2.3 Marital Status

The marital status of the consumers discloses that, 423(65.07%) of the consumers are married.

4.2.4 Area of the Respondents

It is evident from the table 4.1 that, majority 385(59.2%) of the consumer's area of residence is rural and rest 265(40.8%) of the consumer's residence is urban.

4.2.5 Educational Qualification

It can be interpreted from the table that, 272 (41.8%) most of the consumers are undergraduates, 195(30.0%) consumers are post graduates. 107(16.5%) of the consumers are with educational qualification of above higher secondary 63(9.7%) of the consumers are professional and 13(2.0%) of the consumers are diploma holders.

4.2.6 Type of Family

It is evident from table 4.1 that, more than half part of the consumers that is 412(63.4%) belongs to nuclear family while 238 (36.6%) of the consumer belong to join family. This indicates that majority of the consumers belong to nuclear family.

4.2.7 Number of Family Members

Out of the 650 consumers taken for the study, 230(35.4%) of the consumers family comprises up to 3 members, 287(44.27) of the consumers family comprises of 3 to 5 members. While 133(20.5%) of the consumers consists of more than 5 family members. Hence nearly half of the consumer family consists of 3 to 5 members.

4.2.8 Monthly Income

It is clear from the table 4.1 that, majority 296 (45.5%) of the consumers monthly income is between 30,000 and 60,000, 289 (44.5%) of the consumers income is up to 30,000 and rest of 65(10%) of the consumers monthly income is above 60000.

4.2.9 Family Income

The family income of the majority 280 (43%) of the consumers is between 50000 and 100000, 229 (35.2%) of the consumers family income is up to 50,000 and rest of 141(21.7%) of the consumers family income above is 100000.

4.2.10 Health Ailments

Data shows that, majority of the consumer 304 (46.8%) do not suffer from health ailments category, 123(18.9%) of the consumers suffer from diabetes, 113(17.4%) of the consumers suffer from BP, 52(8.0%) of the consumer suffer from allergy,

2(0.3%) of the consumers suffer from coronary troubles, 17(2.6%) of the consumers are suffer from cholesterol, 34(5.2%)of the consumers suffer from overweight and rest of the 5(8%) of the consumers suffer from other health ailments.

4.2.11 Membership in Association/Club

The data shows that, majority of the consumers are not part of any associations. While, as 144(22.2%) of the consumers are members in various association namely Lions Club, Rotary Club, Eco Club and so on.

4.2.12 Types of Association

It is clear from the table 4.1 that, majority 65(45.1%) of the consumers are members in rotary club, 29(20.1%) consumers are members in lions club, 28(19.4%) consumers are members in eco-club, 15(10.4%) consumers are members in consumers forum. while (74.9%) of the consumers are members in others of types of association.

4.3 Environmental Concern of the Consumers

To find out the Environmental Concern of the Consumer on Eco-Friendly Products Simple percentage, Garatte Ranking Technique and Chi-Square Test.

4.3.1 Opinion on Harmful Environmental Pollution

To find out the opinion on which is more harmful environmental pollution simple percentage analysis has been employed.

Table 4.2
Opinion on Harmful Environmental Pollution

Pollution	No of Respondents	Percentage
Air	264	40.6
Sound	178	27.4

Noise	40	6.2
Water	120	18.5
Soil	48	7.4

Table 4.2 shows that, out of 650 consumers, 264(40.6%) are of the opinion that Air pollution is the major cause for environmental pollution, 178(27.4%), 40(6.2%), 120(18.5%) and 48(7.4%) are of opinion that the major cause for environmental pollution are by sound, noise, water and soil respectively.

4.3.2 Causes for Environmental Pollution - Garrett Ranking Technique

Garrett Ranking Technique has been used to ascertain the causes for environmental pollution. Under the Garrett ranking technique the percentage position is calculated by using the following formula:

$$\text{Percentage Position} = 100 (R_{tj} - 0.5) / N_j$$

Where

R_{tj} = Rank given for i th variable by the j th consumers.

N_j = Number of variables ranked by the consumers.

The consumers are asked to rank the eleven questions relating to preference to enter into eco-friendly products.

By referring the Garrett table the per cent position is converted into scores. Then for each factor, the scores of each consumer are added and then mean value is calculated. The factors having highest mean value is considered to be the most important. Scale values as per Garrett ranking technique for first to eleven ranks are as: 82, 71, 64, 59, 54, 50, 45, 40, 35, 28 and 17 respectively. The percentage position of each rank is made into score by referring factors is summed up for assigning rank. The following table exhibits the causes for environmental pollution.

Table 4.3

Causes for Environmental Pollution - Garrett Ranking Technique

S. No	Causes of Pollution	1	2	3	4	5	6	7	8	9	10	11	Total	TotalScore	Mean Score	Rank
		82	71	64	59	54	50	45	40	35	28	17				
1	Industrial activities	87	153	103	75	37	36	73	28	40	12	6	650	39055	60.08	1
		7134	10863	6592	4425	1998	1800	3285	1120	1400	336	102				
2	Dumping solid waste	41	44	68	142	114	60	41	57	29	35	19	650	34815	53.56	5
		3362	3124	4352	8378	6156	3000	1845	2280	1015	980	323				
3	Plastic consumption	148	79	65	56	72	55	23	38	47	38	29	650	37604	57.85	2
		12136	5609	4160	3304	3888	2750	1035	1520	1645	1064	493				

4	Vehicles, trains, ships and planes	107	100	50	60	60	96	36	48	24	35	34	650	36592	56.30	3
		8774	7100	3200	3540	3240	4800	1620	1920	840	980	578				
5	Rabid urbanization	45	55	60	50	46	58	91	49	60	66	70	650	30962	47.63	6
		3690	3905	3840	2950	2484	2900	4095	1960	2100	1848	1190				
6	Population overgrowth	99	56	95	54	43	53	63	54	57	44	32	650	35098	54.00	4
		8118	3976	6080	3186	2322	2650	2835	2160	1995	1232	544				
7	Combustion of fossil fuels	16	48	76	56	58	55	70	90	71	58	52	650	30513	46.94	7
		1312	3408	4864	3304	3132	2750	3150	3600	2485	1624	884				
8	Agricultural waste	27	37	33	49	72	71	29	62	86	77	107	650	28052	43.16	9
		2214	2627	2112	2891	3888	3550	1305	2480	3010	2156	1819				
9	Deforestation	55	38	39	46	65	60	85	82	43	55	82	650	30472	46.88	8
		4510	2698	2496	2714	3510	3000	3825	3280	1505	1540	1394				

10	Overfishing	2	15	23	26	43	52	61	83	102	101	142	650	24034	36.98	11
		164	1065	1472	1534	2322	2600	2745	3320	3570	2828	2414				
11	Lowered biodiversity	28	33	47	33	37	51	69	57	92	129	74	650	27617	42.49	10
		2296	2343	3008	1947	1998	2550	3105	2280	3220	3612	1258				

From the analysis it can be inferred that, the most important factor which is responsible for environmental pollution is industrial activities followed by plastic consumption, vehicles, trains, ships and planes and so on.

4.3.3 Level of Environmental Concern – Chi Square Test

In order to examine the variables that are associated with the level of environmental concern of consumers in eco-friendly products, environmental concern index has been developed. Answers to questions relating to environmental concern of the consumers have been assigned scores for developing the environmental concern index. Consumers were asked to rate 23 statement relating to environmental concern they would face in their eco-friendly product using five point likert scales. The Scores are 5,4,3,2, and 1 respectively. There are 23 questions, so the maximum score is 115 (23x5). Each consumer has been assigned scores. The 'Environmental Concern Index' have been calculated by totaling the scores and multiplying by hundred. The average environmental concern index of 650 consumers is 68.43. The environmental concern index of 650 consumers ranges between 68.44 and 87.24. To classify the consumers with moderate and high Level of environmental concern s, mean and standard deviation have been used. The mean environmental concern index is 87.25 and standard deviation is 9.41.

- Consumers with low level of environmental concern are those whose environmental concern index is up to 68.43 (Mean – SD, i.e 87.25 - 9.41).
- Consumers with high level of environmental concern are those whose environmental concern index is above 87.25 (Mean plus standard deviation,i.e. 87.25 - 9.41).
- Consumers with moderate level of environmental concern are those whose environmental concern index ranges between 68.44 and 87.25.

There are 130 (20%) consumers with low level of environmental concern; 424(65.23%) with moderate Level of environmental concern's and 96(14.76%) with high Level of environmental concern in their day to day life.

4.3.4 Variables Associated with Level of Environmental Concern

Chi-square test has been employed to examine the association between the selected variables and level of environmental concern of the sample consumers. The variables such as Age, Gender, marital status, Area of operation, Educational Qualification, Occupation, Type of family, No of family members, Monthly income, Family income, Health ailments and Member is association have been tested to find their association with environmental concern index. The level of confidence chosen are five and one percent.

4.3.4.1 Age and Level of Environmental Concern

Consumers level of environmental concern may differ based on their age. In order to find whether age is associated with of level of environmental concern, the following hypothesis has been framed and tested.

H₀: Age is not associated with level of environmental concern.

Table 4.4
Age and Level of Environmental Concern

Age (in Years)	Level of environmental concern			Total
	Low	Moderate	High	
Up to 25	45	117	31	193
	(23.3)	(60.6)	(16.1)	(100.0)
26 – 35	38	188	26	252
	(15.1)	(74.6)	(10.3)	(100.0)
36 – 45	34	107	20	161
	(21.1)	(66.5)	(12.4)	(100.0)

Above 45	13	12	19	44
	(29.5)	(27.3)	(43.2)	(100.0)
Total	130	424	96	650
Df:6	Chi-square : 48.246		P Value: .000	Significant

There are 193(29.7%) consumers whose age is up to 25. of them, 45(23.3%) have low level of environmental concern; 117(60.6%) have moderate level of environmental concern and 31(16.1%) have high of level of environmental concern.

Out of 252(38.8%) consumers whose age group ranges between 26and 35, 38(15.1%) have low level of environmental concern; 188(74.6%) have moderate of level of environmental concern and therest 26(10.3%) have high level of environmental concern.

Among the 161(24.8%) consumers whose age group ranges between 36and 45, 34(21.1%) have low level of environmental concern; 107(66.5%) have moderate level of environmental concern and the rest 20(12.4%) have high level of environmental concern.

Table shows that of 44 (6.8%) consumers whose age is above 45, 13(29.5%) have low level of environmental concern; 12(27.3%) have moderate level of environmental concern and 19(43.2%) have high level of environmental concern.

Consumers whose age group is above 45 years have high level of environmental concern. As the Calculated P value is less than 0.01, there exist a significant association between age and level of environmental concern. Hence, the null hypothesis is rejected.

4.3.4.2 Gender and Level of Environmental Concern

The level of environmental concern may vary on the basis of gender. To find whether gender is associated with level of environmental concern the following hypothesis has been framed and tested.

H_0 : Gender is not associated with level of environmental concern.

Table 4.5
Gender and Level of Environmental Concern

Gender	Level of environmental concern			Total
	Low	Moderate	High	
Male	67	234	55	356
	(18.8)	(65.7)	(15.4)	(100.0)
Female	63	190	41	294
	(21.4)	(64.6)	(13.9)	(100.0)
Total	130	424	96	650
Df:2	Chi-square : 0.824		P Value: .662	Not Significant

There are 356(54.8%) male consumers, of them 67(18.8%) have low level of environmental concern; 234(65.7%) have moderate level of environmental concern and 55(15.4%) have high level of environmental concern.

Out of 294(45.2%) female consumers, 63(21.4%) have low level of environmental concern; 190(64.6%) have moderate level of environmental concern and 41(13.9%) have high level of environmental concern.

It can be seen from the table that, Consumers who are male have high level of environmental concern. Consumers who are female have low level of environmental concern. As the calculated P value is less than 0.01, there is no association between gender and level of environmental concern. Hence, the null hypothesis is accepted.

4.3.4.3 Marital Status and Level of Environmental Concern

The level of environmental concern may vary on the basis of marital status. To find whether marital status is associated with level of environmental concern the following hypothesis has been framed and tested.

H₀: Marital status is not associated with level of environmental concern.

Table 4.6
Marital Status and Level of Environmental Concern

Marital Status	Level of environmental concern			Total
	Low	Moderate	High	
Single	48	144	33	225
	(21.3)	(64.0)	(14.7)	(100.0)
Married	82	278	63	423
	(19.4)	(65.7)	(14.9)	(100.0)
Total	130	424	96	650
Df:2	Chi-square : 0.350		P Value: .840	Not Significant

There are 225(34.6%) consumers who are single, 48(21.3%) have low level of environmental concern; 144(64.0%) have moderate level of environmental concern and 33(14.7%) have high level of environmental concern.

Out of 423(65.7%) consumers who are married, 82(19.4%) have low level of environmental concern; 278(65.7%) have moderate level of environmental concern and 63(14.9%) have high level of environmental concern.

It can be seen from the table that, Married consumers have high level of environmental concern, while single consumers have low level of environmental concern. As the calculated P value is less than 0.01, there is no association between marital status and level of environmental concern. Hence, the null hypothesis is accepted.

4.3.4.4 Area of Residence and Level of Environmental Concern

The level of environmental concern may vary on the basis of area of residence. To find whether area of residence is associated with level of environmental concern the following hypothesis has been framed and tested.

H₀:Area of residence is not associated with level of environmental concern.

Table 4.7
Area of Residence and Level of Environmental Concern

Area of Residence	Level of environmental concern			Total
	Low	Moderate	High	
Rural	88	238	59	385
	(22.9)	(61.8)	(15.3)	(100.0)
Urban	42	186	37	265
	(15.8)	(70.2)	(14.0)	(100.0)
Total	130	424	96	650
Df:2	Chi-square : 5.738		P Value: .057	Not Significant

There are 385(59.6%) consumers residence in rural area, 88(22.9%) have low level of environmental concern; 238(61.8%) have moderate level of environmental concern and 59(15.3%) have high level of environmental concern.

Out of 265(40.8%) consumers residence in urban area, 42(15.8%) have low level of environmental concern; 186(70.2%) have moderate level of environmental concern and 37(14.0%) have high level of environmental concern.

It can be seen from the table that, Consumers who are rural area have high level of environmental concern. As the calculated P value is less than 0.01, there is no association between area of residence and level of environmental concern. Hence, the null hypothesis is accepted.

4.3.4.5 Educational Qualification and Level of Environmental Concern

The level of environmental concern may vary on the basis of educational qualification. To find whether educational qualification is associated with level of environmental concern the following hypothesis has been framed and tested.

H₀: Educational qualification is not associated with level of environmental concern.

Table 4.8
Educational Qualification Level of Environmental Concern

Educational Qualification	Level of environmental concern			Total
	Low	Moderate	High	
Up to Higher Secondary	39	66	2	107
	(36.4)	(61.7)	(1.9)	(100.0)
Under Graduate	54	180	38	272
	(19.9)	(66.2)	(14.0)	(100.0)
Post Graduate	31	126	38	195
	(15.9)	(64.6)	(19.5)	(100.0)
Professionals	6	45	12	63
	(9.5)	(71.4)	(19.0)	(100.0)
Diploma	0	7	6	13
	(0.0)	(53.8)	(46.2)	(100.0)
Total	130	424	96	650
Df:8	Chi-square : 47.624		P Value: .000	Significant

There are 107(16.5%) consumers whose educational qualification is up to higher secondary. Of them, 39(36.4%) have low level of environmental concern; 66(61.7%) have moderate level of environmental concern and 2(1.9%) have high level of environmental concern.

Out of 272(41.8%) consumers whose educational qualification is undergraduate 54(19.9%) have low level of environmental concern; 180(66.2%) have moderate level of environmental concern and 38(14.0%) have high level of environmental concern.

Out of 195(30.0%) consumers whose educational qualification is post graduate.of them, 31(15.9%) have low level of environmental concern; 126(64.6%) have moderate level of environmental concern and 38(19.5%) have high level of environmental concern.

Among the 63(9.7%) consumers whose educational qualification is professionals, 6(9.5%) have low level of environmental concern; 45(71.4%) have moderate level of environmental concern and 12(19.0%) have high level of environmental concern.

There are 13(2.0%) consumers whose educational qualification is diploma, 7(53.8%) have moderate level of environmental concern and 6(46.2%) have high level of environmental concern.

It can be inferred from the table that, Consumers whose educational qualification is diploma have high level of environmental concern. Consumers whose educational qualification is up to higher secondary have low level of environmental concern. As the calculated P value is less than 0.01, there exist a significant association between educational qualification and level of environmental concern. Hence, the null hypothesis is rejected.

4.3.4.6 Occupation and Level of Environmental Concern

The level of environmental concern may vary on the basis of occupation. To find whether occupation is associated with level of environmental concern the following hypothesis has been framed and tested.

H₀: Occupation is not associated with level of environmental concern.

Table 4.9
Occupation and Level of Environmental Concern

Occupation	Level of environmental concern			Total
	Low	Moderate	High	
Govt. Employees	28	106	13	147
	(19.0)	(72.1)	(8.8)	(100.0)
Private Employees	54	185	45	284
	(19.0)	(65.1)	(15.8)	(100.0)
Business	13	76	4	93
	(14.0)	(81.7)	(4.3)	(100.0)
Professional	26	16	7	49
	(53.1)	(32.7)	(14.3)	(100.0)
Agriculture	5	27	18	50
	(10.0)	(54.0)	(36.0)	(100.0)
student	4	14	9	27
	(14.8)	(51.9)	(33.3)	(100.0)
Total	130	424	96	650
Df:10	Chi-square : 78.432		P Value: .000	Significant

There are 147(22.6%) consumers whose occupation is Government employees of them, 28(19.0%) have low level of environmental concern; 106(72.1%) have moderate level of environmental concern and 13(8.8 %) have high level of environmental concern.

Out of 284(43.7%) consumers whose occupation is Private employees, 54(19.0%) have low level of environmental concern; 185(65.1%) have moderate level of environmental concern and 45(15.8 %) have high level of environmental concern.

There are 93(14.3%) consumers whose occupation is Business 13(14.0 %) have low level of environmental concern; 76(81.7 %) have moderate level of environmental concern and 4 (4.3 %) have high level of environmental concern.

The table shows that 49(7.5%) consumers whose occupation is Professionals. Of them, 26(53.1%) have low level of environmental concern; 16(32.7%) have moderate level of environmental concern and 7(14.3%) have high level of environmental concern.

Out of 50(7.7%) consumers whose occupation is agriculture, 5(10.0%) have low level of environmental concern; 27(54.0%) have moderate level of environmental concern and 18(36.0%) have high level of environmental concern.

Among the 27(7.7%) consumers whose occupation are student, 4(14.8%) have low level of environmental concern; 14(51.9%) have moderate level of environmental concern and 9(33.3%) have high level of environmental concern.

It can be inferred from the table that, Consumers whose occupation is student have high level of environmental concern. Consumers whose occupations are professional have low level of environmental concern. As the calculated P value is less than 0.01, there exist a significant association between occupation and level of environmental concern. Hence, the null hypothesis is rejected.

4.3.4.7 Type of family and Level of Environmental Concern

The level of environmental concern may vary on the basis of type of family. To find whether type of family is associated with level of environmental concern the following hypothesis has been framed and tested.

H₀: Type of family is not associated with level of environmental concern.

Table 4.10
Type of family and Level of Environmental Concern

Type of Family	Level of environmental concern			Total
	Low	Moderate	High	
Nuclear	100	253	59	412
	(24.3)	(61.4)	(14.3)	(100.0)
Joint	30	171	37	238
	(12.6)	(71.8)	(15.5)	(100.0)
Total	130	424	96	650
Df:2	Chi-square : 12.941		P Value: .000	Significant

There are 412(63.4%) consumers who belongs to nuclear family, of them 100(24.3%) have low level of environmental concern; 253(61.4%) have moderate level of environmental concern and 59(14.3%) have high level of environmental concern.

Out of 238(36.6%) consumers who belongs to joint family, 30(12.6%) have low level of environmental concern; 171(71.8%) have moderate level of environmental concern and 37(15.5%) have high level of environmental concern.

It can be seen from the table that, Consumers who belongs to joint family consumers have high level of environmental concern, Consumers who belongs to nuclear family low level of environmental concern. As the calculated P value is less than 0.01, there exist a significant association between type of family and level of environmental concern. Hence, the null hypothesis is rejected.

4.3.4.8 Number of Family Members and Level of Environmental Concern

The level of environmental concern may vary on the basis of number of family members. To find whether number of family is associated with level of environmental concern the following hypothesis has been framed and tested.

H₀: Number of family members is not associated with level of environmental concern.

Table 4.11
Number of Family Members and Level of Environmental Concern

No. of Family Members	Level of environmental concern			Total
	Low	Moderate	High	
UP to 3	60	144	26	230
	(26.1)	(62.6)	(11.3)	(100.0)
3 – 5	54	181	52	287
	(18.8)	(63.1)	(18.1)	(100.0)
Above 5	16	99	18	133
	(12.0)	(74.4)	(13.5)	(100.0)
Total	130	424	96	650
Df:4	Chi-square : 15.049		P Value: .000	Significant

There are 230(35.4%) consumers whose family comprises of up to 3 members. of them, 60(26.1%) have low level of environmental concern; 144(62.6%) have moderate level of environmental concern and 26(11.3%) have high level of environmental concern.

Out of 287(44.2%) consumers whose family consist 3 to 5 members, 54(18.8%) have low level of environmental concern; 181(63.1%) have moderate level of environmental concern and 52(18.1%) have high level of environmental concern.

Among the 133 (20.5%) consumers whose family consist of more than 5 members, 16(12.0%) have low level of environmental concern; 99(74.4%) have moderate level of environmental concern and 18(13.5%) have high level of environmental concern.

It can be inferred from the table that, Consumers whose family consist 3 to 5 members have high level of environmental concern. Consumers whose family consist up to 3 members have low level of environmental concern. As the calculated P value is less than 0.01, there exist a significant association between number of family members and level of environmental concern. Hence, the null hypothesis is rejected.

4.3.4.9 Monthly Income and Level of Environmental Concern

The level of environmental concern may vary on the basis of monthly income. To find whether monthly income is associated with level of environmental concern the following hypothesis has been framed and tested.

H_o : *Monthly income is not associated with level of environmental concern.*

Table 4.12
Monthly Income and Level of Environmental Concern

Monthly Income (Rs.)	Level of environmental concern			Total
	Low	Moderate	High	
Up to 30000	60	191	38	289
	(20.8)	(66.1)	(13.1)	(100.0)
30001 – 60000	51	194	51	296

	(17.2)	(65.5)	(17.2)	(100.0)
Above 60000	19	39	7	65
	(29.2)	(60.0)	(10.8)	(100.0)
Total	130	424	96	650
Df:4	Chi-square : 6.730		P Value: .151	Not Significant

There are 289(44.5%) consumers whose monthly income is up to Rs.30000.of them, 60(20.8%) have low level of environmental concern; 191(66.1%) have moderate level of environmental concern and 38(13.1%) have high level of environmental concern.

Out of 296(45.5%) consumers whose monthly income is from Rs.30001 to Rs.60000, 51(17.2%) have low level of environmental concern; 194(65.5%) have moderate level of environmental concern and 51(17.2%) have high level of environmental concern.

Among the 65 (10.0%) consumers whose monthly income is from Rs.60000,19(29.2%) have low level of environmental concern; 39(60.0%) have moderate level of environmental concern and 7(10.8%) have high level of environmental concern.

It can be inferred from the table that, Consumers whose monthly income Rs.30001 to Rs. 60000 have high level of environmental concern. Consumers whose monthly income is above Rs. 60000 have low level of environmental concern. As the calculated P value is less than 0.01, there is no association between monthly income and level of environmental concern. Hence, the null hypothesis is accepted.

4.3.4.10 Family Income and Level of Environmental Concern

The level of environmental concern may vary on the basis of family income. To find whether family income is associated with level of environmental concern the following hypothesis has been framed and tested.

H₀: Family income is not associated with level of environmental concern.

Table 4.13
Family Income and Level of Environmental Concern

Family Income (Rs.)	Level of environmental concern			Total
	Low	Moderate	High	
Up to 50000	47	148	34	229
	(20.5)	(64.6)	(14.8)	(100.0)
50001 – 100000	49	183	48	280
	(17.5)	(65.4)	(17.1)	(100.0)
Above 100000	34	93	14	141
	(24.1)	(66.0)	(9.9)	(100.0)
Total	130	424	96	650
Df:4	Chi-square : 5.430		P Value: .246	Not Significant

There are 229(35.2%) consumers whose family income is up to Rs.50000. Of them, 49(20.5%) have low level of environmental concern; 148(64.6%) have moderate level of environmental concern and 34(14.8%) have high level of environmental concern.

Out of 280(43.1%) consumers whose family income is from Rs.50001 to Rs.100000, 49(17.5%) have low level of environmental concern; 183(65.4%) have moderate level of environmental concern and 48(17.1%) have high level of

environmental concern.

Among 141 (21.7%) consumers whose family income is from Rs.100000, 34(24.1%) have low level of environmental concern; 93(66.0%) have moderate level of environmental concern and 14(9.9%) have high level of environmental concern. It can be inferred from the table that, Consumers whose family income is Rs.50001 to Rs.100000 have high level of environmental concern. Consumers whose family income is above Rs.100000 have low level of environmental concern. As the calculated P value is less than 0.01, there is no association between family income and level of environmental concern. Hence, the null hypothesis is accepted.

4.3.4.11 Health Ailments and Level of Environmental Concern

The level of environmental concern may vary on the basis of health ailments they suffer. To find whether health ailments are associated with level of environmental concern the following hypothesis has been framed and tested.

H_0 : Health ailments is not associated with level of environmental concern.

Table 4.14
Health Ailments and Level of Environmental Concern

Health Ailments	Level of environmental concern			Total
	Low	Moderate	High	
Sugar	40	63	20	123
	(32.5)	(51.2)	(16.3)	(100.0)
BP	24	64	25	113
	(21.2)	(56.6)	(22.1)	(100.0)
Allergy	3	34	15	52
	(5.8)	(65.4)	(28.8)	(100.0)
Coronary Troubles	0	2	0	2

	(0.0)	(100.0)	(0.0)	(100.0)
Cholesterol	0	5	12	17
	(0.0)	(29.4)	(70.6)	(100.0)
Overweight	23	8	3	34
	(67.6)	(23.5)	(8.8)	(100.0)
Others	2	3	0	5
	(40.0)	(60.0)	(0.0)	(100.0)
Nil	38	245	21	304
	(12.5)	(80.6)	(6.9)	(100.0)
Total	130	424	96	650
Df:14	Chi-square : 157.447		P Value: .000	Significant

There are 123(18.9%) consumers who are suffer from sugar. Of them, 40(32.5%) have low level of environmental concern; 63(51.2%) have moderate level of environmental concern and 20(16.3%) have high level of environmental concern.

Out of 113(17.4%) consumers who are suffer from Bp 24(21.2%) have low level of environmental concern; 64(56.6%) have moderate level of environmental concern and 25(22.1%) have high level of environmental concern.

There are 52(8.0%) consumers who are suffer from allergy 3(5.8%) have low level of environmental concern; 34(65.4%) have moderate level of environmental concern and 15(28.8%) have high level of environmental concern.

There are 2(2%) consumers who are suffer from coronary troubles, 2(100.0%) have moderate level of environmental concern and 0(0.0%) have high level of environmental concern.

Among the 17(2.6%) consumers who are suffer from cholesterol, 5(29.4%) have moderate level of environmental concern and 12(70.6%) have high level of environmental concern.

Out of 34(5.2%) consumers who are suffer from overweight 23(67.6%) have low level of environmental concern; 8(23.5%) have moderate level of environmental concern and 3(8.8%) have high level of environmental concern.

The table that shows from 5(8%) consumers who are suffer from others health ailments 2(40.0%) have low level of environmental concern; 3(60.0%) have moderate level of environmental concern and 0(0.0%) have high level of environmental concern.

Among the 304(46.8%) consumers who are not suffer from any health ailments, 38(12.5%) have low level of environmental concern; 245(80.6%) have moderate level of environmental concern and 21(6.9%) have high level of environmental concern.

It can be inferred from the table that, Consumers who are suffer from cholesterol have high level of environmental concern. Consumers who are suffer from overweight have low level of environmental concern. As the calculated P value is less than 0.01, there exist a significant association between health ailments and level of environmental concern. Hence, the null hypothesis is rejected.

4.3.4.12 Membership in Association/Club and Level of Environmental Concern

The level of environmental concern may vary on the basis of member is association. To find whether member in association is associated with level of environmental concern the following hypothesis has been framed and tested.

H₀ : Member in association is not associated with level of environmental concern.

Table 4.15
Member in Association/Club and Level of Environmental Concern

Member is association	Level of environmental concern			Total
	Low	Moderate	High	
Yes	25	67	52	144
	(17.4)	(46.5)	(36.1)	(100.0)
No	105	357	44	506
	(20.8)	(70.6)	(8.7)	(100.0)
Total	130	424	96	650
Df:2	Chi-square : 67.611		P Value: .000	Significant

There are 144(22.2%) consumers who are members in association, 25(17.4%) have low level of environmental concern; 67(46.5%) have moderate level of environmental concern and 52(36.1%) have high level of environmental concern.

Out of 506(77.8%) consumers who are not member is association, 105(20.8%) have low level of environmental concern; 357(70.6%) have moderate level of environmental concern and 44(8.7%) have high level of environmental concern.

It can be seen from the table that, Consumers who are member is association have high level of environmental concern. Consumers who are not member in association have low level of environmental concern. As the calculated P value is less than 0.01, there exist significant association between member in association and level of environmental concern. Hence, the null hypothesis is rejected.

4.4 Conclusion

Variables Associated with Environmental Concern, an attempt has been made to identify the variables associated

with environmental concern through chi-square test. It is found that almost all Socio Economic Variables are found associated. Consumer Buying Behavior and Satisfaction on Eco-Friendly Products has been discussed in Next Chapter.

CHAPTER V

CONSUMER BUYING BEHAVIOUR ON ECO - FRIENDLY PRODUCTS

5.1 Introduction

This chapter deals with Consumer's Preference, Frequency of Purchase, Perception on Eco-Friendly Product and Barriers in Eco Friendly Products.

5.2 Buying Behaviour of Eco-Friendly Product

5.2.1 Eco-Friendly Products which first come to mind

To find out the eco-friendly products that come first in the minds of consumer's, simple percentage has been employed.

Table 5.1
Eco-Friendly Products which first come to mind

S.No	Eco-Friendly Products	No of Respondents	Percentage
1	Organic Food Products	118	18.1
2	Electric Items	88	13.5
3	Appliances	55	8.4
4	Ayuurvedic Medicines	54	9.8
5	Groceries	92	14.1
6	Cosmetics	49	7.2
7	Jute Bags	96	14.5
8	Paper Cups	44	6.7
9	Solar System	38	5.3
10	Vehicles	16	2.4

The data shows that, majority 118 (18.1%) of consumers said that organic food products, jute bags, groceries are first come to their mind, when they think about eco-friendly

products followed by electric items, appliances, ayurvedic medicines, cosmetics, paper cups, solar system, vehicles and so on.

5.2.2 Preference for buying Eco- Friendly Product -Weighted Average Ranking Method

To find out the Consumers preference towards eco-friendly products weighted average ranking method has been employed.

Table 5.2
Preference for buying Eco- Friendly Product -Weighted Average Ranking Method

S. No	Statement	S.A	A	N	DA	S.D.A	Total	Mean Score	Mean	Rank
1	I want to preserve the earth	472	166	12	0	0	650	3060	4.71	1
		2360	664	36	0	0				
2	I just like eco-friendly products	182	396	72	0	0	650	2710	4.17	2
		910	1584	216	0	0				
3	I feel trendy/fashionable when I purchase eco-friendly products	155	260	102	133	0	650	2387	3.67	4
		775	1040	306	266	0				
4	When government puts subsidy on eco-friendly products thus bringing them with in my budget	267	256	106	7	14	650	2705	4.16	3
		1335	1024	318	14	14				
5	Health issue	99	151	119	106	175	650	1843	2.84	5
		495	604	357	212	175				

Table 5.2 indicates that, majority of the consumers states that “I want to preserve the earth” secured rank one with mean score 4.71 followed by I just like eco-friendly products, When Government puts subsidy on eco-friendly products thus bringing them within my budget and so on.

5.2.3 Sources of Awareness - Garrett Ranking Technique

The first step of marketing any product is creating awareness for it. Awareness is that state or ability to perceive, to feel, or to be conscious of events, objects, or sensory patterns. Determine the most effective medium for your brand by gathering data about which medium is most used by a consumer, how they retain the information that is passed on through those medium, whether the impact is positive or negative. Compare this data with that of the competitive products and you will get a workable strategy for future advertisements.

Garrett Ranking Technique has been used to ascertain the sources of awareness on Eco-friendly products. Under the Garrett ranking technique the percentage position is calculated by using the following formula:

Percentage Position = $100 (R_{tj} - 0.5) / N_j$ Where R_{tj} = Rank given for i th variable by the j th consumers

N_j = Number of variables ranked by the consumers.

The consumers are asked to rank the ten questions relating to preference to enter into eco-friendly products.

By referring the Garrett table the per cent position is converted into scores. Then for each factor, the scores of each consumers are added and then mean value is calculated. The factors having highest mean value is considered to be the most important. Scale values as per Garrett ranking technique for first to ten ranks are as: 81,70,63,57,52,47,36,29 and 18 respectively. The percentage position of each rank is made

into score by referring factors is summed up for assigning rank. The following table exhibits the sources of awareness on Eco-friendly products.

Table 5.3
Sources of Awareness - Garrett Ranking Technique

S.No	Sources	1	2	3	4	5	6	7	8	9	10	Total	Total Score	Mean Score	Rank
		81	70	63	57	52	47	42	36	29	18				
1	Television	104	216	83	85	44	16	35	27	12	28	650	39952	61.46	1
		8424	15120	5229	4845	2288	752	1470	972	348	504				
2	Social Media	151	59	90	80	67	57	34	25	50	37	650	37198	57.23	2
		12231	4130	5670	4560	3484	2679	1428	900	1450	666				
3	Family Members	109	73	66	87	73	67	59	41	30	45	650	35635	54.82	3
		8829	5110	4158	4959	3796	3149	2478	1476	870	810				
4	Friends/ Relatives	101	83	92	73	48	53	59	44	64	33	650	35447	54.53	4
		8181	5810	5796	4161	2496	2491	2478	1584	1856	594				
5	Newspaper /Magazines	75	88	70	64	98	59	35	79	34	48	650	34326	52.81	5
		6075	6160	4410	3648	5096	2773	1470	2844	986	864				
6	Seminars/	18	42	55	66	53	69	69	57	95	126	650	2759	42.4	9

S.No	Sources	1	2	3	4	5	6	7	8	9	10	Total	Total Score	Mean Score	Rank
		81	70	63	57	52	47	42	36	29	18				
	Conferences												7	6	
		1458	2940	3465	3762	2756	3243	2898	2052	2755	2268				
7	Super Market staff	33	9	39	65	73	74	67	98	102	90	650	276 59	42.55	8
		2673	630	2457	3705	379 6	347 8	281 4	352 8	295 8	1620				
8	Environment group	9	29	48	54	71	115	83	87	114	40	650	286 02	44.00	6
		729	203 0	3024	3078	369 2	540 5	348 6	313 2	330 6	720				
9	Government agencies	18	19	61	36	65	66	119	94	52	120	650	272 15	41.87	10
		1458	133 0	3843	2052	338 0	310 2	499 8	338 4	150 8	2160				
10	Word of mouth	29	33	46	39	47	80	96	98	101	81	650	279 31	42.97	7
		2349	231 0	2898	2223	244 4	376 0	403 2	352 8	292 9	1458				

It is inferred that in the sources of awareness television tops the rank followed by social media, family members and the like.

5.2.4 Point of Purchase - Garrett Ranking Technique

The point of purchase represents the time and place at which all the elements of the sale the consumer, the money, and the product come together. By using various communications vehicles, including displays, packaging, sales promotions, in-store advertising, and salespeople, at the point of purchase (POP), the marketer hopes to influence the consumer's buying decision.

Here an attempt to made to find out what the respondents buy Eco-friendly products.

Garrett Ranking Technique has been used to ascertain the point of purchase Eco-friendly products. Under the Garrett ranking technique the percentage position is calculated by using the following formula:

Percentage Position = $100 (R_{tj} - 0.5) / N_j$ Where R_{tj} = Rank given for i th variable by the j th consumers

N_j = Number of variables ranked by the consumers.

The consumers are asked to rank the six questions relating to point of purchase buy Eco-friendly products.

By referring the Garrett table the percent position is converted into scores. Then for each factor, the scores of each consumer are added and then mean value is calculated. The factors having highest mean value is considered to be the most important. Scale values as per Garrett ranking technique for first to six ranks are as: 77,63,54,45, 36 and 23 respectively. The percentage position of each rank is made into score by referring factors is summed up for assigning rank. The following table exhibits the point of purchase eco-friendly products.

Table 5.4
Point of Purchase - Garrett Ranking Technique

S.No	Point of Purchase	1	2	3	4	5	6	Total	Total Score	Mean Score	Rank
		77	63	54	45	36	23				
1	Retail Malls	77	175	169	73	77	79	650	33954	52.24	3
		5929	11025	9126	3285	2772	1817				
2	Local shops	177	80	103	94	90	106	650	34139	52.52	2
		13629	5040	5562	4230	3240	2438				
3	Internet	242	108	76	87	85	52	650	37713	58.02	1
		18634	6804	4104	3915	3060	1196				
4	Teleshopping	58	129	104	106	114	139	650	30280	46.58	4
		4466	8127	5616	4770	4104	3197				
5	Specialized shops/units	51	84	96	126	155	138	650	28827	44.35	6
		3927	5292	5184	5670	5580	3174				
6	Factory outlet	45	79	102	161	130	133	650	28934	44.51	5
		3465	4977	5508	7245	4680	3059				

From the analysis is inferred that, the point of purchase is majority of internet followed by local shops, retail malls and the like.

5.2.5 Features of eco- friendly product - Garrett Ranking Technique

The popularity of eco-friendly products is good news not only for the people concerned about ecology but also for retailers. It is profitable to sell reusable and disposable items since most of the people today care about what they buy, use and eat, but on top of that, it also gives a nice feeling of contribution to the global environment protection. A product that meets one of these criteria of possessing qualities that will protect the environment; replaced artificial ingredients with natural ingredients or products that are non toxic, energy and water-efficient, harmless to the environment, recyclable and biodegradable. Here an attempt has been made to identify which features of the product gives identify to consumers as Eco-friendly product like no use of pesticide, preservatives, recyclable etc.,

Garrett Ranking Technique has been used to ascertain the features that respondents Eco-friendly products. Under the Garrett ranking technique the percentage position is calculated by using the following formula:

Percentage Position = $100 (R_{tj} - 0.5) / N_j$ Where R_{tj} =Rank given for i th variable by the j th consumers

N_j = Number of variables ranked by the consumers.

The consumers are asked to rank the nine questions relating to preference to enter into eco-friendly products.

By referring the Garrett table the per cent position is converted into scores. Then for each factor, the scores of each consumer are added and then mean value is calculated. The factors having highest mean value is considered to be the

most important. Scale values as per Garrett ranking technique for first to nine ranks are as: 80, 69,61,55,50,44,38,30 and 19 respectively. The percentage position of each rank is made into score by referring factors is summed up for assigning rank. The following table exhibits the features of eco-friendly products.

Table 5.5
Features of eco- friendly product - Garrett Ranking Technique

S.No	Eco-friendly product	1	2	3	4	5	6	7	8	9	Total	Total Score	Mean Score	Rank
		80	69	61	55	50	44	38	30	19				
1	No use of pesticides	54	149	67	110	84	39	59	33	55	650	34931	53.74	1
		4320	10281	4087	6050	4200	1716	2242	990	1045				
2	No preservatives or additives	123	64	77	62	73	71	59	73	48	650	34481	53.05	2
		9840	4416	4697	3410	3650	3124	2242	2190	912				
3	Should contain ayurvedic or natural ingredients	73	69	94	93	51	106	49	48	67	650	33239	51.14	4
		5840	4761	5734	5115	2550	4664	1862	1440	1273				
4	Less environmental impact while manufacturing the products	119	62	58	73	73	71	70	59	65	650	33790	51.98	3

		9520	4278	3538	4015	3650	3124	2660	1770	1235				
5	Completely biodegradable	81	65	51	85	73	58	82	95	60	650	32059	49.32	5
		6480	4485	3111	4675	3650	2552	3116	2850	1140				
6	Mostly biodegradable	42	70	70	65	44	74	106	78	101	650	29778	45.81	9
		3360	4830	4270	3575	2200	3256	4028	2340	1919				
7	Recyclable	44	57	90	50	79	79	94	67	90	650	30411	46.79	8
		3520	3933	5490	2750	3950	3476	3572	2010	1710				
8	Trusted brand	54	55	93	53	96	54	41	101	103	650	30424	46.81	7
		4320	3795	5673	2915	4800	2376	1558	3030	1957				
9	A brand which does a lot of green initiatives	58	56	52	59	80	100	92	97	56	650	30791	47.37	6
		4640	3864	3172	3245	4000	4400	3496	2910	1064				

The table 5.5 indicates that, consumers ranked No use of pesticides as the first features of eco-friendly products followed by the No preservatives or additives, less environmental impact while manufacturing products and so on.

5.2.6 Most Preferred Eco-Friendly Products - Weighted Average Ranking Method

To find out the most preferred eco-friendly products simple percentage analysis has been used.

Table 5.6
Most Preferred Eco-Friendly Products – Weighted Average Ranking Method

Particulars	NIL	LessPurchased1	2	3	4	MostPurchased5	Mean score	Rank
CFL Bulbs	110	263	66	41	22	148	5.95	7
	16.8	40.5	10.2	6.3	3.4	22.7		
Healthcare/ Cosmetic Products	97	157	61	60	30	245	7.07	5
	14.9	24.2	9.4	9.2	4.6	37.7		
Electronics appliance(with energy star ratings)	159	283	49	44	33	82	5.35	10
	24.5	43.5	7.5	6.8	5.1	12.6		
Solar Panels/ solar water heater.	155	303	22	39	12	119	5.49	8
	23.8	46.6	3.4	6.0	1.8	18.4		
Soap	68	134	25	54	50	319	7.86	1
	10.5	20.6	3.8	8.3	7.7	49.1		
5 star energy efficient AC	230	262	29	24	9	96	5.49	9
	35.4	40.3	4.5	3.7	1.4	14.7		
Energy efficient laptop	197	240	38	26	20	129	6.25	6

Particulars	NIL	LessPurchased1	2	3	4	MostPurchased5	Mean score	Rank
	30.3	36.9	5.8	4.0	3.1	19.9		
5 star energy efficient Refrigerator	171	285	36	32	16	110	5.31	11
	26.3	43.8	5.5	4.9	2.6	16.9		
Battery operated car	256	263	28	19	19	65	4.97	12
	39.4	40.5	4.3	2.9	2.9	10.0		
Hybrid car- works on bothfuel and electricity	263	288	29	18	7	45	4.42	13
	40.5	44.3	4.5	2.8	1.1	6.8		
Organic Food	92	146	50	50	16	296	7.84	2
	14.2	22.5	7.7	7.7	2.5	45.4		
Ayurvedic Medicine	107	128	41	57	33	284	7.78	3
	16.5	19.7	6.3	8.8	5.1	43.6		
Mobile phone with 4 day battery back-up	191	219	56	38	21	125	4.38	14
	29.4	33.7	8.6	5.8	3.2	19.3		
Salt	96	96	22	72	81	283	7.77	4
	14.8	14.8	3.4	11.1	12.5	43.4		

The analysis result indicates that, consumers mostly purchase soaps, organic food, ayurvedic medicine, salt, healthcare/ cosmetic products and energy efficient laptop. Mean while, consumers purchased CFL bulbs, solar panels/solar water heater, Ac, electronic appliances, refrigerators, battery operated cars less frequently.

5.2.7 Repeat your Purchase of eco-friendly products

To find out the repeat your purchase of eco-friendly product simple percentage analysis has been used.

Table 5.7

Repeat your Purchase of eco-friendly products

Repeat your Purchase	Numbers	Percentage
Sometimes	414	63.7
Often	144	22.2
Always	92	14.2
Total	650	100.0

The data shows that, majority of the consumers 414(63.7%) of the repeat purchase sometimes, 144(22.7%) of the consumers repeat purchase often and the rest of 92(14.2%)of the consumers repeat purchase of always.

5.2.8 Willingness to Recommend Eco-friendly products

To find out the willingness to recommend of eco-friendly product simple percentage analysis has been used.

Table 5.8

Willingness to Recommend Eco-friendly products

Willingness to Recommend Eco-friendly products	Numbers	Percentage
Very much willing	287	44.2
Willing	284	43.7

Neutral	79	12.2
Total	650	100.0

It is clear from table 5.8, majority 277(44.2%) consumers willingness to recommend green products in very much willing, 284(43.7%) willing to recommend eco-friendly products and the rest of 79(12.2%) of the consumers are neutral in eco-friendly products.

5.2.9 Difference in Conventional and Eco Labeled Product

To find out the difference in conventional and eco labeled product simple percentage analysis has been used.

Table 5.9

Difference in Conventional and Eco Labeled Product

Difference in Conventional and Eco Labeled Product	No. of respondents	Percentage
Yes	411	63.2
No	239	36.8
Total	650	100

The data showed that majority of the consumers 411(63.2%) of the consumers said that there is difference in eco labeled product. Mean while 239(36.8%) of consumers opines that there is no difference in conventional and eco labeled product.

5.2.10 Shortage of Eco Labeled Product

To find out the shortage of eco labeled product simple percentage analysis has been used.

Table 5.10
Shortage of Eco Labeled Product

Shortage of Eco Labeled Product	No. of respondents	Percentage
Yes	333	51.2
No	317	48.8
Total	650	100

It is evident from table 5.10 more than half 333(51.2%) of the consumers said that there is shortage in eco labeled product. Mean while 317(48.8%) of consumers said that there is no shortage in eco labeled product.

5.2.11 Shelf Space for Eco Labeled Product

To find out the shelf space for eco labeled product simple percentage analysis has been used.

Table 5.11
Shelf Space for Eco Labeled Product

Shelf Space for Eco Labeled Product	No. of Respondents	Percentage
Yes	454	69.8
No	196	30.2
Total	650	100

One third 454(69.8%) of the consumer opines that, there is self space for eco friendly-product. and rest 196(30.2%) of consumers opines that there is no self space for eco friendly-product.

5.2.12 Effective Marketing Strategy for Eco-Friendly Products - Weighted Average Ranking Method

Consumers are influenced by various marketing strategies of effective while buying the product. In order to analyze the marketing strategies of the consumer while buying Eco-Friendly Product, ascertain which is effective marketing strategies Weighted Average Ranking method has been applied. Scores on 5 point likert scale has been used.

5 - SA Strongly agree, A- agree, UD-Un decided, DA-Disagree, SDA- Strongly Disagree. The score has been analyzed using weighted average mean based on the rank for each factor.

Table 5.12
Effective Marketing Strategy for Eco-Friendly Products Weighted Average Ranking Method

S.No	Statements	SA	A	UD	DA	SDA	Total	Mean Score	Mean	Rank
1	Ads with green themes and message about saving the environment are good for making people aware about Eco-Friendly Product	203	221	62	41	123	650	2290	3.52	9
		1015	884	186	82	123				
2	Green labels explaining the greenness of the product is good way of creating awareness about a Eco- Friendly Product.	184	235	90	90	51	650	2361	3.63	8
		920	940	270	180	51				
3	Educational campaigns	190	251	108	35	66	650	2414	3.71	6

S.No	Statements	SA	A	UD	DA	SDA	Total	Mean Score	Mean	Rank
	are good strategy.									
		950	1004	324	70	66				
4	Product advertised in the ads using green themes are trust worthy.	174	228	136	70	42	650	2372	3.65	7
		870	912	408	140	42				
5	Ads should tell how the product is green.	194	239	132	58	27	650	2465	3.79	2
		970	956	396	116	27				
6	Eco- Friendly Product should be marketed in environment friendly manner.	213	224	125	33	55	650	2457	3.78	3
		1065	896	375	66	55				
7	Using educational marketing messages	221	198	112	65	54	650	2417	3.72	5

S.No	Statements	SA	A	UD	DA	SDA	Total	Mean Score	Mean	Rank
	regarding greenness of the product on the label helps in building consumer's confidence in the product.									
		1105	792	336	130	54				
8	Ads promoting Eco-Friendly Product only talk about the greenness of the product not about how they perform.	107	271	157	60	55	650	2265	3.48	10
		535	1084	471	120	55				
9	Taking certifications which declare a product as green is a good way of marketing Eco- Friendly Product.	227	194	112	60	57	650	2424	3.73	4

S.No	Statements	SA	A	UD	DA	SDA	Total	Mean Score	Mean	Rank
		1135	776	336	120	57				
10	I have more confidence in unadvertised Eco-Friendly Product than in advertised ones**.	149	208	137	117	39	650	2261	3.48	10
		745	832	411	234	39				
11	People should be educated about the Eco- Friendly Product through some public forums.	265	197	83	65	40	650	2532	3.90	1
		1325	788	249	130	40				

Table 5.12 indicates that, majority of the consumers states that, "People should be educated about the Eco- Friendly Product through some public forums", it secured rank one with mean value 3.90. Mean while "I have more confidence in unadvertised Eco- Friendly Product than in advertised ones". stood at least rank with mean value score 3.48.

5.2.13 Level Of Preference - Chi Square Test

In order to examine the variables that are associated with the level of preference of the consumers towards eco-friendly product, preference Index has been developed. Answers to questions relating to the level of preference of the consumers towards eco-friendly products scores have been assigned for developing the preference index. Consumers were asked to rate 5 statement for preferring eco-friendly products using five point likert scales. The Scores are 5,4,3,2, and 1 respectively. There are 5 questions, so the maximum score is 25 (5x5). Each consumer has been assigned scores. The 'Preference Index' have been calculated by totaling the scores and multiplying by hundred. The average preference index of 650 consumers is 78.21. The preference index of 650 consumers ranges between 68.78 and 87.64. To classify the consumers with moderate and high level of preference, mean and standard deviation have been used. The mean preference index is 87.25 and standard deviation is 9.44.

- Consumers with low level of preference are those whose preference index is up to 68.77 (Mean - SD, i.e 87.65 - 9.44).
- Consumers with high level of preference are those whose preference index is above 87.25 (Mean plus standard deviation,i.e. 87.25 - 9.44).
- Consumers with moderate level of preference are those whose preference index ranges between 68.78 and 87.64.

- There are 154 (23.69%) consumers with low level of preference; 375(57.69%) with moderate level of preference and 121(18.61%) with high Level of preference in eco-friendly product.

5.2.14 Variables associated with Level of Preference

Chi-square test has been employed to examine the association between the selected variables and Level of preference s faced in eco-friendly product. The variables such as Age, Gender, marital status, Area of operation, Educational Qualification, Occupation, Type of family, No of family members, Monthly income ,Family income, Health ailments, Member is association, concern towards environment, perception and satisfaction have been tested their association with preference index. To find the association between the variables and Level of preference, Chi-Squaretest have been employed. The level of confidence chosen are five and one percent.

5.2.14.1 Age and Level of Preference

Consumers level of preferencemay differ based on their age. In order to find whether age is associated with level of preference, the following hypothesis has been framed and tested.

H₀: Age is not associated with level of preference.

Table 5.13
Age and Level of Preference

Age (in Years)	Level of preference			Total
	Low	Moderate	High	
Up to 25	48	113	32	193
	(24.9)	(58.5)	(16.6)	(100.0)
26 – 35	65	136	51	252
	(25.8)	(54.0)	(20.2)	(100.0)

36 – 45	30	99	32	161
	(18.6)	(61.5)	(19.9)	(100.0)
Above 45	11	27	6	44
	(25.0)	(61.4)	(13.6)	(100.0)
Total	154	375	121	650
Df:6	Chi-square : 4.998		P Value: .544	Not Significant

There are 193(29.7%) consumers whose age is up to 25. of them, 48(24.9%) have low level of preference; 113(58.5%) have moderate level of preference and 32(16.6%) have high level of preference.

Out of 252(38.8%) consumers whose age group ranges between 26 and 35, 65(25.8%) have low level of preference; 136 (54.0%) have moderate level of preference and the rest 51 (20.2%) have high level of preference.

Among the 161(24.8%) consumers whose age group ranges between 36 and 45, 30 (21.1%) have low level of preference; 99 (61.5%) have moderate level of preference and the rest 32 (19.9%) have high level of preference.

Table shows that of 44 (6.8%) consumers whose age is above 45, 11(25.0%) have low level of preference; 27(61.4%) have moderate level of preference and 6(13.6%) have high level of preference in eco friendly product

Consumers whose age group ranges between 26 and 35 have high level of preference. As the Calculated P value is less than 0.01, there is no association between age and level of preference. Hence, the null hypothesis is accepted.

5.2.14.2 Gender and Level of Preference

The level of preference may vary on the basis of gender. To find whether gender is associated with level of preference the following hypothesis has been framed and tested.

H_0 : Gender is not associated with level of preference.

Table 5.14
Gender and Level of Preference

Gender	Level of preference			Total
	Low	Moderate	High	
Male	95	195	66	356
	(26.7)	(54.8)	(18.5)	(100.0)
Female	59	180	55	294
	(20.1)	(61.2)	(18.7)	(100.0)
Total	154	375	121	650
Df:2	Chi-square : 4.139		P Value: .126	Not Significant

There are 356(54.8%) male consumers, of them 95(26.7%) have low level of preference; 195(54.8%) have moderate level of preference and 66 (18.5%) have high level of preference.

Out of 294(45.2%) female consumers, 59 (20.1%) have low level of preference; 180(61.2%) have moderate level of preference and 55(18.7%) have high level of preference.

It can be seen from the table that, Female consumers have high level of preference, while male consumers have low level of preference. As the calculated P value is less than 0.01, there is no associations between gender and level of preference. Hence, the null hypothesis is accepted.

5.2.14.3 Marital Status and Level of Preference

The level of preference may vary on the basis of marital status. To find whether marital status is associated with level of preference the following hypothesis has been framed and tested.

H_0 : Marital status is not associated with level of preference.

Table 5.15
Marital Status and Level of Preference

Marital Status	Level of preference			Total
	Low	Moderate	High	
Single	69 (30.7)	122 (54.2)	34 (15.1)	225 (100.0)
Married	85 (20.0)	253 (59.5)	87 (20.5)	423 (100.0)
Total	154	375	121	650
Df:2	Chi-square : 10.053		P Value: .007	Significant

There are 225(34.6%) consumers who are single, 69(30.7%) have low level of preference; 122(54.2%) have moderate level of preference and 34(15.1%) have high level of preference.

Out of 423(65.7%) consumers who are married, 85(20.0%) have low level of preference; 253(59.5%) have moderate level of preference and 87(20.5%) have high level of preference.

It can be seen from the table that, Married consumers have high level of preference, while single consumers have low level of preference. As the calculated P value is less than 0.01, there exist a significant association between marital status and level of preference. Hence, the null hypothesis is rejected.

5.2.14.4 Area of Residence and Level of Preference

The level of preference may vary on the basis of area of residence. To find whether area of residence is associated with level of preference the following hypothesis has been framed and tested.

H₀:Area of residence is not associated with level of preference

Table 5.16
Area of Residence and Level of Preference

Area of Residence	Level of preference			Total
	Low	Moderate	High	
Rural	94	225	66	385
	(24.4)	(58.4)	(17.1)	(100.0)
Urban	60	150	55	265
	(22.6)	(56.6)	(20.8)	(100.0)
Total	154	375	121	650
Df:2	Chi-square : 1.400		P Value: .496	Not Significant

There are 385(59.6%) consumers residence in rural area, 94(24.4%) have low level of preference; 225(58.4%) have moderate level of preference and 66(17.1%) have high level of preference.

Out of 265(40.8%) consumers residence in urban area, 60(22.6%) have low level of preference; 150(56.6%) have moderate level of preference and 55(20.8%) have high level of preference.

It can be seen from the table that, Consumers who are urban area have high level of preference. Consumers who are rural area have low level of preference. As the calculated P value is less than 0.01, there is no association between area of residence and level of preference. Hence, the null hypothesis is accepted.

5.2.14.5 Educational Qualification and Level of Preference

The level of preference may vary on the basis of educational qualification. To find whether educational qualification is associated with level of preference the following hypothesis has been framed and tested.

H₀ : Educational qualification is not associated with level of preference.

Table 5.17
Educational Qualification and Level of Preference

Educational Qualification	Level of preference			Total
	Low	Moderate	High	
Up to Higher Secondary	22	67	18	107
	(20.6)	(62.6)	(16.8)	(100.0)
Under Graduate	78	146	48	272
	(28.7)	(53.7)	(17.6)	(100.0)
Post Graduate	42	114	39	195
	(21.5)	(58.5)	(20.0)	(100.0)
Professionals	10	42	11	63
	(15.9)	(66.7)	(17.5)	(100.0)
Diploma	2	6	5	13
	(15.4)	(46.2)	(38.5)	(100.0)
Total	154	375	121	650
Df:8	Chi-square : 11.409		P Value: .180	Not Significant

There are 107(16.5%) consumers whose educational qualification is up to higher secondary. Of them, 22(20.6%) have low level of preference; 67(62.6%) have moderate level of preference and 18(16.8%) have high level of preference.

There are 272(41.8%) consumers whose educational qualification is undergraduate. Of them, 54(19.9%) have low level of preference; 180(66.2%) have moderate level of preference and 38(14.0%) have high level of preference.

Out of 195(30.0%) consumers whose educational qualification is post graduate. Of them, 31(15.9%) have low level of preference; 126(64.6%) have moderate level of preference and 38(19.5%) have high level of preference.

preference and 38(19.5%) have high level of preference.

Among the 63(9.7%) consumers whose educational qualification is professionals, 6(9.5%) have low level of preference; 45(71.4%) have moderate level of preference and 12(19.0%) have high level of preference.

Out of 13(2.0%) consumers whose educational qualification is diploma, 0(0.0%) have low level of preference; 7(53.8%) have moderate level of preference and 6(46.2%) have high level of preference.

It can be inferred from the table that, Consumers whose educational qualification diploma have high level of preference. Consumers whose educational qualification is under graduate have low level of preference. As the calculated P value is less than 0.01, there is no association between educational qualification and level of preference. Hence, the null hypothesis is accepted.

5.2.14.6 Occupation and Level of Preference

The level of preference may vary on the basis of occupation. To find whether occupation is associated with level of preference the following hypothesis has been framed and tested.

H₀: occupation is not associated with level of preference.

Table 5.18
Occupation and Level of Preference

Occupation	Level of preference			Total
	Low	Moderate	High	
Govt. Employees	36	84	27	147
	(24.5)	(57.1)	(18.4)	(100.0)
Private Employees	82	154	48	284
	(28.9)	(54.2)	(16.9)	(100.0)
Business	17	60	16	93
	(18.3)	(64.5)	(17.2)	(100.0)
Professional	7	31	11	49
	(14.3)	(63.3)	(22.4)	(100.0)
Agriculture	8	27	15	50
	(16.0)	(54.0)	(30.0)	(100.0)
Student	4	19	4	27
	(14.8)	(70.4)	(14.8)	(100.0)
Total	154	375	121	650
Df:10	Chi-square :15.498		P Value: .115	Not Significant

There are 147(22.6%) consumers whose occupation is Government employees. Of them, 36(24.5%) have low level of preference; 84(57.1 %) have moderate level of preference and 27(18.4%) have high level of preference.

Out of 284(43.7%) consumers whose occupation is Private employees, 82(28.9%) have low level of preference; 154(54.2%) have moderate level of preference and 48(16.9%) have high level of preference.

There are 93(14.3%) consumers whose occupation is Business 17(18.3%) have low level of preference; 60(64.5%)

have moderate level of preference and 16(17.2%) have high level of preference.

The table shows that 49(7.5%) consumers whose occupation is Professionals. Of them, 7(14.3%) have low level of preference; 31(63.3%) have moderate level of preference and 11(22.4%) have high level of preference.

Out of 50(7.7%) consumers whose occupation is agriculture, 8(16.0%) have low level of preference; 27(54.0%) have moderate level of preference and 15(30.0%) have high level of preference.

Among the 27(7.7%) consumers whose occupation are student, 4(14.8%) have low level of preference; 19(70.4%) have moderate level of preference and 4(14.8%) have high level of preference.

It can be inferred from the table that, Consumers whose occupation is agriculture have high level of preference. Consumers whose occupation are private employees have low level of preference. As the calculated P value is less than 0.01, there is no association between occupation and level of preference. Hence, the null hypothesis is accepted.

5.2.14.7 Type of family and Level of Preference

The level of preference may vary on the basis of type of family. To find whether type of family is associated with level of preference the following hypothesis has been framed and tested.

H_0 : Type of family is not associated with level of preference.

Table 5.19
Type of family and Level of Preference

Type of Family	Level of preference			Total
	Low	Moderate	High	
Nuclear	106	234	72	412
	(25.7)	(56.8)	(17.5)	(100.0)

Joint	48	141	49	238
	(20.2)	(59.2)	(20.6)	(100.0)
Total	154	375	121	650
Df:2	Chi-square : 2.910		P Value: .233	Not Significant

There are 412(63.4%) consumers who belongs to nuclear family, of them 106(25.7%) have low level of preference; 234(56.8%) have moderate level of preference and 72(17.5%) have high level of preference.

Out of 238(36.6%) consumers who belongs to joint family, 48(20.2%) have low level of preference; 141(59.2%) have moderate level of preference and 49(20.6%) have high level of preference.

It can be seen from the table that, Consumers who belongs to joint family consumers have high level of preference, Consumers who belongs to nuclear family have low level of preference. As the calculated P value is less than 0.01, there is no association between type of family and level of preference. Hence, the null hypothesis is accepted.

5.2.14.8 Number of Family Members and Level of Preference.

The level of preference may vary on the basis of number of family members. To find whether no of family is associated with level of preference the following hypothesis has been framed and tested

H₀ : Number of Family Members is not associated with level of preference.

Table 5.20
Number of Family Members and Level of Preference

No of Family Members	Level of preference			Total
	Low	Moderate	High	
Up to 3	58	138	34	230
	(25.2)	(60.0)	(14.8)	(100.0)
3 – 5	72	155	60	287
	(25.1)	(54.0)	(20.9)	(100.0)
Above 5	24	82	27	133
	(18.0)	(61.7)	(20.3)	(100.0)
Total	154	375	121	650
Df:4	Chi-square : 6.328		P Value: .176	Not Significant

There are 230(35.4%) consumers whose family comprises of up to 3 members. Of them, 58(25.2%) have low level of preference; 138(60.0%) have moderate level of preference and 34(14.8%) have high level of preference.

Out of 287(44.2%) consumers whose family consist 3 to 5 members, 72(25.1%) have low level of preference; 155(54.0%) have moderate level of preference and 60(20.9%) have high level of preference.

Among the 133 (20.5%) consumers whose family consist of more than 5 members, 24(18.0%) have low level of preference; 82(61.7%) have moderate level of preference and 27(20.3%) have high level of preference. It can be inferred from the table that, Consumers whose family consist 3 to 5 members have high level of preference. Consumers whose family consist up to 3 members have low level of preference. As the calculated P value is less than 0.01, there is no association between number of family members and level of preference. Hence, the null hypothesis is accepted.

5.2.14.9 Monthly Income and Level of Preference

The level of preference may vary on the basis of monthly income. To find whether monthly income is associated with level of preference the following hypothesis has been framed and tested.

H_0 : Monthly income is not associated with level of preference.

Table 5.21

Monthly Income and Level of Preference

Monthly Income (Rs.)	Level of preference			Total
	Low	Moderate	High	
Up to 30000	76	159	54	289
	(26.3)	(55.0)	(18.7)	(100.0)
30001 - 60000	68	175	53	296
	(23.0)	(59.1)	(17.9)	(100.0)
Above 60000	10	41	14	65
	(15.4)	(63.1)	(21.5)	(100.0)
Total	154	375	121	650
Df:4	Chi-square : 3.955		P Value: .412	Not Significant

There are 289(44.5%) consumers whose monthly income is up to Rs.30000. Of them, 76(26.3%) have low level of preference; 159(55.0%) have moderate level of preference and 54(18.7%) have high level of preference eco friendly product.

Out of 296(45.5%) consumers whose monthly income is from Rs.30001 to Rs.60000, 68(23.0%) have low level of preference; 175(59.1%) have moderate level of preference and 53(17.9%) have high level of preference in eco friendly product.

Among the 65 (10.0%) consumers whose monthly income is from Rs.60000, 10(15.4%) have low level of preference; 41(63.1%) have moderate level of preference and 14(21.5%) have high level of preference.

It can be inferred from the table that, Consumers whose monthly income is above Rs. 60000 have high level of preference. Consumers whose monthly income is up to Rs.30000 low level of preference. As the calculated P value is less than 0.01, there is no association between monthly income and level of preference. Hence, the null hypothesis is accepted.

5.2.14.10 Family Income and Level of Preference

The level of preference may vary on the basis of family income. To find whether family income is associated with level of preference the following hypothesis has been framed and tested.

H_o : Family income is not associated with level of preference.

Table 5.22

Family Income and Level of preference

Family Income (Rs.)	Level of preference			Total
	Low	Moderate	High	
Up to 50000	58	128	43	229
	(25.3)	(55.9)	(18.8)	(100.0)
50001 - 100000	67	162	51	280
	(23.9)	(57.9)	(18.2)	(100.0)
Above 100000	29	85	27	141
	(20.6)	(60.3)	(19.1)	(100.0)
Total	154	375	121	650
Df:4	Chi-square : 1.189		P Value: .880	Not Significant

There are 229(35.2%) consumers whose family income is up to Rs.50000. Of them, 58(25.3%) have low level of preference; 128(55.9%) have moderate level of preference and 43(18.8%) have high level of preference eco friendly product.

Out of 280(43.1%) consumers whose family income is from Rs.50001 to Rs.100000, 67(23.9%) have low level of preference; 162(57.9%) have moderate level of preference and 51(18.2%) have high level of preference.

Among 141 (21.7%) consumers whose family income is from Rs.100000, 29(20.6%) have low level of preference; 85(60.3%) have moderate level of preference and 27(19.1%) have high level of preference.

It can be inferred from the table that, Consumers whose family income is above Rs. 100000 have high level of preference. Consumers whose family income is up to Rs. 50000 have low level of preference. As the calculated P value is less than 0.01, there is no association between family income and level of preference. Hence, the null hypothesis is accepted.

5.2.14.11 Health Ailments and Level of Preference

The level of preference may vary on the basis of health ailments. To find whether health ailments with level of preference the following hypothesis has been framed and tested.

H_0 : Health ailments is not associated with level of preference.

Table 5.23
Health Ailments and Level of Preference

Health Ailments	Level of preference			Total
	Low	Moderate	High	
Sugar	34	69	20	123
	(27.6)	(56.1)	(16.3)	(100.0)
BP	26	68	19	113
	(23.0)	(60.2)	(16.8)	(100.0)

Health Ailments	Level of preference			Total
	Low	Moderate	High	
Allergy	13	24	15	52
	(25.0)	(46.2)	(28.8)	(100.0)
Coronary Troubles	0	1	1	2
	(0.0)	(50.0)	(50.0)	(100.0)
Cholesterol	6	6	5	17
	(35.3)	(35.3)	(29.4)	(100.0)
Overweight	8	21	5	34
	(23.5)	(61.8)	(14.7)	(100.0)
Others	2	3	0	5
	(40.0)	(60.0)	(0.0)	(100.0)
Nil	65	183	56	304
	(21.4)	(60.2)	(18.4)	(100.0)
Total	154	375	121	650
Df:14	Chi-square : 13.689		P Value: .473	Not Significant

There are 123(18.9%) consumers who are suffer from sugar. Of them, 34(27.6%) have low level of preference; 69(56.1%) have moderate level of preference and 20(16.3%) have high level of preference.

Out of 113(17.4%) consumers who are suffer from Bp. 26(23.0%) have low level of preference; 68(56.1%) have moderate level of preference and 20(16.3%) have high level of preference.

There are 52(8.0%) consumers who are suffer from allergy. 13(25.0) % have low level of preference; 24(46.2%) have moderate level of preference and 15(28.8%) have high level of preference.

There are 2(.2%) consumers who are suffer from coronary troubles. 1(50.0%) have moderate level of preference and 1(50.0%) have high level of preference.

Among the 17(2.6%) consumers who are suffer from cholesterol. 6(35.3%) have low level of preference; 6(35.3%) have moderate level of preference and 5(29.4%) have high level of preference.

Out of 34(5.2%) consumers who are suffer from overweight. 8(23.5%) have low level of preference; 21(61.8%) have moderate level of preference and 5(14.7%) have high level of preference.

The table that shows from 5(.8%) consumers who are suffer from others. 2(40.0%) have low level of preference; 3(60.0%) have moderate level of preference and 0(0.0%) have high level of preference.

Among the 304(46.8%) consumers who are not suffer from 65(21.4%) have low level of preference; 183(60.2%) have moderate level of preference and 56(18.4%) have high level of preference.

It can be inferred from the table that, Consumers who are coronary troubles have high level of preference. Consumers who are others have low level of preference. As the calculated P value is less than 0.01, there is no association between health ailments and level of preference. Hence, the null hypothesis is accepted.

5.2.14.12 Member in Association/Club and Level of Preference

The level of preference may vary on the basis of member in association. To find whether member in association is associated with level of preference the following hypothesis has been framed and tested.

H₀: Member in association is not associated with level of preference in eco friendly product

Table 5.24
Member in Association/Club and Level of Preference

Member is association	Level of preference			Total
	Low	Moderate	High	
Yes	35 (24.3)	82 (56.9)	27 (18.8)	144 (100.0)
No	119 (23.5)	293 (57.9)	94 (18.6)	506 (100.0)
Total	154	375	121	650
Df:2	Chi-square : 0.049		P Value: .976	Not Significant

There are 144(22.2%) consumers who are members in association, 35(24.3%) have low level of preference; 82(56.9%) have moderate level of preference and 27(18.8%) have high level of preference.

Out of 506(77.8%) consumers who are not member in association, 119(23.5%) have low level of preference; 293(57.9%) have moderate level of preference and 94(18.6%) have high level of preference.

It can be seen from the table that, Consumers who are member in association have high level of preference. As the calculated P value is less than 0.01, there is no association between member in association and level of preference. Hence, the null hypothesis is accepted.

5.2.14.13 Environment Concern and Level of Preference

To examine the association between the environment concern and level of preference, the following hypothesis is framed & tested.

H₀: Environment Concern is not associated with level of preference.

Table 5.25
Environment Concern and Level of Preference

Concern towards Environment	Level of preference			Total
	Low	Moderate	High	
Low	36	72	22	130
	(27.7)	(55.4)	(16.9)	(100.0)
Moderate	98	250	76	424
	(23.1)	(59.0)	(17.9)	(100.0)
High	20	53	23	96
	(20.8)	(55.2)	(24.0)	(100.0)
	154	375	121	
Df:4	Chi-square :3.391		P Value: .495	Not Significant

There are 130(20.0%) consumers, whose environment concern is low, of them 36(27.7%) have low level of preference; 72(55.4) have moderate level of preference and 22(16.9%) have high level of preference.

Out of 424(65.23%) consumers, whose on environment concern is moderate, of them 98(23.1%) have low level of preference; 250(59.0) have moderate level of preference and 76(17.9%) have high level of preference.

Among the 96(14.76%) consumers, whose on environment concern is high, of them 20(20.8%) have low level of preference; 53(55.2) have moderate level of preference and 23(24.0%) have high level of preference.

It is evident from the table that, high level of preference is found among consumers who have high level of environment concern. low level of preference is found among consumers who have low level of environment concern. As the calculate P value is less than 0.01, there is no association between the consumers environment concern and level of preference. Therefore, null hypothesis is accepted.

5.2.15 Level of Preference - Correlation Analysis

In order to examine the nature and quantum of association of variables with level of preference, correlation analysis is used. Variables considered for Chi-square have been considered for correlation test too. Out of fifteen variables selected for correlation analysis, two variables have been found to be significant. marital status, occupations are found to be significant at one per cent level and five per cent level.

Table 5.26
Variables Associated with Level of Preference - Correlation Analysis

Variables	R	r²
Age	0.028	0.001
Gender	0.071	0.005
Marital Status	0.113**	0.013
Area of Residence	0.040	0.002
Educational Qualification	0.044	0.002
Occupation	0.106**	0.011
Type of Family	0.076	0.006
No. of Family Members	0.065	0.004
Monthly Income	0.052	0.003
Family Income	0.027	0.001
Health Ailments	0.063	0.004
Member is association	0.012	0.000
Concern towards Environment	0.055	0.003
Perception	-0.043	0.002
Satisfaction	-0.034	0.001

* Significant at five per cent level ** Significant at one per cent level

Marital Status

Marital status is positively correlated with level of preference. consumers who are married have high level of

preference. The co-efficient of determination (r^2) shows that marital status 1.3 percent of the variation in the level of preference.

Occupation

Occupation is positively correlated with level of preference. Consumers who are agriculture have high level of preference. The co-efficient of determination (r^2) shows that occupation for 1.1 percent of the variation in the level of preference.

5.2.16 Determinants of Level of Preference -Multiple Regression Analysis

In order to ascertain the variables that determine the level of preference in Eco- Friendly Product, the selected fifteen variables have been regressed on preference index. The result of the regression analysis is shown in table 5.27. of the variables taken for the analysis, the variables namely (1) marital status (2) occupation (3) concern towards environment are found to be significant. The other variables do not influence level of preference in Eco- Friendly Product. The variable that influences the level of preference is discussed in the following paragraphs.

$$\text{PRE} = a + b_1 \text{ AGE} + b_2 \text{ GEN} + b_3 \text{ MS} + b_4 \text{ AO} + b_5 \text{ EQ} + b_6 \text{ OC} + b_7 \text{ TOF} + b_8 \text{ NMF} + b_9 \text{ MI} + b_{10} \text{ FI} + b_{11} \text{ HA} + b_{12} \text{ MIA} + b_{13} \text{ CTE} + b_{14} \text{ PP} + b_{15} \text{ SF} + e$$

where,

PRE	=	Preference
a	=	Intercept Term
$b_1 \dots b_{15}$	=	Regression Co-efficients
AGE	=	Age
GEN	=	Gender
MS	=	Marital Status

AO	=	Area of Operation
EQ	=	Educational Qualification
OC	=	Occupation
TOF	=	Type of Family
NOF	=	Number of Family members
MI	=	Monthly income
FI	=	Family income
HA	=	Health Ailments
MIA	=	Member in Association
CIE	=	Concern towards environment
PP	=	Perception
SF	=	Satisfaction
E	=	Error Term
Constant	=	65.957
Std. Error of Estimate	=	5.221
$\overline{R^2}$	=	0.032
R^2	=	0.055**

Table 5.27
Determinants of Level of Preference -Multiple Regression Analysis

Variables	Regression co-efficient	Standard error	T	Sig
Age	-0.769	0.519	-1.483	0.139
Gender	1.063	0.780	1.362	0.174
Marital Status	1.881*	0.912	2.063	0.040
Area of Residence	0.733	0.792	0.926	0.355
Educational Qualification	0.625	0.441	1.416	0.157
Occupation	0.684*	0.279	2.450	0.015
Type of Family	1.020	0.972	1.049	0.295
No. of Family Members	0.005	0.649	0.007	0.994
Monthly Income	0.551	0.696	0.792	0.429
Family Income	0.619	0.561	1.103	0.271
Health Ailments	0.150	0.135	1.116	0.265
Member is association	-0.190	0.996	-0.190	0.849
Concern towards Environment	0.167*	0.063	2.669	0.008
Perception	-0.142	0.075	-1.900	0.058
Satisfaction	-0.354	1.285	-0.275	0.783

* Significant at five per cent level ** Significant at one per cent level

(i) Marital Status

The regression co-efficient indicates that marital status positively influences the level of preference. High level of preference is noticed with consumer, who belongs to married.

(ii) Occupation

The regression co-efficient indicates that, occupation positively influences the level of preference. High level of

preference noticed with consumers, who are belongs to agriculture.

(iii) Concern towards Environment

The regression co-efficient indicates that concern towards positively influences the level of preference. High level of preference is noticed with moderate level consumers.

The value of R^2 is found to be significant at one percent level. The shows that the regression equation framed is a good fit. Around 5.5 Per cent of variation in level of preference is due to the select variables.

5.2.17 Variables Prominently Associated with Level of Preference

To find prominent factors that affect level of preference, Step-wise regression test is employed. The following paragraph discuss about the result of the study.

Table 5.28
Variables Prominently Associated with Level of Preference -
Step-wise Regression Analysis

Step	Constant	Marital	Occupation	R^2
1	74.458	2.254		0.013
2	73.077	2.076	0.680	0.022

MS: Marital status

OP: Occupation

The result of step-wise regression test disclose that two variables are found to be significantly associated with preference. The total contribution of the variables namely, (1) Marital status (2) Occupation to 2.2 percent. The R^2 value of the multiple regression amounts to 5.5 per cent. The difference of 3.3 percent is due to contribution by other variables.

5.3 Frequency of Purchase

To find out the Frequency of Purchase on Eco-Friendly Products Simple Percentage, Correlation, Multiple Regression, Step wise Regression.

5.3.1 Frequency of Purchase – Simple Percentage

To find out the frequency of purchase simple percentage analysis has been employed.

Table 5.29
Frequency of Purchase

Frequency of purchase.	No of Respondents	Percentage
Once in a week	191	29.4
Once in a month	306	47.1
Once in three months	153	23.5
Total	650	100

Table 5.29 indicates that, nearly half percentage of the sample consumers buy eco-friendly Product once in a month, 29.4 percent of the sample purchase once in a week and rest 23.5 percent of the sample purchase once in three month.

Global scaling has been used for frequency of purchase. There are 153 (23.53%) consumers with low frequency of purchase; 306(47.07%) with moderate Frequency of purchase's and 191(29.38%) with high Frequency of purchase of eco-friendly products.

5.3.2 Variables Associated with Frequency of Purchase - Correlation Analysis

In order to examine the nature and quantum of association of variables with level of frequency of Purchase, correlation analysis is used. Variables considered for Chi-square have been considered for correlation test too. Out of thirteen variables selected for correlation analysis, five

variables have been found to be significant. Marital status, educational qualification, occupation, monthly income and membership in association are found to be significant at one per cent level.

Table 5.30
Variables associated with Frequency of Purchase -
Correlation Analysis

Variables	R	r²
Age	0.000	0.000
Gender	-0.010	0.000
Marital Status	0.089*	0.008
Area of Residence	0.062	0.004
Educational Qualification	-0.169**	0.029
Occupation	0.160**	0.026
Type of Family	0.063	0.004
No. of Family Members	0.050	0.003
Monthly Income	0.117**	0.014
Family Income	-0.050	0.002
Health Ailments	0.061	0.004
Membership/Club is association	-0.100*	0.010
Concern towards Environment	0.002	0.000

* Significant at five per cent level ** Significant at one per cent level

(i) Marital Status

Marital status is positively correlated with level of frequency of purchase. Married consumers have high level frequency of purchase. The co-efficient of determination (r^2) shows that marital status 0.8 percent of the variation in the level of frequency of purchase.

(ii) Educational Qualification

Educational qualification is negatively correlated with frequency of purchase. Consumers who are up to higher secondary have high level frequency of purchase.

The co-efficient of determination (r^2) shows that educational qualification 2.9 percent of the variation in the frequency of purchase.

(iii) Occupation

Occupation is positively correlated with frequency of purchase. Consumers who are government employees have high level frequency of purchase. The co-efficient of determination (r^2) shows that occupation 2.6 percent of the variation in the level of frequency of purchase.

(iv) Monthly Income

Monthly income is positively correlated with level of frequency of purchase. Consumers who are above Rs.60000 have high frequency of purchase. The co-efficient of determination (r^2) shows that Monthly income 1.4 percent of the variation in the frequency of purchase.

(v) Membership in Association/Club

Member in association is negatively correlated with frequency of purchase. Consumers who belongs to member in association have high level of frequency of purchase. The co-efficient of determination (r^2) shows that Member in association 1 percent of the variation in the frequency of purchase.

5.3.3 Determinants of Frequency of Purchase - Multiple Regression Analysis

In order to ascertain the variables that determine the level of frequency of purchase of. The selected Thirteen variables have been regressed on frequency index. The result of the regression analysis is shown in table 5.31 of the variables taken for the analysis, the variables namely 1) Marital status 2) Educational qualification 3) Occupation 4) Monthly income 5) Health ailments 6) Member is association are found to be significant. The other

variables do not influence level of frequency in buying eco-friendly products. The variable that influences the frequency of purchase is discussed in the following paragraphs.

$$FOP = a + b_1 AGE + b_2 GEN + b_3 MS + b_4 AR + b_5 EQ + b_6 OC + b_7 TYF + b_8 NFM + b_9 MI + b_{10} FI + b_{11} HA + b_{12} MIA + b_{13} CTE + e$$

where,

FOP	=	Frequency of Purchase
a	=	Intercept Term
b1....b13	=	Regression Co- efficients
AGE	=	Age
GEN	=	Gender
MS	=	Marital Status
AOR	=	Area of Resident
EQ	=	Educational Qualification
OCC	=	Occupation
TYF	=	Type of Family
NFM	=	No. of Family Members
MI	=	Monthly Income
FI	=	Family Income
HA	=	Health Ailments
MIA	=	Member is association
CIE	=	Concern towards Environment
Constant	:	43.826
	:	8.266
Std. Error of Estimate R ²	:	0.082
—	:	
R ²	:	0.101**

Table 5.31
Determinants of Frequency of Purchase -Multiple
Regression Analysis

Variables	Regression Co-efficient	Standard error	T	Sig
Age	-1.097	0.943	-1.164	0.245
Gender	-0.336	1.443	-0.233	0.816
Marital Status	3.407*	1.690	2.016	0.044
Area of Residence	0.538	1.466	0.367	0.714
Educational Qualification	-3.036**	0.816	-3.720	0.000
Occupation	2.073**	0.518	3.999	0.000
Type of Family	0.586	1.802	0.325	0.745
No. of Family Members	-0.130	1.202	-0.108	0.914
Monthly Income	4.686**	1.293	3.623	0.000
Family Income	-1.779	1.044	-1.704	0.089
Health Ailments	0.525*	0.251	2.093	0.037
Membership/Club is association	-5.267**	1.849	-2.849	0.005
Concern towards Environment	-0.020	0.081	-0.245	0.807

* Significant at five per cent level ** Significant at one per cent level

(i) Marital Status

The regression co-efficient indicates that, Marital status positively influences the level of frequency of purchase in eco-friendly products. High level of frequency of purchase is noticed with married consumers.

(ii) Educational Qualification

The level of frequency varies according to the educational qualification of the consumers. High level of Frequency of purchase is noticed with consumers whose educational

qualification is under graduate. The regression co-efficient indicates that educational qualification negatively influences the level of frequency.

(iii) Occupation

The regression co-efficient indicates that, Occupation positively influences the level of frequency of purchase. High frequency of purchase is noticed with student consumers.

(iv) Monthly Income

The regression co-efficient indicates that, Monthly income positively influences the frequency of purchase. High frequency of purchase is noticed with monthly income above Rs.60,000.

(v) Health Ailments

The regression co-efficient indicates that, Health ailments positively influence the frequency of purchase. High level of frequency of purchase is noticed with who are overweight in health ailments.

(vi) Membership/Club in Association

Frequency of purchase is noticed with consumers whose member is association. The regression co-efficient indicates have high level of frequency of purchase is noticed with who are member is association.

The value of R^2 is found to be significant at one percent level. This shows that the regression equation framed is a good fit. Around 10.1 per cent of variation in the frequency of purchase is due to the select variables.

5.3.4 Variables Prominently Associated with Frequency of Purchase - Step-wise Regression

To find out the prominent variables that account for the variation in the frequency of purchase, stepwise regression has been carried out. The following paragraph discuss about the result of the study.

Table 5.32
Variables Prominently Associated with Frequency of
Purchase - Step-wise Regression Analysis

Step	Constant	EQ	OC	MI	FI	MIA	HA	R ²
1	49.733	- 3.221						0.028
2	44.419	- 3.123	2.060					0.052
3	38.149	- 3.427	2.192	4.024				0.073
4	40.878	- 3.379	2.099	5.167	- 2.417			0.081
5	47.293	- 3.328	2.142	4.896	- 2.279	- 3.631		0.087
6	46.349	- 3.242	2.089	5.030	- 2.107	- 4.961	0.535	0.094

ED: Educational Qualification

OC: Occupation

MI: Monthly Income

FI: Family Income

MI: Membership in Association

HA: Health Ailments

The result of stepwise regression test discloses that six variables are found to be significantly associated with frequency of purchase. The total contribution of the variables namely (1) Education (2) Occupation (3) Monthly income (4) Family income (5) Membership in association (6) Health ailments amounts to 9.4 percent. The R² value of the multiple regression amounts to 10.1 percent. The difference of 0.7 percent is due to contribution by other variables.

5.4 Consumers Level of Perception on Eco Friendly Product - Anova

In order to examine the variables that are associated with the level of a perception on eco friendly product 'Perception Index' has been computed. Answer's to the questions relating to the eco-friendly product on in consumers have been assigned scores Consumers were asked to asked to rate 31 questions relating to their level of a perception on eco friendly product, using five point likert scale. The scores are 1,2,3,4 and 5 respectively. There are 31 questions, so the maximum score is 155($31 \times 5 = 155$). Each consumer was assigned scores. The 'Perception' have been calculated by totaling the scores and dividing them by maximum scores and multiplying by hundred.

The average Perception index of 650 consumers is 68.43. The Perception of 650 consumers ranges between 68.44 and 87.24.

Consumers were classified based on their level of perception on eco-friendly product consumers for this purpose; standard deviation has been calculated standard deviation amounts to 9.41 Classification of consumers those with low, moderate and high level of perception in consumers has been explained below:

- Consumers whose Perception index is up to 63.47 have low level of eco-friendly product (i.e mean-SD, 63.47-9.41).
- Consumers whose Perception index ranges between 68.44 – 87.25 have moderate level of perception.
- Consumers whose Perception index is above 99.78 have high level of perception.(mean + SD, i.e. 87.25+9.41)

5.4.1 Variables Associated with the Level of Perception on Consumers

Analysis of Variance (ANOVA) has been made used to

examine the difference in mean perception values of the sample consumers. The variables such as Age, Gender, Marital status, Area of operation, Educational Qualification, Occupation, Type of family, No of family members, Monthly income, Family income, Health ailments and Member is association have been selected to test the mean difference in level of perception. The level of confidence are chosen one and five percent.

5.4.1.1 Age and Level of Perception

To ascertain whether there exist a difference in the mean values of perception index among four groups of consumers classified based on their age, the following hypothesis is framed and tested.

H₀: Mean Perception index does not differ among consumers classified based on their age.

Table 5.33
Age and Level of Perception

	Numbers	Perception	Standard Deviation	Minimum	Maximum
Up to 25	193	78.64	9.99	53.04	95.65
26 – 35	252	77.69	8.56	51.30	94.78
36 – 45	161	77.31	8.25	59.13	93.91
Above 45	44	77.15	14.29	54.78	94.78
Total	650	77.84	9.41	51.30	95.65
Df: ..v₁ 3, v₂ 646		F Value: 0.727	P Value: .536		Not Significant

There are 193 (29.7%) consumers whose age is up to 25. The mean Perception is found to be 78.64. Their level of perception ranges between 53.04 and 95.65. out of 252 (38.8%) consumers whose age group ranges between 26 to 35

years. Their level of perception ranges between 51.30 and 94.78 and their Perception index amounts to 77.69. out of 161(24.8%) consumers whose age group ranges between 36 to 45 years. Their level of perception ranges between 59.13 and 93.91 and their Perception index amounts to 77.31. There age group of above 45 years covers 44(6.8%) consumers. Their level of perception ranges between 54.78 and 95.65 and their Perception accounts to 77.84.

It can be seen from the table that, Consumers, whose age group is up to 25 years have high level of perception. Consumers, who are in age of above 45 years have low level of perception.

Since the calculated P value is less than 0.01 there is no significant mean of perception difference among consumers classified based on their age. Hence, the null hypothesis is accepted.

5.4.1.2 Gender and Level of Perception

The following hypothesis is framed and tested to examine whether there exist a significant difference in the mean values of perception among the two groups of consumers classified based on their gender.

H₀: Mean Perception does not differ among consumers classified based on their gender.

Table 5.34
Gender and Level of Perception

Gender	Numbers	Perception	Standard Deviation	Minimum	Maximum
Male	356	78.19	9.37	53.04	95.65
Female	294	77.42	9.45	51.30	95.65
Total	650	77.84	9.41	51.30	95.65
Df: 648		't' Value: 1.037	P Value: .300		Not Significant

Table 5.34 shows that three hundred and fifty six (54.8%) consumers are male. Their level of perception ranges from 53.04 to 95.65 and their Perception index to 78.19. There are 296 (45.2%) female consumers. The level of perception ranges between 51.30 and 95.65 and their Perception index accounts for 77.42. Male consumers have high level of perception. Female consumers have low level of perception. Since, the calculated

P value is less than 0.01, there is no significant mean of perception difference among consumers classified based on their gender. Hence, the null hypothesis is accepted.

5.4.1.3 Marital Status and Level of Perception

To ascertain whether there exist a difference in the mean values of perception among two groups of consumers classified based on their marital status, the following hypothesis is framed and tested.

H₀: Mean Perception does not differ among consumers classified based on their marital status.

Table 5.35
Marital Status and Level of Perception

Marital Status	Numbers	Perception	Standard Deviation	Minimum	Maximum
Single	289	78.08	9.63	51.30	95.65
Married	361	77.65	9.23	51.30	95.65
Total	650	77.84	9.41	51.30	95.65
Df: 648		't' Value: 0.584	P Value: .559		Not Significant

Above table shows that, two hundred and eighty nine (88.13%) consumers who are single. The level of perception ranges between 51.30 and 95.65 and their Perception amount to 77.08. There are 361 (11.87%) consumers who are single. Their level of perception ranges between 51.30 and 95.65 and Perception is 79.42. Single consumers have high level of perception, while married Consumers have low level of perception. Since the calculated P value is greater than 0.01, there is no significant mean difference among consumers classified based on the marital status. Hence, the null hypothesis is accepted.

5.4.1.4 Area of Operation and Level of Perception

To ascertain whether there exist a significant difference in the mean perception of the two groups of consumers classified based on the area of operation, the following hypothesis is framed and tested.

H_0 : Mean Perception does not differ among consumers classified based on the area of operation.

Table 5.36
Area of Operation and Level of Perception

Area of Residence	Numbers	Perception	Standard Deviation	Minimum	Maximum
Rural	385	77.55	9.25	53.04	95.65
Urban	265	78.27	9.64	51.30	94.78
Total	650	77.84	9.41	51.30	95.65
Df: 648		't' Value: - 0.970	P Value: .332		Not Significant

Consumers who are in urban area have high level of perception. Consumers are in rural area have low level of perception. Since, the calculated P Value is less than 0.01;

there is no significant difference in the mean perception of the consumers classified based on the area of operation. Hence, the null hypothesis is accepted.

5.4.1.5 Educational Qualification and Level of Perception

To ascertain whether there exist a significant difference in the mean value of perception among the five groups of consumers classified on the basis of educational qualification, the following hypothesis is framed and tested.

H₀: Mean Perception does not differ among consumers classified based on the educational qualification.

Table 5.37

Educational Qualification and Level of Perception

Educational Qualification	Numbers	Perception	Standard Deviation	Minimum	Maximum
Up to Higher Secondary	107	72.85	10.52	53.04	89.57
Under Graduate	272	77.93	8.93	51.30	95.65
Post Graduate	195	78.83	8.78	56.52	94.78
Professionals	63	80.98	8.45	65.22	94.78
Others /Diploma	13	86.96	3.64	76.52	90.43
Total	650	77.84	9.41	51.30	95.65
Df: ∴v₁ 4, v₂ 645		F Value: 13.911	P Value: .000		Significant

Consumers who are in diploma have high level of perception. Consumers who are in up to higher secondary have low level of perception. Since, the calculated p value is less than 0.01; there exist a significant difference in the mean

of perception value of the consumers classified based on the educational qualification. Hence, the null hypothesis is rejected.

5.4.1.6 Occupation and Level of Perception

To ascertain whether there exist a significant difference in the mean value of perception among the five groups of consumers classified on the basis of occupation, the following hypothesis is framed and tested.

H_0 : Mean Perception does not differ among consumers classified based on the occupation.

Table 5.38
Occupation and Level of Perception

Occupation	Numbers	Perception	Standard Deviation	Minimum	Maximum
Govt. Employees	147	76.73	9.51	53.04	95.65
Private employees	284	77.80	8.91	51.30	94.78
Business	93	78.83	8.28	56.52	94.78
Professional	49	73.97	10.18	62.61	93.04
Agriculture	50	81.29	9.69	63.48	93.91
Others/students	27	81.61	12.22	54.78	93.91
Total	650	77.84	9.41	51.30	95.65
Df: $\therefore v_1 5, v_2 644$		F Value: 4.610	P Value: .000		Significant

Consumers who are students have high level of perception. Consumers who are professionals have low level of perception. Since, the calculated p value is less than 0.01;

there exist a significant difference in the mean of perception value of the consumers classified based on the occupation. Hence, the null hypothesis is rejected.

5.4.1.7 Type of Family and Level of Perception

To ascertain whether there exist a significant difference in the mean value of perception among two groups of consumers classified based on the type of family, the following hypothesis is framed and tested.

H₀: Mean Perception does not differ among consumers classified based on the type of family

Table 5.39
Type of Family and Level of Perception

Type of Family	Numers	Perception	Standard Deviation	Minimum	Maximum
Nuclear	412	77.30	9.88	51.30	95.65
Joint	238	78.78	8.47	56.52	95.65
Total	650	77.84	9.41	51.30	95.65
Df: 648		't' Value: -1.927	P Value: .054		Not Significant

There are 412(63.2%) consumers who belong to nuclear family. Their level of perception ranges between 51.30 and 95.65 and the Perception index amounts to 77.30. 238 (36.6%) consumers belong to joint family and the level eco-friendly product ranges from 56.52 to 95.65. Their Perception accounts to 78.78. Consumers who belong to joint family have high level of perception. Consumers who belong to nuclear family have low level of perception. Since, the calculated P value is less than 0.01 there is no significant difference in the mean value of consumers classified based on the type of family. Hence, the null hypothesis is accepted.

5.4.1.8 Number of Family Members and Level of Perception

The following hypothesis is framed and tested to find whether there exist a significant difference in the mean value of perception among the three groups of consumers classified based on the number of members in their family.

H₀: Mean Perception does not differ among consumers classified based on the number of members in their family.

Table 5.40

Number of Family Members and Level of Perception

No. of Family Members	Numbers	Perception	Standard Deviation	Minimum	Maximum
UP to 3	230	76.31	9.90	53.04	93.04
3 – 5	287	79.03	9.31	51.30	95.65
Above 5	133	77.93	8.39	56.52	94.78
Total	650	77.84	9.41	51.30	95.65
Df: ∴v₁ 2, v₂ 647		F Value: 5.448	P Value: .005		Significant

It could be inferred from the table that, high level of perception is found among consumers whose family consist of three to five members. Low level of perception is found among consumers whose family consists of more than 5 members. Since the calculated P value is less than 0.01, the null hypothesis is rejected. Hence, there exist a significant difference in the mean perception of consumers on the number of members in the family.

5.4.1.9 Monthly Income and Level of Perception

The following hypothesis is framed and tested to examine whether there exist a significant difference in the mean value of perception among the three groups of consumers classified based on the monthly income.

H₀: Mean Perception does not differ among consumers classified based on the monthly income

Table 5.41
Monthly Income and Level of Perception

Monthly Income	Numbers	Perception	Standard Deviation	Minimum	Maximum
Up to 30000	289	77.74	8.99	53.04	95.65
30001 – 60000	296	78.52	9.59	51.30	95.65
Above 60000	65	75.22	10.06	58.26	93.04
Total	650	77.84	9.41	51.30	95.65
Df: ∴v₁ 2, v₂ 647		F Value: 3.325	P Value: .037		Significant

It could be inferred from the table that consumers whose monthly income is between Rs.30001to Rs.60000 have high level of perception. Consumers whose monthly income above Rs.60000 have low level of perception. Since, the calculated P value is less than 0.01; there exist a significant difference in the mean perception of the consumers classified based on the monthly income. Hence, the null hypothesis is rejected.

5.4.1.10 Family Income and Level of Perception

The following hypothesis is framed and tested to examine whether there exist a significant difference in the mean value of perception among the three groups of consumers classified based on the family income.

H₀: Mean Perception does not differ among consumers classified based on the family income.

Table 5.42
Family Income and Level of Perception

Family Income	Numbers	Perception	Standard Deviation	Minimum	Maximum
Up to 50000	229	78.34	9.26	53.04	95.65
50001 - 100000	280	78.69	9.51	51.30	95.65
Above 100000	141	75.35	9.08	58.26	93.91
Total	650	77.84	9.41	51.30	95.65
Df: $\therefore v_1 2, v_2 647$	F Value: 6.519		P Value: .002		Significant

It could be inferred from the table that, consumers whose family income is between Rs.50001 to Rs.100000 have high level of perception. Consumers whose family income is above Rs.100000 have low level of Perception. Since, the calculated P value is less than 0.01; there exist a significant difference in the mean perception of the consumers classified based on the family income. Hence, the null hypothesis is rejected.

5.4.1.11 Health Ailments and Level of Perception

The following hypothesis is framed and tested to examine whether there exist a significant difference in the mean value of perception among the three groups of consumers classified based on the health ailments.

H₀: Mean Perception does not differ among consumers classified based on the health ailments.

Table 5.43
Health Ailments and Level of Perception

Health Ailments	Numbers	Perception	Standard Deviation	Minimum	Maximum
Sugar	123	74.23	11.10	51.30	94.78
BP	113	78.11	10.24	53.04	95.65
Allergy	52	81.52	7.64	66.09	93.04
Coronary Troubles	2	74.78	0.00	74.78	74.78
Cholesterol	17	89.62	5.08	74.78	93.91
Over weight	34	69.51	11.80	54.78	94.78
Others	5	73.39	7.55	66.09	83.48
Nil	304	78.94	7.02	60.00	95.65
Total	650	77.84	9.41	51.30	95.65
Df: .:v₁ 7, v₂ 642		F Value: 13.807	P Value: .000		Significant

It could be inferred from the table that, high level of perception is found among consumers whose health ailments consist of cholesterol. Low level of perception is found among consumers whose health ailments consists of overweight. Since the calculated P value is less than 0.01, the null hypothesis is rejected. Hence, there exist a significant difference in the mean perception of consumers on the health ailments.

5.4.1.12 Membership/Club in Association and Level of Perception

The following hypothesis is framed and tested to examine whether there exist a significant difference in the mean value of Perception among the three groups of consumers classified based on the membership in association.

H₀: Mean Perception does not differ among consumers classified based on the membership in association.

Table 5.44
Membership/Club in Association/Club and Level of Perception

Member ship in Association	Numbers	Perception	Standard Deviation	Minimum	Maximum
Yes	144	81.42	11.09	56.52	95.65
No	506	76.82	8.61	51.30	93.91
Total	650	77.84	9.41	51.30	95.65
Df: 648		't' Value: 5.285	P Value: .000		Significant

It could be inferred from the table that, high level of perception is found among consumers whose membership in association consist are members. Low level of perception is found among consumers whose membership in association consists of not members. Since the calculated P value is less than 0.01, the null hypothesis is rejected. Hence, there exist a significant difference in the mean perception of consumers on the membership in association.

5.5 Satisfaction on Eco-Friendly Product

5.5.1 Satisfaction on Eco- Friendly Product - Simple Percentage

To find out the satisfaction on eco-friendly products simple percentage analysis has been used.

Table 5.45
Satisfaction on Eco- Friendly Product

Satisfaction on Eco-Friendly Product	No. of respondents	Percentage
Very much satisfied	250	38.5
Satisfied	322	49.5
Neutral	78	12.0
Total	650	100

It is evident from table, majority of the consumers 322(49.5%) are satisfied with eco- friendly products, 250(38.5%) of the consumer very much satisfied and the rest of 78(12.0%) of the consumer neither satisfied not dissatisfied with the eco- friendly products.

5.5.2 Variables associated with the Level of Satisfaction - Chi-Squaretest

Twelve variables namely Age, Gender, Marital status, Area of operation, Educational qualification, Occupation, Type of family, Number of family Members, Monthly income, Family income, Member is association and Environmental concern have been selected in order to test their association with the level of satisfaction. The relationship between the variables and satisfaction index is tested using chi-square test. The level of confidence chosen are five and one percent. Global scaling has been used for level of satisfaction.

5.5.2.1 Age and Level of Satisfaction

Consumers level of satisfaction may differ based on their age. In order to find whether age is associated with level of satisfaction, the following hypothesis has been framed and tested.

Ho: Age is not associated with level of satisfaction.

Table 5.46
Age and Level of Satisfaction

Age (in Years)	Level of Satisfaction			Total
	Low	Moderate	High	
Up to 25	93	70	30	193
	(48.2)	(36.3)	(15.5)	(100.0)
26 – 35	90	144	18	252
	(35.7)	(57.1)	(7.1)	(100.0)
36 – 45	59	81	21	161
	(36.6)	(50.3)	(13.0)	(100.0)
Above 45	8	27	9	44
	(18.2)	(61.4)	(20.5)	(100.0)
Total	250	322	78	650
Df:6	Chi-square : 30.887		P Value: .000	Significant

There are 193(29.7%) consumers whose age is up to 25. Of them, 93(48.2%) have low level of satisfaction; 70(36.3%) have moderate level of satisfaction and 30(15.5%) have high level of satisfaction.

Out of 252(38.8%) consumers whose age group ranges between 26and 35, 90(35.7%) have low level of satisfaction; 144(57.1%) have moderate level of satisfaction and the rest 18(7.1%) have high level of satisfaction.

Among the 161(24.8%) consumers whose age group ranges between 36and 45, 59(36.6%) have low level of satisfaction; 81(50.3%) have moderate level of satisfaction and the rest 21(13.0%) have high level of satisfaction.

Table shows that of 44 (6.8%) consumers whose age is above 45, 8 (18.2%) have low level of satisfaction; 27(61.4%) have moderate level of satisfaction and 9(20.5%) have high level of satisfaction.

Consumers whose age group is Above 45 years have high level of satisfaction and Consumers whose age is up to 25 years have low level of satisfaction. As the calculated P value is less than 0.01, there exist a significant association between age and level of satisfaction. Hence, the null hypothesis is rejected.

5.5.2.2 Gender and Level of Satisfaction

The level of satisfaction may vary on the basis of gender. To find whether gender is associated with level of satisfaction the following hypothesis has been framed and tested.

H_o : Gender is not associated with level of satisfaction.

Table 5.47
Gender and Level of Satisfaction

Gender	Level of Satisfaction			Total
	Low	Moderate	High	
Male	152	153	51	356
	(42.7)	(43.0)	(14.3)	(100.0)
Female	98	169	27	294
	(33.3)	(57.5)	(9.2)	(100.0)
Total	250	322	78	650
Df:2	Chi-square : 14.058		P Value: .001	Significant

There are 356(54.8%) male consumers, Of them 152(42.7%) have low level of satisfaction; 153(43.7%) have moderate level of satisfaction and 51(14.3%) have high level of satisfaction.

Out of 294(45.2%) female consumers, 98(33.3%) have low level of satisfaction; 169(57.5%) have moderate level of satisfaction and 27(9.2%) have high level of satisfaction.

It can be seen from the table that, Male consumers have high level of satisfaction. As the calculated P value is less than 0.01, there exist a significant association between gender and level of satisfaction. Hence, the null hypothesis is rejected.

5.5.2.3 Marital Status and Level of Satisfaction

The level of satisfaction may vary on the basis of marital status. To find whether marital status is associated with level of satisfaction the following hypothesis has been framed and tested.

H_o : Marital status is not associated with level of satisfaction.

Table 5.48
Marital Status and Level of Satisfaction

Marital Status	Level of Satisfaction			Total
	Low	Moderate	High	
Single	102	84	39	225
	(45.3)	(37.3)	(17.3)	(100.0)
Married	148	238	37	423
	(35.0)	(56.3)	(8.7)	(100.0)
Total	250	322	78	650
Df:2	Chi-square : 23.900		P Value: .000	Significant

There are 225(34.6%) consumers who are single, 102(45.3%) have low level of satisfaction; 84(37.3%) have moderate level of satisfaction and 39(17.3%) have high level of satisfaction.

Out of 423(65.7%) consumers who are married, 148(35.0%) have low level of satisfaction; 238(56.3%) have moderate level of satisfaction and 37(8.7%) have high level of satisfaction.

It can be seen from the table that, Single consumers have high level of satisfaction. As the calculated P value is less than 0.01, there exist a significant association between marital status and level of satisfaction. Hence, the null hypothesis is rejected.

5.5.2.4 Area of Residence and Level of Satisfaction

The level of satisfaction may vary on the basis of Area of residence. To find whether Area of residence is associated with level of satisfaction the following hypothesis has been framed and tested.

H_0 : Area of residence is not associated with level of satisfaction.

Table 5.49

Area of Residence and Level of Satisfaction

Area of Residence	Level of Satisfaction			Total
	Low	Moderate	High	
Rural	178	155	52	385
	(46.2)	(40.3)	(13.5)	(100.0)
Urban	72	167	26	265
	(27.2)	(63.0)	(9.8)	(100.0)
Total	250	322	78	650
Df:2	Chi-square : 33.030		P Value: .000	Significant

There are 385(59.6%) consumers who are rural area, Of them 178(46.2%) have low level of satisfaction; 155(40.3%) have moderate level of satisfaction and 52(13.5%) have high level of satisfaction.

Out of 265(40.8%) consumers who are in urban area, 72(27.2%) have low level of satisfaction; 167(63.0%) have moderate level of satisfaction and 26(9.8%) have high level of satisfaction.

It can be seen from the table that, Consumers who are rural area have high level of satisfaction. As the calculated P value is less than 0.011, there exist a significant association between area of residence and level of satisfaction. Hence, the null hypothesis is rejected.

5.5.2.5 Educational Qualification and Level of Satisfaction

The level of satisfaction may vary on the basis of educational qualification.

To find whether educational qualification is associated with level of satisfaction the following hypothesis has been framed and tested.

H_0 : Educational qualification is not associated with level of satisfaction.

Table 5.50
Educational Qualification and level of Satisfaction

	Low	Moderate	High	
Up to Higher Secondary	50	46	11	107
	(46.7)	(43.0)	(10.3)	(100.0)
Under Graduate	96	146	30	272
	(35.3)	(53.7)	(11.0)	(100.0)
Post Graduate	67	99	29	195
	(34.4)	(50.8)	(14.9)	(100.0)
Professionals	34	21	8	63
	(54.0)	(33.3)	(12.7)	(100.0)
Diploma	3	10	0	13
	(23.1)	(76.9)	(0.0)	(100.0)
Total	250	322	78	650
Df:8	Chi-square : 18.840		P Value: .016	Significant

There are 107(16.5%) consumers whose educational qualification is up to Higher secondary .Of them, 50(46.7%) have low level of satisfaction; 50(43.0%) have moderate level of satisfaction and 11(10.3%) have high level of satisfaction.

There are 272(41.8%) consumers whose educational qualification is undergraduate 96(35.3%) have low level of satisfaction; 146(53.7%) have moderate level of satisfaction and 30(11.0%) have high level of satisfaction.

Of 195(30.0%) consumers whose educational qualification is post graduate. of them, 67(34.4%) have low level of satisfaction; 99(50.8%) have moderate level of satisfaction and 29(14.9%) have high level of satisfaction.

Among the 63(9.7%) consumers whose educational qualification is professionals, 34(54.0%) have low level of satisfaction; 21(33.3%) have moderate level of satisfaction and 8(12.7%) have high level of satisfaction.

Out of 13(2.0%) consumers whose educational qualification is diploma, 3(23.1%) have low level of satisfaction; 10(76.9%) have moderate level of satisfaction and 0(0.0%) have high level of satisfaction.

It can be inferred from the table that, Consumers whose educational qualification is post graduate high level of satisfaction. Consumers whose educational qualification is professionals have low level of satisfaction. As the calculated P value is less than 0.01, there exist a significant association between educational qualification and level of satisfaction. Hence, the null hypothesis is rejected.

5.5.2.6 Occupation and Level of Satisfaction

The level of satisfaction may vary on the basis of occupation. To find whether occupation is associated with level of satisfaction the following hypothesis has been framed and tested.

H_0 : *Occupation is not associated with level of satisfaction.*

Table 5.51
Occupation and Level of Satisfaction

Occupation	Level of Satisfaction			Total
	Low	Moderate	High	
Govt. Employees	85	47	15	147
	(57.8)	(32.0)	(10.2)	(100.0)
Private Employees	102	142	40	284
	(35.9)	(50.0)	(14.1)	(100.0)
Business	32	57	4	93
	(34.4)	(61.3)	(4.3)	(100.0)
Professional	10	28	11	49
	(20.4)	(57.1)	(22.4)	(100.0)
Agriculture	14	28	8	50
	(28.0)	(56.0)	(16.0)	(100.0)
Student	7	20	0	27
	(25.9)	(74.1)	(0.0)	(100.0)
Total	250	322	78	650
Df:10	Chi-square : 52.299		P Value: .000	Significant

There are 147(22.6%) consumers whose occupation is Government employees. Of them, 85(57.8%) have low level of satisfaction; 47(32.0%) have moderate level of satisfaction and 15(10.2%) have high level of satisfaction.

Out of 284(43.7%) consumers whose occupation is Private employees, 102(35.9%) have low level of satisfaction; 142(50.0%) have moderate level of satisfaction and 40(14.1%) have high level of satisfaction

Among the 93(14.3%) consumers whose occupation is Business 32(34.4%) have low level of satisfaction; 57(61.3%)

have moderate level of satisfaction and 4(4.3%) have high level of satisfaction.

Of 49(7.5%) consumers whose occupation is Professionals. 10(20.4%) have low level of satisfaction; 28(57.1%) have moderate level of satisfaction and 11(22.4%) have high level of satisfaction.

The table shows from 50(7.7%) consumers whose occupation is agriculture, 14(28.0%) have low level of satisfaction; 28(56.0%) have moderate level of satisfaction and 8(16.0%) have high level of satisfaction.

Among the 27(7.7%) consumers whose occupation are student, 7(25.9%) have low level of satisfaction; 20(74.1%) have moderate level of satisfaction and 0(0.0%) have high level of satisfaction

It can be inferred from the table that, Consumers whose occupation is professionals have high level of satisfaction. Consumers whose occupations are government employees have low level of satisfaction. As the calculated P value is less than 0.01, there exist a significant association between occupation and level of satisfaction. Hence, the null hypothesis is rejected.

5.5.2.7 Type of Family and Level of Satisfaction

The level of satisfaction may vary on the basis of type of family. To find whether type of family is associated with level of satisfaction the following hypothesis has been framed and tested.

H₀: Type of family is not associated with level of satisfaction.

Table 5.52
Type of Family and Level of Satisfaction

Type of Family	Level of Satisfaction			Total
	Low	Moderate	High	
Nuclear	189	170	53	412
	(45.9)	(41.3)	(12.9)	(100.0)
Joint	61	152	25	238
	(25.6)	(63.9)	(10.5)	(100.0)
Total	250	322	78	650
Df:2	Chi-square : 32.332		P Value: .000	Significant

There are 412(63.4%) consumers who belongs to nuclear family, Of them 189(45.9%) have low level of satisfaction; 170(41.3%) have moderate level of satisfaction and 53(12.9%) have high level of satisfaction.

Out of 238(36.6%) consumers who belongs to joint family, 61(25.6%) have low level of satisfaction; 152(63.9%) have moderate level of satisfaction and 25(10.5%) have high level of satisfaction.

It can be seen from the table that, Consumers who belongs to nuclear family have high level of satisfaction. As the calculated P value is less than 0.01, there exist a significant association between type of family and level of satisfaction. Hence, the null hypothesis is rejected.

5.5.2.8Number of Family Members and Level of Satisfaction

The level of satisfaction may vary on the basis of number of family members. To find whether no of family is associated with level of satisfaction the following hypothesis has been framed and tested.

H₀ : Number of family members is not associated with level of satisfaction.

Table 5.53
Number of family Members and Level of Satisfaction

No. of Family Members	Level of Satisfaction			Total
	Low	Moderate	High	
UP to 3	126	82	22	230
	(54.8)	(35.7)	(9.6)	(100.0)
3 – 5	90	149	48	287
	(31.4)	(51.9)	(16.7)	(100.0)
Above 5	34	91	8	133
	(25.6)	(68.4)	(6.0)	(100.0)
Total	250	322	78	650
Df:4	Chi-square : 54.744		P Value: .000	Significant

There are 230(35.4%) consumers whose family comprises up to 3 members. Of them, 126(54.8%) have low level of satisfaction; 82(35.7%) have moderate level of satisfaction and 22(9.6%) have high level of satisfaction.

Out of 287(44.2%) consumers whose family consist of 3 to 5 members, 90(31.4%) have low level of satisfaction; 149(51.9%) have moderate level of satisfaction and 48(16.7%) have high level of satisfaction.

Among the 133 (20.5%) consumers whose family consist more than 5 members, 34(25.6%) have low level of satisfaction; 91(68.4%) have moderate level of satisfaction and 8(6.0%) have high level of satisfaction.

It can be inferred from the table that, Consumers whose family consist 3 to 5 members have high level of satisfaction. Consumers whose family consist up to 3 members have low level of satisfaction. As the calculated P value is less than 0.01, there exist a significant association between number of family members and level of satisfaction. Hence, the null hypothesis is rejected.

5.5.2.9 Monthly Income and Level of Satisfaction

The level of satisfaction may vary on the basis of monthly income. To find whether monthly income is associated with level of satisfaction the following hypothesis has been framed and tested.

H_0 : Monthly income is not associated with level of satisfaction.

Table 5.54

Monthly Income and Level of Satisfaction

Monthly Income (Rs.)	Level of Satisfaction			Total
	Low	Moderate	High	
Up to Rs.30000	144	111	34	289
	(49.8)	(38.4)	(11.8)	(100.0)
Rs.30001–Rs.60000	81	180	35	296
	(27.4)	(60.8)	(11.8)	(100.0)
Above Rs.60000	25	31	9	65
	(38.5)	(47.7)	(13.8)	(100.0)
Total	250	322	78	650
Df:4	Chi-square :34.252		P Value: .000	Significant

There are 289(44.5%) consumers whose monthly income up to Rs. 30000. Of them, 144(49.8%) have low level of satisfaction; 111(38.4%) have moderate level of satisfaction and 34(11.8%) have high level of satisfaction.

Out of 296(45.5%) consumers whose monthly income is up to Rs. 30001 to Rs. 60000, 81(27.4%) have low level of satisfaction; 180(60.8%) have moderate level of satisfaction and 35(11.8%) have high level of satisfaction.

Among the 65 (10.0%) consumers whose monthly income is from Rs. 60000, 60(42.6%) have low level of satisfaction; 57(40.4%) have moderate level of satisfaction and 24(17.0%)

have high level of satisfaction.

It can be inferred from the table that, Consumers whose monthly income is from Above Rs.60000 have high level of satisfaction. Consumers whose monthly income is up to Rs. 30000 have low level of satisfaction. As the calculated P value is less than 0.01, there exist a significant association between monthly income and level of satisfaction. Hence, the null hypothesis is rejected.

5.5.2.10 Family Income and Level of Satisfaction

The level of satisfaction may vary on the basis of family income. To find whether family income is associated with level of satisfaction the following hypothesis has been framed and tested.

H_o : Family income is not associated with level of satisfaction.

Table 5.55
Family Income and Level of Satisfaction

Family Income (Rs.)	Level of Satisfaction			Total
	Low	Moderate	High	
Up to Rs.50000	109	89	31	229
	(47.6)	(38.9)	(13.5)	(100.0)
Rs.50001 – Rs.100000	81	176	23	280
	(28.9)	(62.9)	(8.2)	(100.0)
Above Rs.100000	60	57	24	141
	(42.6)	(40.4)	(17.0)	(100.0)
Total	250	322	78	650
Df:4	Chi-square : 36.614		P Value: .000	Significant

There are 229(35.2%) consumers whose family income is

up to Rs.50000. Of them, 109(47.6%) have low level of satisfaction; 89(38.9%) have moderate level of satisfaction and 31(13.5%) have high level of satisfaction.

Out of 280(43.1%) consumers whose family income Rs. 50001 to Rs.100000 family income, 81(28.9%) have low level of satisfaction; 176(62.9%) have moderate level of satisfaction and 23(8.2%) have high level of satisfaction.

Among the 141 (21.7%) consumers whose family income is from Rs. 100000, 60(42.6%) have low level of satisfaction; 57(40.4%) have moderate level of satisfaction and 24(17.0%) have high level of satisfaction.

It can be inferred from the table that, Consumers whose family income Above Rs.100000 family income have high level of satisfaction. Consumers whose family income up to Rs.50000 family income have low level of satisfaction. As the calculated P value is less than 0.01, there exist a significant association between family income and level of satisfaction. Hence, the null hypothesis is rejected.

5.5.2.11 Member in Association and Level of Satisfaction

The level of satisfaction may vary on the basis of member in association. To find whether member in association is associated with level of satisfaction the following hypothesis has been framed and tested.

H_0 : Member in association is not associated with level of satisfaction

Table 5.56

Member in Association and Level of Satisfaction

Member is association	Level of Satisfaction			Total
	Low	Moderate	High	
Yes	74	54	16	144
	(51.4)	(37.5)	(11.1)	(100.0)
No	176	268	62	506
	(34.8)	(53.0)	(12.3)	(100.0)

Total	250	322	78	650
Df:2	Chi-square : 13.571		P Value: .001	Significant

There are 144(22.2%) consumers who are members in association, 74(51.4%) have low level of satisfaction; 54(37.5%) have moderate level of satisfaction and 16(11.1%) have high level of satisfaction.

Out of 506(77.8%) consumers who are not member in association, 176(34.8%) have low level of satisfaction; 268(53.0%) have moderate level of satisfaction and 62(12.3%) have high level of satisfaction.

It can be seen from the table that, Consumers who are not member in association have high level of level of satisfaction. Consumers who are member in association have low level of satisfaction. As the calculated P value is less than 0.01, there exist a significant association between member in association and level of satisfaction. Hence, the null hypothesis is rejected.

5.5.2.12 Environment Concern and Level of satisfaction

The following hypothesis is framed and tested to examine whether the consumers level of environment concern is associated with level of satisfaction.

Ho: Environment concern is not associated with level of satisfaction.

Table 5.57

Environment Concern and Level of satisfaction

Environment Concern	Level of Satisfaction			Total
	Low	Moderate	High	
Low	26 (20.0)	71 (54.6)	33 (25.4)	130 (100.0)
Moderate	199 (46.9)	196 (46.2)	29 (6.8)	424 (100.0)
High	25	55	16	96

	(26.0)	(57.3)	(16.7)	(100.0)
Total	250	322	78	650
Df:4	Chi-square : 56.623		P Value: .000	Significant

There are 130(20.0%) consumers, whose environment concern is low, of them 26(20.0%) have low level of satisfaction; 71(54.6) have moderate level of satisfaction and 33(25.4%) have high level of satisfaction.

Out of 424(65.23%) consumers, whose environment concern is moderate, of them 199(46.9%) have low level of satisfaction; 196(46.2) have moderate level of satisfaction and 29(6.8%) have high level of satisfaction.

Among the 96(14.76%) consumers, whose environment concern is high, of them 25(26.0%) have low level of satisfaction; 55(57.3) have moderate level of satisfaction and 16(16.7%) have high level of satisfaction.

It can be inferred from the table that, high level of satisfaction is found among who have low level of environment concern. low level of satisfaction is found among Consumers who have moderate level of environment concern. As the calculated P value is less than 0.01, there exist a significant association between environment concern and level of satisfaction in eco-friendly products. Hence, the null hypothesis is rejected.

5.5.2.13 Level of Preference and Satisfaction

The following hypothesis is framed and tested to examine whether the consumers level of preference is associated with level of satisfaction.

H₀: Level of Preference is not associated with Satisfaction.

Table 5.58
Level of Preference and Satisfaction

Satisfaction	Level of preference			Total
	Low	Moderate	High	
Low	70	138	42	250
	(28.0)	(55.2)	(16.8)	(100.0)
Moderate	70	194	58	322
	(21.7)	(60.2)	(18.0)	(100.0)
High	14	43	21	78
	(17.9)	(55.1)	(26.9)	(100.0)
	154	375	121	
Df:4	Chi-square :7.683		P Value: .104	Not Significant

There are 250(38.46%) consumers, whose perception is low, Of them 70(28.0%) have low level of preference; 138(55.2) have moderate level of preference and 42(16.8%) have high level of preference.

Out of 322(49.53%) consumers, whose perception is moderate, of them 70(21.7%) have low level of preference; 194(60.2) have moderate level of preference and 58(18.0%) have high level of preference.

Among the 78 (12%) consumers, whose perception is high, of them 53(42.7%) have low level of preference; 58(46.8) have moderate level of preference and 13(10.5%) have high level of preference.

It is evident from the table that, high level of preference is found among consumers who have low level of environment concern. low level of preference is found among consumers who have low level of environment concern. As the calculate P value is less than 0.01, there is no association between the consumers level of preference and satisfaction. Therefore, null hypothesis is accepted.

5.5.2.14 Level of Satisfaction and Perception

The following hypothesis is framed and tested to examine whether the consumers level of satisfaction is associated with level of perception.

H_0 : level of satisfaction is not associated with Perception.

Table 5.59
Level of Satisfaction and Perception

Level of Perception	Level of Satisfaction			Total
	Low	Moderate	High	
Low	43	72	22	137
	(31.4)	(52.6)	(16.1)	(100.0)
Moderate	154	192	43	389
	(39.6)	(49.4)	(11.1)	(100.0)
High	53	58	13	124
	(42.7)	(46.8)	(10.5)	(100.0)
Total	250	322	78	650
Df:4	Chi-square : 5.355		P Value: .253	Not Significant

There are 137(21.07%) consumers, whose perception on eco-friendly product is low, Of them 43(31.4%) have low level of satisfaction; 72(52.6) have moderate level of satisfaction and 22(16.1%) have high level of satisfaction in eco friendly product.

Out of 389(59.84%) consumers, whose perception on eco-friendly product is moderate, 154(39.6%) have low level of satisfaction; 192(49.4) have moderate level of satisfaction and 43(11.1%) have high level of satisfaction in eco friendly product.

Among the 124(19.07%) consumers, whose perception on eco-friendly product is high, 53(42.7%) have low level of satisfaction; 58(46.8) have moderate level of satisfaction and

13(10.5%) have high level of satisfaction in eco friendly product.

It is evident from the table that, high level of satisfaction is found among consumers who have high level of eco-friendly product. Low level of satisfaction is found among consumers who have low level of eco-friendly product. As the calculate P value is less than 0.01, there is no association between the consumers level of satisfaction and perception. Therefore, null hypothesis is accepted.

5.5.3 Barriers in Purchasing Eco-Friendly Products – Garrett Ranking Technique

Sustainability is a holistic and comprehensive concept and consequently, there are so many barriers from all aspects as answered, lack of technology, lack of confidence in the performance of eco-friendly products. Economic and financial, innovational, population growth, unsustainable consumption, poor monitoring and evaluation system, institutional barriers as well as lack of. key barriers to purchasing eco-friendly products include their high price, scarce product availability, low level of credibility of eco-labels, and inadequate information.

Garrett Ranking Technique has been used to ascertain the reason for entering eco-friendly products. Under the Garrett ranking technique the percentage position is calculated by using the following formula:

Percentage Position = $100 (R_{tj} - 0.5) / N_j$ Where R_{tj} = Rank given for i th variable by the j th consumers
 N_j = Number of variables ranked by the consumers.

The consumers are asked to rank the ten questions relating to preference to enter into eco-friendly products.

By referring the Garrett table the per cent position is converted into scores. Then for each factor, the scores of each

consumer are added and then mean value is calculated. The factors having highest mean value is considered to be the most important. Scale values as per Garrett ranking technique for first to ten ranks are as:81,70,63,57,52,47,42,36,29 and 18 respectively. The percentage position of each rank is made into score by referring factors is summed up for assigning rank. The following table exhibits the reason for entering eco-friendly products.

Table 5.60
Barriers in Purchasing Eco-friendly products - Garrett Ranking Technique

S.No	Barriers in purchasing Eco-friendly products	1	2	3	4	5	6	7	8	9	10	Total	Total Score	Mean Score	Rank
		81	70	63	57	52	47	42	36	29	18				
1	Lack of awareness about eco-friendly products	80	160	101	83	54	43	44	13	31	41	650	37556	57.78	1
		6480	11200	6363	4731	2808	2021	1848	468	899	738				
2	Lack of technology	90	46	87	108	57	53	61	60	53	35	650	34491	53.06	4
		7290	3220	5481	6156	2964	2491	2562	2160	1537	630				
3	Lack of confidence in the performanc	65	95	57	50	61	80	69	60	66	47	650	33106	50.93	5

S.No	Barriers in purchasing Eco-friendly products	1	2	3	4	5	6	7	8	9	10	Total	Total Score	Mean Score	Rank
		81	70	63	57	52	47	42	36	29	18				
	e of eco-friendly products														
		5265	6650	3591	2850	3172	3760	2898	2160	1914	846				
4	Eco-friendly products are very expensive	105	77	46	47	96	72	67	68	29	43	650	34725	53.42	3
		8505	5390	2898	2679	4992	3384	2814	2448	841	774				
5	Hard to find in stores	124	80	79	63	30	46	51	59	57	61	650	34951	53.77	2
		10044	5600	4977	3591	1560	2162	2142	2124	1653	1098				
6	Eco-	59	69	84	59	66	47	42	52	86	86	650	31583	48.59	6

S.No	Barriers in purchasing Eco-friendly products	1	2	3	4	5	6	7	8	9	10	Total	Total Score	Mean Score	Rank
		81	70	63	57	52	47	42	36	29	18				
	friendly products are not Advertised properly.														
		4779	4830	5292	3363	3432	2209	1764	1872	2494	1548				
7	Eco-friendly products are not available in full range of variety	36	59	54	69	86	45	50	77	86	88	650	29918	46.03	7
		2916	4130	3402	3933	4472	2115	2100	2772	2494	1584				
8	Labels of	31	18	45	75	81	109	90	82	66	53	650	29816	45.87	8

S.No	Barriers in purchasing Eco-friendly products	1	2	3	4	5	6	7	8	9	10	Total	Total Score	Mean Score	Rank
		81	70	63	57	52	47	42	36	29	18				
	eco-friendly products are not informative, they don't fully inform about their greenness.														
		2511	1260	2835	4275	4212	5123	3780	2952	1914	954				
9	Taste or look bad	26	16	32	59	64	87	85	89	82	110	650	27154	41.78	10
		2106	1120	2016	3363	3328	4089	3570	3204	2378	1980				
10	Does Cost	28	33	62	40	55	68	88	90	97	89	650	28171	43.34	9

S.No	Barriers in purchasing Eco-friendly products	1	2	3	4	5	6	7	8	9	10	Total	Total Score	Mean Score	Rank
		81	70	63	57	52	47	42	36	29	18				
	of Living affects your purchase of eco-friendly products.														
		2268	2310	3906	2280	2860	3196	3696	3240	2813	1602				

From the analysis it is inferred that, the barriers in eco-friendly products is lack of awareness about eco-friendly products followed by the hard to find in stores, eco-friendly products are very expensive and the like.

5.6 Conclusion

To conclude, the analysis has been attempted, to test variables associated with Level of preference, frequency of purchase, level of perception, level of satisfaction and barriers to buy Eco-friendly products.

The result of the study uncovers that consumers buy eco-friendly products due to environmental concern and for their health benefits. They purchase eco-friendly products from internet and local shop. Consumer mostly purchases soap, organic food and ayurvedic medicines.

To disclose the prominent variables that influence the consumer preference towards eco-friendly products, stepwise regression has been employed. Variables such as (1) occupation (2) marital status are prominently associated with the level of preference towards eco-friendly products. Consumers are highly satisfied with the eco-friendly products.

To find out the most prominent variables that influence consumer's frequency of purchase, stepwise regression has been used. the result of stepwise regression discloses that six variables namely (1) Education (2) Occupation (3) Monthly income (4) Family income (5) Membership in association (6) Health ailments amounts are found to be the most prominent variable that influences consumer purchase frequency.

Analysis of Variance (ANOVA) has been made used to examine the difference in mean perception values of the sample consumers. The variables such as Marital status, Educational Qualification, Occupation, No of family members, Monthly income, Family income, Health ailments and Member is association have been found to be significant.

To examine the variables which are associated with the level of satisfaction chi-square test has been employed. Twelve variables namely Age, Gender, Marital status, Area of operation, Educational qualification, Occupation, Type of

family, Number of family Members, Monthly income, Family income, Member is association and Environmental concern have been selected in order to test their association with the level of satisfaction. From the analysis it is inferred that, the barriers in eco-friendly products is lack of awareness about eco-friendly products followed by the hard to find in stores, eco-friendly products are very expensive and the like. Next chapter deals with the findings and suggestions of the study.

CHAPTER VI

SUMMARY OF FINDINGS, SUGGESTION AND CONCLUSION

6.1 Introduction

The current environmental lawful conditions are ever more threatening consumer health and wellbeing at both globally and nationally. Therefore, consumers are becoming more sensitive in their environmental concern, green buying behavior, preferences and satisfaction. The apprehension for environmental degradation has resulted in a new segment of consumers and these consumers have been identified as one who avoids products which are possible danger for health, damage the environment during production, use materials derived from threatened species or environment and cause unnecessary waste. Given the changes in consumer buying criteria toward environmental responsibility, companies should concentrate on this segment because it provides competitive advantage in the future. With this background, attempt has been made in this study (i) To analyze the level of environment concern among the consumers, (ii) To evaluate the factors influencing consumer buying behavior towards eco-friendly products, (iii) To measure the consumers perception towards eco-friendly products, (iv) To examine the barriers for eco-friendly products.

6.2 Methodology

Primary data have been collected from the eco-friendly products consumers in using eco-friendly products the Tirupur district by issuing a well framed questionnaire. A sample of 650 consumers was taken for the study using

snow-ball sampling method. The collected data have been analyzed by Simple Percentage Analysis, Garrett Ranking Test, Weighted average ranking method, Chi-square test, Analysis of Variance, t' test, Correlation, Multiple Regression Analysis and Step wise Regression.

6.3 Summary of Findings

6.3.1 Socio Economic Profile

- Majority of the respondents belongs to the age group ranging from 26 to 35 years.
- Most of the respondents are male.
- Most of the respondents are unmarried.
- Majority of the respondents in rural area.
- Classification by education shows that most of the respondents are with up to Graduation.
- Majority of the respondents are private employees.
- Majority of the respondents in nuclear family
- Majority of the respondents are in no of family members 3 to 5.
- Classification by income shows that most of respondents are with Rs.30001 to Rs.60000.
- Most of the respondents are family income Rs.50001 to Rs.100000
- There is no health problem for majority of the respondents.
- Most of the respondents are not members in any membership.

6.3.2 Environmental Concern- Chi-Square Test

(A) Opinion on Harmful Environmental Pollution -Simple Percentage

Most of the respondents opine that, opinion on harmful environmental pollution are sound, noise, water and soil and so on.

(B) Causes for Environmental Pollution - Garrett Ranking Technique

Result of the Garrett Ranking Technique reveal that, the most important factor which is responsible for environmental pollution followed by industrial activities, plastic consumption, vehicles, trains, ships and planes and so on.

(C) Level of Environmental Concern -Chi square test

Level of environmental concern may vary among the consumers based on their socio-economic profile. Chi-square test has been used to examine whether there is an association between the variables and level of environmental concern. Accordingly, thirteen variables have been selected. The results of the chi-square test are discussed below:

(i) Age and Level of Environmental Concern

Consumers whose age group is above 45 years have high level of environmental concern. The results of Chi-square test reveal that, there exist a significant association between age and level of environmental concern.

(ii) Gender and Level of Environmental Concern

Male consumers have high level of environmental concern, while female consumers have low level of environmental concern. It is found that, there is no association between gender and level of environmental concern.

(iii) Marital Status and Level of Environmental Concern

Married consumers have high level of environmental concern, while single consumers have low level of environmental concern. The results of Chi-square test reveal

that, there is no association between marital status and level of environmental concern.

(iv) Area of Residence and Level of Environmental Concern

Rural consumers have high level of environmental concern. It is found that, there is no association between area of residence and level of environmental concern.

(v) Educational Qualification and Level of Environmental Concern

Consumers whose educational qualification is diploma have high level of environmental concern. Consumers whose educational qualification is up to higher secondary have low level of environmental concern. It is found that, there exist a significant association between educational qualification and level of environmental concern.

(vi) Occupation and Level of Environmental Concern

Consumers whose occupation is student have high level of environmental concern. Consumers whose occupations are professional have low level of environmental concern. The results of Chi-square test reveal that, there exist a significant association between occupation and level of environmental concern.

(vii) Type of family and Level of Environmental Concern

Consumers who belongs to joint family consumers have high level of environmental concern. Consumers who belongs to nuclear family have low level of environmental concern. It is found that, there exist a significant association between type of family and level of environmental concern.

(viii) Number of Family Members and Level of Environmental Concern

Consumers whose family consist 3 to 5 members have high level of environmental concern. Consumers whose family consist up to 3 members have low level of environmental concern. The results of Chi-square test reveal that, there exist a

significant association between number of family members and level of environmental concern.

(ix) Monthly Income and Level of Environmental Concern

Consumers whose monthly income Rs.30001 to Rs. 60000 have high level of environmental concern. Consumers whose monthly income is above Rs. 60000 have low level of environmental concern. The results of Chi-square test reveal that, there is no association between monthly income and level of environmental concern.

(x) Family Income and Level of Environmental Concern

Consumers whose family income is Rs.50001 to Rs.100000 have high level of environmental concern. Consumers whose family income is above Rs.100000 have low level of environmental concern. It is found that, there is no association between family income and level of environmental concern.

(xi) Health Ailments and Level of Environmental Concern

Consumers whose health ailments cholesterol have high level of environmental concern. Consumers whose have low level of environmental concern. The results of Chi-square test reveal that, there exist a significant association between health ailments and level of environmental concern.

(xii) Member in Association/Club and Level of Environmental Concern

Consumers who are member in association have high level of environmental concern. Consumers who are not member in association have low level of environmental concern. The results of Chi-square test reveal that, there exists significant association between member in association and level of environmental concern.

6.3.3 Consumer Buying Behaviour on Eco - Friendly Products

(A)Eco-Friendly Products which first come to our mind with brand-Simple Percentage

Majority of the respondents said that, organic food products come first in their mind.

(B)Preference for buying Eco- Friendly Product -Weighted Average Ranking Method

Weighted average ranking method indicates that, majority of the consumers states that “I want to preserve the earth” secured rank one with mean score 4.71 followed by I just like eco-friendly products, When government puts subsidy on eco-friendly products thus bringing them with in my budget and so on.

(C) Sources of Awareness - Garrett Ranking Technique

The majority of the respondents inferred that, the source of awareness is television followed by social media, family members and the like.

(D) Point of Purchase - Garrett Ranking Technique

From the analysis is inferred that, the point of purchase is majority of Internet followed by local shops, retail malls and the like.

(E) Features of Eco- Friendly Product - Garrett Ranking Technique

Majority of the respondents it is inferred that, the features of eco-friendly products is no use of pesticides followed by the no preservatives or additives, less environmental impact while manufacturing products and the like.

(F) Most Preferred Eco-Friendly Products - Weighted Average Ranking Method

The analysis result indicates that, consumers mostly purchase soaps, organic food, ayurvedic medicine, salt, healthcare/ cosmetic products and energy efficient laptop.

Mean while, consumers purchased CFL bulbs, solar panels/solar water heater, Ac, electronic appliances, refrigerators, battery operated cars less frequently.

(G) Repeat your Purchase of eco-friendly products - Simple Percentage

Majority of the consumers said that, sometimes they repeatedly purchase co-friendly products.

(H) Willingness to Recommend Eco-friendly products

Most of the consumers stated that, they are willing to recommend eco-friendly products.

(I) Difference in Conventional and Eco Labeled Product

Most of the consumers stated that, there is difference in conventional and eco labeled products.

(J) Shortage of Eco Labeled Product

Majority of the consumers said that, there is shortage in eco labeled products.

(K) Shelf Space for Eco Labeled Product

Majority of the consumers opine that, there is shelf space for eco- friendly product.

(L) Effective Marketing Strategy for Eco-Friendly Products - Weighted Average Ranking Method

Find out the majority of the consumers' states that, "People should be educated about the Eco- Friendly Product through some public forums", it secured Rank one with mean value 3.90. Mean while "I have more confidence in unadvertised Eco- Friendly Product than in advertised ones". stood at least rank with mean value score 3.48.

6.3.4 Level of Preference -Chi-Square Test

(A) Variables Associated with Level of Preference

Level of Preference may vary among the consumers based on their socio-economic profile. Chi-square test has been used to examine whether there is an association between the

variables and green buying behavior. Accordingly, fifteen variables have been selected. The results of the chi-square test are discussed below:

(i) Age and Level of Preference

Consumers whose age group ranges between 26 and 35 have high level of preference and consumers age is up to 25 years have low level of preference. It is found that, there is no association between age and level of preference.

(ii) Gender and Level of Preference

Female consumers have high level of preference, while male consumers have low level of preference. It is found that, there is no associations between gender and level of preference.

(iii) Marital Status and Level of Preference

Consumers who are married have high level of preference, Consumers who are single have low level of preference. The results of Chi-square test reveal that, there exist a significant association between marital status and level of preference.

(iv) Area of Residence and Level of Preference

Consumers who are urban area have high level of preference, Consumers who are rural area have low level of preference. The results of Chi-square test reveal that, there is no association between area of residence and level of preference.

(v) Educational Qualification and Level of Preference

Consumers whose educational qualification diploma have high level of preference. Consumers whose educational qualification is under graduate have low level of preference. It is found that, there is no association between educational qualification and level of preference.

(vi) Occupation and Level of Preference

Consumers whose occupation is agriculture have high level of preference. Consumers whose occupation are private

employees have low level of preference. The results of Chi-square test reveal that, there exist a significant association between occupation and level of preference.

(vii) Type of family and Level of Preference

Consumers who belongs to joint family consumers have high level of preference. Consumers who belongs to nuclear family have low level of preference. The results of Chi-square test reveal that, there is no association between type of family and level of preference.

(viii) Number of Family Members and Level of Preference

Consumers whose family consist 3 to 5 members have high level of preference. Consumers whose family consist up to 3 members have low level of preference. The results of Chi-square test reveal that, there is no association between number of family members and level of preference.

(ix) Monthly Income and Level of Preference

Consumers whose monthly income is above Rs.60000 have high level of preference. Consumers whose monthly income is up to Rs.30000 have low level of preference. It is found that, there is no association between monthly income and level of preference.

(x) Family Income and Level of Preference

Consumers whose family income is above Rs. 100000 have high level of preference. Consumers whose family income is up to Rs. 50000 have low level of preference. It is found that, there is no association between family income and level of preference.

(xi) Health Ailments and Level of Preference

Consumers whose coronary troubles have high level of preference. Consumers whose cholesterol have low level of preference. The results of Chi-square test reveal that, there is no association between health ailments and level of preference.

(xii) Member in association/Club and Level of Preference

Consumers who are member in association have high level of preference. The results of Chi-square test reveal that, there is no association between member in association and level of preference.

(xiii) Environment Concern and Level of Preference

High level of preference is found among consumers who have high level of environment concern. low level of preference is found among consumers who have low level of environment concern. It is found that, there is no association between the consumers environment concern and level of preference

(xiv) Perception and Level of Preference

High level of preference is found among consumers who have high level of environment concern. low level of preference is found among consumers who have moderate level of environment concern. It is found that, there exist a significant association between the perception and level of preference.

(xv) Level of Preference and Satisfaction

High level of preference is found among consumers who have low level of environment concern. low level of preference is found among consumers who have low level of environment concern. The results of Chi-square test reveal that, there is no association between the satisfaction and level of preference.

(B) Variables Associated with Level of Preference - Correlation Analysis

In order to examine the nature and quantum of association of variables with level of preference, correlation analysis is used. Out of fifteen variables selected for correlation analysis, two variables have been found to be significant marital status,

occupations, are found to be positively correlated with level of preference.

(C)Determinants of Level of Preference - Regression Analysis

In order to ascertain the variables that determine the consumers level of preference in eco-friendly product, the selected fifteen variables have been regressed on preference index. of the variables taken for the analysis, the variables namely (1) marital status (2) occupation (3) concern towards environment are positively influences of level of preference. However, other variables are negatively influences level of preference.

(D) Variables Prominently Associated with Preference -Step wise Regression

The find out the prominent variables that account for the variation in the level of preference, Stepwise regression has been carried out. Two variables namely (1) Marital status (2) Occupation are found to be significantly associated with level of frequency of purchases.

6.3.5Frequency of Purchase

(A) Frequency of Purchase in Eco -Friendly Products - Simple Percentage

Majority of the consumers said that, they have purchased in once in months are in eco-friendly products.

(B) Variables associated with Frequency of Purchase - Correlation Analysis

In order to examine the nature and quantum of association of variables with level of frequency of Purchase, correlation analysis is used. Out of thirteen variables selected for correlation analysis, five variables have been found to be significant. Marital status, educational qualification, occupation, monthly income and membership in association

are found to be significant at one per cent level are found to be positively correlated with frequency of purchase.

(C) Determinants of Frequency of Purchase – Regression Analysis

In order to ascertain the variables that determine the level of frequency of purchase of purchase, the selected Thirteen variables have been regressed on Purchase index. Variables such as 1) Marital status 2) Educational qualification 3) Occupation 4) Monthly income 5) Health ailments 6) Member is association are found to be positively correlated with level of frequency purchase. However, other variables do not influence frequency of purchase of purchase.

(D) Variables Prominently Associated with Frequency of Purchase –Step wise Regression

The find out the prominent variables that account for the variation in the level of frequency purchase, Stepwise regression has been carried out. Six variables namely (1) Education (2) Occupation (3) Monthly income (4) Family income (5) Membership in association (6) Health ailments are found to be significantly associated with frequency of purchases.

6.3.6Level of Perception- ANOVA

(A) Variables Associated with Consumers Perception on Eco-Friendly Product

Twelve variables have been selected in order to test whether the perception on consumers differ based on the variables. ANOVA has been used to identify the difference in the level of perception of sample consumers. The results of the ANOVA test are as follows:

(i) Age and Level of Perception

The overall perception index is high with consumers, whose age group is up to 25 years buying have high level of perception and low with consumers, who are in age of above 45 years have low perception in level of perception. ANOVA results shows that, there is no significant mean difference among consumers classified based on their age.

(ii) Gender and Level of Perception

Consumers who are male have high level of perception. Consumers who are female have low level of perception. ANOVA result indicates that, there is no significant mean difference among consumers classified based on their gender.

(iii) Area of Resident Level of Perception

Consumers who are urban area have high level of perception. Consumers who are rural area of have low level of perception. The result of ANOVA indicates that, there is no significant difference in the mean perception index of the consumers classified based on their area of resident.

(iv) Educational Qualification and Level of Perception

The average perception index is high with consumers who are in diploma and low with consumers who are in up to higher secondary. The ANOVA result shows that, there exists a significant difference in the mean perception value of the consumers classified based on the educational qualification.

(v) Occupation and Level of Perception

The average perception index have high with consumers who are in students and have low with professionals low level of perception. The ANOVA result shows that, there exists a significant difference in the mean perception value of the consumers classified based on the occupation.

(vi) Type of family and Level of Perception

Consumers who belong to joint family, perceive have high level of perception and consumers, who belong to nuclear

family, perceive have low level of perception. ANOVA result indicates that, there is no significant difference in the mean value of consumers classified based on the type of family.

(vii) Number of family Members and Level of Perception

Those consumer whose family members of three to five members have high level of perception. Consumers whose family members of more than 5 members have Low level of perception. The results derived from ANOVA indicates that, there exist a significant difference in the mean perception values of consumers based on the number of family members.

(viii) Monthly Income and Level of Perception

The overall perception index is high with consumers, whose monthly income is between Rs.30001to Rs.60000 and low with consumers whose monthly income above Rs.60000. ANOVA result shows that, there exists a significant difference in the mean value of perception index among the consumers classified based on the percentage of monthly income.

(ix) Family Income and Level of Perception

Consumers whose family income is have high level between Rs.50001 toRs.100000 and have low with whose family income is above Rs.100000 is level of Perception. ANOVA result shows that, there exists a significant difference in the mean value of perception index among the consumers classified based on the percentage of family income.

(x) Health Ailments and Level of Perception

The average perception index have high with consumers whose health ailments consist of cholesterol and have low with whose health ailments consists of overweight is level of perception. ANOVA result shows that, there exists a significant difference in the mean value of perception index among the consumers classified based on the percentage of health ailments.

(xi)Members in Association/Club and Level of Perception

Consumers whose membership in association consist are have high level of consumers and Low withwhose membership in association consists of not members is level of perception. ANOVA result shows that, there exists a significant difference in the mean value of perception index among the consumers classified based on the percentage of members in association.

6.3.7Level of Satisfaction in Eco-Friendly Product

(A) Satisfaction on Eco- Friendly Product - Simple Percentage

Majority of the consumers said that, satisfied with eco-friendly products.

(B) Variables Associated with Level of Satisfaction - Chi-Square Test

Level of Satisfaction may vary among the consumers based on their socio-economic profile. Chi-square test has been used to examine whether there is an association between the variables and level of satisfaction. Accordingly, twelve variables have been selected. The results of the chi-square test are discussed below

(i) Age and Level of Satisfaction

Consumers whose age group is Above 45 years have high level of satisfaction and Consumers whose age is up to 25 years have low level of satisfaction. The results of Chi-square test reveal that, there exist a significant association between age and level of satisfaction.

(ii) Gender and Level of Satisfaction

Consumers who are male have high level of satisfaction. The results of Chi-squaretest reveal that, there exist a significant association between gender and level of satisfaction.

(iii) Marital Status and Level of Satisfaction

Consumers who are single have high level of satisfaction. It is found that, there exist a significant association between marital status and level of satisfaction.

(iv) Area of Residence and Level of Satisfaction

Rural consumers have high level of satisfaction. The results of Chi-square test reveal that, there exist a significant association between area of residence and level of satisfaction.

(v) Educational Qualification and Level of Satisfaction

Consumers whose educational qualification is post graduate high level of satisfaction. Consumers whose educational qualification is professionals have low level of satisfaction. It is found that, there exist a significant association between educational qualification and level of satisfaction.

(vi) Occupation and Level of Satisfaction

Consumers whose occupation is Professionals have high level of satisfaction. Consumers whose occupations are government employees have low level of satisfaction. It is found that, there exist a significant association between occupation and level of satisfaction. Hence, the null hypothesis is rejected.

(vii) Type of Family and Level of Satisfaction

Nuclear family consumers have high level of satisfaction. It is found that, there exist a significant association between type of family and level of satisfaction.

(viii) Number of Family Members and Level of Satisfaction

Consumers whose family consist 3 to 5 members have high level of satisfaction. Consumers whose family consist up to 3 members have low level of satisfaction. The results of Chi-square test reveal that, there exist a significant association between number of family members and level of satisfaction.

(ix) Monthly Income and Level of Satisfaction

Consumers whose monthly income is from Above Rs.60000 have high level of satisfaction. Consumers whose monthly income is up to Rs.30000 have low level of satisfaction. The results of Chi-square test reveal that, there exist a significant association between monthly income and level of satisfaction.

(x) Family Income and Level of Satisfaction

Consumers whose family income above Rs.100000 family income have high level of satisfaction. Consumers whose family income up to Rs.50000 family income have low level of satisfaction. It is found that, there exist a significant association between family income and level of satisfaction.

(xi) Member in Association/Club and Level of Satisfaction

Consumers who are not member in association have high level of level of satisfaction, while have consumers who are member in association have low level of satisfaction. It is found that, there exists significant association between member in association and level of satisfaction.

(xii) Environment Concern and Level of satisfaction

There are 130(20.0%) consumers, whose perception on environment concern is low, of them 26(20.0%) have low level of satisfaction; 71(54.6) have moderate level of satisfaction and 33(25.4%) have high level of satisfaction.

(xiii) Level of Satisfaction and Perception

Majority of the consumers said that, have high level of satisfaction is found among consumers who have high level of eco-friendly product.

6.3.8 Barriers in Eco-Friendly Products - Garrett Ranking Technique

From the analysis it is inferred that, the barriers in eco-friendly products is lack of awareness about eco-friendly

products followed by the hard to find in stores , eco-friendly products are very expensive and the like.

6.4 Suggestions

(A) Based on the study

1. This research examines the influence of five antecedents on their purchasing intention of eco-friendly products. From the results, it is interesting to note that Attitude toward the environment, social influence, health consciousness and perceived consumer effectiveness significantly influenced their purchasing intention.
2. Attitude toward the environment is the strongest factor that has positively influenced their purchase intention. This study confirmed that a person who has some concern for the environment would have a stronger preference in purchasing a eco-friendly product..
3. Attractive eco-friendly product message contents should be aggressively developed that would stimulate interest among all the educational category and should focus keenly on unmarried respondents.
4. Consumers should be able to easily differentiate eco-friendly products from the no green based on the labels.
5. Further, the price on the eco-friendly products should be affordable to encourage purchase.
6. Government and non-government organizations are a strong players that plays an important role in encouraging consumers to go green and embrace green purchasing behavior.
7. Managers could develop the right positioning strategies and an adequate marketing programme after evaluating the attractiveness of the identified green segments. In addition to the regular benefits, environmental and social

benefits must be present in order to motivate the consumer to buy.

8. According to the results of the study it is indicated that the Retail outlet staffs, TV and Friends and Relatives are an essential factor affecting the sources of awareness on eco-friendly products. In this regard it is suggested that Indian manufacturers for eco-friendly products must focus on these factors and bring about such strategies in their marketing plan that correspond to customers' preference.
9. It is indicated that education is an important factor. This can pave the way for learning and understanding positive behaviors to protect environment. It is shown that there is a meaningful relationship between educated people's attitude towards environmental issues and protecting environment. The growing rate of education in society is a good motive at the face of production and consumption of eco-friendly products in future.
10. Further, green purchase behaviours are associated with social meanings and values. Almost all individuals belong to one social group or another and some of these social groups might have established "norms" on green purchase behaviour.

(B) General Suggestions

(i) Suggestions to Government

1. As observed from the research, the consumers exhibit a high level of concern towards environment. Thus, the organizations and government bodies' aims to create an awareness and importance of environment among the general public by conducting campaign. This could convert an ordinary consumer into a green consumer.

2. The government has to strict the rules towards environment and has to take immediate action against environmental polluting companies.
3. It is advisable to further enhance the environmental educations syllabus at all the levels of education and providing the practical experiences to the students.
4. The more incentives are to provide for the producers of eco-friendly product in order to cut the cost.
5. Many respondents have revealed that identifying the eco-friendly product are difficult. So, the government as to take measures in implementing the ecolabel compulsory on eco-friendly products.
6. Policy makers as to provide eco-certification and exercise legal control to substantiate the green claims of the manufacturers.

(ii) Suggestions to Companies:

1. The study advises that to make the public to aware of eco-label for the easy identification of eco-friendly products and mentioning the eco-friendly aspects on the packaging.
2. The main barrier of eco-friendly product is high cost. The companies have to reduce the cost of eco-friendly products and make available to all the categories of income group of the public.
3. Making the eco-friendly product available in most of the places and the companies has to adopt green practices in their activities.
4. It is strictly advisable to bring to an end to the green washing. It is one of the important barriers to purchase the eco-friendly products.
5. The marketers has to consider the factors such as environmental concern, attitude, intention, behavior and

influence might be taken into account in their efforts to turn the non-green consumers into green consumers.

6. Selecting the best means of communication in spreading the awareness towards environment and eco-friendly products.
7. Industries and business firms should demonstrate their social responsibility and set the right sustainable objectives, comply with regulations, provide adequate amount of environmental information, eliminate avoidable packaging, set affordable prices and involve greener distribution practices.
8. Consumers too need to play an important role in order to achieve sustainability. Consumers can do their bit by buying eco-friendly products with eco-friendly packaging, check for the carbon footprint of the product, buy natural and herbal products as much as possible and make sure that the product's whole life cycle is sustainable.
9. As consumers consider the ill effects of manufacturing and consumption on natural environment, they may purchase the eco-friendly product if marketers can make them aware about the benefits of the eco-friendly products as compared to that of traditional products.
10. The findings of the present study suggest that attitude toward the environment is the more significant predictor of green purchase intention. This implies that future green purchase behaviour can be instilled among prospective consumers by developing favorable attitude towards the environment. Therefore, marketers should try to motivate individuals to get involved in sustainable consumption practices. Such sustainable activities could include maintenance and recycling of used goods, using public transport, etc..

(iii) Suggestions to Consumers:

1. The consumers are advised to read the product label before buying the products and check the ingredients contained in the product to see whether the product we purchased is good to health and for the environment. Buy more and more organic food for the healthy purpose and to serve the environment.
2. Awareness about eco-friendly products and eco-label help the consumers in identifying the difference between eco-friendly and non-eco-friendly products.
3. The consumers should lead and make other consumer understand the seriousness about the environment. It is everyone liability to save the planet. They should pay premium price for eco-friendly products as it can save the planet up to certain extent. Minimizing the use of scares resources and makes use of recycle products.
4. Consumers have shown positive attitude towards eco-friendly products at the same time they are concerned with the availability and price of such products. This implies that Marketers should make the eco-friendly products available to the consumers for their consumption as customers have shown willingness to buy eco-friendly products if it is available.
5. The study has implications for marketers as well as consumers and makes a good case for start of an era of green marketing in India. The study since focused on a limited geographical area has limited generalizability but provides good insights regarding behavior of consumers towards eco-friendly products.

6.5 Conclusion

The research revealed that the green consumers are environmentally conscious but exhibited restrained behaviour when it came to actual purchase of eco-friendly commodities. This situation poses high challenges to the marketers and policy makers in bridging the gap. The determinants and barriers to their eco-friendly purchase will help them overcome this issue and understand their consumers to serve them better.

This study helps to create a balance between the expectations of consumer behaviour and business sector, within the orbit of environmental protection. Understanding the characteristics of green consumers not only helps entrepreneurs and policy makers to explore the environmental market but aids eco-innovation in developing the next generation of products and services with the ability to significantly minimize environmental impact. Explore the environmental market but aids eco-innovation in developing the next generation of products and services with the ability to significantly minimize environmental impact.

In this study eco-friendly products purchase behaviour has been studied across product ranges. In the future, more research should look into the exploration of this framework on specific sectors. A comparative study by a North and a South Indian city may indicate further insights about the role of cultural differences. Also a comprehensive model may be developed which comprises of the antecedents as well as the consequences part of eco-friendly products purchase behaviour which may yield a holistic view on the topic.

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