

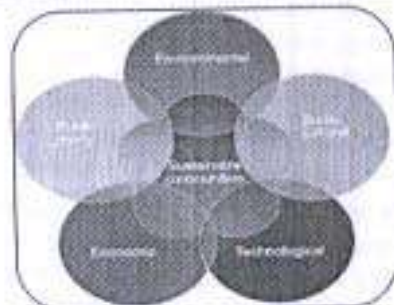


## GREEN PACKAGING: AN EMERGING NEED FOR SUSTAINABLE DEVELOPMENT

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### ABSTRACT

*"Heal the earth and heal our future" is the watch word of every citizen who loves the planet. Hence in the 21<sup>st</sup> century every one speaks of Green revolution, green marketing, green consumers, green products, green packages and eco-friendly terminology for sustainable development. The sustainable development of the country depends upon the usage of green products and packages which nullify the contamination so that the globe becomes free from pollution of air, water and soil. This paper is an attempt to show how the non-green packages litter the coastal belt in Kanyakumari District and pollute the sea and its environs. As packages are used for anything and everything in our daily livelihood, the used packages are dumped into the ocean as well as near the sea shore which contaminate the soil and the ocean and the living creatures. Therefore it is an emerging need of the hour to give apt remedy for this worst situation. Green packaging could be a better solution to eradicate such pollution. This paper intends to enlighten the readers, consumers, marketers and the policy makers to eradicate pollution in the coastal villages by introducing Green packaging. Green packaging is environmental friendly which can eliminate the contaminants that destroy the atmosphere, soil and ocean of our planet. Results from 140 sample indicates that age, gender and economic status are the important factors to determine the awareness of usage of green packaging among respondents. The upper middle income group has more awareness in purchasing green packages than other income group due to health consciousness. This paper also offers few suggestions to the marketers, policy makers and to the final consumers to go green and save green.*

**KEY WORDS:** green packaging, sustainable packaging, eco-friendly packaging, sustainable development, green consumers.

### INTRODUCTION

Packaging plays a pivotal role in all types of products. It attracts and enthralls the customers to choose the products. However after the consumption of the products, the packages are useless and the customers litter. This litter wreaks havoc on the environment and pollutes the environs for years together. The living creatures which consume this litter will end up dying soon. The coastal villages are highly affected due to these waste packages. People, who live near sea shore fill up landfills, that ends up as litter on the land and in sea. It becomes toxic to many animals as they are not easily biodegradable. Therefore green packaging could be an emerging need for the current situation to eradicate such pollution and move forward to sustainable development. Green packaging is the tool for protecting the environment for the future generation. It is the use of materials and manufacturing methods for packaging of goods that has low impact on both energy consumption and on the environment. By using this eco-friendly packaging manufacturers and consumers can eliminate these contaminants that destroy the atmosphere, soil and ocean of our planet. It is rightly remarked by Pope Benedict XVI that "Today the great gift of God's creation is exposed to

serious dangers and life styles which can degrade it. Environmental pollution is making particularly unsustainable the lives of the poor of the world....we must pledge ourselves to take care of the creation and to share its resources in solidarity". Hence the combination of both green packaging and sustainable development has a greater significance for the near future among marketing, society, government and consumers.

#### STATEMENT OF THE PROBLEM

Dumping of garbage and plastic wastes along the sea shore in coastal villages of Kanyakumari district has posed danger to the marine including various endangered species. Most of the garbage is produced due to packages. They are plastics made from polyethylene. They are among the most widely used packaging today which is the greatest threat to our environment. Since coastal areas are thickly populated, people of that locality rampant dumping of waste including plastics which increase the pollution level. Even the thousands of visitors who enjoy the beach also contribute to such pollution by the way of throwing the snacks packets and used plastic bottles. Therefore it is vivid that everyone is the cause for such pollution. None of them has the thought of saving the environment and avoiding pollution to bring sustainable development. In order to avoid such pollution, green packaging could be a better eco-practice to achieve sustainable development. Therefore, the present study is undertaken by the researcher on the title entitled "Green packaging: an emerging need for the sustainable development".

#### OBJECTIVES

The main objective of the study is to find out an awareness and practice of green packaging to attain sustainable development in the coastal belt. The following are the specific objectives.

- To find out the demographic profile of the sample respondents
- To identify an awareness on the usage of green packaging among respondents and
- To analyze the perception towards sustainable development in coastal belt.

#### METHODOLOGY

The present study is empirical in nature based on both primary and secondary data. Primary data were collected from the coastal taluks in Kanyakumari district. Kanyakumari district is bifurcated into two revenue divisions namely, Padmanabhapuram and Nagercoil having the headquarters at Thuckalai and Nagercoil respectively. This district is comprised of four Taluks namely Vizhavankodu, Kalkulam, Agasteeswaram and Thovalai. Among the four taluks, only selected villages of Kalkulam taluk have been chosen as the universe for the study. From Kalkulam taluk Kurumbanal, Vaniakudi, Kodimunai and Simoncolony are the villages that were selected for the study. The size of the sample for the study is 140. Out of this 50 samples of each from the village which has highest population and 20 samples of each from the village with lowest population on the basis of simple random sampling techniques. Secondary data were collected from books, journals, and internet.

#### DATA AND DISCUSSION

##### DEMOGRAPHIC COMPOSITION

Demographic profile is one of the important indicators to measure the level of awareness on green packaging and to analyse the perception towards sustainable development among sample respondents. The following table shows the demographic profile of the green consumers.

**Table 1**  
Demographic profile of the respondents

Variables	particulars	No.of respondents	percentage
Age	Below 21 years	16	11
	21-40 years	99	71
	41-60 years	21	15
	Above 60 years	4	3
	<b>Total</b>	<b>140</b>	<b>100</b>
Gender	Male	45	32
	Female	95	68
	<b>Total</b>	<b>140</b>	<b>100</b>
Occupation	Employed	72	51
	unemployed	36	26
	Student	32	23
	<b>Total</b>	<b>140</b>	<b>100</b>
No. of family members	2- 4	71	51
	5- 7	62	44
	8- 10	7	5
	<b>Total</b>	<b>140</b>	<b>100</b>
Economic status	Lower middle	17	12
	Middle class	60	43
	Upper middle	63	45
	<b>Total</b>	<b>140</b>	<b>100</b>

Source: primary data

Table 1 shows that, 71 per cent (99) of the respondents belong to the age group of 21-40 and three per cent (4) of the sample respondents to the age group of above 60. It is inferred that the younger generations are more aware of green packaging due to exposure to social media and awareness created by both NGOs and Pollution Control board. 68 per cent (95) of the sample respondents are female and 32 per cent (45) of the sample respondents are male. So it is understood that female respondents are having more awareness due to purchasing of green packaging in the market. This agrees with the study by Ewalerzyk (2015) which shows that 66.7 per cent of the respondents were women shopping themselves and their households. 51 per cent (72) of the respondents are employed and 23 per cent (32) of them are students. It indicates that the cost of green packaging is higher than non-green packaging. Therefore the students show less interest in buying green packaging. The findings of this study supports with Madalyn Marie Smith(2015) that 62.7 per cent of the respondents were employed who could involve in buying green packaging product. 51 per cent of the respondents have 2 to 4 members in their family and 5 per cent of the respondents have 8 to 10 family members in their family. It is inferred that majority of the respondents belong to the nuclear family. Hence they are affordable to buy green packaging. 45 per cent (63) of the respondents belong to upper middle class and 12 per cent (17) of them belong to lower middle class. It is understood that maximum of the respondents belong to upper middle class level and affordable to buy green packaging products.

#### AWARENESS OF THE RESPONDENTS REGARDING GREEN PACKAGING

Awareness leads to knowledge, and then knowledge leads to perception and finally perception leads to purchasing behavior. Green packaging is a new phenomenon. It is important to know that whether the sample respondents are aware of green packages which lead to sustainable development or not.

**Table 3**  
Awareness of Sample Respondents

S. No.	Awareness	No. of respondents	Percentage
1	Highly aware	5	4
2	Aware	67	48
3	Neutral	38	27
4	Unaware	20	14
5	Highly unaware	10	7
Total		140	100

Source: primary data

Table 3 shows that, 48 per cent (67) of the respondents are aware of green packaging which leads to sustainable development while four per cent (5) of them are highly aware. It requires the attention of the policy makers. This agrees with the study by Ewalerzyk (2015) which shows that over 40 per cent of the respondents were familiar with the term sustainable packaging and they have knowledge regarding green packaging. The following table measures the relationship between gender and customer perception towards sustainable development by using T-test the result is given in table 2.

**Table 2**  
T test for significance difference between male and female respondents with respect to dimensions of customer perception towards sustainable development

S.no.	Factors	Gender				T-value	P-Value
		Male		Female			
		Mean	Std. Deviation	Mean	Std. Deviation		
1	It is important to me that the packaging I use do not harm the Environment.	4.89	0.318	3.55	0.579	14.518	0.000**
2	My purchase habits are affected by my concern of our environment.	4.64	0.484	3.25	0.838	10.347	0.000**
3	I am concerned about not wasting the resource of our planet.	4.93	0.252	3.51	0.599	15.334	0.000**
4	I would describe myself as environmentally responsible.	5.00	0.000	3.47	0.783	13.045	0.000**
5	I am willing to be inconvenienced in order to take actions that are more environmentally friendly	5.00	0.000	3.63	0.715	12.808	0.000**

Source: Statistically analysed data

Note: \*\* Denotes significance at 1% level

- Since P value is less than 0.01, the null hypothesis is rejected at 1 per cent level of significance. Hence there is significant difference between male and female respondents with respect to 'customer perception on sustainable development. Based on mean score of 'It is important to me that the packaging I use do not harm the Environment', 'My purchase habits are affected by my concern of our environment', 'I am concerned about not wasting the resource of our planet', 'I would describe myself as

environmentally responsible' and 'I am willing to be inconvenienced in order to take actions that are more environmentally friendly', male respondents have high impact than female respondents. Majid Esmailpour and Azade Rajabi(2016) found result similar to this study through factor analysis that consumers are more environmental conscious. The following table depicts the relationship between economic statuses of respondents with respect to amount spent on green packaging using ANOVA. In order to analyse, both the null and alternative Hypothesis are framed.

$H_0$ : There is no significant Difference between Economic Status of Respondents with Respect to amount spent on Green Package.

$H_1$ : There is significant Difference between Economic Status of Respondents with Respect to amount spent on Green Package.

Table 3  
ANOVA for Significant Difference between Economic Status of Respondents with Respect to Amount spent on Green Package

Sl. No.	Particulars	Economic Status			F Value	P value
		Lower middle	Middle	Upper middle		
1	Amount spent on green package	1.00 (0.000)	2.23 (0.422)	3.47 (0.514)	442.923	0.000**

Source: Statistically analyzed data

Note: \*\* Denotes significance at 1% level

Since P value is less than 0.01, the null hypothesis is rejected at 1 per cent level of significance. Hence there is significant difference between Economic status of the respondents with respect to amount spent on green package. The mean score of upper middle is better than the other economic status with respect to the amount spent on green packaging. It is inferred that the upper middle income group have more awareness in purchasing green packages than other income group due to health consciousness. This supports a study by Madalyn Marie Smith (2015) that consumers are more likely to spend more and buy a large quantity of green packaging product as they have interest in social responsibility.

#### FINDINGS

- 71 per cent (99) of the respondents belong to the age group of 21-40 and three per cent (4) of the sample respondents to the age group of above 60.
- 68 per cent (95) of the sample respondents are female and 32 per cent (45) of the sample respondents are male.
- 51 per cent (72) of the respondents are employed and 23 per cent (32) of them are students.
- 51 per cent of the respondents have 2 to 4 members in their family and 5 per cent of the respondents have 8 to 10 family members in their family. It is inferred that majority of the respondents belong to the nuclear family. Hence they are affordable to buy green packaging.
- 45 per cent (63) of the respondents belong to upper middle class and 12 per cent (17) of them belong to lower middle class.
- 48 per cent (67) of the respondents are aware of green packaging which leads to sustainable development while four per cent (5) of them are highly aware. It requires the attention of the policy makers.

- T test for significance difference between male and female respondents with respect to dimensions of customer perception of green packaging Since P value is less than 0.01, the null hypothesis is rejected at 1 per cent level of significance.
- ANOVA for significant difference between Economic Status with respect to amount spent on Green Package P value is less than 0.01, the null hypothesis is rejected at 1 per cent level of significance.

#### SUGGESTION

- Customers are not fully aware of green packaging. Therefore awareness has to be created to the customers through fast reaching social Media. So that they will know the benefits and usage of green packaging, and come forward to spend more on green packaging product.
- The municipality authorities can regularly collect garbage and dispose it in an appropriate place and use them for recycling purpose which makes the coastal villages clean and will contribute to sustainable development.
- People who live near the coastal belt should be motivated on not to violate the environ by way of throwing the litters. And to be guided to use the appropriate place where the municipality allots.
- The reason behind using non green packaging is due to more availability, convenient and cheap price. Therefore the producers who produce green packaging should adopt these features in order to contribute in saving the environment from pollution.
- The government should produce norms for the marketers and the manufactures to stop producing non green packages and to start producing green packages to attain sustainable development.
- It is the responsibility of the government and the NGO's to motivate and to create the awareness in the society to be a part of the solution, and not part of the pollution.
- The manufactures and producers should introduce all consumable products as green packaged products.

#### CONCLUSION

'Heal the earth, heal our future' must be the watch word for the current scenario. It is the responsibility of each one to save the mother earth from being the victim of pollution. Green packaging might be a best solution to arrest pollution and to march towards sustainable development. As coastal villages are highly affected by garbage especially of non green packages, to eradicate such pollution, this green packaging would be a better practice to attain sustainable development. Therefore to develop green packaging the government can adopt legislation prohibiting certain packaging materials use, giving a discount or punishment in tax and limiting over-packaging. Therefore green packaging or sustainable packaging is beneficial, safe, and healthy for the individuals and communities throughout its life cycle. Thus green packaging is the need of the hour to ensure sustainability of the earth and its eco system.

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