A STUDY ON THE AWARENESS LEVEL OF THE FARMERS TOWARDS GREEN MARKETING

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Abstract

In the present competitive scenario, most of the companies were shifting their focus from producing traditional products to green products. The concept of green marketing has been widely practised in automobiles, batteries, refrigerators, microwave ovens, air-conditioners, soaps &detergents, paints, computers, energy-saving lights, real estate, pesticides and even at the work places of various organizations. Since agriculture is one of the backbone of the Indian economy, the agricultural output also depends on the type of fertilizers used. The fertilizers manufactured by the company should be eco-friendly when they were used by the farmers, it should not affect the crop production. The objective of this article is to spread the focus on the marketability of the green fertilizers which are environment friendly or eco-friendly and to know the factors influencing the green marketing through understanding their level of awareness from the farmers. This study helps not only in understanding their level of awareness but also in creating the awareness among the farmers for creating sustainable green marketing which is an essential ingredient to the Indian Agricultural system.

Keywords : Green Marketing, Eco-friendly, Sustainable Green Marketing

Introduction to the concept of Green Marketing

According to the American Marketing Association, green marketing is the marketing of products that are presumed to be environmentally safe. Thus green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. Environmental Marketing and Ecological Marketing are the synonymous terms used in relation to Green Marketing. Thus "Green Marketing" refers to holistic marketing concept wherein the production, marketing consumption an disposal of products and services happen in a manner that is less detrimental to the environment with growing awareness about the implications of global warming, non-biodegradable solid waste, harmful impact of pollutants etc., both marketers and consumers are becoming increasingly sensitive to the need for switch in to green products and services. While the shift to "green" may appear to be expensive in the short term, it will definitely prove to be indispensable and advantageous, cost-wise too, in the long run.

Why Green Marketing?

As resources are limited and human wants are unlimited, it is important for the marketers to utilize the resources efficiently without waste as well as to achieve the organization's objective. So green marketing is inevitable. There is a growing interest among the consumers all over the world regarding protection of environment. Worldwide evidence indicates people are concerned about the environment and are changing their behavior. As a result of this, green marketing has emerged which speaks for growing market for sustainable and socially responsible products and services.

Thus the growing awareness among the consumers all over the world regarding protection of the environment in which they live. People do want to bequeath a clean earth to their offspring. Various studies by environmentalists indicate that people are concerned about the environment and are changing their behavior pattern so as to be less hostile towards it. Now we see that most of the consumers, both individual and industrial, are becoming more concerned about environment-friendly products. Most of them feel that environment-friendly products are safe to use. As a result, green marketing has emerged, which aims at marketing sustainable and socially-responsible products and services. Now is the era of recyclable, non-toxic and environment-friendly goods. This has become the new mantra for marketers to satisfy the needs of consumers and earn better profits.

Literature Review

Green marketing was given prominence in the late 1980s and 1990s after the proceedings of the first workshop on Ecological marketing held in Austin, Texas (US), in 1975. Several books on green marketing began to be published thereafter. According to the Joel makeover (a writer, speaker and strategist on clean technology and green marketing), green marketing faces a lot of challenges because of lack of standards and public consensus to what constitutes "Green". The green marketing has evolved over a period of time. According to Peattie (2001), the evolution of green marketing has three phases. First phase was termed as "Ecological" green marketing, and during this period all marketing activities were concerned to help environment problems and provide remedies for environmental problems. Second phase was "Environmental" green marketing and the focus shifted on clean technology that involved designing of innovative new products, which take care of pollution and waste issues. Third phase was "Sustainable" Green Marketing. It came into prominence in the late 1990s and early 2000.

Meffert and Kirchgeorgg, (1993); In Perceived value of green products, says that the Green products are environmentally friendly and pollution free. Green products induce less harm to the environment and are good for public health & society as a whole. Green products include ecological automobiles, batteries, refrigerators, microwave ovens, air-conditioners, soaps & detergents, paints, computers, energy-saving lights and pesticides.

Gain from the green(by Ashwini Kumar Sharma, Outlook, 22 Sep 2010)

The concept of green has been extended into the real estate also. This concept is called as 'Green Building'. Green building project is not just about planting more trees on the premises says Vidur Bharadwaj, director of the 3C Company and chairman of Indian Green Building Council(IGBC). The green building concept in real estate not only enhances the marketability of a project, but also addresses important national priorities, such as water conservation, handling of consumer waste and energy conservation.

Objectives & Utility of the study:

- ✓ A) To study the level of awareness of the farmers towards 'Green Marketing', by eliciting their opinion on Organic(chemical) fertilizers Vs Eco-friendly(Inorganic) green fertilizers.
- ✓ B) To know the factors influencing the 'Green Marketing' with specific reference to fertilizers.
- ✓ C) To assess the effectiveness of the promotional tools that help in creating the awareness among the farmers towards green marketing
- ✓ D) To develop the variables for the 'Green' Marketing mix of fertilizers in terms of Product, Price, Place, Packaging and Promotion and their impact on purchase decision.

Limitations of the Study

- The study was confined only to Chittoor(dt), Andhra Pradesh and due to the variations in the usage pattern of the fertilizers, the results cannot be extrapolated to the other districts of the state.
- The comprehensiveness of the data collected permitted limited coverage.
- Since it is an opinion survey, the data is diversified in nature and hence will lead to diverse interpretations.

Methodology

Research design of this study was both Exploratory & Descriptive

The following tools of exploratory design are used :

- **Literature survey** : The information about green marketing was collected from the reputed articles of various scholars, News Papers, magazines, Journals etc.
- **Pilot Survey** : The pilot survey has been conducted in the Chittoor distrirct of Andhra Pradesh from the farmers to know their awareness level towards green marketing. The information collected through Pilot Survey led to the development of hypotheses.

Descriptive design focused in understanding the awareness level of the farmers towards 'Green Marketing' for fertilizers.

Techniques like Correlation, Reliability Analysis, Factor Analysis are used in this study.

Data Collection Methods

For collecting the data, both primary and secondary sources are used. Since the study is empirical in nature, it has focussed mostly on the primary data.

Primary data

The survey is administered through the questionnaire by using personal interview, telephone contact and observation.

The study has considered the following tools for

primary data collection :

- Questionnaire on Green Marketing for farmers
- Interview with Village opinion leaders in six blocks to understand the green marketing practices with reference to fertilizers.
- Observation of farmers to understand the usage pattern of fertilizers in both organic & inorganic fertilizers

Secondary data : It was originated from Relevant books, Newspapers, Magazines, Journals, Publications from reputed scholars, websites etc.

Population : The pilot study was conducted in six villages from Chittoor(dt) of Andhra Pradesh. The population is defined as the farmers using fertilizers. Sample size is 130 farmers. The sampling unit is the farmers belonging to the six villages from Chittoor(dt), Andhra Pradesh.

Sampling Method

As the sample is widely spread, the sampling method used was Convenience sampling.

Analysis and Interpretation

The following Statistical methods are used for making analysis by using SPSS:

- Spearman Rank Correlation
- Reliability Analysis
- Factor Analysis

Scale of Reliability or Reliability Analysis

Before conducting Factor analysis, the scale of reliability is used to find out the internal consistency of the variables to be used in Factor analysis. If the scale of reliability is close to 1, then it can be concluded that the variables are suitable for conducting factor analysis. Reliability analysis is a popular and frequently used SPSS method of measuring the internal consistency of the variables. Cronbach Alpha(á) is designed as a measure of internal consistency. Alpha is measured on the same scale as a Pearson (r) correlation coefficient which varies between 0 and 1. The closer the á to 1, the greater the internal consistency of items in the instrument being assessed.

Table 1

Table 2

It can be observed from the Table 1 and Table 2 that since the value of á is 0.722 , so we can conclude that the variables are having internal consistency and hence these variables are suitable for conducting factor analysis**.**

Factor Analysis

The hypotheses for Barlett's test of sphericity are

H0 : The factor analysis is not valid

H1 : The factor analysis is valid

Table 3

It can be seen from the table 3 that the significance (0.0000) is less than the assumed value (0.05). So we reject H0. This means that factor analysis is valid.

The value of KMO coefficient should be always more than 0.5. The table value shows that it is 0.616. So this implies that factor analysis for data reduction is effective.

Table 4

From the above Figure of Scree plot, it can be concluded that the factors having the Eigenvalues more than 1 have to be considered. This study has 3 factors.

Table 5

From the Table 5 of Rotated Component Matrix, it can be seen that the three factors can be classified as follows :

Factor 1 : Color of the packaging (green color) , Packaging (main constituent), Supply & availability of the fertilizers, Nutrient , High Shelf space.

Factor 2: Environment friendly, High Yield

Factor 3: Company/Brand Choice, Price

The factors are renamed as follows :

Factor 1 – Packaging & Availability, Factor 2 – Environmental Yield, Factor 3 – Brand – Price

From the Factor analysis it was concluded that Packaging, Supply & Availability, Environment friendly, High Yield, Company/Brand Choice and Price are the most significant factors for designing the Green Fertilizers.

Table 6

Source: Compiled from the study

The values in the correlation table 6 shows are standardized and range from 0 – 1 . Following are the observation from the table 6 :

- Newspaper and Television are positively correlated with a value of 0.637,
- Company & NGO's/Voluntary Organizations are positively correlated with a value of 0.670.

It can be concluded that, Newspaper, Television, Company & NGO's/Voluntary Organizations are positively correlated and it can influence in creating the awareness for farmers about the Green Marketing practices in fertilizers.

Conclusion

Green marketing is the process of developing products and services and promoting them to satisfy the customers who prefer products of good quality, performance and convenience at affordable cost, which at the same time do not have

a detrimental impact on the environment. It includes a broad range of activities like product modification, changing the production process, modified advertising, change in packaging, etc., aimed at reducing the detrimental impact of products and their consumption and disposal on the environment. Companies all over the world are striving to reduce the impact of products and services on the climate and other environmental parameters. Marketers are taking the cue and are going green.

The concept of green is to be marketed in the fertilizers to a large extent which is the most essential dimension to be introduced in the marketing mix of the company. Very few studies are available in knowing the awareness of the farmers towards the introduction of green marketing as a business model with specific reference to fertilizers. Any study should be for the benefit of the consumer/ farmer because he is most concerned with the livelihood and the environment.

"Green Marketing" has also become an important way for companies to build awareness and loyalty by promoting as a popular issue. By positioning their brands as ecologically sound, marketers can convey concern for the environment and society as a whole.

By developing environmentally safe or eco-friendly products/green fertilizers, it benefits the Indian agriculture system as a whole. Farmers are the major idea generating sources in using fertilizers, that is why their attitudes and perceptions towards using green products forms the basis to reap the rich benefits for the Indian economy. The concept of 'Green Marketing' is still in a conceptual stage which needs to be marketed for sustainable advantage to both company and farmers.

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Table 1: Case Processing summary of reliability analysis

Cases	N	%
Valid	130	100.0
Excluded	0	.0
Total	130	100.0

Source: Compiled from the study

Table 2 Reliability Statistics for Alpha Value

Cronbach's Alpha	N of Items
.722	10

Source: Compiled from the study

Table 3: KMO and Bartlett's Test of hypothesis (for factor analysis)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.616
Bartlett's Test of Sphericity	Approx. Chi-Square	651.780
	df	45
	Sig.	.000

Source: Compiled from the study

Table 4 Communalities

Factors	Initial	Extraction
ENVN FRIENDLY(V1)	1.000	.748
SOIL TYPE(V2)	1.000	.766
HIGH YIELD(V3)	1.000	.742
NUTRIENT(V4)	1.000	.683
HIGH SHELF SPACE(V5)	1.000	.537
PRICE(V6)	1.000	.763
SUPPLY & AVAILABILITY(V7)	1.000	.608
PACKAGING(V8)	1.000	.742
COLOR OF PACKAGING(V9)	1.000	.759
COMPANY/BRAND(V10)	1.000	.843

Extraction Method: Principal Component Analysis.

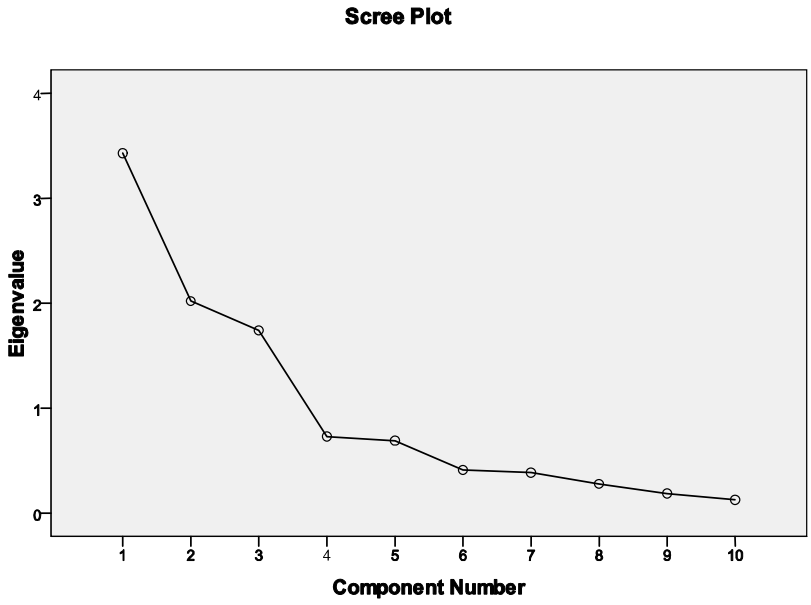

Table 5: Rotated component matrix (for deciding the number of factors)

Variables	Component		
	1	2	3
Envn friendly(V!)	.068	.861	-.040
Soil type(V2)	-.344	.651	.473
High yield(V3)	.238	.826	-.051
Nutrient(V4)	.667	.417	.253
High shelf space(V5)	.586	-.184	.400
Price(V6)	.334	.199	.782
Supply & availability(V7)	.687	.009	-.368
Packaging(V8)	.761	.355	.193
Color of packaging(V9)	.868	-.014	.070
Company /Brand(V10)	-.010	-.084	.914

Source: Compiled from the study

Table 6 Pearson Correlation Coefficients between various media

Media		Newspaper	TV	NGO	Company	Poster	Internet
Newspaper	Pearson Correlation	1	.637**	-.481**	-.489**	-.384**	-.194*
	Sig. (2-tailed)		.000	.000	.000	.000	.027
	N	130	130	130	130	130	130
Television	Pearson Correlation	.637**	1	-.401**	-.291**	-.415**	-.375**
	Sig. (2-tailed)	.000		.000	.001	.000	.000
	N	130	130	130	130	130	130
NGO	Pearson Correlation	-.481**	-.401**	1	.670**	-.144	-.277**
	Sig. (2-tailed)	.000	.000		.000	.102	.001
	N	130	130	130	130	130	130
Company	Pearson Correlation	-.489**	-.291**	.670**	1	-.150	-.324**
	Sig. (2-tailed)	.000	.001	.000		.089	.000
	N	130	130	130	130	130	130
Poster	Pearson Correlation	-.384**	-.415**	-.144	-.150	1	-.073
	Sig. (2-tailed)	.000	.000	.102	.089		.407
	N	130	130	130	130	130	130
Internet	Pearson Correlation	-.194*	-.375**	-.277**	-.324**	-.073	1
	Sig. (2-tailed)	.027	.000	.001	.000	.407	
	N	130	130	130	130	130	130

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).