This chapter introduces the research of the study. The introduction provides introduction a general background about green marketing and the reasons that led to the study. The need for this study is clearly identified in this chapter, which then goes directly into the research objective. Green Marketing is a very broad topic, as such: the research scope is limited to address the research objective. The research problem, objectives, significance, methodology and limitations of the study are also outlined.
1.1 Background

"We need things consumed, burned up, worn out, replaced, and discarded at an ever increasing rate" is a Victor Lebow's quotation (an American retail analyst from 1948) cited in The Green Marketing Manifesto Grant, 2007, p. x (10)). This sentence is no longer an issue.

Since over the last few decades, environmental concerns such as global warming, climate change and rapid depletion of natural resources, etc have been important issues. The deterioration of eco-system and shortage of natural resources seriously affect human beings and thus development. Significant change in the climatic condition poses a threat to the survival of the society. In order to respond to critical issues arising from worldwide climate change and natural resource conservation, concepts focusing on environmental responsibility emerged. Protection of the environment is the primary responsibility of each and every individual and the mode of measures has become one of the biggest challenges to progress.

Mans callous indifference to the environment is the basic reason for such grave environmental hazards. Unless there is a change in mans attitude towards the environment, the problem would remain an enigmatic issue. The solution to the problem is mainly vested with the government and the producers who manufacture consumer goods. At present the problem has become a great concern to a few environmentalists' and their responses have become just a cry in the wilderness. As it is a global issue, the problem addressed by the environmentalists should reach the mind and soul of the society and those in the law making realm. It has become increasingly recognised that today's environmental situation cannot be solved only with technical solutions, but by understanding and changing the behaviours and attitudes of citizens, consumers, business people and policy makers (Tjarnemo, 2001, p.31).

In today's business, enterprises and organisations are becoming more and more committed to environmental issues due to tougher environmental legislation, economic and other influences from the general public. In a competitive and global
setting, companies need to have a concern for the environment as part of their operations. Many global players in diverse businesses are now successfully implementing Green Marketing Practices. Today companies are aware of responsibilities towards the environment. So products and production processes have become cleaner and more companies “go green” that they can protect the environment and increase profits at the same time.

The recent surge of environmental awareness throughout the world should not be under rated. Worldwide evidences indicate that people are becoming concerned about the environment and are changing their behavior accordingly. As business activities caused many of the environmental problems in the past and still do, there is increasing recognition that Green business is vital in the process of a more ecological, sustainable society. Companies, especially multinationals, play an essential role in the world economy, and they have also the resources and capacity to put ecological solutions into practice. Companies have responsibility towards greater sustainability and greening the society. So company’s aim at creating markets for more eco-friendly products and services and influence customers to change their black behaviour to Green behaviour.

Green marketing is inevitable and it is the need of the hour. It is a creative opportunity to innovate in ways that make a difference and at the same time achieve business success by designing and modifying the products totally suitable to nature. It refers to the process of buying and selling of products and/or services based on their environmental values. Green marketing has emerged as an important concept in India as in other parts of the developing world, and is seen as an important strategy of facilitating sustainable development. Thus manufacturers become more eco-oriented and offer environmental-friendly products which might result in increased market shares as well as improved company’s green image in the society and thereby companies gain first-mover advantage in greening.

Marketers today use myriads of terms to convey the green value of their products and services and they use “green” as an umbrella term to define anything that is natural, recyclable, and not detrimental to the environment and the earth.
Consumers’ spending patterns and also the demand for green products have been growing rapidly over the past few decades. There has also developed a curiosity among consumers to understand how green a green product is. Companies should evolve opportunities to “prove” the greenness of their product and its efficiency and quality compared to non-green products. Marketers who do this best win more consumers. It is essential to understand green marketing and the behavior of consumers towards green products especially in India, where the trend is still new.

To gain competitive advantage, firms follow demand trends of consumers and make improvements over time. Marketers have understood the importance of environmental management as a strategic tool not only to reduce environmental hazards and develop business opportunities.

Some firms have changed their corporate culture to a more environmentally responsible and environmentally friendly manner or to meet the demands of the environmentally conscious consumers. However, the pressure to adopt environmentally friendly practices in the consumer goods sector is more when compared to the other sectors. According to press release made by Mintel (Organisation of food and drink market researches) in November 2010, the Consumer Packages Goods (CPG) or Fast Moving Consumer Goods (FMCG) sector should follow twelve trends. Among these trends some of them are concerned with the term “redefining natural”. Producers should respect the regulation to say that a product is natural or not and continue to reduce packaging (mintel.com). These signs show that the FMCG sector is ready for a change and to grow green.

FMCG sector is considerably a large sector in the economy which has become immensely conscious about eco-friendliness. As society becomes more complex with the environmental pollution and unethical business practices, both consumers and business organisations are concerned with the preservation of the presume nature of the environment. As a result there is a shift in the buying behavior of the individual; hence he prefers products which are environmentally friendly to those which are environmentally harmful. This transformation has made business organisations to address society’s “new” concerns. Organisations are now aware of
the fact that only by adopting green in the core of their strategy they can survive in the present competitive era.

The FMCG sector is one of the growing industries that have concern about the green marketing issues. Most of the marketing practitioners use green elements as powerful marketing tools. Studies on environmental trends and green marketing have multiplied in recent years and point to growing consumer awareness. However, a better understanding of consumer behavior towards green marketing is necessary especially in the FMCG sector.

As Chamorro, Rubio and Miranda, 2009, p.233 indicates: “Studies analysing green consumers will continue to be attractive as environmental consciousness evolves over time. The findings of studies from previous years will not necessarily be valid in the future. New research on this topic should aim to identify possible developments in consumer attitudes, intentions and behaviours”.

Recently people have developed a need to redesign their lifestyles and get on the green mode. Marketing can be seen as a significant instrument to sell new lifestyles and change overall consumption habits, not only by ecologically concerned consumers. The demand for green products is more and more on the increase. The thesis aims at identifying the concept of green marketing and the role it plays in gaining competitive advantage to satisfy and retain customers through different strategies adopted by firms. This paper initially discusses the terms and concepts of green marketing, the challenges faced by the firms while segmenting, targeting and positioning the ‘green audience’. The paper also examines the current movement in trends in green marketing in India and tries to understand the importance of green marketing in the context view of the present challenges in the Indian scenario. In the thesis “eco-friendly” as well as “green” products will be used to refer to environmental products.

1.2 The Emergence of Green Marketing

Environmentalism can be traced back to the 1960’s and early 1970’s with increasing concern about the impact of consumption and production patterns in the

Green Marketing of Fast Moving Consumer Goods
environment due to debates about health effects and the impact of economic and population growth. It can be noted that environmental perception and green consumerism had not been significantly important before the mid 1980’s. Green concept and green marketing had an exponential growth during the last few decades and it created a global impact on the market and environment.

The green concept and movement was first initiated in Great Britain where green consumerism sprang up as the result of company’s increased degradation and negligence to the environment. Thus, the concept of green marketing spread throughout Great Britain. The American Marketing Association (AMA) held the first workshop on ecological marketing in 1975.

There is an important trend in green marketing and green consumerism nowadays. Asian countries have started showing signs of its emergence. Ecological responsibility is a critical function of any management and emerges as an important tool for the success of any business organisation. Environmental awareness, increasing interest of consumers in green products, etc led to corporate interest in green marketing, initiating major changes and innovations. Despite this optimism, a significant gap between concern and actual purchasing has been identified. The drastic change in consumer behavior made the firms adopt marketing strategies for the requirements in marketing environment as well as for consumer needs. Rise in environmental concern among consumers has been viewed as the biggest opportunity by enterprises. A number of factors have been responsible for the growth of green consumerism. These include heightened awareness of green issues among people, increased levels of information available to green consumers, emergence of an increasing number of green substitutes to traditional products; widespread use of green themes in advertising; a shift in values towards concern for environment and society; and increased marketing and merchandising activity among environmental and social charities. Companies when go green should bear in mind their social commitment. Hence they should not exploit the green agenda for commercial ends but should give great thrust to sustainable development as well. Therefore, success in business depends on the ability of marketing concerns to make green alternatives
appear natural and acceptable. This has been a concern which has not been addressed earlier. The importance of customer focus also in green marketing activities becomes crucial. This is an orientation that was not addressed before.

1.3 Research problem

A research problem is a question that leads to the need for the study of a problem which remains unresolved. The most obvious environmental issues include global warming and ozone depletion which influences all human activities. The traditional view that the corporate management aimed at maximising profit altered during the early 1990's to the ongoing marketing paradigm based on using the earth’s resources and systems in a sustainable manner.

Many of the serious environmental issues we face today are due to modern lopsided development. In order to tackle this, a paradigm shift to sustainable production and consumption is needed. However, for effecting this, changes on individual, societal and economic levels are needed.

In today's global business environment, businesses are facing increased regulatory and community pressures due to their negligence towards the environment. Furthermore, there is also pressure for environmental sustainability, which requires strategies to reduce environmental deterioration caused by products and services offered. The deterioration of the environment paved the way for the demand from the consumer's towards eco-friendly products in order to safeguard the planet. With increased pressure, many firms embraced green marketing strategies and exploited environmental issues for competitive advantage.

Some of the challenges faced by green firms are changes in consumer preferences, perception, attractiveness and high cost involved in production. However, it has become global struggle to protect the environment. So companies use a unique rhetoric to persuade the consumer segments who are environmentally conscious to alter their preference for conventional products to green products.
Environmental sustainability is a matter which cannot be ignored, so business organisations have to recognize the competitive advantages and business opportunities to be gained from green marketing although it may cost the organization. Green marketing is a relative concept, as different people and countries will have different perceptions of what it constitutes according to their perceptions which will change over time (Peattie, 1995). Green marketing incorporates a broad range of activities, including product modification, changes in the production process, packaging changes, as well as modifying advertising (Michael Jay Polonsky, 1994). Today marketing practitioners of FMCG sector in India use environmental packaging and modify the products to minimise environmental pollution.

According to Greendex 2010, based on worldwide tracking survey, it has been found that environment friendly behavior among consumers has increased from 2008 in developing economies like Brazil, India and China which have the highest scores. However, there is an argument among the marketing philosophers regarding attractiveness of green products to India.

Green marketing concept is fairly young and as a consequence it has not been extensively explored. In India, data about the customer preference towards green products, their willingness to pay and the marketing mix elements in green products are scarce. Therefore, going green depends on many factors that encourage consumers to go forward for green products. With this background, the researcher has paid attention to green marketing which has helped to generate an opinion on the subject: “Study on green marketing with special reference to FMCG’s”.

1.4 Research Gap

Many literatures and surveys which examine the consumer behaviour cover different disciplines that determine the factors influencing green marketing, consumer’s preference towards purchase of the products, etc. From the review of available literature, it can be seen that Green Marketing practices of the FMCG sector form a new area of study. The earlier studies review indicates the impact of price consciousness, the quality consciousness, and the environmental consciousness
of the consumers in a detailed manner. Customers have no faith in the environmental claim of firms and so they are unwilling to buy environmental products as they think it dearer to their conventional counterpart. Despite all the attractiveness provided by the environmental products, the consumer is chiefly concerned about the price fixed by the company for the product. Strategies offered by the green FMCG companies and its impact on consumers still remain unexplored by researchers and scholars. The study is undertaken to explore the recesses of consumers green purchasing behaviour which has hither to remain unexamined. This virgin field has offered great interest and enthusiasm to undertake a research study on the subject. Therefore, the purpose of the study is to provide an overview of the green marketing related issues especially in the FMCG sector.

The researcher will also analyse the five marketing mix elements, consumer’s preference, etc and how they influence consumers to make purchases on the green FMCG products. Further, the factors affecting the green purchasing behaviour of the customers, the degree to which Green Brand Image, Green Satisfaction and Green Loyalty affect the customer Green Brand Equity were examined in detail by applying appropriate statistical models. This research will have a significant and vital impact on the readers as the consumer plays an important role in the green marketing of FMCG research in safe guarding of the earth from depleting its resources.

1.5 Rationale of the Study

In recent years, environmental issues have received a great deal of attention, reflecting increased public awareness and concern. Environmental groups have campaigned briskly for higher environmental standards. Reports from the media on these issues have increased considerably. In addition, some companies have expressed their displeasure towards conventional products through boycotts. There are a number of factors that affect the acceptance of green products. Innovation enhances the competitiveness of organisations and may also endanger the environment. Green marketing was also included in the list as one of the Green operation practices. As far as the FMCG industry and the purchasing behaviour of the customers are considered, many research results have shown that environmental awareness has more to do with
customer attitudes and values. There is strong need for manufacturers, the marketers, the government, the customers of FMCG industry and all the stakeholders in the system to control and reduce the ever-increasing problem of pollution and its impact on the earth, so that the FMCG companies manufacture and introduce their products in a way suitable to the Green environment. This study considers earlier assumptions by researchers and makes an attempt to study the scope of green marketing in FMCG sector.

1.6 Scope and Importance of the study

The FMCG industry in India is the fourth largest industry in the economy which has well established distribution networks, as well as intense competition between the organised and unorganised segments are the characteristics of this sector. FMCG in India has a strong and competitive MNC presence across the entire value chain.

As society becomes more concerned with the natural environment, businesses have begun to modify their behavior in an attempt to address society’s new concerns. The opportunity to provide environmental solutions would be one of the biggest themes in the generation of business leadership. Stakeholders of companies agree that green marketing is not a passing trend as they are aware of the expanding demand for green products. Ottman (2007, p.5) defines “green products are typically durable, non toxic, made from recycled materials, or minimally packaged”. Of course, there are no completely green products, for its production need energy and resources and create by-products and emissions from the time of manufacture till its disposal. Some businesses have been quick to introduce measures like environmental management systems. With the prevailing environmental consciousness of consumers and strict international regulations related to environmental protection, companies undertake green marketing activities to investigate consumers’ Green attitudes and behaviours, to identify the market for green products, and to stratify the Green market into different segments based on consumer needs (Jain and Kaur, 2004). The study is of immense relevance to FMCG companies as it examines the Green Purchasing Behaviour of the customers and the extent of Green Brand Image, Green Satisfaction and Green Loyalty on the Green Brand Equity. The relationship
between these elements enable FMCG companies to frame suitable green strategies for fulfilling the needs of the consumers by producing and distributing Green products.

Companies began employing environmental strategies to produce eco-friendly products, which are good for humans, nature, and company itself. Since innovation plays an important role in enhancing the competitiveness of organisations. Understanding the various factors affecting the Green customer behaviour of the FMCG industry is somewhat difficult in the sense that these factors are related to the psychological aspect or behaviour of the customers.

1.7 Purpose of the study

The main purpose of the study is to discover how the ecological balance and innate environmental features can be preserved through sustainable development. In this context the role played by FMCG’s and their potential consumers have become inevitable for a meaningful and worthwhile study. The study proposes to identify and examine the strategies employed by the FMCG’s to achieve their goal and how the consumer switches over their interest from conventional products to green products.

1.8 Need and significance of the study

Environmental problems have become grave global issues these days due to population explosion and other related factors. The practice of green marketing and the force of “going green” are gaining wide acceptance in our country where environmental threats are disturbing governments and citizens. Recyclable or renewable goods are required to meet the unlimited demands of a society as earth’s resources are limited and human needs (wants) unlimited. As industries are based on limited resources they have to fend alternatives to satisfy the needs of the consumer. Hence green marketing is vital to achieve their organisational goals. Furthermore, environmental issues and health problems from governmental and societal sectors have imposed bitter constraint on the organisations to go green. Consumer’s knowledge, environmental concern, positive belief towards eco-friendly, safe and
cleaner products and desire to pressure the environment are other factors that triggered the growth of green marketing. Although green marketing has attained a global dimension, the demand is still unstable and the market conditions fluctuate. Thus, the study provides an insight into green purchase behavior and facilitate green FMCG companies.

1.9 Objectives of the study

There has been a significant public interest and concern for the environment. Changing environmental conditions, green marketing and ethics, lead to changes in consumer behaviour. So, marketing strategies need to be adapted suit to the requirements in the changing scenario. As environmental issues become increasingly important to the society, green marketing and relationship marketing would help to achieve sustainable competitive advantage. Therefore, companies have changed their production methods to safeguard the environment. The three components that help to promote green marketing are the government, FMCG’s and consumers. It would be interesting to question whether the activity is carried out in India in unition with the aforesaid components.

The basis of the research led to the arrival of the following objectives:–

1. To understand the concept of green marketing and its application in the Indian context.

2. To investigate the consumers preference towards green products in FMCG sector.

3. To analyse the factors affecting green purchasing behaviour of the customers.

4. To evaluate the strategies adopted in the green marketing mix of FMCG products.
5. To examine the impact of Green marketing practices of FMCG companies on Green Brand Image, Green Satisfaction, Green Loyalty and Green Brand Equity of the customers of FMCG sector in Kerala.

6. To suggest suitable strategies for green marketing companies to satisfy the customer’s requirements.

1.10 Hypotheses

1) There is no difference between the preference of the customers of different types of FMCG products and the factors that motivate them to purchase green products.

2) There is no significant difference between the customers of different areas and the factors affecting their green purchasing behaviour.

3) The changes in the GS, GT and GL of the customers do not make any change in the GBE of the customers.

4) There is no association between the type of goods purchased by the customers of FMCG industry and the source of information about green marketing.

5) There is no association between the media for green marketing communication and type of goods purchased.

6) There is no difference between the type of goods preferred by the customers and the factors that influence them to purchase green products.

7) There is no association between type of goods purchased and benefits expected by the customers in the FMCG industry.

8) There is no association between the type of goods purchased by the customers and their reluctance to go green.
9) There is no association between the type of goods purchased by the customers and the expectation of the customers about the reuse of the package.

10) There is no association between the information provided on the package and the purchase behaviour of customers

1.11 Research Questions

A research question is a statement concerned with the logical relationship among concepts, which may be judged as true or false if it refers to observable phenomena. The following research questions were derived:-

RQ1: What are the factors in the marketing mix that influence consumers to purchase eco-friendly products? To what extent these factors influence consumers to purchase green products?

RQ2: Do positive attitudes towards eco-friendly products lead to purchase intention?

RQ3: What is the relationship between consumer preference towards green products and purchase decision?

The researcher proposes to conduct the research depending on the questions based on the objectives.

1.12 Research Methodology

This part describes the different approaches that have been applied to gather necessary information in order to perform a successful research study, contributing to the development of a valid and critical thesis. The present study is descriptive and analytical in nature. The thesis intends to improve the level of understanding of green marketing effects and changing purchasing behaviour of customers and also to examine how Green Brand Image, Green Satisfaction and Green Loyalty affect the customers Green Brand Equity of FMCG.
Introduction

Fig: 1.1 Research Methodology Process
1.13 Data Source

The thesis embraces up quantitative data in the form of both primary and secondary sources of information. The primary data were collected from the managers of Green FMCG Companies through a detailed discussion and data from sample customers of five districts (i.e., Trivandrum, Kollam, Alappuzha, Ernakulam, Pathanamthitta) of South Kerala were collected by using a pre-structured questionnaire. Primary data helped to answer the research question and is collected specifically for the research project undertaken. Primary data involves gathering of first-hand information by the researcher. The use of questionnaire from customers and interaction with Green FMCG's helps to collect valid and reliable data relevant to the research questions and objectives of the study. Secondary data has been collected to get an insight into the field of study. Materials on green marketing collected from the University libraries, scientific articles from online libraries and journals, E-Journals of SAGE, Emerald publications, research theses and dissertations, etc. provided secondary information for the study. A general awareness has been created through the study to identify particular variables of interest for further investigation. The theoretical framework represents the foundation of the topic. From the analysis of the data collected, the researcher could arrive at certain conclusions.

1.14 Research Approach

Descriptive and analytical research approaches were employed to detect the perceptions of customers towards green products and to analyse their influence on green purchase decisions. Survey research method using a well-structured questionnaire for selected customers and an interactive session between Green FMCG's was adopted in this study.

1.15 Period of Study

A preliminary opinion survey for a period of 2 months (March and April 2012) was conducted among the customers and marketing managers of selected FMCG
companies to identify the key variables relating to green marketing practices and the factors affecting the green purchasing behaviour of the customers. A pilot study was conducted among 50 customers of FMCG products with a preliminary questionnaire for a period of two months (May 2012 to June 2012). After testing the reliability and fixing the sample size, the final questionnaire was administered to 700 selected customers of five districts of South Kerala from July, 2012 to October, 2012.

1.16 Research Instrument

A well structured questionnaire was prepared with the objective of gathering information from selected customers of FMCG products and to analyse the factors affecting their Green Purchasing Behaviour, Green Brand Image, Green Satisfaction, Green Loyalty and Green Brand Equity. The questionnaire was administered after conducting a pilot study and consultation with an expert in Applied Statistics. Detailed discussions with marketing managers of FMCG companies and the preliminary opinion survey conducted among the customers also helped to include relevant variables relating to the factors affecting the green purchasing behaviour.

1.17 The Population

The population for the study comprised of customers from five districts of South Kerala who exhibited a significant attitude to go green. The people of Trivandrum, Kollam, Alappuzha, Ernakulam and Pathanamthitta districts are urban, semi-urban and rural areas in South Kerala which should focus more on environmentally friendly. The study of the population in the five districts of South Kerala has been valuable in understanding the behaviour and attitudes towards green products accurately.

1.18 Pilot Study

A pilot study was conducted by using the preliminary questionnaire obtained from 50 customers of FMCG sector. The collected data from the fifty respondents along with the changes reported were studied in detail and changes were incorporated. Thus, a Reliability Analysis was done on the responses pertaining to
the factors affecting the purchasing behaviour such as Brand Image, Satisfaction, Loyalty and finally Green Brand Equity, based on 134 statements recorded on a five-point scale. The classical Cronbach Alpha Model was made use of for ascertaining the reliability of the questionnaire. The final Alpha value obtained for each variable, against the number of statements under study, is presented in the following table.

**Table 1.1 Cronbach Alpha for the Variables Selected for the Study**

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Variable</th>
<th>No: of statements</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Social Influence</td>
<td>7</td>
<td>0.895</td>
</tr>
<tr>
<td>2.</td>
<td>Environmental Knowledge</td>
<td>4</td>
<td>0.952</td>
</tr>
<tr>
<td>3.</td>
<td>Environmental Concern</td>
<td>12</td>
<td>0.962</td>
</tr>
<tr>
<td>4.</td>
<td>General Environmental Belief and Attitude</td>
<td>14</td>
<td>0.924</td>
</tr>
<tr>
<td>5.</td>
<td>Environmental Activism</td>
<td>8</td>
<td>0.892</td>
</tr>
<tr>
<td>6.</td>
<td>Perceived Seriousness of Environmental Problems</td>
<td>5</td>
<td>0.974</td>
</tr>
<tr>
<td>7.</td>
<td>Perceived Environmental Responsibility</td>
<td>8</td>
<td>0.872</td>
</tr>
<tr>
<td>8.</td>
<td>Government’s Role</td>
<td>6</td>
<td>0.942</td>
</tr>
<tr>
<td>9.</td>
<td>Perceived Effectiveness of Environmental Behaviour</td>
<td>5</td>
<td>0.974</td>
</tr>
<tr>
<td>10.</td>
<td>Consumer Awareness and Attitude towards Green Marketing</td>
<td>10</td>
<td>0.922</td>
</tr>
<tr>
<td>11.</td>
<td>Response to Green Companies and their Products</td>
<td>11</td>
<td>0.891</td>
</tr>
<tr>
<td>12.</td>
<td>Expectation of Green Pricing</td>
<td>3</td>
<td>0.921</td>
</tr>
<tr>
<td>13.</td>
<td>Green Place/Distribution</td>
<td>3</td>
<td>0.927</td>
</tr>
<tr>
<td>14.</td>
<td>Green Package</td>
<td>6</td>
<td>0.961</td>
</tr>
<tr>
<td>15.</td>
<td>Responses to Green Promotion</td>
<td>8</td>
<td>0.960</td>
</tr>
<tr>
<td>16.</td>
<td>Consumer Awareness and responses towards Eco-labels</td>
<td>4</td>
<td>0.946</td>
</tr>
<tr>
<td>17.</td>
<td>Green Brand Image</td>
<td>4</td>
<td>0.958</td>
</tr>
<tr>
<td>18.</td>
<td>Green Purchasing Behaviour</td>
<td>5</td>
<td>0.935</td>
</tr>
<tr>
<td>19.</td>
<td>Green Satisfaction</td>
<td>2</td>
<td>0.895</td>
</tr>
<tr>
<td>20.</td>
<td>Green Loyalty</td>
<td>6</td>
<td>0.932</td>
</tr>
<tr>
<td>21.</td>
<td>Green Brand Equity</td>
<td>3</td>
<td>0.918</td>
</tr>
</tbody>
</table>

*Source: Survey data*
1.19 Sample Size

The modified data after Reliability Analysis, collected from the 50 respondents, was studied in detail to identify the extent of variations in the responses. It was seen that the sample size was proportionate to the level of variation and the assumed level of error of the population parameter of the study variable. As many as 134 statements relating to the variables affecting the purchasing behaviour of the customers were used for determining the sample size. For an assumed level of 5 per cent error in the estimates of the means of these 134 responses using the information on variances from the pilot study and the sample size was obtained based on each response. The formulae used is \( n \geq \left( \frac{1.96}{s/d} \right)^2 \), where ‘n’ is the sample size, ‘s’ is the estimate of standard deviation, ‘d’ is the standard error of the estimate of the population parameter, and the value 1.96 is the critical value from normal test at 5 per cent level of significance. Therefore, the sample size determined is 617 and we fix the sample customers at 620 for the study.

1.20 Method of Sampling

Stratified Random Sampling was applied for the selection of sample customers from customers of FMCG industry. The customers of these industries in South Kerala are very large and totally heterogeneous. In this context, Stratified Random Sampling Method was applied as the main technique for developing the groups from the population to derive at a sample that contains homogeneous characteristics among the customers in South Kerala. The 620 sample customers were selected from each category of customer’s i.e. 325 from the customers of convenience goods, 150 from shopping malls and 145 from speciality goods. The customers of convenience goods were randomly selected from the voters list of the ward of a selected panchayath and customers of shopping goods were selected from the list of customers visited in a day in one mall of one district identified and finally the customers of speciality goods were randomly selected from one showroom of speciality goods in a day.

1.21 Type of Analysis

Bi-variate and Multivariate Analysis were done for establishing the relationship among the variables under study. The primary benefit of multivariate and bi-variate techniques is that it gives researchers a vital tool to examine relationships between variables and to quantify the relationship between those variables. Bivariate analysis focuses on two variables, whereas multivariate analysis focuses on more than one dependent variable (also known as the outcome), more
than one independent variable (also known as predictor) or both. Different statistical modelling was applied for proving the multivariate relationship among the relevant variables under study.

1.22 Tools Used for Analysis

1. Chi-square Test

A Chi-square test is also referred to as Chi-squared test or $\chi^2$ test, is any statistical hypothesis test in which the sampling distribution of the test statistic is a chi-squared distribution when the null hypothesis is true. The Chi-square test is applied to test whether there is a significant association between two categorical variables, with classical test for independence. Here, the Chi-square test is used to test the association between benefits desired by the customers while purchasing green products; reason for the customer's negative approach to go green; information on reuse of green packages and green products package messages.

2. K Sample Friedman Test

Friedman test is a non-parametric statistical test developed by US economist, Milton Friedman. This test compares two or more variables and it is also used to test for differences between groups when the dependent variable being measured is ordinal. This test first ranks the values in each from low to high. The rank assigned by the respondents for the variables are averaged and tested to find out whether the mean rank is significant or not. In this study, Friedman's test (non-parametric test) is applied for testing the variation of the rank preferences of the customers towards the factors motivating them to purchase green products (i.e., Convenience, Shopping and Speciality goods) and also to identify the influence of 5 P's (Product, Price, Place, Promotion and Package) on the purchase of green products.
3. One-way ANOVA

The One-way Analysis of Variance (ANOVA) is used to identify the influence of different categories of independent variables on a dependent variable or it measures the significant effect on the independent variable. It also measures difference from one group to another. In this study, ANOVA model is applied to test area-wise mean variation of the factors affecting the Green Purchasing Behaviour of the customers.

4. Step-wise Regression Model

In statistics, step-wise regression includes regression models in which the choice of predictive variables is carried by an automatic procedure. It is a process of building a model by successively adding or removing variables based on the statistics like F-tests, t-tests, adjusted R-square, etc of their estimated co-efficients. The step-wise regression option in statgraphics (or other stat packages) puts more power and information than the ordinary multiple regression option, and is especially useful for sifting through large numbers of potential independent variables and/or fine tuning a model by poking variables in or out. The model could be explained as on equation when the b values are replaced. The Step-wise Regression model is applied in this study to measure the influence of the type of goods on purchase behaviour.

\[ GPB(Y) = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + \ldots + b_nX_n \]

5. Linear Regression Model

Regression analysis is a statistical process for estimating the relationships among variables. It helps to understand how the typical value of the dependent variable changes when any one of the independent variable is varied, while the other independent variables are held fixed. In statistics, linear regression is an approach to modeling the relationship between a scalar dependent variable and one or more explanatory variables. In linear
regression, data are modeled using linear predictor functions, and unknown model parameters are estimated from the data. Linear regression has many practical uses and it can be used to fit a predictive model to an observed data set of $x$ and $y$ values. The dependence of Green Brand Image, Green Loyalty and Green Satisfaction on Green Brand Equity of the customers of different areas may be identified by using Linear Regression Model.

6. Logistic Regression Model

In statistics, Logistic Regression is a type of Regression Analysis used for predicting the outcome of a categorical dependent variable (a variable that can take on a limited number of categories) based on one or more predictor variables. The probabilities describing the possible outcome of a single trial are modelled, as a function of explanatory variables, using a logistic function. Logistic regression measures the relationship between a categorical dependent variable and usually a continuous independent variable (or several), by converting the dependent variable to probability scores. In this study, the probability of the change in GBE is affected by the probability of the change in GBI, GS, and GL is measured by applying the Logistic Regression Model. The logistic model is specified as:

$$\log\left(\frac{P}{1-P}\right) = \beta_0 + \beta_1 x_1 + ... + \beta_k$$

where

$$P = \frac{e^{(\beta_0 + \beta_1 x_1 + ... + \beta_k)}}{1 + e^{(\beta_0 + \beta_1 x_1 + ... + \beta_k)}}$$

1.23 Important Terms and Concepts Used

1. Green Consumer

A green consumer is one who is very concerned with the environment and makes efforts to buy products that favour the environment. They are socially responsible, ethically and culturally creative, and/or environmentally
responsible. They consistently and primarily discriminate product purchases in favour of the environment. In choosing a particular brand, these customers take sustainability into account by seeking out green products or products with eco-friendly design. They are the propelling forces behind the green marketing process. It is important for a marketer to identify the types of green consumers. Green customers of the FMCG industry are those customers who prefer to purchase and use green consumer products.

2. Green Product

A “green” product is essentially a product that is environmentally friendly. It does not pollute the earth or deplete natural resources, and can be recycled or conserved. The need to remain competitive has prompted marketing managers to seek information concerning environmentally responsible purchase behaviour.

3. Green Attitude

Attitudes of environmental concern are rooted in a person’s concept of self and the degree to which an individual perceives himself or herself to be an integral part of the natural environment. Green attitude represents what consumers like and dislike and consumers’ product purchasing decisions are often based on their environmental attitudes.

4. Green Price

Green pricing is a critical element of green marketing mix. As consumers are more concerned about sustainable development they reiterate the notion of “fair price”. The Consumers expect green products to function as effectively as non-green products and are not willing to pay anything extra or sacrifice quality for greener products. The consumers will only be prepared to pay a premium price if there is a perception of additional product value like improved performance, function, design, visual appeal or taste. The pricing policy of any product should reflect the green effect of the product. The price
of the product will create in the mind of the customers the image that the product will not create any pollution or harmful effect on the environment and that the product is environment-friendly.

5. Green Place

The location of the sale of the product, where the company will make it available for the public will have a huge impact on the interest of the consumers. Marketers have to position their products broadly in the market place so that they are not just appealing to a small green niche market. It is essential for a company to have an attractive location, store with quality displays, promotion inside the store, etc. The distribution system is very important to make an FMCG company greener. It is necessary to ensure that companies’ distributors are green and will associate their responsibility with their product.

6. Green Promotion

Green promotion comprises of all forms of marketing communication of products and services, namely advertising, public relations, personal sales, etc. Firms should encourage its customers through its promotion activities and thereby the company could enhance the responsibility of the consumers and also its employees, partners, etc towards the environmental issues.

7. Green Package

Packaging is an outer layer of the product that protects goods from damage, allows efficient transportation, offers convenience, enables easy use, informs the consumer about the products, etc. FMCG companies can take decisions on packaging of their products in order to help the environment and to adopt a greener marketing.
8. **Social Influence**

Social influence is the social dynamic in which individual associates with other people and share the same values, thoughts and beliefs with the person they are communicating. It is whether an action should be performed by a customer in a referent’s point of view. Referents’ could be friends, neighbours, non-profit organisations, teachers, parents, etc.

9. **Environmental Knowledge**

Environmental knowledge refers to a general knowledge of facts, concepts and relationships concerning the natural environment and its major eco-systems. The customer’s level of environmental knowledge about environmental issues, the available substitutes and solutions to these problems can affect the consumer behaviour.

10. **Environmental Concern**

Environmental concern is the degree to which people are aware of environmental problems, assist struggles to solve them and also contribute personally to their solution. The customers with a stronger concern for the environment are more likely to purchase eco-friendly products as a result of their environmental claims than those who are less concerned about the environmental issues. The increase of environmental concern is a desire to increase pro-environmental behaviour and to decrease environmental damages.

11. **Environmental Attitude**

Environmental attitude is the customer’s value for the judgment of environmental protection which taps the individual’s cognitive assessment of the value of environmental protection. The customer’s attitude towards green purchase can influence green purchase intention and affects their green purchase behaviour.
12. Green Company

A Green company is based on its corporate vision that includes environmental concerns as the company’s functioning. This simply means that the company realises the needs of the eco-system with which it interacts.

13. Green Buying

Purchasing and consuming products that are beneficial to the environment is called Green buying. Consumers with more concern for the environmental issues are more inclined to buy ecological products. Consumers who consider environmental issues when making a purchase are more likely to exhibit green buying behaviour, that is spend more for Green products.

14. Environmental Education

Environmental Education refers to organised efforts to teach about how natural environments function and particularly how human beings can manage their behaviour and eco-systems in order to live sustainably.

15. Green Advertisement

The companies define the green function of the product by ads to direct the customers to understand and accept the green product; it would create a green atmosphere by ads to motivate the customer’s desire of purchasing green FMCG products.

16. Green Demand

The consumers are aware that the natural ecological environment should be protected and recovered. This has motivated the consumers green consciousness, which dominates the green demand. Green marketing of FMCG companies is motivated by green demand and they cannot succeed without the increase of green demand.

Green Marketing of Fast Moving Consumer Goods
17. Green Satisfaction

Green satisfaction means the satisfaction of the customers of products which reduce pollutants so that their health and the green environment will not be badly affected. It is often used as a predictor of future consumer purchases. Green satisfaction is a customer-sensed consumption/use which fulfils some need, goal, desire about environmental or green concerns and this fulfilment is pleasurable. It was the outcome of consumption that the performance met or exceeded the green needs of customers, the requirements of environmental regulations, and the sustainable expectation of society.

18. Green Brand Image

A green brand identity is defined by a specific set of brand attributes and benefits related to the reduced environmental impact of the brand and its perception as being environmentally sound. A well-implemented green brand identity should provide benefits to environmentally conscious consumers. The image of the FMCG companies due to the recognition of their name as the perfect one to produce products with the latest technology for making them more eco-friendly and use them with low energy and waste.

19. Green Brand Trust

Green Brand Trust is a customer’s willingness to depend on a product, service or brand based on their belief or expectation resulting from its credibility, benevolence and ability about the products environmental performance. It is the belief of ones behaviour that will strive to protect the environment or promote environmentally friendly activities.

20. Green Brand Loyalty

Green customer loyalty refers to the behaviour of the customer to maintain a relation with an institute through purchase of its products and services, which involves environmental or green concerns. The customer is then committed to re-buy or re-patronize a preferred product or service
Introduction

consistently in the future. Therefore, the loyalty of the customers creates a positive attitude towards the green and forces them to purchase the same brand and recommend it to others.

21. Green Brand Equity

Green Brand Equity is a set of assets linked to the company’s brand name and symbols that add value to FMCG companies by providing green consumer products or services. It can be defined from the perspective of the customer and is based on consumer knowledge, familiarity, and associations with respect to the features of a green product. Proponents contend that for a Green brand to have value, it must be valued by the customer. A thorough understanding of Green Brand Equity from the customer’s point of view is essential for successful Green Brand Management of the FMCG companies.

22. Green Purchasing Behaviour

Green purchasing behaviour or Environment-friendly buying behaviour is the consumption or use of products that are benevolent or beneficial to the environment, sensitive or responsive to ecological concerns.

1.24 Limitations of the study

1) The FMCG industry is a vast and dynamic industry having a lot of organised and unorganised players. But, this study is aimed at the Green Marketing of FMCG Companies in South Kerala with respect to five districts (i.e. Trivandrum, Kollam, Alappuzha, Ernakulam & Pathanamthitta)

2) The study only focuses on few aspects of each factors used by companies that can have an influence on green products purchase and the consumers attitude towards green products.
3) Since the Fast Moving Consumer Goods are very large, the researcher considered different types of goods as Convenience, Shopping and Speciality Goods. The researcher will not focus on durable goods such as electronic ones and cars because the decision making process is more complex and the purchase of these products is not so frequent. The research approach will only be focused on the FMCG sector, on tangible products that consumers regularly buy and which have a short life expectancy. These products will be used in a general way; no particular product will be analysed. The aim is to focus on the concept of green marketing and its application in the India context.

4) Consumer preference towards FMCG green products but not on a special brand in order to generalise the study. Different strategies used in the marketing of green products in the FMCG sector will be analysed in order to see if there are differences inside the FMCG sector.

5) Concerning the data collection, the research approach will be focused on the population of South Kerala. Consequently, differences could be demonstrated concerning consumers' preferences and green purchase behaviours among the population.

6) Only selected aspects of environmental attitudes and behaviours were considered for examining green marketing.

1.25 Thesis chapter frame

The report is spread over six chapters as mentioned below:-

**Chapter 1: Introduction:** - The introduction chapter provides the reader a background of the topic and the research problem. The chapter also gives the emergence of green marketing, research gap, rationale of the study, scope and importance of the study, purpose, need and significance, objectives of the study, hypotheses, research questions, methodology, approach, period of study, research instrument, population, pilot study, sampling method, type of analysis, important terms and concepts used and limitations of the study.
Chapter 2: Literature Review: - The literature review will present the secondary data such as articles from scientific journals, books, websites, etc. This chapter begins with an introduction to marketing and continues with the literatures related to green marketing context in India and abroad, etc.

Chapter 3: Theoretical Framework of Green Marketing: - It outlines the theories and models which are relevant to the study. This chapter gives an elaboration on the evolution of green marketing, difference between traditional marketing and green marketing, green marketing mix, success of green marketing, its challenges, sustainable development, green marketing strategy matrix, eco-labels-different forms, characteristics, initiatives, green satisfaction, systematic approach for innovative products and the model applied for analysing the customer behaviour of FMCG industry in the study, is also explained.

Chapter 4: Green Marketing Practices of FMCG Companies: - This chapter presents the green marketing practices of FMCG companies and discussions with the managers of these companies.

Chapter 5: Impact of Green Marketing Practices of FMCG Companies on the Green Customer Behaviour: - In this chapter analysis is conducted to identify the behaviour of the customers of FMCG products. Statistical methods like Chi-square test, Friedman Test, One-way ANOVA, Stepwise Regression Model Linear Regression Model and Logistic Regression Model were applied for analysis.

Chapter 6: Summary of Findings, Conclusion and Recommendations: - Findings based on the analysis is presented in this chapter. Finally, a conclusion and a number of recommendations based on the results of the study are given and suggest further research in closing for this report.
Fig: 1.2 Chapter Frame
References:


Introduction


