



## Eco-Friendly Behavior Patterns of Rural Consumers

V Vijaya Lakshmi<sup>1\*</sup> and Deepika J<sup>2</sup>

<sup>1</sup>Principal Scientist and Unit Coordinator, FRM - AICRP (Home Science), PJTSAU, Hyderabad, India

<sup>2</sup>Senior Research Fellow, FRM - AICRP (Home Science), PJTSAU, Hyderabad, India

\*Corresponding Author: V Vijaya Lakshmi, Principal Scientist and Unit Coordinator, FRM - AICRP (Home Science), PJTSAU, Hyderabad, India.

Received: May 22, 2021

Published: June 09, 2021

© All rights are reserved by V Vijaya Lakshmi and Deepika J.

### Abstract

Society needs to devise mechanisms of caring for the environment sustainability. Every citizen needs to have civic sense to reduce the pollution at individual level. Plastic is one such material which harms environment tremendously because of that many state governments in the country have banned plastic usage. Because of this step, many shop keepers have started charging for the plastic bag to carry the goods be it food, clothing and other sun dries. Hence, consumers started carrying their own shopping bags to super markets which implies that consumers are becoming conscious about environment protection. Not much research is done to understand the eco-friendly behavior patterns of rural people. The present study explored the behavior of 105 people from rural areas to understand whether they were conscious about the ill effects of environmental pollution and to assess their eco-friendly behaviour patterns in order to protect the environment. Results revealed that majority of the respondents have exhibited eco consciousness.

**Keywords:** Eco-Friendly Behaviour Patterns; Plastic; Pollution

### Introduction

Indian consumers believe that each person should want to expand his needs and then gratify them. Promoting products should not be liable because society actively seeks more and better ends. Materialism should not be an end; it should be a means to achieve better ends. The purpose of eco-friendly behaviour pattern is to make ultimate consumers to protect their own environment with individual efforts. The concept of consumer behaviour can be defined as the act of consumers in obtaining and using goods and services and the decision process that determines their act whereas eco-friendly means earth-friendly or not harmful to the environment which refers to the products that contribute to green living or practices that help conserve resources for the planet and its inhabitants in a big and small way.

Eco-friendly products truly keep both environmental protection and human safety in mind. Product is non-toxic if it is optimally used. Other eco-friendly attributes include the use of sustainably grown or raised ingredients, produced in ways that do not deplete the ecosystem. Organic ingredients or materials are grown without the use of toxic pesticides or herbicides. Products "made from recycled materials" contain glass, wood, metal or plastic reclaimed from waste products and made into something new. Biodegradable products break down through natural decomposition, which is less taxing on landfills and the ecosystem as a whole. In this context every year on June 5<sup>th</sup>, World Environmental day is being celebrated to create awareness among the consumers about their role in protecting environment. With this background, an attempt is made to study the eco-friendly behaviour of consumers by using a standard scale which was developed for the study purpose.

## Review of Literature

Cossio [1] expressed that the consumers have become more conscious about having a healthier and eco - friendly lifestyle, since the COVID 19 pandemic began. They were accepting that human diseases are one of the major global threats caused to a consumer's lifestyle. They are trying to make themselves become aware of the individual and personal environmental impact they are creating. Globally, consumers are believing that environmental degradation is the second most significant global problem, including climate change (60%), natural resource depletion (60%), air pollution (56%) and single-use plastic waste (55%). Due to this, marketers and retailers are also adopting environmentally sustainable ways for business operations.

Whelan and Kronthal - Sacco [2] voiced out that products which are sold as green products grew 5.6 times faster than the normal conventional products. In more than 90% of the Consumer packaged goods (CPG) categories, this phenomenon was observed. Toilet and facial tissues, milk, yogurt, coffee, salty snacks, and bottled juices were few of the products which had the highest share in their category (more than 18%). Laundry care, floor cleaner, and chocolate candy had less than a 5% share; perhaps because the consumers were not concerned about the performance trade-offs. Sanitary napkins saw high growth in sustainability-marketed products, at 150%.

Durgamani, *et al.* [3] found in their study that maximum number of respondents (39%) has become aware about the green products through friends and majority (67%) were using them in their daily life. Around 49 per cent were satisfied with the green products and were using them for less than 3 years (65.5%). Very few (2%) respondents were using them since the last nine years. Around 56 per cent strongly felt that they gave importance to green products as they felt them to be a means to protect health. Advertisements did not influence the respondents in purchasing green products (21%). Around 47 per cent expected to reduce the price of green products.

A survey conducted on the U.S. and U.K. consumers by Young [4] found that 6 in 10 consumers believed that eco-friendly products are likely to be better for their health, mainly the older age group and around 40 per cent perceived them to be of a better quality, mainly the younger group. A fair number of consumers also bought the eco - friendly products as they wanted to be like a positive role

model, develop an image and show their social status among their family and friends and this can give them group influence and respect. Consumers who purchased eco-friendly products on a regular basis bought them as they care about the planet and this phenomenon was consistently high across all of the age groups.

Dubihlel and Ngxukumeshe [5] found out in their preliminary analysis about the Eco-friendly Retail Product Attributes, Customer Attributes and the Repurchase Intentions of South African consumers that among the respondents, majority (57%) were reported to be university students, with an average age of 19.8 years. Out of the total respondents 57 per cent were females, 43 per cent were males; and 21 percent respondents frequently bought eco-friendly products and their age ranged between 15 to 34 years (64%). Nearly 60% of the respondents knew about the importance of eco - friendly products; and the results also indicated that higher the income the more their behaviour became eco-friendly.

Lorek [6] analysed the trends in consumer behaviour towards eco - friendly products. Results revealed price as the main criterion which the respondents (more than 80%) considered when shopping. The important motive for buying the energy - efficient appliances products was the savings associated with them. Around 37 per cent of respondents declared buying organic foods and purchase criterion was their health benefits. A positive tendency was observed with regard to the post-consumer waste management, as waste was currently segregated in most households. But the respondents who repaired broken electronic equipment and appliances decreased which led to an increase of quantity of waste generated.

Agyeman [7] conducted an exploratory study on the consumers' buying behaviour towards green products (n = 200). Results revealed that price as the main factor which affected the buying behaviour of the consumers. This was followed by quality (17%), environmental concerns (16.5%), packaging (12.5%), brand-name (8%), convenience (6%) and durability (3.5%). Around 32.5 per cent of the respondents felt that the prices of green products should be very cheap and also an equal percentage (32%) preferred cheaper green products.

Fisher, *et al.* [8] tested the relationship between various demographic parameters and eco - friendly behavioural patterns of the respondents (n = 306). Only 16.2 per cent of women respon-

dents strongly agreed that they used green products, and only 7.4 per cent of men strongly agreed to this statement. Around 24.3 per cent of the women respondents strongly agreed that they used recyclable bags and only 16 per cent of men strongly agreed to that. Gender did not have any impact on following eco - friendly actions like separating trash, turning off lights while leaving a place, using energy-efficient lights etc. Married consumers were likely to use recyclable bags more often. Consumers with one or two children used recyclable bags more often than the other groups. Higher income respondents agreed that they used green products. Eco - friendly consumer behaviour was also found to be related to race. Asian Pacific Islanders were found to be more cautious on following eco - friendly behaviours.

Banytè., *et al.* [9] articulated that only 40 per cent respondents (n = 105) were credited to be less devoted green consumers based on their nature to contribute to environmental conservation. The respondents expressed that they were concerned about the environmental issues but were busy to change their lifestyle considerably. Majority expressed that they always read the labels of eco - friendly food products and study their marking in search for information. About little more than one-third (36%) felt that they wanted to create an image of a consumer preserving the environment. It was also found that highly educated and the respondents receiving higher incomes had a better understanding of environmental issues and were more sensitive towards them. Females aged between 30 to 44 years were the most frequent buyers of eco -friendly food products. Only 15 per cent were ready to pay an amount higher by 50 per cent for an eco - friendly product compared to an identical conventional product.

World Business Council for Sustainable Development [10] expressed that consumers were increasingly becoming concerned about environmental, social and economic issues, and were willing to act on these concerns. But the consumer willingness often does not translate into sustainable consumer behavior as different factors such as affordability, conflicting priorities, convenience, product performance, availability, skepticism and force of habit stopped them from buying eco -friendly products.

## Methodology

Exploratory research design was selected for the study with a total sample of 105 in selected villages of Moinabadmandal i.e. Tholkatta, Naggireddyguda and Kethireddy pally. Interview sched-

ule cum rating scale was used for data collection. Descriptive statistical analysis was done by using SPSS software.

## Results and Discussion

The results of the present study were presented below in detail.

Parameters	Categories	Frequency	Percentages (%)
Age in years	21-30 years	39	37.14
	31-40 years	33	31.43
	41-50 years	14	13.33
	51-60 years	10	9.52
	Above 60 years	9	8.57
Gender	Male	30	28.57
	Female	75	71.43
Education Qualification	Post Graduate	3	2.85
	Degree	10	9.52
	Intermediate	15	14.28
	6 <sup>th</sup> -10 <sup>th</sup> standard	32	30.47
	1 <sup>st</sup> -5 <sup>th</sup> Standard	15	13.28
	Illiterate	30	28.57

**Table 1:** Distribution of respondents by general information  
N = 105.

Highest percentage (37.14%) of the respondents belonged to the age group of 21-30 years whereas 9.52 per cent of the respondents belonged to the age group of 51 - 60 years (Table 1). Nearly 71.43 per cent of the female respondents and 28.57 per cent of the male respondents have participated in this study. In case of educational qualification, 30.47 per cent of the respondents had completed 6<sup>th</sup> - 10<sup>th</sup> standard education whereas only 2.85 per cent of the respondents had completed their post-graduation. However 28.57 per cent of the respondents were illiterates.

It was evident from table 2 that more than half of the percentage of the consumers agreed that they were checking about the quality of the product before purchasing to avoid the quick damage of it (81.90%), using plastic glasses due to their cheaper cost for giving water when relatives visit their house (78.10%), carrying their own bags while going to market with them to reduce the usage of plastic (77.14%), brushing teeth and washing utensils by switch-

S. No	Statements	Agree F(%)	Not Agree F(%)
1	While going to market, I use carry bags to reduce plastic usage	81 (77.14)	24 (22.86)
2	As I know about great loss of trees is due to heavy usage of papers, we use paper carefully	67 (63.81)	38 (36.19)
3	I do not waste food by keeping more in the plate when I attend a function. I serve as much as I can eat	70 (66.67)	35 (33.33)
4	I refuse to take polythene covers in super markets when they are packing the products	37 (35.24)	68 (64.76)
5	When relatives visit us, I prefer to use plastic glasses due to their cheaper cost	82 (78.10)	23 (21.90)
6	I use cell phone whenever it is necessary as it is spoiling the health of the human and environment	67 (63.81)	38 (36.19)
7	I donot give any importance to plastic products while purchasing kitchen utensils/products	70 (66.67)	35 (33.33)
8	While purchasing any product I check for the quality and durability of product, so that I can avoid the piling up of waste	86 (81.90)	19 (18.10)
9	While brushing teeth and washing utensils, I turn on the tap	32 (30.48)	73 (69.52)
10	I go for unnecessary ride in a car with over speed and honking which may lead to all types of pollution	21 (20.00)	84 (80.00)

**Table 2:** Distribution of respondents by eco-friendly behavior pattern N = 105.

ing off the tap and they are saving water without wasting them (69.52%), equal percentage of the consumers (66.67%) were unnecessarily wasting food by keeping more in their plates when they are going to attend a function and the consumers are not giving any importance to plastic products while purchasing kitchen utensils/products. Most of the consumers (63.81%) were using few papers as they knew about great loss of trees was due to heavy usage of papers and also they were using cell phones whenever necessary as it is spoiling the health and environment.

Whereas less than half of the percentage of consumers agreed that they were avoiding polythene covers (35.24%) and also they were avoiding the car for unnecessary ride with over speed and horn to reduce pollution and save the environment (20%).

Depending upon the frequency level, the rating score of these activities was calculated. Ranking number according to the total score was assigned to different frequency levels where 1st rank was given to highest score and lowest rank was given to least score.

S. No	Statements	Agree(2)	Not Agree(1)	Total Score	Ranking
1	While going to market, I use carry bags to reduce plastic usage	162	24	186	3
2	As I know about great loss of trees is due to heavy usage of papers, we use paper carefully	134	38	172	5
3	I do not waste food by keeping more in the plate when I attend a function. I serve as much as I can eat	140	35	175	4
4	I refuse to take polythene covers in super markets when they are packing the products	74	68	142	6
*5	When relatives visit us, I prefer to use plastic glasses due to their cheaper cost	82	46	128	8
6	I use cell phone whenever it is necessary as it is spoiling the health of the human and environment	134	38	172	5
7	I do not give any importance to plastic products while purchasing kitchen utensils/products	140	35	175	4
8	While purchasing any product I check for the quality and durability of product, so that I can avoid the piling up of waste	172	19	191	1
*9	While brushing teeth and washing utensils, I turn on the tap	32	64	137	7
*10	I go for unnecessary ride in a car with over speed and honking which may lead to all types of pollution	21	168	189	2

**Table 3:** Distribution of respondents by Ranking as per Eco-friendly behavior pattern N = 105.

\*One score for Yes and two score for No answers for these statements.

Table 3 depicted the eco-friendly behavioral pattern ranked as per priority by consumers based on frequency level. Data highlighted consumers given the first priority to checking about the quality of the product before purchasing to avoid the quick damage of it (1<sup>st</sup> rank), avoiding the car for unnecessary ride with over speed and horn to reduce pollution and save the environment (2<sup>nd</sup> rank), carrying their own bags while going to market to reduce the usage of plastic (3<sup>rd</sup> rank), unnecessarily wasting food by keeping it more in their plates when they are going to attend a function and the consumers are not giving any importance to plastic products while purchasing kitchen utensils/products (4<sup>th</sup> rank), using few papers as they knew about great loss of trees due to heavy usage of papers and also they were using cell phones whenever necessary as it is spoiling the health and environment (5<sup>th</sup> rank), avoiding polythene covers when they are packing the products in it especially in super market (6<sup>th</sup> rank), brushing teeth and washing utensils by switching on the taps (7<sup>th</sup> rank), using plastic glasses due to their cheaper cost for giving water when relatives visit their house (8<sup>th</sup> rank). This implies that people need to be educated about not to use plastic

ware when guests come and also to close the tap while brushing the teeth.

Behavior pattern	F	%
Moderate eco-friendly (14-16)	62	59.04
High-ecofriendly (17-19)	43	40.95

**Table 4:** Distribution of respondents by behavior pattern N = 105.

Further classification was made based on the scores obtained on the scale to assess their eco-friendly behaviour pattern. Each statement had dichotomous answer for which 2 score was given for 'yes' and 1 score was given to 'No'. Out of 10 statements, only 5, 9 and 10 statements were negative and other seven statements were positive statements. Hence the scoring was reversed for negative statements. The minimum score that can be obtained by every respondent is 10 and maximum is 20. The scores obtained were ranging between 14 to 19. It was found that none of them were non

eco-friendly. About 59 per cent exhibited moderately eco-friendly nature while 41 per cent exhibited highly eco-friendly behavior.

	Gender	Education Qualification	Eco-friendly	Non-eco-friendly
Gender	1			
Education Qualification	0.072	1		
Eco-friendly	-0.025*	-0.111	1	
Non-ecofriendly	0.025*	0.111	-1	1

**Table 5:** Association between independent and dependent variables.

When correlation was tested between independent and dependent variables, it was found that gender has significant association with eco-friendly and non ecofriendly behaviour patterns. Further analysis revealed that female were more eco-friendly than that of male consumers. It shows that since women maintain the house, they are more conscious about environmental issues and take care of nurturing it.

### Conclusion

The present study mainly aimed at assessing the eco-friendly behaviour patterns of rural consumers. It was found that only 28 per cent were illiterates perhaps this made a difference in exhibiting moderate to high eco-friendly behaviour in their day to day activities. However majority of them were keeping the taps open throughout their brushing teeth and also using plastic glasses when guests come home. This needs to be addressed at community level by creating awareness about quantity of water getting wasted per household per annum and also to discourage them using plastic ware for serving guests. Otherwise in rest of the activities like carrying their own shopping bag, using less paper, checking the quality of product before purchase etc. Female seemed to be more eco-friendly than their counter parts. Hence all the family members need to be cautious about conserving the nature and resources.

### Bibliography

1. Cossio M. "Encouraging healthier and more eco-friendly consumer behaviour". *Pentagon* (2020).

2. Whelan T and Kronthal – Sacco R. "Research: Actually, Consumers Do Buy Sustainable Products". *Harvard Business Review* (2019).
3. Durgamani MK, et al. "A study on consumers' buying behaviour towards selected green products in Kumbakonam". *International Journal of Pure and Applied Mathematics* 119.18 (2018): 3177-3192.
4. Young K. "What Drives Eco-Conscious Consumer Behaviour?" *Global Web Index* (2018).
5. Dubihlel J and Ngxukumeshe T. "Eco-friendly Retail Product Attributes, Customer Attributes and the Repurchase Intentions of South African Consumers". *International Business and Economics Research Journal* 15.4 (2016): 163-173.
6. Lorek A. "Current trends in the consumer behaviour towards eco-friendly products". *Economic and Environmental Studies* 15.2 (2015): 115-129.
7. Agyeman CM. "Consumers' buying behaviour towards green products: An exploratory study". *International Journal of Management Research and Business Strategy* 3.1 (2014): 188-197.
8. Fisher C., et al. "Demographic impacts on environmentally friendly purchase behaviors". *Journal of Targeting, Measurement and Analysis for Marketing* 20 (2012): 172-184.
9. Banyte J., et al. "Investigation of green consumer profile: A case of Lithuanian market of eco-friendly food products". *Economics and Management* 15 (2010): 374-383.
10. World Business Council for Sustainable Development. *Sustainable Consumption Facts and Trends* (2008).

### Volume 5 Issue 7 July 2021

© All rights are reserved by V Vijaya Lakshmi and Deepika J.