



A STUDY OF CONSUMERS' PERCEPTION AND ATTITUDE TOWARDS GREEN PRODUCTS

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Abstract: *Over the years, demand for green products is increasing rapidly and customers are gradually becoming more aware about these products. Green products are very good for health and customers have started to realize the importance of these products. This paper aims to address the consumers' perception and attitude towards green products. For analyzing the behavior and attitude of the customers', Sikar district of Rajasthan state has been selected. Paper attempts to analyze the various responsible factors which are significant about the selection of the green products and these eco-friendly products have been able to attract the customers in the recent past.*

Key Words: *Green marketing, Customers perception, Customers attitude.*

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1 INTRODUCTION

Philip Kotler (2011) recognized that the Companies need to make drastic changes in their research-and-development, production, financial, and marketing practices if sustainability has to be achieved. But along with sustainability several challenges such as change in the composition of the atmosphere, depletion of the ozone layer, soil degradation & increased desertification and increased air and water pollution have to be taken care of. Luckily, Green marketing has come up as a novel concept which is presumed to be environmentally preferable to others. Green marketing incorporates a broad range of activities, including product modification, changes to the production process, sustainable packing as well as modifying advertising. Yet, defining green marketing is not a simple task where several meanings intersect and contradict each other; an example of this will be the existence of varying social, environmental and retail definitions attached to this term. Other similar terms used are environmental marketing and ecological marketing.

Green, environmental and eco-marketing are part of the new marketing approaches which do not just refocus, adjust or enhance existing marketing thinking and practice, but seek to challenge those approaches and provide a substantially different perspective. Precisely, green, environmental and eco-marketing belong to the group of approaches which seek to address the lack of fit between marketing as it is currently practiced and the ecological and social realities of the wider marketing environment. (F, 2009)

2 GREEN PRODUCTS

The term 'green' has nothing to do with color, but the choice of name is appropriate because green is a color that is often associated with nature. Green products are considered friendly to the environment than non-green goods, in one way or another. The term is widely used and it doesn't take much for a product to be called green, so it can cover a wide range of consumer goods. A product is considered earth-friendly if it is biodegradable, meaning that it will pose no threat to the earth and environment, when it is released to the air, water or earth while in use or when disposed of. These types of products usually decompose much quicker in a landfill, than similar items that are not biodegradable. Biodegradable household cleaners, soaps, dish and dishwasher detergents and laundry soaps are just a few examples of this type of green product.



If a product contains any amount of recycled goods in its manufacturing, it is also considered green for two reasons, firstly, recycling reuses a material keeping it out of the landfill, and secondly, saves the environment when alternative materials are not manufactured and used for that component. Alongside, a product where packaging has been considerably reduced compared to other similar products requiring less shipping room and in turn reducing carbon emissions during transport to market, might also be considered green. Many countries, states and provinces also have green initiatives in place that encourage companies to look for ways to manufacture products in an earth-friendly manner. Every effort, even those that may appear minor to us, help to reduce the impact of consumer goods have on our environment. (Mifflin)

3 GREEN CONSUMERS IN INDIA

A latest survey, '*Green Consumers in India*', reveals that the Indian consumers are increasingly getting conscious (60 per cent) about using environment friendly products and 95 per cent of consumers who make green choices assert to do so to protect the environment. The study reveals that the number of consumers willing to switch to using green products and services is increasing and will continue to boost over the coming years. The report provides an analysis of the Indian consumers' attitude towards green practices, products and services across, mainly related to three sectors- energy, retail and transport. It also rates different consumer segments by assigning them green scores, in which India scores very high, based on their level of adoption of green behavior across these sectors. Women and urban dwellers are more inclined towards adopting green behavior across the three sectors as compared to men and the rural population. Report further indicates that there is enormous potential to improve the use of green products especially in automotive industry by reducing carbon emission (Indian consumers go green: Datamonitor, 2010).

4 REVIEW OF LITERATURE

Roach (1991), indicated that while making purchasing decisions, generally consumers do take care of food safety and quality, animal protection and environment. Purchasing decisions related to green products may also be affected by consumers' belief and attitude (Roach, 1991).



Ottman (1992), states that consumers purchase green products because these are environment friendly but these products should be easily available, should have good quality and affordable price.(Ottman, 1992)

Roberts (1996) explains that environmentally conscious customers prefer to purchase green products because these products improve ecological activities and dilute the bad effects of other pollutants.(Robersts, 1996)

Chan and Lau (2002) conducted a cross-cultural survey of two cities, Shanghai and Los Angeles, of China and America and concluded that more attention needs to be given to enhance the utilization of green products. Moreover, customers should be encouraged to purchase the green products by using various market strategies such as promotional activities, price control and product design, etc.(Lau, 2002)

Polonsky (2011) states that the activities related to production, consumption and utilization of resources with minimum bad effects promote green marketing and generate positive externalities.(Polonsky, 2011)

Soonthorsmai (2007) observed that people those who are more concerned about environmental issues, generally, have a preference to purchase green products and this inclination is becoming stronger with passage of time.(Soonthorsmai, 2007)

Chris (2008) asserted that nowadays, consumers are more health conscious and their priorities about consumption rely with green products which are environmentally conducive also.(Chris, 2011)

Joseph & Rupali Korlekar (2012) states that in developing countries like India more researches related to green market potential should be conducted which will be helpful in understanding consumers' perception, their profile, attitude towards green marketing and green products. (Joseph & Korlekar, 2012)

5 STATEMENT OF THE PROBLEM

Majority of consumers contemplate that green marketing means promotion or advertisement of those products which are eco-friendly, recyclable, refillable, ozone friendly and free from other impurities. But, green marketing is much wider term covering consumer goods, industrial goods and even services. For example, around the world there are resorts that are beginning to promote themselves as "ecotourism" facilities, i.e., facilities that "specialize" in experiencing nature or operating in a fashion that minimizes their



environmental impact [May 1991, Ingram and Durst 1989,(Ingram, 1988)Troumbis[1991].(Troumbis)Thus green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. Yet defining green marketing is not a simple task. Indeed the terminology used in this area has varied, it includes: Green Marketing, Environmental Marketing and Ecological Marketing. While green marketing came into prominence in the late 1980s and early 1990s, it was first discussed much earlier. The American Marketing Association (AMA) held the first workshop on "Ecological Marketing" in 1975.(Henion)In this context, this study aims at determining consumer's perception, attitude towards green products. And what makes consumers to understand about green products.

Research Approach

To investigate the research objectives primary and secondary data have been collected and analyzed. Primary data has collected through the structured questionnaire and secondary data were collected from texts, journals and magazines.

5.1 Research Design

The design of present research is analytical in nature. The main purpose of the study is to make an evaluation regarding the awareness level of the consumers. In research consumers' awareness, attitude is dependent variable and product, demographic factors as an independent variable. To accomplish the objective of the present study, the descriptive statistics, chi-square test and garret ranking techniques have been applied. The results presented in the tabular form.

5.2 Research Objective

- 1 To study the relationship between socio economic characteristics of consumers and perception and attitude towards green products.
- 2 To examine the awareness of eco-friendly products.

5.3 Sampling Procedure

The present research confined to Sikar district of Rajasthan state. The study incorporates the consumer awareness for green products. The study carried out in the month of April and May of year 2015. The customers has selected by adopting convenient sampling method through pre-tested and structured questionnaire. The questions are measured by using



Likert five point scale (1 represents strongly disagree and 5 represents strongly agree). The questionnaires distributed to 300 respondents and gather 250 questionnaires for analysis.

5.4 Data Processing and Analysis

Completed questionnaire were inspected, edited and coded and the data were transferred to an excel spreadsheet. The techniques used during the data analysis stage of the research included descriptive statistics, chi –Square test and Garrett Ranking.

5.5 Hypotheses

The following hypotheses are framed and tested for the present study, namely,

H₀: There is no significant relationship between Socio-Economic Characteristics and Consumer's perception towards Green Products.

H₀: There is no significant relationship between Socio-Economic Characteristics and Consumers' Attitude towards Green Products

5.6 Limitations of the study

A convenience sampling was drawn from the target population, which could have an impact on the representativeness of the sample.

The findings are based on only 250 respondents, due to time and cost constrains the researcher could not take entire district for the study. The results of this study will be applicable to only Sikar district of Rajasthan state.

Analysis and Discussion

Table – 6.1 Demographic profile of Respondents

Category	Frequency (N)	Percentage (%)
Gender		
Male	156	62.4
Female	94	37.6
Age	250	100
16 – 21 years	37	14.8
22 – 25 years	46	18.4
26 – 35 years	80	32
36 & above	87	34.8
Education	250	100
Primary level	28	11.2
Secondary level	30	12
Graduate	75	30
Post graduate	82	32.8
Professionals	35	14
Occupation	250	100



Agriculture	42	16.8
Business	44	17.6
Government employee	46	18.4
Private employee	53	21.2
Student	45	18
Home maker	20	8
Monthly Income	250	100
5000 – 10,000	45	18
10,001 – 20,000	56	22.4
20,001 – 30,000	74	29.6
31, 000 and above	75	30
Marital status	250	100
Married	145	58
Unmarried	105	42
Family Type	250	100
Nuclear	190	76
Joint	60	24
Total	250	100

Source: Primary Data

The socio economic characteristics of respondents analyzed and the result presented in table 6.1. The result shows that 62.4 per cent of the consumers are male while the rest of 37.6 percent are female. The result also shows that about 21.2 percent of the consumers are employed in private sector followed by government 18.4 per cent, student 18 percent, businessman 17.6 per cent, agriculturist 16.8 per cent and homemaker 8 per cent. It is clear that about 34.8 per cent of the consumers belong to the age group of 36 & above years followed by 22 – 25 years (18.4 per cent) below 26 - 35 (32 per cent) and 16 - 21 years (14.8 per cent). The majority of the consumers (32.8 per cent) are postgraduate followed by graduate (30 per cent), professionals (14 per cent), secondary level (12 per cent) and primary level (11.2 per cent). The result shows that monthly income varies between Rs. 31,000 to Rs. 5000. It is apparent that about 58 per cent of the consumers are married while the rest of 42 per cent of the consumers are unmarried and about 76 per cent of the consumers belong to nuclear family, and rest 24 per cent of the consumers belong to joint family.



Table No-6.2 Eco-friendly products

Eco-Friendly Products	No.of Respondents	Percentage
a) Cloths & Wears	45 (4)	18
b) Organic Food	72 (1)	28.8
c) Electrical Appliance	65 (2)	26
d) Furniture	55 (3)	22
e) Others	13 (5)	5.2
Total	250	100

Source: Primary Data

Table 6.2 clearly shows that majority of respondents (28.8 per cent) are willing to buy organic food products like Organic Herbal Juices, Herbal Natural Cosmetics, Organic Tea & Coffee, Organic Foods & Vegetables, Organic Spices, Organic Grains & Pulses, Organic Natural Herbs, Organic Manure & Pesticides, etc followed by electrical appliances (26 per cent), furniture items (22 per cent), Cloths (18 per cent) and other eco-friendly products like Automotive fuel oil, Lubricating oil/grease, stationary and office supplies etc.(5 percent).

Table No – 6.3 Consumers Perception towards Eco- Friendly Products

Elements attracting to buy eco-friendly product	S.A	A	N	DA	SDA	Total
Product quality	9 (26.4%)	7 (20.5%)	6 (17.6%)	7 (20.5%)	5 (14.7%)	34 (100%)
Price	9 (30.0%)	4 (13.3%)	5 (16.6%)	7 (23.3%)	5 (16.6%)	30 (100%)
Packing	10 (31.25%)	7 (21.8%)	8 (25%)	4 (12.5%)	3 (9.3%)	32 (100%)
Promotion	9 (25.7%)	8 (22.8%)	8 (22.8%)	8 (22.8%)	2 (5.7%)	35 (100%)
Eco friendly impact	8 (28.5%)	6 (21.4%)	6 (21.4%)	4 (14.2%)	4(14.2%)	28(100%)
Durable	8 (23.5%)	5 (14.7%)	7 (20.5%)	9(26.4%)	5 (14.7%)	34 (100%)
Service quality	9 (27.2%)	7 (21.2%)	8 (24.2%)	6 (18.1%)	3 (9.0%)	33 (100%)
Reputation	7 (29.1%)	4 (16.6%)	4 (16.6%)	6 (25.0%)	3 (12.5 %)	24 (100%)
Total	66 (27.6%)	48 (19.6%)	52(20.8%)	51 (20.8%)	30 (11.2%)	250 (100%)

Source: Primary Data

Table No 6.3 indicates that majority of the respondents are considering about the product quality, price, packing, promotion,eco-friendly impact and Service quality while purchasing the eco-friendly products



Table No –6.4 Socio Economic Character and customers perception towards eco-friendly products

Socio Economic Character	Chi-Square Value	P-value	Result
Gender	0.443	.000	Significant
Age	2.986	.000	Significant
Education	2.582	.000	Significant
Occupation	3.121	.001	Significant
Monthly Income	3.245	.001	Significant
Marital Status	0.526	.000	Significant
Family Type	0.547	.000	Significant

Source: Primary Data

The chi square test has been applied to find the relationship between socio economic character and customer's perception towards eco-friendly products. It can be conclude from the analysis $p < 0.01$ and the null hypotheses is rejected at one percent level of significance. Hence, the null hypothesis cannot be accepted. This shows that there is close association between socio economic character and customer's perception towards green product.

Table No – 6.5 Garrett Ranking for awareness of eco-friendly products

Awareness	Mean Score	Rank
1 Television	62.57	1
2 Radio	56.49	7
3 Magazines	58.83	5
4 Class lectures	57.47	6
5 Newspapers	60.45	3
6 Internet	61.28	2
7 Word of mouth (family & Friends)	51.47	8
8 Social network such as face book	59.35	4
9 Books	50.53	9

Source: Primary Data

The respondents are asked to give the rank on the basis of awareness about eco-friendly products. To find out the ranking Garrett Ranking Technique has been applied. It is observed from the above table that first rank was obtained by television followed by internet, newspapers, social network such as face book, mazagine, class lectures, word of mouth (Family & Friends) and books.



Table No – 6.6 Consumers’ attitude towards green products

Statement	S.A	A	N	DA	SDA	Total
Have you aware about green products features early	9 (34.6%)	7 (26.9%)	5 (19.2%)	3 (11.5%)	2 (7.6%)	26 (100%)
Your Satisfaction level on green products	11(34.3)	9 (28.1%)	7 (21.8%)	2 (6.2%)	3 (9.3%)	32 (100%)
Product label make you much more likely to purchase the product.	10(33.3%)	8 (26.6%)	5 (16.6%)	4 (13.3%)	3(10%)	30 (100%)
Are you face any difficulty while finding the green product	13(37.1%)	9 (25.7%)	4 (11.4%)	7 (20%)	2 (5.7%)	35 (100%)
Are you purchased eco-friendly product more than common product	10(31.25%)	8 (25%)	5 (15.6%)	6(18.75%)	3 (9.3%)	32 (100%)
Do you prefer to buy your green products online	8 (22.2%)	11(30.5%)	7 (19.4%)	6 (16.6%)	4 (11.1)	36 (100%)
Do you primarily use online sources to find information on green products	10 (35.7%)	7 (25%)	5 (17.8%)	4 (14.2%)	2 (7.1%)	28 (100%)
If green features increase the price of the product, are you willing to pay more	9 (29.0%)	7 (22.5%)	6 (19.3%)	5 (16.1%)	4(12.9%)	31 (100%)
Total	80 (32%)	66(26.4%)	44(17.6%)	37(14.8%)	23(9.2%)	250(100%)

Source: Primary Data

It is observed from the table 6.6 that the majority of respondents are aware about green products. In addition 37.1 per cent of the responds said that they faced difficulty while finding green products, 31.25 per cent of the respondents preferred to buy eco-friendly products more than common products. Apparently, 30.5 percent of the responds preferred to buy green products using online access, besides 35.7 percent of the responds strongly agreed on using online sources to find information about green products and 29 percent of the responds were ready to pay more for good features of green products.

Table No – 6.7 Socio Economic Character and customers attitude towards eco-friendly products

Socio Economic Character	Chi-Square Value	P-value	Result
Gender	0.746	.000	Significant
Age	3.121	.001	Significant
Education	2.573	.000	Significant
Occupation	2.532	.000	Significant
Monthly Income	3.586	.001	Significant
Marital Status	0.532	.000	Significant
Family Type	0.342	.000	Significant

Source: Primary Data



The chi square test has been applied to find the relationship between socio economic character and customer's attitudes towards eco-friendly products. It can be conclude from the analysis $p < 0.01$ that the null hypotheses is rejected at one percent level of significance. Hence, the null hypothesis holds good. This shows that there is close association between socio economic character and customer's attitudes towards green product.

RECOMMENDATIONS

- 1 Companies should start organized and unified campaigning to enhance the awareness about green marketing among customers, keeping factors like age, region, and income among others in perspective.
- 2 Producers should develop their products and services according to the genuine need of the customers because merely producing the green products and services is not enough rather that must be well suited to the reality of customers need.
- 3 The research and development expenses should be increased as it will bring some new innovative and better ways to generate, communicate and deliver green products and services.
- 4 Government should promote green concept of products and services and eventually should move towards green economy.
- 5 Government should subsidize the green efforts, so that marketer could avail green products and services at reasonable prices.
- 6 Organizations should adapt green policies as long term strategy because most of the green efforts took heavy initial cost but in long term it is beneficial and cost effective to the organizations.

CONCLUSION

Green marketing is a tool for protecting the environment for the future generation. Much work and efforts are required on part of the government and industry for proper planning and implementation of green marketing. Based on the findings and discussions, it is observed that the consumer's these days are more aware about green marketing. People in emerging economics like India too have high concern for greener environment and have an overall positive attitude towards green marketing. It is also evidence that future more and more consumers will prefer green products as they don't mind paying extra price for green products.



DIRECTION FOR FUTURE RESEARCH

An in-depth study of rural Indian consumers with regard to green marketing will help us to know their attitude. Intensive research can be done on Indian automobile industry with respect to green marketing issues. Research should be done on Indian power sector with respect to green power and on Indian housing sector with reference to green houses or green buildings. Infact, green technology can be adopted for any construction and service sector which would help to save the environment and life on this earth.

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