



A Study of Green Marketing Awareness and Attitudes in Nagaland, India

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Abstract: *Global environmental awareness has increased, leading to the rise of green marketing as a strategy for profit and environmental protection. Eco-conscious consumers, also known as green consumers, prefer sustainable goods and services. Media and social movements play a critical role in raising consumer awareness about the environmental impacts of unchecked consumerism. Green marketing has become a go-to strategy among marketers to adapt to societal changes. This study examines the impact of green marketing on customers' perceptions and purchasing behaviour in Nagaland. The research employed a structured questionnaire based on the Theory of Planned Behaviour (TPB) to gather primary data. Confirmatory Factor Analysis (CFA) then analysed the five factors that shape customers' attitudes towards green marketing and eco-friendly products: environmental concern, perception of green products, advertising, pricing, and convenience and availability. The findings reveal that customers have a positive attitude toward green eco-friendly products.*

Key Words: *Green Marketing, Theory of Planned Behaviour, Confirmatory Factor Analysis.*

1. INTRODUCTION:

As global warming and climate change intensify, societal concern for the environment grows, prompting discussions on environmental issues in various forums around the world. Historically, the relentless pursuit of economic growth often overlooked environmental considerations, disregarding their preservation and conservation. Scientific and technological advancements made it easier to maximize the use of natural resources, which led to a gradual depletion of the environment and its resources. In recent decades, numerous environmental challenges have arisen, including climate change and global warming, ozone depletion, pollution, non-biodegradable waste, and widespread mass destruction of biodiversity. These challenges have garnered global attention as public interest in environmental protection increases, prompting discussions on sustainable and equitable approaches to production, consumption, and coexistence. The American Marketing Association (AMA) conducted the first workshop on ecological marketing in 1975 to address marketing's impact on the environment. This workshop's proceedings produced one of the first books on green marketing, "Ecological Marketing." Governments and major corporations have progressively embraced sustainability as their goal. For sustainable development, it is essential to ensure that fulfilling current requirements does not jeopardise the capacity of future generations to meet their own needs (Brundtland et al., 1987).

Green marketing is a new paradigm shift in societal marketing, and it incorporates all the efforts to produce, package, promote, distribute, consume, and reclaim products in a manner that is responsive to environmental concerns (Polonsky, 1994). The design of these products aims to reduce negative environmental effects without sacrificing their core benefits. Worldwide evidence indicates that people are anxious about the environment and are changing their behaviour accordingly as they have realized that their behaviour has a direct impact on nature (Enkvist & Vanthournout, 2008). The rise of public interest in the environment led to a demand for green products and services, and many companies have started to adopt green marketing practices as part of their social responsibility (Prakash, 2002). Today's consumers are aware of the importance of environmentally friendly products and have started shifting from traditional products to green products. Most consumers are aware of the green products and have a positive attitude towards eco-friendly products (Cherian & Jacob, 2012). Many consumers favour green products as they do less damage to the environment, even if they cost marginally more than conventional products. According to Datta (2011), green consumers



are those who buy eco-friendly products because they care about ecological issues. Pressure from various sources, such as government regulations, media attention, and demand from consumers and stakeholders, has led to the emergence of the green and sustainable trend. Despite being in its infancy for many organizations, these factors propel the practice of green marketing, which leverages the environmental advantages of products or services to boost sales, as many firms are gradually accepting and adopting it (Manjunath & Manjunath, 2013). Moreover, many companies are striving to create a competitive advantage by being environmentally responsible, and they are making significant efforts to address environmental concerns (Arseculeratne & Yazdanifard, 2014). Green marketing started in India during the late 1990s and early 2000s, and it is still in its early stage compared to developed countries, where eco-friendliness is becoming a major consumer preference.

2. LITERATURE REVIEW:

McDaniel and Rylander (1993) coined the term "green marketing" to describe marketers' efforts to develop strategies that target eco-friendly consumers. The American Marketing Association (AMA) defines green marketing as the promotion of products and services that prioritize environmental safety. It refers to an organization's effort to design, promote, price, and distribute products that don't have an ill impact on the environment (Pride & Ferrel, 1993). Green marketing, also known as ecological marketing, environmental marketing, and sustainable marketing, evolved in three phases: ecological green marketing, environmental green marketing, and sustainable green marketing (Peattie, 2001). Ecological green marketing, the first phase, centred all marketing efforts on offering solutions and remedies for environmental problems. The second phase was known as environmental green marketing, which focused on clean technology and involved designing innovative products that are energy efficient and less polluting. The present phase is known as sustainable green marketing, where satisfying the requirements of consumers and society happens in a sustainable and profitable way. Therefore, green marketing encompasses all activities designed to generate and facilitate exchanges that meet human needs while minimizing the impact on the environment (Coddington, 1993). Polonsky (1994) claims that green marketing encompasses a wide range of activities, like product modification, an amendment to the production process, packaging changes, as well as modifying advertising messages. According to Kheiry and Nakhaei (2012), product labels and advertisements are the primary source of awareness about green products. Thus, green marketing is a holistic concept that involves the manufacturing, marketing, consumption, and disposal of goods and services in a manner that minimizes environmental damage, and it forms an integral part of corporate strategy (Menon & Menon, 1997).

Green or eco-friendly products are those that incorporate the strategies of recycling, reusing, reducing waste, and disposable packaging (Mishra & Sharma, 2014). The majority of people believe that green marketing focuses solely on advertising and promoting products with environmental characteristics such as being recyclable, reusable, biodegradable, energy efficient, ozone-friendly, etc. But in reality, it is a very broad concept that encompasses all the marketing activities that the firms undertake to create a positive impact and lessen the detrimental impact of their product or service on the environment (Polonsky, 1994). According to Jain and Kaur (2006), green marketing encompasses various activities, such as conducting market research to identify the market and target segment for the green product, analysing consumer awareness, attitude, and behaviour towards these products, positioning the product, creating a brand image, and developing a green marketing mix.

Green consumers are those who avoid purchasing products or services that could jeopardize their or others' health, cause substantial environmental harm during production, usage, or disposal, or consume a disproportionate amount of energy (Elkington, 1994). Jain and Kaur (2004) view green marketing as both a marketing activity and a marketing philosophy. Making a fuel-efficient car, energy-efficient light bulbs, etc. are few examples of marketing activity, whereas save oil program, conserving natural habitat, etc. are some of the examples of marketing philosophy. Some of the challenges in the implementation of green marketing are that its products require renewable and recyclable materials, which are often costly and (Mishra & Sharma, 2014). Moreover, as it relies on technology, huge investment in R&D is required, and many consumers might not be willing to pay a significant premium price for green products.

2.1 Research Objectives

This study seeks to assess consumer behaviour towards eco-friendly products promoted through sustainable practices by examining consumer perceptions of green marketing in Nagaland. There is a noticeable lack of empirical studies utilizing Confirmatory Factor Analysis (CFA) to assess customer attitudes in this particular region of India. The objective of this study is to identify the various elements that influence the attitudes of consumers who prioritize environmentally friendly products and practices.



3. RESEARCH METHODOLOGY:

The focus of this study is on examining the awareness and behaviour of consumers in Nagaland regarding green products. The mountainous North Eastern state of Nagaland, bordering Myanmar, covers an area of 16,579 square kilometres, and its population consists of several tribes, each having their own distinct languages and cultures, with agriculture being the predominant source of livelihood for most of its population. The study gathered primary data from 566 respondents in Kohima, the state's capital, as well as Dimapur, the state's commercial hub. The study utilized a quantitative research approach, with a standardized questionnaire serving as the major data collection tool. Ajzen's (1991) Theory of Planned Behaviour (TPB) provided the theoretical framework for the development of the survey questionnaire, which included questions about customer awareness, knowledge, perceived benefits, perceived barriers, and purchasing intentions for environmentally friendly items. TPB posits that attitudes, perceptions of related social norms, and perceived behavioural control influence individuals' decisions to engage in a particular behaviour. "Concern for the environment," "perception of green products," "advertising," and "convenience and availability" are believed to have an impact on individuals' attitudes, subjective norms, and perceived control when it comes to purchasing eco-friendly products. Environmental concerns can potentially influence individuals' purchasing intentions regarding eco-friendly products. On the other hand, advertising and green marketing have a notable impact on individuals' perceptions of the societal norms associated with product use. Pricing, ease, and accessibility have the potential to influence individuals' perceived level of control when making purchasing decisions about environmentally friendly products.

The first step in the data analysis process entails assessing the reliability of the data used in the study. Using the Statistical Package for the Social Sciences (SPSS) software, the Cronbach's alpha coefficient was found to be 0.842. Nunnally (1978) suggested that a reliability coefficient of 0.7 is suitable, indicating that the data gathered for this study is highly reliable.

4. RESULTS:

4.1 Demographic Profile

Table 1 presents the demographic profile of the respondents, showcasing that the sample that was chosen for the study exhibits heterogeneity, as special attention was given to ensuring that it accurately represents the population.

Table 1: Demographics Profile of Respondents

Variables	Frequency	Percentage
Gender		
Male	250	44.17
Female	316	55.83
Age Group (in years)		
Below 18	61	10.78
18 – 30	335	59.19
31 – 50	158	27.92
Above 50	12	2.12
Marital Status		
Married	183	32.33
Single	383	67.67
Education		
Undergraduate	95	16.78
Graduate	190	33.57
Postgraduate	264	46.64
Doctoral Degree	17	3.00
Occupation		
Public sector employee	73	12.90
Private sector employee	140	24.73
Businessman	57	10.07
Housewife	45	7.95
Students	178	31.45
Others	73	12.90
Household Income (Monthly)		
Below INR 30,000	221	39.05
INR 30,000 - INR 60,000	260	45.94
Above INR 60,000	85	15.02

Source: Primary Data



4.2 Measurement of Consumer Attitudes Toward Green Marketing Products

The measurement scale used in this study comprised of 37 statements on a five-point scale that evaluated the overall level of consumer attitude towards green marketing products. The maximum possible achievable score was 185, whereas the minimum score was 37. This score represents a comprehensive measure of consumers' attitudes. A higher score indicates a favourable attitude, while a low score indicates an unfavourable attitude, and the overall consumer attitude level calculated can be interpreted as follows:

Table 2: Interpretation of Overall Score of Consumer Attitude

Interpretation of Scale Value	Highly unfavourable attitude	Unfavourable attitude	Moderately favourable attitude	Favourable attitude	Highly favourable attitude
Scale Value for Overall Score	37–66.6	66.6–96.2	96.2–125.8	125.8–155.4	155.4–185

Source: Primary Data

The study found that the mean value of the consumer attitude score is 140.96, placing it in the favourable category. Therefore, we can infer that consumers demonstrate a favourable attitude and a preference for green marketing strategies and environmentally friendly products.

4.3 Confirmatory Factor Analysis

The social sciences use Confirmatory Factor Analysis (CFA) as a statistical technique to validate the final structure of components or factors. The CFA confirms the final model to test whether there is a relationship between the number of observed variables and latent constructs. This statistical technique focuses on the commonalities present in the data and helps to diminish the observed variables into latent constructs and is referred to as a measurement model. This measurement model illustrates the relationship between the variables and constructs through covariances. To perform CFA, it is essential to verify the reliability and validity of the resulting reduction and to confirm that the sample size is adequate. The study utilized the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity as statistical instruments (Chawla & Sondhi, 2011). The KMO statistic value obtained was 0.770, which exceeds the threshold of 0.5, thereby indicating an acceptable level of sampling adequacy. The p-value derived from Bartlett's Test was 0.000, which is below the predetermined significance level of 0.05, suggesting that the data exhibited significant intercorrelations. It can be concluded that the sample data utilized in the study was suitable for conducting CFA.

This research categorized 37 statements into five primary components and utilized the Theory of Planned Behaviour to analyse the relationships among these assertions. To investigate the influence of green marketing and eco-friendly products on consumer behaviour in Nagaland, CFA was conducted using the following components: concern for the environment, perception of green products, advertising, pricing and convenience & availability.

4.4 The Measurement Model

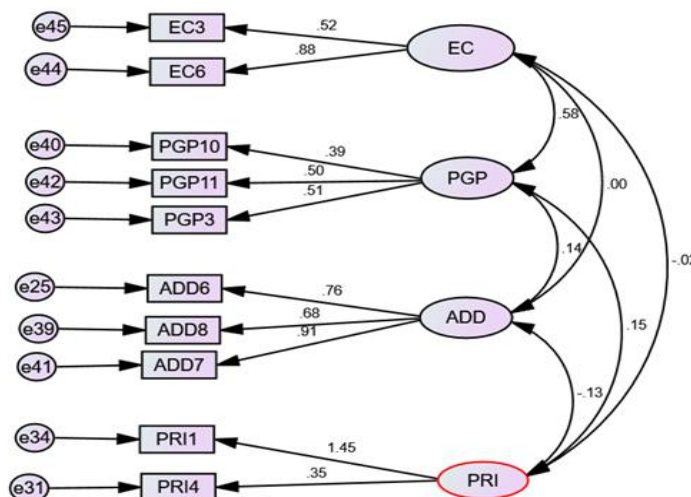


Figure 1: The Measurement Model



The above constructs and their respective latent variables explain the factors influencing consumer behaviour towards green marketing products. We have dropped "convenience & availability" from the five constructs due to poor factor loadings in CFA. Figure 1 illustrates how the conformed latent variable explains "concern for the environment (EC)," "perception of green products (PGP)," "advertising (ADD)," and "pricing (PRI)." The statements "environmental activities undertaken by me today will help save the environment for future generations (EC3)" and "I think my participation in environmental protection would influence my family and friends to participate too (EC6)" illustrate the concern for the environment. The following statements explain the perception of green products: "I search for and purchase products made from or packaged in recycled material (PGP10)," "I have a positive attitude towards green products and prefer brands associated with green marketing (PGP11)," and "the quality of most eco-friendly products meets my expectations (PGP13)." The following statements elucidate the perception of advertising: "eco-labels provide sufficient information (ADD6)," "information on eco-labels is accurate (ADD7)," and "green product advertising claims are trustworthy (ADD8)." And lastly, the statements "most of the eco-friendly products I buy are overpriced (PR1)" and "companies use green advertising to charge higher prices (PR4)" explain the perception of pricing as perceived behaviour control.

4.5 Fitness of Model

The CFA estimations explain the fit of the measurement model. The obtained p-value, critical value of CMIN/DF, goodness of fit index, adjusted goodness of fit index, normed fit index, comparative fit index, root mean square error of approximation, and P-Close justifies the model fitness in Amos. Table 3 displays the values of the above parameters, which substantiates the study's measurement model's robustness.

Table 3: Model Fitness

<i>Measure</i>	<i>Estimate</i>	<i>Threshold</i>	<i>Interpretation</i>
CMIN	85.908	--	--
DF	29	--	--
CMIN/DF	2.962	Between 1 and 3	Excellent
CFI	0.952	>0.95	Excellent
SRMR	0.047	<0.08	Excellent
RMSEA	0.059	<0.06	Excellent
P-Close	0.143	>0.05	Excellent

Source: Primary Data

The Table 3 shows that the chi-square value falls within the threshold limit of 2.962, emphasising the measurement model's fitness. The measures indicating model fitness are excellent in relation to the threshold values as shown in the table above. Therefore, it can be inferred that the developed measurement model effectively explains the factors affecting consumer behaviour regarding green marketing products in Nagaland.

4.6 Results of the Hypothesis for CFA

H₁: *A positive correlation exists between environmental concern and my participation in environmental protection, which would likely encourage my family and friends to participate as well.*

Result: The findings indicate that the data support the hypothesis, indicating a positive correlation between environmental concern and the belief that individual participation in environmental protection can influence family and friends to engage similarly.

H₂: *A positive correlation exists between environmental concern and environmental activities undertaken today will help save the environment for future generations.*

Result: The findings indicate that the data support the hypothesis, indicating a positive correlation between environmental concern and the belief that current environmental efforts will benefit future generations.

H₃: *A positive correlation exists between the perception of green products and the importance of using environmentally friendly products.*

Result: The findings indicate that the data supports the hypothesis, indicating a positive correlation between the perception of green products and the significance of using environmentally benign products.

H₄: *A positive correlation exists between the perception of green products and the tendency to seek and buy products made from or packaged in recycled material.*



Result: The findings indicate that the data supports the hypothesis, indicating a positive correlation between the perception of green products and the behaviour of seeking and purchasing products made from or packaged in recycled materials.

H₅: A positive correlation exists between the perception of green products and having favourable attitude and preference for brands associated with green marketing.

Result: The findings indicate that the data supports the hypothesis, indicating a positive correlation between the perception of green products and having a favourable attitudes and preferences towards brands that engage in green marketing.

H₆: A positive correlation exists between advertising and the availability of adequate information on eco-labels.

Result: The findings indicate that the data supports the hypothesis, indicating a positive correlation between advertising and the perception of adequate information being conveyed on eco-labels.

H₇: A positive correlation exists between advertising and information on eco-labels are accurate.

Result: The findings indicate that the data supports the hypothesis, indicating a positive relationship correlation between advertising and the belief that information on eco-labels is accurate.

H₈: A positive correlation exists between advertising and the advertising claims that green products are trustworthy.

Result: The findings indicate that the data supports the hypothesis, indicating a positive correlation between advertising and the perception of trustworthiness in claims made for green products.

H₉: A positive correlation exists between pricing and the usage of green advertising by companies to justify higher prices.

Result: The findings indicate that the data supports the hypothesis, indicating a positive correlation between pricing and the perception that companies utilise green advertising to justify higher prices.

H₁₀: A positive correlation exists between pricing and the perception that the eco-friendly products are overpriced.

Result: The findings indicate that the data supports the hypothesis, indicating a positive correlation between pricing and the perception of eco-friendly products as being overpriced.

5. DISCUSSIONS AND CONCLUSIONS:

5.1 Findings of The Study

Environmental protection from further deterioration has been a primary priority for governments around the world, including India. However, environmental conservation is possible with the active participation of the general public, and this study describes the current state of public opinion towards ecologically friendly green products in Nagaland. Consumers in Nagaland have positive feelings about products promoted through green marketing. The study quantitatively assesses consumer perceptions regarding eco-friendly green products. The populace of Nagaland exhibits a favourable attitude towards eco-friendly products, signalling a constructive opportunity for the nation's policymakers to develop effective and practical environmental protection regulations. They have a strong belief that by being environmentally responsible, they can preserve it for future generations and influence their peer groups to do the same. They know the importance of environmentally friendly products and actively buy such products and have a favourable attitude towards the brands associated with green marketing. They trust the green claims advertised and believe the information provided in eco-labels. They believe that green products are overpriced, and companies justify the higher cost through green advertising.

Given our reliance on the biosphere for sustaining life, the implementation of green marketing is essential for environmental protection. This should not be viewed merely as another marketing strategy; rather, it must be approached with significant enthusiasm due to its environmental and social implications. Given the looming threats of climate change and global warming, it is crucial that green marketing transitions from being an exception to a standard practice across all industries. It is essential for marketers to ensure that consumers grasp the importance and advantages of eco-friendly products. To achieve a positive shift in restoring ecological balance, it is essential for all stakeholders, including government, business organisations, and consumers, to collaborate and advocate for green consumerism.

5.2 Limitations and Scope for Further Research

The study was conducted to empirically examine the factors identified by the Theory of Planned Behaviour that influence consumer behaviour regarding green marketing and eco-friendly products in Nagaland. It is possible to expand the study's geographical scope to include additional districts and rural areas of the state beyond Kohima and Dimapur. Furthermore, conducting comparative cross-sectional and longitudinal studies can enhance our understanding of consumer attitudes towards environmentally friendly green products. Because this study uses a non-probabilistic



convenience sampling strategy, it is not possible to completely eliminate errors in the estimation of various statistical results. Various other sampling techniques can be employed to conduct similar studies.

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