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# A STUDY ON RURAL CONSUMERS BUYING BEHAVIOUR OF GREEN PRODUCTS IN SELECTED VILLAGES OF CUDDALORE DISTRICT, TAMIL NADU

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#### **Abstract**

Modern consumers are changing their attitude to purchase eco friendly products or green products. This study makes an attempt to analyses the factors influencing consumers to purchase green products and also the difficulties faced by them to purchase the green product. For this study, two hundred samples were drawn and statistical tools like percentage analysis; weighted ranking method, chi- square test and ANOVA were used for analysis and interpret the data. Major findings of the study reveals that, even though there are few difficulties like high price, non availability etc., majority of the respondents desire to purchase the product which do not harm their health and also protect the environment.

**Key-Words**: Green Product, Eco-Friendly, Product, Consumer Attitude, Chi-Square, ANOVA, ANOVA

#### INTRODUCTION

Now a days meaning of the term "marketing" is moving towards "consumer satisfaction along with environment protection" through the promotional campaigns of almost every big business houses across the globe. Green or Environmental Marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs, such that satisfaction of these needs and wants occur, with minimal detrimental impact on the natural environment. It is the marketing of products that are presumed to be environmentally safe. Thus green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. India is not an exception; the words like "eco-marketing", "environmental caring", "eco-friendly export", "green consumerism" etc. are very popular in India. In the developed countries, companies (particularly MNCs) have started making use of green marketing strategies and techniques into their marketing practices. The societal marketing concept and environmental laws have been come into existence.

#### **OBJECTIVES**

- 1. To study the socio-economic factors of the consumers
- 2. To study about the environmental awareness of the consumers
- 3. To study of the awareness of green products
- 4. To identify the factors influencing the consumer to buy green products
- 5. To ascertain the factors preventing consumers to buy green products

#### **REVIEW OF LITERATURE**

Michael Jay Polonsky (1994) has studied that the green marketing requires that consumers want a cleaner environment and are willing to "pay" for it, possibly through higher priced goods, modified individual lifestyles, or even governmental intervention. Final consumers and industrial buyers also have the ability to pressure organizations to integrate the environment into their corporate culture and thus ensure all organizations minimize the detrimental environmental impact of their activities.

Elkington J (1994), toward the sustainable corporation: win-win-win business strategies for sustainable development to conclude A green consumer can be identified to be one who avoids any product which may harm damage to any living organism, cause deterioration of the environment during process of usage, consume a large amount of non-renewable energy, involves unethical testing on animals or human subjects.

Mayank Bhatia and Amit Jain (2013) studied on "consumer perception and preferences in india" in "electronic green journal, 1(36) observed All consumers have rated the seriousness on higher side for various factors that are considered as environmental concern. Consumer's agreement regarding environmental degradation was high and many prefer green products over conventional products to protect the environment. They conclude consumers have positive attitude towards green products at the same time they are concerned with the availability and price of such products.

Dr. Anubha Varshist, Dr.Bharti Wadhwa and Akansha Uppal (2014), Study on awareness level of retailers as well as consumers towards Green marketing to suggest technology should be brought into manufacturing of the products so as to reduce the cost of green products. Recyclable products should be the focus. Eco designs can be implemented where the number of parts use can be minimal. Energy efficient machinery can be used which can be a higher one time investment but a profitable one in long run. Marketers can promote the products using green concept and increase awareness which intern will motivate retailers to keep more green products.

#### **METHODOLOGY**

#### **Sources of Data**

- a.) Primary data: The primary data was collected from 200 respondents.
- b.) Secondary data: Secondary data were collected from various websites, journals and books.

#### Sampling method

Data were collected from 200 respondents by scheduled interview method with structured questionnaire. Convenient sampling method is used for data collection Period of study

The study is undertaken for a period of 5 months years from July 2015 to November 2015.

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## Area of study

For this study, five villages were selected in cuddalore district ,Namely Valliarachal, Mettupalayam, Veeracholapuram, Nathakkadaiyur and Palayakottai Limitations of the study

- The study has been restricted to 200 respondents only.
- The accuracy of the study is based on the respondents.
- The survey has been limited to only selected villages (Valliarachal, Mettupalayam, Veeracholapuram, Nathakkadaiyur, Palayakottai) in Tiruppur.

#### **Tools used for Analysis**

- Percentage analysis is used to measure the proportion of socio-economic variables.
- Weighted ranking method was used to rank the factors influencing the consumer to buy green products as well as factors preventing consumers to buy green products.
- Chi-square test, ANOVA test was used to measure the interrelationship between Socio- economic variables with Environmental awareness and Awareness of green products.

#### DATA ANALYSIS AND INTERPRETATION

Socio-economic status of green consumers, Five major socio-economic factors were taken for study such as gender of respondents, their age group, education level, occupation and their annual income.

Table-1
Socio-economic Status of Green Consumers

S.No.		Variables	Number of respondents (200)	Percentages	
	Gender	Male	137	68.5	
		Female	63	31.5	
1.	Age group	Up to 20 years	29	14.5	
		21-40 years	130	65	
		41-60 years	28	14	
		Above 61 years	13	6.5	
2. Educational level		Illiterate	22	11	
		School level	50	25	
		Graduation	75	37.5	
		Post Graduation	53	26.5	
3. Occupation		Agriculture	55	27.5	
		Govt. Employee	23	11.5	
		Private Employee	79	39.5	
		Business /Self Employment	43	21.5	
4.	Annual Income	Up to Rs. 50000	51	25.5	
		Rs. 50001-Rs. 100000	45	22.5	
		Rs.100001-Rs.200000	67	38.5	
		Above Rs. 200000		18.5	

The above table clearly shows that socio-economic level of respondents, out of 200 respondents,

Majority (68.5%) of the respondents are male.

Majority (65%) of respondents are belongs to the age group of 21-40years.

Majority (37.5%) of the respondents are qualified with the Graduate.

Majority (39.5%) of the respondents are private employee.

Majority (38.5%) of the respondents are earning annual income, which is lie between Rs.100001- Rs.200000.

Table-2 **Factors Influencing the Consumer to Buy Green Products** 

S.No. Variables		Variables Level of influence		Total		
1.	Products Grown	Strongly Agree	107	880	I	
		Agree	76			
		No Opinion	10			
		Disagree	4			
		Strongly Disagree	3			
2.	Products with Natural Ingredients	Strongly Agree	46	775	II	
		Agree	117	1		
		No Opinion	16	1		
		Disagree	8	1		
		Strongly	13			
		Disagree				
3.	Product don't Harm and Pollute Environment	Strongly Agree	64	756	III	
		Agree	46			
		No Opinion	75			
		Disagree	12			
		Strongly	3	1		
		Disagree				
4.	Safety and Healthy	Strongly Agree	61	740	IV	
	,	Agree	56			
		No Opinion	45			
		Disagree	38	1		
		Strongly Disagree	0			
5. More Quality Compared with Normal Product		Strongly Agree	49	697	V	
		Agree	64			
		No Opinion	38			
		Disagree	33			
		Strongly	16			
		Disagree				
6.	Economical (Energy), Efficient, Reusable, Refill, etc.,	Strongly Agree	43	654	VI	
		No Opinion	38			
		Disagree	35	1		
		Strongly Disagree	27	7		

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The above table shows the major factor influence the consumer to purchase green products was taken from the study and they ranked on the basis of their influence level. The results of the table clearly show that: a) The consumers prefer the products which are originally grown. So the consumers ranked the products grown is as first b) The products with natural ingredients hold the second position c) Products don't harm and pollute the environment the consumers ranked in third place d) The green products are safety and healthy the consumers prefer in fourth place e) More quality compared with normal product stays in fifth position f) Economical of green products is last preference by consumers.

Table-3

Factors Influencing the Consumer to Restrict them to Buy Green Products

S.No.	Variables	Level of influence	Weighted score	Total	
1.	High price	Strongly Agree	80	803	I
		Agree	66	1	
		No Opinion	31	1	
		Disagree	23	]	
		Strongly Disagree	0	]	
2.	Lack of availability	Strongly Agree	49	771	II
		Agree	95	]	
		No Opinion	41	]	
		Disagree	8	]	
		Strongly Disagree	7	1	
3.	Lack of awareness	Strongly Agree	54	746	III
		Agree	64	]	
		No Opinion	59	1	
		Disagree	20	1	
		Strongly Disagree	3	1	
4.	Lack of standardized	Strongly Agree	51	731	IV
	quality certifications	Agree	63	1	
		No Opinion	58	1	
		Disagree	22	1	
	Ī	Strongly Disagree	6	1	
5.	Poor performance compared with other normal products	Strongly Agree	33		
	_	Agree	49		
		No Opinion	47	1	
		Disagree	53	1	
		Strongly Disagree	18	1	
6.	Poor sales promotional	Strongly Agree	37		
	activities by companies	Agree	37		
		No Opinion	44	1	
		Disagree	58	1	
		Strongly Disagree	24		

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The above table shows that the factors preventing consumers to buy green products, the table interpret the following results.

- a) High price is the major factor which restrict consumers to buy green products
- b) The green products are not available in all places. So the consumers were told that the lack of availability of green products is in second rank
- c) Inadequate awareness about green products hold the third position. The awareness of the green products is must to the consumers and the society
- d) The fourth factor which preventing to buy green product is that there is no proper standardization certifications for green products.
- e) The green products have poor performance compared with normal products having a fifth place
- f) Consumers ranked the sixth rank for the poor sales promotional activities of the Companies to preventing the consumer to buy green products.
- g) High price is the major factor which restrict consumers to buy green products
- h) The green products are not available in all places. So the consumers were told that the lack of availability of green products is in second rank
- i) Inadequate awareness about green products holds the third position. The awareness of the green products is must to the consumers and the society
- j) The fourth factor which preventing to buy green product is that there is no proper standardization certifications for green products.
- k) The green products have poor performance compared with normal products having a fifth place
- 1) Consumers ranked the sixth rank for the poor sales promotional activities of the companies to preventing the consumer to buy green products.

### **CHI-SQUARE TEST**

The above table shows that the factors preventing consumers to buy green products, the table interpret the following results.

Factors	Calculate d Value	Table Value	DF	Significant
				level
Income of respondents with high	22.01	21.026	12	5%
price of the products				
Purchasing environment	7.64	16.191	9	5%
friendly products with the				
educational qualifications				
Occupation and mode of	24.9	21.026	12	5%
receiving information of the				
respondents				

<sup>1 .</sup>Relationship between annual income and high price of the product

H0: There is no significant relationship between the annual incomes with high price of the products.

H1: Significant relationship between the annual incomes of respondents with high price of the products.

2. Relationship between purchasing environment friendly products and educational qualification

H0: There is no significant relationship between the purchasing environment friendly products by educational qualification of the respondents.

H1: Significant relationship between the purchasing environment friendly products by educational qualification of the respondents.

3. Relationship between occupation and mode of receiving information

H0: There is no relationship between occupation and mode of receiving information of the respondents

H1: Significant relationship between occupation and mode of receiving information of the respondents

The above analysis finds that the calculated  $\chi^2$  value 22.01 is more than the table value 21.026. Hence the null hypothesis (H0) is rejected.

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It concludes there is significant relationship between incomes of respondent with high price of product. So the alternative hypothesis (H1) is accepted.

The above analysis finds that the calculated  $\chi^2$  value 7.64 is less than the table value 16.919. Hence the null hypothesis (H0) is accepted. It concludes there is no impact on purchasing environment friendly products by educational qualification. So the null hypothesis (H0) is accepted.

The above analysis finds that the calculated  $\chi^2$  value 24.9 is more than the table value 21.026. Hence the null hypothesis (H0) is rejected. It concludes significant relationship between the occupation and mode of receiving information of the respondents. So the alternative hypothesis (H1) is accepted.

#### ANOVA TEST

1. Relationship between educational qualification and purchasing environment friendly product

H0: There is no significant relationship between the educational qualifications with purchasing environment friendly products of the respondents.

H1: Significant relationship between the educational qualifications with purchasing environment friendly products of the respondents.

Table-5
Relationship between Educational Qualification and Purchasing Environment Friendly

**Product** 

	Sum of Squares	DF	Mean Square	Calculated F value	<b>Table F value</b>
Between Groups	166.5	3	55.5	0.451219	9.2766
Within groups	369	3	123		
Total	535.5	6			

The table shows that the analysis of variance the calculated value of F test (0.451219) value is less than the table F value (9.2766). So the null hypothesis (H0) is accepted. Which implies there is no significant relationship between the educational qualification and purchasing environment friendly products towards environmental awareness and consumer buying behaviour of green products? Relationship between annual income and purchase of safety and healthy product.

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H0: There is no significant relationship between the annual income with of safety and health products of the respondents.

H1: Significant relationship between the annual income with of safety and health products of the respondents.

Table-6
Relationship between annual income and purchase of safety and healthy product

	Sum of squares	DF	Mean Square	Calculated F value	Table F Value
Between Groups	112.5	3	37.5	0.209111	9.2766
Within Groups	538	3	179.33		
Total	650.5	6			

The table shows that the analysis of variance the calculated F test (0.209111) value is less than the table value (9.2766). Hence the null hypothesis (H0) is accepted. It implies there is no significant relationship between the annual income and purchase of safety and healthy food products towards environmental awareness and consumer buying behaviour of green products.

2. Relationship between age group and lack of awareness of environment friendly products H0: There is no significant relationship between the age group and lack of awareness of environment friendly products

H1: Significant relationship between the age group and lack of awareness of environment friendly products

Table-7
Relationship between age group and lack of awareness of environment friendly products

	Sum of squares	DF	Mean Square	Calculated F Value	Table F Value
Between groups	453	4	113.25	0.215414	6.5914
Within Groups	1577.2	3	525.73		
Total	2030.2	7			

The table shows that the analysis of variance the calculated value of F test (0.215414) value is less than the table F value (6.5914). So the null hypothesis (H0) is accepted. It which implies there is no significant relationship between the age group and lack of awareness of environmental friendly products towards environmental awareness and consumer buying behaviour of green products.

#### **FINDINGS**

The major findings of this research is that majority of the respondents are male and they are graduates, they prefers the green products mainly which are originally grown, the high price is the main factor which prevent their to buy green products. Lack of availability of green products and the lack of awareness is also the others factors preventing consumers to buy green products.

The income of the respondents has an impact on high price of green products and the consumers sometimes purchasing in the green products in the category of graduate level education. The occupation of the respondents has an impact on mode of receiving information.

#### CONCLUSION

The environment is under a serious threat. Green marketing is a major trend in modern business. In present days, environmental awareness is major issue of our society. The consumers are to concentrate his/ her buying behaviour is does not pollute to our environment. The government, all consumers, and traders are to joint to safe of our environment. Consumer's level of awareness about green products found to be high. The green marketing is globally come with drastic change in the world of business if all nations will make strict rules because green marketing is essential to save world from pollution. Marketers also have responsibility to make the consumers to understand the need for the benefits of green products as compared to non-green ones. In green marketing, consumers are willing to pay more to maintain a cleaner and greener environment.

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