CHAPTER – VII
SUMMARY OF FINDINGS AND SUGGESTIONS

7.1 INTRODUCTION

This chapter highlights the result of the present study based on consumer attitude towards green products in the study area of Kanyakumari District. This study has helped the researcher to give suggestions for the benefit of customers to make decision regarding the purchase of green products, thus supporting the greater cause – environment protection.

7.2 SUMMARY OF FINDINGS

The following are the main findings based on the data collected from the respondents who buy green products in the study area of Kanyakumari District.

7.2.1 Demographic Profile of the respondents

- It is found out from the study, that the age is a significant factor that is associated with the awareness level about the importance of using green products. Men in the age group of 30-40 and 20-30 have a greater per cent of awareness, that is 56 per cent, 37 per cent respectively. But it is interesting to note that a woman in the age group of 20-30 has a greater awareness level of 88 per cent.

- Educational qualification is a significant factor that is essential for consumer awareness on using green products. It is proved in this study that the higher the level of education, the greater the level of consumer awareness. It is found out that 73 per cent of the post graduate in the men category and 61 per cent of
post graduate in the women category are aware of the need for using green products.

- The marital status of a person impacts the consumer awareness level as it increases their responsibility towards protecting environment.

- It is found out that 78 per cent of the male respondents who are aware of using green products are married, whereas only 37 per cent of the female respondents are married.

- It is known from the study that 73 per cent of the male members who are aware of using green products are private employees while in the women category nearly 43 per cent are employed in service sector. It is also proved that employment is a significant factor that impacts the awareness level of using green products.

- It is revealed from the study that, 73 per cent of the male members have an income between ₹20,000 - ₹30,000 while 37 per cent of women respondents are having income above ₹ 50,000. The average income of the respondents is ₹ 38,094. It is also proved that income is a significant factor that influences the usage of green products.

- With regard to residential status, 89 per cent of male respondents and 91 per cent of the female respondents are urban based. It is also proved that residential status has no significant relationship with the awareness level regarding the usage of green products.
7.2.2 Findings on consumer awareness on using green products

- The study reveals in the opinion of male respondents, pesticides, chemical wastage and usage of plastics are the first three factors that cause damage to the environment, but for the women the three main factors that cause damage are usage of plastics, cutting down trees and urbanization. But the overall result shows that usage of plastics, pesticides and chemical wastage are main culprits that damage environment.

- It is inferred from the study that the male and female respondents are of the opinion that environment degradation impacts mainly in three ways namely, global warming, climate change and destruction of ozone. Therefore this study is of the opinion that global warming, climate change and destruction of ozone is the main causes for the environment degradation.

- The awareness of green products are reached to the people in various ways, but in this study the researcher found out that the sources that created awareness among the respondents for using green products are news paper, friends and internet.

- An attribute is a quality or characteristic given to a person, group, or some other thing. The study proves that the main attributes of green products as per respondents are recyclable, eco-friendly packaging and non-toxic, but the female respondent’s feel that the main attributes of green products are eco-friendly packaging, recyclable and non-toxic. The overall result proves that the three main attributes present in the green products are eco-friendly packaging, recyclable and non-toxic.
This study has extracted or classified the green attributes into three categories namely, inherent attributes, marginal attributes and external attributes. Inherent attributes means the intrinsic values that are present in a green product. Marginal attribute represent the nature of producing green products. The external attributes represent the level of pollution remitted by the green products. It is concluded that these three attributes, namely inherent, marginal and external are the main attributes that should be known to the respondents when they buy green products.

The study also proves that the green attributes namely, inherent, marginal and external have significant association with demographic factor gender.

This study indicates some of the ways such as label, degradable nature, energy star logo, green seal, consumer’s experience, self-perception knowledge and help from green product users, through which green products can be identified on the basis of gender. According to the study men are able to identify to greater extent with the help of their experience, help from green product uses, label and biodegradable nature. The women folk identify with the help of label; help from green product uses, own experience and energy star. The interesting feature is 72 per cent of women are able to identify with the help of energy star whereas only 32 per cent of men know about it. This may be due to the fact that women deal with household appliance which contain energy star label. Same way 68 per cent of men can identify the biodegradable nature of green products, but only 29 per cent women know about this.

The study also analyzes the impact of gender on the above given seven ways of identifying green products. It is proved that except for label all the other six
ways of identifying green products namely, biodegradable nature, energy star, green seal; own experience, self-perception knowledge and help from green product users have significant association with the demographic factor gender.

7.2.3 Findings on consumer attitude towards green products

- This study analyzes the attitude of the respondents towards some of the important aspects related to green products. It identified fourteen green aspects and registered the opinion of the respondents. In view point of the male respondents it is found out that non-availability of the green products in the market, health friendly green products, essential for better future, ecological need to use green products, conservation of energy and water and using eco-friendly materials for producing green products are the main aspects about green products. The women are of the opinion that, green products are essential for better future, recyclable and reusable nature, conservation of energy and water, non-availability of green products in the market, ecological need and lack of awareness about the uses green products. But the overall opinion about the green product is green products are essential for better future and another important opinion is green products are not available in the market easily. They are also of the opinion that green products conserve water and energy.

- The above given fourteen aspects are classified into four key green aspects namely, environment friendly, user friendly, availability and future benefit. It is proved that these four aspects play an important role in determining the consumer attitude of the respondents towards green products. It means that the
green products should be environment friendly, user friendly, available in the market and beneficial in the future.

7.2.4 Findings on consumer attitude towards green marketing mix

In order to analyze the respondents expectation on marketing efforts for green products and services the researcher developed the marketing mix strategy in view point of the consumers namely, green consumer solution mix, green consumer cost mix, green consumer convenience mix, green consumer communication mix and green consumer consciousness mix, each group containing seven variables.

- The analysis of green consumer solution mix reveals that men give more weightage to eco-friendly, health friendly and recyclable nature of green products, whereas women are particular about eco-friendly, recyclable nature and bio-based material usage on green products. The overall result shows that eco-friendly, recyclable nature and bio-based material are the essentials for the green products. It is concluded that for all the seven variables namely, eco-friendly, recyclable, reusable, disposable, made of bio-based materials, energy saving, water conservation, packaging with green labels, brand name, brand image and good for human health in the consumer solution mix, that there is significant difference in the attitude of male and female respondents.

- The analysis of green consumer cost mix revealed that women give more importance to green consumer cost mix than men. With regard to the components of consumer cost mix both men and women consider cost of value added, the premium price and cost of promoting green products as the main variables that impact the green consumer cost mix. It is inferred from the study
that five of the seven factors namely, green premium price, cost of value added, cost of social responsibility, additional promotional cost, cost of research and development have significant difference in the attitude of male and female respondents regarding the green consumer cost. The other two factors namely, gift coupon and allowances are insignificant.

The analysis of green consumer convenience mix shows that women give more weightage to it than male respondents. Of the seven variables selected for the study men give more weightage to the factors supply through internet, networking, subsidy to start up green shops and availability of green products in the local area, while women give more importance to availability of green products in local market, supply through internet, networking and special storage facility. The overall result shows that attitude of the respondents towards availability in green products in local area, supply through internet, networking and support to start a green shop is very strong. It is also inferred from the result women respondents have stronger perception towards green consumer convenience mix than their male counterpart. The study also shows that there is significant variance in the perception of male and female respondents towards the six convenient mix variables namely, availability in the local area, special storage, transport facility, continuous supply, tie-up with co-operatives and supply through internet.

The analysis of respondents’ opinion towards the green consumer communication mix variables show that both the men and women consider advertising in TV, print, radio and digital marketing as the main factors. The result shows that women have strong perception towards consumer communication mix than the men respondents. It is also inferred that there is
significant variation in the perception of men and women towards the five out of seven variables namely, advertising, event marketing, direct marketing, personal selling and digital marketing.

- The study of the green consumer consciousness mix reveal that men consider learning green attributes, impact of buying non-green products and support for pollution free environment as the main components of green consumer consciousness mix, whereas women feel support for pollution free environment, learning of green attributes and understanding the need to save for future as the main components of consumer consciousness mix. The overall result shows learning green attributes and support for pollution free environment are the two essential factors in the consumer consciousness mix. It is also inferred that women have stronger perception than men towards consumer consciousness mix. It is proved that six out of the seven factors namely, need to save environment, support for pollution free environment, impact of buying non-green products, learning green attributes, accepting green life style and influencing friends and relatives to buy green products have significant variation regarding the perception of male and female respondents towards the consumer consciousness mix.

- The study analysis the 5’Cs of green marketing mix namely green consumer solution mix, green consumer cost mix, green consumer convenience mix, green consumer communication mix and green consumer consciousness mix. The overall results shows that green consumer convenience mix has a greater impact on buying behaviour of the green respondents. In case of the male and female respondents are also the green consumer convenience mix has a greater impact on their buying behaviour.
7.2.5 Findings on consumer attitude towards purchase intension of green products

The purchase intention of green products is analyzed with the help of respondents’ willingness to buy green products, the choice of green products, the shopping methods for purchasing green products and the factors influencing purchase decision to buy green products.

- The study proves that 93 per cent of male respondents are willing to buy green products and with the women the per cent being 94 per cent, a slight edge over men’s willingness.

- The study reveals that respondents prefer to buy green products in the category of food and beverage as it secures first rank. The second choice goes to cosmetics and the third choices batteries, bottles and cutting board.

- The analysis of the shopping method reveals that the respondents prefer to buy green products from organic shops, retail shops and departmental shops.

- While buying the green products the respondents consider many factors such as price, green attributes, environment protection, and impact of advertisement, influence of friends, packaging and labeling and benefit of green products. The most three influential factors for men are protection of environment, impact of advertisement and benefits of green products, while for women the most influential factors are benefits of green products, influence of advertisement and protection of environment. Overall it can be concluded that benefits of green products, influence of advertisement and the need to protect environment are the most influential factors that help
respondents to make a decision on buying green products. It is also proved that there is significant association between gender and the above seven factors that influence the purchase of green products.

- The impact of key demographic factors such as gender, age, educational qualification, marital status, employment, monthly income and residential status on the purchase decision of the green products access through multiple linear regression analysis. It is concluded that out of these except age all the other factors are significant. It shows that these six significant independent variables contribute 71 per cent of the respondents’ decision to buy green products. Hence, it is concluded that the key drivers of respondent’s decision to buy the green products are gender, educational qualification, marital status, employment, monthly income and residential status.

7.2.6 Findings on consumer post purchase attitude of green products

The post purchase attitude of the respondents on green products is analyzed with the help of consumer satisfaction, their attitude to promote green products. It also investigates the barriers or hurdles faced by the respondents while they purchase the products.

- The respondent’s satisfaction level of green products is analysed with the help of eighteen key aspects of green products with the help of factor analysis. These eighteen variables are extracted into three factors namely, green aspects, promotional aspects and value added aspects. It is concluded that these three aspects of green products play a key role in deciding the satisfaction level of the respondents. The customer should be satisfied with the green aspects that
is the inherent qualities of the green products, the promotional aspects that makes an impact on consumers and finally the value added factors that represent how effectively fulfill its usefulness.

❖ The impact of demographic variable on satisfaction level of green products is also analyzed with the help of multiple regression analysis. It is proved that the seven independent demographic variables namely, gender, age, educational qualification, marital status, employment, monthly income and residential status contribute at about 63.1 per cent on the prediction of satisfaction level of respondents regarding the purchase of green products.

❖ Once the green products are purchased and the consumers are satisfied they promote the purchase of green products. This study analyzed the promotional roles played by the respondents by identifying ten promotional tactics. The prominent promotional roles played by the respondents are creating awareness targeting the younger generation, planting trees in and around the house and avoiding the wastage of energy and water.

❖ It is found out from the study that most of the sample respondents selected, belong to the green consumer group greenbacks that constitute, 26.85 per cent, sprouts 22.30 per cent. It means that the greenbacks are the category that are willing to pay extra money for green products and the group sprouts are willing to take part in group individual activity to protect environment. It is proved that basic browns that constitute 17.03 per cent are yet to know about the importance of protecting environment for the future generation.
7.2.7 Findings on the barriers in buying green products

In order to probe the problems faced by the respondents while buying the green products, this study identified fourteen barriers and analyzed the impact of demographic factors on these barriers. The identified barriers are lack of consumer awareness, difficulty in adopting green life style, limited scientific knowledge (CFC, HFC, DME), financial constraints to buy high priced green products, prevalence of deceptive marketing, lack of stringent legal standards, consider costly, non-availability of green products in small shops, they are hard to identify as green by just seeing it, communication shortfall gap, individual attitude, lack of knowledge about environment impacts, poor commitment by manufactures and lack of training education in identifying green products.

- This study reveals that the opinion of the male respondents towards the barriers in buying green products is stronger than the female respondents. That means the male respondents feel for the barriers more than female respondents. Both the male and female respondents are of the opinion that lack of consumer awareness is the most important hurdle faced by them while buying green products. The second most important problem is lack of knowledge about environment impacts and thirdly limited scientific knowledge on the green products is considered as an important problem. It clearly shows that there is consumers’ lack of the knowledge about green products and its attributes. They require more awareness about the dangers of environment and green product attributes. This study reveals another interesting fact that the consumers are not much worried about the lack of stringent legal standards and the cost of the green products, as these two
factors secures the least score from the fourteen barriers identified. It is known from the results, the male respondents have stronger perception about the barriers than their female counterparts.

- The analysis of the significant relationship between the fourteen variables and gender reveals that except for cost, lack of stringent standards and poor commitment by manufacturers, all the other eleven factors are considered as having significant variation in the perception of male and female respondents.

- The age wise analysis of barriers reveal that lack of consumer awareness, limited scientific knowledge and the individual attitude, lack of knowledge about environment impacts are considered as the main hurdles by the young respondents who are below the age of 30. The respondents who belong to the age group of 31 to 50 consider lack of consumer awareness, difficulty in adopting green life style, individual attitude and lack of training in identifying green products as the main hurdles. The respondents above the age of 50 consider lack of awareness, lack of scientific knowledge, lack of knowledge about environment impacts as the main important problems.

- It is found out from the study that the respondents who belong to the age group 31-40 have strong feeling about the hurdles involved in buying the green products. The overall results shows that lack of consumer awareness, lack of knowledge about environment impact, limited scientific knowledge and individual attitude are the main problems involved in buying green products.
It was found out that there is the significant variation in the perception of different age category respondents towards all the fourteen barriers involved in buying the green products.

The marital status wise analysis of barriers reveal that lack of consumer awareness, limited scientific knowledge and the individual attitude, lack of knowledge about environment impacts are considered as the main hurdle by the respondents who are both married and unmarried. The study shows that married respondents have a stronger attitude towards the barriers than the unmarried respondents.

It was found out that there is the significant variation in the perception of married and unmarried respondents towards all the fourteen barriers involved in buying the green products.

The monthly income wise analysis of barriers showed that the lack of consumer awareness, limited scientific knowledge and the individual attitude, lack of knowledge about environment impacts are considered as the main hurdle by the respondents who are in the income group up to ₹ 20,000, ₹21,000 - ₹ 30,000, ₹ 31,000 - ₹ 40,000 and above ₹ 50,000.

It is found out from the study that the respondents who belong to the monthly income group ₹ 41,000 - ₹ 50,000 have strong feeling about the hurdles lack of consumer awareness, prevalence of deceptive marketing and hard to identify green products by just seeing it, are involved in buying the green products. The result shows that the respondents belong to ₹ 31,000 - ₹ 40,000
income group have stronger feeling about barriers than the other income group respondents.

- It was found out that there is the significant variation in the perception of different monthly income group respondents towards all the fourteen barriers involved in buying the green products.

- The residential status wise analysis of barriers reveal that lack of consumer awareness, limited scientific knowledge and the individual attitude, lack of knowledge about environment impacts are considered as the main hurdle by the urban and rural area respondents. The result also reveals that rural respondents have stronger feeling about the barriers involved in green product purchase than that of the urban respondents.

- It was found out that there is significant variation in the opinion of urban and rural respondents only with regard to four barriers namely, lack of stringent legal standards, consider costly, communication short fall-gap and lack of knowledge about environment impacts.

7.2.8 Findings on the promotion of buying green products

The respondents are the opinion that the effective way of promoting the green products are encouraging promotional activities to create more awareness, promotional through documentary films and research work and banning of non-recyclable products and formulation of strict rule.
7.3 SUGGESTIONS

The researcher has given the following suggestions based on the different aspects of consumer attitude towards green products and the intention to buy them and the difficulties involved in buying the green products. These suggestions are given with the aim to bring the consumers to lead a green lifestyle.

7.3.1 Based on consumer awareness on green products

- There is the great need to create awareness about the impact of economic degradation in the minds of young consumers. Schools and colleges should be made to allot weekly one hour to educate the school children about the damages done to the environment due to the non-use of green products. They should conduct seminars and workshop on environment degradation. The school and college students can conduct exhibition by exhibiting the green products and explaining the need to buy green products.

- The NCC and NSS students can be involved in planting trees to protect the environment. Students can be asked to maintain small green gardens in their school and college campus. They can cultivate vegetables by using organic fertilizers.

- The eco and green clubs of schools should actively promote green attributes of green products and the impact of using non-green products.

- The Non-Government Organisations (NGO’s) should be given the task of promoting green products by circulating pamphlets to the offices and public explaining the need to use green products in order to save the environment to the future.
The popular TV channels can be asked to conduct reality shows on the need to protect environment, the attributes of green products and damages caused by the usage of plastic items. Environment experts may be asked to talk in TV regarding eco-label, energy label and the ways of identifying green products.

As this study proves that women have stronger perception towards green consciousness than men educating them on the need to protect the environment and the importance of buying green products is very important. Special programs on environment protection and green consumerism can be arranged for women especially in rural areas. They will be a better word of mouth advertisers.

7.3.2 Based on consumer attitudes on green products

- The consumer’s attitude towards green products is determined by four aspects of green products, namely environment friendly, user friendly, availability in the market and future benefit. Therefore, the manufacturers of the product should standardize their product in such a way to satisfy the consumers in the four aspects. The product should be made available to the consumers through green shops which can be established at Taluk Head Quarters.

- While considering the expectations of consumers on marketing mix strategy the seller should give more weightage to green consumer convenience mix. In order to fulfill the expectation, the manufacturers should make the green products available to the consumers through green shops. These green shops should have special storage facility. The manufacturers can tie-up with co-operative society to supply green products. The manufactures should also
ensure into online green marketing to supply green products to consumers. The government should provide subsidy and support to start green shops.

- Food products, beverages cosmetics and packing materials are the product which required green standards the most. Therefore, stringent laws are required to standardize these products. Plastic carry bags packing materials, bottles should be strictly prohibited. The District authority should check the shops often and the public must be educated to use bags made of paper, cloth and bamboo. Instead of using plastic cup for beverages clay pots can be used. Fine should be imposed on wrong to doers.

- The government can open special organic markets for the supply of perishable green products such as vegetables, fruits etc. Farmers must be educated to use organic fertilizers for cultivation. Workshops should be organized to demonstrate the farmers regarding the manufacture of organic fertilizers.

- Film and sports personalities should be engaged in promoting green products through visual media. Short films and documentaries can be made with the help of popular film and sports personalities to create awareness on environment degradation and the purchase of green products to protect environment. These films must screen in theatres along with the screening of movies.

### 7.3.3 Based on barriers in buying green products

- This study comes up with two specific measures to be used as a strategy to promote green life style. These two measures would help to solve the major barrier in buying green products namely, 1) lack of awareness on environment
degradation and availability of green products, 2) lack of knowledge about green attributes in green products 3) lack of scientific knowledge to recognize green label, symbol etc. The two measures recommended are 1) establishment of green teams at district level to promote green products among consumers and 2) formation of green task force to check and standardized the green products manufactured by government agencies.

1) Green Teams: Corporations, municipality, village officers and panchayats can form green team with the view to create awareness on the causes and impact of environment degradation, need and ways to protect environment for future generation at their city, town and village level respectively. The composition of the team can be decided by themselves and they can frame their own objectives by fixing the time limit to achieve it. They can tie-up with the banks, big corporates, NGOs and educational institutions to do environment activities such as planting trees, conservation of energy and water, usage of organic fertilizers and eco-friendly products and helping the public to identify the green attributes in green products. The green team can raise funds through individual donors, big corporates and by charging an additional small amount for green activities along with house tax.

2) Green task force: This kind of vigilant team can be formed by government to check the green activities to be followed by sellers and manufacturers. They can look into the green process, green label, green symbol, green packing and green standardization methods to be used by sellers and manufacturers. They can take up the task of bringing the wrong doers under the enforcement of law. The government should be careful to form strong laws to punish those who are not following it.
7.3.4 Suggestions to government

- The environment activists should plan for awareness campaigns to establish green policy in the country.

- The government should also introduce nationwide ban on plastic bags. The usage of plastic bottles, plastic bags should be banned in any government meetings or functions, seminars, exhibition and symposium.

- In order to discourage the usage of personal vehicles for short distances the government should introduce green transport system. Green transport system means the usage of vehicles that does not have any negative impact on environment and the vehicles run by renewable sources of energy such as wind, solar, bio-fuels and hydro-electricity. The green transport include bicycle, electric bike, electric vehicles, green trains with green technology, electric motor cycles, multiple occupant vehicle, hybrid cars, buses and pedestrians. Public especially school and college students should be encouraged to use bicycle for short distances.

- The government can ask the corporation, municipalities, panchayats and village offices to establish plastic bag collection centers at convenience distance. It can collect all type of plastic bags for recycling and this can be linked to the hundred days wage program. This would greatly help in saving environment for the future generation. The government should introduce in college and schools environmental education syllabus.

- A special group namely, Students Green Movement for Saving Environment (SGMSE) can be established in schools and colleges with government
funding, to promote environmental activities. Along with that the NSS, NCC and Scout students can be given special training on green issues, so that they can also be used as a main instrument to create awareness on environment degradation and to popularise green products.

- The government can create a special social network such as face book, whatsapp, wechat, twitter, instagram, qzone and tumblr to communicate and share information to the consumers on environment protection and green consumption.

7.4 CONCLUSION

Growing awareness all over the world regarding the protection of the environment makes the consumers more concerned about environment friendly products. Manufacturers have recognized environmental concern as a source of competitive advantage and have developed products with green image. Various regulations recently framed by the government to protect the consumers and the society at large led to the adoption of green marketing as a compulsion rather than choice. The people are more and more aware of the dangers of environment degradation and are looking for eco-friendly green products. In this context the study on the consumer attitude towards green products, is considered as an important one. The present work contributes by analyzing the need to buy green products, so that the environment is protected for the use of future generation.

Though buying green product is good there is always a bit of hesitation in the minds of consumers while identifying the green attributes of green products. This study makes an attempt to help the consumers by explaining important ways to identify green attributes present in the green products. The green issues are highly
technical, complex and fast moving. Therefore, sellers have the responsibility to make the consumers understand through good green marketing strategies without confusing them. An important challenge facing marketers is to identify which consumers are willing to pay more for environment-friendly products. It is apparent that an enhanced knowledge of profile of green consumers would be extremely useful and this study makes an attempt to help the consumers to become green.

Making the society green is a difficult task and it is complex for a person or a group to take the initiative. To achieve this every individual and group, like consumers, sellers, manufacturers, government, NGOs and environment activists should join together to make the environment suitable for the living of future generation.

7.5 SUGGESTIONS FOR FUTURE STUDY

i) A comparative study on the using of green and non-green products and its impact on environment.

ii) Evaluation of environment degradation in Kanyakumari District.

iii) A study on the scope and use of marketing mix strategy related to specific green products.

iv) A study of consumer’s choice of adopting green life style in Kanyakumari District.

This research thus provides an extended scope for specific studies on green products and post purchase behaviour of select green products, namely, food products and cosmetics.