Consumer Buying Behaviour on Eco-Friendly Products in Thoothukudi ArunaDevi.P*, Dr. G. Stella Beatrice Nirmala,**

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Abstract:-

Consumers are becoming more conscious of environmental issues, health-conscious, safe life, and interest to purchase all types of eco-friendly products. Eco-friendly products are the best solution for all environmental problems like climatic change, global warming, and natural disaster. Consumers who buy eco-friendly products are called green consumers. Eco-friendly producers are called green entrepreneurs. Buying and selling of eco-friendly product transactions called green marketing or eco-friendly business. The present research paper is an attempt to investigate buying behaviour towards eco-friendly products among the consumers in Thoothukudi city. The research is conducted with probing questions on the concept of eco-friendly products, mode of awareness, various reasons for purchasing eco-friendly products, and perception of consumers with eco-friendly products. The data has been collected from 185 respondents of different areas in Thoothukudi . Both primary and secondary data have been used for this research paper. Data has been analysed using SPSS. Research findings reveal that eco-friendly products are more effective than non-eco-friendly products.

Keywords: Eco-friendly product, Green consumer, Green entrepreneurs, Green marketing, Green consumer perception, Eco-friendly business

Introduction:

Environmental friendly products are market-oriented products that cause minimal environmental degradation and their production is linked to a product development process that is structured in a way that considers the impacts that can be caused to the environment throughout their life cycle. Environment-friendly processes also referred to as eco-friendly, nature-friendly, and green are sustainability and marketing terms referring to goods and services, laws, guidelines, and policies that claim reduced, minimal, or no harm upon ecosystems or the environment.

ISSN: 1673-064X

Objectives of the study:-

- 1. To understand the concepts of Eco-friendly products
- 2. To know the socio-economic level of the respondents.
- 3. To study the factors considered in buying Eco-friendly products

Statement of the problem:

Worldwide, people are experiencing environmental decline from its natural atmosphere due to the effects of calamities. The environmental decline that raised out of large scale production with modern machinery, population growth, urbanization, using toxic fertilizers for cultivating, poor waste management system, modern mass marketing techniques, Biodiversity Loss, deforestation, plastic pollution, and other pollutions created by the humans .Using and producing eco-friendly products gives a valid and reliable solution to these problems.

Limitations of the study:

- 1. This study is limited to 185 respondents.
- 2. The covid-19 was the constraint in this research paper.

Review of Literature:-

PreetiSehgal.Ms and Neha Singh. Ms (2010)in their article titled "Impact of Eco-Friendly Products on Consumer Behavior" believed that the perception of green products is negatively associated with customers intention to purchase them if they are of lower quality and higher prices in comparison to attractive products, the attractiveness of green products market would not be substantially altered unless a dramatic shift occurs. Environmentally friendly products are good for humans and nature. Some environmentally friendly products are more costly than 'traditional' types of products but savings can be made if we go 'back-to-basics.'

William Young, Kumju Hwang, Seonaidh McDonald, and Caroline J. Oates (2010) in their article titled "Sustainable Consumption: Green Consumer Behaviour when Purchasing

Products" stated that green consumers can use their buying power to make a difference, but at a high cost in terms of effort and time, which is a significant barrier. These consumers need help from the government in the form of incentives and single-issue labels to show them where they should be concentrating their limited efforts. More fundamentally, 'being green' needs time and space in peoples' lives that are not available in increasingly busy lifestyles. Therefore, there needs to be coherent sustainable production and consumption policies across government departments, not just 'green advice' to consumers.

Purohit. H.C (2011) in his article titled "Consumer buying behaviour on green products" analysed consumer attitude, the role of the marketing mix in buying intention, and the relationship between consumer attitude and buying intention towards green marketing.. The study found that product, price, place, and promotion had significant correlation with buying intention of eco-friendly products and consumers were ready to pay a high price for an eco-friendly which cause less pollution to the environment were consumer ready to compensate the quality of the product for the benefit of the environment.

Research Methodology:-

The study has been made in Thoothukudi city. Thoothukudi is also known by the name 'Pearl city'. It is also called as "Sea Gateway of Tamil Nadu" The city lies in the Coromandel Coast of the Bay of Bengal. Thoothukudi is the capital and headquarters of the Thoothukudi district. Thoothukudi has the second-highest Human Development Index in Tamil Nadu next to Chennai. The present study uses a quantitative methodology to investigate the respondent's buying behaviour on eco-friendly products. The primary data collection was done using a structured questionnaire through Google form because of the covid-19 pandemic situation. Secondary data are collected from articles, journals, books, and websites . The sampling technique used for this study was simple random sampling since it was hard to reach the entire population. Garrett's ranking Technique is to analyse respondent's buying behaviour on eco-friendly products. The survey was conducted on 185 consumers of different areas in Thoothukudi city. Descriptive statistical techniques, percentage analysis, factor analysis, were used to analyse the data with the help of the SPSS tool.

Table:1 Demographic information of the respondents

Particulars		No. of respondents	Percentage
Gender	Male	55	30
	Female	130	70
	Total	185	100
Age	Below 25 years	70	38
	25-50 years	52	34
	Above 50 years	63	28
	Total	185	100
Educational	Up to school	33	18
qualification	Under Graduate	100	54
	Post Graduate	38	20
	Professional	14	8
	Total	185	100
Occupation	Businessman	29	16
	Homemaker	52	28
	Private employee	72	39
	Government employee	32	17
	Total	185	100
Monthly	Below Rs.20,000	106	57
income	Rs.20,001- Rs.40,000	32	17
	Rs.40,001- Rs.60,000	18	10
	Rs.60,001- Rs.80,000	16	9
	Rs.80,000-Rs.1,00,000	4	2
	Above Rs.1,00,001	9	5
	Total	185	100
Marital status	Married	47	25
	Unmarried	138	75
	Total	185	100

No. of family	0-4 members	99	54
members	4-8 members	71	38
	Above 8 members	15	8
	Total	185	100

Source: primary data

Table-1 shows the demographic profile of the respondents which reveals that 70% of the respondents are female, 38 % of the respondents belong to the age group below 25 years, 54% of the respondents are undergraduate,39% of the respondents are private employee, 57% of the respondents earn below Rs.20,000 as a monthly income, 75% of the respondents are unmarried and 54% of the respondents have the family size of 0-4 members.

Table -2 Mode of awareness

Particulars	No. of respondents	Percentage
Television	58	32
Magazine	8	4
Friends and relatives	34	18
Newspaper	14	8
Websites	22	12
Sales personnel	35	19
Product label	4	2.
Supermarket	6	3
Information from co-workers	4	2

Source: primary data

The above table-2 explains that 32% of the respondents are aware of eco-friendly products from television, 4% of the respondents are come to know from the magazine, 18% of the respondents are hear the information from friends and relatives, 8% of the respondents read the message from the newspaper, 12% of the respondents are to see the data from websites, 19%

of the respondents get the information from sales personnel, 2 % of the respondents gain the information from the product label, 3 % of the respondents receive the information from the supermarket and 2 % of the respondents obtain information from co-workers.

ISSN: 1673-064X

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Table 3 Descriptive statistics for the purchasing place of the Eco-friendly products

Pariculars	Mean	Std. Deviation
Retail stores	2.48	.652
Supermarket	2.15	.560
Online shopping	1.77	.732
Factory outlet	1.57	.742
Direct organic sellers	2.26	.754
UzhavarSanthai	1.97	.784
Multinational companies	1.67	.748
Customer retail Linkers	1.91	.720
Street vendors	2.07	.778

Source: primary data

It is revealed from the table 3 that the customers are primarily purchasing eco-friendly products from retail stores (Mean 2.48 and SD 0.652), direct organic sellers (Mean 2.26 and SD 0.754) and supermarkets (Mean 2.15 and SD 0.560). the other places from where the customers prefer to buy eco-friendly products are Street vendors (Mean 2.07 and SD 0.778), Uzhavar Santhai (Mean 1.97 and SD 0.784), Customer retail linkers (Mean 1.91 and SD 0.720), online shopping (Mean 1.77 and SD 0.732), Multinational companies (Mean 1.67 and SD 0.748) and factory outlets (Mean 1.57 and SD 0.742) respectively.

Table 4 Monthly spending amount to buy eco-friendly products

Particulars	No. of respondents	Percentage
Less than Rs.3,000	78	42
Rs.3,001 to Rs.6,000	59	32
Rs.6,001 to Rs. 9,000	29	16
Rs. 9,001 to Rs.12,000	9	5
Rs. 12,001 to Rs. 15,000	4	2
Above Rs.15,001	6	3

Source: primary data

The above table describes that 42 % of the respondents are expending less than Rs.3,000 to buy eco-friendly products, 32% of the respondents are spending between Rs.3,001 - Rs.6,000 to obtain eco-friendly products, 16% of the respondents are contributing between Rs. 6,001 - Rs.9,000 acquire the eco-friendly products,5% of the respondents are allocate between Rs.9,001 to 12,000 to purchase the eco-friendly products, 2 % of the respondents are paying between Rs. 12,001 to Rs. 15,000 to get the eco-friendly products and 3 % of the respondents are spending above Rs.15,001 to pick up eco-friendly products.

ISSN: 1673-064X

Table 5 Ranking the reasons for purchasing eco-friendly products using Garrett's ranking Technique

Particulars	Total score using Garrett table values	Mean score	Rank
I want to preserve the nature and world	9290	50	II
It gives a good image in society	8515	46	V
I like eco-friendly products and it gives full satisfaction	8940	48	III
I feel trendy, when I purchase eco-friendly products	8550	46	IV
I purchase eco-friendly products for the healthy life	10955	59	I

Source: primary data

Based on the ranks assigned by the sample respondents, the reasons for purchasing eco-friendly products are analysed through the Garrett ranking technique. It is evident from the above table express that the healthy life (59 scores) is the main reason for purchasing eco-friendly products, followed by preserving the nature and world (50 scores), satisfaction(48 scores), trendy(46 scores), and good image(46 scores).

ISSN: 1673-064X

Table 6 Factors to buy the eco-friendly products- KMO and Bartlett's test

The component loading shows that the factors promotion, attraction, necessity, reliability in nature, company image are a group on the first component. The factors good look of the product, variety of products, price, eco-friendly impact, brand loyalty are the particulars assemble on the second component. The factors health aspects, durable, eco-friendly packaging, design, trust of quality are the details place on the third component

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure o	.765	
Bartlett's Test of Sphericity	rtlett's Test of Sphericity Approx. Chi-Square	
	Df	120
	Sig.	.000

Source: primary data

KMO value of .765 is greater than .05 is acceptable and hence, the sample was adequate to perform factor analysis. The value of Bartlett's Test of Sphericity has also been found to be significant at the 5% level of significance, which expresses that there has an association between various items of the scale. The factors are extracted using principal component analysis and varimax rotation with kaiser's normalization. Three factors are extracted which explained 60.166% of the variation as can see from Table 6.1, which shows the cumulative percentage of the squared loadings.

Table 6.1 Total Variance Explained

Component	Initial Eigen values		Extractio	n Sums of Squar	red Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.085	38.029	38.029	6.085	38.029	38.029
2	2.194	13.714	51.743	2.194	13.714	51.743
3	1.348	8.424	60.166	1.348	8.424	60.166
4	.976	6.102	66.269			
5	.866	5.414	71.682			
6	.755	4.720	76.403			
7	.672	4.203	80.605			
8	.608	3.797	84.403			
9	.510	3.187	87.589			
10	.439	2.742	90.331			
11	.395	2.467	92.798			
12	.333	2.079	94.876			
13	.299	1.867	96.744			
14	.246	1.539	98.283			
15	.149	.930	99.213			
16	.126	.787	100.000			

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

	Component		
	1	2	3
Promotion	.829	.212	
Attraction	.790	.317	
Necessity	.717		.449
Reliable in nature	.622		.453
Company image	.582	.415	.282
Good look of the product		.776	.140
Variety of products		.695	.340
Price		.641	177
Eco-friendly impact		.623	.448
Brand loyalty	.379	.621	.193
Previous experience	.346	.488	.456
Health aspects	.320	.132	.719
Durable	.122	.215	.636
Eco-friendly packaging	.444		.636
Design	.255	.540	.552
Trust of quality	.302	.292	.550

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

The component loading shows that the factors promotion, attraction, necessity, reliability in nature, company image are a group on the first component. The factors good look of the product, variety of products, price, eco-friendly impact, brand loyalty are the particulars assemble on the second component. The factors health aspects, durable, eco-friendly packaging, design, trust of quality are the details place on the third component.

Table 7 Types of eco-friendly product

Particulars	No. of respondents	percentage
Convenience goods	52	28
Shopping goods	36	19
Speciality goods	41	22
Unsought goods	56	30

Source- primary data

It is derived from table 7 out of 185 respondents that 30% of the respondents used to purchase unsought goods, 28% of the respondents they buy convenience goods,22% of the respondents prefer specialty goods and 19% of the respondents were convinced in shopping goods.

Suggestion and conclusion:

Eco-friendly products have special features on protecting the environment at any time, provide a high level of satisfaction and give healthier life to the users. It has a bio-degradable nature, it helps to control pollution and conserve natural resources. Eco-friendly products 'one important character is grown or manufactured locally, it leads to making the gain of regional entrepreneurs and farmers. Consumers are willing to buy unsought goods, encourage to new eco-friendly products inventions. Consumers are not aware of green product certification. Producers can take the steps to educate the consumers regarding to green product certification.

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