

Chapter

7

ENVIRONMENTAL ISSUES IN THE AGE OF GLOBALIZATION

7.1 INTRODUCTION

The term 'globalization' referring primarily to 'an economic system in which raw materials, manufactured goods, intellectual property and financial transactions flow freely (although not equally) across international borders' has been in common use since the early 1990s. Although globalization has an economic connotation as many opine that globalization is nothing but an expansion of capitalism, which entails the integration of local and national economies into the unregulated, even chaotic international economy. Nevertheless, there are other facets of globalization as well that cannot be ignored. Over the last few decades, the spread of globalization has been very rapid and comprehensive that its effects are being felt in the smallest and most remote human communities and natural areas in both developed and undeveloped countries.

Economic globalization affects the environment and sustainable development in many ways. Economic growth accompanying globalization affects the population in multifarious ways. Globalization improves the prospects for economic growth throughout the world and free trade results in higher per capita income. Higher incomes result in both higher levels of consumption while poverty is another reason that put a pressure on environment as the impact of marginalization of economies and people can be poverty induced resource depletion and environmental degradation. Globalization reinforces the vicious circle between poverty and environmental degradation. It favors some while affecting a large number of people adversely. Changes in industrial structure of countries, resource use and pollution level.

One cannot deny that the world today is connected through travel and communication facilities. There are very large corporations that dominate the commercial and financial activities throughout the world, that are regulated not by the nation- state but by one or small number of regulatory bodies that are not only complacent with the interests and objectives of corporations rather work to promote the interest of the multinationals they regulate, this of course detrimental to the sovereignty of nation- states. But equally worrisome is the fact that globalization is responsible for promoting the non-traditional security threats and prominent among these is the impact that it has had on the environment and for the major environmental damages we are experiencing today.

Globalization has, henceforth, highlighted at length in the debates on environmentalism. The Green activists have questioned and highlighted its far-reaching implications of the environmental pressures of globalization. The intense environmental consequences emerging from globalisation are likely to prove extremely long lasting and difficult to address.

Environmentalism is a broad philosophy, ideology and social movements regarding concerns for environmental protection and improvement of the health of the environment, particularly as the measure for this health seeks to incorporate the concerns of nonhuman elements. Environmentalism advocates the lawful preservation, restoration and/or improvement of the natural environment, and may be referred to as a movement to control pollution, addressing ecological imbalance, loss of bio-diversity etc.

The impact of globalization is being experienced not only by domesticated varieties but by wild relatives of food plants as well. The wild relatives of cereals, vegetables, fruits, nuts and other crops constitute a critical resource for genes affecting disease resistance, pest resistance, yield, vigour, environmental adaptations etc. and the wild variety ranges are decreasing sharply because of development, overgrazing, increased herbicide use, logging and conversion of marginal lands to production and export agriculture. All of them related to at least in part to globalization. Also, an estimated of the 3831 breeds or breed varieties of ass, water buffalo, cattle, goat, horse, pig, and sheep . . . 618 are estimated to have become extinct. As per the estimates of The International Union for Conservation of Nature (IUCN) 75% of genetic diversity of agricultural crops has been lost. Globalization has been the result of liberalization and privatization. A structural shift in policy from the public sector to the private sector that eventually led to the shifting of power, authority and control from state to that of the market, which primarily worked on the principle of profit maximization and competition with no concern for the environmental concerns, gradually depleted the environment both in quantitative and qualitative terms. This is to a significant extent, was also responsible for the growth in consumerism and increased inclination towards materialistic culture. The increased consumption of products affects the ecological cycle, which in turn, necessitates production of goods. The increased need for fuel for transportation leads to pollution, depletion of the ozone layer apart from increasing the greenhouse effect. As a result, there is an extensive use of natural resources resulting in indiscriminate use of the resources for a wide variety of products leading to the exploitation of the environmental resources.

Other than this, there are various other environmental issues that require action and concerted efforts at almost all levels of governance. Some of these are explained below:

7.2 LOSS OF BIO-DIVERSITY

In most simple words, it can be understood as the diversity of life-forms around us and unfortunately, the rapid changes in technology, advancement and scientific innovations which is claimed by few, as facilitators toward monitoring and preserving various life forms are said to have threatened various plant and animal species by many. There are three kinds of bio-diversity namely, genetic bio-diversity, habitat bio-diversity and species bio-diversity. *Habitat bio-diversity* refers to the variety of spaces where life exists like, deserts, oceans, lakes, mountains etc. and when the habitat is threatened due to abrupt climatic changes, frequent fluctuations in temperature, disturbed rainfall patterns, increased rate of urbanization and industrialization and in many other similar ways, the habitat loses its natural capacity to sustain the various life forms. *Genetic bio-diversity* refers to the diversity of biotic species that share the same genetic information or the set of species having more or less similar genetic make up that

...their basic characteristics and globalization is considerably responsible for the loss of wide variety of genetic species in the agricultural domain. *Species bio-diversity* refers to all named and unnamed species existing on the earth. It is estimated that there are approximately 1.8 million different species identified on Earth. Of all the species identified. Each year, approximately 13,000 more species are added to this growing list of known species. For example, in 2013, a species of a venomous snake called the green palm-pit viper was discovered in the country of Honduras. In 2014, a carnivorous mammal species called Olinguito was discovered in Colombia and Ecuador. Each species has a role in the ecosystem which species has a contributive role towards managing and maintaining the eco-system health. All three kinds of bio-diversity are affected due to below mentioned factors:

1. Deforestation
2. Pollution
3. Urbanization
4. Modernization and Industrialization
5. Technological Innovations
6. Migrations from Rural to Urban Areas and from Developing to Relatively Developed Economies
7. Establishment of MNCs in countries where the natural resources are in abundance and where cheap human resource is available and also in countries where environment protection laws are not stringent and can be violated easily.

7.3 GLOBALIZATION AND ITS RELATION WITH THE LOSS OF BIO-DIVERSITY

The necessities, compulsions and exigencies of globalization has a close relation to the loss of the bio-diversity mentioned below:

1) Reduced Genetic Diversity in Agriculture

Globalization is said to have brought about profound reduction of the genetic diversity in agriculture over the past few decades that is well documented for food plants, and pertains to vegetables, grains and tree crops. Since 1970, pharmaceutical, petrochemical and other transnational corporations have purchased more than 1,000 once independent seed companies. In the wake of globalization, giant seed companies/corporations are permeating more and more agricultural areas that have been hitherto isolated from global trade as a result, non-commercial varieties maintained by individual farmers, especially in Third World countries suffer a set back. The local farmers drop a wealth of existing varieties in favour of the new, commercial, 'high-yielding' seeds. According to H.Sudarshan, "Over the last half a century, India has probably grown over 30,000 different indigenous varieties but the situation has undergone a drastic change by reducing these varieties to more than half and the rice diversity is likely to reduce to 50 varieties in another 20 years". Moreover, the toxic wastes affect the genetic diversity.

2) The Habitat Loss

The habitat has been drastically affected due to globalization. With rapid urbanization and industrialization large spaces have been cleared that were once the habitat for a wide range of flora and fauna that survive

on land are now at threat. *Urbanization* has dramatically increased the rate of habitat loss and change. Sprawling development is consuming land at a rate of five or more times the rate of the population growth, destroying wildlife habitat and degrading water quality. Dredging, draining, bulldozing and paving the land for housing developments, malls, business parks, and new roads, all destroy habitat. Habitat loss has also disturbed the marine and ocean eco-system as well.

The world being connected through sea-route has proved to be one of the major way by means of which people and goods are transferred from one place to another. This has eventually led to the loss of habitat for various marine species due to oil spilling leading to acidification, de-oxygenation and warming of ocean water. It is not just fish in the oceans that may be struggling, but most biodiversity in the sea. This includes mammals (e.g., whales, dolphins, polar bears), birds (e.g. penguins), and other creatures (e.g., krill).

III) The Species Loss

The overly corporate-led form of globalization that we see today also affects how natural resources are used and what priorities they are used for. A large range of species, subspecies are near a threat of extinction while a good number of the species and sub-species have become extinct due to increased human activity resulting in the continual fiddling with natural processes, phenomenon and cycles. "Every day, an estimated 100 plant and animal species are lost to deforestation" . . . "A conservative estimate of the current extinction rate indicates that about 27,000 species a year are being lost." (*National Wildlife Federation*). The loss of species, in particular, is caused by the growing size of human populations, and the rate at which humans consume resources and cause changing climate. The figures are alarming and disappearance of the species is ranked as one of the planet's gravest environmental worries, surpassing pollution, global warming and the thinning of the ozone layer.

7.4 INCREASED LEVELS OF POLLUTION AND GLOBALIZATION

A few forms of environmental pollution related to globalization are indisputable. One is the pollution provided by the transport of raw materials and finished goods that were formerly produced and consumed locally and other is the technological innovation. Globalization is restructuring the control over resources in such a way that the natural resources of the poor are systematically taken over by the rich and the pollution of the rich is systematically dumped on the poor. The global economy is in the control of the northern corporations that are increasingly exploiting the third world resources for their global activities and making the South bear disproportionately the burden of the global economy. Across the Third World countries, trade liberalization policies and structural adjustments are becoming a serious threat to the survival of the people. The global institutions such as, World Bank, IMF and WTO are also, forcing the cost of adjustment on nature, women and the Third World nations as is evident from the statement and recommendations given by the former Chief Economist of the World Bank. Lawrence Summers, Former Chief Economist of the World Bank and key figure in the preparation of the 1992 World Development Report suggested that it makes economic sense in shifting the polluting industries to the Third World Countries and the logic behind such a suggestion was that:

1. Since the wages are low so the economic costs of pollution arising from increased illness and death are least in the poor countries.