International Journal of Mechanical Engineering

# Prospects and Challenges for Marketing of Green Consumer Durables in Kerala

\*Dr SALEENA TA,

Assistant Professor, RDCMS, PSMO College, Tirurangadi, Malappuram, Kerala

#### Abstract

Technological advancements have shown remarkable growth in each and every field whether it is astronomy, automobiles, electronic devices, communication devices, building and architectural design techniques, bio-electronic devices, health care or computers. These advancements invigorate economic development, as the effective use of technology reduces the material production cost and the overhead charges which generate savings in the economy thus leading to economic development. They not only provide a stimulus for the betterment of standard of living of the society but also stimulate new ideas and avenues that act as motivating factors for further enhancements. In spite of the fact that technology has done a lot of good to the world, it is still surrounded by certain dismal aspects. One of the most bothering issues is the damage caused to the environment. The study is mainly focus on what are factors influencing the retailers for marketing of green consumer durables and explore the challenges faced by the retailers for marketing green consumer durables. Multi-stage Purposive sampling method was adopted for selecting the sample units. A total of 150 samples were selected from the retailers who sell green consumer durables. The result shows that external forces such as corporate social responsibility, follow competitor, financial support from the government and pressure from government are major factors influencing by the retailers. Similarly, high cost of products, high tax rate on products, high promotion cost and tough competition are the major challenges addressed by retailers. Therefore, government should undertake measures for reducing cost of products by way of reducing tax imposed on eco-products from 28% and giving increased present subsidies from 20%. In this way, product cost can be reduced to a great extent and increase the demand for such products.

Key Words: green marketing, prospectus of green marking, challenges of green marketing

#### I INTRODUCTION

Over the centuries, the emergence of environmental concern has been at the top of the agenda at both national and international level. However, the era of modern environmentalism came into the picture in the 1950s and focus on the environmental issues got sharper in 1960s with the exuberant pressure posed by the public. This wave of environmentalism led to the establishment of National Environmental Policy Act, 1969 in the United States. The issue of environmental protection was highlighted more and became a permanent feature of national and international policy with the first celebration of Earth Day in 1970 and first United Conference on the Human Environment held in Stockholm in 1972 (Kinoti, 2011; The Public and Environment, UNEP, 1988).

The recent years have witnessed the wave of environmentalism in India too. Facing the pressure exerted by environmental lobbies, the government has passed a number of environment-related legislation to battle the pollution nuisance and for the preservation of natural resources (Jain and Kaur, 2004). The 'Environment Education, Awareness and Training' is a flagship scheme which has been initiated by the Ministry of Environment and Forests (MoEF), Government of India in order to enhance the understanding of public about relationship between human beings and environment and also to develop competencies to protect the environment. Under the umbrella of this initiative, MoEF formulated National Green Corps (NGC) in 2001-02 with a view to creating environmental awareness among children. The program has been in operation since then and turned into the mass movement of children for preserving the environment.

Generally, green marketing is the marketing of products that are presumed to be ecological safe. From the social perspective, green marketing is the marketing of products which are designed to minimum negative impact on the natural environment. Thus green marketing consists of modification of products, production process, packaging and advertisements. Green marketing is defined by Peattie (1995) as "the holistic management process responsible for identifying, anticipating and satisfying the requirements of customers and society, in a profitable and sustainable way". According to Ottman (2006), the green marketing satisfies two objectives: improved environmental quality and customer satisfaction.

# II STATEMENT OF THE PROBLEM

The technological advancement and rapid industrialization make growth and development in the economy and better of standard of living of the people. But, this advancement has leads to several environmental issues. Due to pressure from political and social factors, several corporate started their business in the way of eco- friendly nature and adopted green marketing strategies. Various studies in the past have been successfully conducted regarding green products from marketer's point of view and consumer's point of view. Some international and national studies have been conducted related to consumers' awareness and attitude towards general green products and their motives for usage and non-usages of products. Yet, no studies have been Copyrights @Kalahari Journals

Vol. 7 (Special Issue2, Jan.-Feb. 2022)

conducted relating to factors influencing for marketing and buying behaviour towards a particular green product segment in Kerala. In this context, the present study is an attempt to investigate the "factors influencing for marketing green consumer durables and its challenges in Kerala".

#### III OBJECTIVES OF THE STUDY

Following are the specific objectives of the study;

- To identify the motives of retailers for marketing of green consumer durables.
- To explore the challenges faced by the retailers for marketing green consumer durables

#### IV HYPOTHESES

- **H0:** There is no significant difference between rural and urban retailers across different motivating factors for initiating green marketing practices.
- **H0:** There is no significant difference between sole proprietor firms and partnership firms across different motivating factors for initiating green marketing practices.
- **H0:**There is no significant association between sole proprietor firms and partnership firms facing different problems in selling green consumer durables.
- **H0:** There is no significant association between proportion of urban and rural retailers facing different problems in selling green consumer durables.

#### V SCOPE OF THE STUDY

The study has been undertaken to analyze motives for marketing and challenges faced by retailers for selling green consumer durables. This study focuses on retailers who deal with green consumer durables. The study was limited to three districts drawn as a representation of Kerala. Trivandrum, Ernakulum and Kozhikode were selected by using purposive sampling method. Retailers were equally selected from each district purposefully. There are a number of green products or eco-friendly products emerging in the markets. The scope of the study is restricted to green consumer durables and covers only three categories of green consumer durables such as energy saving electronic durables, wooden and bamboos home furniture and electric vehicles. Green marketing concept is concerned with various activities but this study is limited to motives of the retailers for marketing green consumer durables and their challenges.

#### VI METHODOLOGY

Research Method:- The study is designed as an descriptive one that makes use of both primary data and secondary data

**Sources of data:-**Both primary and secondary data are used in the study. The study is mainly based on primary data, collected directly from the retailers by using Interview schedule. Secondary data are also used to clarify the concepts with regards to the green marketing. Secondary data are collected from journals, marketing management books, e-books, websites and academic studies conducted in the related areas.

**Sampling Design:-**Multi-stage Purposive sampling method was adopted for selecting the sample units. For the study, Kerala has been divided into three regions as Southern region, Central region and Northern region. From each region, Trivandrum, Ernakulum and Kozhikode districts were selected purposefully. Then, from each district, one Corporation and one Municipality from urban area and two Panchayaths from rural area were selected. A total of 150 samples were selected from the retailers who sell green consumer durables, ie 50 retailers from each district for eliciting information.

Tools for Data Collection:-In order to ensure accurate data, a structured interview schedule is used to collect data from the retailers who sell green consumer durables.

**Tools for Data Analysis:-**Primary data collected are analyzed by using statistical tools such as percentages, Chi-square test, Mean score, Independent t-test and Factor analysis for arriving inferences from the data. Pareto chart and bar diagrams are used for presentation of data. SPSS is used foranalyzing the data

#### VII ANALYSIS AND DISCUSSION

Retail industry has been emerging as one of the largest sector in Indian economy. Retail marketing mainly deals with identifying and meeting needs of people and society and delivering goods and services to consumers. The Indian retail market is a combination of structured and unstructured markets that contain different consumer products. It consists of supermarkets, departmental stores, specialty stores and general shops. In the modern era of globalization, it has become a challenge to keep the producers as well as consumers in touch to keep our natural environment safe, which has been the biggest need of the time to develop the practices for sustainability in the retail sector. The retail sector has key role to play in sustainable production and consumption of products with lower environmental impact, and in promoting them to consumers. This chapter deals with retailers'

Copyrights @Kalahari Journals

Vol. 7 (Special Issue2, Jan.-Feb. 2022)

survey which consists of factors influencing the retailers to sell green consumer durables and challenges of marketing green consumer durables. Statistical tools like Percentage analysis, independent t test, mean score, factor analysis and chi-square test have been applied to analyze the data and draw inferences.

#### **Business Profile of Retailers:-**

Information about the retailers consists of nature of ownership, types of retail shop, types of products, nature of products sold, and period of trading and monthly turnover of the shop as shown in table 1

Table 1
Business Profile of the Respondents

Variables	Categories	No. of Respondents	(%)
	Less than 1 year	23	15.3
Age	1-5 years	50	33.3
(Period of trading)	5-10 years	42	28.1
	Above 10 years	35	23.3
Nature of ownership	Sole proprietorship	82	54.7
Nature of ownership	Partnership	68	45.3
	Simple retail shop	70	46.7
Type of retail shop	Departmental stores	52	34.7
	Specialty shop	28	18.6
	Less than Rs.50,000	17	11.3
N	Rs.50,000 - 1,00,000	48	32.0
Monthly turnover	Rs.1,00,000 - 1,50,000	66	44.0
	Above 1,50,000	19	12.7
	Electronic home appliances	86	57.3
Types of green products	Wood & bamboo furniture	55	36.7
	Electric vehicles	9	6.0
	Green products only	33	22.0
Nature of products	Both green and non-green products	117	78.0
I agation of business	Urban	75	50
Location of business	Rural	75	50
	TOTAL	150	100

(Source: primary)

## A Factors influencing the retailers for initiating green marketing practices

There are a number of factors which are influencing the retailers for initiating green marketing practices.. It is very important to the authorities for the purpose of supports and promotion of such products. Here factor analysis was used for data reduction. It helps to identify important factors which influence the retailers to start such business.

Table 2
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.502
	Approx. Chi-Square	148.704
Bartlett's Test of Sphericity	df	105
	Sig.	.003

Source: Primary Data

Copyrights @Kalahari Journals

# Kaiser-Meyer-Olkin Measure of Sampling Adequacy

KMO Statistic is used to test the interconnectivity of the variables. This measure varies between 0 and 1, and values closer to 1 are better. A value of .5 is a suggested minimum. Generally, 0 < KMO < 1. If KMO > 0.5, the sample is adequate. Here, KMO = 0.502 which indicates that the sample is adequate and we may proceed with the factor Analysis.

Table 3
Rotated Component Matrix<sup>a</sup>

	Component						
Motivating factors	1	2	3	4	5	6	7
Part of corporate social responsibility	.469	172	.365	330	381	.129	.041
Follow competitor	.469	.219	.036	.326	203	.041	.418
Financial support from the government	.486	.029	.273	331	.096	.096	062
Competitive advantage	151	057	331	193	.301	.054	.708
Demand of customers	.104	617	.044	.059	131	.464	.047
Overcoming competition	356	110	.543	.409	035	.126	.242
Easy fund availability	170	.157	.585	.050	.387	.118	046
Customer satisfaction	.217	.552	.352	300	.109	.274	028
Customers environmental awareness	116	.737	.017	.083	148	.143	.209
Pressure from Government	.497	.000	.057	.423	283	295	.197
New opportunity in the market.	.204	014	.180	239	.265	733	.110
Increasing the market share	.623	113	153	.108	.285	.066	089
Own interest	.265	.337	404	.415	.195	.144	343
Maximization of profits	.027	.152	445	431	204	.201	.128
Betterment of society	.271	173	030	.104	.594	.249	.177

**Extraction Method: Principal Component Analysis.** 

# a. 7 components extracted.

Correlation of the variables with each of the extracted factors is shown in above table. Each variable is highly loaded in one factor and less towards to the other factors. For including variables to each factor, the variable with the above 0.4 value in each column is selected to be part of the respective factor. The variables with above 0.4 value in each column are marked as bold.

Table 4
Factor Naming

Factor no	Factor name	Variable	Factor loading
		Part of corporate social responsibility	.469
		Follow competitor	.469
1	External forces	Financial support from the government	.486
		Pressure from Government	
			.497
	G	Demand of customers	617
2	Customer related factors	Customer satisfaction	.552
	ructors	Customers environmental awareness	.737
3	Finance related factors	Easy fund availability	.585

Factor no	Factor name	Variable	Factor loading
		Maximization of profits	445
4	Objective related	Overcoming competition	.409
•	factors	Own interest	415
5	Social welfare	Betterment of society	.594
6	Opportunity	New opportunity in the market.	733
7	Competitive advantage	Competitive advantage	.708

**External forces :-** External forces are the first factor which are influencing the retailers to sell green consumer durables. The variables included in this factor are part of Corporate Social Responsibility (.469), Follow competitor (.469), Financial support from the government (.486) and Pressure from Government (.497).

**Customer related factors:-** The variables included in this factor are Demand of customers (-.617), Customer satisfaction (.552) and Customers environmental awareness (.737). While designing the marketing plan, the retailers should recommend for designing the products as per the requirements of consumers.

**Finance related factors:** -Finance related factors are the third influencing factors for starting the green marketing practices. It includes two variables such as Easy fund availability (.585) and Maximization of profits (-.445).

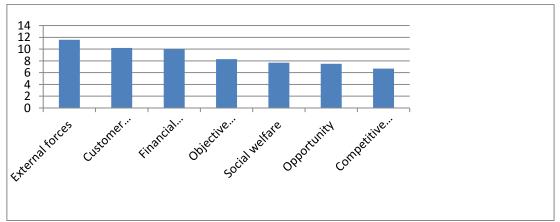
**Objective related factors:-** Overcoming competition (.409) and Own interest (.415) are the fourth factors which are influenced the green marketing practices.

Social welfare: The retailers have started the green marketing business because of betterment of society.

**Opportunity: -** They have started their business because of expecting new opportunity in the markets.

Competitive advantage:- It is the last factor influencing the retailors to start their business practices

Figure 1
Percentage of variance on the basis of Motivating Factors



The above figure shows the motivating factors of retailers to start and proceed marketing of green consumer durables on the basis of percentage of variance between each factor. External forces are the most important factors motivating the retailers to start green marketing practices because its percentage of variance is 11.647 followed by Customer related factors (10.181), Financial related factors (10.016), Objective related factors (8.334), Social welfare (7.681), Opportunity (7.485) and Competitive advantage (6.749).

#### **Motivating factors and nature of Ownership**

Table 5

Motivating factors and nature of ownership –Independent sample t test

	Nature of ownership	N	Mean	SD	t	P(sig)
Motivating factors	Sole trader	82	54.3293	8.09520	.678	.499
	Partnership firm	68	53.6176	4.52532		

# H0: There is no significant difference between perception of sole trader and partnership firm regarding motivating factors for marketing green consumer durables.

From the above table it is clear that at 5 % significance level P value (.499) is greater than 0.05 (5%). Hence the null hypothesis, there is no significant difference between perception of sole trader and partnership firm regarding motivating factors for marketing green consumer durables is accepted.

Table 6

Motivating factors and Location of business –Independent sample t test

	Area	N	Mean	SD	t	P(sig)
Motivating factors	Urban	75	56.0133	7.36224	3.830	.000
	Rural	75	52.0000	5.30680		

The above table depicts that at 5 % significance level P value (.000) is less than 0.05 (5%). Hence the null hypothesis, there is no significant difference between perception of urban and rural retailers regarding motivating factors for marketing green consumer durables is rejected. From this it can be concluded that perception of both urban and rural retailers are same about the motivating factors for marketing green consumer durables.

## B Challenges of marketing green consumer durables

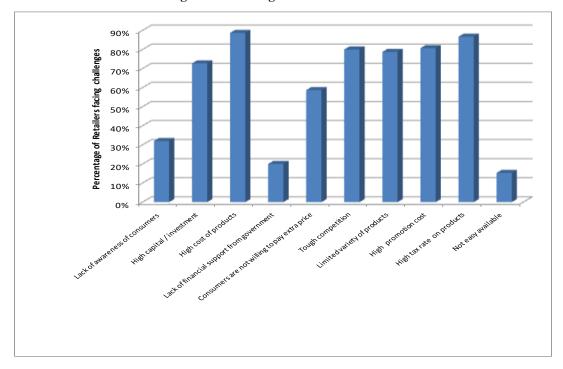
Retailers always face several problems while marketing their products. Here statistical tools like mean score and chi-square test is applied for analyzing and testing of hypothesis. Mean and standard deviation have been used for analyzing the important challenges faced by retailers relating to the marketing of green consumer durables. The results are shown in the following table.

Table 7
Challenges of marketing green consumer durables

Sl. No.	Challenges	Frequency	Percent (%)
1	Lack of awareness of consumers about green products	48	32%
2	High capital / investment	109	72.7%
3	High cost of products	133	88.7%
4	Lack of financial support from government	30	20%
5	Consumers are not willing to pay extra price	88	58.7%
6	Tough competition	120	80%
7	Limited variety of products	118	78.7%
8	High promotion cost	121	80.7%
9	High tax rate on products	130	86.7%
10	Not easy available	23	15.3%

While marketing the green consumer durables, the most important problems faced by the retailers are high cost of products (88.7%), high tax rate on products (86.7%), high promotion cost (80.7%) and tough competition (80%).

Figure 2
Challenges of marketing Green Consumer durables



# Challenges and location of business

In order to identify whether the urban and rural retailers are facing common problems, chi-squire test is applied. The following hypothesis has been formulated to explore the result.

H0: There is no association between proportion of urban and rural retailers facing different problems in selling green consumer durables.

 ${\bf Table~8}$  Challenges Faced by Retailers of green Consumer Durables in Rural and Urban Areas

Sl.	Challanges	Marketers facing	A	rea	Chi samona tast
No.	Challenges	the challenges	Rural	Urban	Chi-square test
1	Lack of awareness of consumers about	Count	13	35	$\chi^2(1) = 0.286$
	green products	%	28.9%	33.3%	p = .593
2	High capital / investment	Count	33	76	$\chi^2(1) = 0.014$
	High capital / investment	%	73.3%	72.4%	p = .905
3	High cost of products	Count	38	95	$\chi^2(1) = 1.140$
3	High cost of products	%	84.4%	90.5%	p = .286
4	Lack of financial support from	Count	9	21	$\chi^2(1) = 0.000$
4	government	%	20.0%	20.0%	p = 1.000
5	Consumers are not willing to pay extra	Count	24	64	$\chi^2(1) = 0.754$
3	price	%	53.3%	61.0%	p = .385
6	Tough competition	Count	38	82	$X^2(4) = 0.794$
O	Tough competition	%	84.4%	78.1%	p = .373
7	Limited veriety of products	Count	36	82	$X^2(4) = 0.068$
/	Limited variety of products	%	80.0%	78.1%	p = .794
8	High promotion aget	Count	38	83	$X^2(4) = 0.588$
0	High promotion cost	%	84.4%	79.0%	p = .443
9	Lighter rete on products	Count	40	90	$X^2(4) = 0.275$
9	High tax rate on products	%	88.9%	85.7%	p = .600
10	Not easily evailable	Count	9	14	$X^{2}(4) = 1.078$
10	Not easily available	%	20.0%	13.3%	p = .299

Source: Primary Survey Data

The above table reveals that P value of each challenges of retailers are greater than .05. So, we can say that null hypothesis is accepted. It means that there is no statistically significant difference between the proportion of urban and rural marketers facing different problems in selling the green consumer durables.

Copyrights @Kalahari Journals

Vol. 7 (Special Issue2, Jan.-Feb. 2022)

Table 9

Challenges Faced by Retailers of green Consumer Durables on the basis of nature of ownership

CI No	Challanges	Nature	of ownership	Total	Chi aguana tagt	
Sl. No.	Challenges	Sole trader	Partnership	Total	Chi-square test	
1	Lack of awareness of consumers about green products	20	28	48	$\chi^2 (1) = 4.814$ $p = .028$	
2	High capital / investment	57	52	109	$\chi^2(1) = 0.906$ p = .341	
3	High cost of products	77	56	133	$\chi^2 (1) = 4.934$ $p = .026$	
4	Lack of financial support from government	17	13	30	$\chi^2(1) = 0.061$ $p = .806$	
5	Consumers are not willing to pay extra price	43	45	88	$\chi^{2}(1) = 2.893$ $p = .089$	
6	Tough competition	68	52	120	$X^{2}(4) = 0.968$ p = .325	
7	Limited variety of products	64	54	118	$X^{2}(4) = 0.041$ p = .839	
8	High promotion cost	62	59	121	$X^{2}(4) = 2.966$ p = .085	
9	High tax rate on products	77	53	130	$X^{2}(4) = 8.195$ p = .004	
10	Not easily available	17	6	23	$X^{2}(4) = 4.06$ p = .044	

Source: Primary Survey Data

In order to examine the association between sole trader and partnership firm relating to the challenges of marketing green consumer durables, the following hypothesis is formulated and tested by using chi-square test.

# H0: There is no significant association between sole trader and partnership firm facing different problems in selling green consumer durables.

The result shows the there is significant association between sole trader and partnership firm regarding some problems like lack of awareness of consumers (p = .028), High cost of products (p = .026), Tough competition (p = .325), High tax rate on products (p = .004) and Not easily available (p = .044). Because of its p value is less than 0.05. Whereas, there is no significant association between sole trader and partnership firm regarding some problems like high capital / investment (p = .341), Lack of financial support from government (p = .806), Consumers are not willing to pay extra price (p = .089), Limited variety of products (p = .839), High promotion cost (p = .085) because p value of all these factors are greater than 0.05.

# VIII SUGGESTIONS OF THE STUDY

- High cost of products, high tax rate on products, high promotion cost are important problems faced by the retailers while marketing their products. So, government should undertake measures for reducing cost of products by way of reducing tax imposed on eco-products from 28% and giving increased present subsidies from 20%. In this way, product cost can be reduced to a great extent and increase the demand for such products.
- > The government should give best vendor award to the firms for initiation and implementation of green marketing practices.
- The government should take strict action against those who violate pollution norms and promote measures to save the environment
- Seminars and awareness programs should be conducted by the Government authorities to enhance the knowledge of consumers about green products.
- Under National Electric Mobility Mission Plan (NEMMP) scheme, the government was to invest up to Rs.14000 crore in creating infrastructure and promoting the use of environment-friendly consumer durables. The government should also spend some more funds on research and development for innovative green technologies and should give subsidies to those who are practicing it.
- > To be included in the academic curriculum regarding the importance and benefits of green products for making environmental sustainability.
- Sovernment agencies should take a lead in the direction of enhancing awareness among public regarding various green certifications and certifying agencies.

#### CONCLUSION

Today's consumer is well aware of social, economical and environmental responsibilities. A consumer wants products which have good quality and safe to use for them and their families. And companies also want to increase sales and get some innovative product that will facilitate consumer's comfortable life. Hence there is a need for green marketing for a shift in the consumer's behavior and attitude towards green lifestyles. The main motive for marketing green consumer durables is because of External forces, Customer related factors, Finance related factors, and Objective related factors, Social welfare, and Opportunity and Competitive advantage. High cost of products, high tax rate on products, high promotion cost and tough competition are the major challenges faced by retailers while marketing green consumer durables. Hence, Government should support the companies which produce eco-products by way of reducing tax imposed on eco-products and give subsidies. So, awareness, attitude and behaviour are essential elements to be considered by the policymakers to design their marketing strategies accordingly.

#### **BIBLIOGRAPHY**

#### **BOOKS**

- ✓ Jacquelyn A Ottman, (2014). Green marketing: Opportunities for Innovation, Book Surge, Publishing.
- ✓ Jacquelyn A. Ottman, (2011). The New Rules of Green Marketing: Strategies, Tools, and Inspiration for Sustainable Branding, Berrett-Koehler Publishers.
- ✓ Jajie Mandana, (1998). The Indian Market Place: Guidelines to Consumer Education, Brindavan Pub. House.
- ✓ John F. Wasik, (1996). Green Marketing Management: A Global Perspective. Wiley; 1edition,
- ✓ Kotler Philip and Armstrong Gary,(2008).Principles of Marketing.12th edition, Prentice hall, New Delhi: Pearson Education-Inc
- ✓ Kotler Philip, and Armstrong, G. (2006). Principles of Marketing, Eleventh Edition, Prentice-Hall.
- ✓ Kotler Philip, Armstrong Gary, Agnihotri, Y. Prafulla, Ehsan Ul Haque, (2011). Marketing Management, Thirteenth edition, Pearson.
- ✓ Kotler Philip, Gary Armstrong, (1999).Principles of Marketing. Eighth edition, New Delhi: Prentice Hall of India private limited.

#### **ARTICLES**

- ✓ Dr. Juleebanerji & Amit Kumar Dubey,(2014). Green Marketing: Necessity as well as Opportunity for industries in current era, International journal of commerce, business and management (ijcbm),03(05),
- ✓ Dr. Ofunya Francis Afande, (2015). Influence of Green Marketing Strategies on Performance of the Kenyan Tea Sector, Journal of Marketing and Consumer Research, An International Peer-reviewed Journal, 4(10).
- ✓ Dr.K.Manian &, AshwinNithish.J,(2014). Present Green Marketing Brief Reference to Indian Scenario, International Journal of scientific research and management(IJSRM),Special Issue On National Level Conference Business Growth and Social Development, 51-57,
- ✓ Dr.Satpal Sin,(2012). Green marketing: challenges and strategy in the changing scenario. International Journal of Advanced Research in Management and Social Sciences, 1(6)
- ✓ DuckittJohn and Linda D. Cameron,(2006). A Cross-Cultural Study of Environmental Motive Concerns and Their Implications for Proenvironmental Behaviour, Environment and Behaviour, 38(6),745-767.
- ✓ DurmazYakup and Zenginsevil (2011). A Theoretical Approach To Concept of Green Marketing. Interdisciplinary Journal of Contemporary Research In Business, 3(2), 1808-1814
- ✓ E. smith & S. Perks,(2010). A Perceptual Study of the impact of Green practice implementation on the business functions, Southern African Business Review, 14 (3)

# WEBSITES

http://www.indiahandicraftstore.com/furniture/

https://economictimes.indiatimes.co

https://greenfc.com

https://greengarageblog.org/the-eco-friendly-automobiles-of-the-future

https://wikibizpedia.com

https://www.alibaba.com/showroom/green-electronic-products.html

https://www.bing.com

https://www.energystar.gov/products/lighting fans/ceiling fans

https://www.energystar.gov/products/lighting\_fans/light\_bulbs