ENVIRONMENTAL LAW - AN OVER VIEW

By

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The concern for conservation of Environment and its protection is growing day by day. The increased concern can be attributed to the open discussions being held globally on issues like global warming, depletion of ozone layer, disappearance of rainforests *etc.*, the effects of the above activities are experienced, and hence the need for the reduction of further degradation. The Judiciary in India, especially the Superior Courts, are also strongly supporting the cause of Environment protection and maintenance of ecological balance.

What is Environment?

Environment means surroundings. The sum total of external factors, substances and conditions, which influence organisms without becoming part of such organism. The Environment consists of physical and biotic factors. The physical factors include the forces of Nature, and non-living materials. The biotic factors include all living beings including their reactions, interactions and inter- related actions. Thus Environment consists of complex factors and it is a system, which is dynamic and adapting itself to the variations. The changes caused may go for betterment or detriment of Environment.

According to Encyclopedia Britannica, Environment means the entire range of external influence acting on an organism both the physical and biological and other organism *i.e.*, forces of Nature surrounding an individual.

Environmental Pollution means introduction of any solid, liquid or gaseous 2006-Journal—F-3

substance in such quantity or concentration which causes damage/injury to Environment.

The Laws

The following are the enactments relating to environmental protection:

- 1. The Indian Forest Act, 1927
- 2. The Wildlife (Protection) Act, 1972
- The Water (Prevention and control of Pollution) Act, 1974
- 4. The Forest (Conservation) Act, 1980
- 5. The Air (Prevention and control of Pollution) Act, 1981
- 6. The Environment (Protection) Act, 1986
- 7. The National Environment Tribunal Act, 1995
- 8. The National Environment Appellate Authority Act, 1997
- 9. The Biodiversity Act, 2003

and finally the National environmental Policy, 2004

and provisions of Constitution of India, Indian Penal Code, and Code of Criminal Procedure

1. The Indian Forest Act, 1927

The provisions of Indian Forest Act, 1927 and the allied State Forest Laws aim at providing for protection and conservation of vegetation and wildlife. The Act aims at reserving certain parts of Forests as Reserved Forests and enforcing regulations on entry, exploitation *etc.*, so that the forests can be preserved for the posterity. The Act is having enforceability through State Forest Departments. Though many areas have been accorded statutory protection, the increasing biotic pressure is almost nullifying the conservation efforts of the Government agencies. The Conservation measures are being reoriented by involving the local people in participatory management of Forests.

2. The Wildlife (Protection) Act, 1972

The Act is enacted to save the wildlife which is dependent on forests. The habitat of wildlife, Forest, is dwindling and as a result the wildlife is losing its shelter and the wild animals are reducing in numbers.

The Act provides for setting up of Sanctuaries and National Parks so as to provide protected habitat for the endangered animals. The Act is also providing for protection of certain specified plants. The offences are non-bailable and penalties are deterrent. The departure from normal trial procedure is implemented through this Act by way of putting onus of proof on the accused. The prosecution can establish preponderance probability of the offence and the accused has to prove his innocence. Many Wildlife cases end up at trial stage and very few cases go up to Superior Courts. The reason is that either the evidence is not properly put up or the accused cannot afford to go in appeal. However, the Act is seen now a day by way of involvement of celebrities in wild life crime.

3. The Water (Prevention and Control of Pollution) Act, 1974

The Act is made for the prevention and control of water pollution and the maintaining or restoring the wholesomeness of water. The Act prescribes setting up of Board for implementation of provisions contained

therein. The authorities can take samples of effluents and based on analysis impose restrictions on new outlets, discharges *etc.* The punishments for breach of provisions is fine and imprisonment up to six years. The enforcement agencies have to be strengthened considerably to reap the benefits of legislation.

4. The Forest (Conservation) Act, 1980

This legislation is remarkable in that it prevents diversion of forest lands for nonforestry purpose. The 'non-forestry' purpose has been defined as the breaking up or clearing of any forest land or portion thereof for the cultivation of tea, coffee, spices, rubber, palms, oil bearing plants, horticultural crops or medicinal plants, and any other purpose other than reafforestation. The term 'forest' is not defined in the Indian Forest Act, 1927 or Forest (Conservation) Act, 1980, and therefore, the Apex Court opined that the dictionary meaning of the word 'forest' should be taken , to assess the applicability or otherwise of the enactment. The penalty proposed in the Act is meager, as fifteen days imprisonment. The procedure for taking cognizance of the offence is time consuming as the violation has to be reported and examined by Government of India before permitting prosecution. The Act has enabled the saving of forest areas, as it slowed sown the diversion of forest land for utilization by Government departments. However, the larger problem of tackling encroachment in forest areas is not covered by this Act, and the political - social issue is a challenging task for the policy planners.

5. The Air (Prevention and Control of Pollution) Act, 1981

The Act was enacted under Article 253 of the Constitution of India to implement the decisions taken at the United Nations Conference on Human Environment held at Stockholm in 1972. The Act envisages formation of Central and State Boards for prevention and control of Air pollution. These

Boards are empowered to prescribe standards for emission from automobiles, impose restrictions on industry causing pollution. The penalties are prescribed for companies, Government departments and quantum of penalty is imprisonment up to seven years and with fine. In implementation of these provisions there are infrastructure and manpower problems.

6. The Environment (Protection) Act, 1986

The decline in environmental quality due to increase in pollution, loss of forest cover and loss of biological diversity, excessive use of chemicals in agriculture and allied sectors has made the Governments world over to think and resolve to protect the Environment. A decision to this effect was taken in United Nations Conference on Human Environment held at Stockholm in June 1972. In pursuance of the International Convention and as per the provisions of Article 253 of the Constitution of India; the Government of India promulgated the Environment (Protection) Act, 1986

The Act defines 'Environment' and 'environmental pollution' and 'pollutants'. The powers of the Government, and need for prevention, control and abatement of environmental pollution by persons carrying on related activities is specified.

The enactment gave rise to many rules, as mentioned below, for achieving the objectives of enactment:

- 1. Environment (Protection) Rules, 1986
- The Manufacture, Use, Import, Export and Storage of Hazardous Micro-Organisms, Genetically Engineered Organism or Cell Rules, 1989
- 3. The Hazardous Waste (Management and handling) Rules, 1989
- 4. The Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989

- The Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996
- 6. The Bio-medical waste (Management and Handling) Rules, 1998
- 7. The Plastics Manufacture, sale and usage Rules, 1999
- 9. The Noise Pollution (Regulation and Control) Rules, 2000
- 10. The Ozone Depleting Substances (Regulation and Control) Rules, 2000
- 11. The Batteries (Management and Handling) Rules, 2001

The above rules are to be implemented by the State Pollution Control Boards and their Officers. The enactments are many but the infrastructure difficulties are causing slow implementation of the provisions.

7. The National Environment Tribunal Act, 1995

The Act provides for liability for damages arising out of any accident occurring while handling any hazardous substance, and the Tribunal is established for disposal of cases arising out of such incidents, providing for speedy relief and compensation for damages to persons, property and environment. The schedule of the Act specifies the categories under which the compensation for damages can be claimed.

8. The National Environment Appellate Authority Act, 1997

The enactment provides a forum to hear the appeals arising out of restriction of areas in which any industry or operation or process or class of industries, which are not to be carried out with reference to safeguards under Environment (Protection) Act, 1986. The enactment was prepared in view of the pronouncements by Supreme Court of India in certain public interest litigation cases involving environmental issues, for setting up

an independent body for quick redressal of public grievances. The Authority is set up to deal with petitions, complaints, representations and appeals against the decisions of competent authorities granting environmental clearance of projects.

9. The Bio-diversity Act, 2003

'Biological Diversity' means the variability among living organisms from all sources, including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part, and includes the diversity within the species, between the species and of eco-systems.

The United Nations Convention on Biological Diversity (CBD) was held at Rio de Janeiro in 1992, wherein the sovereign rights of the States over their biological resources was affirmed. India being signatory to the said convention found it necessary to give effect to the said convention. Accordingly, the Biodiversity Act was made.

The Act regulates the access to Biological Diversity except with the approval of National Biodiversity Authority. The National Biodiversity Authority, established at Chennai, plays a key role in implementing the various provisions of the Act. The Authority consists of a Chairperson, ten ex-officio Central Government members and five non official specialists and experts. The Chairperson is the Chief Executive of the Authority. The main functions of the Authority are to lay down procedures and guidelines to govern the activities such as granting permission to foreign companies for obtaining any biological resource and for transferring the results of any research. It advises the Government on specific areas such as notifications of threatened species, designation of Institutions as repositories for different categories of biological resources and exemption of certain biological resources, normally traded as commodities. It also encourages setting up the State Biodiversity Boards.

The Act provides for constitution of State Biodiversity Boards. Their main functions are to regulate requests for utilization of biological resources by Indian nationals, and to assist the State Government in identifying and notifying the areas of biodiversity importance s biodiversity heritage sites and also assist in framing rules for their management and conservation.

Constitution of Biodiversity Management Committees by local bodies such as Panchayats and Municipalities is contemplated by the Act at local level. These bodies are to prepare Biodiversity Register' in consultation with local people, which will include comprehensive information on local biological resources and traditional knowledge associated with them.

The penalty for contravention of provisions of the Act is imprisonment for a term, which may extend to five years or with fine, which may extend to ten lakh rupees, such fine may be commensurate with the damage caused.

The rules under the Act are made in 2004. The Act provides for conserving Biodiversity, but the implementation down the line is slow, as the implications have to be understood.

National Environmental Policy 2004

The present national policies for environmental management are contained in the National Forest Policy, 1988, the National Conservation Strategy and Policy Statement on Environment and Development, 1992; and a Policy Statement on Abatement of Pollution, 1992. Some sector policies such as the National Water Policy, 2002, have also contributed towards environmental management. Despite these policy documents a need for a comprehensive policy statement has been evident for some time in order to infuse a common approach to the various sectoral, cross-sectoral, including fiscal, approaches to environmental management.

The National Environment Policy (NEP, 2004) is a response to our national commitment to a clean environment, mandated in the Constitution in Articles 48A and 51A(g), strengthened by judicial interpretation of Article 21. It is recognised that maintaining a healthy environment is not the state's responsibility alone, but also that of every citizen. A spirit of partnership should thus be realized throughout the spectrum of environmental management in the country. While the state must galvanise its efforts, there should also be recognition by each individual - natural or institutional, of its responsibility towards maintaining and enhancing the quality of the environment. The NEP, 2004 is also intended to be a statement of India's commitment to making a positive contribution to international efforts.

The principal objectives of this policy are:

(1) Conservation of Critical Environmental Resources:

To protect and conserve critical ecological systems and resources, and

invaluable natural and man-made heritage which are essential for life support, livelihoods, economic growth, and a broad conception of human well-being.

(ii) Intra-generational Equity: Livelihood Security for the Poor:

To ensure equitable access to environmental resources and quality for all sections of society, and in particular, to ensure that poor communities, which are most dependent on environmental resources for their livelihoods, are assured secure access to these resources.

(iii) Inter-generational Equity:

To ensure judicious use of environmental resources to meet the needs and aspirations of present and future generations.

(iv) Integration of Environmental Concerns in Economic and Social Development:

To integrate environmental concerns into policies, plans, programmes, and projects for economic and social development.

(v) Efficiency in Environmental Resource Use:

To ensure efficient use of environmental resources in the sense of reduction in their use per unit of economic output, to minimize adverse environmental impacts.

(vi) Environmental Governance:

To apply the principles of good governance (transparency, rationality, accountability, reduction in time and costs, and participation) to the management and regulation of use of environmental resources.

(vii) Enhancement of Resources for Environmental Conservation:

To ensure higher resource flows, comprising finance, technology, management skills, traditional knowledge, and social capital, for environmental conservation through mutually beneficial multistakeholder partnerships between local communities, public agencies, and investors.

The above objectives are to be realized through various strategic interventions by different public authorities at Central, State, and Local Government levels. They would also be the basis of partnerships between public agencies, local communities, and various economic factors.

The following principles are enunciated for guiding the activities in relation to the policy:

i. Human beings are at the Centre of Sustainable Development Concerns :

- ii. The Right to Development:
- iii. Environmental protection is an integral part of the development process :
- iv. The Precautionary Approach
- v. Economic Efficiency:
 - a) Polluter Pays
 - b) Cost Minimization
- vi. Entities with "Incomparable" Values

vii. Equity:

Equity, in the context of this policy refers to both equity in entitlements to, and participation of the relevant publics in processes of decision-making over use of, environmental resources.

viii. Legal Liability:

The following alternative approaches to legal liability may apply:

(a) Fault based liability

In a fault based liability regime a party is held liable if it breaches a preexisting legal duty, for example, an environmental standard.

(b) Strict liability

Strict liability imposes an obligation to compensate the victim for harm resulting from actions or failure to take action, which may not necessarily constitute a breach of any law or duty of care.

ix. Public Trust Doctrine:

The State is not an absolute owner, but merely a trustee of all natural resources, which are by nature meant for public use and enjoyment, subject to reasonable conditions, necessary to protect the legitimate interest of a large number of people, or for matters of strategic national interest.

x. Decentralisation:

Decentralization involves ceding or transfer of power from a Central Authority to State and Local Authorities, in order to empower public authorities having jurisdiction at the spatial level at which particular environmental issues are salient, to address these issues.

xi. Integration:

Integration refers to the inclusion of environmental considerations in sectoral policymaking, the integration of the social and natural sciences in environment related policy research, and the strengthening of relevant linkages among various agencies at the Central, State, and Local Self- Government, charged with the implementation of environmental policies.

xii. Environmental Standard Setting:

Setting environmental standards would involve several considerations, *i.e.* risks to human health, risks to other environmental entities, technical feasibility, costs of compliance, and strategic considerations.

xiii. Preventive Action:

It is preferable to prevent environmental damage from occurring in the first place, rather than attempting to restore degraded environmental resources after the fact.

xiv. Environmental Offsetting:

There is a general obligation to protect threatened or endangered species and natural systems that are of special importance to sustaining life, providing livelihoods, or general well-being. If for exceptional reasons of overriding public interest such protection cannot be provided in particular cases, costeffective offsetting measures must be undertaken by the proponents of the activity to restore as nearly as may be feasible the lost environmental services to the same publics.

The above mentioned policy objectives and principles are to be realized by concrete actions in different areas relating to key environmental challenges. The following strategic themes and outlines of actions to be taken in each, focus on both ongoing activities, functions, and roles, as well as new initiatives that are necessary.

1. Regulatory Reforms:

The regulatory regimes for environmental conservation comprises a legislative framework, and a set of regulatory institutions. Inadequacies in each have resulted in accelerated environmental degradation on the one hand, and long delays and high transactions costs in development projects on the other. Apart from the legislation which is categorically premised on environmental conservation, a host of sectoral and cross-sectoral laws and policies, including fiscal regimes, also impact environmental quality

(a) Revisiting the Legislative Framework:

The present legislative framework is broadly contained in the umbrella Environment Protection Act 1986, the Water (Prevention and Control of Pollution) Act, 1974, the Water Cess Act 1977 and the Air (Prevention and Control of Pollution) Act, 1981. The law in respect of management of forests and biodiversity is contained in the Indian Forest Act 1927, the Forest (Conservation) Act 1980, the Wild Life (Protection) Act 1972 and the Biodiversity Act 2003. There are several other enactments, which complement the provisions of these basic enactments.

2. Process related reforms

(i) Approach:

The recommendations of the Committee on Reforming Investment Approval &

Implementation Procedures, the Govindarajan Committee identified delays in environment and forest clearances as the largest source of delays in development projects. The objective is to reduce delays and levels of decision-making, realize decentralization of environmental functions, and ensure greater transparency and accountability.

(ii) Framework for legal action

The present approach to dealing with environmentally unacceptable behaviour in India has been largely based on criminal processes and sanctions. Although criminal sanctions, if successful, may create a deterrent impact, in reality they are rarely fruitful for a number of reasons. On the other hand, giving lower level officials the power to institute criminal prosecutions may provide fertile opportunities for rent-seeking. Civil law, on the other hand, offers flexibility, and its sanctions can be more effectively tailored to particular situations. The evidentiary burdens of civil proceedings are less daunting than those of criminal law. It also allows for preventive policing through orders and injunctions to restrain prospective pollution. Accordingly, a judicious mix of civil and criminal processes and sanctions will be employed in the legal regime for enforcement, through a review of the existing legislation. Civil liability law, civil sanctions, and processes would govern most situations of noncompliance. Criminal processes and sanctions would be available for serious, and potentially provable, infringements of environmental law, and their initiation would be vested in responsible authorities. Recourse may also be had to the relevant provisions in the Indian Penal Code, and the Criminal Procedure Code.

3. Substantive Reforms

(i) Environment and Forests clearances

In order to make the clearance processes more effective, the following actions will be taken:

- (a) Encourage regulatory authorities, Central and State, to institutionalise regional and cumulative environmental impact assessments (R/CEIAs) to ensure that environmental concerns are identified and addressed at the planning stage itself.
- (b) Give due consideration, to the quality and productivity of lands which are proposed to be converted for development activities, as part of the clearance process. Projects involving large-scale diversion of prime agricultural land would require environmental clearance whether or not the proposed activity otherwise requires environmental clearance.
- (c) Encourage clustering of industries and other development activities to facilitate setting up of environmental management infrastructure, as well as monitoring and enforcing environmental compliance. Emphasize post project monitoring and implementation of environmental management plans through participatory processes, involving the government, industry, and the potentially impacted community.
- (d) Prohibit the diversion of dense natural forests to non-forest use, except in site -specific cases of vital national interest. No further regularisation of encroachment on forests should be permitted.
- (ii) Coastal Areas:

Development activities in the coastal areas are regulated by means of the Coastal Regulation Zone notifications and Integrated Coastal Zone Management (ICZM) Plans made under them. However, there is need to ensure that the regulations are firmly founded on scientific principles, in order to ensure effective protection to valuable coastal environmental resources, without unnecessarily impeding livelihoods, or legitimate coastal economic activity, or settlements, or infrastructure development.

(iii) Living Modified Organisms (LMOs):

Biotechnology has an immense potential to enhance livelihoods and contribute to the economic development of the country. On the other hand, LMOs may pose significant risks to ecological resources, and perhaps, human and animal health. In order to ensure that development of biotechnology does not lead to unforeseen adverse impacts, the following actions will be taken:

- (a) Review the regulatory processes for LMOs so that all relevant scientific knowledge is taken into account, and ecological, health, and economic concerns are adequately addressed.
- (b) Periodically review the National Biosafety guidelines and Bio-safety Operations Manual to ensure that these are based on current scientific knowledge.
- (c) Ensure the conservation of bio-diversity and human health when dealing with LMOs in transboundary movement in a manner consistent with the Multilateral Bio-safety Protocol.

(iv) Environmentally Sensitive Zones:

Environmentally Sensitive Zones may be defined as areas with identified environmental resources with "Incomparable Values" which require special attention for their conservation. In order to conserve and enhance these resources, without impeding legitimate socio-economic development of these areas, the following actions will be taken:

- (a) Identify and give legal status to Environmentally Sensitive Zones in the country with environmental entities with "Incomparable values" requiring special conservation efforts.
- (b) Formulate area development plans for these zones on a scientific basis, with adequate participation by the local communities.

(c) Create local institutions with adequate participation for the environmental management of such areas to ensure adherence to the approved area development plans, which should be prepared in consultation with the local communities.

(v) Monitoring and Enforcement:

Weak enforcement of environmental compliance is attributed to inadequate technical capacities, monitoring infrastructure, and trained staff in enforcement institutions. In addition, there is insufficient involvement of the potentially impacted local communities in the monitoring of compliance, and absence of institutionalised public-private partnerships in enhancement of monitoring infrastructure.

The following actions would be taken:

- (a) Give greater legal standing to local community based organizations to undertake monitoring of environmental compliance, and report violations to the concerned enforcement authorities.
- (b) Develop feasible models of public private partnerships to leverage financial, technical, and management resources of the private sector in setting up and operating infrastructure for monitoring of environmental compliance, with ironclad safeguards against possible conflict of interest or collusion with the monitored entities.

(vi) Use of economic principles in environmental decision-making:

It is necessary that the costs associated with the degradation and depletion of natural resources be incorporated into the decisions of economic actors at various levels to reverse the tendency to treat these resources as "free goods" and to pass the costs of degradation to other sections of society, or to future generations of the country.

At the macro-level, a system of natural resource accounting is required to assess whether in the course of economic growth we are drawing down, or enhancing, the natural resource base of production, including all relevant depletable assets. In addition, the environmental costs and benefits associated with various activities, including sectoral policies, should be evaluated to ensure that these factors are duly taken into account in decision-making.

4. Enhancing and Conserving Environmental Resources:

Perverse production and consumption practices are the immediate causes of environmental degradation, but an exclusive focus on these aspects alone is insufficient to prevent environmental harm. The causes of degradation of environmental resources lie ultimately in a broad range of policy, and institutional, including regulatory shortcomings, leading to the direct causes.

However, the range of policies, and legal and institutional regimes, which impact the proximate factors, is extremely wide, comprising fiscal and pricing regimes, and sectoral and cross -sectoral policies, laws, and institutions. Accordingly, apart from programmatic approaches, review and reform of these regimes to account for their environmental consequences is essential.

(a) Land Degradation:

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The degradation of land, through soil erosion, alkali-salinization, water logging, pollution, and reduction in organic matter content has several proximate and underlying causes. The proximate causes include loss of forest and tree cover (leading to erosion by surface water run-off and winds), excessive use of irrigation (in many cases without proper drainage, leading to leaching of sodium and potassium salts), improper use of agricultural chemicals (leading to accumulation of toxic chemicals in the soil),

diversion of animal wastes for domestic fuel (leading to reduction in soil nitrogen and organic matter), and disposal of industrial and domestic wastes on productive land. These in turn, are driven by implicit and explicit subsidies for water, power, fertilizer and pesticides, and absence of conductive policies and regulatory systems to enhance people's incentives for afforestation and forest conservation. It is essential that the relevant fiscal, tariffs, and sectoral policies take explicit account of their unintentional impacts on land degradation, if the fundamental basis of livelihoods for the vast majority of our people is not to be irreparably damaged.

- (b) Forests and Wildlife:
- (i) Forests:

Forests provide a multiplicity of environmental services, in recent decades, there has been significant loss of forest cover, although there are now tangible signs of reversal of this trend. It is possible that some site-specific non-forest activities may yield overall societal benefits significantly exceeding that from the environmental services provided by the particular tract of forest.

- (a) to accord legal recognition of the traditional rights of forest dwelling tribes.
- (b) Formulate an innovative strategy for increase of forest and tree cover from the present level of 23 percent of the country's land area, to 33 percent in 2012, through afforestation of degraded forest land, wastelands, and tree cover on private or revenue land.
- (c) Focus public investments on enhancing the density of natural forests, mangroves conservation, and universalization of Joint Forestry Management.
- (d) Formulate an appropriate methodology for reckoning and restoring the

- environmental values of forests, which are unavoidably diverted to other uses.
- (e) Formulate and implement a "Code of Best Management Practices" for dense natural forests to realize the Objectives and Principles of NEP, 2004.

(ii) Wildlife:

The status of wildlife in a region is an accurate index of the state of ecological resources, and thus of the natural resource base of human well being. This is because of the interdependent nature of ecological entities, in which wildlife is a vital link. Moreover, several charismatic species of wildlife embody "Incomparable Values", and at the same time, are a major resource base for sustainable eco-tourism. Conservation of wildlife, accordingly, involves the protection of entire ecosystems.

In respect of Wildlife Conservation, the following elements would be pursued:

- (a) Expand the Protected Area (PA) network of the country, including Conservation and Community Reserves, to give fair representation to all biogeographic zones of the country.
- (b) Paralleling multistakeholder partnerships for afforestation, formulate and implement similar partnerships for enhancement of wildlife habitat in Conservation Reserves and Community Reserves, to derive both environmental and eco-tourism benefits.
- (c) Promote site-specific eco-development programmes in fringe areas of PAs, to restore livelihoods and access to forest produce by local communities owing to access restrictions in PAs.
- (d) Strengthen capacities and implement measures for captive breeding and release into the wild identified endangered species.

(iii) Biodiversity, Traditional Knowledge, and Natural Heritage:

Biodiversity, comprises both genetic and ecosystems diversity. Loss of biodiversity is primarily due to degradation or alteration of ecosystems, in particular the habitats of sitespecific species. Damage to such habitats arises from land degradation, forest loss, conversion of wetlands, pollution of and excessive water drawals from rivers, and loss of coastal ecosystems. A large-scale exercise has been completed for providing inputs towards a National Biodiversity Action Plan. These inputs would be reviewed in terms of the Objectives and Principles of NEP, 2004, scientific validity, financial and administrative feasibility, and legal aspects. In any event, the following measures would be taken:

- (a) Strengthen the protection of areas of high endemism of genetic resources ("biodiversity hot spots"), while providing alternative livelihoods and access to resources to local communities who may be affected thereby.
- (b) Pay explicit attention to the potential impacts of development projects on biodiversity resources and natural heritage. In appraisal of such projects by cost-benefit analysis, assign values to biodiversity resources at or near the upper end of the range of uncertainty. In particular, ancient sacred groves and "biodiversity hotspots" should be treated as possessing "Incomparable Values".
- (c) Enhance ex-situ conservation of genetic resources in designated gene banks across the country. Genetic material of threatened species of flora and fauna must be conserved on priority.
- (d) Formulate and adopt an internationally recognized system of legally enforceable *sui-generis* intellectual property rights for the country's genetic resources, to enable the country, including where relevant the local communities, to derive economic benefits from grant of access to these resources.

(e) Similarly, formulate and adopt an internationally recognized system of legally enforceable *sui-generis* intellectual property rights for ethno-biology knowledge, to enable local communities to realize significant financial benefits from permitting the use of such knowledge. Set up an on-line database of the inventory of such ethno-biology knowledge, once the legal regime, domestic and multilateral, for their protection is in place.

5. Review of Implementation:

Any policy is only as good as its implementation. The NEP, 2004 outlines a significant number of new and continuing initiatives for enhancing environmental conservation. These require the coordinated actions of diverse actors, for the major part organized and stimulated by one or more public agencies. While coordination and review mechanisms are necessary in respect of the individual action plans under each of the strategic themes at relevant operational levels, a formal, periodic high level review of implementation of the different elements of NEP, 2004 is essential. This would enhance accountability of the different public agencies responsible for implementation. It would also reveal practical issues in implementation, including absence of political will at concerned levels, or official indifference.

Accordingly, the Cabinet Committee on Economic Affairs (CCEA) may be requested to review the implementation of NEP, 2004, once a year, within three months from the close of the previous fiscal year. The findings of the CCEA in the review should be publicly disclosed, so that stakeholders are assured of the seriousness of the Government in ensuring implementation of the Policy.

Constitution of India

The provisions contained in Constitution of India relating to Environment are:

Article 21 – Protection of life and personal liberty

Article 48A – Protection and improvement of environment and safeguarding of forests and wildlife

Article 51A – Fundamental duties – to protect and improve the natural Environment including forests, lakes, rivers and wildlife and to have compassion for living creatures.

Indian Penal Code

The Indian Penal Code contains various provisions relating to environmental offences:

Section 269 – spreading infection of any disease

Section 277 – fouling of water of public spring or reservoirs rendering it less fit for the purpose for which it is ordinarily used

Section 278 – voluntarily vitiating the atmosphere in any place so as to make it noxious to the health of persons dwelling or carrying on business in the neighbourhood or passing along a public way

Section 290 – public nuisance

Sections 425, 426 - mischief

Section 430 – mischief by injury to works of irrigation or by wrongfully diverting water

Section 431– mischief by injury to public road, bridge, river or channel

Section 432 – mischief by causing inundation or obstruction to public drainage attended with damage

Criminal Procedure Code

Criminal Procedure Code deals with preventive action against environmental pollution Section 133 – conditional order for removal of nuisance

Section 143 – Magistrate may prohibit repetition or continuance of public nuisance

Section 144 – Power to issue order in urgent cases of nuisance or apprehended danger

Section 149 – Police to prevent cognizable offence

Section 151 – arrest to prevent the commission of cognizable offences

Section 152 –prevention of injury to public property

Conclusion

As can be seen from the above, the concern for environment and its conservation, protection is quite impressive. The plethora of legislations are made but commensurate enforcement mechanism is to be still put in place. The coercive method by way by penalizing defaulters may not yield desired results as the offenders may find ways to circumvent the legislative restrictions. It is desirable that the persons responsible should be made to realize the damage they are initiating/causing to the environment and take measures to control it. The control mechanism should be installed so that a person voluntarily tries to achieve the full results of environment conservation. And apart from the penalties contemplated in various legislations, the 'polluter pays' principle should also be implemented to contain damage caused. The National Environment Policy 2004 is an exhaustive policy document which should be kept in mind to bring the desired attitudinal changes. Instead of proposing or bringing an enactment for achieving a certain objective which is considered to be left out of the exisating legislations, it is desirable that the existing enactments are implemented if necessary by expanding their scope.