CHAPTER - VII

INDIA AND ECOLOGICAL SECURITY: A CASE STUDY OF EARTH SUMMIT AT RIO
Introduction: Environment & Security

"Environment", may be defined as whatever environs or encompasses, especially one's surroundings collectively which affects the life and development of an organism. In simpler terms, our environment is our surrounding including both living (plants, animals and people) and non-living (land, water and air) components of it. These components of the environment also constitute our environmental assets or resources. Protection of the environment is one of the most pressing needs of today. Tension and even crisis situations have arisen more than once in mankind's relationship with nature during its historical evolution. But in recent decade, there have been qualitative shift in the character of these relations.

This environmental issue became all the more important after the second World War due to the international environmental movements. It became more evident when people become conscious of common stake of humanity in the protection of bio-sphere and moved to persuade their governments to act in conformity with their awareness. Man's desire for more joy and comfort has led him to exploit nature's free goods to the extent of reducing its natural capacity for self stabilization. Man has been indiscriminately manipulating the environment and nature to fulfill his narrow selfish interests. Most of the environmental difficulties originate from man's ecological misbehaviour. These ecological problems consist of the deterioration of man's natural environment through industrialization and urbanization of his mode of life, exhaustion of traditional energy and raw material resources, constant growth of demographic pressure on nature, disturbance of natural ecological equilibrium the economic elimination of individual species of animals and plants, the negative
genetic consequences of the pollution of nature by the wastes of his economic activity, including the danger of a genetic degeneration of mankind itself. Thus, steady scientific and technical progress has secured an unprecedented growth of man's power in relation to nature and that is probably why we forgot for a time that there are objective limits to our action on nature. Since the beginning of mechanization, we have been inflicting cruel acts on the nature. In the contemporary scientific era, the blows have been growing in power. The ecological problem is now becoming not just one of the pollution of the environment and other disastrous effects of our economic activity on earth but also one of transforming our anarchic impact on nature into a conscious, purposeful, systematically developing interaction with her. We must closely follow the results of our impact on every one of the components of our plants life system. The planning and optimizing of our interaction with nature and regulating of our impact on nature so as to create a maximally humanized habitat became one of the most urgent issues of the final decades of the 20th century. If this thing is not taken care of properly, then the evil effects of nature in terms of global environmental degradation and other ecological problems would pose a serious challenge to the life of the entire humanity which is arguably worse than those posed by most military security threats. It is in this sense that one tends to address the concept of environmental security which rests primarily on evidence that there has been serious degradation of natural resources and vital life support-systems as a result of the recent acceleration of global economic activities having far reaching effects in the long run.

Broadly, environmental security is concerned with any threat to the well-being of societies and their population which can be influenced
by public policies. Proponents of environmental security argue that increasing stress on the earth’s life support systems and renewable natural resources have profound implications for human health and welfare that are at least as serious as traditional military threats and therefore requires cooperative solutions. There are some clear reasons for making a theoretical and operational linkage between security and changes in the environment caused by human activity. First of all, environmental degradation is in itself a severe threat to human security and all life on earth. Air and water pollution, deforestation, soil erosion, fish stock depletion, acid deposition and nuclear dumping resulting from civilian and military activities can and do change our living conditions dramatically. These problems might plausibly contribute to conflict within and among developing countries. In Rwanda this has happened owing to development model and degradation of resources combined with other factors.

Secondly, environmental degradation or, change can be both cause and effect of violent conflict which might severely threaten the very basis of security. These arguments focus upon empirical cause and effect relationship, particularly the potential of major environmental changes to generate and intensify conflict between and within states. For e.g., reduction in river flows due to global warming, may cause tensions among the states or, other groups that depend upon the increasingly scarce water resources. This water scarcity remained an environmental source of conflict in the Middle-east, Egypt and Jordan and Nile river are the main focal point of conflict for centuries. It may cause conflict between Uzbekistan, Kazakhstan and Tazikistan around river Darya. Along with this water scarcity, it is also vital to predict and control wide scale spontaneous migration or, displacement of huge population from environmentally devastated
areas into neighbouring regions. These so-called environmental migration may cause social tension and political instability that leads to violent conflict. Because of this migration a heavy strain could be foreseen over the resources of the recipient region or state⁴.

Another environmental dimension to security draws attention to the impacts that war and other military activities have on the ecological health of the planet. Actual warfare involves a heavy toll on the environment, but the consequences of modern instruments of war can be particularly devastating and long-lasting. The nuclear war-caused environmental damage could be "nuclear winter". Another environmental damage associated with war is, the alteration of the environment to achieve a military advantage. For e.g., the defoliation and cloud seeding operation of the US in Indo-China and failed attempt by Iraq for biological warfare in Kuwait with allied forces⁵ resulted in disaster.

Even during times of peace, armed forces are responsible for a major drain of natural resources such as petroleum and a substantial source of pollution including radio-active contaminations. These threats are also in terms of pollutions implied by nuclear testing, accident in reactors or nuclear powered sub-marines, dumping of radioactive material in the ocean and so on. According to ecological experts, extensive nuclear testing and large scale secret dumping of radio-active wastes in the Far-North have transformed the Barents and Kara Seas in the Russian and Arctic into the most polluted water-bodies on earth⁶.

Finally, a cognitive linkage between the environment and security has been established. It has become legitimate on part of mainstream
politicians to speak out in favour of an environmentally responsible security policy. Environmental security may still be a politically attractive slogan, but environmental sustainability has indeed become part of the high politics sphere in almost all the countries.

Thus, environmental security deals with threats that are not only the unintended consequences of social and economic activities, but that also develop very slowly compared with military threats. These threats not only cross borders with impunity but also challenge long cherished tenets of international relations. International efforts to protect the natural environment dates back, at least, to the 1870s when Switzerland tried to establish a regional agreement to protect the nesting site of migratory birds. But, move to internalize environmental policy making did not get serious momentum until 1970s.

Rapid population growth, first industrialization and urbanization, technological exposition have all directly contributed to the growth of this irritants. The maddening race for global industrialization is adversely affecting man and nature in more ways than one. The delicate balance of environment and ecology in nature, psychological stability of human society, growing stress on human relations all are perilously close to crumbling down under its impact. This development has damaged and deteriorated the ecological system and caused widespread destruction of natural resources on which human life and well being depend. In addition industrial production has grown more than a hundred fold, emission of a number of toxic metals including cadmium and lead because of human activities have become several times the level emitted from natural resources. Air, being of vital importance, cannot be exploited to the extreme when it
becomes unsafe for one. Its capacity to assimilate waste gases is not unlimited. The chemical industry generates an increasing quantity of substances every year, adversely affecting the essential aspect of composition of the atmosphere, soil, water and subsoil water. In the industrial high density area, in addition to the effects on local health and impact on nature, we are confronted with damage to the social and economic functions of the environment. Further, water is also polluted by different kinds of substances like traditional organic wastes, waste generated from industrial processes, chemical agents, for fertilizers and pesticides for crop protection and silt from degraded catchments. While it is estimated that \( \frac{3}{4} \) by volume of the waste water generated is from municipal sources, industrial waste, though small in volume, contributes over \( \frac{1}{4} \) of the total pollutant load and the major portion of this is coming from large and medium industries. The increase in population is still further enhancing the pressure on the environment. The depletion of forests has been accompanied by increasing amount of pollution affecting atmosphere, soil and water.

**Global Environmental Problems**

However, there are some major and critical global environmental threats which remain common to all people in the world. These may include loss of bio-diversity; rainforest destruction; global warming and green house effects; ozone layer depletion; population explosion and others. Therefore, one needs to have a clear understanding of these problems in order to know the concept of environmental security and the challenges that they pose to humanity.
**Loss of Bio-Diversity**

Diversity is the characteristic of nature and the basis of ecological stability. Diverse eco-systems give rise to diverse life forms and to diverse cultures. The co-evolution of culture, life forms and habitats has conserved the biological diversity of this planet. Cultural diversity and biological diversity go hand in hand. Communities everywhere in the world have developed knowledge and found ways to derive livelihoods from the bounties of nature's diversity, in wild and domesticated forms. Today, however, the diversity of eco-systems life forms and ways of life of different communities is under threat of extinction. Habitats have been enclosed or destroyed, diversity has been eroded and livelihood deriving from bio-diversity are threatened. Tropical moist forests cover only 7% of the earth's land surface but contain of least half of the earth's species.

The problem of habitat destruction exists everywhere, but it is particularly serious in the humid tropics where the major species loss are predicted viewed in terms of biological diversity, the most tropical forests of Africa, Asia and Latin America hold an importance, far beyond the land area they occupy. Many tropical forests lie within countries that though biologically affluent, are economically poor and whose governments are not inclined to value the long term ecological goals above immediate economic gains. Bio-diversity erosion starts a chain reaction. The disappearance of species is related to the extinction of innumerable other species with which it is inter-related through food webs and food chains and about which humanity is totally ignorant. There are two primary causes for the large scale destruction of bio-diversity. The first is habitat destruction due to internationally financed mega projects such as building of dams,
highways and mining operations in forested regions rich in biological diversity\textsuperscript{13}. The Narmada dam would submerge large scale areas of forests in Narmada Valley in India. Besides the direct destruction of bio-diversity in these forests, the sub-mergence would irreversibly destroy the survival base of tribals in this regions.

The second primary cause for the destruction of bio-diversity in areas under cultivation is the technological and economic push to replace diversity with homogeneity in forestry, agriculture, fisheries and animal husbandry\textsuperscript{14}. The Green Revolution in agriculture, white revolution in dairy and the blue revolution in fisheries are revolution based on the deliberate replacement of biological diversity with biological uniformity and monocultures\textsuperscript{15}. The spread of monocultures of 'fast growing' species in forestry and high yielding varieties, in agriculture has been justified on ground of increased productivity. All the technological transformation of bio-diversity is justified in the name of 'improvement' and increased 'economic value'. However, 'improvement' and 'value' are neutral terms. They are contextual and value laden. The categories of 'yield', 'productivity' and 'improvement' which have emerged from the corporate view point have however, been treated as universal and value neutral\textsuperscript{16}.

The dominant view ignores the primary causes of bio-diversity destruction and instead, focuses on secondary causes such as population pressure. However, stable communities in harmony with their eco-system, always protect bio-diversity. It is only when populations are displaced by dams, mines, factories and commercial agriculture that their relationship to bio-diversity becomes antagonistic rather than cooperative\textsuperscript{17}. But species extinction impact could be even more felt in the creation and production of new drugs
and medicines whether antibiotic or contraceptive pills. In fact, experts estimate that about a third of all prescription medicines owe their origin to plants. But more worrisome and threatening could be the impact of the loss of bio-diversity on world's food scarcity. Natural eco-systems influence the climate, generate and maintain soil, regulate atmospheric gases, control hydrological circle, help in waste disposal and nutrient cycling, provide protection to crops and perform myriad and other jobs. The ecosystem services in which the biodiversity plays the critical role are provided on such a grand scale and in such a manner that there is no real possibility of substituting for them. So, the crisis of bio-diversity is not just a crisis of a disappearance of species which have the potential of spinning dollars for corporate enterprises by serving as industrial raw material. It is more basically, a crisis that threatens the life support system and livelihood of millions of people in Third World countries.

**Rain Forest Destruction**

Forests, both temperate and tropical, are an integral part of the life support system of the planet, performing numerous ecological and social functions that are essential for the continuation of life as we know it on earth. Such functions include regulating climate, providing a habitat for the majority of species on earth, providing a homeland and a spiritual basis for millions of forest people, maintaining and conserving soil and regulating hydrological cycles and ensuring supplies.

Forests are vital to maintaining current global climatic patterns and plays a critical role in regulating rainfall patterns certainly at the regional level and in all probability at the global level as well. The
tropical forests act to spread out solar radiation to temperate zones in a manner that is both swift and efficient. Massive quantities of carbon are rocked up in the forest bio-mass which would add considerably to global warming. Forest may also be net consumers of carbon dioxide, although this is a matter of controversy. Forests particularly in tropics, are fundamental to rainfall patterns. Research as the Amazon, as particularly, has revealed moisture to the atmosphere through evapotranspiration.

The continuing loss of the world's forest now contributes a global emergency. In many temperate regions of the world, forests have been severely depleted. An estimate of 1/3 or temperate broad level forests have been lost since the down of agriculture. Continental Europe was still 90% forested during Roman time. Today, West Germany is 30% forested, Italy 27% forested and France 25%. In Britain forest cover is down to mere 9%. As s whole, Western Europe has lost almost 70% of its forests since Roman times. Few virgin forests remain outside Canada, Alaska and the erstwhile U.S.S.R and in many instances, even these are under threat. Almost one-third of India's total land mass is badly degraded and about ½ of the forest area in the country has poor forest cover. Increasing population, live stock pressure and soil and wind erosion continue to under-mine the natural resource base and are endangering vital life support19.

Deforestation particularly in the tropic is causing a loss of biological diversity of an unprecedented scale. So far as future human welfare is concerned, the importance of preserving the genetic diversity of natural world can't be over emphasized. Given the importance of forest products to the daily lives of forest people, the destruction of tropical forests entails the displacement, decimation and even
extinction of tribal population on massive scale. The threat to traditional forest people comes both because their land lie in territory that can be profitably opened up for development and because of government policies aimed at their integration into mainstream society. In the majority of cases, other destruction of their cultures spells physical and social doom for the tribal people. The result is increasing alienation, with a growing incidence of alcoholism and prostitution among acculturated tribals.

Deforestation is causing severe and irreversible ecological degradation resulting in increased erosion, desertification, flooding and drought. In a natural undisturbed ecosystem erosion is relatively limited. In many Savannas and forests of West Africa from some 0.05 to 1.2 tonnes of soil per hectare, per year may be lost naturally. Cultivation, however, leads to a dramatic increase in soil loss.

In India, an estimated 6000 million tonnes of top soil are annually eroded, much of it is the direct result of deforestation. On an average the country is losing 30 tonnes of soil per hectare every year. The economic cost of soil erosion are immense. According to the World Bank, "soil erosion" in India removes nutrients worth US$6 billion a year in chemical fertilizer replacements. The social impact of soil erosion and degradation is severe. Where the land eventually becomes too degraded to farm, the social effects of soil erosion go beyond enforced migration and translate into malnutrition, starvation and famine.

**Global Warming and Green House Effects**

Deforestation threatens major climatic consequences, both by the disrupting global heat transfer mechanism and through adding to the
green house effect. Atmosphere is the most universal "common". As humankind enters the last decade of 20th century, global climate change is threatening years of conservation investment. The topic considered as one of the most critical environmental issues of our age has triggered conservation lists and government representatives to investigate seriously the effect of global climate change on the natural world. No other conservation issue has so captivated the public organisation in industrialized countries as that of climate change. The profligate use of natural resources such as coal, oil and tropical timber and the global nature of resulting problems, have transformed the green house effect from being merely a complex scientific theory to one of the greatest international concerns of the late 20th century.

The global warming phenomenon, also known as "the green house effect", refers to a predicted warming of the earth's surface due to increasing atmospheric concentration of gases like Carbon Dioxide (CO$_2$), Methane (CH$_4$), Nitrous Oxide (N$_2$O), Chloro Fluro Carbons (CFCs) and water vapours caused by forest fires, the burning of fossil fuels and deforestation. These gases which remain trapped in the atmosphere let in the sun's warming rays but block radiated excess heat from escaping back into space causing the surface of the earth to warm up.

The green house gases, primarily carbon dioxide, play a crucial role in regulating the temperature of the earth and the earth's atmosphere. In the absence of these gases, the average surface temperature would be 33 degree celcius colder, (-)18$^\circ$C instead of the present value of (+)15$^\circ$C and the earth would be frozen lifeless plants. The natural greenhouse effect of atmosphere is thus an essential component of the regulating mechanism which has maintained the earth's climate.
within a range, suitable for the development of life in the course of four billion years. His greenhouse effect has already committed the earth to a global warming between 0.8 & 2.5 degree centigrade by year 2030 A.D. or even much earlier. However, there is now a concern that tropospheric temperature will rise further due to steadily increasing concentrations of the various greenhouse gases. This projected warming will cause the sea levels to rise rapidly, spelling doom to several coastal cities, low lying areas, beaches and wet lands\textsuperscript{24}.

**Ozone Layer Depletion**

The ozone layer in the stratospheric is nature's sunscreen which protects life on earth absorbing highly carcinogenic ultra-violet rays. Ozone perhaps is the most important trace gas as its depletion in the stratosphere leads to an increase of UV-B on ground with its harmful effects on health, eco-system, aquatic, materials etc. Chlorine and Bromine containing chemicals can lead to a significant decrease of the stratospheric ozone. Ozone is form of oxygen with three atoms instead of the normal two. The added atom terms the gas we breath into a poison, any animal that inhaled more than a twice of its would die. Near the earth's surface, ozone is an increasingly pollutant, constituent of photo chemical smog and of the cock tail of pollutants popularly know as acid rain. But safely up in the stratosphere, 15 to 20 km above the earth's surface, the blue pungent smelling gas is as important to life as oxygen itself. Ozone forms a fragile shielded curiously insubstantial but remarkably effective. It is scattered so thinly through 35km deep stratosphere that if collected together would form a girdle around the earth no thicker than the sole of the shoe\textsuperscript{25}. Yet this thinnest filter efficiently screens out almost all the ultra violet rays of the sun.
But a worldwide diminishing by 3% as much 50% in some ozone holes that appear every spring over Antarctic are clear indication that this shield is weakening. The situation is not only worsening, there is little hope of its being remedied in the immediate future. This is because, the disturbance in the ozone cycle is due to not any natural process but is being caused by man-made chloro flouro carbons (CFCs) and similar chemicals used as propellants, coolants, solvents and in the manufacturing of plastic foams. Capable of setting up almost self sustaining chain reactions in the upper layers of the atmosphere, these chemicals can continue depleting stratospheric ozone for years. Penetration of UV rays to lower layers of the atmosphere apart from inducing faster mutations, enhance genetic defeats, cancer and blindness, it would play havoc for all forms of life and disturbed the oxygen cycle, damage crops and bring in unpredictable climatic change.

Research also shows that since 1979 ozone has declined by some 5% over Antarctica throughout the year. Indeed, there is increasing evidence that ozone layer thinning all over the world. The global data is much less conclusive than the findings from the southern continent but it seems that since 1970 the protective ozone layer has shrunk by about 4% in winter and 1% in summer over the northern hemisphere from 64 to 30 degree north. This is about twice the depletion that computer models had predicted.

Ozone pollution is thus no ordinary pollution. It plays a biological role. Its presence in sufficient amount in the upper layers of atmosphere is beneficial to life but its increasing concentration at lower levels poses a considerable health hazards and endangers food production.
**Population Explosion**

Massive, population growth makes the country more difficult to solve the loads of environmental problems because it outstrips there country's economic development, relates their social development and makes crushing demands on service resources and the bearing capacity of increasingly environmental renewal. In every country, the man made environmental problems are being generated faster than one can solve or prevent those problems. In every country, environmental wealth capacity is inadequate to meet human needs. Our progress to date has been unturned by population growth. The current global life style is not sustainable. This means that humans are consuming faster than the earth can replenish and dumping wastes faster than the earth can assimilate. A school of thought blames this totally on the growth of human population. The increased rate and quantity of consumption is argued to be directly, proportionate to the increase in human numbers. However, this argument does not take into consideration the variations in the assumption pattern of individuals.  

The increasing population pressure on one sector leads to migration of people to another sector. In this sense, there is large migration of rural people to urban city centres.  

The larger the population the more the demand on resources. Demography is not merely a question of numbers of people. When the bearing capacity of planet Earth reaches the point of exhaustion, as it is doing in countries such as India, China and Indonesia and environmental disasters dooms. People have to be fed, housed, employed, educated, cared for medically and provided recreation. In
the low per capita income countries where the size of population is large, the rate of development is very low. Man is producer as well as consumer. If this number rises, national income must also grow. If only the number of people grow and the national income doesn’t rise, per capita income fall down. Income is closely related to the standard of living. The question of poverty, unemployment, disparity, malnutrition and many other social ills are related to the imbalance between population and means of subsistence.

The growth rate of population in developing countries is still 3% or more per annum. Contrary to this, the population growth rate in developed countries is less than 1% per annum. In the ultimate analysis, the improvisation of large sections of the world's population is the ultimate environmental degradation. Poverty itself is the result of excessive population. Whichever way one looks at the population-development relationship, it seems quite clear that sustainable development requires a curbing of population growth. Development is the best contraceptive.

**Stockholm Conference**

So far as these environmental problems are concerned, there was no such conference on environment within the network of World Forum till the end of 1960s. Ever since the early 70s, there emerged a fresh concern for the future of the earth and that culminated in the Stockholm Conference on Human Environment in June, 1972 under the U.N Stewardship. It marked the combination of efforts to place the protection of the biosphere on the official agenda of international policy and law. Specific aspects of the environment has been the objects of international negotiation and arrangement but the concept
of collective responsibility of nations for the quality and protection of the earth as a whole, did not gain political recognition until the years immediately preceding the Stockholm Conference. Stockholm enlarged and facilitated the "means" towards international issues by restrictive concept of national sovereignty and international interest. In effect nation states joined together their sovereignty and jurisdiction to resolve collectively issues that previously would have been definable only within the limits of particular national jurisdiction.

**Issues of North-South Divide**

The issues in Stockholm Conference were also immediately confronted by the division. There were two conflicting viewpoints present. From the perspective of the developed countries, the primary concern of the conference was the human impact on the bio physical environment with emphasis on control of pollution and conservation of resources. From the developing countries perspective, the second point held that social and economic development\textsuperscript{32}.

For the first time, the Stockholm Conference showed that environmental issues have resulted in environmental conflict. The **North-South tension, among the developed and developing nations came up in the course of justification of their views and responses to the environmental problems**. But in real term, it was accepted that the nature of environmental problems are different in the developed and underdeveloped or developing or Third world nations. In developed countries, these problems emerged due to the advancement of scientific and technological development and affluence of resources, where as the environmental problems of
developing countries are in large measure those that have arisen from the lack of development and persistence of poverty. They are problems of both rural and urban poverty. In both the countryside and towns, not merely the quality of life but life itself is endangered by poor water, housing, sanitation and nutrition and by sickness, diseases and by natural disasters. It is also true that problems arising out of the process of development are also evident in these developing countries. Indeed, as the process of development gets under way, the latter type of problem is likely to assume increasing importance (as India is facing now a days). The process of agricultural transformation, for example, involves the construction of reservoirs and irrigation system clearing of forests, use of fertilizers and pesticides etc certainly these process have environmental implications. The governments of developing nations were also helpless in stemming the pressures of the multinationals and supporting international financial agencies due to their precarious economies dependent on the palliative remedies devised by these helpers.

In the second place, the outlooks of the developed and developing countries towards environmentalism differed. While the environmentalists in the West had fixed their sights on the objectives of upholding and promoting the quality of life, the governments and the vast majorities of people in the developing countries preferred the subsistence of the masses of poor people to the promotion of the quality of life of a few.

Thirdly, the goals of environmentalism would vary among different groups of the people professing adherence there to. Barring these
differentials, the world community hopes that there are certain common environmental or ecological concerns that need urgent, earnest attention and action on the part of the developing countries. In this matter unlike in the matters of international peace and economic development of underdeveloped countries in general, the governmental and public opinion in the developing countries is led by international thinking spearheaded by advanced thinking in the West.

In Stockholm Conference, the Third World statements reiterated the thesis that the foremost environmental problems of the World was Third World poverty caused almost wholly by the exploitative practices of the developed countries. The developing nations differed from the industrial states with respect to priorities.

It is not surprising, therefore, that representatives of the developed, industrialized countries approached the Stockholm Conference with environmental pollution problems, weighing heavily on their minds and with the need for worldwide conservation programmes to safeguard the planet's genetic and natural resources. But the developing countries approached that in their countries, energy and resources consumption was not high and their industrial pollution problems were localized, if present at all. But with them, poverty was rife, expectation of life is poor.

**The Stockholm Conference and India**

India is the most leading country among the Third World Nations. It had its own way of understanding of environmental problems which is supported by other developing countries in the environmental conferences. Indira Gandhi, the late Prime Minister of India while
addressing the plenary session of the Conference, said that poverty is the greatest polluter. She declared that many of the advanced countries of today have reached their present affluence by their domination over other races and countries, the exploitation of their own masses and own natural resources. They got a head start through sheer ruthlessness, undisturbed by feelings of compassion or by abstract theories of freedom, equality or justice. A past age of domination has left in many countries of the so-called Third World, stunted and malformed economies perpetuating to this day the poverty of blighted, stagnant and benighted rural communities.

Mrs. Indira Gandhi said that "on the one hand, the rich look askance at our continuing poverty, on the other, they warn us against their own methods. We don't wish to impoverish the environment any further and yet we can not for a moment, forget the grim poverty of large numbers of people. Are not poverty and needs the greatest polluters?"

She reiterated that for us who live in underdeveloped countries are grappling with age old problems of poverty, the conservation of the environment can not be at the cost of development. War at one end poverty at the other, are the worst of all polluters of the human condition. We need balanced development and peace to rescue civilization out of this predicament. The ecology movement must proceed hand in hand with the movement for peace and fight against economic backwardness. The rich out of greed and the poor out of need have been reckless in plundering earth's assets.

In Stockholm Conference, Mrs. Indira Gandhi strongly voiced that India has always applauded the United Nations endeavor to bring the
world together for peace and prosperity. We affirm our appreciation of its efforts and commend its accomplishments. We, humans, have not regarded earth not just as a play ground but as a place to use, despoil and to destroy. We are too engrossed with the immediate, too absorbed with petty individual problems, to look at basic issues. Today's problem has taken countries to grow into its present threatening proportions.42

She said that developed economies should be prepared to accept some of the responsibilities for redefining their relationship with the developing world. The new international economic order and recognition of the common heritage of mankind, need to be endorsed in theory and in practice. Every international forum should aim at changing attitude so that we move from exploitation and bargaining to co-operation and accommodation. We except the international community to support and reinforce this effort, especially in the developing countries. But developing countries must strengthen their collective self reliance. Technical co-operation, the sharing of training facilities, the exchange of experts and information, joint research and development programmes and related measures, are ways to make self-reliance a reality.43

The Montreal Protocol

The Executive Director of United Nations Environment Programme (UNEP) convened a conference for the protection of the ozone layer at the Headquarters of the International Civil Aviation Organisation, Montreal, Canada from 14th to 16th September, 1987. India did not participate actively in this conference. It only attended as an observer. The absence of many developing nations symbolized the South’s lack
of interest in details of the control measures. Only 24 nations signed this landmark protocol, taking a large step towards solution of the global environmental problems posed by the deletion of atmospheric ozone. Vital issues came to prominence at the last minute. The importance of this protocol is two fold.

It serves to reduce the production of pollutants responsible for atmospheric ozone destruction and it presents a milestone in the field of international environmental co-operation. It is the first time, the international community has banded together to eliminate an environmental threat before serious damage has occurred. As such, the protocol might help set a precedent for solving other environmental challenges faced by global community.

The protocol finally agreed in Montreal proved to be far tougher than any one had imagined. It regulates a wide range of substances, five CFCs and three halons. It specifies heavy cuts in the consumption of the CFCs and it provides tough trade sanctions against countries that do not join the treaty. The nations signed the Montreal Protocol in 1987 stipulating a 50 percent reduction in CFCs by 1998.

The controls are based on 1986 levels of production and consumption of two groups of ozone depleting chemicals as calculated according to a formula in Article 3. Article 2 of the protocol limits production and consumption of the controlled chemicals to 80% of 1986 levels for a five year period beginning on July 1, 1993 and further imposes a limit of 50% of 1986 levels as July 1, 1998. Indeed, it sets the "elimination" of ozone depleting substances as the "final objective", the protocol came into force on January 1, 1989 when 29 countries
and the EEC representing approximately 82% of world consumption had ratified it.

The protocol also binds countries to make similar cuts in the production of the chemicals, but gives them some what more latitude over consumption levels. Production levels have to be frozen and cut in parallel with consumption. No latitude is granted to any country which delays joining the Treaty47.

**North-South Divide In Montreal**

Developing nations, that had attended the early stages of the negotiations in force, were anxious that the agreement should not impede their development. As a whole, they consume only 16% of the world's Chloro Fluro Carbons. India and China, with one third of the world's population use only two percent between them. Developing countries naturally want to develop such technologies *inter-alia* refrigeration and the protocol had to reflect this.

Since CFC technology is relatively easy to obtain and install, developing countries represented a large potential source of future CFC emissions. Existing per capita consumption of CFCs in developing countries was only a small fraction of that of the industrialized nations but their domestic requirement is growing48. The negotiations at Montreal faced difficult challenge in designing special provisions to encourage developing nations to sign the Protocol. The major exception to the Article 2 controls applies to developing countries. The drafters of the Protocol recognized the special requirements of these countries for CFC use and Article 5 entitles developing countries to delay compliance with the controls of
Article 2 by ten years, so long as per capita consumption of the controlled substances does not exceed 0.3 kg. per annum.

Several groups of countries secured concessions to help them over particular difficulties and to respect international equity. The biggest concession is to developing countries. For ten years following the entry into force of the Protocol, developing countries, party to the Protocol will have the opportunity to increase their production of CFCs and halons in order to enhance economic development. Developing countries that join the treaty are guaranteed access to alternative substances and technology and offered subsides, aid, credit guarantees or insurance programmes. For their use, an attractive inducement denied to non-parties. All parties must ban imports of the bulk chemicals from non-parties by the beginning of 1990, and effectively do the same for imports of products containing the chemicals within another four years. Meanwhile, developing countries enjoying the ten year delay in implementation must not export the chemicals to non-parties from the start of 1993. Taken together, these stringent restrictions in trade provide a strong incentive to countries to join the treaty or lose their markets and supplies.

India and Montreal

India, followed by China, did not sign Montreal Protocol because of discrimination. India and China, only share 2% of world's CFCs. They argued that "CFCs problem in developing countries is irrelevant. India produces 7000 tonnes. China produces 10,000 tones. Smaller countries produce less than 1000 tonnes, 200 tonnes, 100 tonnes and yet this is the first international protocol. We are dragged into it, we
become part of it". The analysts from developing countries criticized the treaty for making overtly generous concession. They calculated it as the "worst case" scenarios of ozone depletion, if all developing countries were to reach their allowable per capita CFC and halon use.

India said that it has bought CFCs technology from the US firms, Allied Chemical and Pennwalt before the Montreal Protocol negotiation began. India argued that if US agreed to subsidise these technology, then India may co-operate in Ozone layer protection programme. India insisted that the issue of Indian and Chinese accession and of equitable treatment of developing countries should destined to loom larger as the "sense of urgency" over the ozone layer protection and the developed nation parties should begin to face the realities of implementing the protocol.

Thus in every conference, the issues were sharply divided between North and South. Both the developed and developing countries projected their own views without having coherence or agreement on a single issue. There is hardly any society or country today which is not involved in one way or the other in this debate. From small, local, grassroots organisation to national government, global and international bodies, this debate is becoming the most strident of this century. The global environmental debate is focused on certain specific environmental problems that are facing humanity. Whereas earlier concerns were mainly for the sustenance of growth and the main culprit (the increase in population), the question of social and economic relations soon began to dominate in the international debate. The unjust control and consumption levels of the elite countries and of the elite classes within countries, began to be seen as the major cause of the environmental crisis.
Indian Case

India, since the early seventies, has taken active part in the global efforts to tackle global environmental problems. As a step towards such global concerns, India has actively participated in several international efforts towards the environmental protection. For example, India along with other developing countries has sought and obtained amendments to the Montreal protocol, so that we can actively participate in the global efforts to save the ozone layer.

It has been India's firm conviction that it is the process of industrialization and the continued profligacy of industrialized economies that have created the problems which threaten our planet and its life forms. It is true, of course, that this has not been consciously or intentionally done except in matter such as dumping of hazardous wastes of the use of nuclear and chemical weapons. Nevertheless, the responsibility is clearly established as also the need for urgent and effective action, by the developed world, to prevent global disaster. This includes not only direct action but also indirect measures such as creation of an economic order which helps developing countries to exert less pressure on their own natural resources.

India's approach to global environmental problems has certain basic elements in congruence with other developing countries which are as follows: "Our economic development cannot be hampered in the name of the global environment which we have done nothing to damage and can do little to save. Our resources are required to meet our developmental needs. Without this development, threats to the environment will in any case grow. In the short run, this
developmental effort could even add to the discharges and emission which cause global problems but these are miniscule compared to the quantities which industrialized countries have already contributed. With new and additional funding support and transfer of environmentally sound technologies from the developed countries, we will be in a position to augment our capacity to deal with the environmental problems."51. In other words, the basic element of our approach to environmental problems include:-

- We have never been instrumental in the degradation of environment.

- Our economic development cannot be dovetailed with the degrading environment because without this development also, threat to environment would continue.

- Our resources are key to our development.

- The industrialized countries have exploited the environment to the fullest extent in the name of development as compared to countries like ours.

- The industrialized countries instead of pointing fingers at us should help us deal with these environmental problems by financial support and transfer of environment friendly technologies.

But in the name of environment protection the developed nations threat the trade sanctions against developing countries. They want to provide financial resources through existing world financial institutions like World Bank, IMF. This kind of attitude of developing nations can be termed as a new kind of imperialism - "ecological or
bio-imperialism". The developing nations see it as "Old wine in new bottle" which is clearly visible in all the global ecological negations efforts in terms of north south divide, the recent in this direction being the Earth Summit Rio of 1992. It is therefore, crucial to have a closer look at this conference and particularly India's position with regard to global environmental problems which represents the response of developing countries as a whole.

**Rio Earth Summit**

In December 1989, the UN General Assembly decided to convene a Conference on Environment & Development (UNCED) in Brazil in 1992. This conference was to examine the inter-linked problems of environment and development since UN conference on the Human Environment (held in Stockholm in 1972). To effectively organize this conference, the UN Secretary General JAVIER PEEREZ DECUHELLAR appointed MAURICE STRONG of Canada (same in Stockholm Conference), a former member of World Commission on Environment and Development, as UNCED's Secretary General who then went about creating the UNCED Secretariat. The UN also arranged for the creation of a Preparatory Committee (Precom) open to all UN member governments to do the work for Brazil Conference52.

The UNCED '92' Conference (or Earth Summit, as it is referred to) was held on June 1992 in Rio de Janeiro Brazil to coincide with World Environment Day, June 5th 1992 and is to be at the highest possible level of participation. It brought together heads of state from almost every nation of the planet to define plans of action for achieving as future that is environmentally sound and equitable between nations and peoples, as well as generations53. It was a landmark event - for
those who agree with its deliberations and conclusions and those who
do not acknowledge it as a significant development for several spheres
of human action. Earth Summit is being projected as a "last chance
for mankind to tackle some of the appalling problems facing the
country". MARCELLO ALLENCAR, Rio's Mayor, described the "Earth
Summit" as the last chance to avoid an irreversible deterioration of
once splendid city.

Earth Summit will mark the 20th anniversary of the Stockholm
Conference of Human Environment, which first focused international
attention on the environment. Like the Stockholm Conference,
UNCED will consider the environmental challenges and development
problems facing the international community. It will look into the
changes which have accrued since the earlier conference and identity
and strategies for local, national, regional and global action designed
to meet those challenges and promote environmentally sound
development from the present into the next century. MAURICE
STRONG, Secretary General of the Stockholm Conference and new
Secretary General of the UNCED, makes the distinction that whereas
the principal purpose of the 1972 Stockholm Conference was to put
the environmental issue on the international agenda, the Rio
conference is to move the environment issue into the centre of
development agenda and of economic and sectorial policy making.
Rio Summit promoted the concept "Sustainable Development" into a
great place linking the economic growth with the conservation of
natural resources.

Environmental security also required a new alliance and partnership
with the developing countries. It is not possible to have a secure planet
without their cooperation and they couldn't afford to cooperate unless
they had a degree of economic enfranchisement beyond what they had now. Mr. Strong said that failure at Rio would signal a massive break down in the global cooperation that is indispensable to both environmental and economic security which can deeper into a larger scale rich-poor conflict.

The concept of "Sustainable Development" provides a framework for the integration of environment policies and development strategies. The word is often taken to refer to the processes of economic and social change in Third World. But the integration of development and environment is required in all countries rich and poor.

The position of the developing countries in respect of sustainability of resources in relation to development is much more difficult compared to the developed nations. The developed countries have to adjust life styles to a more rational case of resources with particular emphasis on the present and future resources and environmental needs of large majority of humanity constituted by the poor people of the developing nations. UNEP Executive Director MOSTAFA K. TOLBA describes the growth of reconciliation between environmental and developmental objectives during the first two decades in the introduction to a collection of his addresses on the "Sustainable Development" theme: "Our understanding of the inter-relationship between environment and development has undergone a profound change during the past 15 years. At the end of the 1960's, it was generally believed that it is possible to have either one of the other but not both simultaneously.

At Rio, the contrasting attitude of environmental problems between the rich and the poor countries were at the heart of political conflict.
over global environmental policy. In the North, the emphasis is on environmental problems and there is a tendency to see economic growth and environmental protection as mutually compatible, not contradictory aim of policy. Indeed, environmental protection is now seen as a spur to economic growth. The largest and most technically advanced environment markets and also environment industries have developed in those countries with the most comprehensive and effective environmental legislation. In rich countries, environmental quality has became an integral aspect of the quality of life.

In marked contrast, the problems in the developing countries stem from under development and poverty. This was an underlying thing of the Bruntland Report that poverty reduces people's capacity to use the sources in the sustainable 'manner', it intensifies pressure on the environment. The 'poor', are forced to forgo the needs of the future to meet the needs of today. Hence, the issues that the South's poverty, food, scarcity, diversification, stand in stark contrast to the environmental preoccupation of the North.

In the poor countries, environmental inequality is the direct result of uneven development. Underdevelopment is the major source of conflict and consequently, a major impediment to the achievement and implementation of environmental policy. It is at the heart of conflict between North and South which was emerged, perhaps, as the critical, political fault line in the contemporary world. The WCED now calls upon all the nations of the world, both jointly and individually, to integrate sustainable development into their goals.
Issues that Divided North and South at Rio

Long before the Earth Summit at Rio de Janeiro, the battle lines had been drawn. The clash of steel could be heard right through the torturous of 2 years preparatory process. And instead of being resolved at Kuala Lumpur Ministerial Meet of Developing countries, it was an all out war between the rich nations of the North and the impoverished one in the South. The issues that had arranged. These two group of nations against each other were critical; who is to blamed for needs that the north finds itself in? who will pay for the clear up? How much do we have to reorder our goals to save the earth? There are 6 basic issues which divided the North and the South at Rio.


Most of the Northern countries wanted a 20% cut in Green House Gas Emission like carbon dioxide and methane by 2005. They wanted a major shift from one of coal and wood for energy. The Third World countries of South blamed the rich nations for excessive emissions over last 50 years and want them to reduce it. They opposed to any cut on it's own emissions as it hinders developments.


North wanted a legally binding convention that severely restricts the falling of forest especially which are rich in bio-diversity. South reiterated that such move will impinge on national sovereignty. The rich nations must compensate for conservation and share profit if species are used for research.
(3) **Population**

The developed nation of North life population explosion and poverty are the major reasons for deforestation and water pollution. They wanted steps should be taken to control population. The developing nation of South blamed rich for over consumption. They said that the developed world is responsible for consuming 60% of the world’s energy resources66.

(4) **Technology Transfer**

The developed countries believed that technology development is commercial and those countries that want to utilise it must pay for it. The developing countries wanted technology used for clearing of pollutants and for improving energy efficiency. They demanded that this technology should be transferred cheaply.

(5) **Finance**

The developed nations refused any mandatory compensation. They said that existing U.N mechanism such as G.E.F. (Global Environment Facilities) or World Bank would distribute aid. The developing nations wanted form commitments on aid for environmental issues. They insisted on new situation whose functioning is transparent and democratic.

(6) **Degradation**

Though the North admitted that industrialization process caused the environmental degradation, they do not want to pay for polluting the earth in the past and do not want it raked up. The South strongly
believed that the North is responsible for all the wreck in the past and therefore need, to pay for entire clearing up process.67.

The main objective of UNCED (United Nation Conference on Environment and Development) is to translate to concrete policies and actions the concept of environmentally sustainable development mooted at the epoch-making Stockholm Conference on Environment back in 1972. Two decades have passed but the several initiatives taken by the UN member countries in pursuance of the Stockholm Conference recommendation had evidently fall in short of expectation. There has been growing realisation that a still better management of environment is needed along with changes in development priority, investment patterns and disruptive impact both within and among nations. The UNCED 1992 is meant to achieve this68.

But the Preparatory Committee meetings pitted rich nations against poor over how to chat distraction of the environment while encouraging economic growth. In each area, there was a serious North-South divide. This conflict between environmental justice and green imperialism become the most important issue at Rio. It is a misrepresentation to identify Rio with a conflict between environment and development and see this as a North-South conflict. It is wrongly assumed that the North is defending the environment while the south is defending developmental. In truth, the North has been resisting all serious environmental regulation through the UNCED. It is quite clear that the North has no serious commitment to project the planet and its life but only to a non sustainable way of life which is parasitic on the North and the Third World people.69.
The issues, processes challenges, actors and interests at Rio were many and complex. At the inter-governmental level, 175 countries many of them responded by Heads Of States were to sign the Rio Declaration, Agenda 21 and Global Convention a climate change and Bio-diversity. The developing countries insisted that in Agenda 21, the Conference must accept time bound targets for various environments indicators provided the resources required are qualified and clearly identified. These countries argued it is the responsibilities of the major industrial countries to take corrective steps. There can be no corresponding obligation on the developing countries since they are not really responsible for causing the problems.

The Northern countries wanted to create no new institution, though the Earth Summit called for the largest restructuring of all institutions even demanded in human history. They wanted to make the Global Environment Facility (GEF) located in and controlled by the World Bank. The global environment ministry of the future given the banks role in environmental destruction and poverty creation, the North demanded that the GFE be the sole financial mechanism for the implementation of UNCED Agenda is like recommending that the Wolf is asked to protect the Sheep. But the South insisted that the thrust of the new global partnership should be to give equal weightage to the concerns of all nations.

The countries of the South, under the banner of the Group 77, stuck formally to their stand that the North, which has created a global environmental crisis by the profligate life styles, must compensate by paying the bill for the clean up. The North, on the other hand, insisted that only limits of consumption patterns or life styles should apply uniformly to all countries.
The developing countries suggested that the Global Environment Facilities could be considered one mechanism while the developed countries insisted that it should be the only one. As the GEF is part of the World Bank and donor weighted, the south does not accept that it is a fair funding mechanism and fears that any funds channeled thought would have environmental conditionalities.

The three main international treaties which created the schism at Rio were protection of tropical and temperate forest, global climate convention and protection of the earth's bio-diversity (Bio-diversity convention). In each area, and every step, industrialized countries tried to intervene and suggest some universal norm and principles.

In forest issue, the developed nations argued that universal norms and principles should be applied. But the developing countries strongly resisted and said that these countries should be left to determine for themselves how they use and manage their forest resources wisely and that the West, which has contributed to the accumulation of carbon dioxide in the atmosphere, can not now demand that all forests remain untouched just because they are carbon dioxide sinks. The countries caught in the fight between the industrialized and the developed world were those from the former Eastern Bloc. They cut or rather pathetic figure at the conference. It was apparent that they wanted share of the development cake but at the same time did not want to align themselves openly with the developing countries.

The rationale behind the developing countries position has been very clear on the issue of "Climate Convention". The Convention on Climate Change aims at reduce carbon dioxide emission level in
countries as it has been found to lead the global warming with for reaching implications for the world's ecology. The developing countries argued that the responsibility for cutting back excessive emission of Green House glasses particularly carbon dioxide (CO₂) from burning fossil fuels rests on countries whose per capita consumption is high. They said that the developing countries together contribute less than 5% the annual emission of chloro fluro carbons (CFCs) and halon gas which are depleting the ozone layer.

On Bio-diversity convention, arises over the fact that the North controls and restricts access to biotechnology which the Third World is praised to take step to conserve bio-diversity. More over, the protection, industrialized countries seek for their intellectual property rights is not being extended. As it should be to traditional knowledge the know how of the farmers over centuries which has gone into developing crop verifies. The US did not want to sign the Bio-diversity treaty because it would harm the interests of its bio-tech companies, impose burden on its tax payers and raise problem of controls on funds. The developed countries are willing to give developing countries. So it seems that the reasons for the US position are, of course, directly related to commerce and to protect plants and animals per se.

Forty countries have signed the convention on preserving Flora and Foura which the US has stubbornly refused to endure even though the president, Mr Bush’s arch ally, Mr. John Major has signed on the dotted lines. Their anxiety to protect the interests at the growing bio-technology industry on the US was the chief motivation in convincing Mr. Bush not to sign the Treaty. Mr. Bush added that there are two things strong with the Bio-diversity Treaty. One that it does not
protected the biotechnology and the other, the financing arrangement by refusing to sign the Treaty. The US has exposed its inability to accept the fundamental link between environmental protection and global trade which better to had remained outside the purview of such discussions. In fact, the very concept of Earth Summit which sought to integrate environmental concerns in to development ensures that this aspect can not be ignored.

**India and Rio : Constraints**

Constraints in the field of environment increasingly flow from the development of both developed and developing countries. India as a developing country was of course, not free from the icy winds of these constraints in the Earth Summit Rio, posed by the developed countries in general and United States in particular. Their frantic attempts to put enormous pressure on our country in the name of development dovetailed with the preservation of environment, have been dealt with in a very careful, calculated and diplomatic way. India faced constraints on the question of natural resources where the attempt of developed nations was to bring an agreement on Convention of Forestry which would have put our national sovereignty in question. It faced constraints due to the excessive control of developed countries with regard to finance and institutions. The attempt of developed nations to bring some of the provisions of this Summit under the purview of GATT also acted as a constraint for India. However, despite all these attempts the fact remains that India led the Third World countries to play a major role in the Summit and signing of Conventions on Bio-diversity and climate change is an example in this regard.
In spelling out India's position on the environmental agenda for the Earth Summit in June, 1992, Mr. Kamalnath cited the two key principles that must inform any global agreements. These are the development needs of Third World countries and national sovereignty. India led the Third World countries in Rio. India emerged as a major player and a powerful bridge between the developing and the developed world protecting the interests of the Third World nations through its skillful and diplomatic negotiations.

The Prime Minister of India Mr. P.V. Narsimha Rao became the first speaker when India was given the singular honor of addressing the Earth Summit. India led the Group 77 nations through most of the negotiations defying any treaty being thrust on them by the affluent nations that could prove detrimental to their interests. India set the tone by placing, before the Summit's agenda its suggestions for the creation of a "Planet Protection Fund" as conceived by the late Prime Minister Mr. Rajiv Gandhi at the Belgrade NAM Summit, where every country would contribute a certain portion of its GDP for this purpose. The proposed fund was the first institutionalized effort on this scale to tackle the problems of environmental degradation.

Developed countries, led by U.S., tried to bring pressure on all the developing countries to agree to a Convention of Forestry which prohibited them from cutting down trees or the pretext that they were rain forests and needed as CO₂ sink to absorb pollution. This was a deliberate American attempt to bulldoze its way on this issue. They have already cut down large tracts of their forests and are trying to use afforestation in countries like ours as a substitute for reduction on consumption of fossil fuels which powers their entire economy. This was one of the major constraints on the question of national...
sovereignty over natural resources. But, since the convention is a legally binding document, India and Malaysia successfully thwarted attempts by the North, particularly the US ensured that only a Statement of Forestry Principle was issued at the end of the Summit.\textsuperscript{85}

The Climate Change Convention signed by a record number of 160 nations prescribed the limits for carbon emissions so as to minimise the efforts of climate change caused by greenhouse gases and global warming. India became the second country after Brazil to sign the biodiversity convention. The Bio-Diversity Convention along with the one on Climate Change, is the centerpiece of the Earth Summit. An equal number of countries signed this convention but United States which was expected the lead the table at the Earth Summit stood isolated by refusing to sign the convention.\textsuperscript{86}

India lead the Third World in persuading United States to sign the Convention which sought to preserve the flora and fauna of the plant. The United States refused to sign the convention because it would hit its $2 billion bio-technology industry back home and the issue of Intellectual Property Rights (IPR) coming under the aegis of GATT negotiations remained contentious. However, the isolation of America was not just a question of its imperious veto on the needs of the Third World or even its failure to carry along with it the allied governments of the North. Rather, it stood like a symbol of a bygone world order that has no future and represented the empty narcissism of today which shall not last tomorrow. Besides, the legitimate fear expressed by the Third World nations is that if north is not willing to accept its responsibilities, the onus would fall on the South. Environmental protection could become another instrument to dictate economical
and sociological policies in Third World Countries that are already reeling from external debt, growing poverty and other conditionalities imposed by World Bank, IMF and other bilateral aid agencies. The North's agenda for GATT is another clear example of the bullying tactics adopted by countries like the US to arm-twist Third World nations. In the wrangling over the Bio Diversity Convention, the North has tried to insist that tropical economical system and the wealth of rain forests are a common world heritage. Similarly, it has upheld the view that since biotechnology is in private hands, the research emanating from the original bio-diversity resources has to be protected by patents and the IPR of GATT.

It becomes apparent then that very specific economic motives are at work in the impetus to declare biodiversity as 'global' wealth when return from this wealth are protected by the IPR and Patents of GATT. That is why India delayed to sign the Climate Change Convention. Mr. Kamal Nath, the Minister of States for Environment and Forest disclosed that India, China and Pakistan are coordinating closely on the issue and there can be no moving away from the principle of equity. India also demanded the "polluter must pay" principle to be applied by United Nations. The UN Secretary General Mr. Boutros Boutros Ghali also mooted the "polluter pays" principle at Rio.

Prime Minster P.V. Narasimha Rao said that India is not dependent on aid from outside to protect its environment and it has an independent stand on environment issues. The need of the hour is to integrate environmental protection in the planning process itself. On the problem of "new and additional funding" for global environmental protection, Mr. Rao said there is an international agreement on the
need for setting up of such a fund and the problem was only about
the funding mechanism. He said "a single omnibus model" for all
countries, developing or otherwise, is not possible as all countries
have different types of problems and these have to accord priorities
accordingly. He proposed a new global partnership to solve the
seemingly intractable problem of poverty, environment and
sustainable development. He urged the developed countries to accept
the responsibility for conserving the environment and setting apart
resources for helping the poor south to develop economically and
transfer to it technological know how to ensure environmentally
acceptable growth. He insisted that removal of global poverty is a
critical pre-requisite for finding solution to the problem of
environment. He said we must see that the affluence of some is not
derived from the poverty of many. He said that it is not a simple
question of transfer of technology as commonly understood. Indeed,
the process has to start with stopping the transfer of destructive
technologies which alone can give incentive to the development of
environment friendly technologies.

The current environmental degradation in the world is caused by the
pattern of development of developed countries and the developed
countries have reached their levels of growth. Their levels of
development by destructing the environment is leading to this great
problems today. Therefore, they should plough back a little of their
prosperity and refrain from causing environmental degradation. In
this connection they had decided to contribute .07% GNP for
developmental assistance but the constraint remains as to there has
been neither any assurance from the developed countries not to take
any adverse steps against environment nor in achieving the target of
.07% GNP assistance. On the question of GEF, the Global
Environmental Facility, the funding mechanism it is in the thumb of the World Bank and therefore, reflects the interests of the developed countries rather than developing countries. The developed countries have too much control on it and that is once again a constraint. Therefore, fund should be democratically administered and should not have a donor bias.

Mr. Kamal Nath said that developing countries could not be expected to compromise their effort toward development and poverty alleviation while tackling the environment problems. He said that "development" is the right of the developing countries. Conditions must be created in which they are enabled to develop rapidly avoiding the dirty-and-astray route to development through access to sustainable and environment-friendly technologies. The primary responsibility for sustainable development rests, of course, upon the developing countries themselves. The cost of conservation are an integral part of development and therefore, mechanisms of conservation have to be built into the process of development. The removal of poverty is the only viable environmental strategy for the world as a whole-equally, it is essential that developing countries not become the dumping ground for technologies that have already inflicted unacceptable environmental damage in the countries of the North where they originated. At last, he said that sharing responsibility means sharing costs. Developing countries have made the least contribution to environmental degradation. They must now integrate the costs of conservation into the cost of the development, so that all might survive: this cannot be a matter of merely national action: national action must be complemented by a suitable framework of international cooperation, with the developed countries...
contributing their due share to repair the damage already done and the maintenance of sustainability in future development.

In an interview with the then Minister of State for Environment and Forests, Sri Kamal Nath says that "Environmental consideration are now going to be a major factor in international relations precisely because they impinge heavily on the global security agenda. Environmental degradation is leading to a great problem today. It is mostly caused by nation states who aspire for increasing levels of growth by excessive exploitation of natural resources. Therefore, we should be concerned about a sort of development which does not take out from the nature more than what it is possible to put back into it and at the same time we should also protect the nature, so that the future generations are not deprived of the resources available. In this direction, the Rio Conference has served to generate awareness about the inter-related concerns of environment and development and as to how and why these need to be tackled together.

India in this Conference was represented by a delegation including the Prime Minister, M. P.V. Narasimha Rao, External Affairs Minister, Sri Eduardo Faleiro, Environment and Forests Minister, Sri Kamal Nath, eight eminent experts in various fields related to environment, and officials from concerned Ministries. Besides, it was also attended by representatives from Non-Governmental Organisations like Mr. Anil Agarwal of CES, New Delhi. In this conference, India put forward its view with great concern including an effort to secure a greater understanding of the issues of environment and development the over-riding priority of poverty eradication measures for prevention of pollution, national sovereignty over natural resources, community participation for the management of these resources, better access to
environmentally sound technologies etc. In the negotiation phase, there were pressures, but we withstood them with great courage, protecting our national interest along with like minded developing countries. We are a major country and we have bargaining power to withstand pressures from the developed nations.

As far as constraints were concerned, we didn't have any direct but indirect, perceived or anticipatory constraints. To mention some of them:

- Non-assurance from developed countries not to take adverse steps against environment.

- Too much control on the fund by the developed countries which might lead to undemocratic administration and a donor bias.

- Perceived lack of transparency on Fund.

- Entry of MNCs and setting up hazardous or toxic industries and dumping of hazardous wastes.

- Threat to sovereignty over natural resources.

However, despite these constraints and meager resources that we have, efforts had been made for a better understanding and recognition by the international community not only towards development and poverty alleviation but also for environment"95.

**Conclusion**

The expectation from developed countries seem to be a lovely dream primarily because of the contrasting positions that the developed countries take vis-à-vis the developing countries on different
agreements/negotiations/conferences. This is perhaps best exemplified in the Rio Declaration which is though portrayed as international consensus on the future direction of global environment and development, show up more clearly areas of conflicting interest.

In terms of expectations, however, UNCED foresees that the gathering in Rio will have six major output. Each of these outputs cover a broad range of topics of "issue areas". These outputs are as follows:

**(I) Conventions**

It is hoped that the conferences will bring about the global convention on certain issues of global importance (i.e. climate change, biodiversity and forestry).

**(ii) Earth Chapter**

It is basically a document based on Rio Declaration by people should conduct themselves on relation to each other and to the governments. It is the Charter of the rights which will be a Magna Carta for the planet. At the same time it would safe-guard against destructive practice in the North. It will be the ethical standard underlying the actions outlined in Agenda 21.

**(iii) Agenda 21**

A programme of action for the implementation of principles enunciated on the Earth Character. It is a way of saying this is what we must do to bring ourselves into the 21st century. It is a statement of goals and objectives as well as a list of strategies and actions that will be taken to meet those objectives.
(iv) **Financial Resources**

The conference itself also expected to consider "ways" of financing these activities especially in developing countries. The UN believed that conference must ensure access by developing countries to the additional financial measures they will require to integrate the environmental dimension into their own development policies and practices, as well as the incremental costs that will be incurred by complying to the international environmental conventions and protocols.

(v) **Technology Transfer**

In same way that some countries will need financial resources to undertake the actions and programmes that are required of them after the Earth Summit. The UNCED Secretariat feels many countries will need access to technologies that allow them to take care of their environment. According to the Secretariat, the technologies should be provided them on an "equitable" basis.

(vi) **Institutional Arrangements**

As a final output to UNCED, the organizers of the conference hope that they will be able to strengthen existing institutions which deal with environment and development issues (e.g. UNEP, UNDP)\(^7\).

But in every stage, there was a non-compromising attitude between the developed nations and the developing nations. In fact, the agenda for the Earth Summit does include issues such as programmes for poverty alleviation and environmental health, but the major focus of attention in all the preparations has been started towards concerns
related to the global environment and its protection. The UNCED Secretariat itself has come up with a blueprint for the next century called "Agenda 21". Among other things, Agenda clearly estimates a transfer of $ (US) 125 billion per annum from the countries of the North to the South in order to protect the environment both of the global and local levels. But unfortunately the receptivity of the developed countries to this particular recommendation and other components of Agenda 21 has generally been negative, discouraging and deliberate in order to check the developing nations like India from the path of development. India argued that Agenda 21 is too much like a big shopping list and had not focused enough on the 5 major issues which have a direct bearing on the conflict of security like - poverty, population, stabilization, pollution and public policy for action.

Another principal concern of developing countries in the global environmental process has been to prevent any international jurisdiction over what are considered national natural resources. On the Biological Diversity Convention, it could be said that sovereignty might be affected due to the promise of access to bio technology. in such a situation, could India have self-reliance and independence on matters of environmental security?

India is also going to be affected by the undemocratic condition of the commission on environment and sustainable development (a multilateral mechanism to monitor the implementation of the agenda) which has been specifically designed to protect the interests of the North. Besides the difference on the CSD structure, the over emphasis by some developed countries on the high power Advisory Body that will assist the Secretary General in the task of monitoring
agenda implementation, has led to a controversy. The role of Advisory Body as envisaged in the agenda is acceptable to all the parties, but causing concern among South countries is the attempt by some developed or so called donor countries to institutionalize this mechanism. India wanted it to be democratically constituted without any donor bias. The South wanted the Commission to be modelled on the lines of ECOSOC with geographical representation to countries.

Thus, India led the Third World countries at Rio, emerged as a major player and powerful bridge between the developing and the developed world protecting the interests of the Third World nations through its skillful and diplomatic negotiations working under substantial constraints. These constraints made it change its diplomatic stance and accept certain discriminatory provisions in the hope that this would help Third World countries. Future holds the key to the issue that hopes will be fulfilled or belied. As of now, as in the other two areas it is the international constraints that seem to have an impact on our policies, as also the pressure from organisations like FICCI and our perception of the international constraints. Therefore, it is better to forget the perception of hundred earths, we should have a single and common approach to "only one Earth" or "Single Common Future". If we are to plan for a better future, it would have to be on the principles of equity and sustainable development.
END NOTES


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