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# **Green Marketing: A Study of Consumer Perception and Preferences in India**

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## **Abstract**

Recently, concerns have been expressed by manufacturers and customers about the environmental impact of products. Consumers and manufacturers have directed their attention toward environment friendly products that are presumed to be “green” or environment friendly like low power consuming (energy-efficient) electrical appliances, organic foods, lead free paints, recyclable paper, and phosphate free detergents. Indian marketers are also realizing the importance of the green marketing concept. Although a variety of research on green marketing has been conducted across the globe; little academic research on consumer perception and preferences has been carried out in India. This research provides a brief review of environmental issues and identifies the green values of the consumers, their level of awareness about environmental issues, green products and practices. This paper highlights the consumers’ perception and preferences towards green marketing practices and products with the help of a structured questionnaire. A study was conducted on 106 respondents. High level of awareness about green marketing practices and products was found among the consumers. Green values were also found to be high among the respondents. Research has given good insights for marketers of the green products and suggests the need of designing the marketing communication campaigns promoting green products due to high green value among the consumers. Results of regression analysis reveals the view that overall green values, awareness about green products and practices and the perception regarding seriousness of marketing companies towards green marketing had positive significant impact on consumer persuasion to buy and prefer green products over conventional products.

## **Introduction**

Businesses need to constantly assess the latest and most attractive marketing trends. Marketing trends can be found out by continually researching about the changes in consumer behavior in the marketplace. By identifying the changes in the consumer behavior, the businesses can modify their offering to the consumers. Consumers today are more concerned about environmental degradation and negative impact of their uses of product and services on environment. The reason for this concern could be visible climatic changes, global warming and increasing air and water pollution. Thus using green marketing by the organizations not only provides an opportunity to meet

consumer expectations and address their environmental concerns, but also to gain a competitive advantage and a strong consumer base.

Green marketing is also termed as environmental marketing or ecological marketing. According to American Marketing Association, marketing of products that are presumed to be environmentally safe is called as Green Marketing. Thus wide range of activities are covered under green marketing, which includes modifying the product, making changes in the production process and packaging, as well as modifying advertising or removing any activity that impacts the environment in negative way. Today, the Earth faces more environmental issues than ever before, hence it is imperative for companies to make and market themselves as environment friendly. Green marketing is emerging as a popular promotional strategy owing to increased consumer awareness and concerns.

The concept of green or ecological marketing calls upon businesses to follow ethical and green practices while dealing with customers, suppliers, dealers, and employees. Companies have started marketing themselves as green companies. Even the Public Sector Units and state governments are now paying a lot of attention towards environmental issues such as global warming, pollution, or water contamination and have started taking steps to prevent environmental pollution. In a recent survey conducted by *National Geographic Society* and the international polling firm Globescan (2010) to determine consumers' green attitude called "Consumer Greendex", the top scoring consumers were in the developing economies of India, Brazil and China while industrialized countries ranked at the bottom. Consumers showing the largest increase in environmentally sustainable behavior were in India, Russia and the United States (Howe et al., 2010). A company to be successful in green marketing requires to be committed to operate in environmentally friendly ways.

### **Green Products and marketing practices**

Actually there is no consensus on what exactly is green. There is no accepted definition of green product. However based on different definitions of green marketing, some common characteristics of products generally accepted as green, including the products are:

1. Energy efficient (both in use and in production).
2. Water efficient (both in use and in production).
3. Low emitting (low on hazardous emissions).
4. Safe and/or healthy products.
5. Recyclable and/or with recycled content
6. Durable (long-lasting).
7. Biodegradable.
8. Renewable.
9. Reused products.
10. Third party certified to public or transport standard (e.g., organic, certified wood)
11. Locally produced.

Many consumer durable companies are now marketing their products with Energy Star Label stating that their use will reduce the energy consumption and consumers can save a lot of money on electricity consumption over a period of time. For example, Godrej Consumer Products is marketing its product through green marketing and gives additional incentive to buyers to exchange their old products with latest green and environmental friendly products. The advertisements try to persuade the buyers to adopt a green lifestyle and contribute in development of a greener planet. NDTV a major media group promotes green values through its campaign Greenathon. NDTV Greenathon as they call it organizes various philanthropic and social activities to raise awareness regarding environmental issues at the same time contribute to the social causes like electrification of rural areas etc. Philips is marketing its Compact Fluorescent Light (CFL) as "Marathon", highlighting its new "super long life" and energy efficiency. Many companies are now offering more eco-friendly alternatives for their customers; re-cycled products are one of the most popular alternatives that benefit the environment. Companies are now focusing on not to use plastic bags, instead they use carry bag made up of recycled paper (for example, Titan, Tanishq have made a corporate policy that the goods will be delivered or given to customers only in the carry bags made out of recycled paper). Idea Cellular Limited also launched an advertisement stating saving trees towards their corporate social responsibility. Kansai Nerolac Paints is marketing themselves as green as they have removed hazardous heavy metals from their paints and are marketing their lead free paints in India. Dell focuses on producing green IT products under their strategy called "Go Green with Dell". Dell products are also coming in eco-friendly packaging with a system recycling kit bundled along. They are also focusing on green innovations from data-center efficiency to the use of eco-friendly materials for everything from chassis design to product packaging. Major electronic goods manufacturing organizations are selling their products with star energy ratings that help to consume less energy. More is the star rating (maximum rating is 5 star) of the electrical/electronic appliance, less is the energy consumed. Nokia has come up with the concept of recycling of phones to save the natural resources. In 2007, IBM launched Project Big Green to help clients around the world improve the efficiency of IT and better optimized their data center resources. IBM has software and services technologies to help businesses reduce data center energy consumption and cut energy costs by more than 40 percent.

Efforts are being made at government and industry level to protect environment. In India Environment Protection Act in was implemented in 1986 and Environment Audit in 1992 for the protection of the environment. New Delhi, Indian capital, was one of the most polluted cities until Supreme Court of India intervened to change to alternative fuels. In 2002, Supreme Court issued a directive to completely adopt CNG in all public transport systems to curb pollution. Many greenhouse gas reduction markets have emerged over a period of time that can catalyze projects with important local, environmental, economic, and quality-of-life benefits. Kyoto Protocol's Clean Development Mechanism (CDM) is one of the steps towards greenhouse gas reduction. In the construction industry, builder lobby are now using *fly ash bricks* to reduce soil erosion due to manufacturing of traditional bricks. They are also using solar panels to generate electricity for common passage lighting, elevators to reduce the traditional electricity consumption. Footwear Design and Development Institute (FDDI) is focusing on re-use

of tyres, using unconventional methods and innovatively creating footwear and accessories from old and recycled tyres. Green products have also proven to be recession proof through the economic downturn of 2008 and 2009. According to a Datamonitor study in the first six months of 2009 there were over 500 new product launches of goods that claim themselves as eco-friendly.

### **Literature Review**

Green marketing came into prominence in the late 1980s and early 1990s. The first book titled *Ecological Marketing* was the outcome of first workshop on “Ecological Marketing”, held by American Marketing Association (AMA) in 1975. Green marketing acquired an eminent status since early 1990s. There has been occurring about green consumers and green consumerism in 1970s and 1980s. Henion and Kinnear (1976) defined green consumers as environmentally conscious consumers while Antil (1984) described green consumerism as a specific type of socially conscious consumer behavior with prime focus on protection of environment. Green consumerism was described as a form of “pro-social” consumer behavior (Weiner and Doescher, 1991). Michael Polonsky (1994) defined “green marketing as the marketing that consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment.”

Various studies support the assertion that consumers today prefer environmentally safe products and have a positive disposition towards companies following such practices. A strong willingness is shown by consumers to favor environmentally conscious products and companies as per various opinion polls taken in US and elsewhere, however action to do so in reality are debatable (Mendleson N, Polonsky M J, 1995). In spite of huge interest in green marketing by researchers and organizations, demand of green products is not as high as expected. Mintel (1995) found a significant gap between consumers concern and actual green purchasing. It is found that still there are considerable barriers towards the diffusion of more ecologically oriented consumption styles.

According to Michael J Polonsky, environmental marketing has been perceived as an opportunity by the organizations to achieve their objectives (stated by Keller 1987, Shearer 1990). It was believed that organizations have moral obligation to serve the society in more environmental friendly way (Davis 1992, Freeman and Liedtka 1991, Keller 1987, Shearer 1990). Firms are also forced to become more socially responsible due to the laws laid by the government towards the protection of the environment. Firms are also pressurized by the environmental activities adapted by competitors that demand the firms to change their marketing activities to environmental marketing activities. One of the factors identified that affects the purchase of green product is its high price in comparison with traditional product. Price of the product can be reduced by properly designed environmental standards. Environmental standards can trigger innovations that lower the cost of the product or improve its value. Such innovation will allow the companies to use a range of inputs more productively-from raw materials to energy to labor – thus offsetting the cost of improving environmental impact and hence

enhanced resource productivity will make companies more competitive. Innovation will play a lead role in sustainable development for the companies to be competitive and resisting innovations will lead to loss of competitiveness in today's global economy (Michael Porter and Claas van der Linder, 1995).

Jacquelyn Ottman, (1998) suggests that from an organizational standpoint, all aspects of marketing including new product development and communications should be integrated with environmental considerations. This holistic view of Green Marketing suggests that not only the suppliers and retailers, but the new stakeholders including educators, community members, regulators, and NGOs should also be taken into purview. Environmental issues should not be compromised to satisfy primary customer needs. Organization operating green practices in their processes and products is considered as environmentally friendly by the consumers and they prefer to purchase the products of the organization that are marketing themselves as green organizations.

It has been always believed that the actions of individuals can be predicted by their attitudes. Number of studies has been made towards improving the ability to predict an individual's actions. Davidson et al. (1985) found that the consumers' attitude is associated with the knowledge and personal experience they possess. However inconsistencies were found among the relationship between consumers' attitude and their behavior when it comes to green consumerism. Mainieri et al. (1997) found low correlation between consumers' attitude and green behavior. Previous researches also proved low correlation between consumers' attitudes and their green behavior (Tracy and Oskamp, 1984). Spruyt et al. (2007) suggested that the prediction of individual's behavior is dependent on the attitude of the consumer. In order to predict specific behaviors, the measurement criteria of attitudes should be directed at a specific environmental issue like purchasing of green products (Gadenne et al, 2011; Wulf and Schroder, 2003). Green Gauge Study of Roper Organization (stated by Crispell, 2001) classified the American consumers into True-Blue Greens, Greenback Greens, Sprouts, Grouzers and Basic Browns. True-Blue Greens are the consumers who buy only green products and trying to make up for the deficits, Greenback Greens are the consumers willing to expend money towards protection of natural environment but don't have time and energy for environmental activities, Sprouts are the consumers who can buy green products but are not involved in environmental activities, Grouzers are the consumers who cares about the protection of environment but make excuses for adapting green products, and Basic Browns are the consumers who don't care about the environment protection and are not even ashamed of it.

Consumers are substantially aware about green products; however applying green marketing practices in business operations is not an easy task (Juwaheer, 2005). Antonio et al (2009) suggested that due to environmental consciousness that has evolved over time, studies on green consumerism will be the main focus point in future leading to identifying the consumer attitudes, behaviors and intentions. Braimah and Tweneboah-Koduah (2011) studied Ghanaian consumers and have found low level of awareness towards green marketing issues which affected that purchase decision of the consumers. Price of green products was also found to be one of the factor that influence the purchase of green products. However, it was found that young consumers are more

likely to be influenced by green issues. Cherian and Jacob (2012) found that consumers lack green knowledge and because of this low awareness, organizations are still not focusing towards development of green products.

There are several issues and challenges identified by various researchers with respect to Green Marketing (Welling and Chavan, 2010). Practicing green marketing initially may prove to be a costly affair as it encourages green products/services, green technology (procuring new technology or modification of existing technology), green power/energy which requires a lot of money to be spent on R&D programs. High investment is required in marketing promotions to create awareness regarding green products and their uses. Many customers may not be willing to pay a premium for green products which may affect the sales of the company. It requires the companies to extensively communicate the presence and benefits of green marketing to the customers by means of various tools available for integrated marketing communication. Eco-labeling could be a good way to convince the customers regarding green products. Consumers might be willing to pay premium price if they see additional benefit (such as quality, environmentally safe product, fuel-efficient vehicles, and non-hazardous products) attached with the product. Green Marketing can help organizations to gain a competitive advantage and a strong consumer base. (Renfro L A, 2010).

According to Joel Makower (cited by Shafaat & Sultan, 2012), challenges faced by green marketer also include *the lack of standards and common consensus among the public about what actually constitutes "green"*. Despite these challenges, green marketing continues to gain popularity, particularly in light of growing global concern about climate change. Companies are coming forward to showcase their commitments to reduce adverse climate impacts of their products and services. Green marketing can play an important role in sustainable development so firms must adapt innovative methods to sustain itself in the competitive environment.

### **Need For the Study**

Green marketing has now evolved as one of the major area of interest for marketers as it may provide competitive advantages. However it requires investment in terms of technology enhancement, process modification, communicating benefits to customers etc. Many of the companies in India have now started marketing themselves as green organizations due to certain government regulations and shift in the preference of the consumers worldwide. However, not much research with respect to green marketing has been done in India and there is question about the awareness of green products among consumers. The attitude of Indian consumers towards green products and the relationship between the attitude and behavior is also questionable. As green marketing is different from the marketing in traditional way, marketers need to know the factors that persuade the consumer to buy the green products. This study aims to resolve the research question that what factors influence the consumer persuasion to buy the green product or not.

## **Research objectives**

1. To investigate the level of awareness of Indian consumers about green products and practices.
2. To measure the green values of the customers.
3. To identify the brands, consumer associate with green marketing practices.
4. To investigate the preferences of Indian consumers about green products.
5. To identify the factors that influences the customer persuasion to buy green products.
6. To understand the issues and challenges of green marketing practices.

## **Hypotheses**

Based on the literature reviewed and the conceptual model following hypotheses were generated to be verified with statistical analysis.

H<sub>0</sub>1: There is no significant difference in green values on the basis of gender.

H<sub>0</sub>2: There is no significant difference in preference of green products with respect to the academic qualification of the consumer.

H<sub>0</sub>3: There is no significant difference in buying intentions for green products with respect to the academic qualification of the consumer.

H<sub>0</sub>4: There is no significant difference in preference of green products with respect to the gender of the consumer.

H<sub>0</sub>5: There is no correlation between green values and preference for green products.

## **Methodology and measurement**

The unit of analysis in this study is the consumer level. Questionnaire survey was applied in this study to collect information from the consumers (refer appendix A for questionnaire). Information collected through consumer survey is utilized for further analysis and verification of hypotheses. Green Consumer Value Scale developed by Haws et al, 2010 was adapted in this study to measure the green value of the consumers. Classification of consumers from Green Gauge Study of Roper Organization (2001) was adapted in this study. 10 consumers were asked to fill the questionnaire for pretesting and to identify the ambiguity in terms, meanings and issues. Therefore the questionnaire had a high level of content validity. The respondents were asked to rate the statement on a 5 point scale ranging from strongly disagree to strongly agree. Since the neutral point on the scale was 3, those means above 3 suggests overall agreement with the statement and the mean below 3 reflects disagreement. 106 valid responses for the questionnaire were received. After the pretest, the sample elements were selected as per convenience and were asked to return the filled questionnaires within 1 week.



## Findings and Discussion

### Awareness

Respondents surveyed were aware about the green products and practices. However most of the respondents were not aware about the initiatives taken for promoting green marketing practices by central/state government, NGOs and business houses in India suggesting need for better marketing communication from these entities and have to strongly communicate to the customers about their green initiatives. Newspaper and Television were found to be the most known sources of information regarding green products to the consumers.

### Consumer Perception about Green Products and Practices

As revealed from the mean score (3.57), respondents agreed that organizations with green claims are really concerned about the environment. This implies that consumers are not skeptic about the green claims of the organizations. Consumers strongly agreed that the environmental degradation has risen in the last decade. Their mean score was found to be 4.38 on a scale of 5. Also, consumers strongly agreed to the fact that the environment will be degraded more in the next five years with a mean score of 4.15 on a scale of 5.

All consumers have rated the seriousness on higher side for various factors that are considered as environmental concern. Consumers' agreement regarding environmental degradation was high and may prefer green products over conventional products to protect the environment. Marketers can come up with new green products and communicate the benefits to the consumers. Respondents have rated the seriousness of various environmental concerns as high. The responses have marketing implications in terms of designing marketing communication campaigns, as higher mean score representing higher concern regarding the same amongst consumers and thus could be used while promoting green products.

Consumers were strongly agreeing for the importance of green marketing practices and have rated "Manufacturing Eco-Friendly Product" as the most important green marketing practice followed by "Educating customers to use products in environmental friendly manner" with a mean score of 4.67 and 4.64 respectively. All the green marketing practices were found to be considered as important by the consumers with none of the green marketing practice having scored less than 4.10 (see Table 1). This suggests that consumers are concerned about the state of environment and expect the organizations to employ green practices towards the protection of environment.

Table 1: Consumer perception about importance of green marketing practices

<b>Green Marketing Practices</b>	<b>Mean</b>	<b>Std. Deviation</b>
Manufacturing Eco Friendly Product	4.67	.658
Educating customers to use products in environmental	4.64	.733

friendly manner		
Manufacturing products through eco-friendly process	4.53	.650
Modifying products to make them environmental friendly	4.36	.807
Modifying product packaging to suit environment	4.30	.841
Promoting products through eco-friendly modes of communication	4.20	.844
Using green supply chain for procurement and distribution	4.11	.865
Branding product associating with green marketing practices	4.10	.839

“Message/Theme of the advertisement” was rated as the most important element of green product’s advertisement (with mean score of 4.60), followed by “Punch-line of the advertisement” (with mean score of 4.04). The responses have marketing implication in terms of designing marketing communication campaigns focusing on message or theme of advertisements.

### Attitude

The reliability analysis of Green Consumer Scale has shown the Cronbach’s Alpha value as 0.726 (as seen in Table 2)

Table 2: Green consumer value scale reliability analysis

Cronbach's Alpha	No. of Items
.726	6

The Overall Green Value of the consumers is found to be 3.88 i.e. the consumers are concerned about the protection of the environment.

Table 3: Green consumer value measure

Statements	Mean	Std. Deviation
Green Value: It is important to me that the products I use do not harm the environment.	4.43	.690
Green Value: I am concerned about wasting the resources of our planet.	4.17	1.108
Green Value: I would describe myself as environmentally responsible.	3.85	.871

Green Value: I consider the potential environmental impact of my actions when making many of my decisions.	3.77	.772
Green Value: I am willing to be inconvenienced in order to take actions that are more environmentally friendly.	3.70	1.057
Green Value: My purchase habits are affected by my concern for our environment.	3.43	1.005
Overall Green Value	3.8870	.60858

## **Brand Association**

Following brands were recalled as being associated with Green Marketing Practices including Bajaj CFL, Suzlon Windmills, Indian Railways (paperless ticket), Nokia, Philips CFL, Nerolac Paints, Exide Green Batteries, etc. It was found that consumers were not able to recall the brand without assistance. This has marketing implication in terms of the requirement of extensive communication by the marketers to make the consumers aware about the green brands.

Around 75 % of the consumers have shown willingness to buy green products if it is available in the product category often purchased. Their mean score was found to be 3.92 on a scale of 5. This implies that marketers should make the green products available to the consumers for their consumption as customers have shown willingness to buy green products if it is available.

Around 56 % of the consumers were found to be “Sprouts”, i.e. people who can buy green products from time to time but are not involved in any environmental activities, whereas, around 22 % of the consumers were found to be “True Blue Greens”, i.e. people who buy only green products, spend time and effort in environmental activities such as recycling and believe that an individual can do much to promote the environment. Around 12 % of the consumers were found to be “Green Back Greens”, i.e. they are able to buy green products but don’t have the time and energy for environmental activities and do not want to change their lifestyles to promote the environment. It was found that the percentage of people who buy only green products is very low (22%). Thus signifying need for better promotions.

## **Consumers Action**

Consumers felt that green products are priced higher than conventional products (with mean score of 3.83). They have revealed that they prefer the green products over conventional products while purchasing (with mean score of 3.78). Consumers have also revealed that they consider the ill effect of the manufacturing and consumption on natural environment and the price of the green product affects their purchase behavior with mean score of 3.59 and 3.58 respectively. As consumers consider the ill effects of manufacturing and consumption on natural environment it can be said that following green marketing practices not only lead to social good but also make good business sense. When asked about the factors that affect the purchase of green products,

consumers rated “awareness about green product” first with the mean score of 4.31, followed by “availability of green product”, and “product price” at second and third position. This implies that marketers have to extensively market and communicate the availability of green products to the consumers.

### Results of Hypothesis Testing

With respect to the first hypothesis (**H<sub>01</sub>**), it was found that there is no significant difference in green consumer values on the basis of gender; overall green value of consumers was found to be 3.88 and p-value for overall green consumer value was found to be 0.675 which states that null hypothesis is accepted and it can be inferred that gender of the consumers does not affect their green values.

With respect to second and third hypothesis (**H<sub>02</sub> and H<sub>03</sub>**), no significant difference was found in the preference of green products, and purchase intention for green products with respect of academic qualification of consumer, with p-value of 0.322, and 0.727 respectively, failing to reject the null hypothesis and stating that qualification of consumers does not affect their preference and purchase intention towards the green products.

With respect to fourth hypothesis (**H<sub>04</sub>**), it was found that there is no significant difference w.r.t. to gender and preference of green products, i.e. the preference of green products does not depend on the gender of the consumer.

With respect to fifth hypothesis (**H<sub>05</sub>**), a moderate positive correlation was found between green consumer values and purchase intention for green products with Pearson Correlation Coefficient coming to as 0.445. It can be inferred that purchase intention of green product is dependent on the green values of the consumers.

### Influence of green consumer values on purchase of green products

The value of correlation coefficient,  $R=0.445$  suggests that there is moderate positive correlation between preference of green products and green values of the customers. However only 19.8 % (R-square values of 0.198) variation in purchase preference is accounted due to green consumer values. This implies that there is impact of other factors also on green purchase behavior. These factors remain to be explored in future research.

Table 4: Influence of green consumer values on purchase decision of green products

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	0.445	0.198	0.190	0.858

### Influence of green consumer values, awareness about green products and perception regarding seriousness of green marketers on purchase of green products

Only 33.8 % (R-square values of 0.338) variation is accounted due to the green consumer values, green product awareness and perception regarding seriousness of green marketers, on the purchase intention of green products. This implies that there is impact of other factors also on purchase decision towards green products. These factors remain to be explored in future research.

Table 5: Influence of green consumer values, awareness about green products and perception regarding seriousness of green marketers on purchase of green products by consumers

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.581(a)	.338	.282	.811

### Conclusions

Consumers' level of awareness about green products found to be high but at the same time consumers are not aware about green initiatives undertaken by various government and non-government agencies signifying need for more efforts from organizations in this regard. Newspaper remains leading source of information for most of the respondents and should be utilized more for reaching out to the consumers regarding green products and practices.

Responses were on moderate positive level and we can conclude that consumers are not skeptic about green claims of the organizations and consumers are concerned about the present and future state of environment signifying need for green products and practices. Marketers can come up with new green products and communicate the benefits to the consumers. Due to increased awareness and concern consumer may prefer green products over conventional products to protect the environment. Concerns were more directed towards depletion of Ozone and Global Warming. The consumers are concerned about the state of environment and expect the organizations to employ green practices towards the protection of environment. The results have implication for durable manufacturers especially to practice green marketing.

The marketing communication regarding green practices need to focus more on theme and message. Advertising appeals using green products and practices are likely to move emotions and result in persuasion. It is important for markets to be in top of mind recall of consumers to gain maximum from their green brand positioning. Constant and continuous communication from the organizations' side is required to make an impact and create a distinct green positioning.

Consumers have shown positive attitude towards green products at the same time they are concerned with the availability and price of such products. This implies that Marketers should make the green products available to the consumers for their consumption as customers have shown willingness to buy green products if it is available. As consumers consider the ill effects of manufacturing and consumption on

natural environment, they may purchase the green product if marketers can make them aware about the benefits of the green products (which consumers perceive as priced higher) as compared to that of traditional products. It was found that the percentage of people who buy only green products is very low and marketers need to take this as an opportunity to build their product portfolios and promote themselves as green.

The study has implications for marketers as well as consumers and makes a good case for start of an era of green marketing in India. The study since focused on a limited geographical area has limited generalizability but provides good insights regarding behavior of consumers towards green products. Future research could focus on psychographic segmentation of consumers in terms of assessing their green values and preferences. The study can be replicated at a larger scale to get more insights into the behavior of consumers and understand more about green phenomenon.

### References

- Antil, J. H. (1984). Socially Responsible Consumers: Profile and Implications for Public Policy. *Journal of Macromarketing*, Fall, Vol. 4, No. 2, pp. 18-39.
- Antonio, C., Sergio, R., Francisco, M. J. (2009). Characteristics of Research on Green Marketing. *Business Strategy and the Environment*. Vol. 18, pp. 223-239.
- Braimah, M and Tweneboah-Koduah, E. H. (2011). An Exploratory Study of the Impact of Green Brand Awareness on Consumer Purchase Decision in Ghana. *Journal of Marketing Development and Competitiveness*, Vol. 5, No. 7, pp. 11-18
- Cherian, J. and Jacob, J. (2012). Green Marketing: A Study of Consumers' Attitude towards Environment Friendly Products. *Journal of Asian Social Science*, Vol. 8, No. 12, pp. 117-126.
- Crispell, D. (2001). Going Green(ish). *Public Perspective*, September/October 2001, pp. 28-30.
- Davidson, A. R., Yantis, S., Norwood, M. and Montano, D. E. (1985). Amount of Information about the Attitude Object and Attitude Behavior Consistency. *Journal of Personality and Social Psychology*, Vol. 49, No. 5, pp. 1184-1198.  
<http://dx.doi.org/10.1037/0022-3514.49.5.1184>
- Davis, Joel J. (1992). Ethics and Environmental Marketing. *Journal of Business Ethics*. Vol. 11, No. 2, pp. 81-87.
- Freeman, R. E. and Liedtka. J. (1991). Corporate Social Responsibility: A Critical Approach. *Business Horizons*. Vol. 34, No. 4, pp. 92-98.
- Gadenne, D., Sharma, B., Kerr, D. and Smith, T. (2011). The Influence of Consumers' Environmental Beliefs and Attitudes on Energy Saving Behaviors. *Energy Policy*, Vol. 39, No. 12, pp. 7684-7694. <http://dx.doi.org/10.1016/j.enpol.2011.09.002>

- Haws, K. L., Winterich, K. P., and Naylor, R. W. (2010). Green Consumer Values. *Handbook of Marketing Scales, 3<sup>rd</sup> Edition*, pp. 172-173
- Henion, K. E. and Kinneary, T. C. (1976). Measuring the Effect of Ecological Information and Social Class on Selected Product Choice Criteria Importance Ratings, *Ecological Marketing*, Chicago: *American Marketing Association*, pp. 145-156.
- Howe, J., Bratkovich, S., Bowyer, J., Fernholz, K., and Stai, S. (2010). Green Marketing-Growing Sales in Growing Markets, *Dovetail Partners INC*.
- Juwaheer, T. D. (2005). Emerging Shades of Green Marketing Conscience Among the Population of a Small Island Economy-A Case Study on Mauritius. Source: [http://irfd.org/events/wfsids/virtual/papers/sids\\_tjuwaheer.pdf](http://irfd.org/events/wfsids/virtual/papers/sids_tjuwaheer.pdf).
- Keller, G. M. (1987) Industry and the Environment: Toward a New Philosophy. *Vital Speeches*. Vol. 54, No. 7, pp. 154-157.
- Mainieri, T., Barnett, E. G., Valdera, T. R., Unipan, J. B., and Oskamp, S. (1997). Green Buying: The Influence of Environmental Concern on Consumer Behavior. *Journal of Social Psychology*, Vol. 137, No. 2, pp. 189-204. <http://dx.doi.org/10.1080/00224549709595430>
- Mendleson, N. and Polonsky, M. J. (1995). Using Strategic Alliances to Develop Credible Green Marketing. *Journal of Consumer Marketing*. Vol. 12, No.2, pp. 4 – 18
- National Geographic and Globescan (2012). *Greendex 2012. Consumer Choice and the Environment – A Worldwide Tracking Survey*. Retrieved April 16, 2013, from <http://environment.nationalgeographic.com/environment/greendex/>
- NDTV Toyota Greenathon (2012). About Us. Retrieved February 11, 2013 from <http://www.green.ndtv.com>
- Neff, J. (2009, April 20). Green-Marketing Revolution Defies Economic Downturn: Sustainable-Product Sales Rise as Eco-Friendliness Goes Mainstream and Value Players Join the Trend. Retrieved December 21, 2012 from <http://adage.com/article/news/green-marketing-revolution-defies-recession/136091/>
- Ottman, Jacquelyn. (1998). Green Marketing: Opportunity for Innovation. *NTC Business Books, 2<sup>nd</sup> Edition*.
- Polonsky, M. J. (1994). An Introduction to Green Marketing. *Electronic Green Journal, Issue # 2 UCLA Library, UC Los Angeles*. <http://escholarship.org/uc/item/49n325b7>.
- Porter, M. E., and Claas van der Linde. (1995). Green and Competitive: Ending the Stalemate. *Harvard Business Review, September-October (1995)*, pp.119-134.
- Renfro, L. A. (2010) Green Business Operations and Green Marketing. *Gatton Student Research Publication*. Vol. 2, No. 2.
- Shafaat, A.; Sultan, A. (2012). Green Marketing. *Excel International Journal of Multidisciplinary Management Studies*. Vol. 2, No. 5.

Shearer, Jeffery W. (1990). Business and the New Environmental Imperative. *Business Quarterly*. Vol. 54, No. 3, pp. 48-52.

Spruyt, A., Hermans, D., Houwer, J. D., Vandekerckhove, J, and Eelen, P. (2007). On the Predictive Validity of Indirect Attitude Measures: Prediction of Consumer Choice Behavior on the Basis of Affective Priming in the Picture-Picture Naming Task. *Journal of Experimental Social Psychology*, Vol. 43, No. 4, pp. 599-610

Tracy, A. P., and Oskamp, S. (1984). Relationships Among Ecologically Responsible Behaviors. *Journal of Environmental Systems*, Vol. 13, No. 2, pp. 115-126

Weiner, J. L. and Doescher, T.A. (1991). A Framework for Promoting Cooperation. *Journal of Marketing*, Vol. 55, pp. 38-47.

Welling, M. N. and Chavan, A. S. (2010) Analyzing the feasibility of Green Marketing in Small and Medium Scale Manufacturers. *APJRB*. Vol. 1, No. 2.

Wulf, K. D. and Schroder, G. O. (2003). Assessing the Impact of a Retailer's Relationship Efforts on Consumers' Attitudes and Behavior. *Journal of Retailing and Consumer Services*, Vol. 10, No. 2, pp. 95-108.

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#### Appendix A

Dear Respondent,

We are conducting a survey to understand consumers' perception about green marketing practices of the organizations. We solicit your sincere response for this purpose.

#### **Questionnaire:**

1. Kindly provide your response for the following statements?

	<b>Strongly Disagree</b>	<b>Somewhat Disagree</b>	<b>Neutral</b>	<b>Somewhat Agree</b>	<b>Strongly Agree</b>
It is important to me that the products I use do not harm the environment.					
I consider the potential environmental impact of my actions when making many of my decisions.					
My purchase habits are affected by my					



concern for our environment.					
I am concerned about wasting the resources of our planet.					
I would describe myself as environmentally responsible.					
I am willing to be inconvenienced in order to take actions that are more environmentally friendly.					

[Source: Haws et. al. (2010)]

2. Environmental degradation has risen in last decade?

<b>Strongly Disagree</b>	<b>Somewhat Disagree</b>	<b>Neutral</b>	<b>Somewhat Agree</b>	<b>Strongly Agree</b>

3. In the next five years, state of the environment will be degraded more?

<b>Strongly Disagree</b>	<b>Somewhat Disagree</b>	<b>Neutral</b>	<b>Somewhat Agree</b>	<b>Strongly Agree</b>

4. According to you, what are the serious environmental concerns in India?

- a.
- b.
- c.
- d.
- e.
- f.
- g.
- h.
- i.

5. Rate the seriousness of the following environmental concerns on the scale of 1 to 5 where 1 represents "Not at all Serious" and 5 represents "Extremely Serious"?

Sr. No.	Factor	1	2	3	4	5
1	Destruction of Ozone					
2	Industrial Water Pollution					
3	Industrial Air Pollution					
5	Pesticides on Food					
6	Hazardous Waste					
7	Drinking Water Contamination					
8	Warming up of Earth					
9	Ocean Contamination					
10	Endangered Species					
11	Destruction of Rain Forest					

6. Have you ever heard of "Environment Friendly or Green Marketing" Products/Practices?

- a. Yes
- b. No

7. Following green marketing practices are important from environmental point of view.

Green Marketing Practice	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
Manufacturing Eco-friendly Product					
Manufacturing products through eco-friendly process					
Promoting products through eco-friendly modes of communication					
Branding product associating with green marketing practices					
Modifying products to make them environmental friendly					
Modifying product packaging to suit environment					
Educating customer to use products in environmental friendly manner					
Using green supply chain for procurement and distribution.					

8. From where you get the information about Green marketing Practices?

Television	
Newspaper	
Magazines	
Radio	
School/Universities/Institutions	
Outdoor Media	
Others (Please Specify)	

9. Can you name the advertisements of green products/practices you have seen in recent past?

- a.
- b.
- c.
- d.

10. Out of above mentioned advertisements, which advertisement you like the most?

11. Please rate the following components of advertisements on a scale of 1 to 5 (where 1 represents least important and 5 represent most important)?

Sr. No.	Factor	1	2	3	4	5
1	Message/Theme of the advertisement					
2	Punch-line of the advertisement					
3	Jingle of the advertisement					
4	Celebrity Endorsement					
5	Any Other (Please Specify)					

12. Organizations manufacturing/promoting green products are really concerned about the environment.

Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree

13. Consumers have become more concerned about protection of environment?

Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree

14. Please tick the statement that best describes you as a consumer?

I buy only green products. I spend time and effort in environmental activities such as recycling. I believe that an individual can do much to promote the environment.	
I am able to buy green products but I don't have the time and energy for environmental activities. I do not want to change my lifestyles to promote the environment.	
I can buy green products from time to time but I am not involved in any environmental activities	
I do not buy green products. I believe that business and government should be fixing environmental problems	
I am the least involved in environmentalism. I believe that there is not much that an individual can do in solving environmental problems. It should be the government and business which should promote the environment.	

[Adapted from Crispell (2001)]

15. If a Green Product is available in a product category often purchased, I would.....

Definitely Not Buy	Probably Not Buy	Not Sure	Probably Buy	Definitely Buy

16. While purchasing the product,

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
I consider the ill effects of manufacturing and consumption on the natural environment.					
I prefer green products over conventional products.					
I feel that green products are priced higher as compared to conventional product.					
I feel that price of green product affects my purchase behavior.					

17. Following factors affect the purchase of green products?

Factors	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree

Product Price					
Awareness about Green Products					
Availability of Green Products					
Past Experience					
Information provided on product					
Any Other (Please Specify)					

18. Are you aware of some initiatives taken for promoting green marketing practices by the following?

Sr. No.	Agency	Specify
1	Ministry of Environment	
2	State Government	
3	NGO's	
4	Small Business of India	
5	Large Business of India	
6	Others	

Demographic Information:

Name:

Gender:

Age:

Academic Qualification:

Occupation:

Address:

Contact No. (M):

Email ID:

Family Income: