

A Study on Perception and Adaptation of Eco-Friendly Packages among Consumers of Nagaland

OPEN ACCESS

Manuscript ID:
MGT-2025-13029294

Volume: 13

Issue: 2

Month: October

Year: 2025

P-ISSN: 2321-4643

E-ISSN: 2581-9402

Received: 16.07.2025

Accepted: 07.08.2025

Published Online: 01.10.2025

Citation:

Tepa, Nounenuo, et al.
“A Study on Perception and Adaptation of Eco-Friendly Packages among Consumers of Nagaland.”
Shanlax International Journal of Management, vol. 13, no. 2, 2025, pp. 1–13.

DOI:

<https://doi.org/10.34293/management.v13i2.9294>



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Nounenuo Tepa

Assam Don Bosco University, Assam, India
 <https://orcid.org/0009-0001-7170-0632>

Kili

Assam Don Bosco University, Assam, India
 <https://orcid.org/0009-0008-1286-5294>

Harjyoti Kalita

Assistant Professor, Assam Don Bosco University, Assam, India
 <https://orcid.org/0009-0000-8106-218X>

Abstract

As environmental challenges grow, customary methods have become eco-friendly packaging alternatives. Eco-friendly packaging perception as well as the adjustment of people in Kohima Town, Nagaland, was the focus of this study. Demographic factors such as age, education, and income influence sustainable consumption patterns, in addition to consumer awareness, attitudes, and intentions to behave. This study relied on a sample size of 120 respondents. The researchers collected data using both primary and secondary methods. Research shows that younger individuals, along with those who are more educated, show a generally positive attitude toward green packaging. Adoption is curbed because products are unavailable, affordability is absent, and sustainability claims are incredible. The study found that awareness and attitude are linked in a way that is strongly positive. Therefore, a greater degree of knowledge leads to more positive behaviour. Sustainable packaging promotion is guided by inclusive outreach and targeted strategies for policymakers, businesses, and environmental advocates. Examining social influence, cultural norms, and long-term behavioural changes, future research could assess the effectiveness of specific policy interventions and marketing approaches to encourage eco-friendly packaging adoption.

Keywords: Eco-Friendly Packaging, Consumer Perception, Sustainable Consumption, Awareness, Adaptation, Green Behaviour, Kohima Town

Introduction

Recently, environmental concerns have driven industries to adopt sustainable practices, with eco-friendly packaging emerging as a crucial alternative to conventional packaging. Eco-friendly packaging refers to materials and designs that minimise the environmental impact by being biodegradable, recyclable, reusable, or compostable. As climate change and plastic pollution have become urgent global issues, governments, businesses, and consumers are exploring sustainable alternatives.

Despite rising awareness of environmental sustainability, the transition to eco-friendly packaging is not uniform across different regions and industries. Consumer perceptions play a significant role in determining the success of such initiatives, as attitudes toward cost, convenience, and effectiveness influence purchasing decisions. Businesses, on the other hand, face challenges related to production costs, supply chain management, and regulatory compliance.

While some companies embrace sustainable packaging as part of their Corporate Social Responsibility (CSR) efforts, others hesitate because of concerns about profitability and market demand. Additionally, various external factors, including government policies, technological advancements, and media influence, shape the adaptability of eco-friendly packaging. Understanding how these factors impact consumer behaviour and industry practices is essential for driving large-scale adoption.

However, despite these efforts, several barriers, such as high costs, lack of awareness, and limited availability, prevent widespread acceptance.

This study aims to analyse the public's perception of eco-friendly packaging, explore the factors that drive or hinder its adoption, and identify the key barriers that slow down its widespread implementation. By gaining deeper insights into these aspects, this research contributes to development of strategies that encourage sustainable packaging solutions while balancing environmental, economic, and practical considerations.

Eco-Friendly Packages (Meaning)

Eco-friendly packaging refers to packaging materials and designs that minimise environmental impact while maintaining functionality and efficiency. It is designed to reduce waste, lower carbon footprint, and prevent pollution, making it a sustainable alternative to conventional packaging.

These packaging solutions often use biodegradable, recyclable, reusable, or compostable materials to ensure that they break down naturally or can be repurposed without harming the environment. Common materials used in eco-friendly packaging include recycled paper, biodegradable plastics made from cornstarch or sugarcane, glass, metal, bamboo, and plant-based alternatives, such as mushroom packaging.

One of the key advantages of eco-friendly packaging is its ability to reduce reliance on single-use plastics, which are a major contributor to environmental pollution. Many businesses are adopting sustainable packaging solutions not only to comply with environmental regulations but also to meet growing consumer demand for eco-conscious products. Industries such as food and beverages, cosmetics, fashion, and e-commerce

are increasingly shifting towards materials such as recycled cardboard, craft paper, reusable cloth bags, and edible packaging options. Additionally, sustainable packaging often requires less energy and fewer natural resources during production, further reducing the overall ecological footprint.

Despite its benefits, the widespread adoption of eco-friendly packaging faces challenges including higher production costs, limited consumer awareness, and the availability of sustainable materials. Some businesses hesitate to switch because of concerns about durability, cost-effectiveness, and supply chain adjustments. However, as technology advances and more consumers prioritise sustainability, eco-friendly packaging has become a crucial element in global efforts to reduce environmental harm and promote responsible consumption.

Different Forms of Eco-Friendly Packaging

1. **Cardboard and Paper:** Cardboard is a widely recyclable and biodegradable material made from wood pulp and is commonly used for boxes and cartons owing to its strength and light weight. Kraft Paper is a durable and recyclable brown paper made from chemical pulp; used in wrapping, envelopes, and pouches.
2. **Recycled Plastics:** High-Density Polyethylene (HDPE) is a strong, durable plastic that is often recycled into bottles and containers and helps reduce the demand for virgin plastic. Low-Density Polyethylene (LDPE) is a flexible and lightweight material that is often used for bags and wraps and is recyclable in specific facilities. Polyethylene Terephthalate (PET) is commonly used in beverage bottles; highly recyclable and widely accepted in recycling programs.
3. **Biodegradable and Compostable Plastics:** Biodegradable Plastics are plastics that break down naturally by microbes over time and are often used in disposable bags and food packaging. Compostable Plastics are designed to decompose into nontoxic components in industrial composting facilities and require specific conditions. (Polylactic Acid) PLA: A compostable plastic made from corn starch or sugarcane; used for cups, trays, and food packaging.

4. **Natural Fibres:** Jute is a strong, biodegradable fibre commonly used for sacks and bags; has a low environmental impact due to minimal processing. Cotton is a soft, biodegradable fibre often used in cloth bags and wraps, and organic cotton is even more eco-friendly.
5. **Bio-Regenerative Materials:** Seaweed is a renewable resource used to create edible and compostable packaging films; rapidly renewable and ocean-friendly. Hemp is a Durable and biodegradable material used in paper and fabric packaging that grows quickly without pesticides. Mushroom Packaging is made from mycelia and agricultural waste and is fully biodegradable and moldable into custom shapes.
6. **Other Eco-Friendly Options:** Glass Containers: Reusable and recyclable with no quality loss; ideal for food and beverage storage. Stainless Steel: Durable, reusable, and fully recyclable; often used for lunchboxes and bottles. Bamboo: Fast-growing and biodegradable; used for containers, cutlery, and wraps due to its strength and sustainability.

Growing Importance of Eco-Friendly Habits in the Society

Eco-friendly packaging is gaining increasing attention and importance in today’s society owing to the growing awareness of environmental issues and the urgent need to reduce pollution, especially plastic waste. Traditional packaging materials, particularly single-use plastics, contribute significantly to land and marine pollution and take hundreds of years to decompose and cause harm to wildlife and ecosystems. In contrast, eco-friendly packaging offers sustainable alternatives that are biodegradable, recyclable, reusable, or made from renewable resources, helping minimise environmental impacts.

The growing importance of eco-friendly packaging reflects a broader societal move towards sustainability, where responsible consumption, waste reduction, and environmental preservation are becoming core values. It is not just a trend, but a vital component of global efforts to combat climate change and protect the planet for future generations.

Society Moving towards a Green and Sustainable Direction

Society is shifting toward a green and sustainable direction owing to the convergence of environmental, social, and economic factors. Growing awareness of issues such as climate change, pollution, and resource depletion has highlighted the urgent need to protect the planet and its ecosystems. Concerns about public health have also played a key role, as people recognise the harmful effects of pollution and toxic substances on their well-being. In addition, the transition to sustainability offers significant economic opportunities, with green technologies and industries driving innovation, job creation, and growth. A sense of responsibility for preserving the environment for future generations further fuels this movement. Governments and international bodies are implementing stricter regulations and promoting sustainability goals, compelling businesses and communities to adopt greener practices.

Perception Concept

Perception is a process by which individuals organise and interpret their sensory impressions to convey meaning to their environment. (Stephen P. Robbins)

Perception is an active and dynamic process in which we interpret sensory data to make sense of ourselves and those around us. It involves recognising and understanding sensory inputs while also determining how to react to them.

Aspect	Perception	Adaptation
Definition	The process of interpreting and understanding sensory information.	The process of adjusting to a new conditions or environments.
Focus	It focuses on how we sense and interpret the world around us.	It focuses on how we change our behaviour or thinking in response to changes.
Nature	Psychological and cognitive.	Behavioural, psychological and physical.
Involves	Awareness, recognition, and interpretation.	Learning, coping and change over time.
Timeframe	Often immediate or short-term.	Often gradual or long-term.

Goal	To make sense of stimuli.	To function effectively in new situations.
Result	Formation of an understanding or opinion.	Change in behaviour or thinking.
Example	Seeing a snake and recognizing it as dangerous.	Getting used to a hot climate after moving to tropical region.

Statement of the Problem

The increasing environmental degradation caused by plastic and non-biodegradable packaging materials has necessitated a shift towards sustainable alternatives. While eco-friendly packaging offers numerous benefits, its adoption remains limited owing to various socio-economic, behavioural, and logistical challenges. Some consumers may perceive eco-friendly packaging as costly or inconvenient, whereas businesses may struggle with production and supply chain limitations. In addition, a lack of awareness and policy implementation delays this transition. This study seeks to analyse public perception, assess key influencing factors, and identify barriers preventing the effective adoption of eco-friendly packaging. By doing so, this research will provide insights into how these challenges can be addressed to enhance sustainability efforts.

Objectives of the Study

1. To study the public's perception of eco-friendly packaging.
2. To study the various factors which reflect the adaptability of eco-friendly packages to users.
3. To study barriers preventing the adoption of eco-friendly packaging.

Literature Review

(Cherian & Jacob, 2012), "Green Marketing: A Study of consumers' Attitude towards Environment Friendly Products". This study aims to bring the concept of green marketing to life, review its findings, and highlight specific consumer behaviours aligned with sustainable advertising strategies. This study explores the connection between distinct buyer mindsets and green marketing practices. A theoretical framework was introduced and relevant studies were examined. The key characteristics of consumer behaviour toward green marketing were identified as being highly significant. Consequently, there is a growing need to understand buyer behaviour and foster a shift toward environmentally

sustainable lifestyles. Companies face challenges in leveraging green marketing effectively, including the development, structuring, and evaluation of sustainable supply chains. Businesses are adopting practices to eliminate excess inventory, reduce waste, and recycle materials for efficient and eco-friendly operations. Individuals are increasingly recognising their roles and responsibilities in protecting the environment.

(Sharma, Sonwalkar, & Kapse, 2013), This study aims to explore the key factors influencing consumer purchasing behaviour for environmentally friendly or green products in Central India, specifically focusing on the state of Madhya Pradesh. This study sought to understand what drives consumer decisions and preferences when choosing sustainable products in this region.

(Bhatia & Jain, 2013), "Green Marketing: This study uses structured surveys to assess consumers' perceptions and attitudes toward green advertising methods and products as well as their awareness of environmental issues. The study surveyed 106 respondents, and the findings indicated a moderate level of awareness regarding eco-friendly marketing practices and products among some consumers. Many participants rated the green products positively. The survey results provide valuable insights for marketers, suggesting that consumers are influenced by environmental incentives when purchasing green products. The analysis highlights that familiarity with green features, awareness of eco-friendly products, and companies' efforts to implement sustainable marketing strategies significantly impact consumers' choice to buy green items.

(Singal, Garg, & Singla, 2013), "Green Marketing: Challenges and Opportunities". This paper presents a practical approach for businesses to understand how eco-conscious consumers, who are concerned about the environment, can be persuaded to make and maintain sustainable purchasing decisions. It addresses the challenges and opportunities companies face in green advertising.

The study also explores why businesses adopt green marketing strategies and emphasises the importance of aligning these strategies with both industry practices and consumer demand.

(Katait, 2016), “Green marketing & consumer behaviour: A case study of consumer durable products”. Novice marketing reflects the promotion of products with an emphasis on their environmental benefits. The significant increase in environmental awareness among consumers has been driven by businesses adopting sustainable practices. This study focuses on understanding consumer attitudes toward green advertising and marketing and explores the relationship between individual purchasing preferences and environmentally friendly product displays. It also examines whether education level influences consumers’ shopping behaviour for eco-conscious products. These advertising formats, referred to as Green Displays, incorporate sustainable strategies into product evaluation, development, promotion, and distribution activities.

(Rupinderkaur, 2016), “Green Marketing and Its Impact on Consumer Buying Behaviour”. This study explores consumers’ green purchasing behaviour, focusing on the value and penalties associated with promoting eco-conscious buying intentions. This shift has prompted some marketers to rebrand and align their offerings with sustainability goals to address global environmental concerns. Both organisations and consumers are actively working to reduce environmental impact. This study evaluates the environmental consciousness of Indian consumers, their awareness of ecological issues, their familiarity with green attributes, and the influence of income and education levels on sustainable purchasing behaviour. The findings suggest that consumers are increasingly willing to pay a premium for environmentally friendly products, demonstrating a commitment to protecting nature.

(Mohanty & Nayaak, 2017), “Green Marketing - Its Application, Scope, and Future in India”. They highlight that green marketing faces significant challenges in achieving its objectives. A key challenge is finding a balance between a company’s profitability and its responsibility to society and the environment. In the current market landscape, both aspects are crucial for long-term sustainability. Companies must excel in business performance while

fulfilling their obligations to society and addressing environmentally conscious consumers’ concerns.

(Kaur, 2017), “Sustaining Environment with Green Initiative: A Conceptual Study of Green Marketing Practices in India”. This study examines green advertising, eco-friendly products, the integration of green practices, environmentally conscious consumers, and sustainable marketing approaches, which are being adopted by various sectors to promote green marketing in India. This includes an analysis of supportive documents through written enquiries and research. The primary goal is to clarify the role of a firm’s environmental commitment in shaping green marketing strategies to enhance customer-perceived value. Notable examples include Nokia’s initiative to manage e-waste through take-back schemes and collection centers, and Videocon’s green initiatives, such as upgrading R&D centres to eco-friendly technology and using the colour green in its logo to symbolise ecological aspirations. This study highlights diverse green practices across industries such as electronics, banking, and FMCG, shedding light on the simultaneous efforts being made in India to embrace sustainable approaches.

(Deepak, 2018), “An empirical study of green consumer behaviour in Uttar Pradesh”. This study aimed to explore consumers’ awareness, perception, and willingness to pay more for green products. It examined cognitive and attitudinal factors and their impact on green purchase intention and behaviour. Additionally, it investigates consumer perceptions of green marketing tools and their effects on purchasing behaviour. The research segments green consumers and profiles them based on selected attitudinal and behavioural criteria, aiming to assess green consumer behaviour to design effective green marketing policies and strategies in the Indian context.

(Aruna, 2019), “Consumer awareness and buying behaviour towards the green products in Chennai City”. This study aims to identify the level of awareness of green products among consumers in Chennai City and how they obtain information about these products. It examines the factors influencing consumers’ preferences for green products and their

attitudes towards their usage. Additionally, this research explores consumers' buying behaviour, their priorities regarding green product purchases, and their satisfaction and post-purchase attitudes towards green products in the study area.

(Reddy, et al., 2023), "Consumers' Perception on Green Marketing towards Eco-Friendly Fast Moving Consumer Goods". This study investigated consumer attitudes towards green marketing and eco-friendly FMCG products in India. Based on the responses from 702 participants, we found a high level of environmental awareness and favourable attitudes toward green products. Gender, age, education, and marital status significantly influenced perceptions. Consumers prefer green products because of their eco-safety and quality, although many remain unaware of institutional green initiatives. This study emphasises the need for targeted awareness campaigns and strategic marketing communication to encourage sustainable buying behaviour.

(Bhardwaj, Mishra, Rivera, & Julianthry, 2023), "Consumer Perception towards Eco-Friendly Products: A Quantitative Study". This study investigates consumer perceptions and factors influencing the adoption of eco-friendly products. Key findings indicate that consumers are increasingly aware of environmental concerns and view eco-friendly purchases as socially responsible and healthier choices. Product labelling, brand reputation, availability, and perceived effectiveness significantly affect purchase decisions. However, scepticism and premium pricing are barriers. The study used descriptive analysis based on responses from 183 participants, highlighting the role of awareness campaigns and accessibility in promoting sustainable behaviour.

(Prakash, Reddy, Reddy, & Reddy, 2023), "A Study on Consumers' Perception, Preferences, and a Myth Towards Eco-Friendly Products and Marketing with Reference to South India". This study investigates consumer awareness, preferences, and attitudes toward green products in South India using factor and correlation analyses of survey data from 185 respondents. The findings reveal high awareness and moderately positive attitudes toward eco-friendly products but low actual purchase behaviour. Weak or insignificant correlations were found between green marketing strategies

and consumer decisions, indicating a gap between attitudes and actions. The study highlights the need for more targeted marketing and policy support to bridge this intention-behaviour gap.

(Pravin, 2024), "Consumer perception Towards greenproducts: Implications for sustainable marketing strategies": This study examines how marketing strategies, product factors, and consumer green values influence perceptions and purchase behaviour towards eco-friendly products. Based on a survey of 118 consumers, this study found a strong positive correlation between green marketing efforts and consumer attitudes. The regression analysis confirms that marketing strategies, product features, and personal environmental values significantly affect buying decisions. This study highlights the growing environmental awareness among consumers and underscores the need for businesses to align their marketing and production practices with sustainability principles.

(Malhotra, et al., 2024), "Consumer Perception and Buying Behaviour Regarding Eco-Friendly Products". This study explores how environmental awareness, socio economic status, and marketing influence consumer attitudes and purchase behaviour toward eco-friendly products. Using survey data and Garrett's ranking method, it was found that while consumers show strong environmental concern, factors such as high price and limited availability hinder actual purchases. This study highlights the need for targeted marketing and supportive policies to make sustainable products more appealing and accessible.

Research Gap

While there is a growing body of literature on consumer awareness and acceptance of eco-friendly packaging, most studies have focused on urban areas and larger cities. There is a lack of research specifically addressing the unique socio cultural and economic factors influencing consumer behaviour in smaller towns and rural areas, such as Kohima Town in Nagaland. Additionally, existing studies often emphasise general consumer perceptions without delving into the specific challenges and barriers faced by consumers when adopting eco-friendly packaging in these regions. This study aims to fill this gap by

exploring the perceptions, attitudes, and adaptation strategies of consumers in Kohima Town, providing insights into the localised factors that impact the acceptance and usage of eco-friendly packaging. This research will contribute to a more comprehensive understanding of consumer behaviour across diverse geographic and demographic contexts, ultimately aiding the development of targeted and effective eco-friendly packaging initiatives.

Significance of the Study

This study is significant for multiple stakeholders, including consumers, businesses, policymakers, and environmental organisations. Understanding public perception will help manufacturers and marketers to design eco-friendly packaging that aligns with consumer preferences. Identifying factors influencing adoption can guide businesses in implementing sustainable packaging strategies while maintaining cost-effectiveness. Additionally, recognising barriers to adoption can assist policymakers in formulating regulations, incentives, and awareness programs that encourage eco-friendly practices. Ultimately, this study contributes to global sustainability efforts by promoting responsible consumption and reducing the environmental harm caused by conventional packaging waste.

Research Methodology

This study “The perception and adaptation of eco-friendly packages among consumers in Nagaland” is mostly conducted to investigate the adaptability of eco-friendly packages in society. The study mostly focused on the perception and adaptation of users towards the use of eco-friendly packages. In order to understand the perception, the researcher will investigate certain parameters such as awareness, attitude, and influencing factors. The researcher will also consider the adaptability of eco-friendly packages among users, for which certain other parameters should be considered, such as behavioural intentions, barriers to adoption, policies, and regulations.

Research Design

Research is mostly descriptive in nature, where consumer perception and adaptation will be

elaborated by developing a structural conceptual framework. Eco-friendly packages and their uses should be described with facts and figures for an in-depth understanding. The problem of this study will be investigated using all statistical means and methods to generate a specific outcome.

Different parameters were considered to assess the perception and adaptability of the public in the study area. These are:

Perception	Adaptability
Demographic factors	Behavioural intentions
Consumer awareness	Environmental impact
Consumer attitude	Barriers to adoption
Marketing influence	
Policy and regulations	

Area of the Study

The study was conducted in Kohima Town, Nagaland.

Sampling Design

- Target population: The target population of this study consisted of consumers from Kohima Town.
- Sampling method: For this study, a non-probability sampling method was employed, with convenience sampling used to select participants based on availability and ease of access.
- Sample size determination:

Cochran Formula

The Cochran formula is used to determine the sample size for a survey or study, especially when the population is large and unknown. This helps to calculate an adequate sample size for estimating proportions with a specified level of confidence and precision.

$$\text{Formula: } n_0 = \frac{Z^2 \cdot p \cdot (1-p)}{e^2}$$

Here, $Z = 1.75$
 $p = 0.5$
 $e = 0.08$

Therefore, $n = 119$.

To obtain a justified result, the researcher considered 120 respondents for the study.

- **Sample size:** A sample size of 120 participants was determined based on factors such as the availability of respondents, time constraints, and nature of the research.

Data Collection Source

Primary and Secondary Data

- **Primary Data:** A structured questionnaire was designed to concentrate on fulfilling the objectives of the study and was distributed among

the respondents to reveal a fruitful outcome.

- **Secondary data:** Secondary data were collected from different sources of information such as annual marketing reports, government guidelines projected in newspapers, and published journal magazines.

Research Question Based on Parameters

Is awareness reflected in the attitude of users towards perceiving eco-friendly products positively?

Data Analysis and Interpretation

Consumer Awareness

Table 1 Awareness of Consumer on Eco-Friendly Packaging

Statements	(Strongly Agree)	(Agree)	(Neutral)	(Disagree)	(Strongly Disagree)	Weighted Average
Familiar with the concept of eco-friendly packaging	30	63	22	3	2	2.03
Actively seek out information about eco-friendly packaging options.	11	53	48	7	1	2.45
Frequently come across information about eco-friendly packaging through social media or other online platforms.	23	53	33	9	2	2.28
Confident that the eco-friendly packaging options purchased are actually environmentally sustainable.	37	54	24	3	2	1.99
Aware of Government policies and regulations supporting eco-friendly packaging.	10	55	46	9	0	2.45
					Average of Weighted Average	2.24

(Source: Field Survey)

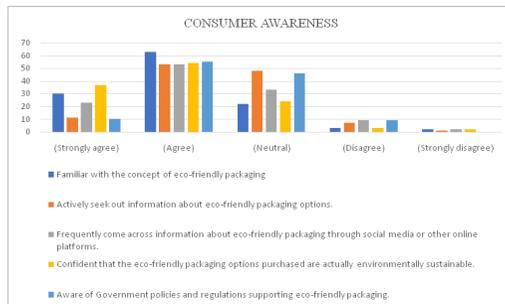


Figure 1 Awareness of Consumer on Eco-Friendly Packaging

Behaviour Adaptation

Table 2 Attitude of Consumer towards Eco-Friendly Packaging

Statements	(Very important)	(Important)	(Neutral)	(Slightly important)	(Not important)	Weighted Average
Eco-friendly packaging is important when making a purchase.	60	42	12	2	4	1.73
Recommending products with eco-friendly packaging is important.	45	60	10	2	3	1.73
The availability of eco-friendly packaging options in the market is important.	55	48	11	2	4	1.76
Stricter regulations would encourage more use of eco-friendly packaging.	59	41	15	3	2	1.73
					Average of Weighted Average	1.74
					Average of Weighted Average	2.24

(Source: Field Survey)



Figure 2 Attitude of Consumer towards Eco-Friendly Packaging

Marketing Influence

Table 3 Influencing Factors of Consumer towards Eco-Friendly Packaging

Statements	(Very satisfied)	(Satisfied)	(Neutral)	(Dissatisfied)	(Very dissatisfied)	Weighted Average
Satisfied with the influence of advertisements and promotions in decisions to purchase eco-friendly packaging.	5	42	63	7	3	2.67

Satisfied with the effectiveness of eco-friendly labels and certifications in influencing purchasing decisions.	6	49	51	13	1	2.62
					Average of Weighted Average	2.65

(Source: Field Survey)

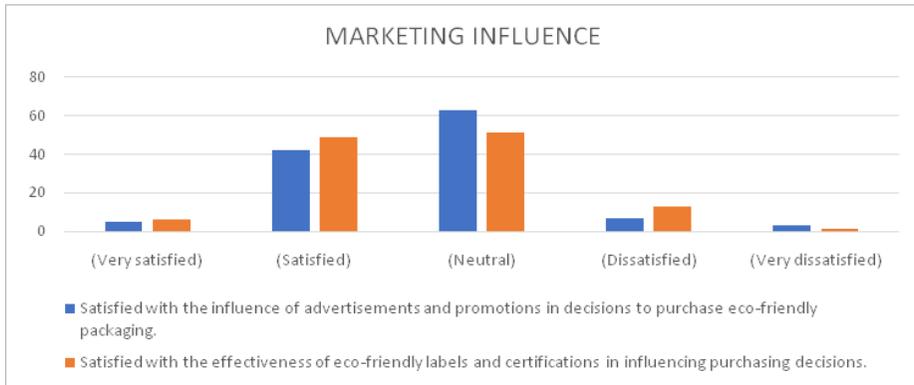


Figure 3 Influencing Factors of Consumer towards Eco-Friendly Packaging

Environmental Impact

Table 4 Consumers View on Contribution of Eco-Friendly Packages to the Environment

Statements	(Very likely)	(Likely)	(Neutral)	(Unlikely)	(Very unlikely)	Weighted Average
Eco-friendly packaging contributes to environmental sustainability.	56	46	12	4	2	1.75
Using eco-friendly packaging can significantly reduce environmental pollution.	69	30	14	5	2	1.67
					Average of Weighted Average	1.71

(Source: Field Survey)

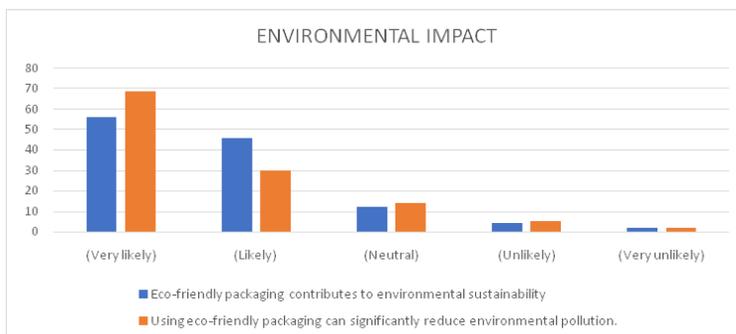


Figure 4 Consumers View on Contribution of Eco-Friendly Packages to the Environment

Research Question Analysis

Whether the awareness reflect in the attitude of users in perceiving eco-friendly products positively?

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.408	.164		2.493	.014
	Awareness	.697	.071	.673	9.886	<.001

a. Dependent Variable: Attitude

Major Findings and Discussion

- Regarding familiarity with the concept of eco-friendly packaging, consumers showed a positive response, as the proportion of awareness was very high.
- Awareness regarding government policies and regulations supporting eco-friendly packaging shows that consumers are highly aware which they are active in information seeking. Many consumers are familiar with environmental regulations and seek information on sustainable packaging.
- Consumers exhibit a highly positive attitude toward eco-friendly packaging. The general sentiment toward sustainable packaging is favourable.
- Consumers strongly believe that eco-friendly packaging positively contributes to the environment. There is widespread belief that eco-friendly packaging reduces pollution and supports sustainability.
- Influencing factors related to the use of eco-friendly packaging show that consumers have a supportive response towards factors such as accessibility, product availability, and social influence, as they are positively perceived.
- Lowest awareness is seen in verifying the true sustainability of eco-friendly packaging. While consumers are aware of the concept, they are less confident about the authenticity of eco-friendly claims in packaging.
- There was a strong positive correlation between awareness and attitude ($B = 0.697$). Higher awareness is closely linked to a more positive attitude toward adopting eco-friendly packaging. When awareness increases, it reflects consumer attitudes.

Suggestions

To improve the use of eco-friendly packaging, we should promote clear eco-labelling and certifications supported by the government. This will help to build trust in sustainability claims. Investing in affordable, innovative packaging materials and taking responsibility for the supply chain can create significant changes. Open communication is essential for preventing green washing and boosting consumer confidence. Awareness campaigns should teach consumers about sustainability using social media and online platforms to reach more people. Offering incentives such as discounts or rewards can encourage eco-friendly choices, particularly among students. Expanding outreach to older demographics and collaborating with educational institutions will help ensure that low-income consumers can afford these options. Government grants for sustainable packaging projects and follow-up studies with diverse groups are recommended to guide future efforts.

Limitations of the Study

- The concept of eco-friendliness has diversified in marketing direction; therefore, concentrating only on their packages may not reflect the outcome in the real sense.
- Another limitation is that the Kohima district is a large area with different sub-divisions and population diversity; therefore, focusing only on Kohima Town and opinions from that particular area may not resemble the opinions of other places.
- There is always a contradiction regarding the term perception and adaptation; therefore, the opinion derived through the study may contradict another researcher.
- Owing to time constraints, specific relevant information cannot be considered.

Conclusions

Environmental issues remain a serious concern in society. Changes are difficult without collective effort. One area that society cannot ignore when striving for environmental improvement is packaging. This study, focused on the “Perception and Adaptation of Eco-Friendly Packaging among consumers of Nagaland”, particularly in Kohima Town, has shown clear evidence of how consumers are incorporating eco-friendly packaging into their daily lives. There is generally a positive response among consumers, especially among younger and more educated individuals. They expressed concerns about environmental issues and demonstrated their knowledge about green packaging.

Although awareness and attitude show a strong positive link, meaning greater knowledge leads to more positive behaviour, several barriers limit adoption. These barriers include high costs, lack of availability, and doubts regarding sustainability claims. Many people are aware of eco-friendly practices, but they still lack a deeper understanding of sustainable packaging. Demographic factors such as age, education, and income greatly influence consumer behaviour. Low-income individuals often face challenges related to affordability and accessibility.

Other factors such as peer influence, government policy, and product availability also play a role in consumer adaptation. To convert awareness into action, coordinated steps are required. This includes clear eco-labelling, accessible and affordable options, educational outreach, and incentive programs. Although this research is based on 120 respondents in Kohima Town, using both primary and secondary data, it offers valuable insights for developing focused interventions. These findings can assist policymakers, businesses, and environmental advocates in promoting sustainable packaging practices. Future research should examine how social influence, cultural norms, and long-term behavioural changes encourage the adoption of eco-friendly packaging.

Bibliography

Journals

- Ketelsen, M., Janssen, M., and Hamm, U. “Consumers’ Response to Environmentally-Friendly Food Packaging – A Systematic Review.” *Journal of Cleaner Production*, vol. 254, 2020, p. 120123.
- Moshood, T.D., et al. “Sustainability of Biodegradable Plastics: New Problem or Solution to Solve the Global Plastic Pollution?” *Current Research in Green and Sustainable Chemistry*, vol. 5, 2022, p. 100273.
- Khandeparkar, A. S., et al. “Eco-Friendly Innovations in Food Packaging: A Sustainable Revolution.” *Sustainable Chemistry and Pharmacy*, vol. 39, 2024, p. 101579.
- Dhileepan, D., and Lakshmidivi, S. “A Study in Understanding the Consumer Perception Factors Towards Sustainable Packaging in Food Industry.” *Journal of Dynamics and Control*, vol. 8, no. 9, 2024, pp. 217–234.
- Wandosell, Gonzalo, et al. “Green Packaging from Consumer and Business Perspectives.” *Sustainability*, vol. 13, no. 3, 2021.
- AsiaPack. “Eco Friendly Packaging: A Sustainable Solution for a Greener Future.” AsiaPack, 8 Nov. 2024
- Suresh, K. *Green Marketing: Concepts and Cases*. First ed., The ICAFI University Press, 2006.

Books

- Peattie, Ken, and Martin Charter. *Green Marketing: Meeting the Green Challenge*. Business Enterprises, 2003.
- Esty, Daniel C., and Andrew S. Winston. *Green to Gold: How Smart Companies Use Environmental Strategy to Innovate, Create Value, and Build Competitive Advantage*. 2nd ed., John Wiley & Sons, 2009.
- Johnson Wax and Roper Organization. *The Environment: Public Attitudes and Individual Behaviour*. The Roper Organization, Inc., 2011.

Websites

- <https://www.sourceful.com/blog/sustainable-packaging-materials>
- <https://www.kreo.net/news-2d-takeoff/guide-to-sustainable-building-materials-and->

costs#:~:text=Home%20builders%20and%20corporations%20increasingly%20use%20recycled,beverage%20containers%2C%20detergent%20bottles%2C%20and%20packaging%20materials

<https://betsy.com/2024/02/01/types-of-perception/>
<https://www.vedantu.com/biology/sensory-perception>

References

- Aruna, S. "A Study on Consumer Awareness and Buying Behaviour towards the Green Products in Chennai City." 2019.
- Bhardwaj, M., A. Mishra, K. M. Rivera, and Julianthry. "Consumers Perception towards Eco-Friendly Products: A Quantitative Study." *Journal of Informatics Education and Research*, vol. 3, no. 2, 2023, pp. 119-23.
- Bhatia, M., and A. Jain. "Green Marketing: A Study of Consumer Perception and Preferences in India." *Electronic Green Journal*, no. 36, 2013.
- Cherian, J., and J. Jacob. "Green Marketing: A Study of Consumers Attitude towards Environment Friendly Products." *Asian Social Science*, vol. 8, no. 12, 2012, pp. 117-26.
- Deepak, J. *An Empirical Study of Green Consumer Behaviour*. Central University of Himachal Pradesh, 2018.
- Katait, S. K. "Green Marketing and Consumer Behaviour: A Case Study of Consumer Durable Products." *International Journal of Commerce and Management Research*, vol. 2, no. 12, 2016, pp. 129-31.
- Kaur, S. "Sustaining Environment with Green Initiative: A Conceptual Study of Green Marketing Practices in India." *Asian Journal of Management*, vol. 8, no. 3, 2017, pp. 761-68. doi:10.5958/2321-5763.2017.00120.2.
- Malhotra, R., V. Garg, P. Aggarwal, A. Aggarwal, O. Bansal, and B. Tusnial. "Consumer Perception and Buying Behaviour Regarding Eco-Friendly Products." *Journal of Business Management and Information Systems*, vol. 11, no. 1, 2024, pp. 54-65.
- Mohanty, V., and Sasmita Nayak. "Green Marketing: Its Application, Scope and Future in India." *Indian Journal of Scientific Research*, vol. 15, no. 2, 2017, pp. 111-15.
- Prakash, C., K. S. Reddy, N. S. Reddy, and A. S. Reddy. "A Study on Consumer's Perception, Preferences and a Myth towards Eco-Friendly Products and Marketing with Reference to South India." *Academy of Marketing Studies Journal*, vol. 27, no. 6, 2023, pp. 1-13.
- Pravin, P. "Consumer Perception towards Green Products: Implications for Sustainable Marketing Strategies." *Educational Administration Theory and Practice*, vol. 30, no. 6, 2024, pp. 85-90.
- Reddy, K. P., V. Chandu, S. Srilakshmi, E. Thegaram, C. Sahyaja, and B. Osei. "Consumer's Perception on Green Marketing towards Eco-Friendly Fast Moving Consumer Goods." *International Journal of Engineering Business Management*, vol. 15, 2023, pp. 1-14.
- Rupinderkaur. "Green Marketing and Its Impact on Consumer Buying Behaviour." *International Journal of Science Technology and Management*, 2016.
- Sharma, V., J. Sonwalkar, and M. Kapse. "Consumer Purchase Behaviour for Green Products." *International Journal of Economics and Business Administration*, vol. 1, no. 4, 2013, pp. 50-65.
- Singal, R., A. Garg, and S. Singla. "Green Marketing: Challenges and Opportunities." *International Journal of Innovations in Engineering and Technology (IJJET)*, vol. 2, no. 1, 2013, pp. 470-74.

Author Details

Nounenuo Tapa, M.Com Student, Assam Don Bosco University, Assam, India, **Email ID:** nounenuot@gmail.com.

Kili, M.Com Student, Assam Don Bosco University, Assam, India, **Email ID:** kiliboachumi8@gmail.com.

Harjyoti Kalita, Assistant Professor, Assam Don Bosco University, Assam, India, **Email ID:** harjyoti.kalita@dbuniversity.ac.in.