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## Environmental Transformation-Biggest Challenge of 21st Century

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*The global economy is expanding fast amidst a rapid deterioration in the environment. Unless we arrest the current trends in environment degradation, there may well be the beginning of an economic decline too. Individuals often believe that they can make little difference in the larger scheme of things. But they can. Indeed without individual change, there can be no societal change. For those in the field of management education, an important thing to realise is that it is not easy to engage the corporate/industrial world's attention on these issues. The business community, which today commands more economic power and influence than ever before, must play a major role and it is our responsibility to ensure that the management aspirants who graduate are equipped with sound understanding of environmental issues and their transformational implications on individuals as well as on the society at large.*

## Environmental Transformation-Biggest Challenge of 21st Century

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Traditionally, business schools have been obsessed with imparting functional and technical competencies to management aspirants, with little or no sensitivity towards the "softer" dimensions of management. Issues concerning environment, ethics, personality, etc. have been rarely given the importance and status that disciplines like Marketing, Finance and HR enjoy. These softer issues play a major role in transformation process.

Management education must give due emphasis to environmental issues and how they impact on the quality of life. B-School curricula must incorporate the human side of business and quality of life. This requires a thorough assessment of the role an environmental specialist can play in a business organisation. A few questions need to be answered:

*How can an environmental orientation be beneficial to the organisation?*

*Should it be taught as a specific skill or as a generalist skill, like communication or leadership?*

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There are several reasons as to why B-Schools must transform. It is the moral duty of the B-Schools to groom mature, open minded & conscientious individuals, who are equipped with technical skills and human qualities. This will ensure that they appreciate and promote the wider interests of the society.

The second relates to the changing world scenario. Traditional careers are gradually ebbing out and new job opportunities in fields of communication; environment and ethics are fast emerging.

Organisations are also transforming and showing a more human face. A focus on environmental care and concern generates immense goodwill for the corporation not only in the eyes of investor but for the customer as well. Therefore, B-Schools must develop in their management graduates the skill of transforming change into a personal competitive advantage.

There is statistical support for the argument favouring the inclusion of modules on environmental issues in the curricula of B-schools.

#### BURDEN OF INCREASING NUMBERS

The projected growth in population over the next half century may more directly affect economic progress than any other single trend. Between 1950 and 2000, world population increased from 2.5 billion to 6.1 billion, a gain of 3.6 billion. And even though birth rates have fallen in most parts of the world, recent projections show that population is projected to grow to 8.9 billion by 2050, a gain of 2.8 billion. Our numbers continue to expand, but earth's natural systems do not.

The amount of fresh water produced by the hydrological cycle is essentially the same today as it was in 1950. So, too, is the sustainable yield of oceanic fisheries, of forests, and of agricultural lands. As population grows, the shrinking per capita supply of each of these natural resources threatens not only the quality of life but, in some situations, even life itself.

Government policies aim at pushing industry growth to newer heights. To attain this, significant changes in the competitive business environment are being made. Individuals and companies demand and obtain freedom to enhance profitability employing fair and aggressive practices.

In such a scenario, while it is important that these market forces are dealt with commercial acumen, they must be supported by initiatives to further preserve and protect our resources. Environmental awareness, responsibility and familiarity with environmental regulations and laws will equip the young managers to effectively deal with increasing demands placed upon them by government agencies, NGOs and environmentalists.

Environment Management has tremendous scope in the following areas:

- Environmental Cost Accounting
- Environmental Legislation
- International Trade & Environment Issues

## ENVIRONMENTAL COST ACCOUNTING

The cost of complying with environmental regulations has to be included in the accounting practices and business executives must learn to manage, control and most importantly, predict these costs to ensure their enterprises' future competitiveness.

The changing environment has extended the boundaries of accounting and it is moving away from its traditional procedural base such as record keeping, preparation of budgets and final accounts to include such issues as accounting and reporting for conservation of environment, that is in other words, environmental disclosure.

## ENVIRONMENTAL LEGISLATION

Equally important is the interpretation of environmental laws. In the wake of growing national and international pressure for preventing and controlling environment pollution in India, a number of new Acts have been passed and old ones have been amended to ensure strict compliance with environmental norms. The Environment Protection Act 1986 and the Public Liability Insurance Act, 1991 have been passed. The Air (Prevention and Control of Pollution) Act 1981, the Wildlife (Protection) Act 1972 and The Motor Vehicles Act 1938 have been amended. Many monitoring agencies like Central and State Pollution Control Boards have been set up for controlling pollution and an "Eco-Mark" label has been introduced to label consumer products that are environment-friendly.

Environmental audit is compulsory. In the not too distant future, all companies would probably have to prepare their own environment conservation programme statement each year, showing the items of environment conservation to be covered, such as pollution control, recycling of wastes, tree plantation, etc.

Making matters more complex is the fact that since all aspects of environment are not quantifiable at present due to paucity of proper measurement techniques, both narrative and quantitative information will have to be provided. These reports will also have to be duly audited.

In India, only 3% of industries have submitted environment audit reports. What is of great concern is that the status of compliance is very low for old plants. In Karnataka, 48 out of 99 units set up before 1991 do not conform to the present environment standards. The growth of petrochemical refineries, thermal power generation, chemicals, food processing, caustic soda industries provide tremendous employment opportunities. Of these, the first three account for over 70% of foreign direct investment. In fact, in Ankleswar in Gujarat, 3000 chemical units constitute half of the total units. They reportedly generate 270kl of hazardous liquid waste daily and 50,000 tonnes of hazardous solid waste annually. Compounding the problem is the fact that multinationals like Shell, ICI, Dupont are also investing here. In certain states like Maharashtra, Gujarat, Uttar Pradesh and Tamil Nadu, capacity utilisation by almost all industries has also doubled since the seventies and this has significant environmental consequences.

This highlights the need for authenticated information on the state of pollution, environment management measures and implementation of eco-friendly technologies in the country.

## INTERNATIONAL TRADE AND ENVIRONMENT

No discussion about the role of business schools in providing education on environment-related issues is complete without highlighting the relationship between international trade and environment. In fact, the preamble of the Agreement establishing the World Trade Organisation (WTO) states that "relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand and expanding the production of and trade in goods and services; while allowing for the optional use of the world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development."

The WTO Committee on Trade and Environment (CTE) recognises that there is a close link between poverty and environmental degradation.

Liberalised trade leads to higher income level in the developing countries and demand for environment-friendly products and processes will increase in developing countries. This is an irreversible trend that the corporate world will have to follow if its products are to be globally acceptable.

## RESPONSIBILITY OF B-SCHOOLS

It is the responsibility of B-Schools to ensure that the management graduates are equipped with sound understanding of environmental issues and their implications on individuals as well as on the society at large.

At the industry level, work-related injuries and diseases are responsible for the death of over a million people every year. The cost to the world economy has been estimated at 4% of the world's gross national product. Harmful chemicals and toxics when released into the atmosphere and water bodies impair the intellectual development.

Who can forget the Bhopal gas tragedy or the arsenic contamination of drinking water in Bangladesh?

We cannot afford to release into the mainstream of the corporate world young professionals who have an ostrich-like approach towards these risks. The business practices they choose to follow will have to be tempered by ethically desirable standards.

They will have to:

- Curb or minimise the use of non-renewable fuels
- Reduce waste generation
- Eliminate pollution and thereby minimise global environmental change.

For example, the construction and engineering sector has an important role to play in upgrading the human environment, through environmental engineering.

Another example of industry behaviour working against health and environment is the tobacco industry. The tobacco industry may talk of "freedom of choice" when restrictions are placed on advertising, promotion schemes and trade of their products. But let's look at the facts: Globally, between 82,000 and 99,000 young people start smoking every day. This is no surprise. Since we know that the tobacco industry targets its huge commercial machinery on adolescents, this is not freedom of choice. Young people are, in fact, to be properly educated that smoking is injurious to health and to the environment.

In view of the sword hanging upon us, we have no freedom of choice. We have to include environmental education in the curricula of B-Schools. The costs are too high and the issue too critical and pervasive to be deferred.

### GROWING CONCERN AREAS

There are other areas of growing concern. The use of plastics, which, when recycled, create a health hazard, industrial waste and, of course, the pollution caused by vehicular traffic are all violators of the principles of social justice. In fact, India recycles about 60% of its plastic waste. India's ratio of recycled plastic is the highest in the world leading to an industry with a turnover of Rs.2,500 crores per annum. And the tragedy of plastic waste also begins here. Plastics choke municipal sewers, block water drains and kill cattle. In fact, cities have their own graveyards of plastics. It is really shameful that the cow whom Hindus respect as mother dies after consuming poisonous plastic bags. One has to visit Delhi's Mundka Village to understand the full nuances of the plastic recycling industry.

Medical cotton waste is used as fill-ins for winter quilts. Be it glucose bottles, blood bags, uro-bags, surgical gloves, disposable syringes - they are all available for re-use. It is well known that a needle used in injecting an HIV-positive patient, if used again, may cause AIDS to a healthy person.

We now find that industrial pollutants and wastes are released into rivers, polluting their water. Ganga, the most sacred river for Hindus, is no longer pious because of entry of such pollutants into its water. As conscious employers, citizens and employees, we have to inculcate a consciousness that questions whether plastic is a biomass and whether it fits in the exosphere's chain of being!

Reminders of the need to do business within the parameters of social justice are the need of the hour especially in the current era of liberalisation with its accompanying free market approach.

### TRAINING TO DEVELOP AN ENVIRONMENTAL CONSCIOUSNESS

If industry's oft-repeated assertion of commitment to environmental protection has to be actually translated into action, then management professionals will have to be trained in the following areas:

- Identifying and defining environmental objectives in quantitative terms
- Breaking up of broad objectives into specific targets expressed in quantitative terms and formulated for each responsibility/profit center

- Consideration of international standards, regulatory bodies, regulations, acts, notification of local authorities, state and central governments
  - Preparing short and long-term plans for environment management
  - Designing a formal organisational framework, identifying the persons in charge of environment management, and
  - Laying down the lines of authority and vertical and horizontal relationships.
- There is definitely a problem in exact computation of the environmental impact. However, the audit procedure that may well begin as a compliance procedure can definitely evolve into substantive procedure.

### ENVIRONMENTAL RESPONSIBILITY: NO LONGER A CHOICE

The message from these measures is clear. Business firms will have to initiate and bear the burden of controlling pollution and conserving the environment. Environmental responsibility is, therefore, no longer an optional responsibility for business. In this scenario, B-schools face the risk of becoming hopelessly out of tune with their environment if they continue to tread the beaten track of traditional accounting, or focussing on the gamut of labour laws only. Interpretation of these environmental laws and their implications in the business world will per force have to be part of the curricula. This is in deference to the government requirements, public opinion and the principles of equity and social justice.

In fact, an often-understated fact is that the Government of India has introduced fiscal incentives like accelerated depreciation on the installation of pollution control equipment. The point to note here is that the European Commission has begun to demand more of such controls and measures from industry.

American industries too are required to give the details of 300 substances on their Toxic Release Inventory. The United Nations Environment Programme and the International Chamber of Commerce have launched the Public Environmental Reporting initiative as a basic framework for environmental reporting.

In India, we need strict implementation and monitoring to ensure compliance and this will be facilitated if employees at various levels are equipped with the knowledge, implication and costs of environmental hazards and degradation. In fact, lack of knowledge or training in these areas is currently a serious lacuna in our management education curriculum, one that has to be immediately removed by the B-schools if their claims of catering to industry/corporate world needs and trends are to be authenticated.

### CONCLUSION

The world is in our hands. As we enter the third millennium, humanity is faced with a daunting challenge. The global economy is expanding amidst a global deterioration in the environment. Unless we arrest the current trends in environmental degradation, there may well be the beginning of an economic decline too. We need a shift in paradigms to deal with shrinking forests, falling water tables, disappearing plant species, changing climate. Caught up in the economic excitement, we seem to have lost sight of the deterioration of environmental systems and resources.

There is a growing awareness that environmental problems are as much a question of lifestyles as of agricultural or industrial activity. Therefore, it is necessary to change people's attitudes with regard to environment. New environmental behaviour is necessary in which quantitative demands and confrontation must be replaced by qualitative appreciation and co-ordination. Knowledge of environment-friendly products, eco-labelling on products, recycled packaging and other issues must be given to the aspiring managers to enable them to realise the full value of the education imparted to them.

Future generations will watch carefully how we acted when we had all that knowledge at hand. We have the knowledge, the evidence and the technology to make the necessary changes. But is the will there to transform the whole outlook at this gigantic problem of environmental degradation? Posterity will not forgive us if we fail to contain immediately the further environmental degradation and make the life of future generations safer and better.

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