Chapter – II

INDIAN SCENARIO
2.1 INDIAN ENVIRONMENT

The global community has been struggling with the issue of how to effectively respond to the threat of climate change for several decades. In 1992, the United Nations Earth Summit in Rio de Janeiro produced a landmark treaty on climate change that undertook to stabilize greenhouse gas concentrations in the atmosphere. By focusing on stabilization, however, the treaty implicitly adopted the position that the risks posed by climate change require that emissions be reduced no matter what the cost. The agreement, signed and ratified by more than 186 countries, including the United States, spawned numerous subsequent rounds of climate negotiations aimed at rolling back emissions from industrialized countries to the levels that prevailed in 1990.

Yet, in most underdeveloped and emerging economies, such as India, general discussion of a Green Economy is still at a nascent stage. This is largely due to the perception that Green Growth is always less than standard Keynesian growth and costlier. As these countries have large concentrations of the world's poor and negligible social overhead capital, their utmost priority is to increase income so that the state can ensure distribution and investment in a way that lifts people out of poverty and creates a conducive atmosphere for private investment. Developing countries, such as India, argue that while they are prepared to be part of regime to tackle climate change, they should not be required to bear a disproportionate part of the costs of taking action. Current concentrations of greenhouse gases in the atmosphere are primarily the result of economic activities in the industrial economies since the Industrial Revolution. Because it is the stock of carbon in the atmosphere that matters for temperature changes, any climate change in the near future will be largely the result of the activities of industrial economies. Why should developing countries not be able to follow the same energy intensive development paths of the currently industrialized economies? Evidence shows that some of the most adverse effects of climate change will be in developing countries, where populations are most vulnerable and least likely to easily adapt to climate change, and that climate change will affect the potential for development in these countries. Developing nations, like India, face greater vulnerability because of their reliance on agriculture, their lower tolerance to coastal and water resource changes, and lower financial, technical, and institutional capacity to adapt (causing higher health impacts, for example). While sustainable development might reduce this vulnerability, uncertainties about the
rate of climate change and pattern of economic development in poorer countries raise questions about whether development could occur fast enough to make a difference. Few studies have considered dynamic responses to steadily increasing greenhouse gas (GHG) concentrations, and the implications of multiple stress factors.

India's population is currently in excess of 1.2 billion people and predictions state that by 2050, the population will have grown by another 500 million (UN 2008). This increase in population will undoubtedly lead to a strain on resources, especially when coupled with the impacts of climate change. The widespread affect that climate change is expected to have on agriculture and rural livelihoods will lead to greater migration from rural areas to urban, further straining resources in these centers. Evidence has shown that climate change will affect the distribution and quality of India's natural resources, which will ultimately threaten the livelihoods of the most poor and marginalized sector of the population who are closely tied to India's natural resource base. More than 56% of workers are engaged in agriculture and allied sectors, while many others earn their living in coastal areas through tourism or fishing; indeed most of the poorest people live in rural areas and are almost completely reliant on natural resources for their food and shelter.

India's climate is both diverse and changing. The south experiences tropical climes, through to more temperate conditions to the alpine regions of the north where elevated areas receive sustained winter snowfall. The Himalayas provide a barrier to the cold winds of continental Asia and helps the development of the monsoon during the rainy season (June-September) when over 70% of the annual precipitation in India falls. This results in a warm climate across most of India throughout the year, where temperatures can exceed 40 degrees, but also fall below freezing in the deserts of the north and Kashmir.

While climate change affects everyone, it is the poor who are on the front line. Although agriculture contributes only 21% of India's GDP, its importance in the country's economic, social, and political fabric goes well beyond this indicator. Rural areas are still home to some 72% of India's 1.1 billion people, most of who are poor and marginalized and rely on agriculture as their main source of income. Smaller farms are dependent on timely and sufficient rainfall
during the monsoon for high crop yields. However with the changing climate, rainfall patterns have become erratic and reduced leaving farmers exposed to many risks including droughts, floods, disease of both crops and animals and unpredictable market irregularities (Venkateswarlu 2009). Indeed it is estimated that every 1°C increase in temperature is likely to lead to a 5-10% reduction in yields of some crops (Pachauri 2009).

As the climate change, there is going to be an increasing impact on human health. Temperatures will rise and lead to an increasing frequency of heat waves, ultimately increasing incidences of illness and death in India. Food and water supplies will be affected and the rate of disease will escalate, predominantly affecting the poor and marginalized who are often forced to live in overcrowded conditions with limited access to water and sanitation. As coastal populations are further displaced by rising sea levels, migration will increase, which will perpetuate levels of disease and infection due to the unstable living conditions with limited sanitation facilities and access to clean water and food.

In India – a country with one-third of its population living below the poverty line – the discussion about Green Growth began, to a certain extent, only after the economy had experienced increased growth in the last decade. It has become one of the leading emerging market economies in the world and increasingly plays a major role in multilateral cooperation agreements. This new status might have been one of the reasons for the government and the private sector to begin addressing issues of environmental concern, such as carbon emissions, efficient utilization of natural resources, and so on.

In the last decade, India has undertaken a number of initiatives toward greening its growth. Through public interventions, it has prioritized such areas as water conservation, renewable energy, renewal of degraded land, and solid waste recycling for energy, among other initiatives. The adoption of green technology, which is largely imported in India, incurs high costs, so government has encouraged investment by providing tax breaks and incentives (for example, for solar power generation). In 2008 the government unveiled its first National Action Plan on Climate Change, which has, among other sustainable development tools, eight primary missions covering the areas through which the objectives of a Green Economy can be achieved: energy efficiency, clean technology, renewable energy, public transportation, resource efficiency,
strategic knowledge centers, sustainable habitats, and tax incentives. Recently, it launched the National Mission for a Green India to regenerate 10 million hectares of forest by 2020.

In 2009 to promote investment in the Green Economy, the Indian government launched the National Solar Mission to incentivize the installation of 22 gigawatts of solar power capacity by 2022. Innovative public–private partnerships are already mitigating investor risks to increase the flow of private finance. The Asian Development Bank and the United Kingdom have launched a partial credit guarantee mechanism to mitigate commercial and technical risks encountered by solar project developers. Meanwhile, some government measures make use of subsidies (direct advantage) or exemptions from taxes and regulations (indirect advantages) to promote a Green Economy. For instance, a number of municipalities in the Indian state of Maharashtra are providing 6 to 10 per cent rebates in property taxes for users of solar water heaters.1 The Indian Renewable Energy Development Agency, a public limited government company, borrows money from commercial financers to support renewable energy and energy efficiency projects. The agency includes a network of business development centers and strategic allies and provides technical assistance to those requiring loans.

At the same time, various acts have been passed by the government to protect environment. In 1980, the Department of Environment was established in India. Later on it became the Ministry of Environment and Forests in 1985.Environment Protection Act 1986 came into force soon after the Bhopal gas tragedy.

Following are the list of Environmental Acts in different categories:

**General**

1986 - The Environment (Protection) Act
1986 - The Environment (Protection) Rules
1989 - The objective of Hazardous Waste (Management and Handling) Rules
1989 - The Manufacture, Storage, and Import of Hazardous Rules
1989 - The Manufacture, Use, Import, Export, and Storage of hazardous Micro-organisms/Genetically Engineered Organisms or Cells Rules
1991 - The Public Liability Insurance Act and Rules and Amendment,
1995 - The National Environmental Tribunal Act
1997 - The National Environment Appellate Authority Act
1999 - The Environment (Setting for Industrial Projects) Rules
2000 - The Municipal Solid Wastes (Management and Handling) Rules
2000 - The Ozone Depleting Substances (Regulation and Control)
2001 - The Batteries (Management and Handling) Rules
2002 - The Noise Pollution (Regulation and Control) (Amendment)
2002 - The Biological Diversity Act

*Forest and Wildlife*
1927 - The Indian Forest Act and Amendment.
1980 - The Forest (Conservation) Act and Rules

*Water*
1882 - The Easement Act
1977 - The Water (Prevention and Control of Pollution) Cess
1978 - The Water (Prevention and Control of Pollution) Cess Rules
1991 - The Coastal Regulation Zone Notification

*Air*
1948 – The Factories Act and Amendment
1981 - The Air (Prevention and Control of Pollution) Act
1982 - The Air (Prevention and Control of Pollution) Rules
1987 - The Air (Prevention and Control of Pollution) Amendment Act
1988 - The Motor Vehicles Act

Business organizations, such as the Confederation of Indian Industry, and non-governmental research organizations, such as The Energy and Resources Institute (TERI) and the Centre for Science and Environment, have also been in the forefront of influencing and promoting green
concepts. They focus largely on the areas of green buildings, energy efficiency technologies, solid waste management, water use efficiency, pollution control measures, solar energy, and business incubation, all of which have an effect on social costs. In fast-growing locations, there has been in particular an increased interest in the concept of green buildings. Based on awareness created by green business groups, there is now a realization that investment in green buildings, although costly in the initial stages of a project, can bring down operation costs in three to five years of the project and provide benefits over its lifetime. Discussion of the benefits of green building helped bring about the launch of the Energy Conservation Building Code in 2007; although its implementation is on a voluntary basis, it is expected eventually to become mandatory.

Following the lead of government initiatives, Indian industries are indeed playing a role in promoting a Green private sector is treating green initiatives more as an element of corporate social responsibility than as a business proposition. Further, as there are few incentives for adopting green technology, and no disincentives for using existing technology, progress toward green production has been hampered. Even when government creates an enabling environment – by promoting public and private investment in such sectors as renewable energy, forest conservation, and water management – sufficient business opportunities must be available. Support for green business ventures is often crippled by an inadequate availability of working capital, scant financing options, and inefficient subsidies, limited opportunities for global partnership and trade, lack of demand for the enterprise, and lack of local action. There is a need for more awareness among users as well, since demand is extremely important for these business models to be successful and competitive.

India has also witnessed the emergence of campaigners strongly advocating environmental protection and sustainable development. The torchbearer has been R. K. Pachauri, the chairman of the International Panel on Climate Change and director general of TERI. The noted environmentalist Ashish Kothari has been actively supporting people’s struggles against destructive development projects and has also taken part in reshaping the way government perceives environmental issues. Career banker and environmentalist Pavan Sukhdev has highlighted the importance of viewing the environment through an economic lens.
Sustainable and More Inclusive Growth« is the title of India’s Twelfth Five Year Plan. It gives the impression that the growth that India has thus far achieved might not be sustainable and could be more inclusive. Although neo-classical growth is different from inclusive growth, the significant question now is whether economic growth can be achieved by being indifferent to sustainable growth. In other words, can the high-growth path adopted by India be decoupled from resource use intensity and environmental degradation? The answer may not be positive; hence, the Indian government’s Planning Commission specifically wants to focus on sustainability that can be achieved through accelerating the decoupling process.

In developing countries like India, decoupling economic growth from sustainable growth can be difficult, as the focus continues to be on economic growth, which is a precondition for enhancing Millennium Development Goals allocations. Further, sustainable growth comes with costs, which can adversely affect immediate growth and, therefore, national development. In other words, in India at its current stage of development, there could be a clear trade-off between growth and sustainable development. If the focus of public policy is more on growth, it needs »first, to generate the income and employment opportunities that is needed for improving living standards for the bulk of the population; and second, to generate the resources needed for financing social sector programmes, aimed at reducing poverty and enabling inclusiveness.«13 To make this growth sustainable, however, emphasis will be needed on improving energy efficiency, which is identified as a major risk in achieving the five-year plan’s growth objective. Nevertheless, for longer and sustainable growth, more focus should be on green investment, even if it has adverse growth impacts in the initial phases.

Shifting from current growth strategies to Green Growth does come with costs, and these can be higher (in some cases, substantially higher) for developing countries than industrialized nations. Developing countries, like India, suffering from scarce capital may need to divert more resources toward new and energy-saving technologies that could be costlier than conventional technologies. Although one can argue that this change in technology might secure higher profit margins in the long run, in the short term it could push costs too high and compromise growth as well as employment generation. In the absence of higher social-sector outlays, and because fiscal
space is limited, the cost for the poor from the loss in growth and employment can be expected to be irreparable. Hence, although it is desirable to shift to Green Growth, the actual transformation might be exceedingly costly. The process therefore requires substantial support from the global community.

The development of products differentiated on the basis of pollution content i.e. the green quality is increasingly emerging as an option among companies world over. This has picked up momentum in developed countries where the consumers are aware about the environmental consequences of the product they are consuming and are willing to pay a price premium for such green products. However, in developing countries, like India, the concept of marketing green product has not picked up, even though it is the need of hour for them. In fact, major developing economies like India need to alleviate the rapid growth in the pollution level which is a by-product of the rapid industrialization. Going green at the industry level is one such way to control pollution given the fact that the formal environmental regulation has not been able to deliver tangible improvements. However, there are several reasons as to why the concept of developing a eco-friendly products and thus marketing it has not picked up in Indian domestic market. The industries and specifically the micro, small to medium enterprises (MSMEs) which accounts for more than 50% of output in India face a number of constraints; most important of them being the technical and the economic barriers when opting for a greening option. More so, if producing a green product entails an increasing marginal cost of production. In the face of lack of technical knowhow, if a firm facing a financial barrier opts for developing a greener product then it would end up producing a product which though green would be below standard in the overall quality i.e. the physical quality. Marketing such a green product would be difficult because green attribute should always come after the traditional selling points like price and quality have been catered to. It would be more difficult when the consumer awareness about the environmental consequences of the product they are purchasing is either absent or low to begin with, as is the case in India where consumers are guided more by the prices and the quality of the product they are purchasing than by the green attribute of it. In such a situation justifying a price premium for the green attribute becomes difficult and such a firm offering a high green quality product but having a lower physical quality would lose out on the market share in contrast to a firm which though is polluting in nature, offers a product with higher physical quality attributes.
2.2 INDIAN CONSUMER

Environmentalism has fast emerged the world over as an important phenomenon during the last decade or so owing to increasing environmental degradation and various environmental problems that mankind is facing such as acid rains, green house effect, land degradation and ozone layer depletion etc. To begin with, most of the ecological pressures came from the nongovernmental organizations, and local environmentalists. But of late individual consumers have also become alarmed with environmental problems and started demanding eco-friendly products especially in more advanced countries.

With the ever-increasing penetration of internet and social media, the purchasing activities of Indian consumers has undergone radical change. With the growth of Indian economy, the Indian customer has higher disposable income than ever before, is more conscious and this has affected buyer behavior in cities, towns and even rural areas. In this scenario, creating consumer loyalty is now a whole new test for marketers. The Indian neo-rich consumers’ story is one that has caught the interest of rest of the world and this has led transnational from across the world opening their shop in India. Rising incomes in the hands of a younger population, an expanding economy, easy availability of products and services and availability of easy credit, all of this has given rise to new consumer segments and a rising acceptability of debt, whether it is mobile phones, credit cards, western attire or organized retail, people evidently appear to be spending more, mostly on discretionary objects.

The spread of education and thus awareness has made Indian consumer show concern towards worsening environment. One type of environmentally conscious behaviour is environmental consumerism (green buying)--purchasing and consuming products that are benign towards the environment. The increasing number of consumers who prefer and are willing to buy eco-friendly products is increasing and thus are creating new opportunities for businesses that are using "eco-friendly" or "environmentally friendly" as a component of their value proposition. In general, more Indian consumers are likely to buy eco-friendly products and packs if they are reasonable priced and easily available. The future key for marketing could be to select more ethical and ecological responsible products and packaging, which is also suitable for consumers,
thus harmonizing environmental concerns with commercial considerations. Indian consumers are showing the way to producers to adopt technologies to produce eco-friendly products.

Due to pressures from environmentalist and non-government organizations, Indian government has enacted a number of legislations to fight the pollution threat and preserve natural resources. The progress, however, continues to be more of a government introduced one. Not much advancement can be expected unless industrial and individual consumers turn green and start engaging on their own in eco-friendly behaviours.

However, in developing countries like India, the concept of marketing green products has not picked up, in spite improving literacy rate among people and various legislations enacted by the government. Not many people are buying eco-friendly products even though it is the need of hour for them. In fact, major emerging economy like India needs to lessen the rapid growth in the pollution level which is a by-product of the rapid industrialization. Going green at the industry level is one such way to control pollution given the fact that the formal environmental regulation has not been able to deliver tangible improvements. However, there are several reasons as to why the concept of developing a green product and thus marketing it has not picked up in Indian domestic market. The companies and particularly the small to medium enterprises (SMEs) which accounts for more than 50% of output in India, face a number of barriers; most important of them being the technical and the economic barriers when opting for a greening option. More so, if manufacturing a green product entails a higher marginal cost of production. Faced with of lack of technical expertise, if a firm facing a financial barrier opts for developing a greener product then it would end up producing a product which though green would be below standard in the overall quality i.e. the physical quality. Marketing such a green product would be difficult because green attribute should always come after the traditional selling points like price and quality have been catered to. It would be more difficult when the consumer awareness about the environmental consequences of the product they are purchasing is either absent or low to begin with, as is the case in India where consumers are guided more by the prices and the quality of the product they are purchasing than by the green attribute of it. In such a situation justifying a price premium for the green attribute becomes difficult and such a firm offering a high eco-
friendly product but having a inferior physical quality would lose out on the market share in contrast to a firm which though is polluting in nature, offers a product with higher physical quality attributes.

2.2.1 Salient Features of the Indian Consumer Behaviour

Indians are known to be, one of the shrewdest customers in the world. The ‘value factor’ very much intertwined with their lives, to such an extent that even luxury brands have to work out unique pricing strategies to enthuse the great Indian consumers to buy their products.

Indians are family people. The family, for example, even includes extended family and friends as well. Brands that approve family values are logically more popular among customers and can make easy in roads in the Indian market.

Also, Indians give more importance to cultivation, care and affection, than values like goal and accomplishment. The companies that talk of such feelings find it easy to attract the Indian consumers.

Besides, psychology and economics, even history and customary products have played a crucial role in the development of Indian consumer behaviour. This may be one of the reasons why we find both traditional and modern products placed beside each other, at the retail stores.

2.2.2 Various Fragments of Indian Consumers

The Rich Class

Joint families as well as nuclear families fall in this category. These are third or fourth generation business families. They possess several imported cars and houses. They seek for social status and power. The obscenely wealthy, some of them are first-generation entrepreneurs, some are techies. They may be similar to the rich from the developed countries.
The Upper class

The upper class, also called the ‘Socialites’ shop at specialty retail outlets, visit clubs and spend bountifully on luxurious objects. Socialites are in particular brand conscious and would prefer to spend only on well-known brands.

The Middle Class

The middle class are the showpieces of true Indian culture. They are the fastest growing social class; hope for global brands, but with a local touch. Quite conventional in their attitude, they do premeditated spending and believe in giving more time to their families than in parties. They believe more on savings than in spending.

The Working Women

From the late nineties, there has been a rise in this class. Well educated and financially independent, this segment has especially unleashed opportunities for the retailers in India. Today, she is standing side by side with, and at times marching ahead of men. Working women have their own preferences when it comes to purchasing goods for both personal as well as family needs.

Rural Consumer

More than half of India’s population resides in rural hinterlands. And with growing middle-class, particularly in the metros, there is an expected spill-over effect in the rural India as well.

The Indian rural market is apparently growing at 3-4% per annum, thereby adding more than 1 million new consumers every year. Today it accounts for nearly 50% of the volume consumption of fast-moving consumer goods (FMCG) in India.

2.2.3 Increasing awareness among Indian Consumers

Rise in literacy rates and exposure to the western world, satellite television, newspapers, foreign magazines and media have all led to the phenomenal rise of Indian consumer. Today, increasing number of Indian consumers has become choosy and demand quality products at competitive
prices. They prefer to purchase their preferred products from well known retail stores, where responsibility is apparent and feedbacks are given prominence.

2.2.4 Shifting Patterns in Indian Consumer Behaviour

Changing times have been influencing the lifestyles and the buying behaviour of Indian consumers. And with growing income and increase in working urbanities, the evolutions in patterns have become much more evident.

*Bulk Buying*

The working class with increase in purchasing power and with both partners working is more prefer fast and ready-to-serve food, may be due to lack of time, rather than home-cooked food, as they want to avoid the troubles of cooking and cleaning. Refrigerators becoming a necessity rather than luxury, bulk purchasing seems to be the norm, with purchasing becoming a week-end affair, at times even month end affair. No more passing visits to neighborhood stores on day to day basis. The current trend is buy things from one stop hyper stores and super markets.

*Stylish Lifestyles*

There seems to be heavy western influence on urban middle and upper class Indian consumers. There is a positive attitude blend towards western lifestyle. Moreover, the Indian consumers have higher degree of flexibility and more experimental in their approaches. And via exposure to international media and Indian’s working abroad, this has been spiraling growth in western trends. Increasing number of beauty parlors in the city, eateries, designer wear, international branded wrist watches, hi-tech products are a few examples which mirror these changes.

Foreign products have made rapid in roads in India, in the following product categories:

- Packed food
- Beverages
• Ready to eat food

• Canned food

• Pre-cooked food

• Personal care products

• Garment and apparel

• Audio/video products

• Footwear

• Toys

• Sportswear

• Gift items

*Seller’s Market making roads for Buyer’s market.*

The seller market is slowing giving way to the buyer’s market. With economic liberalization that started in 1991, new products have made inroads into the Indian markets, thereby increasing the product choices available to Indian consumers. Import license restrictions have been done away with, and as a result the range of consumer goods has been increasingly flooding Indian markets.

Indian consumers have always desired imported goods and with open-market policies being practiced by the government, their longings have apparently reached a fruitful end.
Quality Oriented Outlets

Indian consumers have an inclination to purchase branded products that are pretty expensive, and because they feel that branded products are qualitatively superior. While buying branded products, that are not just brand driven, they also opt for known retail outlets, because they feel that these well known retail stores offer them quality products.

Freebies

Discounts and freebies is what attract the middle class Indian consumer. White goods such as TVs, washing machines, refrigerators, and ready made garments are few of the product categories in which freebies are available. Even fast moving consumer goods such as tooth paste, soaps, detergent, cooking oil etc. consist of of freebies.

Eco-Friendly-Products

Conventional wisdom has it that the Indian middle class values price over almost any other attribute in its purchasing decisions and is relatively indifferent to environmental concerns. However, eco-friendly products seem to be the new mantra of the economically better off Indians. Indians in the future are likely to get attracted to environment-friendly products and packages.

Indians think the government needs to play a prominent role in supporting green innovation and consumers want their government to mandate disclosure of ingredients and greater label clarity a message, perhaps, for corporate social responsibility programmes as well.

So, the key strategy for marketing could be choosing ecological responsible products and packaging, which will be convenient for consumers, thus, complementing environmental concerns with commercial considerations.