



A Study on Consumer's perception and preference towards green products with Special reference to Ernakulam District

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Abstract

Over the last decade environmentalism has emerged to be a vital aspect due to increasing issues related to acid rains, depletion of ozone layer and degradation of land and many more pressing environmental issues. Global ecological imbalance and global warming have called upon environmentalists, scientists, social organizations and alert common men to initiate the concrete efforts to stop further deterioration of ecological environment. With this emerged the concept of green movement, which promotes green production methods, green marketing and green lifestyle. In order to preserve the environment, both the developed and developing countries are actively participating in this Green Movement.

Keywords: green products, green marketing, consumer perception, consumer's preference

Introduction

The green movement has been expanding rapidly in the world. With regards to this consumers are taking responsibility and doing the right things. Consumer awareness and motivation continue to drive change in the market place, notably through the introduction of more eco-friendly products. Compared to consumers in the developed countries, the Indian consumer has much less awareness of global warming issues. Successful marketing has always been about recognizing trends and positioning products, services and brands in a manner that supports buyer intention.

The term 'green' indicates purity. Green means pure in quality and fair or just in dealing. For example, green advertising means advertising without adverse impact on society. Concept of green marketing concerns with protection of ecological environment.

According to the American Marketing Association Green Marketing of products that are presumed to be environmentally safe. At present green marketing is widely becoming a phenomenon throughout the world as concerns towards environment have begun in the past few decades. Every year the populations of people who are turning towards green brands or environmental friendly products are increasing thus magnifying the phenomenon. Green product selection often involves trade-offs between multiple environmental impacts. Green products are energy efficient, durable and often have low maintenance requirements. They are free of ozone depleting chemicals, toxic compounds and don't produce toxic by-products. They are often made of recycled materials or content or from renewable and sustainable sources.

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. (Polonsky, 1994). Today "Green" marketing has moved from a trend to a way of doing business and businesses that sell should recognize the

value of going green and incorporating this message into their marketing program and communicating the Green concept to their consumers. Green Marketing is the holistic management process responsible for identifying and satisfying the requirements of customers and society, in a profitable and sustainable way. Green Marketing is not just one of the processes of marketing activities; it is a larger picture which takes about developing and sustaining consumer's eco-friendly attitudes and behaviours.

Review of literature

Katiyar Shilpi (2015) [7], attempts to throw light on the conceptual issues associated with green marketing. The study is based on secondary data. The study concludes that Green marketing will come with drastic change in the world of business if all nations will make strict roles because green marketing is essential to save world from pollution. It also reveals that green marketing assumes even more importance and relevance in developing countries like India.

Varghese Anu and J.Santhosh (2015) [13], conducted a study to find out the impact of eco-friendly products on consumer behavior in Kollam district, Kerala. The study was designed as descriptive in nature based on survey method. Both primary and secondary data was used for study. Sample for the study was around 80 consumers selected on convenience basis. The study reveals that one should know the importance of being nature friendly. Environmental sustainability has become an essential ingredient to doing business responsibly and successfully. So constant efforts should be taken by Government, NGOs, Educational Institutions, Business Houses and society at large to create awareness among consumers to promote eco-friendly buying behavior.

Digel Aman and Dr.Yazdanifard Rashad (2014) [2], focused on what makes green marketing successful, consumer's behavior and their perceptions towards green products, the reason why marketers decided to adopt green marketing and how marketers can implement the green marketing mix. The study is descriptive in nature. The study reveals that

nowadays people are more concerned about the environment and they are worried whether the natural resource could be sustained for the upcoming generation. Even if the eco-friendly products were found as expensive, they preferred green marketing.

Dr. Shruti. P. Maheshwari (2014) ^[4], focused to investigate consumer beliefs and attitudes on green products, consumer awareness on the availability of environmentally friendly products and influence of marketing efforts put by marketers with reference to consumers. The study is based on both primary and secondary data. The study was carried out in various cities of Madhya Pradesh (India). One hundred and twenty women consumers, with an age ranging from 21 to 45 years were approached with a structured questionnaire. The study confirms that the consumers are not exposed enough to green product marketing and brands to promote and sell products that are environmentally friendly and function effectively.

Kaur Supreet (2014) ^[8], focuses on how people respond to greener products and what impact does green marketing creates in minds of consumers. Based on both primary and secondary data. The study comprised of 60 respondents. It reveals that going green can save our planet from pollution, global warming and threat of ozone depletion.

Bhatia Mayank and Jain Amit (2013) ^[1], provides a brief review of environmental issues and identifies the green values if the consumers, their level of awareness about environmental issues, green products and practices. This study highlights the consumer's perception and preferences towards green marketing practices and products with the help of a structured questionnaire. The study is based on both primary and secondary data. It was conducted on 106 respondents. The results of analysis reveals the view that overall green values, awareness about green products and practices and the perception regarding seriousness of marketing companies towards green marketing had positive significant impact on consumer persuasion to buy and prefer green products over conventional products.

Objectives

1. To investigate the level of awareness of consumers on green products and practices.
2. To identify the factors that influences consumers to buy green products.
3. To understand the issues faced by consumers in connection with green marketing practices.

Research methodology

The process used to collect information and data for the purpose of making business decisions. The methodology may include publication research, interviews, surveys and other research techniques, and could include both present and historical information. There are several important aspects to research methodology. This is a summary of the key concepts in scientific research and an attempt to erase some common misconceptions in science. Methodology is the systematic, theoretical analysis of the methods applied to a field of study. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge. Typically, it encompasses concepts such as paradigm, theoretical model, phases and quantitative or qualitative techniques. The Methodology is the general research strategy that outlines the way in which a research project is to be undertaken and, among other things,

identifies the methods to be used in it.

Research Design

The research design refers to the overall strategy that you choose to integrate the different components of the study in a coherent and logical way, thereby, ensuring you will effectively address the research problem; it constitutes the blueprint for the collection, measurement, and analysis of data. The function of a research design is to ensure that the evidence obtained enables you to effectively address the research problem logically and as unambiguously as possible. A research design is one that minimizes bias and maximizes the reliability of the data.

Sources of data collection

Data used for the research has been collected from primary and secondary sources.

Primary data

Primary data is collected by the researcher or through investigators or enumerators for the first time. It is original in character. Census survey of population, court records, personal diaries etc are coming under this category. Here, Primary data are considered as the questionnaire to which the statistical methods are applied for the purposes of analysis and interpretation.

Secondary Data

The secondary data are those data, which have already been collected, tabulated and presented in some form by someone else for some other purposes. It means data that are already available. It is in the form of finished products.

Sampling Method

A sample is the group of people who take part in the investigation. The people who take part are referred to as "participants". Sampling is the process of selecting participants from the population. The purpose of sampling is to provide various types of statistical information of a qualitative or quantitative nature about the whole by examining a few selected units. The sampling *method* is the scientific procedure of selecting those sampling units which would provide the required estimates with associated margins of uncertainty, arising from examining only a part and not the whole.

Sampling Unit

A unit in a statistical analysis refers to one member of a set of entities being studied. It is the material source for the mathematical abstraction of a "random variable". A single section selected to research and gather statistics of the whole. For example, when studying a group of college students, a single student could be a sampling unit.

Sample size

"Sample size refers to the number of items to be selected from the universe to constitute a sample". Sample size of this study is 100 respondents.

Tools for analysis

The data collected were classified and presented using tables and graphs. The data analysis has been done by using appropriate mathematical and statistical tools such as percentage, weighted average, chi-square method and Likert

5 point scale.

Data Analysis and Interpretation

Objective 1: To investigate level of awareness of consumers on green products and practices.

Likert 5 point scale is used in evaluating the statement. Each point on the scale carries a score. The score value for very high, high, average, low and very low are 5,4,3,2 and 1

respectively. The likert scaling technique, thus assigns as score values to each of the 5 responses. In this way the instrument is a total score for each response, which would measure the respondents’ favourableness towards the given point of view. If the score value for any statement is more than 300, it is favourable and if it is less than 300 then it is unfavourable.

Table 1: Level of awareness about various dimensions of green products

Statements	Very high	High	Average	Low	Very low	Condition al value	Calculate d value	Conclusion
Aware of the benefits of green products for health.	3	25	55	10	7	300	307	Favorable
Aware of the benefits of green products for environment.	6	25	50	11	8	300	310	Favorable
Aware of various brands offering green products.	5	15	37	23	20	300	262	Unfavorable
Aware of various symbols or certifications or other identifiers which declare the product as green.	1	18	34	27	20	300	253	Unfavorable

Source: Primary Data

Table 1 reveals the opinion of the respondents regarding the level of awareness about various dimensions of green products. Table shows that about 3 % of the respondents have a very high level of awareness regarding the benefits of green products for health, 25 per cent have high level of awareness, 55% have an average awareness level, ten per cent have low level of awareness and the remaining 7 % have very low level of awareness with the same.

About 6% of the respondents have a very high level of awareness regarding the benefits of green products for environment, 25% have high level of awareness, 50% have average level of awareness, 11% have low level of awareness and the remaining 8% have very low level of awareness with the same.

About 5% the respondents have a very high level of awareness regarding the various brands offering green products, 15% have high level of awareness, 37% have only average awareness level, 23% have low level of awareness and the remaining 20% have very low level of awareness with the same.

Only one per cent of the respondents have a very high level of awareness regarding the various symbols or certifications or other identifiers which declare the product as green, 18% have high level of awareness, 34% have an average awareness level, 27% have low level of awareness and the remaining 20% have very low level of awareness with the same.

Objective 2: To identify the factors that influences consumers to buy green products.

Table 2: Ranking of various factors influencing consumers to buy green products

Factors	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Weighted Average
Healthy	46	50	4	-	-	29.47
Good for environment	48	47	5	-	-	29.53
Good quality	37	43	20	-	-	27.8
Better than normal products	29	46	25	-	-	26.93
Reasonably priced	19	22	43	13	3	22.73
Easily accessible in stores	17	29	33	20	1	22.73
Well promoted	17	26	32	17	8	21.8

Source: Primary Data

Table 2 reveals the personal opinion of the respondents regarding the various factors influencing them to buy green products. Table shows that about 46% of the respondents strongly agreed with the statement green products are healthy, 50% agreed and the remaining 4% have neutral opinion with the same. The statement green products are good for environment is strongly agreed by 48% of the respondents, 47% agreed and 5% have a neutral opinion with the same.

About 37% of the respondents strongly agreed with the statement green products are of good quality, 43% agreed and remaining 20% have a neutral opinion. The statement

green products are better than normal products are strongly agreed by 29% of the respondents, forty six per cent agreed and 25% have a neutral opinion with the same. About nineteen per cent of the respondents strongly agreed with the statement that green products are reasonably priced, 20% agreed, 43% have a neutral opinion, 13% disagreed the statement and the remaining 3% strongly disagreed with the same. The statement green products are easily accessible in stores are strongly agreed by only seventeen per cent of the respondents, agreed by twenty nine per cent, thirty three per cent have a neutral opinion, twenty per cent disagreed the statement and remaining one per cent strongly disagreed

with the same. About seventeen per cent of the respondents strongly agreed with the statement that green products are well promoted, twenty six per cent agreed, thirty two per cent have a neutral opinion, seventeen per cent disagreed and remaining eight per cent strongly disagreed with the same.

In order to analyse the opinion of the respondents regarding various factors influencing their purchase decision, ranking method is adopted. And for that weighted average for each

statement is calculated and the same is arranged in ascending order. So it is identified that the statement good for environment occupied first rank, healthy got second rank, good quality occupied the third rank, the statement better than normal products occupied fourth rank, the statements reasonably priced and easily accessible in stores got fifth rank and the sixth rank goes to the statement that green products are well promoted.

Objective 3: To understand the issues faced by consumers in connection with green marketing practices.

Table 3: Ranking of various problems faced by consumers while purchasing green products

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Weighted Average
Lack of awareness	14	42	34	7	3	23.8
Very expensive	17	39	37	6	1	24.33
Not promoted properly	13	45	37	5	-	24.44
Lack of confidence in using green products	10	17	37	29	7	19.6
Not easily available in shopping outlets	11	35	40	11	3	22.67
Labels of green products are not informative about the product	13	25	50	10	2	22.47

Source: Primary Data

Table 3 reveals the personal opinion of the respondents regarding the various problems faced by consumers while purchasing green products. Table shows that about fourteen per cent of the respondents strongly agreed that unawareness is the major problem, forty two per cent agreed, thirty four per cent have neutral opinion, seven per cent disagreed and remaining three per cent strongly disagreed with the same. The statement green products are very expensive is strongly agreed by seventeen per cent of the respondents, thirty nine per cent agreed, thirty seven per cent have a neutral opinion, six per cent disagreed and one per cent strongly disagreed with the same. About thirteen per cent of the respondents strongly agreed with the statement green products are not promoted properly, forty five per cent agreed, thirty seven per cent have a neutral opinion and remaining five per cent disagreed with the same. The statement lack of confidence in using green products are strongly agreed by ten per cent of the respondents, seventeen per cent agreed, thirty seven per cent have a neutral opinion, twenty nine per cent disagreed and seven per cent strongly disagreed with the same. About eleven per cent of the respondents strongly agreed with the statement that green products are not easily available in shopping outlets, thirty five per cent agreed, forty per cent have a neutral opinion, eleven per cent disagreed the statement and the remaining three per cent strongly disagreed with the same. The statement labels of green products are not informative is strongly agreed by only thirteen per cent of the respondents, agreed by twenty five per cent, fifty per cent have a neutral opinion, ten per cent disagreed the statement and remaining two per cent strongly disagreed with the same. In order to analyze the opinion of the respondents regarding various problems while

purchasing green products, ranking method is adopted. And for that weighted average of each statement is calculated and the same is arranged in ascending order. So it is identified that the statement labels of green product are not informative occupied first rank, green products are not promoted properly got second rank, green products are very expensive occupied the third rank, the statement lack of confidence in using green products occupied fourth rank, the statement green products are not easily accessible in stores got fifth rank and the sixth rank goes to the statement lack of awareness about green product.

Testing of hypothesis

Table 4: Level of awareness about green products and spending pattern of respondents

Level of awareness	Spending pattern				Total
	0-10%	10-30%	30-50%	Above 50%	
Very high	0	5	1	0	6
High	3	11	6	2	22
Average	25	29	2	1	57
Low	8	1	1	0	10
Very low	2	3	0	0	5
Total	38	49	10	3	100

Source: Primary Data

H₀: There is no significant relationship between level of awareness and spending pattern of respondents on green products.

H₁: There is significant relationship between level of awareness and spending pattern of respondents on green products.

Table 4.1: Result of chi-square test

Table value	21.026
Calculated value	15.6113
Degree of freedom	12
Level of significance	0.05
Result	Accepted

Since the computed value (15.6113) is less than table value (21.026), the null hypothesis is accepted. So we can say that there is no significant relationship between level of awareness and spending pattern of respondents on green products.

Findings

3 % of the respondents have a very high level of awareness regarding the benefits of green products for health, 25 per cent have high level of awareness. 46% of the respondents strongly agreed with the statement green products are healthy. In order to analyse the opinion of the respondents regarding various factors influencing their purchase decision, ranking method is adopted. And for that weighted average for each statement is calculated and the same is arranged in ascending order. So it is identified that the statement good for environment occupied first rank, healthy got second rank, good quality occupied the third rank, the statement better than normal products occupied fourth rank, the statements reasonably priced and easily accessible in stores got fifth rank and the sixth rank goes to the statement that green products are well promoted. Labels of green product are not informative occupied first rank, green products are not promoted properly got second rank, green products are very expensive occupied the third rank, the statement lack of confidence in using green products occupied fourth rank, the statement green products are not easily accessible in stores got fifth rank and the sixth rank goes to the statement lack of awareness about green product. There is no significant relationship between level of awareness and spending pattern of respondents on green products.

Conclusion

Green marketing is an emerging concept which is found to be more beneficial than traditional marketing. It has become very inevitable to encourage the production and distribution of eco-labeled or green products and services. Green marketing involves product modification and production process and packaging which will be beneficial for the environment. From the study it was concluded that people have only average level of awareness about green products. They are aware of the benefits of green products for health as well as for the environment. Lack of perception was found among the respondents regarding the various brands and symbols or certifications of green products. Respondents claim that they are highly concerned about the environment. So the main factor which influences them to buy green products is that they are good for environment as well as healthy. The study revealed that consumers were facing various problems while purchasing green products. Majority of them have the opinion that eco-friendly products have to be promoted properly.

References

1. Bhatia Mayank, Jain Amit. Green Marketing: A study on consumer perception and preferences in India”,

- Electronic Green Journal. 2013’; 1:36.
2. Digel Aman, Yazdanifard Rashad. Green Marketing: its influence on buying behaviour and attitudes of the purchasers towards eco-friendly products, *Global Journals*. 2014; 14(7):11-18.
 3. Deshwal Parul. Green Marketing: Issues and Challenges, *International Journal of Business Economics and Management Research*. 2012; 2(6):105-114.
 4. Shruti Maheshwari P. Awareness of green marketing and its influence on buying behaviour of consumers: special reference to Madhya Pradesh, India, *Journal of Management and Research*, 2014.
 5. Gupta Shruti, Ogden Denise T. To buy or not to buy A social dilemma perspective on green buying”, *Journal of Consumer Marketing*. 2009; 26(6):376-391.
 6. Jain Sheenu. Green Marketing: An illusion or reality”, *Indian Journal of Marketing*. 2007; 37:5.
 7. Katiyar Shilpi. An overview of green marketing for Indian market, *Abhinav National Monthly Refereed Journal of Research in Commerce and Management*. 2015; 4(2):11-16.
 8. Kaur Supreet. Impact of green marketing on consumer’s buying behavior, *Abhinav National Monthly Refereed Journal of Research in Commerce and Management*. 2014; 3(5):1-8.
 9. Mishra. Green Marketing in India: opportunities and challenges, *Journal of Engineering, Science and Management Education*. 2010; 3:9-14.
 10. Murugesan J. Green trust and distrust”, *Indian Journal of Marketing*. 2008; 38(9):22-26.
 11. Parameshwaran Pillai Raji. It’s time to go green with Pride: A conceptual study of Green Marketing”, *Indian Journal of Marketing*. 2013; 43(4):30-34.
 12. Ramakrishna H. Green Marketing in India: some eco-issues, *Indian Journal of Marketing*, 2012, 5-15.
 13. Varghese Anu, Santhosh J. A study on consumer perception on eco-friendly products with reference to Kollam District in Kerala”, *International Journal of Economic and Business Review*. 2015; 3(7):146-148.
 14. Welling MN, Chavan AC. Analyzing the feasibility of green marketing in small and medium scale manufactures”, *Asian Pacific Journal of Research in Business Management*. 2010; 1(2):1-15.
 15. Yadav Rambalak, Swaroop Pathak Govind. Green Marketing: initiatives in the Indian context”, *Indian Journal of Marketing*, 2013, 25-32.