

Related Developments To Global Warming: An Over View

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Abstract: Today's main source of pollution is man and there is no way for nature to decompose many man made materials and return their elements to the cycle of nature. Land is the most important of all natural resources of any region; this resource following burgeoning population, rapid industrialization, urbanization and other human activities has come under a tremendous pressure. Pollution is the effect of undesirable changes in our surroundings that have harmful effects on plants, animals and human beings. In order to fight against global warming many concepts are developed to maintain the ecological equilibrium such as sustainable development, public interest litigation, intellectual property, human rights, eco-consumerism, environmental insurance, eco-tourism, and eco labeling etc.

Today man is the principal source of pollution because there is no way for nature to decompose many man made materials and return their elements to the cycle of nature. Land is the most important of all natural resources of any region; this resource following burgeoning population, rapid industrialization, urbanization and other human activities has come under a tremendous pressure. The process of modernization and imprudent land use is causing degradation and pollution of this resource. Pollution is the effect of undesirable changes in our surroundings that have harmful effects on plants, animals and human beings. In order to fight against global warming many concepts are developed to maintain the ecological equilibrium. Some important concepts are taken up for discussion.

SUSTAINABLE DEVELOPMENT

Development and Environment both are considered as two sides of the same coin. In the present scenario, the human as it is developed cannot live without the developmental activities for meeting his needs. Consequently there is a need to harmonize both economical and ecological sustainability. Basically, 'sustainable development' is a pattern of resource use that aims to meet human needs while preserving the environment so that these needs can be met not only in the present but also for future generations. Sustainable development ties together concern for the carrying capacity of natural systems with the social challenges facing humanity. The need for sustainability has been recognized since ancient times across diverse civilizations. As early as 1970s "sustainability" was employed to describe an economy 'in

equilibrium with basic ecological support systems' and the concept of sustainable development was contained in the Stockholm Declaration of 1972. The term "sustainable development" was coined for the first time by the International Union for the Conservation of nature (IUCN) in the year 1980 in its "World Conservation Strategy". However, the term popularized through the Brundtland Report entitled "Our Common Future" published in 1987 provides "Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs". It contains within it two key concepts:

- ✓ the concept of "needs", in particular the essential needs of the world's poor, to which overriding priority should be given; and
- ✓ the idea of limitation imposed by the state of technology and social organization on the environment's ability to meet present and future needs.

Sustainable development ought to mean the creation of a society and an economy that can come to terms with the life support limits of the planet in a way that enables the most vulnerable people to survive with dignity in a self reliant manner.

On the basis of the Brundtland Report, the U.N. General Assembly decided to convene a United Nations Conference on Environment and Development (UNCED) in 1989 which could take place in 1992 and passed a "Rio Declaration on Environment and Development"; a programme for action known as "Agenda 21". Sustainable development is the central theme of Agenda 21 and to monitor the implementation of Agenda 21 a Commission on Sustainable Development was

set up in 1993 for which the decision was (already) taken at Rio in 1992. The United Nations Division for Sustainable Development observed that sustainable development is an eclectic concept, as a wide array of views fall under its umbrella. The concept has included notions of weak sustainability, strong sustainability and deep ecology. Different conceptions also reveal a strong tension between ecocentrism and anthropocentrism. Broadly defined, the sustainable development mantra enjoins current development and to manage natural, produced and social capital for the welfare of their own and future generations. The document Caring for the Earth defines the term as “improving the quality of human life while living within the carrying capacity of supporting ecosystems”.

As Principle 1 of the Stockholm Declaration, 1972, which is relevant for the present discussion declares that, “man has the fundamental right to freedom and adequate conditions of life in an environment of a quality that permits a life of dignity and well being, subject to the solemn responsibility to protect and improve the environment for the present and future generations”. The adequate conditions of life contemplate an environment of well being. Principles 8, 11, and 18 further guarantee ‘quality of life’, ‘better living’ and ‘common good of mankind’, respectively. These principles do not directly guarantee any right to clean environment but the direction is towards that goal.

Similarly, Principle 21 of the Stockholm Declaration, while affirming state’s sovereignty to exploit to exploit their natural resources renders it subject to the condition that they do not cause damage to the environment of to the environment of other state. This subtle symbiosis between states’ right and obligation continues further and Principle 2 of Rio Declaration virtually adopts the same trend, of course, with more explicit emphasis on the right to pursue ‘their own environmental and developmental policies’. Thus essentially while development has grown as a right, need for environmental protection has grown only as an obligation. Principle 4 of Rio Declaration goes further in this direction, when it says that the ‘right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations’.

Numerous measures and programs to achieve sustainable development have been implemented under the Climate Change Convention and Agenda 21. The Climate change Convention transforms the right to a safe and healthy environment into the “specific” goal of “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. The reliance of the Climate Change Convention and Agenda 21 on the natural and common law concepts in sustainable development and the weak, sometimes absent, enforcement mechanisms have, however failed to significantly slow global warming.

It is true that International Community acclaims that the parties ‘have a right to promote sustainable development’. The desirable perspective therefore is that only economic growth that provides for equitable development opportunities with distributive justice and the right to livelihood with dignity can ensure sustainable development. This thrust is more pronounced in the Johannesburg Declaration on Sustainable

Development, 2002. Sustainable development aims as much at the environmental stability with development as access to distributive justice for all, which is possible only through growth consistent with fulfillment of needs. Sustainable use of natural resources will reduce global warming problems.

PUBLIC INTEREST LITIGATION

India is a developing country. Its common law traditions and quest for restitution of its pristine environment are often reflected in the pronouncements of its courts. Experience of developed nations in their efforts for a sustainable development throws light on how India should act to combat environmental degradation. The emergence of public Interest Litigation has relaxed the traditional rule of standing considerably and brought into existence the citizen standing. In fact the environmental justice in India should follow the streak of environmentalism and Constitutionalism for the sustainable development.

The citizens involved the jurisdiction of superior courts when they became aware of the fact that environmental pollution and ecological imbalances have the potential to affect fundamental rights (Article 21) under the Constitution of India. Under the writ jurisdiction, the appellate courts have given wide-ranging relief to citizens which are not even contemplated under existing environmental laws of India. This is evidenced from many public interest petitions that the traditional rule of ‘locus standi’ does not stand in the way in those cases where environmental issues are raised. In India, mid 1970s saw a rise in the liberal attitude towards the standing issue and who reasons have been mentioned for changes. The first reason lies in the increased concern with social justice. In order to come out of the individualistic attitude on locus standi, the courts were interested to examine the nature of the wrongdoing and whether it has affected the ‘collective conscience’.

In the 1980s, most of the famous and leading environmental cases posed the question of the citizen standing and the Supreme Court took the leading role in widening locus standi. The court allowed pressure groups or voluntary organizations to have standing in court. They had standing either in a representative category or in their own right as a member of the public to bring action in cases involving executive decisions or governmental policy contrary to public action. Thereafter, in the early 1990s, most of the state High Court followed this liberal trend. In one case, the Allahabad High Court declared that petitioners’ standing could not be challenged because they were ‘public spirited citizens who were rightly reminding the authorities of their duties as enshrined in the Constitution. In another case, the Orissa high Court issued a writ mandamus against local authorities, even though the petitioner was merely a visitor to the locality and also there are several cases where locus standi was granted to interested individuals. In most of the recent cases, the standing issues remain unchallenged and the court did not decide the matter unless challenged by the opponent. All most all the cases of environment concerns are brought before the court as PIL, for examples all the M.C. Mehta’s cases especially related to air pollution cases are PIL cases in GHGs reduction.

INTELLECTUAL PROPERTY

Intellectual property refers to property rights protected by laws that protect the applications of thoughts, ideas and information which are of commercial value, including the law relating to patents, copyrights, trademarks, trade secrets and other similar rights. The primary aim of patent law is to give an incentive to inventors to invent new products, processes and machines. Some of the greatest inventions of the last two centuries include the car, the train, the plane, the refrigerator, and the computer, and with them comes the use of energy (oil or Coal). Under the natural rights theory, it seems that any inventor or creator should have a property right to his/her labour, whatever the consequence it has on global warming. But one could argue that according to an extrapolation of the principles advocated by Locke, the inventor or creator should consider the impact of his/her invention or work on the environment. Indeed, for Locke, the right to private ownership requires that the owner leaves in the commons enough and as good for others and that he/she may not remove more out of the commons than she or he can use (the 'non-waste' condition)

As the improvement of human life includes general well being, it should mean that patents and copyrights should be given for inventions and creations that decrease the levels of CO₂ in the atmosphere further it should be the duty of law makers to follow a balanced approach between the benefits of the invention/creation and its carbon impact. Hence, IPRs need to be considered by adopting human rights approach otherwise it may conflict specially with right to life and privacy.

TRIPs directly and indirectly address environmental concerns: Articles 7 and 8 generally, and 27 regarding patent. Article 7 provides that the protection and enforcement of intellectual property right should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations. Article 8 provides the sum that measures may be needed to prevent intellectual property holders from abusing their rights. TRIPs recognizes values underlying human rights in the exceptions to the exclusive rights e.g., the protection of the environment. Para 2 to Article 27 allows members to prohibit the patentability of inventions in order to protect *ordre public* or morality including to "avoid serious prejudice to the environment, provided that such exclusion is not made merely because the exploitation is prohibited by their law". In Article 17 of the Berne Convention compulsory licenses cannot be introduced to prohibit copyright work which increases levels of CO₂. In TRIPs and WIPO (World Intellectual Property Organization) treaties could have clarified that works increase emissions of CO₂ could not receive copyright protection. However, drafters were not concerned with this issue at the time or did not think copyright works could damage the environment. The provisions are broad (Compulsory licenses, *ordre public*), and legislatures and courts can interpret them to reduce or even eliminate carbon emissions.

HUMAN RIGHTS

Right to life being the important of all human rights implies the right to live without the deleterious invasion of pollution, environmental degradation and ecological imbalances. Several environmental issues are closely linked to human rights. These include the equitable distribution of environmental resources, the utilization of resources and IPRs, conflicts between people and wildlife, resettlement issues around development projects such as dams and mine, and access to health to prevent environment related diseases.

The right to the use of natural resources that the environment holds is an essential component of human rights. It is related to disparities in the amount of resources available to different sectors of society. People who live in wilderness communities are referred to as 'ecosystem people'. They collect food, fuel wood, catch fish in aquatic ecosystems, or hunt for in forests and grasslands. When land use patterns change from natural ecosystems to more intensively used farmland and pastureland the rights of these indigenous people are usually sacrificed. Take the case of the subsidies given to the pulp and paper industry for bamboo, which makes it several times cheaper for the industry than for a rural individual who uses it to build his home. This infringes on the human right to collect resources that have been traditionally used free of cost. Another issue is the right of small traditional fishermen who have to contend against mechanized trawlers that deprive them of their catch and over harvest fish in the marine environment. These people have right to a livelihood conflicts that with the powerful economic interests of large scale organized fisheries.

The Universal Declaration of Human Rights 1948 has declared that "everyone has the right to life" and that "every one has a right to a standard of living adequate for the health and well being of himself and of his family..."

The International Covenant Economic, Social and Cultural Rights, 1966, declared that the States Parties to the Covenant recognized the right of everyone to an adequate standard of living for himself and his family... and to the continuous improvement of living conditions. ... The Covenant further declares that the States Parties recognize the right of everyone to the enjoyment of the highest attainable standard of physical and mental health. The Covenant provides that the steps to be taken by the State parties to achieve the full realization of this right shall include that necessary steps shall be taken for ...the improvement of all aspects of environmental and industrial hygiene. The International Covenant on Civil and Political Rights, 1966 proclaims that every human being has the inherent right to life. This right shall be protected by law... The European Convention for the Protection of Human Rights and Fundamental Freedom, 1950 provides that "everyone's right to life shall be protected by law.

Principle 1 of the declaration of the United National Conference on the Human Environment, 1972 held at Stockholm proclaims that "man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well being..." After the Stockholm Declaration, references to a right to a decent, healthy and viable environment were

incorporated in several Global and Regional Human Rights Treaties and in the declarations and resolutions of International Organization. However, the Rio declaration 1992, merely asserted that 'human beings are at the centre of our concern for sustainable development. They are entitled to a healthy and productive life in harmony with nature. The UN Sub-commission on Prevention of Discrimination and Protection of Minorities undertook a Study on "Human Rights and the Environment" and submitted its report in 1994. The most fundamental conclusion of the Report is that there has been a "shift from Environmental law to the right to a healthy and a decent environment" and that it is capable of immediate implementation by human rights bodies. The Sub-Commission has also proposed a draft Declaration of principles on Human Rights and the Environment, which would give environmental rights an autonomous character. Thus a healthy environment conducive to the health and well being of human beings is an essential ingredient of right to life. In the new millennium, we have to ensure that new science and technology is responsive and dedicated to the cause of humanity and protection of human rights. There is a vigorous debate on the utility of big development projects in developing countries and their impact by ecological disaster on environment or earth itself. When the release of GHGs increased in the environment all human rights will be violated as it destroys the ecosystem on which human survival is dependent upon.

ECO- CONSUMERISM

Modern consumption patterns are depleting non-renewable resources, poisoning and degrading ecosystems, and altering the natural processes on which life depends. People in the industrialized countries make up 20% of the world population but consume 80% of the world's resources and produce 80% of wastes. This is due to a pattern of economic development that ensures that people go on consuming even more than they actually need. India is rapidly moving into this unsustainable pattern of economic growth and development. It is seen that today's consumption patterns are not only depleting natural resources at a rapid rate, but also widening the inequalities in consumption indifferent societies.

Money is not the only way to measure the cost of an item that we use. When one adds up all the raw material and energy that goes into the manufacture of goods or the services provided by the nature that one uses during a day's activities, the toll on the environment is large. When this cost is multiplied over a lifespan, the amount is staggering. If one considered the over-utilization in each family, city or a country, the impacts are incredibly high. For example: two hundred billion cans, bottles, plastic cartons and paper cups, are thrown away each year in the "developed" world. "Disposable" items greatly increase this waste. Rather than compete on quality or reliability, many industrial consumer products are made for one time use. Buying quality products that are warranted against failure or wearing out, learning about the raw materials that things are made of, and an appreciation of their origin from nature's storehouse, as well as knowing the conditions of the workers that make them, are some ways of resisting consumerism and decreasing waste. While there may be some new appliances and cars that are

more productive and energy-efficient, discarding the old often leads to an almost total waste of the energy and material already invested in these products. This alone may more than nullify the energy savings of the new product.

Green consumerism (Eco-consumerism) helps us make the links between production, consumption, disposal of goods and services and sustainable development. Therefore, green consumerism should promote the production of products that are not only environmentally less harmful but also qualitatively more effective for its intended use. But, as a matter of fact, environmental problems in India have been receiving scant attention as both consumers and producers have been concentrating on attaining the goals of economic development. Forests continue to be denuded, water and air, grossly polluted.

However, individualistic consumption does not provide scope for innovation as it is driven by greed and not by need. The interaction between poverty, societal forces and technology has produced new products and services. The private sector has to be challenged to make the country a leader in innovation for sustainable development. Indian firms are taking the opportunity to prove them as cutting edge innovators targeting the poor about 500 million consumers. The innovation of nano has set a new trend for innovative products for people with less money, aspiring for a better living. These innovations are not to be looked as cheaper ones, a new design and manufacturing has been raised to a new level in the use of resources. Innovations are needed to generate public-private-people partnerships to chart new roadmap in urbanization and transportation. This will modify consumption patterns and would also encourage innovative policies for augmenting services provided by critical natural resources energy water, and forests.

ENVIRONMENTAL INSURANCE

Environmental insurance in the United Kingdom has grown rapidly in maturity, diversity and capacity in the past 10 years, mirroring the growth in environmental legislation. In areas where the law is undeveloped, damages and liability are difficult to establish. For example, with the introduction of the superfund legislation in the United States, new liabilities emerged. At that time, general liability policies in the US and UK did not recognize pollution as a potential liability and insurers did not collect premiums to cover the claims which emerged. This resulted in massive losses for the primary insurers and re-insurers and led to a retrenchment within the industry. In the US, pollution exclusions typically were inserted into Comprehensive General Liability policies in the 1970s to clarify the scope of coverage for damages caused by the emission of pollutants as a regular or continuous part of a policyholder's business. The National Association of Insurance Commissioners (NAIC) formed the Climate and Global Warming Task Force, which has been charged with the responsibility of drafting an overview of the potential insurance related impacts of climate change on insurance consumers, insurers, and insurance regulators. And The Ceres Report published in August 2006, entitled From Risk to Opportunity Manage Climate Change, argues that the insurance industry has a long term interest in addressing

global warming risks and designing products designed to mitigate against climate change.

In the UK in 1991, the Association of British Insurers introduced the pollution exclusion into public liability policies. This excluded all claims for property damage and injury arising from pollution, except for cases where the pollution was sudden, accidental and unintended. So, by 1991 there was no insurance cover available in the UK for historically contaminated sites and for pollution which emerged gradually. The response from the insurance industry, and especially brokers, was to seek specialist environmental insurance to meet the needs of industry and commerce.

Every year since 1990, new specialist environmental policies have emerged from insurers in the London market to introduce new products and add capacity. The insurance risks primarily associated with historical contamination because that was the dominant environmental concern in the UK, but over the past 10 years, a wide range of specific environmental insurance solutions has been developed such as environmental warranties and indemnities, future pollution, remediation cost management, contractors' pollution liability, and planned expenditure risks.

In India the Parliament enacted the Public Liability Insurance Act in the year 1991 with the object to provide immediate relief to persons affected by accident occurring while handling any hazardous substance. The most significant feature of this Act is that it imposes liability to give relief on principles of "no-fault". If death or injury or damage to property is caused to any person other than a workman, as a result of an accident caused while handling hazardous substance, the owner will be liable as specified in the Schedule of the Act.

By the time of the 1995 Berlin Climate Conference, COP-1, at least some of the insurance world was beginning to see the problem in Dr. Leggett's way. Global Warming plaintiffs alleged that defendants knew their activities were causing global warming, knew the effects of global warming, and yet continued willfully to engage in their practices. However, the fact that liability is unlimited, the difficulty of establishing the commencement of gradual pollution, and the potential magnitude of compensation some environmental scenarios render the risks too great for the insurance market to accept- unless, of course the site is clean, the activity is clean, and the premiums are sufficiently high to cover all potential liability. As a result, many of the larger industrial companies self-insure, a luxury that smaller companies-usually the very companies that require the cover-cannot afford. It made to move to compulsory insurance. France, Italy and the Netherlands have created pools of insurance to cover gradual as well as sudden pollution, and the German Environmental liability Act lists certain industrial installations which must be covered for environmental liability.

ECO- TOURISM

According to the draft eco-tourism policy and guidelines of Government of India (2002), "Eco-tourism means sustainable, equitable community based endeavour for improving living standard of indigenous host communities". The WTO points out as "eco-tourism involves traveling to

relatively undisturbed natural areas with the specified objectives of studying, admiring and enjoying the sceneries and its wild plants and animal, as well as in the existing cultural aspects found in these areas" Tourism in India is a growing industry. Therefore, the question arises whether tourism will lead to disturbances in Environmental equilibrium. Tourism brings with it several problems from beach erosion to solid disposal and coral reef destruction. Garbage disposal is one the biggest nightmares of economies depending on tourism.

However, in India attempts should be made to gradually entrust the activities to the Eco-tourism Development Committees (EDC/ Forest Protection Committees (EPC). Governments have to evolve sustainable tourism to combat these problems. For instance, a few airlines have stepped into ensure that tourists who fly to Maldives in these airlines are given a bag and asked to bring to the airport all the waste they produce during their stay. The airlines carry it to the destination, free of cost. The International Eco-tourism Society (IETS) considers eco-tourism to be 'responsible travel to natural areas which conserves the environment and improves the well being of local people.' It demands 'responsible' travel so that the impact on ecology is minimized and the benefits of travel trade are shared, not just with tour operators, but with local communities-'an environment friendly smokeless industry for the many beautiful but destitute regions of the world.'

ECO LABELLING

The concept of 'environmental consumption helps in developing an interest in eco-labels. This is a shift away from traditional command and control measures imposed by governments towards market governance which is a self-regulatory new environmental policy instrument, eco-labelling. Taken into consideration of this eco-labels potentiality to attain sustainability, various eco-labelling schemes have been introduced since early 90's.

Green Stickers on consumer goods have been evolving since the 1970s. The main drivers have been energy and fuel consumption. These stickers first started appearing on major appliances after government agencies in the United States and Canada legislated their requirement. Manufacturers are also required to meet minimum standards of energy use. The automobile industry in North America is required to meet a minimum emissions standard. This led to fuel efficiency labels being placed on new automobiles sold. The major appliance manufactures were required to use standard testing practices and place clear labels on products. The International Organization for Standardization has developed standards for addressing environmental labelling with the ISO 14000 family which grew out of ISO's commitment to support the objective of sustainable development discussed at the United Nations Conference on Environment and Development, in Rio de Janeiro, in 1992. Green Labelling worldwide is moving beyond traditional country borders. Ecolabels are often voluntary. They are a form of sustainability measurements directed at consumers, intended to make it easy to take environmental concerns into account when shopping. Some labels quantify pollution or energy consumption by way of index scores or

units of measurement; others simply assert compliance with a set of practices or minimum requirements for sustainability or reduction of harm to the environment.

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