CHAPTER I

INTRODUCTION

1.1 INTRODUCTION

India is a diverse country with strong culture, values and ethics indicated by a significant segment of the population holding advanced degrees, yet also with massive poverty and illiteracy. It is the world’s largest democracy and currently India is undergoing a tremendous economic growth. Even then it faces an increasing stresses to its air, water, energy and also the resources use is becoming uncertain. Its agricultural productivity is at risk, whereas its agricultural imports are in raising trend. In today’s planet, development can no longer follow the traditional path of emphasizing heavy industries and paying little attention to the surrounding environment. Sustainable development is the watchword of everyday, which means due care should be taken to preserve existing environmental resources for the benefit of future generations.

Urbanisation and changing consumption patterns have equally contributed for many of the environmental problems faced by the country in the recent years. Severe air pollution affects many cities of India today. Many waterways have become highly polluted by the industrial and urban wastes. Degradation of soil, forest and bio-diversity has become a widely prevalent phenomenon. The other environmental problems faced by the country include depletion of energy resources, intensive cultivation of fields, poor management of wastes, loss of bio-diversity and a high incidence of variety of
diseases and health hazards. Unless the Companies, government and consumers' are responsible for these environmental issues. Nothing can be saved for future generation if they don’t take initiatives to attain sustainable development. Many firms are currently undertaking an environmental transformation process with the purpose of reducing the negative externalities that come from their economic activities (Elena Fraj-Andres et al, 2009). Acceleration in the human induced changes in the climate of the earth and it has become the focus of the scientists and social scrutiny as well.

This environmental destruction throws a strong question on whether today’s consumption pattern will be the same for the future consumers'. Since 1970s, there has been a growing concern about the future of the earth and its inhabitants in many developed nations. There is a fact that marketers are faced with tremendous changes and are more concerned about the shortages of environmental resources and increased social responsibility (Leob, 1974). On the other side consumers' also have strong commitment to purchase, use and consume products that are environmental friendly. When consumers' realize the importance of environmental issues, they will have the tendency to behave positively and act favourably towards the environment. This is called environmentally responsible behaviour. Further, it can be argued that consumers' who are increasingly concerned and realize the essentials of environmental issues are “green consumers”’. Consequently, marketing products which has an environmentally responsible function is called “green marketing”. From the mid 1990s, consumers' in developing countries also started to become more and more environmentally and socially aware (Strong, 1996). Critical consumers' began to emerge as a new force of green consumerism during that period whereby they require social responsibility from corporations (Gurau and Ranchhod, 2005). From 2000 onwards, the force of going green is extended to the Asian region where environmental threats are alarming the local government and citizens as well.
There are clear alarms of raising pattern of global warming and climate change impact on global temperature ever before.

In spite of these alarming facts, man has not stopped for searching his endless needs. As we all know, the marketing philosophy revolves around doing business profitably by identifying and meeting the needs and wants of consumers'. However, the conventional marketing should view that the environment has its limits. Meeting the need of today’s consumers' unsustainably will reduce the ability to meet the needs and wants of future generation consumers'. The growing environmental issues in the past few years in the country have imposed changes in policy towards environmental protection and the companies to think about green marketing.

1.1.1 Emergence of Green Marketing Concept

It could be argued that the movement began with the advent of chemical agriculture in the early nineteenth century. At that time, all agriculture was "organic" because there was no other way. Almost as soon as "super-phosphates" and ammonium began to be used, there were some who wanted to do things in the old way, without purchased inputs and machines. Thus, the term was coined in 1940s. The first natural food stores that sprung up in the 1970s in developed countries sold not only the organic products but also some hand made products without chemicals and with easily degradable substance. There was no national distributing chain of natural or organic products, and they were all local, by default. Such stores tended to be found in large cities of many developed nations.

In the early 1980s, there was an attribute on the dangers of a then common agricultural chemical called Alar that was found in great quantity on the all American apples. By that time, there were very few people not using
chemical sprays on their apples, and when demand raised overnight for chemical-free apples, the farms were not prepared. In that scenario, there was a health scare of one sort or another to purchase "natural" goods. While their numbers slowly grew, it was not until the mid 1990s such stores really began popular up all over the world. By staying in business all those years until it became fashionable to "be green", they proved that a small but dedicated group would be willing to pay a little more and put up with a little inconvenience to shop somewhere they could be confident. The products offered were in line with a shared set of ideals. In the early 1990s, some large supermarket chains began to offer a few green goods in bulk.

The United States Department of Agriculture took notice and it took nearly 13 years to explore a national organic standard which was created in 1990. The Environmental Protection Agency (EPA), under President Clinton, began to mark the most efficient examples of otherwise power-hungry devices such as computer monitors and water heaters as being "energy star" compliant with an easily identifiable sticker. It was around the late 1980s and early 1990s that the suppliers of other products began to realize there was a market for goods that utilized recycled materials, did not use chemicals such as bleach or pesticides, did not take advantage of exchange rates to take advantage of farmers in the tropics, used good old creativity to create handy devices that allowed to utilize a non-chemical approach to household tasks, cosmetics and personal care items without fragrance and dyes, cosmetics not tested on animals and any number of periodicals and books on this green/eco-friendly subject. Emphasis on locality, or atleast region, would save the cost and fuel of transport, as supply chains in the supermarkets grew hundreds of miles each year with the consolidation of distribution networks. Thus, the green marketplace was born initially.
1.1.2  Growth of Green Marketing

As we progress into the second decade of the 21st century, more products are being reformulated or repackaged as environmentally friendly. Even more than that, young people are starting their businesses with environment and localism in mind. Choosing to make things that are "real" they use fresh ingredients from local farmers and create food and goods from scratch. They are able to differentiate themselves from others by serving unique product categories. Especially in India, larger corporates like Suzlon, Tata, Amul, ITC, Hero Honda, Wipro, Infosys, Dabur India, HUL, Maruthi, Godrej, BSA, LG electronics and many more corporates now realize that they have to capture going green new market. They need to deliver environmentally friend products that are superior in some way to its conventional counterpart instead of relying on the good intentions of others. Suppliers realize that they need to make it an easy choice for consumers'. A sizeable portion of the population will go out of their way to avoid supporting companies that pollute their home countries, no matter where they are. Indeed, the trend in green marketing is to, in many instances, and accentuate the uniquely upscale nature of the product or service.

1.1.3  Green Marketing in India

In India, the emergence of Eco-Mark Scheme introduced by the government of India in 1981 was a major step towards the promotion of green marketing in the country. The Eco-Mark Schemes of India were initiated with the following objectives,

- To provide incentives to manufacturers and importers to reduce unfavorable environmental impact of products,
- To help consumers' to become environmentally responsible in their daily lives by providing them information to take account of environmental factors in their daily lives,

- To convince citizens to procure the products which have less environmental impact, and

- To reward actual initiatives by companies to reduce adverse environmental impact of products and ultimately to improve the quality of the environment and to encourage the sustainable management of resources.

Thereafter, there is a noticeable change in green marketing phenomenon in India for green initiatives in their product and services. Some of the recent examples like the Indian Railway Catering and Tourism Corporation (IRCTC) have allowed its customers to carry Passenger Name Record (PNR) number of their E-Tickets on their laptop and mobiles, avoiding the printed version of their ticket anymore in order to save papers. Forest and Environmental Ministry of India has ordered the retail outlets like Big Bazaar, Reliance Fresh and many other retailers to provide polythene carry bags to customers only if customers are ready to pay for it. State Bank of India (SBI) has also entered into green service known as “Green Channel Counter”. SBI is providing many services like, paperless banking, no deposit slip, no withdrawal form, no checks, no money transactions form and all these transactions are done through SBI shopping and Automated Teller Machine (ATM) cards. State Bank of India turns to wind energy to reduce emissions. The wind project is the first step in the State Bank of India's green banking programme dedicated to the reduction of its carbon footprint and promotion of energy efficient processes, especially among the bank's clients. By using eco and power friendly equipment in its 10,000 new ATMs, the banking giant has not only saved power costs and earned carbon credits, but also set the
right example for others to follow. Wipro InfoTech was India's first company to launch environment friendly computer peripherals. For the Indian market, Wipro has launched a new range of desktops and laptops called Wipro Greenware. These products are Restriction of Hazardous Substances (RoHS) compliant thus reducing E-waste in the environment. Philips has launched the 'super long life' bulb which saves upto 20 percent energy. The above cases show the corporate initiatives towards the growing concept of green marketing among Indian firms.

1.1.4 Conflicting Factors on Environment

1.1.4.1 Global climate change

The climate of earth is a dynamic one, promoting the evolution of various living forms and changing the structure and chemical composition of the atmosphere. The gaseous composition of the atmosphere has undergone a significant change mainly through increased industrial emissions, fossil fuel combustion, widespread deforestation and burning of biomass as well as changes in land use and land management practices. These activities have resulted in an increased emission of radioactively active gases, e.g., carbon dioxide and methane, popularly known as the 'greenhouse gases'. These greenhouse gases trap the outgoing infrared radiation from the earth's surface. The process, generally referred to as the greenhouse effect, adds to the net energy of the lower atmosphere, and therefore results in atmospheric warming. The global mean annual temperature at the end of the 20th century has increased by 0.7 Degree Centigrade from that recorded at the end of the 19th century.

1.1.4.2 Impact of climate change

More floods, frequent droughts and forest fires, decrease in agricultural and aqua cultural productivity, displacement of coastal
inhabitants by sea level rise and intense tropical cyclones, and the degradation of mangroves may be some of the likely consequences of climate change in Asia. Uncertainty in rainfall, causing droughts and floods, has been responsible for many food scarcities, rural poverty and migration despite development of impressive irrigation potentials. These environmental changes, particularly temperature increase and sea level rise, could also affect fisheries directly and indirectly through changes in the availability of feed. Similarly, by increased temperatures the changes in fodder and water availability affect production and supplies of various products and services. Several important socio-economic determinants of food supply such as government policies, capital availability, prices and returns, infrastructure, land reforms and inter and international trade are also expected to be influenced. The major effect can be classified as energy crises and agricultural down turn which are the crucial issues altered by the environmental changes.

1.1.4.3 Energy crisis

There are two sources of energy namely, renewable and non-renewable sources. The non-renewable sources are limited in supplies like oil, natural gas, coal and nuclear power, otherwise called as fossil fuels. Today our consumption rate is far excess of the rate of formation of these fuels, i.e., we consume in one day what earth took thousand years for its formation. The renewable sources of energy includes solar energy, wind energy, hydro power, and hydrogen as fuel and fuel cells are renewable in nature and the products out of it are named as green products. India predicts it will need an extra 85,000 megawatts of electricity-generating capacity by 2014. The country produces around 600 million tonnes of agricultural residue each year. If only half of this was available for use in biomass-based power plants, it would still produce 40,000 megawatts of energy, and the shortfall could be made up through solar and wind energy. Another core factor of today’s
environmental disasters is transportation. This is the world’s fastest growing crises in the form of energy use and that is largely due to the raise of private cars, motorbikes and other public transportations. We are also taking more trips and travelling greater distances. On the other hand the electricity demand has doubled during these past decades. The International Energy Agency (IEA) predicts that world electricity demand will double because of increased growth of living places.

1.1.5 The Changing Scene of Green Revolution in India

India now produces annually 180 to 220 million tons of food grains. The increase in grain production since 1960s is attributed to the green revolution, until about the middle of the twentieth century, and farmers in India needed very little input from outside. They grew a variety of crops and kept aside some part of the harvest as seeds for the next year crop. They used organic manure and natural pesticides. Even if one crop failed, there were others to save the farmers from ruin. Life was not easy, but the farmers were not in deep crises either. However, India’s population is growing and sustainable agriculture is saturated as such food is being imported. This is the problem with many countries of the world including India. The solution came in the form of green revolution with the promise of plenty of other variety of farming styles. The key element was new seeds called High Yielding Varieties (HYVs). These were developed first in Mexico and then taken to many countries. The new seeds increased the yield per hectare.

The green revolution came as a package like HYVs along with high inputs of chemical fertilizers, pesticides, water and agricultural machinery like tractors. It was energy intensive method, apart from the energy that went into the making of the inputs; energy was again needed to run the machinery and to pump water. The farmers also had to buy new seeds, fertilizers and
pesticides every year. The green revolution encouraged farmers to plant the HYVs, replacing the indigenous ones. Over the years, many traditional species have disappeared. In place of 30,000 varieties of rice, Indian farmers now predominantly plant just 12 species. The farmers found that, year after year, the inputs had to be increased to maintain the productivity levels. The new varieties were more prone to disease and pest attacks. The soil has also been getting degraded and drained of its nutrients through the excessive use of chemicals.

1.1.5.1 The loss of good soil

In the not so distant past, people used to ingest beneficial soil and plant based microbes with the food they ate. During the past fifty years, however, our soil has been sterilised with pesticides and herbicides, destroying bacteria, both good and bad. Our modern lifestyle, which includes antibiotics, chlorinated water, agricultural chemicals, pollution and a poor diet, is responsible for eradicating many of the important beneficial microorganisms in our bodies. Our lack of connection with these organisms through soil may be the reason why many allergies, bowel diseases and immune disorders, as well as chronic fatigue syndrome, are now reaching widespread proportions (Jeff Cox, 2008).

1.1.5.2 Sustainable agriculture

Sustainable agriculture refers to our ability to produce food indefinitely, without causing irreversible damage to ecosystem health. Sustainable agriculture has bio-physical, socio-economic, and environmental aspects. The impact of various agricultural practices on soil properties and processes should not affect crop productivity in long term. The farmers should be able to obtain the necessary inputs, manage the resources and make a
decent living in the long run. Agriculture should use natural resources like water and land in such a way that these resources remain available indefinitely.

### 1.1.5.3 Organic farming

A way of moving towards the goal of sustainable farming is to make a gradual shift from chemical agriculture to organic farming, which is based on the following principles,

- Avoidance of artificial fertilizers and pesticides, organic farming uses natural fertilizers like compost and green manure, bio pesticides and biological pest control,

- Maintaining soil fertility it avoids the over exploitation of the soil and keeps soil healthy, and

- Avoidance of mono cropping and encouraging mixed cropping that promote one another (Jeff Cox, 2008).

Organic farming blends traditional knowledge with modern scientific ideas, over a period of time, reverses soil degradation and improves soil health. Conservation to organic farming will mean initial problems and economic losses as the soil recovers, but it will be a better option in the long term.

### 1.1.6 Interaction of Environment with Business and Consumers'

Modern business is an integral part of current day society. This business has far reaching impact on social and economic life of people. As a socio-economic institution, each marketing company has to deliver the goods and services for the standard of living and lifestyle as per the aspirations of the members of this society. It has a great social responsibility which means an intelligent and objective concern for the well-being of society. The
marketing philosophy revolves around doing business profitably by identifying and meeting needs and wants of consumers'. However, the conventional marketing view that the environment as limits, it becomes clear that meeting the need of today's consumers' unsustainably will reduce the ability to meet the needs of future generation consumers' (Davis, 1991).

All the above paragraphs analysed recent issues like climate change and the energy crisis, which are “speeding up”. The social shift for our environment has taken centre stage in the media, politics, and work place and around our family members. Most of the environmental crises that we face today will continue to impact our lives indefinitely, many with an increasing sense of urgency. In the light of these disturbing developments in our environment, many studies have indicated individuals and businesses have begun to make behavioural changes to reduce their impact on the natural world as discussed above.

On the other side, the green concept calls upon marketers to build social and ethical considerations into their marketing practices. They must balance and manage the often conflicting criteria of company profits, consumer needs and want satisfaction and public interest as well. Now, we see that both consumers' and sellers are becoming more concerned about environment-friendly products and services. As a result, green marketing has its emergence in Indian market too. The green marketing concept aims at marketing sustainable and socially responsible products and services. “Green or Environmental 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” (John Grant, 2009). The “Green Consumer” has been a central figure in the development of the logic of green marketing. Many green marketing strategies depended on consumers’ being
willing to buy green products. It was clear that the level of environmental concern being voiced by consumers' was not being matched by an equal level of change in their purchasing behaviour. It seemed that the opportunities for environmental marketing were far more than the retailers have been predicted.

Hence, we ought to pay great attention to its significance. People have begun to pursue a reservation to mother nature, to value highly the real natural products and to be keen on non-polluted green product category. The product ranges from organic foodstuff, green electronic items and green vehicles are visible in the market with growing frequency, and the total volume of green consumption has increased dramatically. It can be asserted that the next century will be a "green century" and we are now entering into a "green era". In this context, as a new phenomenon in contrast to traditional marketing, green marketing has penetrated into various areas of marketing and is becoming a new trend which will certainly have tremendous influences on the development of both national and international trade. Keeping all the factors in mind, the present study focuses on answering the following problems.

1.2 STATEMENT OF THE PROBLEM

This study aims to profile the consumer who will make this green market viable for big and small businesses alike. The same is done by developing a tool with which to identify individuals, who are most likely to purchase green alternatives, and to know the growing consumers’ concern for preservation of the environment and their attitude and perception to purchase of green products. Understanding this perception will motivate some marketing companies to introduce changes in both the quality of their products and their production processes to meet their consumer sentiments. Despite environmental changes, the underlying assumptions for the extent of consumer perception towards green products have not been much empirically
investigated in Indian market. More specifically, the study attempts to answer the following questions:

1) To what extents are the consumers' aware of environmental disasters?

2) How far does environmental awareness have an impact on the consumer purchase behaviour?

3) What other factors influence in pre and post purchase behaviour towards green products?

4) What are the problems faced by the consumers' in relation to buying and using the green products?

5) What are the implications of all the above for green product marketing organisations?

1.3 NEED FOR THE STUDY

The social shift towards demonstrating environmental problems and engaging in environmental activities described in the previous section highlights the present need for the study. During the early seventies and certainly the nineties, far fewer consumers' evaluated their consumption choices based on their environmental impact. In addition, significantly fewer environmental friendly alternatives were available in fewer product categories and the majority of research efforts focused on behaviour not related to the purchase and consumption of goods in the traditional sense, but rather behaviour such as government involvement and energy conservation. Most of the recent environmental study in consumer behaviour tends to focus on post-purchase behaviour like recycling and waste disposition, leaving a gap in progress towards an understanding of the impact of environmental issues on green product purchase decision and the drives for the consumption decisions,
that they make. The dietary and lifestyle behaviour of today’s consumers' have in fact become increasingly selective and oriented by their willingness to invest large sums in purchasing organic products and other quality lifestyle products like green electronics and green vehicles as well, which show significant progress in terms of becoming more environmentally friendly categories. There are still significant areas of the consumer goods market in which few green alternatives exist. Therefore, most of the companies are launching green products with focus on the consumer expectations. It is not known how far the consumer expectations are met by the marketers of green products. To fill the void, this study is taken up, albeit in a smaller area, viz., Coimbatore district. Further, the study was carried out with following objectives.

1.4 OBJECTIVES OF THE STUDY

The overall objective of the study is to analyze the consumer awareness on environmental issues and its impact on purchase behaviour of green products in Coimbatore district. The specific objectives of the study are:

1. To study the consumer awareness on environmental issues and its impact on purchase behaviour of selected green products,

2. To investigate the demographic profiles of the consumers' and their differences in understanding the environmental issues and their preference for the selected green product,

3. To study the extent of consumers' pre-purchase search for green products,

4. To study the relevant attributes which influence purchasing of
organic foodstuffs, green electronics and green vehicles specifically, and

5. To study the problems faced by consumers' in locating the green products and the implications of the above for green marketing organisations, in designing futuristic green marketing strategies.

1.5 HYPOTHESIS

The above objectives require the following hypothesis to be tested.

1. There is no association between the demographic characteristics of the consumers' and their environmental impact on purchase decision of selected green products,

2. There are no significant differences among consumers', in the pre - purchase search for purchasing selected green products and they are the same,

3. There is no significant difference in the preference for the green products among various demographic segments of the consumers',

4. The attributes of the selected green products have no influence on the consumer purchase decision, and

5. The independent variables, namely, environmental issues, consumer awareness, environmental knowledge and environmental concern are not influencing the dependent variable, namely, the impact on green product purchase decision.
1.6 SCOPE OF THE STUDY

Green marketing is inevitable for the attainment of vision and mission of an organization with sustainability. Various studies by environmentalists indicate that people are concerned about the environment and are changing their behaviour patterns. Most of the consumers', both individual and industrial, are becoming more alarmed about green products and green product line for their safe and sustainable future. Now, it is the era of recyclable, non-toxic and environment-friendly goods. This has become the new mantra for marketers to satisfy the needs of consumers' and earn better profits with a social benefit. The study will help to address the problems and challenges associated with reaching the environmentally friendly consumer; thereby providing opportunities for manufacturers and retailers of green products. As the green market continues to grow, an understanding of the consumer who is populating it will be a critical success factor for many firms. This study will help to know what really a consumer expects from marketers of green products and also their readiness in accepting those products which are environmental friendly and minimize the environmental degradation in future.

1.7 LIMITATIONS

Taking into consideration the objectives of the study and its coverage both in terms of time span and the number of consumers', the study is prone to certain limitations. Some of the major limitations of the present study are,

- The study has been confined to Coimbatore district only and it can be enhanced further by carrying out a similar study incorporating other cities and districts of Tamil Nadu and other states in India as well,
Any study on consumer behaviour cannot provide enduring findings overtime as the expectations of the consumers' as well as the type of market offerings tend to change over a period of time. Therefore, the findings of the study indicate only contemporary views of the consumers' and may not be valid, and

The study attempts to compare the consumer awareness and perceived knowledge about environmental issues and their impact on purchase behaviour only on three product categories. This may be extended to other green product categories too.

1.8 ORGANISATION OF THE THESIS

This thesis is organized into five chapters as follows,

Chapter I - Introduction

The chapter deals with the introduction of the study, need for the study, statement of the problem, objectives, hypothesis, scope and limitations of the study and chapter scheme.

Chapter II - Review and Concepts

The various concepts and definitions of the study area are defined and the related review of the previous studies is presented.

Chapter III - Methodology

A description of the universe of the study, sample size, sampling techniques, methods and instruments of data collections and statistical tools and models used for analysing the data are presented.
Chapter IV- Results and Discussions

The data were analysed with reference to each of the specific objectives and hypothesis of the study are tested, and results are presented and analysed in this chapter, in order to draw specific inferences.

Chapter V -Summary and Conclusion

An objective summary of work done and the salient findings are presented, hypotheses are verified, conclusions are drawn and their implications for the green marketing organisations are presented.