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CLIMATIC CHANGES - THE AVAILABILITY OF LEGAL REMEDY

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Abstract:

Climate change is one of the complex problems facing mankind today. This is evident from observations of increases in the global average air and ocean temperatures, widespread melting of snow and ice, and the rising global average sea level. It is projected to have significant impacts on conditions affecting agriculture, including temperature, precipitation and glacial run-off. Economic development at the cost of degradation of the environment will aggravate the problems of poverty, unemployment and disease. Existing legal mechanisms addressing mitigation, adaptation and remediation of climate change are failing to cope with the scale of the global issue and its wide ranging impact on individuals. This paper identifies what all the legal remedy is done to the people affected by climatic disasters and what are the preventive measures should be taken. This paper highlights the study in two ways how the climatic changes affects the person in social and economical status and what is the remedial measures taken by the government of India. And often an issue of climate change justice issues will be always left unaddressed. The environmental laws and act like the Endangered Species Act ("ESA"), the Clean Water Act ("CWA"), and the Clean Air Act ("CAA") where drafted mean that regulations intended to protect natural resources and promote conservation will it be applicable with these act to prevent climatic change is unanswered question. To achieve the original goals of these regulations will require a careful assessment of long-standing assumptions, as well as decisive action to change regulatory practices in ways that accommodate-, offset, and mitigate climate change.

Key Words: Climate Change, Preventive Measures, Legal Remedy, Protect Natural Resources & Careful Assessment

Introduction:

Environmental Management in India is as old as old its history, social and cultural milieu. Our forefathers used to mountains, the rivers, the forest and even the animals, etc. have been worshipped in India. The concept of bio-diversity and the green cover are age old in India. The social and religious fabric was woven around till of Environment protection and promotion. It was somewhere on the way to economic development that we went astray and have started looking to the west for environmental management- the management of natural resources, i.e. air, water, land and flora. The present form of environmental management started with the environmental Act/Notification/Rule right in1927 with the enactment of Indian forest Act. The next environmental Act took very long time, almost 33 yet the prevention of cruelty to animals Act came into being in the year 1960. It was followed by Wild life protection Act, 1972. Therefore, the legislations have been enacted at frequent intervals. The rate of enactment went up after Bhopal disaster which comprehensive environmental legislation called Environment (protection) Act, 1986. The environmental laws have been supplemented with fiscal incentives for purchase pipe pollution control devices and setting up affluent treatment plants. The law basically directed the environmental manage command and control mode. The legislations were mainly directed towards industries and civic bodies. Industries have implemented environmental management system mainly to get the incentives rather than contributing to pollution control or arresting environmental degradation. The post-liberalizations era starting from 1991 saw plethora of enactments. It was in 1994 that environment impact assessment and environmental management plan were made mandatory for setting up a business or its expansion or modernization. The clearance for the projects has to be given by the Central or the State level Authority based on the industry sector and size.

Climatic Changes in India:

Monsoon:

The most serious impact of climate change in India is likely to be visible on monsoon which would consequently affect the food production and ultimately the survival of mankind. Various studies show that surface air temperature in India is going up at the rate of 0 Degrees Celsius every 100 years, particularly during the post-monsoon and winter seasons. While mean winter temperatures could increase by as much as 3.2 degrees Celsius in the 2050's summer temperature could go up by 2.2 degrees Celsius in the 2050's spurring climate variability. Extreme temperature and heat spells could alter patterns of monsoon rains, vital for India's agriculture and water needs. Erotic monsoon during the last couple of years resulted in decline in food production. Rainfall distribution changed countrywide causing floods and droughts simultaneously in many

parts of the country. Scientists warn that India will experience a decline in summer rainfall by 2050. The monsoon accounts for almost 70 per cent of the country's total annual rainfall. Winter rains are also predicted to fall by 1-0-20 percent. Higher temperatures also mean faster melting of Himalayan glaciers and as the melting season coincides with the monsoon season, any intensification of the monsoon is likely to contribute to flood disasters in the Himalaya catchment.

Agriculture:

Another area of concern is the agriculture which not only feeds one billion plus population but also provide raw material to many industries. Agriculture will be adversely affected not only by an increase or decrease in the overall amounts of rainfall, but also by shifts in the timing of the rainfall. Higher temperature reduce the total duration of a copy cycle, leading to a lower yield per unit area, especially for India's wheat and paddy crops, climate change will make monsoons unpredictable; for instance, the amount of moisture in the soil will be affected by changes in factors such as rainfall, runoff and evaporation.

Rising Seas:

A 10- year study in and around the bay of Bengal points to the sea rising 3.14 mm a year in the mangrove swamps of the sunder bans delta against a global average of 2mm, threatening the low-lying area which is home to about 4 million people. A trend of sea level rise of 1 cm per decade has been recorded along the Indian coast. The major delta area of the ganga, Brahmaputra and Indus rivers, which have large populations reliant on riverine resources, will be affected by changes in water regimes, salt water intrusions and land loss.

Global Warming:

It is one of the serious environmental problems of today. The increases levels of carbon dioxide due to greenhouse effect has led to an increase in the temperature of the earth. This is called global warming. In the coming years the temperature of earth may rise to such a level that it would be enough to melt the polar icecaps, which can increase the sea level and also increase the chances of floods.

Acid Rain:

It occurs when gases like sulphur dioxide and carbon dioxide dissolve in water and form highly acidic substances like sulphuric acid falls on the earth, it is called acid rain. Acid rain has destroyed large portions of European forests.

Heat Island:

It is formed in cities because of the tall buildings, which inhibit the circulation of warm and cool air. The heat radiated which is generated by factories and given out by vehicles is disrupted and circulation and evaporation of rain water is hindered. Due to enlargement of cities, the chances of formation of heat islands which further increases the greenhouse effect and global warming.

Control of Air pollution:

The knowledge and technology needed to control air pollution effectively are available now. Pollution free engines can be built, pollution free factories can be put into operation, and techniques for controlling agricultural insect pests with a minimum use of persistent pesticides can be developed. But for economic reasons, none of these measures are being applied universally and they have not received any political or social support.

Ozone Layer:

In the atmosphere of land there is a layer of gases in which there is presence of ozone. It protects the land by absorbing 99% quantity of emission of ultra-violent sun rays. In the report prepared by 300 scientists issued by UNEP (United Nations Environment Programme) and UNWMO it is reported that the erosion of Ozone layer which protects the land from the powerful ultra-violent sun rays has become stopped. That means the Ozone layer has increased again to the large extent.

Environmental Laws in India:

The word "environment" relates to surroundings which may be treated as covering the physical surroundings that are common to all of us, including air, space, land, water, plants and wildlife. The Environment (Protection) Act, 1986, Section 2(a) environment "includes water, air and land and the inter-relationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property."

Thus, after analyzing all the above definitions, the basic idea that can be said that environment means the surroundings in which we live and is essential for our life. Today we are living in nuclear arena. No one can overlook the harm caused to the environment by the nuclear bombs. Day to day innovation and advancement of technology, apart from development additionally expands the risk to human life. Accordingly, there arises an intense and an acute need of the law to keep pace with the need of the society along with individuals. In the present times, the people are harming the environment in such a way that it is dangerous for the human existence. In order to protect the environment, the government has introduced certain environmental laws in our country to protect the environment from ill- practices of humans. Conservation and protection of the environment have been an inseparable part of Indian heritage and culture. Realizing its importance, the Indian

State has also enshrined it in the Constitution which requires both the state and the citizen to "protect and improve the environment"

Constitutional Aspects on Environmental Law:

The Indian Constitution is amongst the few in the world that contains specific provisions on environment protection. The chapters directive principles of state policy and the fundamental duties are explicitly enunciated the nation commitment to protect and improve the environment. It was the first time when responsibility of protection of the environment imposed upon the states through Constitution (Forty Second Amendment) Act, 1976.

Article 48-A the provision reads as follows: "The State shall endeavour to protect and improve the environment and to safeguard the forest and wildlife of the country."The Amendment also inserted Part VI-A (Fundamental duty) in the Constitution, which reads as follows:

Article 51-A (g) "It shall be duty of every citizen of India to protect and improve the natural environment including forests, lakes, and wildlife and to have compassion for living creature."

The Indian Penal Code for Environmental Protection:

The Indian Penal Code has a chapter on offences affecting Public Health, Safety, Convenience (Chapter XIV). Sec. 268 provides that "a person is guilty of a public nuisance who does any act or is guilty of an illegal omission which causes any common injury, danger or annoyance to the public or to the people in general who dwell or occupy property in the vicinity, or which must necessarily cause injury, obstruction, danger, or annoyance to persons who may have occasion to use any public right." The section further explains that a common nuisance is not excusable on the ground that it causes some convenience or advantage. Other concerned provisions are: a "negligent act likely to spread infection or disease dangerous to life" (Sec. 269 IPC.), a "malignant act likely to spread infection or disease dangerous to life" (Sec. 270 IPC.), "making atmosphere noxious to health" (Sec. 278 IPC.).

But the essential requirement of the provision to punish a man is the guilty intention of the accused, i.e. either the act of the accused should be negligent, malignant or voluntary, which vitiates the atmosphere. In case of public nuisance, the Penal Code provides for fines up to Rs. 200/- by way of punishment (Sec. 290 IPC.) and for making the atmosphere noxious to health Rs. 500/- only (Sec.78 IPC.).

The punishments are too meagre to meet the objectives. With these penal provisions, it is not possible to check environmental pollution

Domestic Legislations pertaining to Climate Change:

In the study of domestic legislation variety of enactments and the principles laid down by the judiciary. India's concern for earth and environment can be traced back to ancient and Vedic period and to safeguard it various legislations like Water Act, Air Act, Forest Conservation Act and the inclusion of provisions relating to the environment in the Constitution were drafted after The United Nations conference on human environment held at Stockholm in 1972. Thereafter the Bhopal Gas Tragedy of 1984 was a big lesson for India, which pointed out the gray areas in the environment protection norms in India. The major positive outcome of this tragedy was the enactment of Environment (Protection) Act, 1988 and other environment related legislations. This was further followed by enactment of The Biological Diversity Act, 2002 as an impact of The Rio Conference in 1992. Apart from these enactments the jurisprudence of environments protection has been glorified by the Indian judiciary by evolving various foundational principles.

The Energy Conservation Act (2001) - With the background of high energy saving potential and its benefits, bridging the gap between demand and supply, reducing environmental emissions through energy saving, and to effectively overcome the barrier, the Government of India has enacted the Energy Conservation Act – 2001. The Act provides the much-needed legal framework and institutional arrangement for embarking on an energy efficiency drive. Under the provisions of the Act, Bureau of Energy Efficiency has been established with effect from 1st March 2002 by merging erstwhile Energy Management Centre of Ministry of Power. The Bureau would be responsible for implementation of policy programmes and coordination of implementation of energy conservation activities

The Electricity Act (2003) - This Act was enacted with the objectives of encouraging autonomous regulation with the separation of policy regulation and operational aspects ; Rationalizing tariff and lowering the cross-subsidization levels ; Creating competition in the industry; Ensuring supply of electricity to all areas ; and Protecting consumer interests.

National Electricity Policy (2005) - In compliance with section 3 of the Electricity Act 2003, has been evolved in consultation with and taking into account views of the State Governments, Central Electricity Authority (CEA), Central Electricity Regulatory Commission (CERC) and other stakeholders. This Policy was laid down aiming at laying guidelines for accelerated development of the power sector, providing supply of electricity to all areas and protecting interests of consumers and other stakeholders keeping in view availability of energy resources, technology available to exploit these resources, economics of generation using different resources, and energy security issues.

Integrated Energy Policy (2006) - The need for Integrated Energy Policy was felt due to the responsibility for different energy sources being distributed over a number of different Ministries, e.g. Petroleum, Coal, Power, Water Resources (in the case of hydroelectricity), Atomic Energy and New & Renewable Energy. Several other Ministries are also involved in determining policies which affect energy demand (Transport, Urban Development, Industry, Steel, etc.) and the Finance Ministry determines tax rates for different fuels. Hence the Planning Commission came up with an integrated energy policy. To have common and consistent policies for different energy sources and to be consistent with each other and the overall framework for energy to be consistent with achieving the objective of inclusive growth the policy was a must. In many areas policies relevant for energy are in the hands of State government e.g. urban transport, city planning, building codes, etc. and these policies also need to be made consistent with the overall energy policy. It was laid down in 2006 for the first time and subsequently it was revamped in 2013. In context of Climate change concern it recommends to include power structure reforms, ramping up mass transit, increasing nuclear power and renewable and highlighting energy efficiency in all sectors. The second category would consist of the India's role in global climate change scenario as one of the global powers carrying more responsibility to be proactive in climate change concerns. Though this role was assumed by India due to international pressure, it has taken it up as a challenge. This approach could be explained with the help of policy and legislations laid down after 2000s as mentioned below.

National Action Plan on Climate Change (NAPCC) - NAPCC was a turning point in the climate change regime of India which was released under the leadership of Prime Minister Manmohan Singh in 2008. National Action Plan on Climate Change (NAPCC) is a comprehensive action plan which outlines measures on climate change related adaptation and mitigation while simultaneously advancing development. The 8 Missions form the core of the Plan, representing multi-pronged, long termed and integrated strategies for achieving goals in the context of climate change.

National Mission on Enhanced Energy Efficiency - The National Mission for Enhanced Energy Efficiency (NMEEE) is one of the eight missions under the National Action Plan on Climate Change (NAPCC). NMEEE aims to strengthen the market for energy efficiency by creating conducive regulatory and policy regime and has envisaged fostering innovative and sustainable business models to the energy efficiency sector. The NMEEE spelt out four initiatives to enhance energy efficiency in energy intensive industries which are as follows: Perform Achieve and Trade Scheme (PAT), a regulatory instrument to reduce specific energy consumption in energy intensive industries, with an associated market based mechanism to enhance the cost effectiveness through certification of excess energy saving which can be traded.

Solar Mission - The Jawaharlal Nehru National Solar Mission was launched on the 11th January, 2010 by the Prime Minister. The Mission has set the ambitious target of deploying 20,000 MW of grid connected solar power by 2022 is aimed at reducing the cost of solar power generation in the country through (i) long term policy; (ii) large scale deployment goals; (iii) aggressive R&D; and (iv) Domestic production of critical raw materials, components and products, as a result to achieve grid tariff parity by 2022. Mission will create an enabling policy framework to achieve this objective and make India a global leader in solar energy. The Solar Mission also aims at permitting the decentralized distribution of energy, thereby empowering people at the grassroot level". India being a tropical country, sunshine is available for longer hours per day and with great intensity. The daily average solar energy incident over India varies from 4 to 7 kWh/m2 with about 1500–2000 sunshine hours per year, depending upon location resulting in an aggregate incident radiation of about 5000 trillion Kwh/yr. This substantially exceeds the current total energy consumption. For example17, even assuming 10% conversion efficiency for PV modules, it will still be thousand times greater than the likely electricity demand in India by the year 2015. Solar energy, therefore, has great potential as future energy source. Based on this vision a National Solar Mission is being launched under the brand name "Solar India". The Mission is spanned in three phases first phase consists of remaining period of the 11th Plan and first year of the 12th Plan (up to 2012-13); second phase constitutes of the remaining 4 years of the 12th Plan (2013-17) ; and the third phase is 13th Plan (2017-22) The immediate aim of the Mission is to focus on setting up an enabling environment for solar technology penetration in the country both at a centralized and decentralized level. Also the Mission anticipates achieving grid parity by 2022 and parity with coal-based thermal power by 2030.

Judicial Remedies for Environmental Pollution:

Constitutional Interpretation on Environment:

Damodar Rao V. S. O Municipal Corporation:

Hyderabad Municipal Corporation Act, 1955- Sec 112. Construction of Residential Houses for LIC and I.T. Department in the Land demarked for the Public Park. Some part of the land which is meant for the development of a recreational park. Subsequently out of acres151.55 cents 37 acres of land was acquired for the purpose of enabling LIC to build houses. A small portion of 37 acres of land was sold to Income Tax Department by the LIC. Out of acres 101.19 cents the Municipal Corporation has developed an area of 50 acres as a park. However, it allowed LIC build a few residential houses in its area of 37 acres and Income Tax department also wanted to build houses in allotted area. The petitioners challenged this before High Court

Andhra Pradesh and complained that the balance about 51 acres of land out 151.5 cents as shown in the development plan ought not allowed to used by the LIC and I.T. Department. The Counsels for the petitioners argued that the section 112 of the Hyderabad Municipal Corporation Act, 1955 imposes a mandatory duty on the Corporation to make adequate provision for public parks, gardens play grounds etc.

The Court also observed that the declarations regarding demarcations of the Land user contained in a development published under statutory authority are statutorily enforceable. Those declarations impose legal obligations on the land owners and public authorities. The Court observed that the use of above area by the LIC and I.T. Department is illegal and contrary to law. The Court issued mandamus forbidding respondents from raising any structures. The Court resorted to the Constitutional mandates under Articles 48A and 51A(g) to support this reasoning and went to the extent of stating that environmental pollution would be a violation of the fundamental right to life and personal liberty as enshrined in Article 21 of the Constitution

Air Pollution:

M. C. Metha V. Union of India:

M. C. Mehta case is the famous tort law case which brought in the principle of absolute liability. Shriram Food and Fertilizer Industry, a subsidiary of Delhi Cloth Mills Limited, was engaged in the manufacture of dangerous chemical. On December 1985, large amounts of oleum gas leaked form one of the units in the heart of Delhi which resulted in the death of several persons. The leakage, resulted from the bursting of a tank containing oleum gas, was caused by mechanical and human errors. It created a scare among the people residing nearby and within two days, another leakage, a minor one, broke out as a result of oleum gas escaping from the joints of a pipe. On 6thDecember 1985, the District Magistrate, Delhi ordered Shriram to stop the manufacturing and processing of hazardous chemicals and fertilizers at their establishment in Delhi and to remove such chemicals and gases from Delhi. At this particular point, M.C. Mehta moved to Supreme Court to file PIL and claim for compensation for the losses caused and also demanded that the closed establishment should not restart. In this case, the Supreme Court laid down two important principles of law:

- ✓ The power of the Supreme Court to grant remedial relief for a proved infringement of a fundamental right (in case if Article21) includes the power to award compensation.
- ✓ The judgment opened a new frontier in the Indian jurisprudence by introducing a new "no fault" liability standard (absolute liability) for industries engaged in hazardous activities which has brought about radical changes in the liability and compensation laws in India. The new standard makes hazardous industries absolutely liable from the harm resulting from its activities

Sustainable Development:

Narmada Bachao Andolan V. Union of India and Ors:

The Supreme Court of India upheld that "Water is the basic need for the survival of human beings and is part of the right to life and human rights as enshrined in Article 21 of the Constitution of India … and the right to healthy environment and to sustainable development are fundamental human rights implicit in the right to life

Conclusion:

Environmental Management has in its wrap all sciences exact like astronomy, biology, chemistry, geology physics, etc. Environment is a constitutional right of Indian citizen and under Article 51A the protection of the environment is a fundamental duty of every citizen. The interpretation of the fundamental right to life entitles citizen to invoke writ jurisdiction of the Supreme Court and High Court. Environmentally educated societies can also directly induce its government to administer ecologically sensitive Policies. In fact, Supreme Court in 1991 in pursuance of a PIL gave a ruling because of which the environmental education has become part of the curriculum in primary and secondary schools. The writ petition had prayed that environment should be made a compulsory subject in Schools and colleges in graded systems so that there will be general growth of awareness. It had also sought directive to include environmental broadcast from the media as well as environmental education under article 32 of the Constitution, besides Supreme Court's intervention, public awareness and education supported by information technology has made the nation environ conscious. TRIPs has encouraged the compilation of data constitute intellectual creations for protection; India has developed a network of air and water pollution monitoring stations whose is published annually. Pollution intensive industries like thermal plants have installed continuous pollution monitoring equipments and real time pollution data is available through IT network. Information and knowledge is important for proper environmental management. In fact, the development of IT has become a great tool not only for environmental education, research and exchange of data but also for generating data for Biodiversity and protection from Biopiracy. The grasping of Climate Change Law in India in light of the broad legal framework as stated above is insufficient to explain the ambit of legal provisions. This is evident to show how scattered and piecemeal is the Climate Change Law regime in India. Thus, climate change is one of the gravest problems that not only Indians but the whole human kind is facing today. There are various other aspects which would help in mitigating and adapting to climate change ranging from scientific, technological, medical, social and political. However, law is one of the centrifugal instruments which would combine all the sciences and studies to produce the expected outcome.

Suggestions:

- ✓ The powers vested to the Pollution Control Boards are not enough to prevent pollution.
- ✓ The Boards do not have power to punish the violators but can launch prosecution against them in the Courts which ultimately defeat the purpose and object of the Environmental Laws due to long delays in deciding the cases. Thus, it is imperatively necessary to give more powers to the Boards.
- ✓ What we need is social awareness from below, not laws from the above.
- ✓ In order to educate people about the environmental issues, there should be exhibition of slides in the regional languages at cinema houses and television free of cost school and college level syllabus should contain this as an subject so that there will be general growth of awareness.
- ✓ The new machineries should be invented to identify the disaster earlier and the remedial measures should be taken as soon as possible.

References:

1. Anil Kumar Thakur, Mithilesh Kumar Sinha, Climatic Change and Environmental Management, Regal Publications, New Delhi, 2012
2. Sudhanshu Gupta, Climatic Changes and Vulnerability of Ecosystem Services, Allied Publishers Pvt. Ltd., New Delhi, 2010
3. T. Bhattacharyya, D. K. Pal, Dipak sarkar, S. P. Wani, Climatic changes and agriculture, Studium Press Pvt. Ltd., New Delhi, 2013
4. Vishwambhar Prasad Sati, Disaster Management and Risk Reduction, Aavishkar Publishers and Distributors, Jaipur, 2013
5. Article 48A, 51A (g) of the Constitution of India- 42nd Amendment etc.
6. The Indian Penal Code, (Chapter XIV) Sec. 268, Sec. 269, Sec. 270, Sec. 278, Sec.78
7. The Environment (Protection) Act, 1986, The Energy Conservation Act (2001), The Electricity Act (2003), (Other legislations relating indirectly to Climate Change and directly to Environment Conservation and Protection are, Water Act; Air Act; Forest Conservation Act;
8. National Electricity Policy (2005), Integration Energy Policy (2006), National Action Plan on Climate Change, National Mission on Enhanced Energy Efficiency, Solar Mission
9. Damodar Rao v. S.O Municipal Corporation AIR 1987 AP 171
10. M. C. Metha v. Union of India 1987 SCR (1) 819
11. Narmada Bachao Andolan v. Union of India and ors (2000) 10 SCC 664
12. Climate Change Laws in India – Need for Change in Legal Climate? Available @ https://www.worldwidejournals.com/international-journal-of-scientific-research(IJSR)/file.php?val=February_2016_1454155173_76.pdf