

GREEN MARKETING AND SUSTAINABLE DEVELOPMENT IN ANDHRA PRADESH: AN EMPIRICAL INVESTIGATION

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ABSTRACT

*We are all affected by human actions that have an impact on the environment we all live in. Human life is influenced by environmental activities as well. Environmental degradation, such as air pollution and deforestation, as well as climate change, are all the outcome of human activity. Business has displayed a concern for security and the environment as part of its social obligation. Civilization is becoming increasingly worried about these issues as well. Companies of the future now need to focus on "Green Marketing" and "Environment marketing" if they are to remain competitive. There are numerous buzzwords in today's business world, such as go green, environmentally friendly, safeguarding the environment, and saving energy. Keeping our natural environment secure has become increasingly crucial and difficult in today's globalised world. For industries, Green Marketing has proven to be a conceptual and long-term instrument for balancing their economic activities with a mindset of environmental conservation. Natural environmentalism is an absolute must for any company. Furthermore, several businesses have employed Green Marketing methods to their advantage over their competitors by providing distinctive products made from recycled, renewable, and reused materials to their clients. Specifically in India, the purpose of this study is to discover how green marketing methods have grown into sustainable business development. You'll learn about how businesses are embracing green tactics to get a competitive edge over their rivals. The report examines the potential and challenges firms have when using green marketing in India. The study's main goal is to assess current design's emergence of tribal art trends. The study is based on quantitative and qualitative techniques for collecting primary data through surveys and interviews. For quantitative data, survey is carried out among 100 respondents from A.P. and they were selected based on **Yamane (1967) sampling technique and Convenient Sampling Technique**. In-depth interviews were also conducted over the telephone call interview to find out what are the issues and challenges and other financial support from the government etc. The whole data was utilized for a well-structured survey/questionnaire. **The examiner has applied well known statistical method in this study is i.e., Chi-Square Test**. After the chi-square test analysis, it is found that there is a significant green marketing can be as sustainable development in AP.**at 5% level of significance. In this study we examined that there are significant different green marketing strategies implemented by businesses. In this investigation it is observed that there are challenge and opportunities posed by green marketing. Finally, it is concluded that there is a lot of scope and increase the economic development of the nation by implementing the green marketing strategies.***

Keywords: Competitive Advantage, Green Marketing, Green Strategies, opportunities and Challenges, sustainable development.

INTRODUCTION

According to experts, the globe is on the verge of an environmental catastrophe. Going green is the only way to save our planet, and it needs to be done as soon as possible. The economics have therefore also played a role. People all throughout the world are becoming more environmentally conscious. According to recent studies, people all across the world are becoming more ecologically aware. In response to the increased demand for environmentally and socially responsible products and services, the field of green marketing has emerged. Using environmentally friendly methods of promotion Both the general public and specialised groups are divided on the value of green marketing to varied degrees. Ecological preservation is central to the mission statement of green marketing. With the advent of modern marketing, however, came a plethora of issues. As a result of increasing marketing efforts, a more competitive market emerged. The upshot of this greater rivalry was the employment of destructive marketing practises and techniques, such as over-the-top advertising, liberalisation, and globalisation, as well as the formation of multinational companies (MNCs). The consequences of these changes were numerous. Shops and shopping malls are bursting at the seams with both essential and frivolous items. These and other factors have put human well-being and ecological balance at jeopardy. Large factories, in particular, are increasingly becoming a source of pollution in multiple ways. Production, use, and disposal of several items have negative environmental consequences.

NEED AND IMPORTANCE OF THE STUDY

This research is critical to India's environmental progress. The adjective 'green' denotes cleanliness. Green denotes excellence that is unadulterated, as well as fairness or justice in business dealings. Green advertising, on the other hand, refers to advertising that has no negative impact on society. The colour green denotes a message that is composed of mature and balanced facts that are free of exaggeration or misunderstanding. Plastic and plastic-based product usage is reduced as a result of green marketing. As a result of eco-friendly marketing, more natural items are purchased, and fewer chemicals are used. The demand for herbal medications, natural therapy, and Yoga would surely increase as a result of this. Consumer and industrial products can be reused if they are properly labelled. As a result, the environment benefits.

REVIEW OF LITERATURE

The term "green marketing" encompasses a lot more than just a company's promotional claims. While corporations are largely to blame for environmental degradation, consumers eventually desire things and so contribute to environmental concerns. McDonald's, for example, is frequently cited as a polluter of the environment since so much of its packaging ends up by the side of the road. It's important to keep in mind that irresponsible garbage disposal is the fault of the consumer. Consumers must want a cleaner environment, and they must be prepared to "pay" for it, whether through increased prices, altered personal habits, or even governmental action, for green marketing to succeed.

Jain and Kaur (2006), It's clear from the research that not all customers are enthusiastic about environmental conservation or even particularly affected by "green" marketing. They do, however, represent a market segment that can be very beneficial for businesses engaged in the manufacturing and disposal of environmentally friendly items.

Mishra (2010), Green marketing has grown in importance in today's market, especially in the United States. As a result of this idea, it is now possible to rebrand and package products that already meet certain standards. With the rise of green marketing, businesses may now co-brand

their products into distinct lines, praising some for being environmentally friendly while disregarding others.

Manju (2012), Product and service development, distribution, consumption, and disposal are all done in ways to have the least amount of negative influence on the environment as possible as part of a holistic marketing concept known as Green Marketing. We need to rethink green marketing for three reasons. These eco-friendly products have a short afterlife that is not necessarily kind to the environment. (2) The environmental impact of the items, and (3) the most difficult question of all is whether or not they are truly green.

Kantapop buathong, pei,-chun lai (2019), They discovered that while the public and private sectors in Thailand are working together to promote sustainability in the event business, environmental education and course curricula are still critical.

OBJECTIVES OF THE STUDY

The main objective of the study is to analyze the highlights on evaluating the **Green Marketing and Sustainable Development in A.P.** Product and service development, distribution, consumption, and disposal are all done in ways to have the least amount of negative influence on the environment as possible as part of a holistic marketing concept known as Green Marketing.

The specific objectives of the study are:

- Analyze the ways in which green marketing might contribute to long-term economic growth in Andhra Pradesh.
- Investigate business's use of various green marketing methods.
- To assess green marketing's difficulties and potential.

HYPOTHESES OF THE STUDY

The following research hypotheses are formulated in light of the study's goals:

- (i) **H₀**: There is no green marketing can be as sustainable development in A.P.
- (ii) **H₀**: There are no different green marketing strategies implemented by businesses
- (iii) **H₀**: There are no challenges, opportunities posed by green marketing.

RESEARCH METHODOLOGY

A descriptive and qualitative research approach is used in this project. The data is gathered from both primary and secondary sources. 100 people completed questionnaires as part of the research to gather primary data. In addition, secondary sources of information are consulted, such as peer-reviewed journals, published newspapers, and journals both online and in print. The information is gathered from several sources, including libraries and internet.

Sample Deign & Sample Selection

Yamane's sampling and convenient Sampling technique procedure was used to choose 100 people from Anathapoor, and Kurnool District as the sample size. The sampling technique developed by Yamane was expanded upon to ensure that every member of the population had an equal chance of being selected for study.

Sample Selection

As per census survey of 2011 the entire residents (population) of the study in A.P. are **8,45,80,777 (census survey 2011)**. Out of them, the researcher drew a sample size of 400 by using **Yamane's formula (Yamane, 1967)** 5 percent of the time is precise enough. But researcher applied convenient sampling technique when studying a big population, it is impossible to research everyone in that population at once. Finally, I finalised the sample size is 100 (400x25%) foe my convenient during the covid 19 pandemic. In this example, a population of **8,45,80,777** people is a huge population, hence working with samples is required. The Yamane's formula was used to come up with a scientific sample size for this type of study. Using a simple formula, Yamane (1967) calculated the sample sizes.

Formula:

$$n = N / 1 + N(e)^2$$

Where,

n = Sample size, N = Estimated population size in Hyderabad e = Precision value, set as 15% (0.15)

$$N = 8,45,80,777$$

Therefore,

$$n = 8,45,80,777 / 1 + 8,45,80,777 (0.05)^2$$

$$n = 8,45,80,777 / 8,45,80,778 (0.05)^2$$

$$n = 8,45,80,777 / 8,45,80,778 (0.0025)^2$$

$$n = 8,45,80,777 / 8,45,80,778 (0.0025)$$

$$n = 8,45,80,777 / 211451.945$$

n= 399.99 (approximant) “Yamane (1967) developed an easy formula to determine the sample sizes”.

Yamane (1967) made the process of calculating sample sizes simple by developing a formula. Thereafter, the researcher has picked 50 respondents from each district, i.e. Anathapoor, and Kurnool District, so that the study's sample size is 100.

Chi-Square (X²) test

The chi-square test is one of many statistical tests that must be performed. It is a non-parametric statistical test that is both easy and commonly used. In the context of sampling analysis, it is a statistical measure used to I examine the degree to which two attributes are associated and (ii) examine the degree of homogeneity or the significance of population variation.

$$\text{Chi-Square} = (O - E)^2 / E$$

Reject: $X^2 > \text{Table value}$ & Accept: $X^2 \leq \text{Table value}$ Where, O = observed values and E = expected values. Critical values of Chi-Square are derived from the table of Chi-Square distribution by using an approximation of the Chi-Square distribution. **(Source: Sathyanarayana Gardasu, 2019).**

Green Marketing

This is a term coined by the American Marketing Association (AMA) to describe marketing of environmentally friendly products. There are numerous actions that are included in green marketing, such as changing the way products are made or how they are packaged. Definition of Green Marketing, on the other hand, is a difficult undertaking due to the fact that various definitions overlap. Existence of various social, environmental, and retail definitions is an illustration of this. In other words, "Green Marketing" refers to a marketing strategy that encompasses all aspects of the marketing process while minimising the impact on the environment.

Polonsky (1994) According to this definition, green marketing includes any activities that aim to meet human needs and wants while having the least amount of negative influence on the environment.

Sustainable Development

In environmental conservation circles, the term "sustainable development" is all the rage. In 1987, the Brundtland report, which had enormous sway, gave it its most popular exposition "World Commission on Environment and Development, 1987 as quoted by Pearce et al., 1994". It's only been in the last few years that sustainable development has drawn the attention of a large number of academics and practitioners alike, as indicated by the list of twenty-four alternative definitions provided by Pearce et al. As a result, there isn't a single definition of sustainable development that everyone agrees with. There is a constraint here, thus the World Commission on Environment and Development (1987) defines sustainable development as "development that satisfies the requirements of the present without compromising the ability of future generations to meet their own needs" in order to overcome it.

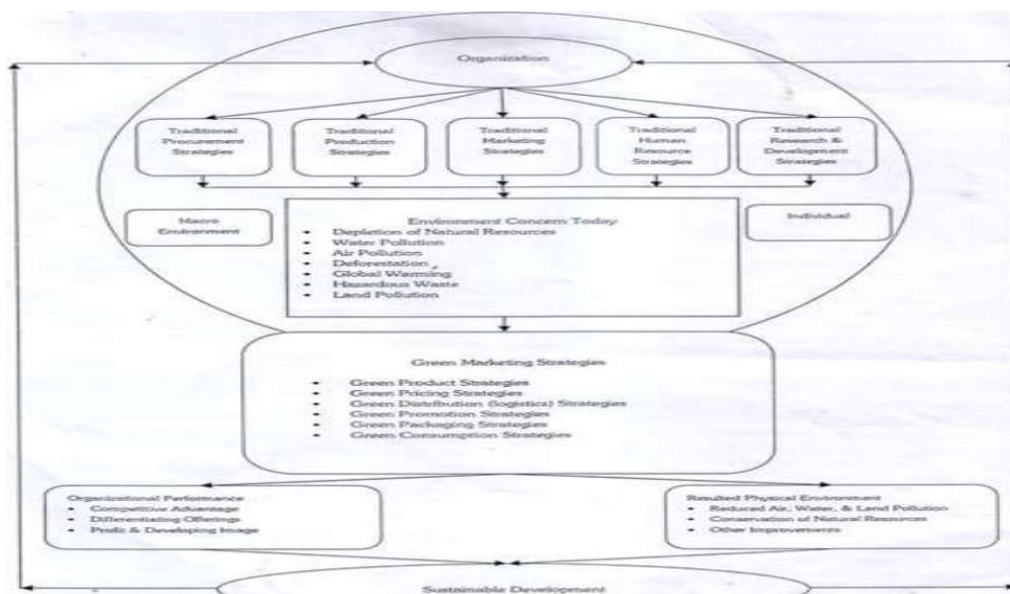


Fig. 1: Conceptual Framework of Green Marketing and Sustainable Development

Components of Sustainable Development

natural capital stock and man-made capital stock are the two most important components of sustainable development, according to (Pearce et al., 1994). The natural capital pool of a corporation includes things like oil reserves, water quality, and the global potential for carbon recycling and absorption. Among other things, it covers everything from coastal seafood to social issues to the condition of groundwater.

When it comes to human capital, on the other hand, it includes both tangible and intangible assets, such knowledge and skills. The word "constant" describes something that is either constant or rising (Pearce et al., 1994).

Products that are good for the environment are generally regarded as the sole goal of green marketing. A wide range of products and services, from consumer goods to industrial products and services, are covered by green marketing in general (Polonsky, 1994).

"Sustainable marketing," which refers to marketing operations that are both economically successful and environmentally sound, is required to achieve sustainable development (Polonsky et al., 1997). Marketing, as we all know, has a huge influence on the development of new products (Kinsey, 1982; Riley et al., 1983; Dholakia, 1984; Carter 1986; Kotler, 1986). To be acknowledged as a force in progress, marketers must supply current needs while not endangering future generations' ability to meet theirs (Polonsky et al, 1997). Environmental protection and increased advertising efficacy are two major objectives of green marketing. As opposed to this, sustainable development requires future generations to receive the natural environment in a condition that is on par with or better than that provided to the generation before them in the past. It is therefore necessary to save and improve the environment. Green marketing and other components are not dependent on sustainable development, hence it is not a dependent variable. (The relationship between green marketing and sustainable development is illustrated in Fig. 1 conceptual framework.)

Traditional procurement techniques, industrial processes and technology, marketing and human resources management can all be used to handle today's environmental concerns. These marketing mix approaches can help not only the marketing department but also other parts of the company. in keeping with the strategy.

Green Based Product Strategies

Green products are those that last a long time, are non-toxic, or are made from reclaimed materials (Ottman, 1997). Green-based product strategies include using sustainable raw material sources, creating durable products, designing repairable items, making things safe for disposal, creating biodegradable products, and creating products that are easier to use. Recycling, minimising packaging materials, and dematerializing items are all part of green product initiatives (Bhat, 1993; Ashley, 1993; Polonsky et al., 1997; Ottman, 1998 and Charter et al., 1999).

Green Pricing Strategies

Shoppers frequently believe that environmentally friendly products are more expensive (Peattie, 1999; Polonsky, 2001). Despite this, Peattie (1999) maintains that traditional products are unreasonably cheap because of the omission of socio-environmental costs involved with product manufacturing, use, and disposal. Peattie (1999) Ergo he believes that asking consumers whether

they want to keep purchasing environmentally damaging low-cost products is one approach of dealing with the high-price dilemma. That means that in order for consumers to make an informed decision about green products, more information about their advantages must be provided..

CHALLENGES OF GREEN MARKETING

- Consumers in India are becoming increasingly aware of the benefits of using eco-friendly products, a new study finds. However, it is a brand-new concept to the Indian populace. Green marketing initiatives can assist save our environment if consumers are educated and made aware of environmental risks.
- Few marketing initiatives are green in the actual sense, while others are only committed to society. Lack of standardisation. As a result, there is no criteria for verifying these assertions. In order to execute such labelling and incensing, a standard quality control system is required.
- Investing for the Long Term: Investors and corporations alike should see this project as a long-term investment that will, in time, pay off handsomely.
- There should be no green myopia when it comes to actions that a business plans as part of its green marketing strategy. A green marketing's end result must benefit the customer, which is why they should buy the goods. Motivate them by doing this and converting them from other tour brands. This is unquestionably going to happen, but consumers must weigh the benefits of choosing our alternative against the costs first..

Opportunities of Green Marketing

- **Eco-friendly Behaviour:** In India, customers' preference for products that are good for the environment is growing. Even if herbal care goods, recyclables, eco-friendly packaging in products, energy-saving items, and non-toxic products are more expensive, they are now acceptable. As a result, companies may now offer ecologically friendly products to their stakeholders, increasing the popularity of their brand.
- **Social Responsibility:** In today's world, many successful companies have come to appreciate the importance of completing their social responsibilities in order to become socially responsible businesses themselves. A company's financial success as well as its social performance are both included in the scorecard used to evaluate its performance. As a result, environmental concerns are woven into the fabric of the company's operations.
- **Competitive Advantage:** An organisation must remain competitive in today's fast-paced and intensely competitive market. Innovation in products, low costs, R&D, differentiated distribution techniques and packaging are now conventional ways to gain a competitive advantage. Green marketing has given a lot of company's new lifeblood and turned it into a competitive advantage.
- **Cost Reduction:** As a result of cutting toxic waste, recycling packaging, and using recyclables in industrial manufacturing, the company has saved large amounts of money. Several businesses use green marketing to strike a balance between costs and earnings.

DATA ANALYSIS & INTERPRETATION

TESTING OF HYPOTHESES

Ho1: There is no green marketing can be as sustainable development in Telangana.

TABLE NO. 1

“Observed Frequencies

Gender /Variable	Strongly Agree	Agree	Neutral	Slightly Disagree	Disagree	Total
Male	11	23	48	9	0	91
Female	4	3	02	0	0	9
Total	15	26	50	9	0	100

Source: Primary Data

TABLE NO. 2

Expected Frequencies

Gender /Variable	Strongly Agree	Agree	Neutral	Slightly Disagree	Disagree	Total
Male	14	24	46	7	0	91
Female	1	2	4	2	0	9
Total	15	26	50	9	0	100

Source: Primary Data

Table No 3

Showing calculation of χ^2 – value

O	E	(O-E)	(O-E) ²	(O-E) ² /E
11	14	-3	9	0.6428
23	24	-1	1	0.0416
48	46	2	4	0.0869
9	7	2	4	0.5714
0	0	0	0	0.0000
4	1	3	9	9.0000
3	2	1	1	0.5000
2	4	-2	4	1.0000
0	2	-2	4	2.0000
0	0	0	0	0.0000
				13.8429

Source: MS Excel

Calculated value of Chi- Square =13.8429

Level of significance – 0.05

Chi-square = (O-E)²/E

Expected value = sum of the observation/the total number of observations

Degree of freedom (r-1) (c-1) = (2-1) (5-1) = 1*4 = 4

Table Value of Chi Square for dof (degree of freedom) =1@5% Level of significance=9.488

Interpretation / Result: Table 3 presents that the **calculated Chi –Square value (13.8429)** is more than the table value (9.488) of Chi -Square Test (χ^2) so null hypothesis (Ho) has been rejected and it is **concluded that there is a significant** green marketing can be as sustainable development in AP.**at 5% level of significance.**

(ii) **Ho2: There are no different green marketing strategies implemented by businesses**

TABLE NO. 4
Observed Frequencies

Variable	Yes	No	Total
Female	6	3	9
Male	89	2	91
Total	95	05	100

Source: Primary Data

TABLE NO. 5

Expected Frequencies

Variable	Yes	No	Total
Female	8	1	9
Male	87	4	91
Total	95	05	100

Source: Primary Data

Table No 6

Showing calculation of χ^2 – value

O	E	(O-E)	(O-E) ²	(O-E) ² /E
6	8	-2	4	0.500
89	87	2	4	0.045
3	1	2	4	4.000
2	4	-2	4	1.000
χ^2				5.545

Source: MS Excel

Calculated value of Chi- Square =5.545

Level of significance – 0.05

Chi-square –(O-E)²/E

Expected value = sum of the observation/the total number of observations

Degree of freedom $(r-1)(c-1) = (2-1)(2-1) = 1 \times 1 = 1$

Table Value of Chi Square for dof (degree of freedom) = 1 @ 5% Level of significance = 3.121

Interpretation / Result: Table 6 presents that the **calculated Chi-Square value (5.545) is more than the table value (3.121) of Chi-Square Test (χ^2)** so null hypothesis (H_0) has been **rejected** and it is **concluded that there are significant** different green marketing strategies implemented by businesses **at 5% level of significance**.

H₀₃: There are no challenges, opportunities posed by green marketing.

TABLE NO. 7

Observed Frequencies

Gender /Variable	Strongly Agree	Agree	Neutral	Slightly Disagree	Disagree	Total
Male	9	25	48	9	0	91
Female	4	3	02	0	0	9
Total	13	28	50	9	0	100

Source: Primary Data

TABLE NO. 8

Expected Frequencies

Gender /Variable	Strongly Agree	Agree	Neutral	Slightly Disagree	Disagree	Total
Male	14	24	46	7	0	91
Female	1	2	4	2	0	9
Total	15	26	50	9	0	100

Source: Primary Data

Table No 9

Showing calculation of χ^2 – value

O	E	(O-E)	(O-E) ²	(O-E) ² /E
9	14	-3	9	0.6428
25	24	-1	1	0.0416
48	46	2	4	0.0869
9	7	2	4	0.5714
0	0	0	0	0.0000
4	1	3	9	9.0000
3	2	1	1	0.5000
2	4	-2	4	1.0000
0	2	-2	4	2.0000
0	0	0	0	0.0000
				13.7429

Source: MS Excel

Calculated value of Chi- Square =13.7429

Level of significance – 0.05

Chi-square = $(O-E)^2/E$

Expected value = sum of the observation/the total number of observations

Degree of freedom $(r-1) (c-1) = (2-1) (5-1) = 1*4 = 4$

Table Value of Chi Square for dof (degree of freedom) =1@5% Level of significance=9.488

Interpretation / Result: Table 9 presents that the **calculated Chi –Square value (13.7429) is more than the table value (9.488) of Chi -Square Test (χ^2) so null hypothesis (Ho) has been rejected** and it is **concluded that there is a significant** there are challenges, opportunities posed by green marketing in AP.**at 5% level of significance”.**

Conclusion

According to the findings of this research, environmental issues are currently a top priority for the federal government, academics, the general public, and business. Each person approaches environmental concerns in a unique way. Businesses have taken a variety of approaches to addressing environmental issues, with the concept of green marketing emerging as a solution for many companies. Another finding of this research is the fact that using green marketing, and in particular using green marketing tactics, can help organisations perform better and have a better physical environment, both of which lead to long-term development. Following the COVID-19 epidemic, we predict that green marketing tactics will acquire traction and influence among consumers and business leaders alike. Green marketing's ultimate success, however, is heavily reliant on our ability to alter/adapt our way of life as well as our regard for nature. Telangana's sustainable growth benefits from major green marketing. **at 5% level of significance. In this study we examined that there are significant** different green marketing strategies implemented by businesses. **In this investigation it is observed that there are challenge and opportunities posed by green marketing. Finally, it is concluded that there is a lot of scope and increase the economic development of the nation by implementing the green marketing strategies.**

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