Chandni Seth, Nimish Gupta

Abstract: In recent years, the concept of green marketing has emerged as global concern and it has dragged attention of end users, translated into policy formulations and passed to the manufacturers and marketers. Green marketing is no more a matter of choice, rather it is utmost necessary to recalibrate our manufacturing and marketing practices as well as usage behavior in order to keep the our earth healthy and sustainable for long run. It is joint responsibility of every stakeholder to pay a premium for a healthy ecosystem. India, home to world's second largest population does relatively more industrial and logistic activities and hence, green marketing needs more attention. With the technological advancements, it has become utmost priority to develop green technologies and products that are ecological in order to minimize industrial and electronic waste for sustainable growth and development. Using a sample of 300 customer survey data and applying techniques of PCA and FA, this study attempts to identify factors which contribute to the green marketing and sustainable development in India. The Green marketing revolution becomes even more important for countries like India which inhabit a large population and hence higher production and consumption of goods leading to more electronic and industrial waste. We have identified certain factors that contribute to green marketing efforts and sustainable development in our country.

Keywords: Green marketing, Electronic waste, Industrial waste, Sustainable development, business environment.

# I. INTRODUCTION

Businesses are under constant pressure when it comes to adaptability in the varying needs of the consumers and consumers find it difficult to understand the continuous challenges in business particularly the concept of green marketing. Large scale environmental changes and growing environmental concerns throughout the world like global warming, water and air pollution, dumping of waste particularly IT waste have forced large business houses to change many of their business strategies and include sustainable initiatives. Bruntland Commission (1987) explained the concept of sustainable business development by stating it aimed at providing for the needs of current generations with no unfavorable effect on the forthcoming generations. While the existing businesses have to adapt to the current demands by being a part of the ongoing green campaign, new businesses however have a clean slate to formulate their strategies keeping in mind the green initiatives.

A sustainable business can be defined as one that not only meets the short and long-term needs of its stakeholders but also minimizes costs and maximizes profits while at the same time preserves the resources needed for a better future.

# Revised Manuscript Received on January 22, 2020.

Chandni Seth, Research Scholar at Amity Business School, Amity University, Lucknow, India.

**Dr. Nimish Gupta,** Associate Professor, Amity Business School, Amity University, Lucknow, Uttar Pradesh, India.

A business can be termed as environmental if it either makes a product which has a positive bearing on the natural environment or the processes used by it are clean, green, and sustainable.

Responsible companies use a framework to develop green initiatives that work on impacting three important areas i.e. economic, environmental, and social. The economic aspect of it focuses on maximizing profits and minimizing losses. The environmental aspect of it focuses on minimizing its adverse impact on the planet through environmental responsibility and social aspect focuses on measuring how socially responsible an organization has been to the people. Consumers worldwide are now aware about protecting the environment in which they live. Environment-friendly products are safer to use in daily lives. Companies are now inclined in the production of goods that are eco-friendly like recycled products, energy saving appliances, hybrid cars, carpooling, etc. The environmental damage that the world has suffered due to earlier practices used in industries has significantly highlighted the need for sustainable development in every walk of human life. As an outcome, there is an advancement in the environmentally inclined procedures of businesses along with the notion of 'Think Green' and 'Go Green'. The initiation of green drive has initiated the conversation about creating market of and for sustainable goods and services. Think green and go green encompasses a wide range of activities like introducing more natural components, devising new environment friendly methods of production, appropriate advertising, modifying the packaging process of products, etc., that is focused on reducing the adverse impact of products, their consumption and disposal on the environment. Though there has been an increase in awareness regarding environmental decay, but still new challenges and problems arise every day that require innovative and suitable eco-friendly solutions.

The organizations today are using the word 'sustainable' as a key marketing strategy in the competitive business environment of this global era. The resources are scarce and the wants of the humans are unlimited and boundless, this broad disparity has increased the focus amid consumers worldwide in regard to strengthening of environment-friendly practices. Today more and more people are aware about the importance of ecological balance which has led to increased environmental consciousness amongst them. This increase in awareness has brought about major changes in the behavioral patterns of both consumers as well as businesses. The current decade saw the introduction of decomposable, non-toxic and ecological goods. This in turn led to the advent of green marketing that centralizes on promoting market for ecological, publicly responsible and environmentally answerable products and services.



The social responsibilities encompasses a widespread choices of duties such as goods alteration, modifications in the manufacturing process, degradability of packing material, etc., all of which aim at decreasing the detrimental bearing of products, their consumption and removal on the environment. The marketers nowadays use green marketing phenomenon to influence the desires and wishes of the customers that are being targeted and therefore produce lucrative green products and services. In order to diminish the hazardous impact of manufacturing on the climate, processes organizations around the world are trying to bring in measures and reformation in their system. Companies are trying to shift their strategic focus on incorporating the green in product ingredients, supply chains, marketing, retailing, products etc. to promote green consumption for the progress of the whole society.

Marketing of products that are assumed to be ecological and environmentally safe and are desired by the consumers is known as green marketing. However, defining green marketing is a colossal task since there are several meanings that challenge each other. The main motive of green marketing is "to satisfy customers' needs and wants for quality, performance, affordable pricing and convenience through the development of products and services that do not adversely impact the environment". The quality of the product, it's pricing, availability and performance are equal in such competitive business world, and however, the benefit that a product offers for the environment can surely help in favoring the popularity amongst today's consumers. The socially responsible businesses will gain the incentives of exceptional revenues as well as increased customer loyalty and market value along with a healthy and greener future to live in.

# II. REVIEW OF LITERATURE

We have reviewed most of the available literature in our research domain and pertinent to our study scope. Reviews from journals that are reputed be it national or international relating to green marketing and issues related to it like sustainable development has been done. We have also studied and found certain relevant data and literature from reputed journals, magazines e-books and websites. The research purposely include articles from the time period 2000-2018.

Kumar (2010) conducted a research, the analysis of which tells us that how by indulging into activities that are environmentally beneficial, the tourism sector helps the customers to gain satisfaction and their needs and also influence their behavior and sought the sustainable growth of the business as well as of other organizations. Jain et al (2010) gave summarization on the 3 C's process of green marketing and its implementation. These are "consumer value positioning, credibility of product and consumer knowledge calibration". He explains how the three C's combination creates on environment of green business that will have long term sustainability. Aarti Agarwal et al (2011) brought to light that it becomes quite difficult for the eco-responsible (green) firms enhance and amend or rather optimize the product offering mix when they target not only to have product price competition, but also gain customer attraction .The pricing combination of green and non-green products creates visible differentials in marketing terms. Ramakishen et. al. (2010) identified the concerned factors that can create market goodwill for the green products and identified the underlying factors which are Product Goodwill (PG), Product Differentiation (PD), Organizational Competition (OC), Government Initiatives (GI), Customer Demand (CD) and New Market Entry Strategy (MES).

Bhattacharya (2011) conducted research study on green marketers in India and concludes that firms should be organizing campaigns which will be promotional in nature because of price sensitivity amongst the rival firms and majority of consumers being unaware about the quality which green product possesses. Joseph and Rupali Korlekar (2012) have an opinion that the scope for in-depth studies in India relating to green marketing is in abundance. It not only comprises of understanding the perception of consumers but also about profile of those consumers where there exists a strong progressive attitude to green produces and green marketing. Chopra and Jungda (2011) In their research work they indicated that green marketing is not just about getting the green products manufactured, but thriving for all those marketing activities which will not only lead to the development and sustainability of consumers eco-friendliness behavior but also helping to create an impact which has the lest and minimal damage to society and environment.

Moloy Ghoshal, Mdan (2008) concludes that, green marketing is in the initial phase in Indian business environment. Marketing scholars perceives that green marketing has got reference to segmentation of market and products eco-label, as a tool structuring factors, economic incentives to influence the prevailing behavioural aspects of consumers. The marketers dealing with green products should have main objectives as to satisfy the green marketing consumers. One is "consumer satisfaction" and the other is "improved environmental quality". Ann Kronrod et al (2012) Tinted and gave explanations that in the media there prevails a very surprising argumentative environmental messages. Various environmental agencies boomed with people who believe that protecting environment is a serious issue, need to understand that not every customer is serious, concerned or informed about the environment.

Varalakshmi et. al (2008) stressed in order to solve and adjust the cost or profit related issues, firms make attempts to use green marketing as a tool.

Charles W Lamb et al. (2004) states that green marketing can be used as a tool to bring consumer awareness and brand loyalty among consumers. The brand positioning through eco-marketing concerns are vital for creating needs and demands of consumer segments for the whole society. Robert Dahlstrom (2010) found out that positive influence exists for many economy participants because of green marketing. He says "there exists tie ups of their times with various government, Ngos, local communities, industry experts and also competitions to enhance the benefits of the consumers".

Karakaya & Kerin (2007), are of the opinion that green marketing encompasses PDO which comes from waste prevention program and consumer research areas.



Waste prevention programs take suggestions of employees on ways to curb pollution levels and get in to recycling of materials leading to development of attitude of eco-friendliness among consumers. Such will have a lower or a minimal determent to the environment.

Murugesan (2008) opens that in an attempt to solve investment cost or tentative profit issues, firms use green marketing as a tool. Some products especially industrial products that are environmentally harmful by-products are much more costly and to save substantial cost industries try and attempt to reduce harmful waste to create an illusion of green marketing.

Philip Kotler, Kevin & Keller (2011), opined that for green products, consumers can face two basic dilemma that if product is inferior in the name of green brand or product really do not meet the green quality standards. Rajan Saxena (2010) mentioned that companies and customers are accepting green products and services. Educated and aware customers are in the demand of green products or green packaged products or bio-degradable products. Customers are now lobbying in chain to purchase and consume green products and green services. Sherlekar (2007) put a case study in which the company had used green earthen pitcher as eco-marked symbol as brand, consumers expressed positive intention despite higher price. Sandhya Joshi (2011) states that issues relating to environment have gained importance not only in public life but businesses as well all over the world .Green marketing has now become an important segment and part of the overall business strategy, alongside the manipulative traditional marketing mix. Despite recession eco-friendly products have global demand and the local producers can also harness the opportunity of marketing and selling.

Banumathi Mannarswamy (2011) proved in his study that there exists concern among people regarding environment are bringing about a change in purchase and consumption behaviours. The growing eco-friendly products market are not only sustainable but also long lasting. Moreover, the products and services that are socially responsible have clear response on the hands of the customers. Meenakshi Handa (2006) has concluded in her research that media is playing an important role to enhance the awareness and consciousness in the minds of the consumer. Many papers show that there exists difference between consumer behaviour, education level, income, age etc. But if we overall, there is an increase in environment concern worldwide.

Welling & Chavan (2010) felt that the concept of green marketing is not as easy as it sounds. Organizations need to properly plan and chalk out an idea to carry out green marketing concepts in a feasible and appropriate manner. Green product adoptions may not be an easy task in modern competitive environment though it is a short run or a long run market. However, it is quite sure that the positive impact on firms overall performance is the result of green marketing.

Vemuri Lakshmi Narayana & Dhinesh Babu (2008), propagate their idea that marketers involve their consumers in marketing process and also convinces them. Green marketing is a two way approach that includes pursuing the environmental and social dimension. Renewing and recycling the green products and materials is a costly affair that requires

new technology, heavy investment in research and development and is one of the greatest stimulating concerns in green marketing. By commanding high prices there exists an opportunity where firms can enhance the program of their product and give strength to customer loyalty. Also, the government, organizations and individuals need to make sure that there is increased awareness about environment friendly products among the customers in the market.

#### a. Environmental Marketing & Sustainability

Elangovan et al. (2006), stated that environmental deterioration and as its result pollution all over the world were on the rise. Amongst others the main factors that contributed environmental deterioration were Industrialization, urbanization and changes in the way people consumed goods and services. Varsha Jain & Subhadip Roy (2010) shifted the perspective on the notion of eco-ism and made it more consumer centric, as environmentally safe products are at a very infant phase in the world and particularly in India. The consumers still find it difficult to understand the concept of eco-friendly products. Kupuswamy & Venkatrama Raju (2011) "studied further during their work the various measures taken by the companies to improve Energy Efficiency (EE), trying to fashion out new ways and means to re-use energy, oils and materials to further contribute to Resource Conservation (RC)". It emphasizes on developing sustainability at three levels, namely, "Strategic Level, Relationship and Co-ordination Level and Operating Level". Philip Kotler (2011) emphasized on the fact that commercial establishments needed to create rapid alterations at all levels including their "research-and-development, production, financial, and marketing practices", if any progresses at sustainability need to be accomplished.

Philip Kotler et al. (2010), was of the opinion that sustainability of the environment along with making profits should also aim at preserving the eco-system of the earth. Douglas J. Darymple & Leonard J. Parsons (2002) presumed that the green measures could help businesses in producing more environmentally safe products. Responsible conduct comprises not only of environmentalism but also other factors like designing recyclable products and eco-friendly packaging materials. The importance of green marketing is on two main facets that is one is civic responsibility and the other one is sustainability. Leon G. Schiffman & Leslie Lazar Kanuk (2008) stated that the set of needs that a person experiences at any given times are often triggered by certain cues in their surroundings. Sometimes an advertisement or any other environmental cue might produce a psychological imbalance in the viewer's mind. Oftentimes, when an individual lives in a complex and highly varied environment, he experiences many stimulations for need arousal. Bala Krishnamoorthy (2008), suggested the use of eco-labels which were to provide consumers with information about a product and to highlight the fact that it was made using components and technology that had minimal adverse impacts on the environment.

These eco-labels were a step forward in the field of creating products that were environmentally responsible.



These products reduced air and water pollution, used minimal energy and natural resources, slowed down ozone depletion and global warming. These products were designed to prevent the contamination of different eco-systems like fish and wildlife and their habitats etc if waste out of such green products are dumped.

Ashwini Kumar Sharma (2010) emphasized that the concept of green building should be introduced in real estate. It would not only improve project marketability but also help in solving issues of national priority such as water conservation, energy conservation and handling of consumer waste. Andrew Winston (2010) stated that while addressing current economic challenges companies and countries must also work towards dealing with long-term environmental issues. Martin Wright (2011) opinionated that in the present scenario of dimnuishing natural resources, the concept of sustainability should not be treated merely as a fashionable word. It was in highest business interest to adapt at a fast pace to such changes. The companies that adapted to such changes not only had environmental impact but also improved their revenues. For e.g. Unilever committed to halving its environmental impact by 2020 while doubling sales.

## b. Green Supply Chain Marketing - Initiatives

It was analyzed that in Indian market the idea of green supply chain management is very young (Rakesh Rajpal et al. (2011). The results revealed that the focus of industries should be on improving the performance of green supply chain management. The value of the business will enhance overall in real terms only when there is a proper implementation of green supply chain management. Pravin Kumar Bhoyar & Asha Nagendra (2012) in their study emphasized that in marketing the most crucial role was played by the distribution channels by performing a numerous important distribution functions. Distribution is one of the most dominant variable which most consumer goods manufacturers having green marketing concepts like to keep in mind while formulating their marketing strategies.

Shradha Gawankar et al. (2011) stated that while applying green marketing strategies, if supply chain management is considered as the most crucial constituent then the organizations can experience huge increase in both their productivity and profitability. Sharath Kumar (2011) stated that great value addition could be made at every stage of product development and marketing development if only the supply chain strategy were kept in line with organizational goals.

Chandrasekaran (2010) noticed that Indian companies were also going green and building sustainability in the process similar to western companies. Companies like "Walmart, Bajaj Auto, Wipro and MRF" have all undertaken green supply chain initiatives and embraced these initiatives in managing theirr marketing system. Sunil Chopra et al. (2010) discovered that major factors like demographics, geographic, historic and socioeconomic differences contributed majorly to adaptation of diverse distribution systems in various regions of the world. Building of better infrastructure, transportation and storage facilities are few initiatives taken by the Government of India to ensure the reduction in problems related to distribution systems. It will not only help in keeping and storing the products for any duration but also provide sustainability.

#### c. Green Marketing Strategies

Green marketing portrays the various ways in which the companies can promote their products and educate their consumers that they are all working in an eco-friendly manner. Not only are the companies incorporating green marketing in their business strategy but it has also become a global trend. The objective of sustainability can be achieved by reviewing marketing practices internally and externally and analyzing the situation by expanding marketing plan, and also outlining the various strategies keeping in mind the 4 P's. These practices have become leading factors to success in the current competitive business environment. Marketers can set a performance evaluation schemes to monitor the performance of their marketing strategies pertaining to green marketing initiatives.

# d. Identification of principal constructs and related factors

The focus of green marketing is to advocate the purchase and use of green products. To promote these products is the responsibility of the manufacturers in the industry. They should follow green parameters and make efforts to manufacture green products and use green marketing strategies. Under the concept of green marketing, the finest performance in the long run of marketing systems should be promoted by the marketers. The aim for achieving these intentions should be focused upon five sustainable marketing principles, "consumer oriented marketing, customer value marketing, innovative marketing, sense of mission marketing and societal marketing".

#### e. Customer Value Marketing (CVM)

The concept of CVM suggests that to construct consumer value, the company will have to flush their resources in marketing investments. Marketers use many strategies like "short sales promotions, cosmetic packaging changes, direct response advertising" to improve sales in the lesser time. However, these strategies will not hold for long, instead if the companies improvise their products or its quality, features or make it more convenient to use then it will add more value to the product. Smart marketing is focused on promoting consumer long term loyalty and relationships through continuous improvement in the value that the customers get from the firm's product offered in the market. Creating value from consumers in return helps the company to capture value from consumers.

#### f. Innovative Marketing (IM)

The concept of innovative marketing suggests that the organizations keep on seeking real product and improvement in marketing. The businesses that fail to find new and innovative ways to perform eventually lose their consumers to another businesses that find better ways. Innovations and process innovations can together set the path for green marketing initiatives.

# g. Societal Marketing (SM)

According to the fundamentals of societal marketing a company makes decisions of marketing by analyzing what are the consumer requirements and

where his interests lies.

Published By:

It also focuses upon the necessities of the company and advantages to the society on the whole in the future course of time. It is not in the interest of the organization to ignore consumer's interest and the interest of society as it is considered as the disservice to the society and consumers both. Societal marketing promotes products which are also beneficial besides being pleasing. Based on the degree of instant consumer satisfaction and advantage in the longer duration of time, a product can be made suitable accordingly.it is also important to note that products which are below standards or have bad taste does not appeal to the consumer instantly and doesn't provide benefits the organization in the long run.

#### h. Environmental Concept of marketing (ECM)

Advocates of environmentalism do not have anything in contradiction of marketing and consumerism, but they want people at business houses to be more careful about their impacts on the environment. According to them, the goal of marketing system should not be to maximize customer choice at consumption but to provide them with ample choices which can increase the quality of life depends upon many things like excellence of environment and not only on the excellence and amount of goods and services. Environmentalist advocate that present and environmental cost should form the basis for both consumer and producer decision making. Now days, companies are taking conscious efforts to not harm the environment. They are proactive and abstaining themselves from any kind of boycott or demonstration. and accepting the fact that they are responsible for environment and Environmental sustainability proposes making profits while at the same time making efforts to save the planet. It is difficult but extremely important social goal which organizations and individuals should try to achieve as a society. While some companies only respond towards environmental worries of consumer and does the minimum that is required to keep environmentalist quiet and to avoid new regulations. Some environmentally aware companies on the other hand are making conscious efforts not to choose some near future projects or because they are being forced by someone but because they believe that it is important for them to take care of the environment and the society on the whole which will in turn benefit the company as well as for planet's environmental future. Widespread environmental campaigning has helped in creating a powerful attitude among people projecting their concerns for the environment and as more and more people become aware, the preferences of the consumers will bring about a change in consumer behavior and market trends. The stakeholders of companies will force the industrial sectors to serve to the changing demands created by consumers. The corporate houses will have to understand the grave nature of environmental issues and will have to adapt and make conscious choices to advertise their products as eco-friendly. If consumers choose green and environmental friendly goods then it will also motivate the marketers to make their marketing strategies more environmental friendly which portray real environmental issues. Indian researchers recently discovered a new eco-friendly process that could prove to be a boom for the plastic and pesticide industry where the traditional processes yielded harmful by-products and affluent treatments were very expensive. The new process provides product purity high yield along with being low cost. It was also duly patented in 1998. Plastic and pesticide industry heavily contribute to pollution.

#### i. Green Initiatives (GI)

The manufacturing industry was deeply impacted because of concerns over the nature and environmental implication of industrial progress. Green initiatives are primarily concerned about environmental degradation and the management of product development is also impacted due to increasing environmental concerns. To overcome this the manufacturers these days plan and manage produce development keeping in mind the environmental qualities and use it as a marketing strategy to proudly declare themselves as committed environmentalist and integrate environmental issues in their business strategies. With increase in interest among government institutions, pressure groups and public at large for the quality of the ecosystem and manufacturers recognizing the benefits, there is an added motivation to adapt environmentally conscious marketing programs. The impact that the product has on environment is essential for pursuing market oriented approaches to environmental protection. For example consumer's choice of goods can be influenced by green rating information and by influencing product and corporate images in the market, technology development and project planning can also be influenced. We have taken corporate initiatives as important concepts for our research study.

#### j. Environmental Consciousness (EC)

Environmental concerns is an important factor to be accounted for as it expresses the psychosomatic propensity by analyzing the biological environment with some amount of favor.

#### k. Effective Waste Management (EWM)

EWM consist of four segments that is municipal waste, industrial waste, biomedical waste and electronic waste the kind of waste is different for all of these and therefore each of them are guided by different laws and policies. Waste management practices depends upon various factors like making or production of waste, initial storage, first assemblage, secondary assemblage, transference, reprocessing activity, treatment and disposal. Municipal Corporation play a crucial part in managing waste in every city through India along with public health department. The public health department is accountable for assimilation, street cleaning, widespread control and food contamination.

# Green Marketing and Sustainable Development (GM & SD)

GM & SD as per the world commission or environmental development 1978 to sustainable development put forward the philosophy of accomplishing todays need without posing any danger for future for acquiring their own needs. The underlying message throughout this strategy of sustainable development states that it is important to make policies and strategies for saving the quality for development of agricultural produce and protection of environment at the same time,

which can only be attained by integrating economic and ecological issues. The ultimate outcome of green marketing is preservation of environment for today and tomorrow Promoting energy efficient operations, better pollution control techniques, recyclable and biodegradable packaging, producing equal logically safe products are all part and parcel of green marketing which in turn leads to sustainable development.

Business thinking in modern times has changed and now includes sustainability as one of the major concepts. Capturing market essence by applying sustainability to the marketing discipline is the center of green marketing. Sustainable marketing promote marketing which not only captures the need of the consumers, Businesses and society in general but also takes care of long-term environmental goals. It aims at designing and marketing products that can be used by all consumers across the world over long periods without having adverse impact on consumers or the environment.

#### III. RESEARCH METHODOLOGY

We identified eight constructs which consists thirty seven items and these were converted to our research instrument (Questionnaire) which were administered among 325 respondents and finally collected and found 300 questionnaires fully filled and ready for further processing. In the first phase we tested the reliability of the instrument through Cronbach's Alpha value and found highly reliable which counts .923 for factors and .958 for items as given in table-1.

Table-1: The reliability analysis

Reliability Statistics					
Cronbach's Alpha N of Items					
.923	8				
Cronbach's Alpha	N of Items				
.958	37				

Table-2: Kaiser-Meyer-Olkin Measure of Sampling Adequacy

KMO and Bartlett's Test									
Kaiser-Mey	er-Olkin	Measure	of	Sampling	872				
Adequacy.					.072				
Bartlett's	Test	of Approx.	Chi-	Square	1811.560				
Sphericity		Df			28				
		Sig.			.000				

Further table-2 explains sampling adequacy which comes to .872 which is highly adequate for the further processing. We also proceed for communalities initial value and extraction. The extraction value of all constructs found to be greater than .60 (ranging lowest from .607 to highest .762). We conclude that our questionnaire is fit found for the study (table-3).

Table -3: Communality of eight constructs/ variables in extraction form

Communalities							
Initial Extraction							
CVM	1.000	.638					
IM	1.000	.762					
SM	1.000	.738					
GI	1.000	.607					

EC	1.000	.527				
EWM	1.000	.620				
GM	1.000	.711				
SD	SD 1.000 .658					
Extraction Method: Principal Component Analysis.						

Table-4: The variance explained with initial Eigen-value and extraction sum of squared loading

	Total Variance Explained										
Componen	]	Initial Eige	nvalues	Extraction Sums of Squared Loadings							
t	Total % of Variance		Cumulative %	Total	% of Variance	Cumulative %					
1	5.26 0	65.747	65.747	5.260	65.747	65.747					
2	.758	9.473	75.220								
3	.612	7.644	82.863								
4	.427	5.343	88.206								
5	.385	4.812	93.018								
6	.270	3.373	96.391								
7	.162	2.026	98.418								
8	.127	1.582	100.000								
E	Extract	tion Method	d: Principal C	Compo	nent Analys	sis.					

Table-4 represents that our instrument account for approximately 66% and explain the green marketing values to customers and companies and sustainable development.

Table-5: Relative strength of relationship amongst the constructs

Correlations											
	ntrol ables	CVM	IM	SM	GI	EC	EWM				
	CVM	1.000									
	IM	.667	1.000								
GM &	SM	.390	.617	1.000							
SD	GI	.375	.451	.520	1.000						
	EC	.299	.353	.358	.459	1.000					
	EWM	.213	.268	.153	.250	.261	1.000				

Table-5 shows the relative strength of correlation in which we have higher positive correlation between CVM and IM (.667), IM and SM (.617), SM and GI (.520). We have moderate correlation between CVM and SM (.390), between CVM and GI (.375) so on and weak positive strength of relationship SM and EWM (.153). This strength of relationships explains the influences of one variable on the other and table -5 explains it all in positive in three categories as higher, moderate and weak correlation. Marketing people use this strength of relationships in accessing the change in one variables and the resultant change in associated variables. Green Marketing and Sustainable Development is control variable while other are predictors.

**Table-6 Model summary** 

	Model Summary										
Model R R Square Adjusted R Std. Error of the Estimate											
1	1 .805 <sup>a</sup> .648 .640 .49276										
	a. Predictors: (Constant), EWM, EC, CVM, GI, SM, IM										



Table-6 is a summary of the model for our identified and authenticated variables (both the dependent and independent) and items of the variables too. This summary table provides the value of r, r2 and adjusted r2 for the model that has been derived. "r" represents the value of the multiple correlation coefficients between the predictors and the outcome (Field, 2005). Here, r has a value 0.805, this value represents the simple correlation between group size.

"r2" is a measure of how much of the variability in the outcome is accounted for by the predictors (Field, 2005). The value of r2 is 0.648 which tells us that these selected variables can account for 64.8% of the variation in the overall green marketing and sustainable development. This means that 31.6% of the variations in overall variables are not explained. So, there must be other variables too that have an influence on green marketing and sustainable development.

The adjusted "r²" gives an idea of how well the model generalizes and ideally its value is likely to be the same or very close to, the value of r² (Field, 2005). Here, the difference between r² and adjusted r² is 0.1% (0.648–0.640=0.08). This means that if the model were derived from the population rather than a sample it would account for approximately 0.8% less variance in outcome. Hence we become sure that all our identified variables, chosen tools and techniques, our though process for the present research study has been scientific and we have followed right research methodology which is scientific and reliable.

**Table-7 Analysis of Variance** 

ANOVA <sup>a</sup>											
		Sum of		Mean							
Mod	lel	Squares	df	Square	F	Sig.					
1	Regression	131.229	6	21.872	90.07	.000 <sup>b</sup>					
	Residual	71.388	294	.243							
	Total	202.617	300								
a. Dependent Variable: GM											
b. Pı	redictors: (Cor	nstant), EWN	I, EC, C	VM, GI, SM	, IM						

Table-7 is the output reports of an analysis of variance (ANOVA). "F-ratio represents the ratio of the improvement in prediction that results from fitting the model, relative to the inaccuracy still exists in the model (Field, 2005)". "A large value of "F' indicates that most of the variation in "GM & SD" is explained by the regression equation and that the model is valid. A small value of "F" indicates that most of the variation in "GM & SD" is unexplained" (Keller, 2009, p.679). From the table-7 we can see, F is 90.075, which is significant at p (sig.) value <.001, i.e. 0.000< 0.000. This result tells us that there is no chance of F-ratio being this large. Therefore, the regression model significantly improved our ability to predict green marketing and sustainable development.

Table-8 explains Coefficients Beta Values and regression equation for green marketing on our data that we compiled during the study period. The constant value is .344 that shall be used in drawing the regression equation and all values of standardized coefficient Beta weights the constructs. We

derived the regression equation values for both the primary dependent constructs i.e green marketing (table-8) and sustainable development in table-9. The green initiatives have negative marks in both the equations that conclude that there must be proper attention on green initiatives the longer course of success.

Table-8 Coefficients Beta Values and regression equation for green marketing

	Coefficients <sup>a</sup>												
Model			Unstandardized S Coefficients		t	Sig.							
		В	Std. Error	Beta									
	(Constant)	.344	.148		2.319	.021							
	CVM	.114	.062	.106	1.834	.068							
1	IM	035	.081	032	438	.662							
1	SM	.281	.061	.286	4.619	.000							
	GI	005	.050	005	104	.917							
	EC	.025	.042	.028	.594	.553							
	EWM	.529	.045	.546	11.873	.000							
		a. Dep	endent Varia	able: GM									

GM= .344+ .106 (CVM) -.032 (IM)+ .286 (SM) -.005 (GI) + .028 (EC) + .546 (EWM)

SD=.830+.060(CVM)+.187 (IM) + .379 (SM) -.105 (GI)+.013(EC) +.301 (EWM)

Table-9 Coefficients Beta Values and regression equation for sustainable development

	Coefficients <sup>a</sup>												
	Model	0 110 11111	Unstandardized Coefficients		t	Sig.							
		В	Std. Error	Beta									
	(Constant)	.830	.169		4.901	.000							
	CVM	.065	.071	.060	.911	.363							
1	IM	.209	.092	.187	2.261	.024							
	SM	.375	.070	.379	5.383	.000							
	GI	100	.057	105	-1.760	.079							
	EC	.012	.048	.013	.245	.807							
	EWM	.293	.051	.301	5.764	.000							
		a. De	pendent Vari	able: SD									

Just to have more conformity on our identified constructs and items as well, we conducted factor analysis Principal Component Analysis (PCA) in table-10 and found all items fit to study and it have produced desirable values group wise for all six factor constructs.

Table-10 Factor analysis and principal component analysis

	Component Matrix <sup>a</sup>											
	Component											
	1	2	3	4	5	6	7	8				
CVM1	.575											
CVM2	.616											
CVM3	.532											



CVM4	.604							
CVM5	.594							
IM1		.800						
IM2		.670						
IM3		.549						
IM4		.603						
IM5		.647						
SM1			.836					
SM2			.694					
SM3			.689					
SM4			.670					
SM5			.625					
GI1				.823				
GI2				.507				
GI3				.609				
GI4				.588				
GI5				.708				
EC1					.511			
EC2					.595			
EC3					.667			
EC4					.584			
EC5					.653			
EC6					.761			
EWM1						.586		
EWM2						.576		
EWM3						.548		
EWM4						.611		
GM1							.771	
GM2							.673	
GM3							.617	
GM4							.619	
SD1								.686
SD2								.601
SD3								.817
Extraction	on Metho	od: Princ	ipal Cor	nponent	Analysi	s.		
a. 6 components extracted.								

All the items have factor loading more than 5 hence we assure and verify all the items as shown in table-10. Now ANOVA has been conducted as presented in table-11 where gender impacts on opinion on our identified constructs and have cause for variance in the result. All the constructs have significance value greater than .005 and hence gender is significant in the thought process of green marketing and sustainable development.

Table-11 ANOVA with gender

ANOVA_GENDER							
	Sum of		Mean				
	Squares	df	Square	F	Sig.		
CVM	3.798	1	3.798	6.583	.011		
IM	1.886	1	1.886	3.464	.064		
SM	1.657	1	1.657	2.379	.124		
GI	.040	1	.040	.053	.819		
EC	.732	1	.732	.875	.350		
EWM	.158	1	.158	.219	.640		
GM	1.523	1	1.523	2.264	.133		
SD	1.183	1	1.183	1.736	.189		

Similarly table-12 explains the variance level in which we find that occupation have deeper impact on green initiatives (GI) as the significance value is (.004) less than .005. It shows that respondents are sensible for green initiatives either started by government or NGO.

Table-12 ANOVA with occupation of the respondents

ANOVA_OCCUPATION							
	Sum of		Mean				
	Squares	df	Square	F	Sig.		
CVM	7.313	4	1.828	3.202	.014		
IM	5.396	4	1.349	2.506	.042		
SM	5.628	4	1.407	2.039	.089		
GI	11.373	4	2.843	3.909	.004		
EC	5.282	4	1.321	1.592	.176		
EWM	6.518	4	1.630	2.308	.058		
GM	6.326	4	1.581	2.385	.051		
SD	4.554	4	1.138	1.682	.154		

As we move to table-13 towards analysis of variance, we find CVM, IM, SM, SD have its significant value (.000) which is less than .005 and GI, have its value.006 which is on the very threshold of .005. Respondent monthly incomes do impact on thought process green and sustainable marketing.

Table-13 ANOVA with monthly income of the respondents

ANOVA_Monthly Income							
	Sum of		Mean				
	Squares	df	Square	F	Sig.		
CVM	13.205	5	2.641	4.777	.000		
IM	13.066	5	2.613	5.083	.000		
SM	16.490	5	3.298	5.030	.000		
GI	12.201	5	2.440	3.356	.006		
EC	7.892	5	1.578	1.916	.091		



EWM	6.363	5	1.273	1.795	.114
SD	15.385	5	3.077	4.789	.000

Table-14 ANOVA with residence of the respondents

ANOVA_residance							
	Sum of Squares	df	Mean Square	F	Sig.		
CVM	3.889	2	1.945	3.361	.036		
IM	2.849	2	1.424	2.622	.074		
SM	7.321	2	3.660	5.384	.005		
GI	2.651	2	1.326	1.763	.173		
EC	.586	2	.293	.349	.706		
EWM	1.484	2	.742	1.033	.357		
GM	2.230	2	1.115	1.658	.192		
SD	1.427	2	.713	1.045	.353		

We find the location of the respondent (rural/urban) do not create any impact barring to social marketing. Social marketing phenomenon concerns significance is .005 which is significant and society at large have responses on social factors, social issues and people are concerned with green marketing and sustainable development at large.

As we move to ANOVA table-15 regarding the education impact on green marketing and sustainable development, it is found that all significant value are greater than .005 and hence education level of the respondent are also significant in case of green marketing and sustainable development.

Table-15 ANOVA with education of the respondents

ANOVA_EDUCATION							
	Sum of Squares	df	Mean Square	F	Sig.		
CVM	5.037	6	.839	1.441	.199		
IM	3.077	6	.513	.933	.472		
SM	2.672	6	.445	.632	.705		
GI	4.991	6	.832	1.103	.360		
EC	3.528	6	.588	.699	.651		
EWM	3.287	6	.548	.759	.603		
GM	2.561	6	.427	.627	.708		
SD	2.258	6	.376	.546	.773		

# IV. FINDINGS AND CONCLUSION

The issues relating to environment are growing at a very past pace in India and to control that it is essential to implement green marketing in business practices at the earliest. Green marketing not only makes severe business changes but it also has a far reaching positive impact on the saving the world from pollution. The companies should be more responsible in creating public awareness about the positive implications of green marketing. Green marketing not only act as a platform to attract new customers but it also positively impact the consumers and they in turn become environmentally

conscious and are also willing to shell out premium prices for ecological products. The burden of understanding the challenges and developing suitable strategies to overcome them while adapting to green marketing depends on the marketer. The electronics sector in India contribute significantly towards green marketing and green potential exists for eco-friendly products in electronic section only if manufacturers study and understand the buying behaviours of consumers and adapt new out-of-the-box technologies that do not adversely impact the environment.

A consumer is said to be a green consumer when he not only avails services that are green in nature but also buys products that are ecological and environmentally safe. Good examples of eco-friendly products can be goods with minimum or no packaging, products that are made without causing any environmental pollution or products made using natural ingredients. A green consumer would choose a hybrid vehicle and purchase goods made from regular materials.

Green marketing keeps ecological issues as the focal point when making decisions. It comprises everything from changes in new material to bringing changes in materials used for packaging. These include making changes in the design of the product even replacing a product with another product. "Disposal of waste generated during production and distribution, disposal of excess or expired products and also the disposal of packaging after the use of the product all form an essential part of green marketing". There is huge possibility for green marketing at both the manufacturer as well as the marketers end. In Indian context the phenomena of green marketing is spreading in a contagious way. Consumers along with marketers are slowly but strongly recognizing its advantages. More and more awareness is being created about using materials which are eco-friendly but will help in conserving the environment. Even though green products are more expensive compared to non-green ones, but they are more beneficial keeping in mind the pros of conserving the environment which will surely prove to be beneficial in the longer run. Green marketing is assimilating more and more attention in India and across the world.

Green marketing and sustainable development is an ongoing process that needs continuous input from the market traders, consumers, governmental policies and regulations. The need for this arises to keep the green marketing strategies of the businesses aligned to the target markets to achieve reasonable advantage. It is important that the policies and strategies relating to green products are structured and implemented in such a way so as to guide the consumers and retailers towards the path of green revolution. The focus of the businesses should be to develop and create a product that is green and will be desired by the public in general as well as in line with the objectives of the company. Beyond this, the companies should also try and mitigate risk and cost factors. In conclusion, we can say that innovating and implementing with green marketing strategies is a very complex process that is bound to change with time. The context offered in this research paper tries to explain the discrepancies in attitudes and behaviours that has been discussed in past researchers.



The present framework focuses on framing the gaps between the attitudes and behaviours as a societal dilemma while at the same time trying to understand the gap at identifying individual factors by applying reference group theories.

There are certain suggestions given through which these gaps can also be covered up. The study aims at providing a deep insight to both practitioners and Doctrinaires trying to understand environmentally conscious individuals. Since the success of green product largely relies on the consumers adopting or changing their outlook and attitude towards such products, it is important that green marketers identify all the factors that could bring about more cooperation. Thus, the current study is also beneficial to the green marketers as it assist in devising a marketing strategy that convinces the consumers to seek the value of collective benefit over personal gain.

#### **REFERENCES**

- Aggrawal, A., Manjrekar, P., & Aggrawal, A. (2011). Consumer Behaviour in Retail Food Patronage: A Study of Navi Mumbai. BVIMR Management Edge, 4(1).
- Bhattacharya, S. (2011). Consumer attitude towards green marketing in India. IUP Journal of Marketing Management, 10(4).
- P. K., & Nagendra, A. (2012). Effectiveness of FMCG distribution channels with respect to satisfaction of consumers in rural markets. Indian Journal of Marketing, 42(1), 17-22.
- Chandrasekaran, R. (2010). Imperial life in the emerald city: Inside Iraq's green zone. Vintage.
- Chopra, G., & Jangda, A. A STUDY ON THE RELATIONSHIP BETWEEN GREEN ADVERTISEMENT AND ENVIRONMENTALLY RESPONSIBLE CONSUMER BEHAVIOUR. The Research Repository, 39.
- Coughlan, A. T., & Soberman, D. A. (2005). Strategic segmentation using outlet malls. International Journal of Research in Marketing, 22(1), 61-86.
- Dahlstrom, R. (2010). Green marketing management. Nelson Education.
- 8. Dahlstrom, R. (2011). Green Marketing Theory. Practice, and Strategies, CengageLearning, New Delhi, 163-164.
- Dhamija, S., Agrawal, A., & Kumar, A. (2011). Place Marketing--Creating a Unique Proposition. BVIMR management edge, 4(2).
- Gawankar, S., Kamble, S., & Raut, R. (2016). Development, measurement and validation of supply chain performance measurement (SCPM) scale in Indian retail sector. Benchmarking: An International Journal, 23(1), 25-60.
- 11. Ghoshal, M. (2008). Green marketing A changing concept in changing time. Journal of IMR-Mgt, 2(1), 1-24.
- Ghoshal, M., & Madan, P. (2011). Issues & Challenges of Quality Management faced by MSMEs. GRIN Verlag.
- Gupta, U. (2012). Ageing and psychophysiological health. Indian Journal of Gerontology, 26, 424-436.
- Handa, M. (2006). green marketing: Drivers and Challenges. B-Cognizance, IITA e-Magazine, 2(11).
- Jain, V., Kumar, S., Kumar, A., & Chandra, C. (2016). An integrated buyer initiated decision-making process for green supplier selection. Journal of Manufacturing Systems, 41, 256-265.
- Jain, V., Roy, S., Kumar, A., & Kabra, A. (2010). DIFFERENTIAL EFFECT OF NATIONAL VS. REGIONAL CELEBRITIES ON CONSUMER ATTITUDES. Management & Marketing, 5(4).
- Joseph & Korlekar, R. (2012). Green marketing practices: An Indian perspective. Expressions

  –Unity CSR Foundation Magazine, 2(2), 12-15.
- Joshi, S. (2011). A study of service quality and customer satisfaction across various service providers in the telecom sector. Indian Journal of Marketing, 41(9), 55-61.
- Karakaya, F., & Kerin, R. A. (2007). Impact of product life cycle stages on barriers to entry. Journal of Strategic Marketing, 15(4), 269-280.
- Karpagam, M., & Jaikumar, G. (2010). Green Management: Theory & Applications. Ane Books Pvt Ltd.
- Keegan, W. J., & Green, M. C. (2005). Global Marketing, Upper Saddler River.

- Kotler, P. (2011). Philip Kotler's contributions to marketing theory and practice. In Review of Marketing Research: Special Issue–Marketing Legends (pp. 87-120). Emerald Group Publishing Limited.
- 23. Kotler, P. (2011). Reinventing marketing to manage the environmental imperative. Journal of Marketing, 75(4), 132-135.
- Kotler, P., & Keller, K. L. (2011). Manajemen Pemasaran. Edisi Keempat Belas.
- Krishnamoorthy, B. (2008). Bounds on the size of branch-and-bound proofs for integer knapsacks. Operations Research Letters, 36(1), 19-25
- Kronrod, A., Grinstein, A., & Wathieu, L. (2012). Go green! Should environmental messages be so assertive?. Journal of Marketing, 76(1), 95-102.
- Kronrod, A., Grinstein, A., & Wathieu, L. (2012). Go green! Should environmental messages be so assertive?. Journal of Marketing, 76(1), 95-102.
- Kumar, A., & Meenakshi, N. (2009). Organizational behaviour: A modern approach. Vikas Publishing House.
- Kumar, V. (2010). Customer relationship management. Wiley international encyclopedia of marketing.
- Kuppuswamy, D., & Raju, V. D. (2011). Developing Competencies for Sustainable Development for Automotive Industries. International Journal of management Research and Technology, 5(2), 301-305.
- Lamb, C. W., Hair, J. F., & McDANIEL, C. (2004). Princípios de marketing. Thomson.
- 32. Loudon, D. L., Della Bitta, A. J., Consumer Behaviour, T. M. H., & Edition, F. TEXT BOOK. JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD, 48.
- Mishra, P., & Sharma, P. (2010). Green marketing in India: Emerging opportunities and challenges. Journal of Engineering, Science and Management Education, 3(1), 9-14.
- Murugavel, M. V. (2010). Interest Rate Futures in India—Needs a Huge Revival. The Management Accountant Journal, 45(9), 715-717.
- Murugesan, S. (2008). Harnessing green IT: Principles and practices. IT professional, 10(1), 24-33.
- Mutsuddi, I., & Mutsuddi, R. (2009). Emerging Trends of Aggressive Movie Marketing: Lessons Learned from Ghajini. Indian Journal of Marketing, 39(3), 3-9.
- Rajpal, R., Roy, B. K., & Kumar, P. (2011). Green supply chain management: prospects and implementation of practices. International Journal of Logistics and Supply Chain Management, 3(1), 11-18.
- 38. Ramakishen, G. (2010). Chirag and Shah.
- Ramkishen, Y. (2002). New perspectives on rural marketing: Includes agricultural marketing. Jaico Publishing House.
- 40. Saxena, R. (2010). Communicative Identities and Brand Placement.
- Schiffman, L. G., Kanuk, L. L., & Wisenblit, J. (2007). Consumer behavior. Upper Saddle River, NJ.
- 42. Sharma, A. K. (2010). Gain From The Green. Outlook, 56.
- Sherlekar, S. A., & Sherlekar, V. S. (2007). Modern Business Organisation and Management: Systems-based Contingency Approach to the Organisation and Management of Business. Himalaya Publishing House.
- Varalakshmi, R., & Kumar, V. S. A study on factors affecting on green marketing and green practices in selected areas of Tamilnadu.
- Welling, M. N., & Chavan, A. S. (2010). Analysing the feasibility of green marketing in small & medium scale manufacturers. Asia Pacific Journal of Research in Business Management, 1(2), 119-133.
- 46. Winston, A. S. (2010). Green offers a plan for recovery. Financial Executive, 26(2), 23-24.

#### **AUTHORS PROFILE**



Chandni Seth is a research scholar at Amity university Lucknow campus and is pursuing her PhD in Role of green marketing on effective management of electronic waste in IT sector. She has presented many research papers in renowned conferences across India. She has also published research papers in various International journals of high repute.





**Dr. Nimish Gupta** is an Associate Professor at Amity business school, Amity University, Lucknow, Uttar Pradesh. He has a vast amount of experience in teaching and research in management areas. He has nearly 15 research papers in international as well as national journals of high repute. He has an exposure of more than 60 conferences across India.

