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PERCEPTION OF CUSTOMER TOWARDS GREEN PRODUCTS WITH REFERENCE TO KOTTAYAM DISTRICT

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ABSTRACT

This study attempts to describe the initiatives taken by selected durable goods manufacturing companies for making the environment clean and green with its objective of establishing low carbon society, establishing a reprocessing-based society, providing environmental protection and establishing a society in harmony with nature[1]. But some of the occasions, it has been noticed that companies are involved in claiming themselves as eco-friendly whereas they are not involved in green activities, hence involving in green washing[2]. The conclusion is that, the complex and erratic behaviour of consumers pose challenges to the government and producers in addressing their issues and fulfilling their needs. Each and every organization of today have better knowledge about their environmental responsibility. They have realized that the mere importance of their responsibility towards the society and the environment is not sufficient. Many top companies around the globe have launched its footstep towards environmental responsibility. Environmental degradation taken into consideration by companies leads to the production of new green products. This helps the company to gain a sufficient reputation from the public. In turn this will increase its sales volume and profit. Hence, if all the companies make an effort to increase their responsibility towards the environment, it can surely help prevent environmental degradation and conserve ecology.

Keywords: Green products, Eco-friendly

1. INTRODUCTION

Consumers are the main factors that boost a country's economy. Each and every consumer has their very own perspective and preference towards what they consume. Consumers have become environmental conscious; this is because of the initiatives of the environmentalists, and government. Environmental concerns have been growing, the reason being global warming and climate change [3]. Natural events and human activities such as garbage burning, contribute to an increase in average global temperatures. This is caused primarily by increases in "green-house" gases such as Carbon-Dioxide. The green-house effect keeps the earth warm when functioning normally [4]. According to Jack, (2010), in less than 2 centuries, humans have increased the total amount of carbon dioxide in the atmosphere by 25 per cent from the burning of the fossil fuels and the destruction of forests, etc.

Green products are defined as products that produce limited carbon footprints; they require fewer resources to produce, consume less energy or emit fewer hazardous emissions [5]. Green products are also a product that is non-toxic, water efficient, and also recyclable and bio-degradable. There are many green products that have been produced for the consumers in the market. The rationale for going green is two-fold; clearly, the positive effects on the environment are the key driver for purchasing green products [6]. Green products provide myriad environmental benefits. They can replace toxic materials that may be harmful to people, animals, and the earth. Some products save energy and water, while others limit solid waste and manufacturing releases [7]. Green products create a healthier environment for people through reduced exposure to cleaners, solvents, paints and other hazardous substances. Green products also reduce allergies. Green products are formed from recycled components, be manufactured in a more energy-conservative way, or be supplied to the market with more environmental friendly way [8]. So, people are becoming more aware about the concept of

environmental consciousness. This reduces the usage of modern manufactured products. Traditional or conventional products are those that are manufactured in a conventional way. Thus the study is to analyse the perception of customers towards green products with reference to Kottayam District.

STATEMENT OF THE PROBLEM

Consumers are very keen in purchasing green products, slow and study the change is happening [9]. However, it will take some more time that all consumers to return to the green consumption, besides, the manufacturers have to shift their production to green production by controlling emissions, sewage, etc. [10]. This study analysis the consumers part, how they get the source of information, their attitude, whether they are willing to pay more, how they chose between the brands and non-branded green products, available in the market, place of preference of purchase, and so on in Kottayam, Kerala. A perfect parity between the green products and purchase behaviour is vital to make the environment healthier. Therefore, green consumption has become integral part of everyone's life and to save the mother Earth. In this context it is imperative to make a study on the green consumption behaviour among the consumers of Kottayam, and the present research work has tremendous relevance to the society and consumers to over-come the purchase of non-green or to say conventional products.

NEED FOR THE STUDY

Environmental sustainability is a matter which cannot be ignored, so business organizations have to recognize the competitive advantages and business opportunities to be gained from green marketing although it may cost to the organization. Consumers also have to largely aware of the usefulness of adapting to the green products. Green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. [11]. Today, marketing parishioners of FMCG sector in India use environment friendly packaging and modify the products to minimize the environment pollution. However there is a big argument among the marketing philosophers regarding attractiveness of green product to customers in developing country like India. Hence, this is study will provide a knowledge, how far the consumers' in Kottayam have adopt to the eco-green consumer products.

OBJECTIVES OF THE STUDY

To obtain influencing factors among consumers towards green products among selected respondents in Kottayam.

To explore purchase behaviour among the consumers towards green products among selected respondents in Kottayam.

SCOPE OF THE STUDY

The study covers the extent of consumer's preference and satisfaction regarding green product consumption in Kottayam. In the prevailing globalized economic scenario the consumers have multiple choice to select green products, because, many manufacturers have shifted to green product manufacturing [12]. Native producers and global producers are competing in the market, some of the native producers are non-brands, but their quality is good compared to the global brands. It is important to understand the influencing factors that motivate the consumers to buy green products [13], as well some factors uninfluenced the consumers to buy non-green products, in some case due to price consumers are provoked to buy non-brands, or those goods produced by local manufacturers. Hence, the present study aims to analyse the consumers' attitude and satisfaction towards purchase of green products.

RESEARCH METHODOLOGY

Type of research: Descriptive research.

Type of sampling: Simple random sampling. Sample size: 250

Data Collection Method: Survey based analytical method is used for data collection, which was thought fit for this research.

Tools used for the study: Percentage analysis, Mean rank, Chi-square and SEM analysis

LIMITATIONS OF THE STUDY

Research or any study has their own limitations, this study too has its own limitations, and this is due to the nature of the study. This investigation depends on overview technique, study research has its own confinements, further assets like cash and time has encouraged pushing the work quick, because of these blunders might be, regardless of care taken up in concluding the report. Second, the respondent's views are one of the uncontrollable factors, respondent's opinion is final, so the results may vary if applied to other areas, therefore, and the findings are not the final. Thirdly, data collection was very problematic, because most of the consumers are reluctant to provide information. However, at-most care was taken-up in the study, there are some of the limitations exists in the research study.

ANALYSIS AND INTERPRETATION

SOCIO ECONOMIC PROFILE OF RESPONDENTS

Table 1:

S.NO. **AGE**	**RESPONDENTS**	**PERCENTAGE**
18 Years - 27 Years	21	8.5
28 Years to 37 years	53	21.1
1 38 Years - 47Years	83	33.4
48 Years to 57 Years	51	20.6
Above 57 Years	41	16.4
Total	250	100.0
GENDER		

2 Male	170	67.9
Female	80	32.1
Total	250	100.0
EDUCATIONAL	0	
QUALIFICATION		
3 Matric	35	13.8
HSC	63	25.4
Degree	63	25.4
Diploma	88	35.4
Total	250	100.0
MARITAL STATUS	0	
Married	92	36.6
4 Unmarried	91	36.3
Separated	45	18.1
Widow	23	9.0
Total	250	100.0
EMPLOYMENT	0	
Public sector employee	17	6.8
Private sector employee	50	20.1
5 Selfemployed	37	14.6
Agriculture	32	13.0
Allied works employee	114	45.5
Total	250	100.0
MONTHLY INCOME	0	
Up to Rs.25,000	50	20.1
6 Rs.25001 - Rs.50,000	100	39.9
Rs.50,001 to Rs.1,00,000	50	20.0
Above Rs.1,00,000	50	20.0
Total	250	100.0
7. **DEPENDENT**	0	
One	36	14.4
Two	108	43.1
Three	54	21.4
Four	35	11.1
More than four	18	7.0
Total	250	100.0

It is clear that the respondents belong to the age group of 18 years to 27 years (8.5 per cent), 28 years to 37 years (21.1 per cent), 38 years to 47 years (20.6 per cent), 48 years to 57 years (20.6 per cent) and above 57 years (16.4 percent). The maximum of the respondents belongs to the age group of 38 to 47 years (33.4 per cent). It is clear that 67.9 per cent of the respondents are male and 32.1 per cent of the respondents are female. The majority of the respondents are male (67.9 per cent). It is clear that the educational level of the respondents is matriculation (13.8 per cent), Both HSC level and Degree level (25.4 per cent), and Diploma level (35.4 per cent). The majority of the respondents belong to the diploma level (35.4 per cent). It is clear that 36.6 per cent of the respondents are married and 36.3 percent of the respondents are unmarried, 18 per cent of the respondents are separated and 9 per cent of the respondents are Widow. The majority of the respondents are married (36.6 per cent). It is clear that the respondent Occupational level of the respondents is public sector employee (6.8 per cent), private sector employee (20.1per cent), self-employed (14.6 per cent), Agriculture employee (13 per cent) and Allied works employee (45.5 per cent). The maximum of the respondents belongs to the allied works employee (45.5per cent). Most of the respondents are allied works employees (45.5 per cent). It is clear that the monthly income of the respondents is up to Rs. 25,000 (20.1 per cent), Rs. 25001 to Rs. 50,000 (39.9 per cent), both Rs. 50,001 to Rs. 1, 00,000 and above Rs. 1,00,000 (20 per cent). Maximum of the respondent's monthly income is less than Rs. 25001 to Rs. 50,000 (39.9 per cent). From the above table, it is known that 14.4 per cent of the respondents have one dependent, 43.1 per cent of the respondents have two dependents, 21.4 per cent of the respondents have three dependents, 14.1 per cent of the respondents have four dependents and 7.0 per cent of the respondents have more than four dependents. The majority of the respondents have two dependents (43.1 per cent).

Environmental concern that influence purchase of green products

Table 2:

Environmental factors	Mean	Rank
Variable 1	3.84	1
Variable 2	3.65	2
Variable 3	3.64	3
Variable 4	3.64	4
Variable 5	3.20	5
Variable 6	3.19	6
Variable 7	3.08	7
Variable 8	3.06	8
Variable 9	2.79	9
Variable 10	2.73	10

Variable 11	2.61	11
Variable 12	2.60	12
Variable 13	2.60	13
Variable 14	2.57	14
Variable 15	2.52	15
Variable 16	2.48	16

From the table, it is known that Firms that damage or disrespect the environment should be punished, Environmental declarations demonstrate that the manufacturer may have concern with the environment and Agricultural toxins and dangerous substances in food harm the environment with mean score of (3.83, 3.649 and 3.643 respectively)are the top influential environmental concerns leads to buy green products and I am worried when I see people dirtying streets and parks has placed last place with mean score of 2.48 .

Man-nature orientation that influence purchase of green products

Table 3:

S.no	Man-nature orientation factors	Mean	Rank
1	Influence 1	4.86	1
2	Influence 2	3.76	2
3	Influence 3	3.68	3
4	Influence 4	3.68	3
5	Influence 5	3.59	4
6	Influence 6	3.57	5
7	Influence 7	3.42	6
8	Influence 8	3.34	7
9	Influence 9	3.23	8
10	Influence 10	3.23	8
11	Influence 11	3.22	9
12	Influence 12	3.22	10
13	Influence 12	3.12	10

It is clear that, I motivate and support every person who takes to save ecological system has scored first rank with mean score of 4.86, My family is accustomed to use green products has scored second rank with mean score of 3.76, third rank has been shared by I respect cultural values and I am associated with green groups with mean score of 3.68, I prefer recycled products to save ecological system has scored fourth rank with mean score of 3.59, I prefer green advertising has scored fifth rank with mean score of 3.56, I advise my wards and friends to save ecological system has scored sixth rank with mean score of 3.42, I do not use plastics has scored seventh rank with mean score of 3.33, eighth rank has been shared by I prefer to save nature and Me and my family members are only using green products, as they are safe for health with mean score of 3.226, I adhere to the principle of nature living has scored ninth rank with mean score of 3.223, I take initiative in saving animals, birds, and plants as they are part of ecological system has scored tenth rank with mean score of3.221 and I am very careful in disposing non-green products safely has scored last rank with mean score of 3.1.

PERSONAL VARIABLES Vs FACTORS INFLUENCE GREEN PROD- UCT

Table 4:

Profile of the respondent	Chi square	DF	p	Sig.
Age	17.785	16	< 0.001	Highly Significant
Gender	21.907	4	< 0.001	Highly Significant
Marital Status	28.410	12	< 0.001	Highly Significant
Educational Status	24.682	12	< 0.001	Highly Significant
Annual Income	20.354	12	< 0.014	Significant
Number of Dependents	24.31	16	< 0.001	Highly Significant
Occupational Status	25.582	16	< 0.001	Highly Significant

It is noted that the p value is less than 0.05 for all the selected variables, the above hypothesis is rejected. I.e. there is a significant association found between the socio-demographic variables of the respondents and their factors influencing to choosing green products. It may be inferred that there is a relationship between the factors influencing for purchase of green products of the respondents and their socio-demographic variables like Age, Gender, Educational Status, Annual Income, Occupational Status etc. It may be inferred that factors influencing to purchase green products differ from one individual to another individual on the basis of their age, marital status, educational status, annual income etc.

Health consciousness attitude for green products

Table 5:

Health consciousness	Sum	Mean	Rank
V1	2669	3.75	1
V2	2614	3.68	2
V3	2544	3.58	3
V4	2528	3.56	4
V5	2362	3.32	5

My health is more important to has scored first rank with mean score of 3.75, I prefer to eat a product which improve my immunity power and stamina has scored second rank with mean score of 3.68, I am always purchase products which are prevents from side effects has scored third rank with mean score of 3.58, Consumption of non-green products may lead to health related problems has scored fourth rank with mean

score of 3.5606 and I wish to live long with good health has scored last rank with mean score of 3.3268 .

Purchase intention attitude for green products

Table 6:

Purchase intention	Mean	Rank
V1	4.8549	1
V2	3.5831	2
V3	3.4141	3
V4	3.3268	4
V5	3.2239	5
V6	3.2155	6
V7	3.1155	7

From the above table, I feel trendy when I buy products with eco-friendly has scored first rank with mean score of 4.85, I prefer to buy products in reusable packages has scored second rank with mean score of 3.58, Opinion of my family members and friends relating to eco-friendly products impulse me to buy has scored third rank with mean score of 3.41, I purchase green products even if they are costly than the non-green products has scored fourth rank with mean score of 3.32, I feel comfortable when purchasing product with green image has scored fifth rank with mean score of 3.22, I am always prefer to purchase products that are eco-friendly has scored sixth rank with mean score of 3.21 and I prefer to purchase products which contribute money for environment protection purposes has scored last rank with mean score of 3.11 .

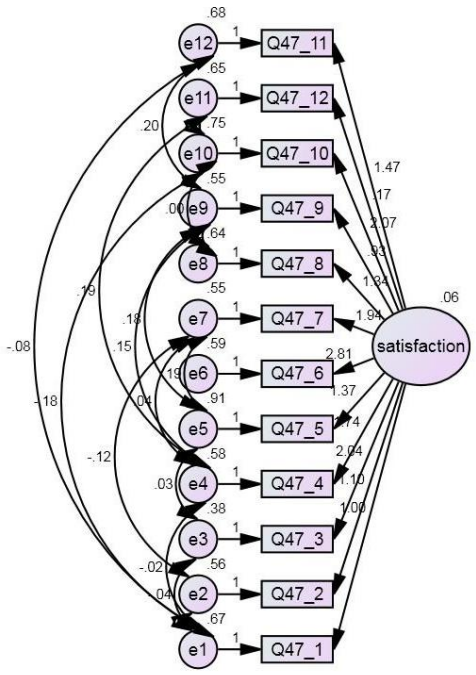
MODEL FIT INDICES OF SATISFACTION AND USING GREEN PROD- UCTS

Table7:

No.	TESTFACTOR	CALCU-LATED VALUE	ACCEPTABLE VALUE
1	GFI(Goodness-of-fit-index)	0.929	
2	AGFI(Adjusted goodness-of-fit-index)	0.854	>=0.90 and above satisfactory fit 0.80 to <0.9 acceptable fit
3	CFI(Comparativefitindex)	0.820	al.2006)
4	NFI (Normedfitindex)0.806		
5	TLI(Tucker-Lewisindex)0.68(Hair et		
6	RMSEA (Root meansquare error of approximation)	0.108	0.05orlesswouldindicatea close fit of themodel

No. TEST FACTOR

Figure 1:



REGRESSION WEIGHTS FOR SATISFACTION AND USING GREEN PRODUCTS

Table 8:

Measured Variable		Latent Variable	Estimate	S.E.	C.R. P
Brand Image	<—	Satisfaction	1.000		
Product Quality	<—	Satisfaction	1.095	.205	5.342 Significant at
Visual Appeal and Attraction	<—	Satisfaction	2.036	.364	1% level 5.599 Significant at
Value for money	<—	Satisfaction	1.738	.326	1% level 5.339 Significant at
Positive proven personal	<—	Satisfaction	1.372	.293	1% level 4.676 Significant at
experience Social status enhancement	<—	Satisfaction	2.811	.502	1% level 5.603 Significant at
Agreement and approval by	<—	Satisfaction	1.938	.358	1% level 5.420 Significant at
family members Adherence to traditional	<—	Satisfaction	1.338	.270	1% level 4.963 Significant at

family customs					1% level
Product certification	<—	Satisfaction	.926	.206	4.487 Significant at
Go green	<—	Satisfaction	2.068	.411	1% level 5.031 Significant at
Competitive cost	<—	Satisfaction	.165	.151	1% level 1.095 Significant at
Endorsement by others	<—	Satisfaction	1.468	.299	1% level 4.916 Significant at
					1% level

From this result as shown in table 4.46, it is noted that estimates of the coefficient of portability is high followed by ease of handling and it indicates that both factors are highly influenced the satisfaction level on green products. Further, the analysis indicated that all the variables are having positive relationship with the satisfaction level on green products and significant at 1% level.

FINDINGS

- 33.4 percent of the respondents belong to the age group of 38 to 47 years.
- 67.9 percent of the respondents are male.
- 35.4 percent of the respondents belong to the diploma level.
- 36.6 percent of the respondents are married.
- 45.5 percent of the respondents belong to the allied works employee.

39.9 percent of the respondent's monthly income is less than Rs. 25001 to Rs. 50,000.

43.1 percent of the respondents have two dependents.

The dominant part of the respondents has 61.4 percent have utilization of green items.

It is found that 54.4 per cent of the respondents take shopping bags along with them and 45.6 per cent of the respondents don't take shopping bags along with them. It is concluded from the chi-square test that a particular socio demographic variable is related to take a shopping bag while purchase green products. It is inferred that take a shopping bag while purchase green products differ from one individual to another individual based on their age, gender, education, marital status, employment, income, etc., .

SUGGESTIONS

Because positive attitude of consumers towards environmentally friendly products has not been found to be significant, consumer counseling programs are encouraged. Eco-labeling criterion should be standardized so that consumers may not be confused about claims of green products. Companies should assume at least some responsibility for environmental deterioration. As consumer awareness and purchase intent of green products has been found to be positively correlated. So the producers can provide more value to their customers by highlighting the characteristic of being a "green product" producer. Consumers are aware of green products and they have the attitude towards the environment but an attitude to purchase a green product does not exist, so the companies producing "green products" may develop programs in communities to develop the attitude towards green products. The consumer may be aware through programs about the purchase of green products and how this purchase will contribute to the environment.

Government and business houses may consider the point that print media and websites seemed to be the least important source of spreading awareness about eco-friendly products and hence these media should be used sparingly in their mass communication efforts.

CONCLUSION

The conclusion is that, the complex and erratic behaviour of consumers pose challenges to the government and producers in addressing their issues and fulfilling their needs. Each and every organization of today have better knowledge about their environmental responsibility. They have realized that the mere importance of their responsibility towards the society and the environment is not sufficient. Many top companies around the globe have launched its footstep towards environmental responsibility. Environmental degradation taken into consideration by companies leads to the production of new green products. This helps the company to gain a sufficient reputation from the public. In turn this will increase its sales volume and profit. Hence, if all the companies make an effort to increase their responsibility towards the environment, it can surely help prevent environmental degradation and conserve ecology.

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