



CONSUMER'S BEHAVIOR TOWARDS ECO-FRIENDLY PRODUCTS IN KERALA - A STUDY OF KOLLAM CORPORATION

Manu V, Lecturer in Economicsma Economics, Fatima Mata National College (Autonomous), Kollam

Ajmal Asbaraf, Civil Service Aspirant, State Civil Service Academy, Thiruvananthapuram

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Abstract: A green product refers to a product that is typically nontoxic, originally grown, recycle/reusable, not tested on animals, not polluting the environment and minimally packaged; and contains natural ingredients, recycled content and approved chemicals. These products help preserve the environment by significantly reducing the pollution they could produce. Eco-friendly products can be made from scratch, or from recycled materials. There are lot of eco-products that can start using right now which can help to reduce waste and make this planet a better place to live. Eco-products are also known as environment friendly products or green products as they cause minimal harm to people and the environment. Environment friendly products and green marketing has become a highly attractive subject. This research aims to study consumers buying behavior towards eco-friendly products. To promote eco-friendly products and green market it is imperative to conduct a research study.

Keywords: Greendex, Life cycle analysis (LCA), Global Environment Facility (GEF), Bureau of Energy Efficiency (BEE).

Introduction

"In general, green product can be defined as the product which has lesser or no adverse environmental impacts throughout the life cycle, as compared to any other product performing a similar function" (Source: Greendex)

Eco-friendly products are products that do not harm the environment whether in their production, use or disposal. In other words, these products help preserve the environment by significantly reducing the pollution they could produce. Eco-friendly products can be made from scratch, or from recycled materials. There are lot of eco-products that can start using right now which can help to reduce waste and make this planet a better place to live. Eco-products are also known as environment friendly products or green products as they cause minimal harm to people and the environment.

The Government of India recognizes the environmental concerns arising as a result of the economic growth. The 12th five year plan, which is the centralized and integrated national economic program, recognizes the fact that the issue of environmental sustainability cannot be ignored. Sustainability of economic development itself

crucially hinges on the protection of environment. Preventive strategies like minimization of the waste in production of products and goods to public disclosure of information on polluting activities have been reflected in the planning document as elements which can create pressure in the market to manufacture environment-friendly products. However the Government approach of environmental protection has been mostly through the legislative route. Such approach has now been recognized to be mitigating rather than preventive.

The Indian consumers, particularly the middle class consumers, over the last two decades have become environmentally more conscious. This has been reflected in various surveys. The 2012 Greendex survey reflected that Indian consumers are choosing to buy environmentally friendly products but it also found that amongst the 17 countries surveyed, the Indian consumers have the highest percentage of respondents who are skeptical of green products.

There is availability of green products and usual products in Indian market. Customers consider certain environmental attributes of

products and also understand the barriers in acceptance of eco-friendly products.

Statement of the Problem

There are lots and lots of harmful effects of plastics, chemicals, non-biodegradable items, which is the main reason for us to start using eco-friendly products as soon as possible. The dangerous gases produced by these items not only pollute our environment but also causes respiratory problems in human beings. Due to this polluted air and water there is a danger of complete extinction of various rare species of animals and birds. Not only this, but there is also a change in the global warming of the earth, which increases the earth's temperature, which in turn causes the greenhouse effect. Using up of eco- friendly products can reduce these problems.

This study has been designed and carried out to understand the consumer's behavior and come out with recommendations to promote the consumption of green products.

Objectives of the Study

1. To investigate the factors that influences the growth of consumption pattern of green products.
2. To measure the effect of green products among consumers.
3. To suggest the measures to improve the popularity of green products.

Research Methodology

The study is based on primary and secondary data. The study is designed as descriptive and empirical one. It is descriptive because it describes the state of affairs as it in empirical one because it collects first-hand information with a structured questionnaire from the respondents to collect the primary data using judgement sampling method.

Primary data is collected from the respondents (individuals from selected families) in Kollam Corporation by using questionnaire with sample size of 40 respondents.

Secondary data is collected from online resources internet, Official publications of state

government (and other journals) etc. For the analysis of primary data percentage analysis method is used. The analysed data are presented with the help of tables and diagrams.

Overview – Green Product Attributes

Any product before reaching to the end user goes through various stages of production and at each stage there is extensive use of resources like water, energy, fuel, etc. So, it becomes very important to optimize the use of these resources at every stage in order to mitigate the potential environmental impacts during the production phase. Not only during the production, but also during the use and after the disposal/end of life of the product, it can lead to major environmental hazards. In order to address these issues, a product is to be assessed based on its impacts on the environment at every stage of its life cycle from raw material extraction/procurement to its disposal/ end of life. Any product which has lesser environmental impacts as compared to any other product with similar function or application is considered as a 'green product'.

In a study performed by the GPNI, over 140 eco-labels existing around the world were assessed to arrive at common core criteria reflected in most of the eco-labels, used for the certification of green products across various categories. These core criteria are the attributes which should be looked at for identifying green products.

The common core criteria's are explained in the following sections.

- *Compliance to Environmental, Health and Safety Regulations*
- *Resource Conservation and Efficiency*
- *Exclusions and Preferences based on Life Cycle Analysis (LCA)*
- *Environmental Protection and Conservation of Biodiversity*
- *Reporting and Responsible Disclosure of Product Information*
- *Biodegradability and Compost ability*

- *Implementation of Environmental Management System (EMS)*
- *Social Inclusions*

Current Status of Green Products in India

In India, environmental protection has been a governmental priority with a well-established regulatory regime, the focus has been more on emissions and waste management. But, there has been very less emphasis on product oriented standards till date. The development and implementation of such standards for green products will bring about a change in the market availability of green products and boost Sustainable consumption and production (SCP) in India.

There is gradual increase in voluntary initiatives being taken for manufacturing and promotion of green products in the Indian market due to increasing awareness amongst the urban consumers. Although, this change is taking place at a slow pace but is expected to gain pace in the near future. It is observed that most of the Indian companies manufacturing green products obtain certifications mainly for products to be exported, as they have to meet the stringent requirements of the developed countries.

Another important aspect that is responsible for slower market growth of green products in India is the lack in participation from MSMEs. MSMEs form a major component of the Indian industry and are suppliers for large scale national and international companies as well as they play a large part in public or government procurement of India. Due to limited capacity, lack of expertise and limited access to long-term finances, MSMEs find it difficult to meet the client requirements on product sustainability. Moreover, there is no financial, technical or regulatory support from the government which will shift the SMEs towards manufacturing of environmentally sustainable products.

Effective communication of green products to consumers in India is also one of the major challenges taking into consideration the limited knowledge on green products and minimal information disclosure on the same. The lack of

understanding of Eco label usage for products make it difficult for the consumers to differentiate between the nationally/internationally accepted Eco labels and the spurious self-declared claims made by the manufacturers.

Policy instruments and voluntary initiatives promoting Green Products

• *The Indian Eco mark Scheme*

In 1991, MoEF, Government of India, launched its very own ecolabelling scheme called “Eco mark” for recognition and authentication of green products in India. The certification is based on the cradle-to-grave approach for ecolabelling of the products. There are about 16 product categories covered under the Eco mark scheme.

• *Energy Efficiency Labelling Scheme in India*

The Bureau of Energy Efficiency (BEE) is an agency of the Government of India, under the Ministry of Power created in March 2002 under the provisions of the nation's 2001 Energy Conservation Act. Amongst the various schemes initiated by the BEE, Standard & Labelling is one of the thrust areas. A key objective of this scheme is to provide the consumer an informed choice about the energy saving potential of the relevant marketed product.

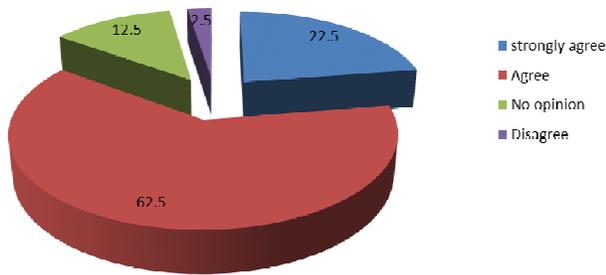
• *National Programme for Organic Production (NPOP):*

Owing to the favorable climatic conditions and the agricultural biodiversity of India, there is large potential for cultivation of wide range of organic products. This lead to the formation of National Programme for Organic Production (NPOP) in 2000 by Ministry of Commerce and Industry, Government of India. The standard was formally notified under the Foreign Trade (Development & Regulation) Act (FTDRA).

Consumer’s Behavior towards Eco-Friendly Products an analysis plastic has become a lifestyle and it is impossible to avoid

Opinion	Respondents	Percentage
Strongly agree	9	22.5
Agree	25	62.5
No opinion	5	12.5
Disagree	1	2.5
TOTAL	40	100

(Source: Primary Data)



Give preference to purchase environment friendly product

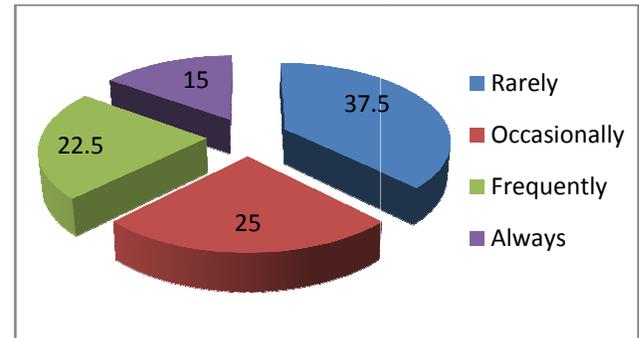
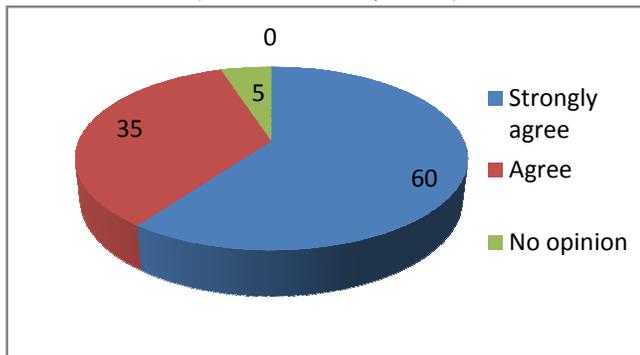
Opinion	Respondents	Percentage
Rarely	15	37.5
Occasionally	10	25
Frequently	9	22.5
Always	6	15
Total	40	100

(Source: Primary Data)

Eco-Friendly products protect us from harmful effects of non-biodegradable products

Opinion	Respondents	Percentage
Strongly agree	24	60
Agree	14	35
No opinion	2	5
TOTAL	40	100

(Source: Primary Data)



Percentage of income used to purchase eco friendly products

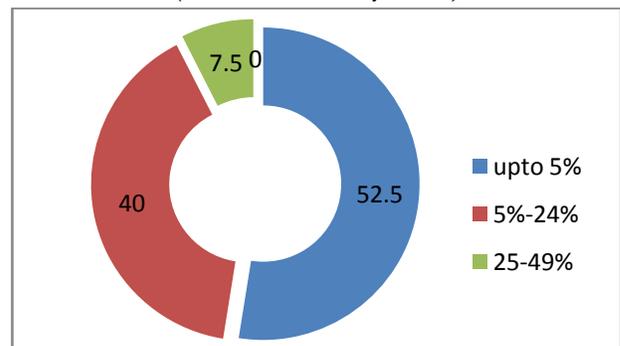
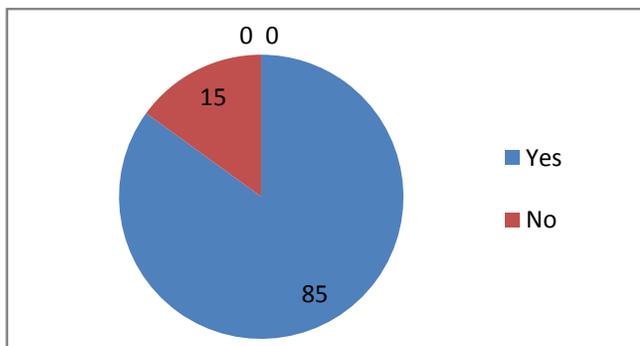
% of Income	Respondents	Percentage
Up to 5%	21	52.5
5-24%	16	40
25-49%	3	7.5
Total	40	100

(Source: Primary Data)

Awareness of the term "Green Products"

Opinion	Respondents	Percentage
Yes	34	85
No	6	15
Total	40	100

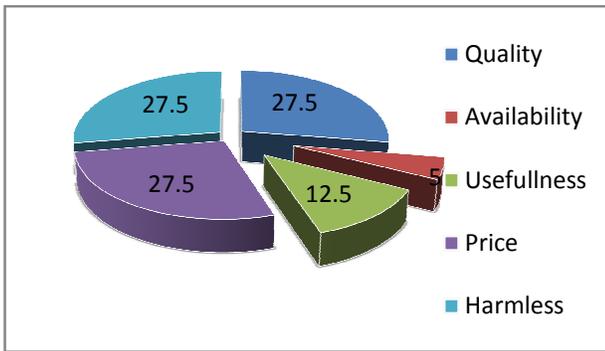
(Source: Primary Data)



Factor considered while purchasing eco-friendly product

Opinion	Respondents	Percentage
Quality	11	27.5
Availability	2	5
Usefulness	5	12.5
Price	11	27.5
Harmless	11	27.5
Total	40	100

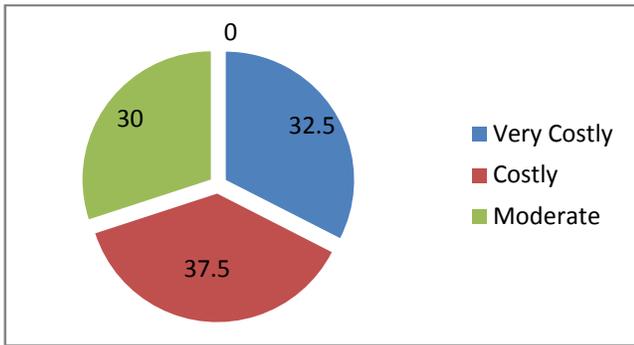
(Source: Primary Data)



The price consumers prefer to pay green products

Opinion	Respondents	Percentage
Very Costly	13	32.5
Costly	15	37.5
Moderate	12	30
Total	40	100

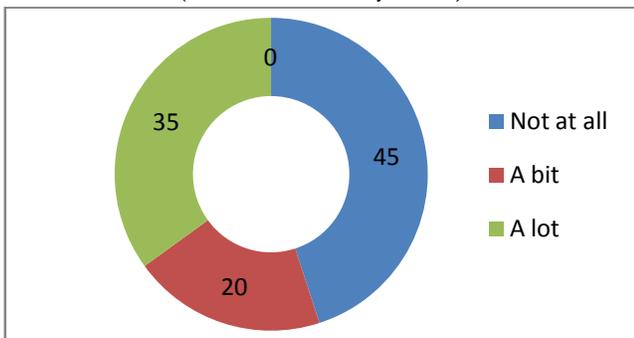
(Source: Primary Data)



Consumer's sensitivity to cost of green products

Opinion	Respondents	Percentage
Not at all	18	45
A bit	8	20
A lot	14	35
Total	40	100

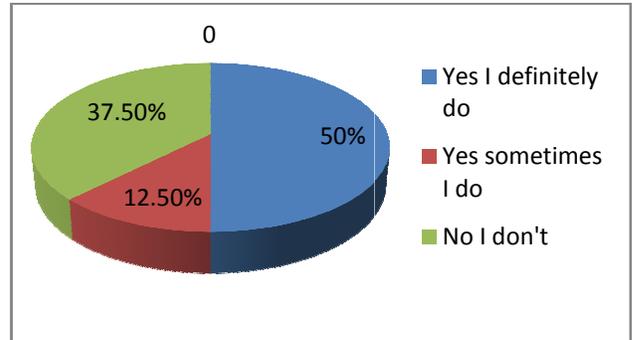
(Source: Primary Data)



Trust on eco-labels/certifications

Opinion	Respondents	Percentage
Yes I definitely I do	20	50
Yes, sometimes I do	5	12.5
No, I don't	15	37.5
Total	40	100

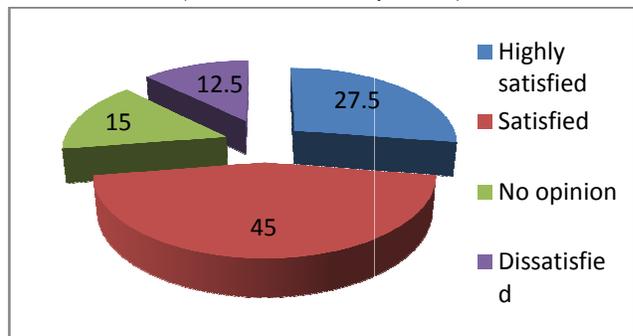
(Source: Primary Data)



Level of satisfaction while choosing an eco-friendly product

Opinion	Respondents	Percentage
Highly satisfied	11	27.5
Satisfied	18	45
No opinion	6	15
Dissatisfied	5	12.5
Total	40	100

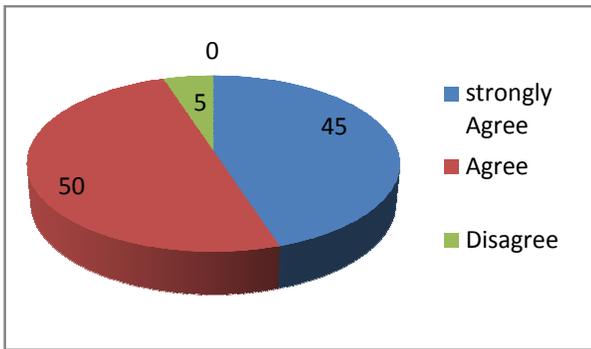
(Source: Primary Data)



Purchasing of eco-friendly products can improve our environment

Opinion	Respondents	Percentage
Strongly agree	18	45
Agree	20	50
Disagree	2	5
Total	40	100

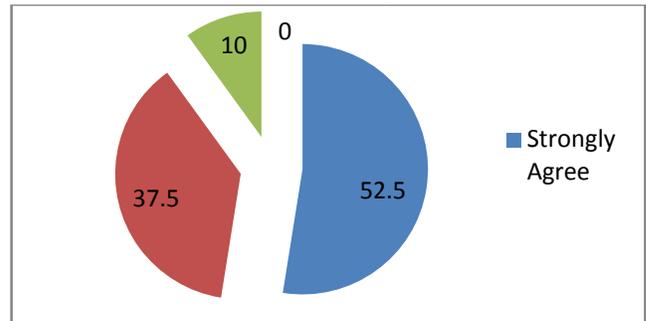
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While purchasing, preference will be given to products with least amount of pollution

Opinion	Respondents	Percentage
Strongly agree	21	52.5
Agree	15	37.5
Disagree	4	10
Total	40	100

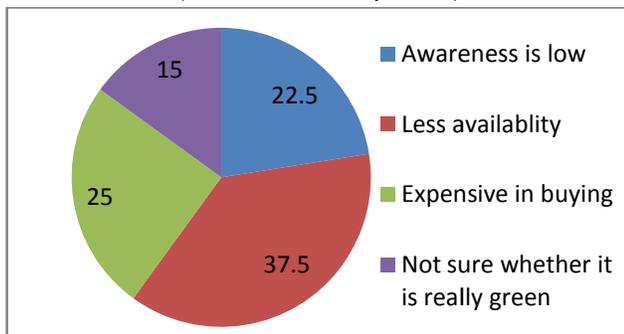
(Source: Primary Data)



Barriers to buying decision of eco-friendly products

Opinion	Respondents	Percentage
Awareness is low	9	22.5
Less availability	15	37.5
Expensive in buying	10	25
Not sure whether it is really green	6	15
Total	40	100

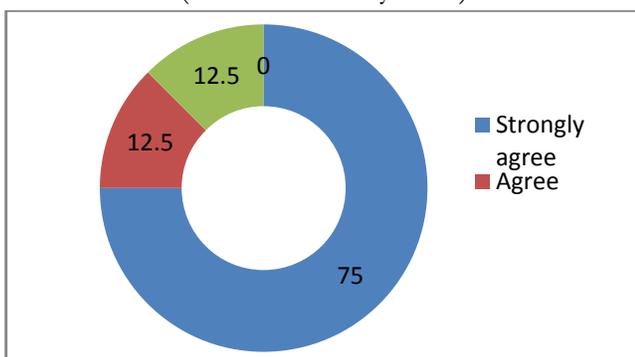
(Source: Primary Data)



Now a days promoting eco-friendly products is a necessity

Opinion	Respondents	Percentage
Strongly agree	30	75
Agree	5	12.5
No opinion	5	12.5
Total	40	100

(Source: Primary Data)



Findings of the study

- From the survey researcher could realize the fact that most of the respondents agree that plastic has become a life style and it is impossible to avoid.
- The survey observed that high percentage of the respondents strongly agree that eco-friendly products protect us from harmful effects of non-biodegradable products.
- According to the study, most of the respondents in Kollam Corporation are aware of the term eco-friendly product.
- The study shows that most of the respondents are rarely preferred to purchase eco-friendly products.
- The survey revealed the fact that most of the respondents used the term recycle to signify that the product is eco-friendly.
- The study observed that majority of the respondents consider Quality, Harmless and Price of the products while purchasing eco-friendly products.
- The survey revealed the fact, most of the respondents opinioned that eco-friendly products are costly.
- Majority of the respondents will buy green products whatever the cost.

- Before buying a product most of the respondents are checking the labels to see that whether the contents are environmentally safe.
- Most of the respondents are satisfied while purchasing an eco-friendly product.
- Most of the respondents opinioned that eco-friendly products are not close substitute for plastic product.
- The survey also revealed that majority of the respondents agrees that purchasing of eco-friendly products can improve our environment.
- The study shows that less availability in the market is the most important factor that prevents customer from buying eco-friendly products.
- Majority of the respondents strongly agree that now a day's promoting eco-friendly products is a necessity.
- Most of the respondents says that while purchasing, they will give preference to the products with least amount of pollution.

From the analysis, it was observed that the recent policy taken by the Kerala government to ban the plastic made national flags is a best example for promoting eco-friendly products. The latest initiatives such as operation survive, e-waste management with the help of clean Kerala mission taken by the Kollam Corporation to prevent the use of plastic materials in government offices and plastic carry bag sales is an appreciable steps from the health department of Kollam Corporation.

Suggestions

- To educate everyone on the presence of plastic and its harmful effects on the environment. Learn how to rid your life of plastic with pertinent knowledge, realistic application and a commitment to encourage others to limit or even eliminate their plastic intake.
 - Environment friendly behaviour is far and difficult to attain. Hence, environmental awareness and attitudes should be created in the minds of consumers during their childhood days itself.
- It requires rigorous efforts at school level to create an attitude of environment sustainability.
 - Eco clubs play an important role in creating environmental awareness amongst the future generation. So eco clubs should be there in all schools and colleges.
 - Eco-friendly products should be integrated with thoughtful green marketing strategies that fulfil the individual needs and maximize customer's satisfaction.
 - Expand consumer's awareness of green products by creating effective green marketing campaigns or environmental related activities.
 - Price is the attribute that consumers reflect on when making a green purchasing decision. Consumers are less likely to purchase green products if they are more expensive. So price should be reduced for the eco-friendly products.
 - Companies should create advertisements that are more focused on green, eco-friendly image that will influence their customers purchasing decision.
 - More inventions and innovations needs for green products to enhance quality and reducing the cost of production.
 - Government should conduct trade fairs and exhibitions to promote eco-friendly products at subsidised rates to consumers. It helps to increase its popularity.
 - Local self-government should take initiatives and strict plastic elimination activities.
 - Initiatives are to be taken by government to make the public know about non-biodegradable packaging and its demerits.
 - Ensure that our public has an idea about eco-friendly products and its advantages.
 - Local self-governments can create a sense in the mind of public that, purchasing and promoting eco-friendly product is a necessity.

Conclusion

Promoting eco-friendly products are very important now days. Because the plastic produced

are creating so many problem in the environment. Most of the customers are aware about eco-friendly products and its advantage. consumers who feel man must live in balance with nature choose products that create less pollution, make efforts to recycle, limit their use of products made from scarce resources, and, in general, attempt to make ecologically correct decisions about the products they buy. These behaviors do not suggest the consumer is not using a product all together, but instead is choosing products

and activities that will have less impact on the environment.

Environment sustainability has become an essential ingredient to doing business responsibly and successfully. So, constant efforts should be taken by the Government, NGO's, Educational Institutions, Business Houses, and society at a large to create awareness among the consumers to promote eco-friendly buying behavior.

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