

Environmental Green Concept: A Perspective

Raminder Singh¹, Alok Raj²

¹Mechanical Engineering Department, Jaipur National University

²Chemical Engineering Department, Jaipur National University

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ABSTRACT

Today technological, legal and cultural environment is experiencing a change around the world. India after the liberalization era of 1991 has been on the roads of development with the opening of doors of many multinational companies. This development has raised the standards of living of the Indian middle class but this development has brought many challenges for the economy through principle of sustainable development. The sustainable development is a development approach that aims to meet the needs of the present without compromising the ability of future generations to meet their own needs. This balances economic growth, social inclusion, and environmental protection to create a more equitable and resilient world. So, every organization is integrating sustainability with economic development, environmental protection and corporate social responsibility(CSR). Hence in present world the concept of green technologies, green marketing and green (CSR) is required in business environment. This paper aims to study the concept and importance of green marketing and its requirement for human beings and the steps taken to preserve the environment for future generations. The concept of green marketing is based on basic principle of economics i.e. maximum utilization with minimum resources as the needs and aspirations of humans are very high but the availability of resources is limited. So Green marketing helps the organizations to use scarce and available resources in an efficient and effective way to achieve organization goals and needs of the society.

Keywords: Environmental , Sustainable development, economic growth, Corporate social responsibility

Significance of Green Marketing:

The concept of green marketing is synonymous with sustainable marketing. To be more precise, nowadays the main thrust of organizations is to develop strategic decisions for marketing their products, thereby developing the business. Organizations are prone to making profits. But sustainable development requires social marketing wherein the natural resources of land are not depleted to earn one's own profit. In 2015, the United Nations General Assembly collectively designed 17 Global Goals as a "blueprint to achieve a better and more sustainable future for all" and intended to achieve this by the year 2030. It is part of the UN Resolution called "The 2030 Agenda." As part of this resolution, the UN is working to improve food and agriculture, which can have a remarkable impact on the other 16 sustainable goals, combat climate change, economic growth, and also maintain peace and stability in societies around the world.

Green marketing comes with the mantra of "Re-use, Reduce and Recycle." Green marketing helps in reducing pollution, use of eco-friendly products, encourages the use of rainwater harvest, eco-friendly houses and promotes deforestation. Thus green marketing helps to nurture and upkeep Mother Earth with all its beauty. Green marketing, in a nutshell, is to produce products in a sustainable fashion. It also includes:

- Products made from eco-friendly materials
- Eco-friendly packing
- Products not tested on animals

- Products approved with eco-friendly chemicals
- Products that are reusable and biodegradable

Origin of Green Marketing:

The prominence of “Environmental Marketing” (popularly called green marketing) came into being in the late 1980s and early 1990s in Europe. India experienced the birth of green marketing during the late 1990s when there was a revolutionary change in consumer preferences and lifestyles. Green marketing emerged as a significant concept in India after the entry of new and modern marketing concepts brought by different multinationals. To tap more customers, firms started emphasizing this new marketing concept.

Eco-Friendly Houses:

It is a dream of every individual to have a house of their own. Here we should all think that let us have houses which are eco-friendly and sustainable so that they do not harm society at large. The great British-born Indian architect Laurie Baker excelled in building cost-effective, energy-effective architecture and designs that maximized space, ventilation and light, and maintained an uncluttered yet striking aesthetic sensibility. He inspired a generation of architects to utilize not just exposed brick but link it to more substantial ideas, philosophies and principles of sustainable architecture. A pioneer of conservation (green) architecture in India, he was a keen proponent of exposed brickwork who once said, “such unique and characterful creations should not be covered with plaster.”

Another person who has marked her footprints in this field is Chitra Viswanath, based in Bangalore, focusing on ecology and architecture. She follows the philosophy of employing local resources in an optimized way, enabling natural elements to render the construction with social impact and with quality and sustainability centered. Most of her works involves the use of...

“Mud” as a major component, which helps the building remain cool and is relatively labour intensive and available locally. Besides this, the use of stabilized earth, such alternative systems and energies are used: wastewater treatment system, grey water recycling system, rainwater harvesting, solar and wind energy generation system.

Yet another name in this field is P. K. Sreenivasan, following the footprints of Laurie Baker and in this new generation concentrating on low-cost, eco-friendly houses. P. K. Sreenivasan was a civil engineer but he was impressed by the works of Baker and took to that profession and in 1994 established Vasthukam. He helped people understand the concept of eco-friendly houses and made it more cost friendly to them.

A young architect, Srijith Srinivas, who grew up and studied at Loyola School in Thiruvananthapuram, emphasizes the works of Baker. On campus, Laurie Baker had built the beautiful Loyola Chapel, which remains a wonderful example of brick construction. He would go there often with a few friends during break time just to get a feel of the space even at an age when we knew nothing about the technicalities of architecture. Srijith and his team practiced Pidicrete, a waterproof compound to the cement mortar to prevent seepage in their eco-friendly houses called the Brickhaus. Even during construction of the first building, there were heavy rains, but the Brickhaus still did not experience seepage. Another important construction practice was applying Stone Clear on brick and over pointed mortar joints instead of paint for sheen and to prevent probable seepage. Stone Clear is applied so that brick will retain its look. This is a clear coat protecting it from rain.

Green Water Harvesting Techniques

A cost-effective and adaptable green water use technique for limited water supply conditions.

- Enhance crop yields of rain-fed crops up to 30%
- Demonstrated in fields of Navadh, Navagam and Revaliya villages in Panchmahal District of Gujarat

Most regions in India are characterized by monsoon rainfall, eroded and degraded soils with multiple nutrient as well as water deficiencies, declining groundwater table and poor resource base of farmers. Green water harvesting techniques were installed with low-cost effective features such as paired row and furrow, conservation furrow and stubble mulch farming, vegetative filter strips, V-shape micro catchment, crescent-shaped bunds, saucer-shaped basins and crop residue and gravel mulch techniques and furrow irrigation techniques for limited water supply conditions for rain-fed crops.

Sustainability of Rainwater Harvest System

Today with the steady growth of population and the increasing needs and wants of human beings, the resources available are scarce to satisfy the needs. Water has become one of the scarce resources which have to be properly used for future needs. The idea of rainwater harvesting system has been developed in early years. Rainwater harvesting is one of the oldest and simplest methods of self-supply of water for households, residents and farming purposes.

Among the states of India, Tamil Nadu was the first state to make rainwater harvesting compulsory for every building to avoid groundwater depletion. The scheme was launched in 2001 and has been implemented in all rural areas of Tamil Nadu. There was a 50% rise in water level in five years in Chennai and water quality significantly improved, and slowly every state started following this trend.

Today the new generation architects like Srijith Srinivasan have introduced new models of using this rainwater for daily purposes. They have put up this project in Trivandrum where groundwater contains chemicals and is not suitable for drinking. So, with a view to use this rainwater for drinking purpose, he put up these new techniques into work. The technique used is simple with the use of normal filters. Turbidity is removed with a pressure sand filter. Iron is removed with an iron removal filter. Odour, however, is taken care of by an activated carbon filter. In many cities, the public water supply cannot always be trusted. So, we need other sources. Well water can dry up, and that is why he set up this rainwater recharge system.

Picture 2: Water purification – Pressure sand filter – Iron removal filter – Activated Carbon Filter.

This is an initiative taken by Srijith Srinivasan to bring up eco-friendly elements that is needed for a house. This type of houses are very practical and drastically reduce the running cost of the house.

Green Marketing and Plastic Products

Plastic is the demand of the hour. For day-to-day use we cannot be without using plastic. From the morning brush to android phones everything needs plastic. It is because of the convenience of plastic that it has been added in all daily life products. But the very significant part that we need to think about is that the time it takes to decompose is very long. Studies have shown that disasters in the world are happening because of the use of these non-decomposable plastics. Moreover, plastics when decomposing may release toxins harmful to humans and animals. Plastics have many side effects on human and animal health as well as play a major part in environmental pollution. Hence plastic usage has to be controlled or even totally banned. Research studies were taken up and because of the advancement of technology and science today we have eco-friendly, biodegradable plastics.

It has been found out that there are three types of environmentally friendly plastics:

- Bioplastics
- Biodegradable plastics
- Eco/recycled plastics

Bioplastics: Industries today are more innovative and thoughtful about the use of plastics. It is understood that research is going on and researchers are working towards sustainable use of plastics. It is long that this

sustainable bioplastic has come into use. Bioplastics are made of used cooking oil, sugarcane, corn, soybeans, canola, natural gas, castor beans, feathers, algae, wood and oil. Bioplastics are plastics made from renewable resources and are able to break down naturally. They can help reduce reliance on fossil fuels, support sustainability in the industry and allow manufacturer to diversify feedstock. The significance of bioplastics is that this decomposes within a few weeks, whereas a regular plastic bag takes more than 500 years to degrade.

Bio Plastic Life Cycle

Biodegradable Plastics

Plastics such as PLA (Polylactic Acid) are unique plastics for which biological degradation potential is part of nature. They are plastics that are decomposed by the act of organisms like microbes, carbon dioxide and biomass. The production of biodegradable plastics is done using renewable raw materials, micro-organisms, petrochemicals or a combination of all three. Some of these plastics decompose in landfills; they produce methane gas. This gas is suspected to be very harmful and adds to the problem of global warming. Biodegradable materials are expensive, but the long-term ramifications of not using them—including massive landfill crowding—help to put the cost into perspective.

Eco-Recycled Plastic

The process of changing scrap and waste plastic into useful products for further use is called plastic recycling. Recycling is done as a global effort to reduce waste plastic formation and accumulation. Various studies show that plastic does not decompose and it is a threat to the earth's ocean. The Association of Plastics Recyclers has issued a "Design Guide for Recyclability." This has become one of the social responsibilities of corporates that they use recyclable plastics for their products and packaging and to set them apart from their competitors. In the past, only certain types of plastics were recycled. But after technological development, recyclable plastics can be created for the same use and are more environmentally friendly. The impact of plastic has reduced and now plastic is not the same enemy as it was in the past. Improved plastic production methods have altered the impact of plastic creation. The vision of people has changed and now new methods are followed for the production of eco-friendly and recycled plastics.

The Ozone Layer and Its Protection:

Ozone layer acts as a shield in protecting the earth from harmful ultraviolet (UV) rays from the sun and other forms of radiation that could injure or kill most living things. It was discovered in May 1985 by British Antarctic Survey scientists Joe Farman, Brian Gardiner and Jonathan Shanklin that a hole had developed in the ozone layer. It was observed that there was a decline of ozone in the polar region in the stratosphere. It was reported in September 2000 by NASA that the ozone hole is increasing in size. This is a big threat to countries like Argentina, Chile, South Africa, New Zealand and Australia. This depletion of the ozone layer leads to thinning of the layer and lets more UV radiation reach the earth, which injures life on earth. The only way to stop this depletion is by stopping the release of harmful gases into the atmosphere. The depletion of the ozone layer is caused by the release of harmful gases like chlorine and bromine or chlorofluorocarbons (CFCs), which when come in contact with the ozone layer in the stratosphere destroy ozone molecules. Studies have shown that one chlorine atom can destroy over 1,00,000 ozone molecules.

Human activities only have caused ozone depletion and global warming. It is manmade disasters which has caused this. This depletion in the ozone layer has caused many health problems from eye damage to skin cancer. To control this depletion many countries came forward and decided to ban the use of CFC. All countries participating in the UN came to an understanding to phase out the ozone-depleting chemicals that was the cause for depletion. Scientists in this age are working around the clock to develop hydrofluorocarbons (HFCs) to take the place of hydrochlorofluorocarbons (HCFCs) and chlorofluorocarbons (CFCs) for use in air conditioning. HCFCs are powerful greenhouse gases, but they do not deplete ozone.

Hydrochlorofluorocarbons (HCFCs) are better alternatives until safer alternatives are available.

Some solutions to curtail ozone depletion:

- Desist from using pesticides — use alternative eco-friendly methods
- Limit the number of vehicles on road, use public transport
- Utilize environmentally friendly cleaning products
- Prohibit the use of harmful nitrous oxide

Concept and Significance of Green Marketing

Green marketing refers to the promotion and sale of products and services based on their environmental benefits. It involves a comprehensive approach that incorporates eco-friendly production, packaging, distribution, and consumption practices (Peattie & Crane, 2005). The core principles encompass the mantra of **"Re-use, Reduce, and Recycle"**, aiming to minimize environmental footprints.

The significance of green marketing is underscored by its alignment with sustainable development goals (SDGs) set by the United Nations in 2015. The SDGs, particularly goals related to climate action, responsible consumption, and life on land and water, emphasize the critical role of environmentally responsible business practices. Green marketing thus acts as a conduit for organizations to contribute to these global objectives while gaining competitive advantage.

Strategic Importance

- Enhances brand reputation and consumer loyalty.
- Opens new market opportunities for eco-friendly products.
- Ensures compliance with environmental regulations.
- Contributes to resource efficiency and cost savings.

Green Marketing Mix

Green Product

Companies develop products that are environmentally friendly, sustainable, and safe for consumers and the planet.

Example: Patagonia offers outdoor clothing made from recycled materials and organic cotton. Their products are designed to be durable and environmentally responsible.

-Example: Tesla produces electric vehicles that reduce reliance on fossil fuels, promoting cleaner transportation.

Green Price

Pricing strategies reflect the value of eco-friendly features, sometimes at a premium but often competitive through efficiency and innovation.

Example: LEGO offers eco-friendly building blocks made from sustainable materials at comparable prices to traditional LEGO sets, emphasizing value and sustainability.

- Example: The Body Shop* prices its cruelty-free, natural skincare products competitively while highlighting their ethical sourcing.

Green Place

Distribution channels are optimized to reduce environmental impact.

Example: IKEA uses eco-friendly logistics by optimizing transportation routes and employing renewable energy in their supply chain and stores.

-Example: Unilever collaborates with logistics providers committed to reducing carbon emissions, ensuring their products are distributed sustainably.

Green Promotion

Promoting environmental benefits through advertising, labels, and corporate initiatives.

- Example: Seventh Generation emphasizes its commitment to sustainability in advertising campaigns, highlighting biodegradable and plant-based cleaning products.

Example: Ben & Jerry's promotes its use of Fairtrade ingredients and environmentally responsible practices through storytelling and social media campaigns.

Green Product- Companies identify the needs and wants of the consumers and produce goods according to the needs and wants of the customers.

The green products have the following features-

1. Products with green labeling i.e. eco-labels
2. Products that can be recyclable
3. Products that are eco-friendly in nature
4. Products which use less energy and have low price
5. Products with eco-friendly packaging that helps to reduce pollution
6. Products made up of optimum utilization of resources
7. Products which are concerned of sustainability issues

Green Price- Price is an important factor for products as well as for customers because it decides the demand for the products. Customers are willing to pay more prices for the goods only if they are getting green benefit from the consumption of products. Green pricing should be decided that it should increase productivity and also take care of the people, planet and profit. Marketers should fix the price of green products according to the income of the customers and according to the demand of green products. Green price should be fixed in such a way that more customers can afford it and companies can earn more profit.

Green Place- Place is also an important factor to be considered because some people are not willing to travel just to buy products. To attract consumers, place selection is important where distribution of green products is an important task. Green place is about managing logistics to cut down transportation emission and aims to reduce carbon footprint. Green products should be made easily available in the global market so that customers can easily buy the products.

Initially driven by regulatory pressures and environmental activism, green marketing has evolved into a strategic imperative, integrating eco-design, sustainable sourcing, and corporate social responsibility initiatives.

Practical Initiatives of Green Marketing

Eco-Friendly Housing and Architecture

Pioneering architects like Laurie Baker and Chitra Viswanath have championed sustainable architecture utilizing local, natural, and renewable materials such as mud, stabilized earth, and bricks. These practices promote energy efficiency, natural ventilation, and minimal environmental impact (Khosla & Gupta, 2014). Innovations include rainwater harvesting, solar energy integration, and waste recycling systems.

Water Conservation and Rainwater Harvesting

States like Tamil Nadu have mandated rainwater harvesting in buildings, resulting in groundwater recharge and sustainable water management (Government of Tamil Nadu, 2001). Modern techniques involve filtration and recharge systems, such as pressure sand filters and activated carbon filters, to ensure potable water supply from rainwater.

Eco-Friendly Plastics

The proliferation of plastic waste has prompted research into biodegradable, bioplastics, and recycled plastics. Bioplastics, derived from renewable biomass like sugarcane and corn, decompose within weeks, unlike conventional plastics which take centuries (Shen et al., 2010). Recycled plastics, produced through technological advancements, reduce landfill accumulation and environmental pollution.

Ozone Layer Protection

Efforts to protect the ozone layer involve phasing out chlorofluorocarbons (CFCs) and replacing them with eco-friendly alternatives such as hydrofluorocarbons (HFCs). International agreements like the Montreal Protocol exemplify successful global cooperation in ozone conservation (UNEP, 2019).

Challenges and Future Outlook

Despite the advancements, green marketing faces challenges including higher costs of eco-friendly products, lack of consumer awareness, and technological constraints. However, the global response to environmental issues, exemplified by the recovery of the ozone layer during the COVID-19 pandemic, demonstrates the potential for positive change through collective efforts.

Future prospects involve integrating green marketing into core business strategies, leveraging technological innovations, and fostering consumer education to accelerate sustainable practices.

CONCLUSION

Green marketing plays a pivotal role in aligning business objectives with environmental sustainability. It fosters responsible consumption, promotes eco-friendly innovations, and contributes to global efforts to combat climate change and resource depletion. As environmental consciousness among consumers increases, organizations adopting green marketing practices will not only enhance their brand image but also ensure long-term viability in a sustainable economy.

Top Green companies operating in World

RANK	GREEN SCORE	COMPANY SECTOR	COUNTRY	LOGO
1	87.70%	Shire PLC (HealthCare)	Ireland	

2	83.90%	Reckitt Benckiser Group PLC (Consumer Staples)	U.K.	
3	83.20%	BT Group PLC (Telecommunication Services)	U.K.	
4	82.90%	Swisscom AG (Telecommunication Services)	Switzerland	
5	82.00%	Essilor international ISA (Health Care)	France	
6	81.90%	NIKE Inc. (Consumer Discretionary)	US	
7	81.80%	Unilever PLC (Consumer Staples)	U.K.	

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