GLOBAL ENVIRONMENTAL GOVERNANCE AND ENVIRONMENTAL HEALTH PLANNING AND POLICIES IN INDIA: A CRITICAL ANALYSIS

Dissertation submitted to the Jawaharlal Nehru University in partial fulfilment of the requirements for the award of

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"The fundamental question of values in any culture can be phrased in simple terms: what kind of control over what kind of environment?"

-- ERNEST BECKER



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CERTIFICATE

It is certified that this dissertation entitled "GLOBAL ENVIRONMENTAL GOVERNANCE AND ENVIRONMENTAL HEALTH PLANNING AND POLICIES IN INDIA: A CRITICAL ANALYSIS" submitted by Mr. Ramlal Ray in partial fulfilment of the requirement for the award of Master of Philosophy degree of this University, has not been previously submitted for any degree of this or any other University and this is his own work.

We recommend that this dissertation may be placed before the examiners for evaluation

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To my teachers, B.S. Malwad and G.B. Mattur, for their love and sincere support.

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LIST OF ACRONYMS

UNCHE - United Nations Conference on Human Environment

UNCED - United Nations Conference on Environment and Development

UNGA - United Nations General Assembly

UNEP - United Nations Environment Programme.

GEF - Global Environment Facility.

NGO - Non-Governmental Organisation.

STAP - Standing Scientific Advisory Panels

MNC - Multi-National Corporation.

UNICEF - United Nations Children's Fund

WHO - World Health Organisation

WTO - World Trade Organisation

GATT - General Agreement on Tariffs and Trade.

CITES - Convention of International Trade in Endangered Species of

Wild Fauna and Flora.

CFC - Chloro Fluoro Carbon

CSD - Commission on Sustainable Development.

ECOSOC - Economic and Social Council.

UNDP - United Nations Development Programme

ODA - Overseas Development Agency

WB - World Bank.

IMF - International Monetary Fund.

WCED - World Commission on Environment and Development.

ODS - Ozone - Depleting Substances

GDP - Gross Domestic Product.

GNP - Gross National Product.

CBD - Convention of Biodiversity.

WDR - World Development Report.

SAP - Structural Adjustment Programme.

TRIPS - Trade Related Intellectual Property Rights.

MOEF - Ministry of Environment and Forests.

OECF - Overseas Economic Cooperation Fund.

AIJ - Activities Implemented Jointly.

CIDA - Canadian International Development Agency.

FCCC - The Framework Convention on Climate Change.

UNO - United Nations Organisation.

UN - United Nations.

OECD - Organisation for Economic Cooperatoin and Development

EC - European Community

UNCTAD - United Nations Conference on Trade and Development

WWF - World Wide Fund for Nature.

CHAPTER - 1

INTRODUCTION

After three billion years of the pre-biological evolution and 15000 years of human history, we have come at the cross roads of the earth planet. It is a well recognized fact that science and technology have brought about multiple revolutions in thinking and behaviour of human beings. Industrial revolution being one of them, has certainly transformed lives of many people and brought about blessings to a large section of the world. Industrialization is still considered indispensable to material progress and development. Countries that built strong industrial base in the last few decades are now the major actors of the world economy, putting their people on the fast track of prosperity with high consumption life styles.

Although, industrial revolution have transformed lives of many people, but it has also deeply eaten the vitals of the environment resulting into disturbed ecological balance. If mankind has to continue its stay on this earth, such disharmonious ecological system needs proper protection and governance.

More recently we have learned that many societies seem willing to bear the problem of environmental degradation in the pursuit of prosperity. Apart from this, it is now clear, for example, that when one society sacrifices its environmental quality for economic gain, it may put at risk not only its own population, present and future, but the entire planet.

As we enter the last decade of the millenium, environmental issues have forced their way to the top of nations planning and agenda by including specificity of local concerns. However, remarkably dramatical wide range of concerns in recent decades includes the international problems of acid rain, the green house effect leading to rising sea levels, the flooding of coastal areas, and the transformation of fertile farmland into dust bowls, and finally depletion of earths protective ozone layer, leading to ultraviolet burning and pandemic of skin cancer.

These well orchestrated global environmental problems have national, regional and local dimensions which needs to be grappled at that level. The national environmental issues varies from country to country, for example, poverty and its consequence on population and environmental degradation is the major environmental issue in underdeveloped countries, high consumptive life style and its consequences on environment may be the major environmental issue of the North. Nevertheless, by virtue of globalizing environmental problems local issues though varies yet, it needs to be examined very closely and critically, within the purview of global environmental governance.

OBJECTIVES:

This dissertation would attempt to delineate the process of global environmental governance which mainly initiated since the United Nations Conference on Environment and Development (UNCED), at Rio under various banners of multilateral agencies. The objective further is to discuss, how far these multilateral and bilateral agencies,

being the major actors of global environmental governance, been able to locate local issues as a part of global environmental governance in its various policies and programmes. In what way India, being a member of all those multilateral agencies, carried out some of the processes of environmental governance in its local environmental planning and policies. And, in the light of all the above facts what are the current challenges of environmental governance before it.

Second Chapter of the dissertation deals with concept and scope of global environmental governance. Governance encompasses much more than the organisations we refer to as governments. It involves the institutions and symbols that make possible collective choices about how people shall live. Under the scope of the regime, global environmental norms, rules and administration has been discussed and finally an appraisal of global environmental governance dealt, with special emphasis on post UNCED issues of environmental governance.

Third Chapter critically evaluates various issues of environmental governance and environmental health at UNCED such as, the various dimensions of sustainable development, the issue of technology transfer, role of non-governmental organizations, and other issues. Finally some of the processes of environmental governance set out by UNCED has been discussed.

Fourth Chapter discusses how the processes set out at UNCED carried out by various multilateral agencies in its various reports policies, and programmes. India by

virtue of its membership to such agencies also incorporated some of the processes of environmental governance in its local environmental health planning and policies. However, such national planning and policies in recent years facing the challenges of externally induced parochial exploitative attitude and conditionality of Bretton Woods institutions.

Finally, in the Fifth Chapter various issues are analyzed to reach at final conclusions.

CHAPTER - 2

GLOBAL ENVIRONMENTAL GOVERNANCE:

CONCEPT AND SCOPE OF

THE REGIME

The International community first acknowledged the urgency of dealing with global environmental issues at the United Nations Conference on Human Environment (UNCHE) in Stockholm, Sweden, in 1972. At that time International environmental problems particularly widespread transboundary pollution and the management of regional and global commons-issues that naturally fall within the purview of International Institutions-were not well understood, and a few systematic efforts existed for their management or protection. Observers were also sceptical that effective governance could be established for such issues, because strong, binding governance at the International level has always been widely regarded as difficult and problematic due to the temptation for countries to defect from collective agreements involving public goods and the difficulty of monitoring and enforcing such arrangements.\footnote{1}

Yet, two years after the United Nations Conference on Environment and Development, such scepticism appears unwarranted. A system of environmental governance has evolved in the twenty years from UNCHE to UNCED. Governments are now held accountable to new standards by carriers of values who had no standing in 1945. Not only has a stable set of expectations about reciprocal state practice been established, its form has evolved over time to become more comprehensive, reflecting growing scientific understanding about the behavior of eco system. Debates

now are no longer about whether to protect the global environment but rather how it should be protected. General attitudes are shifting from regarding weak environmental standards as a potential source of comparative advantage to seeing them as "a form of exploitation similar to that of flouting Internationally recognized human rights and labour standards".²

The current governance system can be described in constitutional terms. Governance entails a set of commitments that command obedience (rights and responsibilities, conventions, principles and norms) actual rules and procedures by which these commitments are to be realized, a set of authoritative actors who may participate in decision making (rules of suffrage), a set of formal Institutions through which activities are coordinated, and a procedure for adjudicating disagreements and challenges.³ In other words governance encompasses much more than the organizations we refer to as governments. It involves the institutions and symbols that make possible collective choices about how people shall live.

In domestic society, global governance is exercised through political and administrative processes performed by Legislature, executive and judiciary. At the International level these functions are performed by International Institutions. Authoritative values are developed in International treaty law, through UNGA decisions and under the auspices of UN agencies. A body of soft law has also been developed that international lawyers regard as less binding than the formal treaties and customary law developed for the environment. Executive branch and administrative functions are performed by UN specialized agencies. The enforcement and arbitration function is performed only through informal and decentralized channels. Unlike domestic

society, these decisions always rest on choice. However, as in domestic society, a lasting and legitimate exercise of governance rests on its legitimacy in the eyes of member governments.

SCOPE OF THE REGIME

GLOBAL ENVIRONMENTAL NORMS

Global environmental norms establish the expectations against which states are willing to be judged. Though such instruments of International law may lack the formal requirements as of "law" in a more legalistic sense, they do express shared purposes. Legal scholars concur that a set of principles has been established in International treaties with the effective claim of normative injunctions that constrain the conduct of nations by creating new norms and obligations to restore ecosystems health.⁴

More broadly, International treaties concluded since UNCHE reveal an appreciation of the saliency of the issue as well as an acceptance of an increasingly comprehensive approach towards environmental management. Over half of the 140 multilateral environmental treaties signed since 1920 were adopted since 1973. Their substantive focus appears to be increasingly comprehensive. Before UNCHE, these expectations were much weaker and more disjointed. International attention moves from conservation efforts towards protecting international commons and ecosystems from discrete threats. Marine pollution control moved from controlling tanker based sources of pollution to controlling marine dumping and the politically more difficult and economically costly land based sources of pollution as well as

protecting ecosystems in which valued species dwell. In marine pollution control regimes, consensus principles involve the acceptance that human emissions are responsible for environmental contamination. It is opined that norms typically enjoin states to curb the activities that cause environmental degradation principles are becoming increasingly comprehensive, focusing on the protection of ecosystems rather than discretely controlling individual pollutants or sources of pollution.⁵

The substance of global environmental governance has expanded by presenting the scale and scope of environmental threats for instance global action has been taken to confront common threats to the quality of the atmosphere. Attention has also been shifted more generally from local and regional risks to global ones: from conversation of local bird species to efforts starting in the 1970's for global protection of migratory bird's habitats: from acid rain in the 1970's and 1980's to atmospheric issues in the 1980's and 1990's.

Environmental governance arrangements have become increasingly "ecological" in form, giving attention to ecological laws supported by scientific ecologists and focussing on the sustainable management of ecosystems. Environment impact assessments are now widely required at least as a ritual by governments and international organizations in order to weigh the environmental consequences of economic or development decisions. International debates now regularly consider new concepts such as "ecological sensitivity values" to bond the rates of economic growth. Richard Gardner notes that the preamble to the climate change treaty commits

signatory states, "to the goal of stabilizing green house gas concentrations in the atmosphere at level that would prevent dangerous interference with the earth's climate and to do so in a time frame that will permit eco system to adapt".6

GLOBAL ENVIRONMENTAL NORMS AT UN CONFERENCE ON ENVIRONMENT AND DEVELOPMENT (UNCED)

As written, environmental norms complement norms of sovereign rights. Principle 21 affirmed that "states have the sovereign right to exploit their own resources pursuant to their own environment polices, "while also asserting" the responsibility to ensure that activities within their jurisdiction or control don't cause damage to the environment of the other states or of areas beyond the limit of national jurisdiction". The parallel UNCED declaration extended the principle of state sovereignty to include, "the sovereign right to exploit their own resources pursuant to their own environmental and development policies". However in practice these are an effort to encroach into the sovereign rights of nations by increasingly including domestic activities in International laws and declarations.

GLOBAL ENVIORONMETAL RULES

Multilateral environmental treaties and regimes contain a number of concrete rules for national practices. Governments accept the duty to inform each other of risks, to notify neighbours in cases of emergency situations, and to co-operate in scientific research and systematic environmental monitoring overall there is a trend toward the explication of greener rules. Environmental commitments generally take

the form of regulatory injunctions administered through a combination of numerical targets procedural permits, and reporting systems.

Ecosystem-based management models have been applied in the 1971 RAMSAR Convention on Wetlands of International Importance, the 1973 Agreement on the Conservation of Polar Bears, the 1979 Bonn Convention on the Conservation of migratory species, and the 1980 convention on the conservation of Antarctic Marine Living Resources, as well as for managing the North American Great Lakes. Most impressive is the current effort by the parties to the European acid Rain regime to apply the critical loads concept to controlling sulphur dioxide and nitrogen oxide emissions. With the adoption of the 1994 revised sulphur protocol, the parties agreed to cut their emissions of these gases according to the absorptive capacity of the local ecosystems in other countries where the compounds fall.

Decision making procedures take the form of annual or biannual intergovernmental meetings to review the activities of international secretariats, authorize new projects, and hash out differences in national approaches to environmental policy. Treaty drafters and regime designers also resort with increasing frequency to the establishment of dedicated voluntary trust funds to finance their activities. UNEP administers 12 trust funds for regional and global environmental treaties that have the effect of making the conventions financially self supporting as well as creating more resources for programme activities. These trust funds are appended to UNEP's Regional Seas Programmes and CITES. The World Bank administers the Montreal Trust Fund for the ozone regime while the global environmental facility

(GEF) exists to finance the International component of projects intended to preserve biodiversity, protect the ozone layer, curtail climate change, control marine pollution and limit desertification.

Following the development of a wide set of commitments during the 1970's and 1980's many countries are now turning their attention to refining the rules, and promoting compliance with them.

GLOBAL ENVIRONMENTAL SUFFRAGE

The primary figures in international environmental governance are, of course, representative of governments who claim the legal authority to take authoritative decisions in international institutions. Governance through the late 1980's primarily occurred through dialogues between environmental ministers and environmental scientists and with other governmental bodies.

Over the last twenty years, legitimate participation in environmental governance has spread beyond the society of states. The scientific community has participated widely in International discussions as well as engaged in preliminary discussions at the national level, as environmental issues were unfamiliar to most policy makers and they had to solicit technical advice. Those exercising authoritative control over knowledge command great potential influence because technical information is one of the critical resources for effective environmental governance. As environmental scientists have become systematically involved in decision making at the national level in domestic and international issues, environmental governance has come to

established independent advisory panels, with the effect of Institutionalizing the participation of Independent scientists in environmental governance. For example standing scientific advisory panels (STAP) exists for GEF. In the UN, the high level advisory board on sustainable development advises the Secretary General and the Commission on Sustainable Development.

UNCED was particularly revealing because of the broad variety of actors - whose participation was widely accepted as legitimate in environmental governance. Over 1,400 corporate environmental and development NGO's attended the official meeting in Rio, and many more participated in the preparations. Since 1990, major business and environmental NGO's routinely have attended as observers at UNEP meetings as well as meetings convened by MARPOL, the London Dumping Convention, the Climate Change Convention and the GEF. While originally established in industrial countries, environmental NGO's are no longer restricted to the north. Many flourish in Malaysia, the Philippines, India and Brazil and umbrella groups exists on every continent.⁷ At UNCED, 70 per cent of the registered NGO's came from Industrial countries, with the heaviest representation from the United States, Canada and United Kingdom. The most heavily represented developing countries were India, the Philippines, Nigeria, Kenya, Srilanka and Pakistan with more than 10 NGO's accredited from each. At UNCED the contribution of the non-governmental organizations both in the preparatory committee meetings leading up to the Rio conference and in the conference itself has substantially altered the contents of agenda 21 to deal with concerns that may have never been identified or voiced without their participation.

Throughout the Rio conference NGO pressure groups kept up their inputs either as member of their countries official delegations or from the "Global forum" which was a parallel summit of NGO's where some of the deepest concerns of the ordinary citizens of the world were voiced.

NGO's perform its function in international governance by providing information and balancing the claims of governments and the private sector. Their involvement in International politics is for the creation of international civil society. It is not clear about the composition of them in order to carry forward their interest. Ultimately many are interest groups representing a specific constituency rather than offering an impartial and universally shared set of views about environmental governance.

The emerging transnational NGO movement is not homogeneous. Two major cleavages exist. One schism is between grassroots and mainstream groups. Many grassroot and populist groups challenge the underlaying beliefs in economic growth and new technologies, which they consider illusory; dangerous and self destructive. They stress the importance of traditional indigenous lore in ecosystem management, where the rationale has to do with facilitating social learning about sustainable life styles. Moreover they denounce other groups whose interests they feel are conditioned by the ties between education, science, the state, and corporate interests.

Another schism exists between Northern and southern environmental groups.

Northern groups tend to focus on continuing their affluent, wasteful life style and domination of world resources, while the southern groups obviously tend to focus on poverty, illiteracy, agricultural issues (such as soil loss and pesticide use), resources

issue (such as deforestation, biological diversity and erosion) and public health problems (such as malnutrition underdevelopment freshwaters quality and quantity) etc. and improving their overall quality of life.

While it is difficult to characterize the common policy agenda of these thousands of groups, they do share some broad preference about policies and institutional arrangements. In many instances their policy preferences are procedural. They are suspicious of the elite activities of small groups of scientists and Government representatives, outside public scrutiny. Many NGO's press for greater participation in decision making within international institutions, and easier access to the information circulated within them. They are particularly suspicious of the GEF and World Bank, which they feel lack transparancy. The prefer Institutions that stress decentralized approaches to implementing projects, such as UNEP, and often favour institutions with headquarters in cities that are easily accessible.

Multinational corporations have taken a fairly low profile in international environmental policies until recently. Many firms determined that environmental regulations did not constitute a significant threat to their competitiveness, and most have been content to either lobby their government or to await decision and then seek to temper those they found burdensome. More recently they have responded to the growing national legislation and the rising tide of consumer taste by becoming more vigorous participants. MNC's can make a valuable contribution to effective environmental governance because they control the products, technologies and knowledge about markets that are essential for efficient environmental protection.

INTERNATIONAL ENVIRONMENTAL ADMINISTRATION

Many executive branch functions are performed by International organizations. Like executive branches in national governments, the UN specialized agencies and Brettonwoods institutions can compel or induce action by reluctant members of the society as well as legitimate the political participation of the members of society. International organizations are engaged primarily in national capacity building, generating and diffusing information, monitoring actions taken at the national level, and building domestic constituencies of sympathetic actors such as scientific networks, environmental NGO's, and increasingly private firms.

UNEP has been the environmental catalyst as well as the environmental conscience of the UN system. Deciding that almost each and every act of man was closely interrelated with the environment; UNEP, Immediately became involved with almost every possible economic activity of both men and nations it could conceive. However, unable to function alone due to the small amount of many at its disposal, UNEP generally manages to achieve its ends by coercing other organization into cooperating with it in getting things done. UNEP's activities covers several areas in which they work almost hand in glove with other international organizations partly for financial reasons but quite often to be able to draw on the expertise of others too. The condition of children in relations to environment for instance: enjoys the active support and co-operation of UNICEF, whose efforts on behalf of children

and education are legendary.

When dealing with health and environment, the expertise of world health organization (WHO) is brought into use to combat the effect on health of all things that have to do with the environment particularly those affecting climate change.

UNEP and the world meterological organization are jointly involved in several other programs associated with climate, the weather and the oceans.

There are now several multilateral agreements and accords on the books as a result of such collaboration work and major agreements include the 1973 convention of International Trade In Endangered Species of Wild Fauna and Flora (CITES), the 1979 Convention on the Conservation of Inventory Species (CMS) the 1985 Vienna Convention for the protection of the ozone layer. The 1987 Montreal Protocol on substances that deplete the ozone layer was a milestone in international agreements and has since served as the blue print for later international understanding. It has formed the basis of the amendments to the protocol which was signed in 1990, wherein nations agreed to assist developing countries n their efforts to reduce dependence of harmful substances, like the now infamous CFC's and to help them to adopt environmentally kinder alternative technologies. The 1989 Basel Convention of the Transboundary Movement of Hazardous Wastes and their Disposal although a subjects still representative of a problem of great magnitude to third world countries used as dumping ground for hazardous waste, has nevertheless given UNEP some means of control over those nations who choose for their own short term gains to ignore convention made in the Interest of the majority.

Two perspectives are dominant in assessing the role of the UN in any multilateral ventures: the forms / actor perspective and the Instrument / executor perspective. First the UN may be perceived as an arena or forum for global bargaining between governments. United nations, literally is the only place where global negotiations on environmental protection can be conducted. It is only in a public and universal forum of this kind that sovereign actors may be persuaded to endorse cooperative ventures and so relinquish the temptations to play the "free rider" to pass on external costs and to play the persistantly uncooperative role in the many "prisoners dilemma" scenarios that characterize global environmental change Second the UN may be characterized as an instrument for implementing or executing for implementing or executing the policies of its members.

The UN's role in environmental field derives mainly from the transboundary and sometimes global nature of many threats to the environmental security of the state. The boundaries of sovereign states do not coincide with the boundaries of the ecological systems which sustain them. Therefore, the rationale for international environmental regulation sometimes possesses conditions on sovereign states. On the contrary any attempt by sovereign state to regulate ecological systems in bound to have only limited success. It is therefore, argued that this creates crisis of legitimacy for the state because it cannot deliver complete security. One solution of these dilemma has been the 'functional approach' to international organizations, and approach laterly restyled by some as "liberal institutionalist". Some environmental threats to the security of state are completely beyond the capacity of any one state to resist or to alter. No one country can legislate for the protection of the ozone layer above

it, or command the obedience of the level of the sea lapping at its shores. Countries that do legislate for sustainable development policies will be subject to pressures caused by transoundary flows originating abroad. Some countries are likely be more sinned against than sining in this particular balance of transouboundary pollution.¹⁰ Functional organizations have, since the creation of the Rhine Commission in 1815, attempted to reconcile the imperfect fit between jurisdictional boundaries and the so called natural or functional boundaries. Some of the earliest example of functional cooperation were associated with the International River Commissions for the Rhine, Scheldt, and Danube. These can be described as natural in the sense of being hydroglocial system defined by geographical rather than political boundaries. These nineteen century projects were a successful precedent for the global application to fields of human cooperation such as the universal postal union, the food and agricultural organization, and the international civil aviation organization in which standard setting and economies of scale suggested a rational basis for intergovernmental cooperation. Attempts to apply the vocabulary of natural functions or "technical self determination" to other social and economic aspects of international cooperation - for example, the world bank have invited criticism that functionalism is either teleological or hegemonic.¹¹ However, only some dimension of contemporary global environmental change, such as climate change ozone layer depletion and control of oceanic pollution fit well with the functionist logic invoking the case for global regulation by organizations of global reach.

Functional cooperation can only operate under the conditions of complex interdependence identified by Keohene and Nye (1977). UNCED addressed a complex agenda: Agenda 21 itself extended over forty substantive chapters. Pre-conference positions were well established. The north promoted climate change, forestry conservation and the preservation of biological diversity as its priorities. The south approached Rio Keener to promote pledges on concessionary finance and technology transfer, trade reform, action on desertification and protection from waste dumping and sought to avoid stigmatization on forestry and demographic questions.

The UNCED process recognized the crucial role of the numerous stake holders and parties in the implementation of, and the follow up to, the agreements which ware made. Agenda 21 also recognized the role of numerous so called "major groups" mostly obviously local authorities women Indigenous peoples, youth, the corporate sector, trade unions and the scientific community (though despite this, these groups were poorlyrepresented in the state centric decision making structures of the conference). UNCED was (like all similar global conferences) predicted on the parties recognizing the near irrelevance of military power in resolving the disputes that arose in addressing the agenda.

Although typically associated with relations of mutual dependence, the above conditions need not imply symmetrical relations. On the contrary, in UNCED, as in many North-South arenas the parties were configured in a profoundly asymmetrical relationship of power.

The institutional reforms of the UN machinery set in motion by the 1992 UNCED were contained in the recommendations chapter 38 of Agenda 21. In brief, the governments participating in UNCED reaffirmed a hierarchy of political accountability, with the UNEP and UNDP obliged to cooperate with each other (Agenda 21:38, 32). Both are explicitly accountable to the newly created Commission on Sustainable Development (CSD), itself a subcomission of the well established Economic and social council (ECOSOC), which is in turn an organ of General assembly. Within this hierarchy, Agenda 21 enlarged the competence of UNEP, whilst assigning a particular leadership role to the UNDP in capacity building and finance, and also agreed to continue funding the newly created tri-agency GEF.

A recognition of the need to impose system wide coordination in the pursuit of sustainable development persuaded the otherwise Anglo-Saxon delegations to endures the creation of the commission of sustainable development. Charged with the role of following up the Rio conference, both in general sense of coordinating the UN's own organs and agencies programmes for sustainable development; overseeing the application of UNCED provision about technology transfer, ODA commitments and finance of environmental technologies: collecting reports from governments about their environmental activities; facilatating NGO Involvement; and hosting high level annual meetings on environment and development. In a more formal, Institutional sense, the CSD is thus responsible for organizing the 1997 Review conference for UNCED.¹² The CSD's programme has like that of the UN commission on human rights, adopted the practice of receiving national reports from the members

as well as instigating cross sectoral review of the agenda 21 chapters. The CSD is supported by a division within the new department of policy coordination and sustainable development, which is thin in numbers and budgetary support.

WHO publishes environmental standards that are widely adopted in national legislation particularly in developing countries. Other international organizations are also expanding their activities to integrate environmental considerations into regular projects. Notable is the ecosystem management emerging in fisheries regulation and for conservation reserves. Environmental impact assessments are now widely required in projects development by most organizations.

The World Bank's development style has been transformed to incorporate environmental consideration into project development. Since 1989 new design practices have been introduced for most projects. The Bank also administers with UNDP and UNEP, the replenished 2 billion Global Environment Facility. The Global Environment Facility (GEF) was established in the International Bank for Reconstruction and Development (World Bank) as a pilot programme in order to assist in the protection of the global environment and promote thereby environmentally sound and sustainable economic development by resolution in march 1991, of the Executive Directors of the World Bank and related inter agency arrangements for co-operation between the UNDP and UNEP and the World Bank that became effect on October 28, 1991.

However, indue course it has been found the GEF is dominated by donor countries; and it is functioning like an extension of the world bank and not really as an autonomous body. The world bank is not a bank that serves the interests of

all the world communities but one in which decisions are based on voting weighted by the economic and political power of its donors.

Further the four environmental issues i.e. (1) a reduction in greenhouse gas emission (2) protection of biodiversity (3) a reduction of pollution in international waters and (4) a reduction in ozone layer depletion that the world bank addresses under GEF also invited criticism that issues were arrived at before a world wide debate on environmental priorities had been concluded. For instance, many developing countries felt that environmental programmes under its four heads could not be taken up in isolation when the central issue in their countries was economic development and poverty alleviation. In this connection Shiva 13, has noted "the exclusion of other concerns from global agenda is artificial; for example, the nuclear and chemical industries operate globally, and the problem they generate in every local situation is related to their global reach. The way global environmental problems have been constructed hides the role and responsibility of the globalizing but parochial local in the destruction of the environment which supports the subjugated local peoples. The constriction becomes a political tool to free the dominant destructive forces operating world wide of all responsibility and the shift the blame and responsibility for all problems on to the communities that have no global reach".

In recent years NGO's are playing an increasingly visible role in environmental administration. They serve as an independent source of information about the quality of environmental and governmental practices exert pressure on governments to adopt international environmental actions, serve as a watch dog over enforcement, and

expose infraction. Others serve as policy think tanks to develop new approaches to solving environmental problems. Some NGO's such as IUCN, administer conservation projects in developing countries. Analogous to Amnesty International, environmental NGO's also serve as witnesses to ecological crimes, expressing the emerging norms that ecosystems should not be willfully destroyed.

ENFORCEMENT

The judiciary function, is weak in international environmental governance while an international court of the Environment foundation was established in Italy in 1992 to promote the idea of a world environmental court, there are few formal mechanism for enforcement of international environmental obligations and many international treaties are not closely enforced. From 1987 to 1990, 873 infringements of EC environmental directives were reported. Very few international environmental regimes have strong provisions for adjudication seventeen (Including the Montreal protocol, CITIES, the Basal Treaty and Ten Species Conservation Treatises) contain provisions for trade against violators. Those that do contain such provisions have virtually never been invoked on are being challenged by the GATT. Enforcement in practice largely depends upon shame.¹⁴

While government sign treaties out of self interest, self interest does not always extend to enforcement. International Institutions provide a key function by collecting data and information receiving reports on treaty implementation by states, facilitating independent monitoring and inspection, and acting as a forum

for reviewing the performance of individual states.¹⁵ The OECD has been conducting and publishing environmental performance reviews of its member countries since 1991.¹⁶

AN APPRAISAL OF GLOBAL ENVIRONMENTAL GOVERNANCE

There is no simple way to appraise the global environmental governance system. The question of effectiveness can be formulated in several ways: have human environmental stresses been reduced, is environmental quality better, do governments comply with their international obligations to protect the environment how far international environmental administration encroaching upon sovereignty of a nation; do the global environmental governance system treat all the nations equally, who controls the global environmental governance system at whose cost?

An honest appraisal require one to ask whether the new forms of environmental governance are doing enough to offset threats of eco system health without sacrificing other widely shared international values and encroaching upon any nations sovereignty. Are economic systems being modified in an equal sustainable way that does not cause long term damage but still fulfils basic needs of world population? It is still to soon to make such an assessment. International treaties are not designed to cope with discrete problems. It is only in the aggregate that they come to approach such holistic standards. We can only speculate about whether international political processes are moving towards the formulation of problems or not. The current process of global environmental governance is as follows.

Although, the Rio processes is recognized as the beginning of the period of global environmental governance; it could not address the basic issue of power structure in international relations, especially in economic terms. The domination of the multilateral agencies (like WB and IMF) by the economic and political power of the donors remained unresolved. The most developed nations who were responsible for the activities that have caused the greatest damage to the environment, were now given the role to guide the transition to a harmonious, equitable and environmentally sound development i.e. sustainable development. This is noting but double standard. Thus the concept of 'global' does not represent universal human interest at UNCED. It represented a particular parochial interest that has been globalized through its reach and control.

The issue of multinational corporations with a low profile of the environmental and local peoples concern hardly received any attention at the conference, even till today.

Further Rio could not resolve the issue of sovereignty of a nation, which got divided between developed and developing and given different preferences in terms of capacity to control international power structure. For example, not only at UNCED even after five years since Rio conference, the convention of biodiversity is not yet signed by the US, the world's largest user of biodiversity who pushed the issue behind by saying that it did not protect the biotechnology interest of private research laboratories of their country. On the contrary many unique genetic resources especially native plants were being exploited by biotechnology agrobusiness, and pharmaceutical

firms based in developed countries with little or no economic returns accruing to host countries. Is not it a question of enchroachment of some one else's sovereignty in the name of liberalization and globalization?

However, the historic communion of nation of Rio de Janeiro did acknowledge that the world has radically to change its approach to economic growth in the path of sustainable development and try to understand, problems of poverty and underdevelopment in the south. The basis of this vision is the realization of the north that unless they radically alter their self centered consumptive life style their own futures are gravely imperiled.

REFERENCES

- 1. Garrett Hardin, "The Tragedy of the Commons", *Science 162* (1968) pp. 1243-1248.
- Hilary F. French, "Costly Tradeoffs: Reconciling Trade and the Environment", Worldwatch paper 113, (Washington, DC: Worldwatch Institute, March 1993), p. 36.
- 3. Dahl, A. Robert. *Polyarchy*, (New Haven: Yale University Press, 1971)
- 4. Oscar Schachter, "International Environmental Law", Journal of International Affairs, Vol. 44, No.2, Winter 1991; pp. 457-93.
- 5. Such as Marine Pollution Control Regimes for the North Sea, Baltic Mediterranean, and Great lakes, where terrestrial sources of air pollution are now covered because their emissions ultimately land in ocean.
- 6. Richard. N. Gardner, *Negotiating Survival*, (New York: Council on Foreign Relations, 1992), p. 37.
- 7. "The Growing Influence of NGO's in The Developing World", *Environment*, Vol. 34, No. 5, June 1992.
- 8. Imber, Mark F. 1996 "The Environment and United Nations in John Vogler and Mark F. Imber (eds). The Environment and International Relations.(London and New York: Routledge, 1996).
- 9. Ibid.
- 10. Ibid.

- 11. Ibid.
- 12. Ibid.
- 13. Shiva, Vandana "Conflicts of Global Ecology: Environmental Activism in a period of Global reach", *Alternatives* Vol. 19, Spring 1994, pp. 195-207.
- 14. Abram Chayes and Antonia Handler Chayes, "Compliance without Enforcement: State Behaviour Under Regulatory Treaties" *Negotiation Journal July* 1991, pp. 311-330.
- 15. French. F. Hilary, "Strengthening International Environmental Governance"

 Journal of Environment and Development, Vol.3, No.1, (Summer 1994), pp. 59-69.
- 16. Eric Lykke (ed) Achieving Environmental Goals. (London: Belhaven Press, 1992)

CHAPTER - 3

EARTH SUMMIT - 1992 : ITS IMPACT ON ENVIRONMENTAL GOVERNANCE AND ISSUES OF ENVIRONMENTAL HEALTH

The UN Conference on Environment and Development (UNCED) held in Rio de Janerio from 3-14 June 1992, was on important milestone in Global Co-operation to tackle environment and development issues. It was the most important event in terms of agenda setting, was known as "Earth summit"; which was organized explicitly to address the issues of environmental governance.

While the 1972 Stockholm Conference on Human Environment initiated global awareness about environmental issues. In many respects, it was a dialogue of the deaf between the rich and the poor. The rich world particularly the USA, had to face up to the effluence of affluence. In order to clean up the world in which we are living, governments of the industrialized and wealthy world wanted all nations to agree to act together. If only one or two began serious clean up operations, those few would be at a disadvantage because their industry would have to carry an additional and unfair cost. So it was in the interest of both industry and government to go to stockhomse to create a level playing field where all would agree to clean up.

Third world countries did not see Stockholm in that way. For them the problem was poverty. It was in response to this indifference that Indira Gandhi said" of all the pollutants we face the worst is poverty. We want more development "2 Stockholm achieved success by making its mark. The western world began to see the error of its ways.

However, what has changed dramatically over the last twenty years is a number of things which we do that have an impact on the environment and the increasing rate at which that impact registers. In particular what we push into the atmosphere by driving cars, destroying forests and burning coal, our knowledge of its global effect has increased. Now it is not only our own resources that are affected but those of others and the effect is registered on a global scale. Recognizing the impact on environment on December 1989, at its 85th plenary meeting, the UN General Assembly reported," over the 20 years since the United Nations convened its conference on Human Environment in 1972 in Stockholm, concern has been mounting over the continued deterioration of the environment and lack of adequate development in the developing countries should this disruption of the global ecological balance continue, it would Jeopardise the earth's life sustaining qualities and eventually lead to both ecological and economic catastrophe. This global environmental deterioration has been result of unsustainable patterns of certain kinds of consumption and production process found especially in the Industrialized countries, which are responsible for the largest proportion of the world's current emission of pollutants, including toxic and hazardous wastes. The development gap between the industrialized and developing countries has continued to widen during the last few decades. The number of people living in poverty has not diminished. More than 1 billion people in the developing world live without adequate food, health care, education and housing. In calling for a United Nations Conference on Environment and Development (UNCED) to take place in Rio de Janerio, Brazil, member states stressed that poverty and environmental degradation were closely interrelated and that environmental protection in developing countries had

to be viewed as an integral part of the development process. The same idea was logically articulated in the 1987 report of the World Commission on Environment and Development, which recognized that" International environmental protection measures have to take current global imbalances in production and consumption fully into account, and that addressing environmental problems in developed and developing countries requires an integration of environmentally sound and sustainable development".³

Beset by the twin specters of too little shared development and too much shared destruction, representatives from 178 nations met in Brazil in June 1992 to outline the environmental dimensions of a new world order. Several thousand high levels delegates including 118 heads of state and government, attended the historic meeting, dubbed the "Earth Summit", It was held, in a setting renowned for its extreme ranges of wealth and Topography - Rio de Janerio Officially known as the United Nations Conference on Environment and Development (UNCED), the two week gathering of world's most powerful political leaders attracted 8000 delegates, nearby 9000 journalists, approximately 3000 accredited observers representing nearly 1400 non-governmental organizations, and another of 15,000 to 20,000 foreign visitors and non accredited NGO representatives who participated in the "Global Forum" - a series of separate meetings, exhibitions and non-binding negotiations timed to coincide with the official deliberations of government delegations.

At the top of the summit's agenda where six key items " a Rio Declaration" setting forth twenty seven principles for sustainable development, a seven hundred page non binding action plan, 4 known as "Agenda 21" the funding strategies and commitments required for implementation of the action plan; global treaties on climate protection and

biodiversity and a set of proposed guidelines for forest management. While the proposed treaties attracted intense media scrutiny and generated most of the political controversy it was the action plan and its funding obligations that drew most of the delegates time and attention.

Agenda 21 is a comprehensive programme of action to be taken globally-from now into the twenty first century - by Governments, United Nations Organizations, development agencies, non governmental organizations and independent - sector groups, in every area in which human activity impacts on the environment. It provides a blueprint for action in all areas relating to sustainable development of planet, from now into 21st century.

The UN conference on Environment and Development "action plan" for the 21st century, known as Agenda 21 calls for new level of cooperation in seven major areas.⁵

The prospering world: Revitalizing growth with sustainability. Accelerating sustainable development through international and domestic policies, and Integrating environmental and development concerns in decision making.

The Just World: Sustainable living, combating poverty, changing consumption patterns demographic dynamics and health issues.

The Habitable World: Human settlements, Urban issues such as water supplies, waste management and health.

The Fertile World: Efficient resources use, Land and fresh water resources, energy, rural and agricultural development, managing fragile ecosystems like islands and mountains and biotechnology management.

The shared World: Global and regional resources. The atmosphere, oceans and seas and living marine resources.

The peoples World: People participation and responsibility, Education training and public awareness, and strengthening the role of women, youth, indigenous people, private campaigning organizations, farmers, local officials, trade unions, business and industry and the scientific community.

Agenda 21 was intended to stimulate cooperation on more than 120 separate initiatives for environmental and economic Improvement, each of them commencing by the turn of the century. Having devoted forty chapters to issues ranging from soil erosion to the creation of UN Commission on Sustainable Development, the action plan represented the most comprehensive framework ever devised by government for global environmental policy making.

Despite the numerous disagreements over ideas and the wording used to express them, the delegates to the earth summit were ultimately able to settle most of their differences in series of "contact group" meetings, which were arranged to give each of the parties objecting to the draft language an opportunity to workout compromises in a closed intimate atmosphere. However of particular concern was the fact that political support for implementation of these measures began to wane almost before the ink had dried on the final agreement. Unlike the hopeful anticipation and momentum of "New World" thinking that carried the summit through a difficult three year organizing process, the momentum created by the adoption of Agenda 21 was too weak to overcome the friction of rising political fragmentation.

The Earth Summit, like the stockholm conference of 1972 provided an international framework for action that far exceed in scope and ambition all prior initiatives in environmental governance. The UNCED has initiated as process between interaction between states characterised by interdependence converging objectives and global integration. The subordination of internal process to the interactive processes to the process of nations led to a formal structure of governance to the global partnership based on shared values relating to the natural environment, its use and maintenance. In a sense the Earth Summit represented a familiar situation in which a system of environmental governance has evolved in the twenty years from UNCHE to UNCED. Governments are now accountable to new standards of environmental accountability. Not only has a stable set of expectations about reciprocal state practice been established, its form has evolved over time to become more comprehensive, reflecting growing scientific understanding about the behaviour of ecosystems. 6

The Rio conventions are a hybrid of two types in the commonly accepted taxonomy of treaties. The first kind of treaty is of a norm creating character or forms the basis for the creation of a general rule of global environment governance. The second establishes a collaborative mechanism for states to regulate or manage a particular area of activity. The norms that the Rio treaties are trying to create (in the context of first type of treaty) relate to the acceptance of sustainable development as a fundamental principle of international economic and environmental organization.

ISSUES OF GLOBAL ENVIRONMENTAL GOVERNANCE AT THE EARTH SUMMIT

SUSTAINABLE DEVELOPMENT

Origin: Two of the most pressing problems confronting the international community at the present time are those of development and protection and improvement of the natural and human environment. Both the problems have been given priority within the UN framework and other international bodies.

In 1950's and 1960's development was regarded as the concept of growth in an economic framework and confined to economic aspects only. Development was treated as a branch of the science of economics.⁷

In 1970's the club of Rome formulated the "limits to growth" theory. The idea was that the planets physical limits were reached. What had seemed infinite to a relatively small human population was now alarmingly finite. If we pushed beyond those limits, the earth's environment would break down, lose its ability to sustain us and our industries and our agriculture. We would be the end losers of course the theory was only partly correct - as was shown by later studies, including those of club of Rome itself, but it was an eye opener. From within the framework of this debate gave rise to a new concept of development where environmental issues is not seen in a separate sector but as an inherent aspect of development. Now it is fully realised in national governments and multilateral institutions that it is impossible to separate economic development issues from environmental issues.

However, it is wrong to say that destruction is a necessary consequences of development. Development is only destructive if it ignores the limits of the environment.

This calls for a new kind of development which works in tandem with the environment is what we call "sustainable development"

Definitions: The most widely accepted definition of sustainable development is provided by the UN's world commission on environment and development, which described it as development that, "meets the need of present without compromising the ability of future generations to meet their own needs. This articulation of sustainable development has led to attempts to spell out in greater detail the specific features of this concept. Some alternative definitions that outline the concept of sustainable development are given below.9

An economic definition places greater emphasis on the use of renewable natural resources in a manner that doesn't eliminate or otherwise diminish their usefulness for future generations. ¹⁰ Further within the scope of economic definition the concept of sustainable development varies for rich countries and poor countries. For rich countries, sustainable development means steady reductions in wasteful levels of consumption of energy and other natural resources through improvements in efficiency and through changes in life style. In this process care needs to be taken to ensure that environmental stresses are not simply exported to developing countries. Sustainable development also means changing consumption patterns that needlessly threaten the biodiversity of other countries.

In poor countries sustainable development would mean the commitment of resources toward continued improvement in living standards; by alleviating absolute poverty which has important practical consequences for sustainable development, since there are close links between poverty environmental degradation and overall quality population. One means of alleviating poverty and improving living standards that applies to both rich and poor countries is also an end in itself: making access to resources among all people within a society more equal. Sustainable development would also mean making unproductive, large landholdings available to the landless poor; extending credit and legitimacy to the informal economic sectors of many countries; and improving education and health care opportunities for women everywhere.

In all countries sustainable development means transferring money from military and state security expenditures to development needs. Reallocating even a small portion of the resources now devoted to the military could markedly accelerate development.

Drawing thread from poor country perspective, in a welfare state perspective, sustainable development has been described as development that improves healthcare, education and social well being.¹¹

A third technology based interpretation is that sustainable development includes a rapid transformation of the technological base of industrial civilization ¹² with the use of new technologies that should be cleaner, more efficient and less natural resource intensive. ¹³ An ecological definition ¹⁴ of the concept is that it involves, "improving the quality of human life while living within the carrying capacity of supporting ecosystems".

There do, of course exist linkages between each of these concepts interpretation of sustainable development, which indicate that these could be considered aspects of the same process. Those definitions are intended to be merely pointers in terms of content not a description of the debate on the subject.

Interpretations: Sustainable development became the dominant theme of the Summit from its very inception. It represented a politically expedient compromise between the forces of economic growth and those of environmental protection. Environmentalists enthused over the word sustainable while many business and government leaders praised development as the final world. However, awkward the pairing of these words may have seemed their combination signified a rare convergence in ecological and economic thinking. Agenda 21 represented the most striking manifestation of this convergence, but there were many other programme and policies that emerged with sustainable development as their professed goal.

At UNCED, there emerged various types of concerns and considerations like: ecological, economic, technological etc, revolving around the concept of sustainable development. Despite all these concerns and considerations sustainable development emerged from the Earth Summit with a large following in the international diplomatic community. Although the term is viewed by many environmentalists as an oxymoron, sustainable development need not imply the acceptance of limitless material growth. It can be contrasted quite nicely with the "development-as-destruction" that has in the past devoured natures capital in order to produce fleeting forms of man made capital. As with the post materialist notion of progress, sustainable development, refers to development

that is largely quantitative or self limiting in nature. It can conceivably encompass most of the important objectives of global environmental governance.

The Rio declaration contains numerous references to sustainable development.

In the absence of an explicit definition, a proximate interpretation can be derived through an examination of the text of various principles. Its implicit contents may be some or all of the following:

- a) a healthy and productive life in harmony with nature (principle 1)
- environmental protection is an inherent part of the development process (principle
 4)
- c) Eradicating poverty (which is seen as an indispensable requirement for sustainable development (Principle 3) and;
- d) As related to "production and consumption" and appropriate demographic policies (principles 4 & 5)
- e) Involving exchanges of scientific and technological knowledge and by enhancing the development, adaptation and diffusion of new technologies including the transfer of technologies, (principle 34)

In line with the different definitions listed above (a) and (b) could be said to represent the environmental or ecological aspects of sustainable development (e) involves the technological component and (c) and (d) relate to economic and human aspects. Developing country concerns around the UNCED process have predominantly related to (c) and (e).

The cumulative message from Rio as related to sustainable development is generally is keeping with the WCED interpretation. A close reading of Agenda 21 and the heat of international debate at Rio in the context of internationalizing ecological consciousness, clearly spells out the contents of a global sustainable development policy within the explicit issues of global environmental governance.

Nevertheless, despite its widely growing acceptance, the thesis of sustainable development is not free from contradictions and limitations, as pointed out in Fidel Castro's speech on behalf of the third world, 15 at the Rio Earth Summit itself one of these is its ambiguous character, in that it identifies the existing social disparities in the world today, but doesn't recognize the mechanisms that have generated this inequality. A consistent interpretation of sustainable development should begin with the recognition that underdevelopment is the result of the plundering of the third world, which has been prolonged in our time by an international economic order that uses the mechanism of debt unfair division of the world's labour, trade protectionism and control over flow of finances to heighten the exploitation of the underdeveloped nations and, as a consequence, the ensuring ecological destruction.

Moreover, there is a tendency to view sustainable development as a formula for the reconciliation of environmental conservation, social equality, economic growth and market forces. It is clear that many are attempting to envelop the concept of sustainable development in the aura of new Utopia. What is equally clear is the potential danger for the socio-economic future of the underdeveloped countries posed by the related concept of the so called "green market", according to which market forces, along will guaranttee

stable and equitable socio-economic and environmental development. The concept of the green market which reveals the disastrous influence of neoliberalism on discussions regarding the environment and development tends to favour those economic agents seeking to legitimize the right to cause damage to the environment and to commercialise this right.

Another significant limitation that has been imposed on the thesis of sustainable development, in terms of its practical application up until now, is the suggestion that the same multilateral agencies dominated by most developed nations, largely responsible for the activities that have caused the greatest damage to the environment, should not guide the transition to a harmonious equitable and environmentally sound development. The orientation of socio-economic development toward "sustainable" bases depends on an international climate of understanding justice and equality. There is no doubt that the recognition of the major environmental challenges facing the world as global problems tends to unite nations in the search for common solutions. However this consensus disappears when the time comes to specify the responsibilities among nations and to establish commitment related to international co-operation such as trade regulations, external financial aid and the technology transfer, among other matters.

A number of recent studies based on an analysis of the socio-economic impact of the IMF adjustment programmes have revealed that the organization formulas not only ignore the problems of poverty and the environment, but also encourage a total disregard for both issues on the part of underdeveloped nations. As a consequence, these adjustment programmes not only have a direct environmental cost, but are also a fundamental factor, in the increase in social inequality, and especially in poverty, that has

been observed in the underdeveloped nations over recent years and in this way further contribute indirectly to the deterioration of the environments. Neoliberal adjustment formulas are without a doubt a fundamental link added in the 1980's to the chain of factors responsible for the structural poverty that has plagued the economies of underdeveloped nations since their inception.

CONVENTIONS

The atmosphere and biological experiments draw their fulfledged international policy response at Rio. The Framework convention on climate change and the convention on Biological diversity emerged in the weeks leading up to the summit as the front page stories of the conference. Their adoption during the final days of the meeting was hailed as the summit's leading accomplishment.

The climate convention which was signed by over 150 nations, entered into force on march 21, 1994. The biodiversity convention, which was signed by 165 nations and the European community, took effect on December 29, 1993. Elements of both conventions provoked strong opposition from the US delegation.

Climate: The climate convention's ultimate objective (Article 2) was the stabilisation of atmospheric concentrations of green house gases. As part of a framework treaty of general goals and principles, however, this objective was not tied in any direct way to the means required for its realisation into its policies and actions. Negotiations for climate protection took place as a part of two step process of initial framework building, to be followed eventually by concrete policy measures known as protocols. The framework

conventions only specific action requirement (Article 4) were that all parties prepare national inventories of anthropogenic emissions, as well as contingency plans for dealing with climate change.

The convention called upon developed country parties to take the lead in adopting climate change prevention and mitigation policies. In the spirit of this treaty provision, most of the Industrialised countries pledged to reduce their green house gas emissions by the year 2000 to 1990 levels. The US delegation, having unilaterally and successfully insisted on changes that removed targets and time tables from the convention, promised only to improve the nations green house gas abatement efforts in a voluntary, open ended manner-a policy that was later revised and strengthened by the Clinton administration.

Bio-diversity: The principal provisions of the biodiversity treaty went to the heart of sensitive landuse, biotechnology, and sovereignty issues. Foremost on the minds of environmental leaders was the provision that each party establish "in-situ" conservation measures (Article 8) including designation of protected areas and restoration of degraded ecosystems.

In contrast most of the political leaders attending the summit were more concerned about the economic implications of proposed changes in biological resource management.

Developing countries complained bitterly that many of their unique genetic resources
- especially native plants were being exploited by biotechnology, agribusiness, and
pharmaceutical firms based in developed countries, with little on no economic returns
accruing to the host countries. Worse yet, some of the genetically engineered products
of this exploitation (e.g. medicine and hybrid seeds) were allegedly sold at enormous

profit by these firms to poor third world residents who were being asked to forego their own development in order to preserve the genetic base for such enterprises.

Led by the U.S. negotiating team opponents of the biodiversity convention insisted that rights to intellectual property not be overridden by provisions for country-of-origin protection and technology transfer requirements. They also insisted that the financing mechanisms for implementation of the treaty be changed to avoid the volatile situation in which simple majority rule determined how much each donor country was obliged to pay. In the end, the opposition forces were unsuccessful in remaining what they perceived as fatal flaws in the treaty language, but only the Unites States refused to sign the convention. This created the single largest note of discord heard during the summits proceedings. Although ostensibly the loser in the contest, the Unites States was widely perceived to have been victorious in removing the wind from conventions mainsails.

POVERTY, CONSUMPTION PATTERNS DEMOGRAPHIC DYNAMICS AND SUSTAINIBILITY

The Rio declaration emphasized on the combined forces of poverty, wasteful consumption and rapidly growing population must be brought under control to make sustainable development a reality.

In 1972 Prime Minister Indira Gandhi emphasized at the UN conference on Human Environment at Stockholm that the removal of poverty is an integral part of the goal of an environmental strategy for the world. In a response to North-South indifference she said "of all the pollutants we face, the worst is poverty.\(^{16}\) We want more development".

The concept of interrelatedness, of a shared planet, of global citizenship and of spaceship of earth cannot be restricted to environmental issues alone. They apply equally to the shared and interlinked responsibilities of environment and development. The global community must address the issue of global development in order to move towards an environmentally sound planet.

But the problem of poverty remains as serious today as it was then, speaking at the opening meeting of UNCTAD at Colombia, UN secretary general emphasized poverty as one of the most urgent issues facing the international community. It is the goal of removing poverty of development, at the global level, which must be addressed if environmental problems are to be tackled. In this context noted Indian Journalist Nikhil Chakravarty has rightly pointed out that "To keep the majority of humankind in a state of poverty and deprivation so that the developed countries of the north can corner all the gifts of natural resources and indulge in reckless pollution of the earth and the atmosphere above, is the road to certain extermination of the human race. The ghastly imbalance between the haves and havenots, between the affluent north and deprived south, militates against the very law of nature apart from sheer immortality of It."

Thus poverty eradication, which is seen as an indispensable requirement for sustainable development (principles 3); was priority in developing countries and the focus of most development measures at UNCED. The Climate Change Convention and Biological Diversity Convention both explicitly recognise that economic and social development and poverty eradication are the first and overriding priorities of developing countries with respect to the fulfillment of their commitments under the conventions. In this debate India has taken the lead from the side of developing countries, as already mentioned.

In combating poverty Agenda 21 recognizes it as a multidimensional problem with both national and international origins. Therefore no one solution will apply globally country wise specific programmes are crucial on the contrary it also explicitly recognized that poverty remains major challenges everywhere. Therefore, calls for all countries to cooperate and share responsibility globally. Global cooperation and a reinforcing partnership are essential to achieving the fundamental goal of improving human welfare throughout the world. It calls for cooperative global action programme on poverty and sustainable development which should be implemented in next 5 years in order to provide 1 billion poor with sustainable livelihoods. A focal point in the United Nations systems should be established to facilitate the exchange of information and the formulation and implementation of replicable pilot projects.

Achieving sustainable living for all requires an environmentally responsible global approach to modify those unsustainable patterns, involving efficiency and waste minimization changes in production process, less wasteful consumption, reducing demographic pressures and ensuring access to health care.

Making primary health care available to everyone is a key aspect of alleviating poverty. Standards of health care for those now receiving poor or moderate services and specialised health care for environmentally related problems not be increased. Access to affordable health care and facilities that communities can maintain on their own are important factors.

Aganda 21 proposals cover population policies, healthcare and education, the rights of women and the role of young people, indigenous people and local communities in order to enable all people to achieve sustainable livelihoods. Policies need to simultaneously address development, sustainable resource management and poverty eradication.¹⁷

Poverty and environmental degradation are closely interrelated. While poverty results in certain kind of environmental stress, the major cause of the continued deterioration of global environment is the unsustainable pattern of consumption and production particularly in industrialised countries, which is a matter of grave concern, aggravating poverty and imbalances.

Measures were proposed to be undertaken at the international level for the protection and enhancement of the environment must take fully into account the current imbalances in global patterns of consumption and production.

Although consumption patterns are very high in certain parts of the world, the basic needs of a large section of humanity are not being met. This results in excessive demands and unsustainable life styles among the richer segments, which place immense stress on the environment. The poorer segments, meanwhile, are unable to meet food, health care, shelter and educational needs. Changing consumption patterns will require a multiprolonged strategy focussing on demand, meeting the basic needs of the poor, and reducing wastage and use of finite resources in the production process.

It also called the attention of all countries which should be led by developed countries to strive to promote sustainable consumption patterns. It proposed assistance

from developed countries for access to improved and environmentally sound technology to developing countries if they have to avoid environmentally hazardous levels of consumption.

Consumption patterns in combination with intensive production and population growth have put increasingly severe stress on the life supporting capacity of the planet.

Agenda 21 in this regard proposed that population factors to be thoroughly researched.

A better understanding is needed of the relationships among demographic dynamics, technology, cultural behaviour, natural resources and life support systems. International education on the urgency of population-issues should be improved.

The agenda suggests that population concerns should be more fully integrated into national planning, policy and decision making. Policies should combine environmental concerns and population issues in a holistic view of development.

Other proposals include enhancing reproductive health programmes and services, providing universal access to family planning services and safe contraceptives, directing education programmes at both men and women and encouraging voluntary migration to decrease pressure on areas in crisis.

To implement population programmes, Governments local communities women's organisations and non-governmental organisations need to develop a framework for action that allows for full community involvement in decision making.

MAKING ENVIRONMENTALLY SOUND TECHNOLOGY AVAILABLE TO ALL

To develop in a sustainable manner developing countries need access to technology that preserves world's resources. Facilitating the transfer of such technology and helping countries make the best use of it, are the two proposals in Agenda 21. While no production is waste free, "Environmentally sound technology" refers, in general, to production methods that are less polluting than previously used methods, consume less energy and fewer resources, and recycle wastes or handle them more acceptably.

The transfer of both patented and public domain technical information should be promoted and financed countries should be supported in developing their technological capacities. The transfer of patent protected processes to developing countries should be expedited one proposal is for the purchase of (appropriate) (environmentally (safe and sound technology) patents for their transfer to developing countries on non commercial terms (as part of aid packages) other proposals are to:

- Purchase patent licenses on commercial terms for their transfer to developing countries on non commercial terms.
- Facilitate the transfer of intellectual property rights between countries where such action is essential to the success of a project.
- Facilitate the transfer of appropriate technologies including intellectual property rights to developing countries in various modalities as part of aid activities.

PROMOTING SUSTAINABLE HUMAN SETTLEMENTS

By the year 2025, 60 per cent of the earth's population will live in cities. Degradation of the environment and human living conditions is already seen in cities, particularly in developing countries.

Proposals in Agenda 21 focus on planning and management methods that will meet the housing water sanitation, safety and waste management needs for billions of people. They include:

- Creating national strategies for providing shelter.
- Forming an international network on trained Urban Managers equipped to plan for human, environmental and infrastructure demands.
- Easing migration pressures on cities by creating employment opportunities in rural areas.
- Taking inventory of land resources and structuring landuse plants to reflect the needs of all population segments.
- Establishing in International programme focusing on urban water sanitation drainage and solid waste management problems, to be called the Settlement Infrastructure and Environment Programme (STEP). Pilot programmes will be funded by existing international organisations. Successful programmes will be replicated worldwide.
- Reducing the Impact of natural disasters through education, risk research and planning.

Examining techniques used in construction industry in order to reduce environmental impact, provide for employment and meet needs for shelter.

Solutions to problems caused by human settlements are linked to issues of energy, air and water on a global scale. Agenda 21 proposals on air water and energy all apply to human settlements.

PROTECTING AND PROMOTING HUMAN HEALTH

Sound development is not possible without a healthy population. Most development activities affect the environment in a way that often causes of exacerbates health problems.

At the same time a lack of development adversely affects the health of many people.

Proposals in Agenda 21 focus on meeting primary health care needs, controlling communicable diseases, coping with Urban health problems, reducing health risks from environmental pollution and protecting vulnerable groups such as infants, women, Indigenous peoples and the very poor. Education, housing and public works should be part of an overall strategy for achieving health for all by the year 2000.

By the year 2000, every country should incorporate environmental health considerations (Including assessments of the Impact of pollution) into its development policy. Factors include noise pollution, radiation and waste from factories and power plants. Technology and infrastructure are needed to monitor air and water quality: anti pollution laws must be enacted and enforced; hygienic programmes have to be introduced to protect industrial workers.

Environmental control measures are indispensable especially in the area of water supply and sanitation. In order to curb many communicable diseases including cholera malaria, schistosomiasis and diarrhoeal diseases.

To counter the effects on city dwellers of pollution, poverty, poor diets and inadequate housing and services, more intensive municipal health efforts are proposed. The goal is a 10-40 percent Improvement in Urban health indicators by the year 2000, including reductions in respiratory diseases, tuberculosis and meningitis.

Making primary health care available to every one is a key aspect of alleviating poverty. Standards of care for those now receiving poor or moderate services and specialised care for environmentally related problems should be increased. Access to affordable health equipment and facilities that communities can maintain of their own are important factors.

Environmental measures (including the provision of clean water and sanitation) are key to controlling many communicable diseases. An estimated 15 million child and infant deaths per year are from preventable causes.

A rapid increase in AIDS cases will strain health care resources in many developing countries in the next few years proposals call for the mobilisation of all countries to prevent HIV infection and lessen the social impact of the disease.

Protecting those whose health is most vulnerable to environmental and social factors is stressed for example infants and children.

STRENGTHENING THE ROLE OF NON-GOVERNMENTAL ORGANISATIONS: PARTNERS FOR SUSTAINABLE DEVELOPMENT

Non-governmental organizations play a vital role in the shaping and implementation of participatory democracy, where independence is a major attribute of non-governmental organizations and is the prediction of real participation. Their credibility lies in the responsible and constructive role they play in society.

Non-governmental organizations, possess well established and diverse experience expertise and capacity in fields which will be of particular importance to the implementation and review of environmentally sound and socially responsible sustainable development, as envisaged throughout Agenda 21. The community of non-governmental organisations, therefore, offers a global network that should be tapped.

To ensure that the full potential contribution of non-governmental organisations is realised the fullest possible communication and cooperation between international organisation, national and local governments and non-governmental organisations should be promoted in institutions mandated and programmes designed to carry out Agenda 21.

These were some of the issues of global environmental governance at the Earth Summit. Thus the Rio conference brought together more heads of state and government than any conference ever before which recognised on effective legal and regulatory framework at international national and Local Levels to transform environment and development policies is to action.

However, the biggest problem with the Rio conference has been petty mindedness. It has consistently refused to look into the basic processes that lead to environmental destruction. The world's political leaders have shown great fear of the economic and political restructuring that such an approach would demand. The result, on the one hand is a petty focus, promoted by industrialized countries, on a few specific environmental problems, and a counter to that by the developing world stressing national sovereign rights over natural resources and compensation for the additional costs that would be incurred in dealing with these, but what are the issues that lie at the heart of the global environmental problem? The simple fact is that today the consumption levels of most of us in the North and a few of us in the south-have reached a level that the earth's capacity to bear has been more or less exhausted. The consumption of the rich now has an adverse impacts across national boundaries and reaches out to citizens of other countries. It is because of the fact that beyond a point the sovereignty argument cannot work in a world which has reached such life threatening levels and forms of consumption cutting across national borders.

Unfortunately the world doesn't have an adequate system of checks and balances - both at national and at global levels-to address these problems. If we want to control global environment problems, we will have to create an effective system of checks and balances. These systems can definitely be developed both in the political sphere and in the economic sphere, if all countries accept a basic minimum global discipline.

THE DEBATE AT RIO AND ITS CONSEQUENCE ON FUTURE ENVIRONMENTAL GOVERNANCE

NORTH SOUTH DIVIDE

It is no wonder to say that the single failure of the Earth Summit is the conflict between the affluent north v/s the poor south and the industrialized G-7 vs the developing G-77, which was omnipotent globally as well as locally. It was the unwillingness of the over consuming rich and the overpopulated poor to accept the responsibility for their own contributions to global ecological destruction. Instead, they tended to blame on each other.

Both, the over consumption by the affluent countries and the over population in poor countries have contributed significantly to the depletion of Earth's non renewable resources Like fossil fuels (Petroleum, gas and coal) and other minerals. Even the seemingly renewable resources like fertile soils, ground water, biodiversity etc. have been exploited to extremes causing severe damage to the environment. Add to this the deforestation inflicted on earth in the name of development and the pollution due to industrialization and we get the present health of the planet.

Bringing back the planet in good health again would require a coherent and concerted application of political, economic, scientific technological systems at the disposal of mankind. However, the affluent countries controlling the global power would like to continue their privileges and wasteful life styles and infact tried to use the "Earth Summit" to further

increase their power and hold over the planet and its people. Similar to new world order these countries tried to prescribe "New Environmental Order" that was being termed as "Green Imperialism".

At the Earth Summit many industrialized nations were eager to seize on Third world population growth and tropical deforestation as the critical issues of the day, while developing nations pointed accusingly at the destructive life styles of the rich and powerful nations of the North. Deforestation on the other hand, was inserted high on the agenda by the United States just before the conference opened thereby providing angry responses from tropical timber exporting countries, led by Malaysia, that succeeded eventually in blocking the US. Proposals for action. The North has been insisting on a legal framework to manage the world forests. Each preparatory meeting saw bitter negotiations as southern countries rained together to prevent this assents on their sovereignty. Some southern environmentalists also see the forest convention as a threat because it would globalize control over forest management and disempower local communities.

Placed on the defensive by population and deforestation arguments many of the G-77 countries openly complained that United States and some of its industrial allies were using the UNCED meetings as a way to shift attention from their own environmental failing to those of developing countries. Malayasian prime Minister Mahatir Mohammed warned against "making the south the scopegoat for the ecological sins the north committed on the road to prosperity. At Rio, the Eco-imperialism of the North ought to be put to rest once and for all".

The most abrasive of all issues being discussed are the Earth charter though non-legally binding the charter is a set of principles which underlie the substance and morality of the conference. The south wanted the principles to clearly articulate its world vision, putting humans and development at the centre of ecological concerns. But the North saw this as "Unbalanced", and would in particular, like to avoid any mention of linking unsustainable consumption patterns to environmental degradation.

From a realist perspective, the Industrialised nations were not wrong to call attention to overpopulation, but they failed in many cases to recognise their own overpopulated condition in terms of unsustainable consumption levels. More important they failed to address adequately the role of poverty and their own role in perpetuating it as a powerful driving force behind third population growth.

In nutshell looking from the angle of North south divide, the Rio meet, many observers believe, heralds the end of the cold war and the beginning of a green war.

CLIMATE CONVENTION & BIODIVERSITY CONVENTION

At Rio, the framework convention on climate change and the convention on Biological diversity are the markerers on the way to more careful and more equally shared, custodianship of the planet. They are the two pillars on which the Earth Summit rests.

At the heart of the Biodiversity Convention lied sensitive land use biotechnology and sovereignty issues. Through the convention governments affirmed sovereign rights over the biological resources found within their countries, while accepting responsibility for conserving biological diversity and using biological resources in a sustainable manner.

Each party under the treaty were to establish in-situ conservation measures (Article 8), including designation of protected areas and restoration of degraded ecosystem. In contrast most of the political leaders attending the summit were more concerned about the economic implications of proposed charges in biological resource management more particularly the US., till the end of the summit, the south was not able to persuade the US to sign the biodiversity convention, because Washington feared that it would infringe its patent rights on biotechnology, and did not protect the biotechnology interests of private research laboratories in the North. Developing countries complained bitterly that many of their unique genetic resources - especially native plants-were being exploited by biotechnology agribusiness, and pharmaceutical firms, based in developed countries with little or no economic returns accruing to the host countries. Many Southern countries in fact, have seen in the Biodiversity convention a certain selfish design of the North. In this connection Ashish Kothari 19 has rightly pointed out that, the last couple of centuries have seen the countries of the North, themselves poor in biological diversity, forcibly looting the resources of the biologically rich nations of the south, while creating the most selfish protectionist systems to monopolize the technologies and benefits arising out of these resources".

Another genuine concern expressed (more by peoples groups than by governments) is that the current draft of the convention has only a qualified recognition of the Interests of the local communities in areas of significant biodiversity. There is a commitment to "protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with sustainable use requirements". ²⁰ The provision

are weak and inadequate there is, for instance, no explicit and unambiguous guarantee of the rights of local people in areas to be conserved for biodiversity. Local communities have not gained anything for all their knowledge and efforts to protect the world's biodiversity. The convention, suggests no mechanism for sharing benefits with them. The biodiversity convention raises yet another set of unanswered questions?

Whether southern governments have the untrammelled rights to negotiate systems and conditions of access to biological diversity. In some cases customary rights of the rural communities to these resources are recognised in law. In others, there has been an erosion in these rights, beginning with the colonial period. If Northern governments can argue, as indeed they do, that they cannot make commitments on behalf of their private sector how then can the governments of the south negotiate the wealth of the forests without participation of their people to whom the forest belong if not legally then morally?

Further the objective of climate convention (Article 2) was the stabilisation of atmosphere concentration of green house gases. As part of a framework treaty of general goals and principles, however this objective was not tied in any direct way to the means required for its realisation. Instead each party to the convention was left to its own devices and schedule to incorporate the goal of stabilisation into its policies and actions. The convention called upon developed country parties to take the lead in adopting climate change prevention and mitigation policies. In the spirit of this treaty provision, most of the industrialised countries pledges to reduce their greenhouse gas emissions by the year 2000 to 1990 levels. The US delegation, having unilaterally and successfully insisted on

changes that removed targets and time tables from the convention, promised only to improve the nations greenhouse gas abatement efforts in a voluntary, open-ended manner. Thus it insisted on a watered down convention on climate change by saying that "Jobs at home had to be protected above global environmental concerns. The disappointment over targets and time tables was a matter to deep concern to many who had hoped for much more from the summit. The eminent scientist Dr. M.S. Swaminathan said that, "the conventions are disappointing in that they postponed firm decisions".

The two most contentions parts of the proposed convention relate to action that the countries of the south are making both in case of climate convention and biodiversity convention. We are aware of our global commitments to the environment, but if the North wants us to take special measures over and above what is already within our means then it must transfer relevant technologies and provide funds for this. At Rio transfer of technology and issue of funds was discussed in detail.

TRANSFER OF RELEVANT TECHNOLOGY

It was agreed in Rio that if the carbon emission level is controlled at the 1990 Index, temperature change can be minimized significantly. The use of energy for industrial activities, including transport, is the largest source of carbon emissions in the world. The curves for development, GDP and carbon dioxide emissions between 1860 and 1990 appear to rise in a parallel manner. It is in this context that the energy dependent growth of west is significant.

Developing countries, however have experienced a different growth pattern. Here, population growth led to increased consumption and burning of fuel. But the major global polluters are the developed countries in the post industrial period.

If the dictum of "polluters must pay" is applied, the burden of checking the trend and clean up operations should be borne by the developed countries. The expectation that the developing countries should adhere to the same environmental standard is expecting the impossible on account of their paucity of economic resources and appropriate technology. Since the convention of climate change makes clean up operations imperative, it should also be mandatory for developed countries to transfer appropriate technology to the developing countries free of cost. Also, global environmental funding for developing indigenous technology should be increasingly directed to countries where 80 percent of the world population lives.

Thus the present formulation commits countries to "provide and/or facilitate access for and transfer to other (countries) of technologies that are relevant to the conservation and sustainable use of biological diversity or make use of genetic resources and do not cause significant damage to the environment" and further that, "access and transfer of technology to developing countries shall be provided and or facilitated under (fair and reasonable) (fair and most favourable) (preferential and concessional) conditions". As can be seen from the square brackets, the conditions to technology transfer remain to be sorted out, but at least the commitment has been made.

However, the issue of technology transfer was not so black and white as mentioned in the documents. Much of the success of Rio attended by more than 115 heads of state

or governments focussed around the repairing of the global environmental damage resulting from climate change and protecting the biodiversity. The central importance given to the climate change and biodiversity conventions in Rio is a clear indication that the modern technology based industrial economies have retained their strong influence on the green agenda of the world and this ensured priority to their own sustainability.²²

Further by the turn of this century the global scientific community will be involved in a big way in environmental research ²³ and surely this enhanced attention of the world scientists will lead to breaking of much new ground to ensure the sustainability of modern industrial production systems. The south will be unable to participate in this process in a significant way. This inherent advantages of the North in terms of its control over modern scientific knowledge and information fits well with the growing clamour from the south for the transfer of environmentally safe technologies. The creation of ecological knowledge, thus will create wider possibilities of North South collaboration.

One final aspect about technology transfer is important, and has been largely transfer is important, and has been largely ignored in both the negotiations as also the debate surrounding the convention. It must be recognised that if what is needed is technology appropriate to biodiversity convention and sustainable use, than the south may have a lot to teach to the north. A considerable variety of traditional skills and techniques are ecologically sustainable, and need to be encouraged and revived, rather than displaced by modern technologies just because they, would now be available. The talk of technology transfer "assumes a one way north to south transfer, which is not only narrow minded, but also self-demeaning for countries with a rich tradition of relevant technologies like India.²⁴

FINANCIAL ASSISTANCE AND GEF

At Rio Financial resources and mechanisms was the thorny topic and biggest stumbling block. For most countries of the south the bottomline in all the negotiations is money. How much and what form of financial commitment can be obtained from the north is the prime concern of many southern delegations. From the point of view of the south the claim to funds from the North is strategically crucial.

There are serious differences on many fronts. Southern countries want the North to provide "new and additional funds, independent of the developmental and environmental assistance already flowing to them. Many northern countries are reluctant to do this and are agreeing only to provide incremental costs over and above what it feels the south is capable of providing internally.

The question further was how much will be promised and the funds will be controlled.

The secretariat of the conference says US \$ 125 billion is needed in aid every year for cleaning up environmental problems.

The group of 77 (G-77) has asked for 0.7 per cent of the GNP to be given as aid by the end of the century. But the North is not willing to commit to a time frame. This is not a totally new idea in the fore of United Nations. The proposal to raise the ODA upto one percent of the GDP has been fervently advocated in the early seventies in order to make the UN Development decade get off the ground. The reluctance of the most developed countries, barring a few of the Nordic region, ensured its failure.²⁵

The Global Environment Facility of the World Bank was unacceptable to the south as the future funding mechanism as it is dominated by the donor countries and it functioned like an extension of world bank and not really as an autonomous body. Now the south has accepted GEF, but only as an interim mechanism and only once it is "modified" in the words of Indian environment minister, Kamal Nath. The biodiversity and climate conventions have accepted this formulation, though without specifying what these modifications would be. In May, a high powered meeting of the GEF said that decisionmaking would be balanced so that developing countries get adequate representation while donor countries got adequate weightage for their funding efforts.

These are some of the Governance issues of the debate at Rio, which directly or indirectly have had an influence on future Global environmental governance.

ASSESSING THE SUMMITS SUCCESS IN THE LIGHT OF GLOBAL ENVIRONMENTAL GOVERNNANCE

Like the famous Stockholm Conference 1972, the Rio summit inaugurated a new era of international ecological responsibility. It was to have marked not only the end of negotiating process and the beginning of an implementation process, but also the start of a global transition to a new century of sustainable development.

The success of UNCED has initiated a process of interaction between states characterized by interdependence, converging objectives and global integration. The subordination of internal processes to the interactive process of nations led to a formal

structure to the global partnership based on shared values relating to the natural environment, its use and maintenance.

Global Integration: Common Concerns

There were various factors which provided for global integration at Rio. The significance of Rio for environmental policy and law is the universal recognition that environmental quality, as an essential life support system, is a common concern not more important than national interests but that it is important to national interests. Three approaches for operationalising global integration are already becoming apparent, for integrating societies, peoples, policies and states.

First, the Rio declaration on Environment and Development and the conventions signed at Rio have emphasised the eradication of poverty as a prerequisite for safeguarding environmental quality for future generations, blurring the existing separation of economic and political issues in international relations. Converting this statement of values for sharing global prosperity, into norms and obligations will be a key element in securing the continuing commitment of all states to common values; because of the ensuring benefits in terms of providing services, increasing options and enhancing capabilities.

Second, considerations of environmental quality provide a process of global interaction opposed to the current philosophy of the international economic system and its assumptions informing economic policy, where costs to the environment are externalized. This common concern, based on the environment rather than on function or territory, provides a new role for multilateral diplomacy in adjusting interests among but also within groups, reducing

the possibility that solutions are affected by differences in political and economic strengths of the parties; underlining the equality and interdependence of states in the international systems and identifying the opportunities for improvements through market instruments.

Third, the states have voluntarily accepted new kind of central authority the commission on sustainable development as well as subsidiary bodies on implementation in the conventions signed at Rio, to review the programmes for sustainable development. These institutions have specific functions that go beyond the purely technical and specialised nature of tasks, which characterises existing international organisations. Their mandate includes controversial political areas that are inherently expansive as they recognise joint decision and delegation of decision making to the new organs: which are permitted to promulgate guidelines and channel benefits. This common purpose constitutes a significant step in the cumulative process of change in the nature of relations between states toward global integration.

Ultimately, Judgements about what was accomplished in Rio depend to a large degree on whether, the summit is viewed as an event or as a process. As an event, the summit can be seen as a spectacle of political posturing and "Photo-ops" designed to divert attention from the weak and underfunded treaties that it produced. As a process however the summit is concluded to be offering a much more helpful image. From this vantage point the most important achievements of UNCED were not the treaties or what they symbolized, but rather the framework for action that was provided by Agneda 21. Out of the deliberations that led to the action plan came new institutions, policy proposals and financing mechanisms that will provide a much surer footing for future environmental governance.

Most notable perhaps was the agreement calling for establishment of a UN commission on sustainable development to provide a new oversight and coordination mechanism for implementation of agenda 21. Composed of representatives from fifty three nations the commission was formally established in New York in February 1993 to monitor progress on the agreements reached in Rio and to report their findings to the UN's Economic and Social Council (ECOSOC)

Thus UNCED process mobilised and expanded a world wide network of environmental organisations and individuals who are likely to play pivotal roles in future global monitoring and political action. Confronted with the growing incapacity of governments to resolve many environmental dilemmas, representative of private and non-profit organisations observing the summit vowed to pick up the slack left by government negotiators, finance minister and complacent heads of state. Several thousand of these representatives participated in the "NGO Forum", a shadow summit of sorts in which they negotiated unofficial treaties and strategies that mirrored the deliberations but not the results of their government counterparts. Throughout the Rio conference NGO pressure groups kept up their inputs either as members of their's official delegations or from the global forum which was a parallel summit of NGO's where some of the deepest concerns of the ordinary citizens of the world were voiced. Perhaps the best expression of the idealism of these NGO participants could be seen in the dozen of banners they paraded through the streets of Rio proclaiming in Gandhi's words, "if people will lead leaders will follow".

BASIC ISSUES OF GLOBAL ENVIRONMENTAL GOVERNANCE WHICH REMAINED UNSOLVED AT RIO

To start with, it was the disappointment over targets and time tables which was a matter of deep concern to many who had helped for much more from the summit. The eminent scientist Dr. M.S. Swaminathan, said that the conventions (Biodiversity and climate) are disappointing in that they postpone firm decisions. The unspecified financial resources are also unlikely to take the programmes very far. He argued that Agenda 21 is too much like a big shopping list and had not focussed enough in the five; major areas poverty, (only referred to in chapter 3 without prioritization of action) population stabilization, pollution and public policy for action.

Although the Rio conference was an important exercise in global public awakening it is not specific and integrated enough in its programme. The richest 20 per cent of the world enjoy 82.7 percent of the Income and the poorest 20 percent have only 1.4 percent of global income and these are the odds that we have to contend against, Dr. Swaminathan added.

The other serious draw back to forcing a new partnership among nations is the inherent failure at UNCED to address the basic issues of power structure in international relations, especially in economic terms. At a panel discussion in the NGO Global Forum on, "Who controls the world after UNCED: The world Bank and The IMF, a restructured UN on the people", during the Rio conference, participants agreed that much of what was done or agreed to in UNCED will be negated by the Uruguay round of the GATT. Mr. Anil Aggarwal, Director of the centre for science and environment, New Delhi, who

was also a member of the Indian delegation to the summit said that the World Bank and the IMF were operating in the third world in such a way that these countries were forced to open their markets to the transnational corporations and enormous destabilization was occurring through their structural adjustment policies and the devaluation of currencies in these countries. He further said that the developing countries were in effect becoming the bonded labour of the North. Mr. Walden Bellow of the Philippines, pointed out that some 70 countries of the south were under the banks influence through its structured adjustment loans.

However, the historic communion of nations in Rio de Janerio did acknowledge that the world had radically to change its approach to economic growth and the problems of under development in the south. The basis of this new perception is not a sudden vision or charity from the nations of the North but their realization that unless they radically alter their self centred consumptive and profiteering life style their own futures are gravely imperiled. Cuba's president Mr. Fidel Castro succinctly summed it up at the Rio conference by reminding the participants that, what has to be paid to the earth is the ecological debt of the rich nations, and not the foreign debt of impoverished countries who are the victims of economic colonialism as much as they were of the old political imperialism.

Further, the Global Environment Facility which is to be the organisation that will disburse funds for environment projects world wide is to jointly administered by the UNDP, UNEP and the World Bank. Although at Rio promises were made about the early restructuring of the GEF (following its Washington meeting two months ago) and

for democratic decision making, there remains a great deal of scepticism about its potential role in financial disbursement to the third world nations. Another criticism of GEF is its choice of four focal areas arrived at before a world wide debate on environmental priorities had been concluded. For instance, many developing countries felt that environmental programmes under four head could not be taken up in isolation when the central issue in their countries was economic development and poverty alleviation.

The connection between unfair international trade practices, protectionism in the North, aid packages and loans are only too obvious but did not merit adequate attention at the summit.

Food security and poverty were not also specially addressed by the Summit although rhetoric on these abounded in documents and speeches. The issue of consumption patterns was also given the go by and the same broad principle treatment at the summit. Although the Kaulalampur meeting of the south countries a few month ago another earlier meetings have sharply attacked the gross disproportion of consumption to population levels, the Summit did not really go into this question at all. For instance the United States refusal to even target the long term lowering of CO₂ levels underlies its oft repeated rhetoric that it would do nothing to compromise American lifestyles.

If the Earth sumit did not really succeed in bridging North South tensions as it set out to do, it at least set out in urgent terms that nations and communities have to get down seriously.

By June 1997, the world has completed five years since the two conference. An evaluation of the results of environmental governance shows that no government has shown any serious commitment to take action on green, global issues. The framework convention on climate change is yet to result in binding targets on controlling green house gas emissions. The convention of Biodiversity (CBD) has not yet signed by US, the world's largest user of biodiversity resources and knowledge. And the Agenda 21- the global action plan for environment has gone largely unfunded.

The post-Rio Inter-governmental dynamics, is that environmental negotiations have slowly turned into petty business transactions, not the establishment of fair and just global environmental governance system. While business transactions, are built on principles of mutual benefits regardless of their social costs, governance system are built of principles of democracy, justice and equality.

REFERENCES

- Sandbrook, Richard, OBE "From Stockholm to Rio", in (ed)., Earth Summit 1992
 UNEP, (United Nations Organisation, Geneva, 1992), pp. 15-16.
- 2. Ibid, pp.16.
- 3. UNCED, The Global Partnership for Environment And Development: A Guide to Agenda 21, (New York: United Nations, 1992).
- 4. Agenda 21: Report of the United Nations Conference on Environment and Development, (4/Conference, 151/26/Rev.1), (New York: United Nations, 1992).
- 5. United Nations Opcit (3)
- See Ambio; Vol. 23, No.1, February 1994. "For a recent survey of natural scientists"
 Understanding of Global Ecosystems.
- 7. Malviya, R.A; "Sustainable Development and Environment: Emerging Trends and Issues", *Indian Journal of International Law*, Oct. Dec. 1996, pp.57-74.
- 8. The World Commission on Environment and Development; *our Common Future*(New York; Oxford University Press, 1987) p.8.
- These are based on definitions provided in World Resources Institute, World Resources
 1992-93, Oxford University Press, New York 1992.
- Robert Goodland and George Ledec, "Neoclassical Economics and Principles of Sustainable Development"; *Ecological Modelling*, Vol. 38, 1987, p.36, Quoted in World Resources 1992-93.
- United Nations Development Programme, Human Development Report 1991, Oxford
 University Press, New York, 1991. Quoted in World Resources 1992-93.

- James Gustave Speth, "The Environment: The Greening of Technology" *Development*,
 Vol. 2, No. 3, 1989. Quoted in World Resources, 1992-93.
- George Heaton, Robert Repetto and Rodney Sobin, Transforming Technology: An agenda for environmentally sustainable growth in 21st century, World Resources Institute, Washington D.C., 1991, Quoted in World Resources 1992-93.
- 14. IUCN- The World Conservation Union United Nations Environment Programme and World Wide Fund for Nature, Caring for the Earth, IUCN, UNEP and WWF, Switzerland, 1991. Quoted in World Resources, 1992-93.
- 15. Fidel Castro's speech At The Rio Earth Summit, *The Marxist*, vol.10(3), July Sept., 1992, pp. 36-72.
- 16. United Nations Op cit (1).
- 17. United Nations Op cit (3).
- 18. Miller, Marian A.L. *The Third World in Global Environmental Politics*, (Boulder, Co.: Lynne Reinner, 1995).
- 19. Kothari, Ashish, 1992, "Politics of Bio-Diversity Convention", *Economic and Political Weekly*, April 11-18, 1992, pp. 749-755.
- 20. Document No UNEP/Bio Div./ N6-INC 4/ WGI/ L2/ Add 3/ dated February 14, 1992.
- 21. Document No. UNEP/Bio Div./N 6-INC/4/WG11/L1/Rev./1, dated February 14, 1992.
- 22. Jayanta Bando padhyay, "Year of the paper tiger", *Seminar (Annual)*, vol 401, January 1993 pp. 75-78.

- 23. International Geosphere Biosphere Programme (IGBP), Global change: Reducing Uncertainities, The Royal Swedish Academy of Sciences, Stockholm, 1992.
- 24. Ashish Kothari, "The Biodiversity Convention: An Indian viewpoint", Monthly Commentary on Indian Economic Conditions, June 1992, pp. 9-15.
- 25. Voice of reasons at Rio, The Hindustan Times, 15th June 1992.

CHAPTER - 4

GLOBAL GOVERNANCE AND NATIONAL PLANNING

National efforts on environmental governance have echoed many of the International trends towards more environmental comprehensive management. By now virtually every government is a party to various multilateral and bilateral agencies and also of many environmental treaties. In addition to ratifying and implementing their international obligations similar norms and procedures have been widely developed in national legislation and policy.

In Indian context UNCED provided concrete opportunity for environmental governance with its emphasis on environmental health. Thus health sector in the country to work in tandem with UNCED tried to ensure that health and environment imperatives are adequately addressed by ongoing future national planning and policies.

The process initiated at UNCED have been further carried out by various intergovernmental agencies related to United Nations like World Bank WHO, WTO in its various multilateral rules policies and reports. India by virtue of its membership to such agencies incorporated some of the processes of environmental governance in its local environmental health planning and policies.

Some of the multilateral agency reports which have had an influence on Indian Environmental Health Policies are critically evaluated below.

WORLD DEVELOPMENT REPORT 1992:

DEVELOPMENT AND ENVIRONMENT (WORLD BANK)

In recent decades the current opinion emerged that the World Bank has been flouting basic environmental norms and going areas with projects which have proved disastrous to global ecosystem. World Development Report 1992: Development and the Environment, the report carried out by World Bank, Earth Summit has been invited a large-no of criticism.

Like the 1990 edition on poverty, the 1992 WDR represents a step away, from neoliberalism and the Bank's attitude of the 1960's: that the continuing existence of the poor in poor nations is the development problem. Indeed the report's insistence on remedying water and air pollution resembles nothing more strongly than 20 year old strategies aimed at satisfying developing countries basic needs. Despite favourable signs, there is a tension in the WDR's prose between concern with poor peoples water, air and quality of life on the hand, and the advocacy of a "market friendly" policy line on the other. Whether the market alone is capable of dealing with the two major problems of the post-cold war world-the abysmal standards of living of (by the Bank's estimates) one fifth of humankind and the rapidly deteriorating global environment with its non negligible possibility of collapse - is a question that the WDR cannot quite bring itself to confront.

Some of the Global environmental issues in the WDR leaves out interesting and controversial points. Which has been discussed below.

1 THE ENVIRONMENT, THE MARKET AND THE STATE

As each succeeding World Development Report documents, the World Bank's management is ideologically committed to the market this fact no doubt induced the author along economistic lines. They involke ecologists and anthropologists, but in the final analysis don't take seriously their insistence on the need to preserve and sustain diverse natural and human systems as placeable components of an unfolding global dynamics.

Despite deploring poverty and recognizing factions such as the "deeper spiritual importance" and "amnesty values" of forests and other natural phenomenon, the Report's main thrust is that policy should be decided on the basis of environmental benefits and costs.

2. ENVIRONMENTAL POLICIES IN PRACTICE

Chapter 3 and 4 of the Report set out these policy characteristics, and present examples - their general thrust is in favour of market based incentives but caveats are also provided. Without going through the lists in detail, a few observations are worth making.

One fundamental issue has to do with the environmental implications of new investments, after all, the World Bank is in the business of project lending. The WDR recognises that "numerous public investments - often supported by development agencies, including the World Bank - have caused damage by failing to take environmental considerations into account or to judge the magnitude of the

impacts.³ More recently, the Bank used independent river basin scheme in India and in mid 1992 publicly agreed with the recommendations of an independent review panel to finance resettlement and rehabilitation for the 100,000 people who would be adversely affected. However, fund for the project was not stopped despite a standoff in the Bank's board whether the protesters in the dam submergence area of the Sardar Sarovar Dam will be mollified remains a truth and distant dream despite hue and cry of environmentalists.

The WDR argues that authorities who share information with local residents and apply appropriate cost - benefit analysis procedures can avoid such difficulties. However, in reality social and environmental awareness is required to address such questions beyond setting general cost and pricing limits. It is not obvious that market forces have much of a role to play.

The Report repeated injunctions to developing countries to cut subsidies on energy and fertiliser and water use (many low price/ cost ratios) may not lead to much environmental response. The fiscal improvements that subsidy reductions could bring may be far more important in that they would permit environment friendly public investment.

The WDR's Box (4.6) beautifully describes the reverence for nature that permeates many indigenous societies, as the authors fully recognize, one of its attributes is the maintenance of common property resources. The literature is full of examples of how opening local cultures to the full rigours of the price system can lead to both economic misery and ecological loss. In many cases, it appears

that environmental friendliness would have been better served by protective barriers than attempts at stimulating markets.

Even apart from traditional cultures, the WDR rightly emphasizes the importance of community action and local division making about environmental issues. Such healthy institutions cannot just be fostered by the market.

A final set of uncertainties surrounds the role of the state. The WDR takes continual small swipes at public enterprises which allegedly will not respond to market oriented environmental policies because of congenitally soft budget constraints. Inept bureaucrats also come in for the authors wrath. But the report doesn't recognize that no agency besides the state is likely to try to establish local citizen participation in environmental choices, protect the poor or close the skill's gap⁴ regarding decision making.

3. POVERTY

The reports discussion of poverty makes sensible points, but is narrow and brief.

Dreze and Sen (1989) provide some guidance with regard to hunger. They agree with WDR in pointing out that the poor lack "entitlements or claims to the social product. In acute famine situations their purchasing power can be severely squeezed by spiralling prices which act to reduce aggregate demand, a friendly solution to this market failure is to give stricken people cash (say as wages in public works programmes) and let the private sector handle food distribution. Chronic

hunger has best been attacked by directly supporting the spending power of the poor or else by making sure that they participate in the fruits of growth. Similar logic also applies in other spheres. As we have seen the WDR correctly emphasizes the importance of protecting traditional societies with their (typically) conservationist practices the Report further argues that the property rights of the poor should be supported in general. But why the market alone (or even supplemented by the state) can be counted upon to ratify such institutional changes is not made clear. Russel's pessimism continues to apply: entitlements always flow easily into the hands of those with power in the first place.

4. WATER AND SANITATION:

Chapter 2 gives a sympathetic assessments of the environmental problems that poor people in developing countries face - unsafe water, inadequate sanitation, soil, depletion, indoor smoke from cooking and outdoor smoke from coal burning - while chapter 5-7 suggests policy solutions. Some are sensible, others suffer from the deficiencies.

If clean water and sanitation are not adequately provided, the poor (especially children suffering from diarrheal diseases and women who spend immense amounts of time carrying water) bear the brunt of the social costs. The WDR presents both urban and rural examples to suggest that families might be willing to pay for improved water supply. At the retail level - with adequate regulations-private companies may be able to hold down delivery costs.

These pieces of evidence which draw heavily on the cumulative experience of the World Bank water sector staff ⁵ lead the WDR to recommend that water supply should be privatized to the extent possible despite the fact that "private involvement in the sector is not a panacea and is never simple for sample in the United Kingdom water privatization is generally considered to be the most complex of all privatization undertaken." ⁶

Thus as an important actor both environmentally, economically and in terms of shaping global environmental norms, the World Bank dictates its own terms more as a means to realize the debt than any serious concern for the environment. Its obsession with market friendliness at each WDR documents and at each sector within itself, with its attitude of involvement of private sector as a panecea for all environmental problems sometimes considered as anti ecological. Further its sympathetic view one the one hand towards indigenous societies for maintenance of common property resources and on the other hand the attitude of "push the project" without caring for the people for rehabilitation (As in case of Narmada river basin cited above) needs to be recognized.

STRUCTURAL ADJUSTMENT POLICY V/S ENVIRONMENT

Under the New Economic Policies (NEP) drastic "stabilisation" and "structural adjustment" programmes are being put into effect in an effort to meet India's severe balance of payment crisis, and to propel its economy into quicker growth and global

integration. Apart from direct fiscal policies, the major components of new package include boosting exports to earn foreign exchange, liberalising industrial production, dropping barriers to the entry of foreign companies and goods expanding privatisation and cutting government spending. Some of these are a part of IMF - World Bank led's structural adjustment programme (SAP) a set of prescription which these multilateral agencies have forced into dozens of third world countries.

The objective of the SAP as it is understood are: (i) modernisation of the Industrial sector of the economy in order to achieve international competitiveness and increased exports, (ii) faster growth of the economy with fall out effects on employment and (iii) greater reliance on market forces (rather than on government intervention) for bringing about faster development.⁸

THE ECOLOGICAL DIMENSION OF STRUCTURAL ADJUSTMENT

The UNCED process created a broad international consensus on the need to link development and environmental criteria in order to achieve the goal of sustainable development (UNCED 1992). In all fields of policy, special consideration was given to such questions as the creation of an appropriate framework for the required policy reforms the integration of ecological and development criteria into all fields of action and the increased use of economic policy instruments to apply these criteria.

Some chapters of the Agenda 21 of Rio 1992 UN conference directly or indirectly refer to the importance of Structural Adjustment Programmes and their social and environmental aspects.

Chapter 2 (International Cooperation to Accelerate Sustainable Development in developing countries and Related Domestic Policies) points to the need for macro economic policies which serve both development and the environment. Trade liberalisation, favourable conditions for private investments, democratic reforms and an efficient administration support this process.

Chapter 4 (Changing consumption patterns) analyses the relationship between poverty and environmental degradation and demands to satisfy basic needs in the developing countries. At the same time unsustainable consumer and production patterns in the industrialised countries have to be changed. Structural reforms and prices which internalize ecological costs are appropriate means in this context.

- Chapter 8 (Integrating Environment and Development in Dicision making)
 demands that environmental and development policies should not be separated from
 each other any longer, that laws and regulations should be complemented by market
 instruments, that information on environmental degradation should be improved
 and environmental cost accounting be introduced.
- Chapter 9 (strengthening the role of Business and Industry) emphasizes the importance of a favourable political and macro economic framework for business and industry but also the more active role of the private sector should play in the process of structural reforms by promoting more environmentally sound products and cleaner production process.

The task now at hand is to build on this process of debate and negotiation and to develop and encourage the few existing approaches which take account of the ecological dimension of structural adjustment.

The more intensive international debate and the experience in recent years helped to give more priority to ecological aspects; it has become obvious that structural adjustment is not ecologically neutral. However it is difficult to make generalised statements yet and case studies have shown specific environment effects.

On the one hand structural adjustment can have a positive impact on the environment: e.g. If subsidies for fertilizers and pesticides are removed and if prices better reflect the real costs these products might be used in a more efficient and environmentally sound way. On the other hand structural adjustment can place an additional burden on the environment, the pressure to earn more foreign enchange for example may force countries to expand energy and resource intensive monoculture or to overexploit marginal lands. The sustainable use of natural resources however is an essential prerequisite for effective and sensible structural adjustment and the creation of a favourable framework for development (at least in the long term).

Even in the case of structural adjustment programmes with an environmental component, its implementation is likely to get even more difficult. In many developing countries there will be a series of conflicts between economic and social goals one the one hand and the requirement of environmentally friendly i.e. sustainable development on the other.

In Indian context given its nascent stage of development, no matter what type of SAP is adopted the process of industrialisation is certainly likely to pose problem of environmental degradation. True, there are available today many types of equipment and other preventive measures which can mitigate and in certain areas totally avoid, the adverse effects of the industrial process on the environment. But these process and equipment are expensive and frequently not even available to developing countries.

There thus arise two major problems, first, a country starting on a programme of industrialisation may find it difficult almost impossible to adopt totally environment friendly processes and to install environment friendly equipment in a globalised economic system wherein countries which have had a head start can easily score and successfully wipe out nascent industrialisation efforts of developing countries.

Further while developed countries are justifiably concerned about dangers of global environmental degradation - arising from the nascent development efforts of countries which are yet to achieve industrialisation - they are yet keen to maximise their monetary gain from technologies which would help to bring about environment friendly industrial production in developing countries. At the same time in the interest of biodiversity the resources of developing countries are to be made available freely to developed countries.

The essential prerequisite to global economic development is an environment friendly atmosphere. This is unfortunately getting to be more and more difficult to achieve in the new international economic order which has been emerging of late.

The consequences could be dismal for the whole world in the shape of environmental degradation for the billions of poor in the developing countries cannot be denied the fruits of economic development in an era of mass communication.

All talk of safety nets to alleviate hardships for the poor is an exercise in futility. If the poor remain poor forever, what precisely is the meaning of a safety net? For whom is the safety net devised and for how many people in the absence of development? But that would be a mirage under the on going SAP and under the New International Economic Order.9

One of the major component of SAP is the liberalisation of the economy, which is the major objective of New Economic Policy (NEP). The health impacts of NEP are particularly worrying. Reductions in investment toward improving civic infrastructure, particularly water supply and sanitation have resulted in sudden outbreaks of cholera in several Latin American countries. The IMF in case of Peru, was directly held responsible. In mid 1991, Hiroshi NakaJima, director general of the World Health Organisation stated that: "The economic adjustment programme dictated by the IMF is responsible for the increasing cholera epidemic in Peru. Without doubt in order to comply with payments claimed by the IMF, Peru found itself in a position that it cant allocate more resources to fight cholera epidemic.¹⁰

Poor communities all over India are in urgent need of health and housing infrastructure inputs to reduce the incidence of epidemics of water borne diseases (cholera, diarrhoea, typhoid and hepatitis) instead the government, is reducing allocations which will result in even severely life threatening conditions.

OUR PLANET OUR HEALTH - 1992 (WHO)

In connosance with the theme of World Health Organisation (1990) on environment and health on April 7, and the slogan, "our planet our health: Think globally act locally, and in tandem with the objectives and goals of UNCED World Health Organisation (WHO) brought its report in 1992 titled as "Our Planet, Our Health".¹¹

Among the chapters of the report three of its chapters refer directly or indirectly global environmental governance with its main emphasis on health.

Chapter 1 (Health, Environment and Development) places health at the centre of the discussion about environment and development. By pointing out health so far has been absent from public discussion about the environment and development and is seldom given high priority in development plans, it points out health and development are so intimately connected that the state of health within a country is one of the most revealing indicators of its developments.

Sound management of the environment brings major health benefits while inadequate or no management results in large adverse effects on health. Thus sound management is essential to a sustainable interaction between people and their environment in a world where finite resources are being depleted and the capacity of natural cycles and systems to absorb wastes is being exceeded. Therefore there is a need to act urgent in the developed as in the developing countries, although the priorityies differ, in the developed world the priority is to arrive at more sustainable patterns

of resources use and eco system exploitation, and in the developing world the priority is equitable distribution of the benefits of economic growth.

Focusing on health as it provides many insights into how a better balance can be achieved between the environment and development. The report draws on the knowledge and experience of the last few decades on how to reduce the prevalence of disease with levels of resource use that can be sustained. The extent to which sustainable development and health for all can be made comparable depends on a new understanding of what is meant by development in which health takes a more central role.

Chapter 2 (Global challenges to health and environment) considers issues of a global nature that underlie most environmental problems. The issues that are discussed are population, poverty and macro economic policies.

Based on the State of World Population 1990, by United Nations Population Fund (UNPF), it recognizes population as an issue that affects the environment of developing countries in a direct way and indirectly to the whole world because of increasing exploitation of the earth's resources and pollution by agents with global distribution and global effects, such as chlorofluorocarbons and carbon dioxide, although the main contributors to these so far are the developed countries. From the purely environmental point of view, the direct and immediate concern of developing countries is population size. From the health point of view, mortality and morbidity, especially in children, whether from water, food, air or vector - borne diseases, have in each case a strong environmental component.

With regard to poverty the report places strong association between poverty and health. Within poverty often women and children are more vulnerable to the health risks.

While dealing with consumption pattern the report states that the impact of any population on the environment depends on the type and level of its resource use and waste generation. The report recognizes the fact that on an average, each person in the developed world consumes natural resources at a rate at least 10-20 times as high as the corresponding average in the developing world.

In the section of macro economic policies the report deal especially with structural adjustment programme (SAP) and its direct and indirect effects on health and environment. Macro economic policies affect health through the level of Govt.. expenditure on health services and on the other services with an influence on health status, such as water supply, sanitation, education and poverty relief.

Cuts in public expenditure are main feature of most structural adjustment policies. Cuts in social expenditure are often demand by outside agencies before aid or balance of payment support is given. This has often meant cuts in health services and other services important for health public works such as piped water supplies sewers, and drains, which require large capital investment often receive the largest cuts. In respect of health sector specifically a joint WHO/ World Food Programme study on the health impact of adjustment programmes in Africa found that in more than half the case studied, the health sector had been the first to suffer a cut back when there were budgetary constraints.

Chapter 7 (Human Settlements and Urbanisation) deals with rapidly growing urban centres which pose a particular challenge for environmental health. As well as being an essential part of economic development urbanisation can bring major benefits to health and the environment.

WTO: ITS ENVIRONMENTAL HEALTH CONCERNS

The dicision of establishing the World Trade Organisation (WTO) was taken in the Marrakesh Ministerial Conference in 1994 after finishing the General Agreement on Tariffs and Trade (GATT) Uruguay Round. WTO has taken the role as the successor for the GATT. The WTO is also more than mere continuation of GATT. It has not only a potentially broader membership than GATT but has also a much broader scope in terms of the commercial activity and trade policies to which it applies.

The inquiry on the environmental and health implications related to World Trade Organisation is a task which necessarily involves some clarification in relation to the issues related to the World Trade Organisation per se and to the policy stands leading to the formation of WTO and embedded in its actions but more frequently discussed under the framework of globalisation, free trade or competitiveness.

IN THE CONTEXT OF TRADE AND ITS ACTORS

In order to deal with WTO policies, a short outlook on the global context and actors in the global scene is necessary. In the global trade least developed

countries, with 10% of the world's people account for 0.3 % of world trade. On the other hand the foreign investments between North America, Europe and Japan which together with China receive more than 90% of foreign direct investment. The rest of the world, with 70% of population receives less than 10%. Thus globalisation process is uneven in terms of trade and investment and thus seems to run the risk of further marginalisation of poorest nations in which economic growth may be considered more relevant for poverty reduction.

In addition to nation states and regions global trade involves other non governmental organisations and multinationals. The share of multinational corporations in global trade is expected to frow and it has been estimated that intracompany trade now accounts about 40% of world trade.¹⁴

In terms of environmental and public health policies the record of many multinational corporations are at best limited. The multinational corporations tend to advance disingenious and socially suspect arguments against corporate social responsibility and recent developments in bilateral investment treaties, multilateral trade agreements, privatisation efforts, weakened national regulations and the predominance of free market ideology reinforce this by minimising the corporate responsibilities while expanding their rights.¹⁵

GENERAL IMPLICATION TO ENVIRONMENT AND HEALTH

The general implication of the WTO, environment and health are linked to the growth in trade and economic growth and possibilities of WTO in enabling this. The different views and estimates on impacts of WTO on different countries influence the estimated to the role of distributive impacts. In general health and environmental impacts tends to be seen mostly as consequential to economic growth and cheaper products for consumers with more resources available and technological improvements developed for maintenance of health and improvement and safeguarding of environment. Most of the estimates on impacts of WTO are linked to the results of GATT Uruguay Round finished in 1994. The OECD and World Bank estimates have highlighted general gains, but defined subsaharan Africa as a loser. ¹⁶

TRADE LIBERALISATION AND ENVIRONMENT:

Economic growth may be achieved through different means and liberalisation of trade is only one set of means to achieve the end point. However the process does have relevance to health and environment in other aspects. In general these issues have been debated in the context of free trade and or consequences of globalisation and GATT Uruguay Round. In the case of health the positive impacts have been linked to the gains in economic growth gained through increase of exports. The openness of economy and export lead to growth or growth to increased exports. A set of issues concerning health may be linked to the estimated impacts in terms of food security and quality of nutrition conditions of labour, availability and marketing of products hazardous to health and impacts on environment.

In the environmental I scene concerns over free trade have been reduced down to four central propositions.

- 1. Without environmental safeguards, trade may cause environmental harm by promoting economic growth that results in the unsustainable consumption of natural resources and waste production.
- 2. Trade rules and liberalisation often entail market access agreements that can be used override environmental regulations unless appropriate environmental protections are built into the structure of the trade system.
- 3. Trade restrictions should be available as leverage to promote world wide environmental protection, particularly to address global or transboundary environmental problems and to reinforce international environmental agreements and.
- 4. Even if the pollution on they cause does not spill over into other nations countries with lax environmental standards have high environmental standards to reduce the rigour of environmental requirements.¹⁷

SPECIAL IMPLICATIONS

Trade Related Aspects of Intellectual Property Rights (TRIPS Agreement)

The trade related aspects of intellectual property rights have been a new aspect in the WTO compared with GATT. The agreement deals in practice with issues such as patents, copyrights, trademarks and industrial designs and licences. In terms of health and environment the major issue rise from the implications of patent rights.

The interpretation of intellectual property rights has lead to concerns related to patenting of seeds, indigenous products and practices, genetically engineered plants and chemicals and pharmaceuticals. Although naturally occurring substances are not patentable, the only mildly altered chemical substances are. Serious concerns have been expressed about the possibilities of patent on biological materials, many of them traditionally used by ordinary people in the South. Vandana Shiva, has noted that the transnational corporations that accuse the third world of piracy have created TRIPS, to stop this piracy are themselves engaged in large scale piracy of biological wealth and intellectual heritage from the third world including medicinal plants.

Thus it needs to be analysed further to what extent the current hegemony towards liberalisation of trade and capital is an ideological exercise and may lead to dismal social and environmental consequences and marginalisation of those poorest without sufficient consuming power or competitiveness. There is evidence that the liberalisation of trade and the rules as negotiated in current WTO agreements have winers and losers and have potential for undermining the basis of public health policies, social justice and environmental sustainability.

GLOBAL GOVERNANCE AND NATIONAL

ENVIRONMENTAL HEALTH POLICIES

The UN Conference on Environment and Development (UNCED), in June 1992 set in motion measures to bring about environmentally sound and sustainable development. The issues of UNCED was further triggered by intergovernmental agencies related to United Nations like, World Bank, World Health Organisation (WHO) and World Trade Organisation (WTO) in its various policies, mechanism, projects and reports.

India being a member of all the above international organisations, and realising the paramount importance of environment, planned its environmental health policies accordingly and as per its national requirements. To mention some of those policies, National Conservation Strategy and the Policy Statement on Environment (1992), The Environmental Action Programme (1993) etc. However, such policies in recent years are facing the challenge of liberalisation and its poor implementation are questioned which needs a critical evaluation.

UNCED provided both a challenge and opportunity for the health sector in the country to ansure that health and environment imperatives are adequately addressed by on going and future national planning and programme development.²¹

Proposals in section 1, chapter 6 of Agenda 21 under caption "protecting and promoting Human Health", of the UNCED focus on meeting primary health

care needs, controlling communicable diseases, coping with urban health problems, reducing health risks from environmental pollution and protecting vulnerable groups such as infants, women and the very poor. Education housing and public works form a part of overall strategy for achieving health for all by the year 2000.

Realising that the environment is of paramount importance in influencing the health status of the people a National Conservation Strategy and the Policy Statement on Environment (1992) has been formulated. The policy addresses issues related to sustainable development, including health.

Thrust has also been given to the management of hazardous wastes, adoption of clean technologies by the industries, establishment of common effluent treatment plants for clusters of small scale industries development of criteria for environmentally friendly products, phasing out ozone depleting substances and creating mass awareness programmes.

Thus majority of the above issues related to Indian environmental health planning and policies are in tune with the system of global environmental governance evolved at the UN conference on Environment and Development (UNCED) "action plan" for the 21st century, known as agenda 21.

In the National Conservation Strategy and the Policy Statement on Environment (1992) sustainable development is the key phrase in the agenda for action and the preamble. The preamble of the policy statement highlighting the means between development and environment says, "The survival and well being of a nation depend

on sustainable development. It is a process of social and economic betterment that satisfies the needs and values of all interest group without foreclosing future options. To this end we must ensure that the demand on the environment from which we derive our sustenance, doesn't exceed its carrying capacity for the present as well as future generations....."

After reviewing the nature and dimension of environment problems, the policy statement stresses for reorientation of the developmental process and the need for devising a conservation strategy. It states, "we can meet the challenges only by redirecting the trust of our developmental process so that the basic needs of our people are fulfilled by making judicious and sustainable use of our resources." ²²

A very far reaching notification by the Ministry of Environment and Forests gazetted in 1994 makes it obligatory for almost all developmental activities, small and large to conduct an environmental impact assessment study which has to be evaluated and assessed by an impact assessment agency.²³

Government of India, while considering measures for prevention and control of epidemics, constituted a group in January 1995. ²⁴ Under the secretaries of ministers of Rural Areas and Employment, Urban affairs and Employment, Environment and Forests and Chief Secretaries of their nominees of Government of Maharastra, Tamil Nadu, West Bengal, Uttar Pradesh and Director General of Health Services, Government of India and Adviser (Health) Planning Commission to formulate a comprehensive National Programme on Sanitation and Environmental Hygiene on the lines of the technology mission. Based on a series of meetings, massive exercise and discussions

with large number of experts in the country and taking cognisance of the recommendations of the GOI/WHO collaborative interactive workshop during April 1995, the group identified six priority programme areas namely (I) Urban low cost sanitation (II) Urban waste water management (III) Urban solid waste management including hospital waste management (IV) rural environmental sanitation (V) Industrial waste management and air pollution control, and (VI) strengthening of health surveillance and support services and submitted a report to government of India during August, 1995. The Dayal Committee recommended initiation of a National Mission on Environmental health and sanitation with six sub-missions in the above identified areas. The report outlined the objectives, strategy, methodology, thrust areas, technology option and the needs for information education and communication support community participation, health surveillance and support, services, institutional mechanism, mission and sub mission management structures, estimates of fund requirements and methods of raising funds for a long term programme.

The recommendation of the Dayal Committee were considered by a committee of secretaries meeting during March 1996. One of the decisions taken in the meeting was that the recommendations, relating to the comprehensive national programme on sanitation and environmental hygiene could be considered by various working group constituted by the planning commission in the various ministries for finalising proposals for the Ninth Five Year Plan. Decision of the committee of secretaries was conveyed by the Union health Secretary on 23rd April, 1996 to the secretaries of the concerned Departments to take further necessary action and priorities the

activities and areas that ought to be covered by the respected Ministry/ Department for inclusion in the Ninth Plan.

The Draft Ninth Five Year Plan document of the GOI aims to address the issue of human health in an aggressive manner covering both primary health infrastructure and the habitat of its populace.

On habitat conditions, unless poor sanitation, contaminated water supply and lack of adequate facilities for solid and liquid waste management, both in urban and rural areas, are corrected, it may not be possible to completely prevent periodic outbrears of infectious diseases. The Ninth plan strategy will be to provide housing for all by the terminal year of the plan by taking into account the upgradation of Kucha units to semi pucca and pucca units. The plan also seeks to strengthen health surveillance, early alert, and rapid response mechanisms at the district level.²⁵

CURRENT EFFORTS OF INDIAN AND GLOBAL ENVIRONMENTAL HEALTH LINKAGES

The government has taken the initiative in many international meetings related to the various conventions on implementing the Rio Agreements, Agenda 21, the Montreal Protocol, the Commission on Sustainable Development, the Global Environment Facility (GEF) etc.²⁶ The Ministry of Environment and Forests (MOEF), the GOI, is also the nodal agency within-the country for the United Nations Environment Programme, the International Centre for Integrated Mountain Development etc., and looks after the follow up of the United Nations conference on Environment and Development (UNCED) including Agenda 21 (MOEF 1996). The MOEF invites project proposals for posing these projects through the Department of Economic Affairs to seek assistance from bilateral and multilateral sources.

The World Bank has been providing assistance in the form of soft loans for projects relating to pollution control, afforestation, capacity building hazardous wastes management, etc. to central/ state governments. The Japanese Government is providing assistance in the form of grants/ soft loans under the Overseas Economic Cooperation Fund (OECF) and pollution-control related activities in the form of grants (MOC 1997). Japan is also set to extend assistance to India under the activities implemented jointly (AIJ) projects. Bilateral donors such as the Canadian International Development Agency (CIDA), Canada; UNSAID; The Overseas Development Agency, UK and Danish International Development Agency, Denmark also provide assistance to projects in the field of environment and forestry.

Currently, there are 133 ongoing externally aided projects in the environment and forestry sector involving a total outlay of Rs. 4137 crore. The policy statement on abatement of pollution, 1992 and the environmental action programme 1993 are primarily galvanising the flow of external assistance to sustainable development projects.

India is a party to several international conventions agreements in the area of environment (MOEF 1996). The framework Convention on Cclimate Change (FCCC), which enjoin upon the signatory countries to take precautionary measures to anticipate and prevent the causes of climate change and minimize and mitigateits adverse effects, was ratified by India in November 1993. Towards implementation of the general commitments of the (FCCC). India has initiated work on the GEF - supported and ADB - sponsored Asia Least Cost Greenhouse Gas Abatement Strategy (AIGAS) project, which envisages the preparation of inventories of greenhouse gases (GAG's) and the development of abatement strategies and is expected to provide inputs for the country's National communication.

India is also actively seeking assistance from the GEF for meeting the incremental costs to effectively tackle the climate change related activities.

This activity also highlights the close co-operation and active research mediating between various governments and the industry on one hand and various international (including bilateral and multilateral) institutions and donor agencies on the other. India is also a party to the Convention Biological Diversity (CBD) which came into force in December 1993. The objectives of the CBD are the conservation of biological diversity, the sustainable use of its components, and fair and equitable sharing of benefits arising out of the utilization of genetic resources and appropriate transfer of relevant technologies, and by appropriate funding. A draft status report on biodiversity has been prepared and a national action plan on biodiversity is also under preparation. A comprehensive legislation on biological diversity is being considered.

India ratified the Basel Convention on the Control of Trans Boundary Movement of Hazardous Wastes and their disposal in June 1992. This convention (applicable to 47 categories of wastes other than nuclear wastes) seeks to prohibit the export of hazardous wastes without the written consent of the importing countries.

India has also been a party to Montreal protocol since September 1992. To fulfil its commitments of converting its existing manufacturing facilities from those based on ozone-depleting substances (ODS) to those based on non-ozone depleting substances (phase-out of ODS) an ozone cell has been set up in this ministry through multilateral grants. The ozone cell has carried out a number of activities to move the industry, decision makers and the general public aware of the importance as well as implications of the Montreal Protocol. Considerable efforts have also been made in persuading Indian industries to come up with ODS phase-out projects.

India has not only received financial aid for technical assistance and capacity building, but has also interacted with international agencies/ forums and sought bilateral/multilateral cooperation with regard to the phase out of ODS. The country programme for the phase out of ODS in India is contingent on the assistance for funding component of incremental costs, including transfer of technology, from the multilateral fund of the protocol. India has so far received about US \$ 450 lakh from the Multilateral Fund for 156 projects and activities for the ODS phase - out.²⁷

CHALLENGES BEFORE NEW ENVIRONMENTAL HEALTH POLICY

The chances of success or failure of a policy depends largely on the instruments of policy and its implementation. Many of the directives of this policy are still in the process of implementation. Therefore, it is too early to predict with reasonable precision the adequacy of new policy to meet the task of protection of environment.

However, in the years, to come environmental health policy in India will face the liberal economic policies of a largely feudal state. The challenge is how far environmental control mechanisms in India will be able to stand up before the forces of economic liberalisation and how far environmentalism in India with foreign counterparts than with people at remote corners.

Environmental control mechanism in India will hardly be able to standup before the forces of economic liberalisation. The reason being government policies sometimes are not taking serious note on environmental impact, though there is a perpetuation of hopes, that the new economic policy will not be destructive to the environment. Further, the total self imposed marginalisation of the scientific community which the people of India subsidised for so long. Finally the growing tendency of degeneration of environmental activism and the large scale competition for self protection in the name of environmentalism.

Thus, inspite of Rio, inspite of the advance start in India and inspite of the largely correct institutional flexibility that is being provided by liberalisation, environmental governance in India is on the defensive and in a state of disarray. The situation may seem in gross contrast with the impressions created by the volumes of media articles and TV programmes seen in India everyday. The intricate political link between technology economy and ecology, however cannot be totally covered up the ceremonial VIP's saplings or by fashionable greens. Officials merely dismiss any proposal for peoples involvement in environmental governance and planning predicting it as an utopian dream.

REFERENCES

- 1. World Development Report 1992, (Oxford: Oxford University Press, 1992)
- 2. Ibid, p.57
- 3. Ibid, pp.13-14
- 4. Ibid, p.91
- 5. Ibid, p.180
- 6. Ibid, p.111
- 7. Kothari, Miloon and Kothari, Ashish, "Structural Adjustment V/s Environment", Economic and Political Weekly, March 13, 1993, pp.473-477.
- 8. Ghosh, Arun, "Structural Adjustment and Industrial and Environmental Concerns", *Economic and Political Weekly*, February 19, 1994, pp.421-26.
- 9. Ibid
- Press Statement by Hiroshi Nakajima, Director-General of WHO, as Reported in *Third World Resurgence*, No.10, Malaysia, 1991.
- 11. Our Planet, Our Health-Report of the WHO Commission on Health and Environment, (Geneva: WHO, 1992).
- 12. UNDP. Human Development Report. Oxford University Press, Oxford. 1997
- UNCTAD. The Least Developed Countries 1996 Report. Overview. (UNCTAD, Geneva: 1996).

- 14. Cook P, Kirkpatrick C. Globalisation, Regionalisation and Third World Development (Mimico) (1995) University of Manchester and University of Brad Ford, Cited in UNCTAD. The Least Developed Countries 1996 Report. UNCTAD, Geneva 1996.
- 15. Kolodner E. Transnational Corporations: Impediments or Catalyst of Social Development? UNRISD Occasional Papers 5. (United Nations Research Institute for Social Development. Geneva, 1994).
 - 16. Goldin I, Knudsen O, Van Mensbrugghe D. Trade Liberalisation: Global Economic Implications. Paris and New York; OECD and World Bank. 1993.
- 17. Esty D. Greening the GATT. Trade Environment and the Future. Institute for International Economics, Washington DC. 1994.
- Correa, C.M. The Uruguay Round on Drugs. Discussion Paper. WHO, Action
 Programme on Essential Drugs, WHO: Geneva. 1996.
- 19. Khor M.A. World Wide Fight Against Biopiracy and Patents of Life, *Third World Resurgence*, 1997: 77/78, pp. 29-37.
- 20. Shiva. V, Who are the real pirates? *Third World Resurgence*, 1995, 63: pp.16-17.
- 21. Third Evaluation of the Strategies for Health For All by the Year 2000 AD, Country Report India: Ministry of Health and Family Welfare, Government of India (1997).

- 22. The National Conservation Strategy and Policy Statement on Environment and Development, Ministry of Environment and Forests, (Government of India, 1992).
- 23. Ministry of Health and Family Welfare Op cit.
- 24. Ibid
- 25. India: Sustaining Development, Ministry of Environment and Forests, (Government of India, 1998), pp.18-19.
- 26. Ibid
- 27. Planning Commission. Eighth Five Year Plan, 1992-97, Vol.1, (Government of India, 1992), p. 15.

CHAPTER - 5

CONCLUSION

In this dissertation, the main objective is to critically evaluate the relevance of global environmental governance and its influence on Indian environmental health planning and policies; given the overriding influence of multilateral and bilateral agencies on environment.

As discussed earlier, the world rapidly recognized environmental issues such as, global warming and ozone depletion, acid rain, marine pollution, and threat to biodiversity as global and not merely national. This was the rationale given by the International community for enforcing global environmental regime for the management and protection of the planet.

Though the international community recognized environmental issues as global at the UN Conference on Human Environment held in Stockholm 1972, yet, at that moment few systematic efforts existed for their protection and governance, except, making the environment as a part of national development plans and decision making. Strong and binding governance at the international level has always been widely regarded as difficult and problematic, however the notion of global environmental governance was implicit at that point of time within the global political structure or system. A concrete approval for global environmental governance has evolved after twenty years since the UNCHE at the UN Conference on Environment and Development held in Rio, June 1992.

At the top of the summits agenda were Agenda 21, a comprehensive programme of action to be taken globally - from now into the twenty first century - by Governments, United Nations organizations and Independent sector groups, in every area including environmental health.

Agenda 21 provided a blueprint for action in all areas relating to sustainable development of the planet. Despite various concerns and considerations like, ecological, economic, technological etc., sustainable development emerged as a single most principle encompassing most of the important objectives of global environmental governance. In the heat of international debate at Rio in the context of internationalizing ecological consciousness, clearly spelt out the contents of a global sustainable development policy within the explicit issues of global environmental governance.

Nevertheless, despite its widely growing acceptance, the thesis of sustainable development is not free from contradictions. At UNCED, there aroused a tendency by industrialized countries to view sustainable development as a formula for pushing a reconciliation in environmental conservation, global social and economic inequality, economic growth and market forces, thereby, preserving the existing disparities in the world. Rather it is better to have the orientation of sustainable development towards creating an international climate of understanding of socio-political justice and equality.

It has to be underlined that the concept of interrelatedness of a shared planet, of global citizenship and spaceship earth cannot be restricted to environmental issues alone. They apply equally to the shared and interlinked responsibilities of environment and development. The global community must address the basic issues of global human development by removing poverty, population, food security and nutrition.

One the one hand poverty with its interrelated problems may result in certain kinds of environmental stress, on the other hand, unsustainable consumption patterns continued to deteriorate global environment. Though concern has been raised at the UNCED regarding removal of poverty and unsustainable consumption patterns, ultimately it resulted in creating North-South tensions and success was with those who have had a control of global economic and political power structure.

The affluent countries controlling the global power structure continued to have the privilege and wasteful life styles and in fact, tried to use earth summit to further their power and hold over the planet and its people. Thus, concerns regarding issue of poverty and underdevelopment at UNCED had been pushed behind by sympathetically regarding as if it is "local" and does not come under the purview of global environmental governance system, though rhetoric of the issue abounded in documents and speeches.

Thus, the concept of "global" does not represent universal human interest by removing poverty and underdevelopment, rather, it represented a particular parochial interest of perpetuating high consumption life style and deterioration of environment that has been globalised through its reach and control.

Thus, the thesis of global environmental governance system, like all other systems mirrored the unequal global economic and political power structure.

Perhaps the single failure of the Earth Summit is the conflict between affluent North and poor and over populated South, and the Industrialized G-7 and the developing G-77, which was omnipotent globally and locally. Agenda-21, though it covered a wide variety of issues of global environmental governance like poverty, technology transfer, sustainable development, population, biodiversity, climate convention etc., it got divided between North and South and each one tried to defend the right to exploit at any cost and ultimately success was with those who were strong economically and politically at the world level.

The industrialized nations were not wrong to call attention to overpopulation of the developing countries, but they failed in many cases to recognize their own overpopulated condition in terms of unsustainable consumption levels. More importantly they failed to address adequately the role of poverty - and their own role in perpetuating it - as a powerful driving force behind third world population growth.

The process of global environmental governance set in motion by UNCED was further carried out by multilateral actors like World Bank, WHO, WTO in its various policies and reports.

As an important actor both environmentally and economically and in terms of shaping global environmental norms, the World Bank can play a big role in financing projects and modifying the role of humankind in nature. However, its obsession with market friendliness at each WDR documents and each sector of governance within itself, with its involvement of private sector as a panacea for all environmental problems is hardly eco-friendly as when market and private sector takes over, nature as well as perpetuation of poverty and inequality.

Thus, multilateral and bilateral agencies, currently the major actors of global environmental governance both economically and politically are recognizing the well orchestrated problems of dominant countries and merely condemning specificity of problems such as poverty, ill health etc., which have wide ramification for environment. The need is to 'think and act locally' rather that "Think globally and act locally". However, in the world of domination of industrial countries and the multilateral agencies being dominated by dominant countries, this would be difficult to visualize. The prognosis is, of course, an environmental governance enforced by the thinking of such dominant countries.

India being a member of various multilateral and bilateral agencies, are facing the challenge of externally induced domination on the one hand and its vision of removal of specificity of problems of poverty and under development on the other. Such vision is constantly perpetuated by the unequal system and power structure of global environmental governance.

BIBLIOGRAPHY

BIBL OGRAPHY

PRIMARY SOURCES

Reports Of International organizations

Agenda 21: Report of the United Nations Conference on Environment and Development. (A/conf. 151/26/Rev. 1) New York: United Nations, 1992.

Our Planet, our health - Report of the WHO commission on health and environment, Geneva: WHO, 1992.

The Global partnership: For Environment and Development a Guide to Agenda 21, 1992, Geneva (UNO).

UN Conference on The Human Environment, Declaration on the Human Environment (New York: UNO, December 1972).

Valuing the Global environment: Action and Investments for 21st Century, Global Environment Facility (GEF, World Bank 1998).

UNCTAD, The Least Developed Countries 1996 report: overview, (UNCTAD, Geneva: UNO, 1996).

United Nations Development Programme, Human Development Report 1991 (New York: Oxford University press 1991) UNDP, Human Development report, (Oxford: Oxford University press, 1997)
UNDP, Human Development report, (Oxford: Oxford University press, 1996).

WTO: Trading for the future (Geneva: WTO, 1995).

Investing on Health; World Development Report, (New York; Oxford University Press, 1993)

Government Documents

Eight Five Year Plan: 1992-97, Planning Commission, Government of India, 1992.

Environment Action programme: India, Ministry of Environment and Forests, (New Delhi, 1993).

Environment and Development: Traditions, Concerns and efforts in India, 1992. Nations Report To UNCED Ministry of Environment and Forests Government of India.

India: Sustaining Development, Ministry of Environment and Forests, Govt. of India (1998).

Policy Statement for Abatement of pollution, Ministry of Environment and Forests, (New Delhi, 26 February 1992).

The National conservation strategy and policy statement on Environment and Development, Ministry of Environment and Forests, Govt. of India (1992).

Third evaluation of the strategies for health for all by the year 2000 A.D. country report India; Ministry of Health and Family welfare, (Govt of India, 1997)

Secondary Sources

Books

Chatarjee, Pratap and Maathias Finger, The Earth Brokers: Power Politics, and World Development, (New York: Routledge, 1994).

Dwivedi, O.P., India's Environmental Policies, Programmes and Stewardship, (London: Macmillan Press Ltd, 1997).

Falk. A. Richard, Johansen, C. Robert and Samuel S. Kim (eds.), The Constitutional Foundation of World peace, (Albancy: State University of New York Press, 1933).

Gardener Richard, Negotiating Survival: Four priorities after Rio (New York: Council on foreign relations press, 1992).

Green Globe year book of International Co-operation on Environment and Development, (New York: Oxford University press, 1995)

Haas, Peter M, and others (eds.) Institutions for the Earth: Sources of effective International Environmental protection, (Cambridge, MA: MIT press, 1993)

Hempel, C, Lamont, Environmental Governance: The Global Challenge, (Washington: Island Press, 1996).

Hindu Survey of Environment, 1992.

Lynten, Keith Caldwell, International Environment Policy, (New Delhi: East-West Press, 1991)

Michael, Edwards and David, Hulne, Making a difference: NGO's and development in changing world, (London: Earthscan publications Ltd.,1992).

Miller, Marian A.L., The Third World in Global Environmental Politics, (Boulder Co: Lynne Reinner, 1995).

Pearce, David Blueprint 4. Capturing global environmental value, (London: Earthscan Publications Ltd, 1995).

Reid, David, Sustainable development - An International guide, (London : Earthscan publications Ltd., 1995)

Survey of Environment, 1997, The Hindu.

The world commission on Environment and Development, Our common future, (New York, Oxford University press, 1997).

Tolba, Mostafa K; and Osama A. El Kholy, The World Environment, 1972-1992: Two decades of challenge, (London: Chapman and Hall, 1992)

Tolba, Mustafa K., Development Without destruction: Evolving Environmental perception, (Dublin.: Tycooly International publishing Ltd, 1982)

World Resources Institute State of the world 1992: A World Water Institute report on progress toward a sustainable society, (New York: Norton, 1992)

World Resources Institute, World Resources 1992-93: A Guide to the Global Environment, (New York: Oxford University press, 1992)

Young, Oraon International Governance: Protecting the environment in a Stateless society, (Ithaca, N.Y.: Cornell University press, 1994).

Eric Lykke (ed), Achieving environmental goals, (London: Belhaven press, 1992)

Imber, Mark FA and Vogler, John, The Environment and International relations, (London and New York: Routledge, 1996)

Dahl, A. Robert, polyarchy (New Haven: yale university press, 1971)

UNEP. Earth summit 1992 (Geneva: UNO, 1992)

Articles in Periodicals

Bandyopadhyay, Jayanta "Year of paper tiger, Seminar (Annual), vol.401 January 1993.

Bryant, Raymond L, "Putting Politics First: The Political Ecology of Sustainable Development" Global Ecology and Biogeography, Letter 1, 1991 pp. 164-165.

Choucri, Nazli, "Political economy of the Global environment", International Political Science Review, vol.14, no.1 (1993).

Chouncri, Nazli, "Global accord: Environmental Challenges and International responses" Technology Review, Vol. 94, No.3 (April 1991): 52-59.

Detlef, Sprinz and Vahhtorarta, Tapani "The Interest based explanations of International Environmental policy", International Organizations, vol. 48: Winter 1994, pp.77-105.

French, Hilary 1992 "Strengthening Global Environmental Governance in Lester Brown et. al. eds. state of the world 1992, pp.172-177. New York: Norton.

French, Hilary, "After the Environmental Summit: The future of Environmental governance" World Watch paper no.107, (Washington, DC.), World Watch Institute.

Ghosh Arun, "Structural Adjustment and Industrial and Environmental Concern", Economic and Political Weekly, (New Delhi), February 19, 1994. pp.421-26.

Kothari Ashish, "Environment and New Economic policies", Economic and Political Weekly, April 29, 1995, pp.924-928.

Kothari, Miloon and Kothari, Ashish, "Structural Adjustment V/s Environment", Economic and Political Weekly, March 13, 1993 pp.473-477.

"Multinationals: Back in fashion", Economist, (London) March 27, 1993. pp.5-20.

"Oiling the Wheels of globalization", Down to Earth, (New Delhi), September 15, 1995. pp.33-38.

"Post Rio progress", Down to Earth; June 15, 1995. Pp.19-21.

Sievers, H. Raghuram, and Vyasalu, V. "Structural Adjustment: Industrial and Environmental Concerns", Economic and Political Weekly, January 22, 1994 pp.164-65.

Singh, S, "Planning for environmental sustainability", The Indian Journal of Public Administration (New Delhi), vol.39, No.3, July-September 1993.

Khor M.A.; "World Wide fight against biopiracy and patents of life", Third world resurgence, 1997: 77/78 pp. 29-37



Shiva, vandana, "conflicts of global ecology: Environmental activism in a period of global reach", Alternatives; vol 19, spiring 1994. pp. 195-207.

"The growing influence of NGO's in the developing world", Environment vol 34, No 5, June 1992.

Garrett Hardin; "The Tragedy of the Commons", science, 162 (1968) pp 1243-1248

Oscar schachter, "International Environmental Law" Journal of International Affairs vol. 44, No.2 winter 1991 pp. 457-93.

Robert Goodland and George Ledec, "Neoclassical Economics and principles of sustainable development; Ecological modeling, vol 38, 1987 p. 36.

James Gustave speth, "The Environment: The Greening of Technology" Development, Vol 2, No. 3, 1989.

Fidel Castro's speech at the Rio Earth Summit; The Marxist vol 10 (3),

July - Sept , 1992, pp. 36-72

Kothari, Ashish "Politics of biodiversity convention"; Economic and political weekly; April 11-18, 1992, pp. 749-755.

Kothari, Ashish "The biodiversity convention: An Indian view point", Monthly commentary of Indian economic conditions, June 1992, pp. 9-15

Raghavan, C; "The Biopiracy reaches new heights"; Third world Resurgence 1995: 63: 12-15.

Rice T., "Can markets give us the health system we want"; Journal of Health politics, policy and Law, vol 22, 1997. pp. 383-426

Malviya R.A, "Sustainable Development and Environment", Indian Journal of International Law; Oct-Dec 1996, pp. 57-74.

Shiva, V "Who are real pirates?"; Third world Resurgance vol 4, pp. 16-17

Khor M.A, "WTO - How the rich countries got their way"; Third world Resurgance vol 63: 1997. pp 14-15

News Paper Clippings

1. The Patriot, 1992 : The 5-fold achievement at Rio,

Harresburg, PA, June 17.

2. The Hindu, 1992 : Towards sustainable development,

Madras, June 13.

3. The Hindu, 1992 : New U.N. panel on environment to

be set up, Madras, June 11.

4. Hindustan Times, 1992 : Rao: India recognised as an activist

on environment, New Delhi, June 15.

5. Hindustan Times, 1992 : US holds key to Rio meet success,

New Delhi, May 27.

6. Hindustan Times, 1992 : From the Rio with hope, New Delhi,

June 16.

7. Hindustan Times, 1992 : Hectic third world lobby to win over

Japan EC, New Delhi, June 2.

8. The Hindustan Times, 1992 : Voice of reason at Rio, New Delhi,

June 15.

9. Hindustan Times, 1992 : Toward earth summit, New Delhi,

June 2.

10.Statesman, 1992 : An eventful year for

environmentalists New Delhi,

December 29.

11. Statesman, 1992 : Round-up of Indian achievements,

New Delhi, December 21.

12. The statesman, 1992 : Scrutinizing Rio Resolutions, New

Delhi, July 16.

13. News Times, 1992 : Rio really on, Hyderabad, June 3

14. The statesman, 1992 : The Rio declaration on-environment,

New Delhi, June 15.

15. The observer, 1992 : Road from Rio is not Smooth,

London, November 2.

16.Bangladesh Observer, 1992 : The United Nations Environmental

Programme, Dacca, July 11.

17. National Herald, 1992 : Earth Summit: Rio blazes a new

trail, New Delhi, July 8.

18. The Hindu, 1992 : A worth while Summit, Madras,

June 16.

19. New Age, 1992 : Rio Summit Focuses on

Environment, New Delhi, June 28.

20. The Hindu, 1992; The road from Rio, Madras, June 20.

21. Times of India, 1992 : Will the Rio de Janeiro carnival save

the planet?, New Delhi, June 3.

22. Hindustan Times, 1992 : Reflections on Rio, New Delhi,

June 19.

23.Indian Express, 1992 : The summit that failed, New Delhi,

June 16.

24. Times of India, 1992 : Rendezvous in Rio, New Delhi,

June 3.

25. The statesman, 1992 : Unsaid at UNCED, Calcutta,

June 18.

26.International Herald Tribune, 1992 : The Earth summit winds up in

compromise, Paris, June 15.

27.Patriot, 1992 : Earth summit and beyond.

Harrisburg. P.A., June 2.

28. International Herald Tribune, 1992 : Environment: The Rio Agenda,

Paris, June 1.

29.International Herald Tribune, 1992 : Consensus : If not now, when?

Paris, June 1.

30. News Time, 1992 : An agenda for the future of our

plane, Hyderabad, June 6.

31.Deccan Herald, 1992 : Agreement reached on environment body, Bangalore, June 10.

32.Deccan Herald, 1992 : There is much that is hollow,

Bangalore, June 10.

33. The Patriot, 1992 : The stake in Rio, Harrisburg, P.A.,

June 8.

34. Times of India, 1992 : Double speak at Rio, New Delhi,

June 15.

35. Times of India, 1992 : Post-Rio Blues, New Delhi, June 27.

36. Times, 1992 : A Bargain not a whinge, London,

June 1.

37.Deccan Herald, 1992 : Focus on ozone depletion,

Bangalore, June 1.

38. Hindustan Times, 1992 : Rio calcitrant nations taken to task

by Rao, Hyderabad, June 13.

39. Current, 1993 : Role of people in eco development,

Bombay, January 30.

40. The observer, 1993 : Absurd but dangerous, London.

May 12.

41. The Hindu, 1993 : The road from Rio: China shows the

way, Madras, January 6.

42. National Herald, 1993 : Bio diversity convention since Rio,

New Delhi, September 1.

43. Bangladesh observer, 1994 : Ecology-Health-Global Warning-IV,

Dacca, September 13.

44. Times of India, 1994 : Ecology Must be on Business

Agenda, New Delhi, December 5.

45. New Straight Times, 1994 : Rich countries yet to fulfil Rio

promise, Kuala Lampur,

December 6.

46. Sunday observer, 1994 Sharing bio diversity, New Delhi, February, 17. 47. Financial Express, 1994 Ecological disaster: India and global perspective, New Delhi, March 5. 48. The observer, 1994 Time to take stock, London, July 16. 49. The Hindu, 1994 Will the GEF pay off? Madras, July 26. 50. Daily News, 1995 Integration of environment and development in decision-making, a top priority, Colombo, June 12. 51. Financial Express, 1995 Keeping one's Muck to oneself, New Delhi, October 8. 52. Financial Express, 1995 North Develops Cold Feet on a Hot Issue, New Delhi, May 7. 53. National Herald, 1995 Making earth worth living, New Delhi, February 18. 54. News Time, 1995 Energising the UN system, Hyderabad, March 1. 55. The Pioneer, 1995 Global warming of climate debate, : New Delhi, April 4. 56.Bangkok post, 1995 Some sacrifices necessary to prevent global warming, Bangkok, April 14 57. Rising Nepal, 1995 Earth Day and environmental issues Kathmandu, April 21. 58.Deccan Herald, 1995 Victims of others profligacy, Bangalore, May 3. 59. Rising Nepal, 1995 Bio diversity Convention and Nepal, Kathmandu, December 30. 60. Times of India, 1996 Humans Endanger Earth's climate, New Delhi, June 10.

61. Times of India, 1996 Ecology and development, New Delhi, November 5. 62. Telegraph, 1996 Heat of the moment, Calcutta, July 25. 63. National Herald, 1996 The global environment: progress and challenges, New Delhi, August 27. 64. Indian Express, 1997 Environmental Diplomacy, New Delhi, July 1. 66. The Hindu, 1997 Summit reaffirms Rio principles, Madras, August 29. 67. The Hindu, 1997 Earth summit ends with goals unfulfilled. Madras, August 29. Bio diversity: Thinking differently, 68.The Hindu, 1997 Madras, April 20. 69.The Hindu, 1997 Funds issue will dominate earth summit follow up, Madras, June 19. 70.News Time, 1997 Business takes lead in protecting environment, Hyderabad, March 15. 71.News Time, 1997 Call for new World environment organisation, Hyderabad, March 21. 72. Times of India, 1997 Rio Plus 5 = 0, New Delhi, July 2. 73.News Time, 1997 The spirit of Rio has vanished, Hyderabad, June 6. 74. News Straight Times, 1997 Another 'last chance' to save the Earth, Kuala Lampur, March 25. 75. National Herald, 1997 Global climate change, New Delhi,

New Delhi, June 13.

Cleaner Earth: Who foots the bill?

June 10.

76. National Herald, 1997

77. National Herald, 1997 : Global warning: Consequences for

life on earth, New Delhi, October 7.

79.International Herald Tribune, 1997 : Europeans challenge U.S. at UN

Environmental Summit, Paris,

June 24.

80. The Pioneer, 1997 : Earth Summit-II, Sound and fury

signifying nothing, New Delhi,

June 27.

81. The Pioneer, 1997 : Earth summit fails to reach a

decision, New Delhi, June 29.

82.International Herald Tribune, 1997 : 5 years After Rio summit, Old ways

still Dominate, Paris, June 19.

83. News Time, 1997 : A requiem for Rio, Hyderabad,

May 27.