Environment is a very complex word to define and so are the problems affecting it. Man is nature's best promise and worst enemy. Population is increasing and available resources are decreasing at an alarming rate. The most difficult challenge before the country is continue to improve economic growth rate, provide basic minimum life support services to a large section of our population and deal with the problems of poverty and unemployment. At the same time, we have to pay attention to conserving our natural resources and also improving the status of our environment. Environmental degradation, which was not much of a concern until quite recently, has started to accelerate. We will need to tackle this in a holistic manner in order to ensure sustainability, both economically and environmentally. This, in short, is the task before the country, and in particular its planners and policy-makers.

The fact that Indian planners and policy-makers expressed concern about environmental issues long before it became fashionable to do so is neither strange nor unusual, since it is deeply rooted in our cultural traditions. To Indian philosophy, the bounties of Nature are as much to be nurtured as used for the benefit of mankind. Protection and regeneration and inherently more desirable in Indian ethos wanton destruction and exploitation. But philosophy and ethics, while important in shaping attitudes, are subservient to survival instincts. The noble sentiments expressed by our philosophers and saints, and embodied as objectives in our Development Plans, have been overtaken by the pressure of population growth and development needs. Population pressure and poverty together form a potent combination that can undermine all ethical considerations and can severely distort the valuation of the interests of the present generation relative to that of the future. The resultant severe shortening of the operative time horizon and the ready availability of technologies which can quickly and cheaply meet immediate needs through exploitative use of resources form an unholy nexus
which is difficult to resist. Our best-laid plans and comprehensive legislative framework for environmental protection have not succeeded in reversing the deterioration in our environmental endowments of air, water, solid and life forms.

Today major rivers in our country are facing pollution due to sewage disposal and industrial effluents flowing directly into them. Besides these, the non-point sources of pollution, which are even more difficult to monitor and control, include agricultural non-offs, dhobi ghats and cattle wallowing. As a result of pollution, even the river Ganga is unfit for bathing at some stretches. The country's other water resources are also facing problems of pollution leading to high occurrence of water borne diseases. Even today about 200 million people in India do not have access to safe drinking water. Most of our water resources are polluted with untreated/partially treated wastes from industry, domestic sewage and fertilizer/pesticide runoff from agricultural fields. About 1.5 million children die each year due to water related diseases only. The problem of water pollution is being faced both in river water as well as ground water. The main cause of groundwater pollution is leaching and percolation of pollutants, including heavy metals, from industry. Contamination from agricultural runoff contains high amounts of pesticides and insecticides. Lack of proper sewage treatment and disposal facilities is another problem that is contributing to water pollution. About 75% of the wastewater produced is from the domestic sector, but the sewerage facilities are inadequate in most cities and almost absent in rural India. Only 25% of class I cities have wastewater collection, treatment and disposal facilities. Only 20% of wastewater generated in class I cities and 2% in class I towns is treated. The problem is compounded by depletion of the water table due to over-exploitation of ground water. Ground water pollution is a matter of serious concern as 80% of domestic water needs are met from this source. Despite our increasing green consciousness, hazardous wastes are being dumped on land indiscriminately, coastal areas and deep seas are getting increasingly polluted, pesticides and other chemical pollutants continue to contaminate the rivers and ground water and noxious gases are being continuously released into the
atmosphere. We are consuming fossil fuels at higher rates to meet the energy
demands, arising out of increasing economic activity. Deforestation and
degradation of natural habitats is yet another issue of concern. The increase in
noise levels leading to noise pollution is quite alarming and if unchecked may
impair hearing ability. Noise pollution has reached a high level in most of the
metropolitan cities in many residential and commercial areas and even in the
'silent zones'. The problem of land degradation has arisen mainly because of the
changes in land use pattern over the years, wherein large tracts of fertile
agriculture and forest land have been diverted for urbanisation and settlements.
Excessive soil erosion with consequent high rate of sedimentation in the
reservoirs and decreased land fertility has become a serious environmental
problem with disastrous economic consequences. Rural areas are facing another
threat, that of indoor pollution. Studies indicate that the levels of pollutants inside
rural houses, especially in the kitchens, are quite significant due to poor
ventilation and use of thermally inefficient chullhas as also due to use of poor
fuels such as cow dung, fire wood, kerosene etc. These lead to higher indoor
concentrations of pollutants, adversely affecting the health of people, especially
women and children. Air has got so much polluted that there is increase in the
diseases like Asthma and bronchitis. Forests are disappearing at a very fast pace
which affects total environment processes including rain.

One must understand that economic activities and development have a
direct bearing on the natural and environmental resources. Excessive and
indiscriminate use of natural resources and energy leads to pollution. Activities
involving processes like extraction, manufacture, transport, consumption and
disposal add some stress to the environmental and affect its assimilative capacity
by adding wastes to it. Scientific and technological developments undoubtedly
offer opportunities to change and shape the environment of man to meet his need
and aspirations. At the same time, they may also constitute grave dangers, if not
properly controlled. It is universally admitted that over-industralisation and
indiscriminate application of science and technology to economic development
have been the principal cause for the continuing and accelerating impairment of the quality of the human environment. When such activities are carried out inefficiently, the impact is much higher.

Since environmental problems can be traced to many causes, their solution will not come easily. Most of these problems are further complicated by the fact that merely national approaches, though important, are inadequate to provide lasting assurance of prevention and control of environmental pollution. Most forms of environmental degradations are transnational in scope and must be dealt within a modern system of international law suitable to needs of today's interdependent world community. United States of America is the largest producer of polluting gases and other pollutants but its adamant behaviour of back tracking at international platform has always blocked the way for a strict environment protection legal regime, which is not a welcomed gesture. International law and sanctions are really very weak as far as environmental protection matters are concerned. The developed countries wants to maintain their fast pace of development without caring for the environmental outcome. The United Nations has really become a puppet in the hands of group of developed nations.

There are more than 200 Central and State enactments which have a direct or indirect bearing on environmental protection. In legal matters we continue to follow blindly an inherited tradition, legislating laws after laws in a set pattern without ever enquiring whether such laws are the right instruments for the purpose. However, the extreme poverty of our jurisprudence is not the only factor that hampers investigation concerning environmental laws. By their very nature these laws pose problems all of which are not legal-such as socio-economic problems. Hence their study demands an expertise which lies outside the purely legal domain. It is only when we study the laws in their socio-economic setting together with the legal theories that back them; the appropriate measures for their
improvement can be suggested. This research work undertakes such a task.

After careful study and analysis of environmental laws major shortcomings can be seen as, many of these laws are outdated; they lack statements of explicit policy objectives; they are mutually inconsistent; they lack adequate provisions for helping the implementing machinery and there is no procedure for reviewing the efficacy of the laws. Our environmental laws operate on a deterrent theory of criminal justice administration. However, the retributive values of the penalties fail to deter because there is a total disparity between retribution and economic benefits of non-compliance. The laws fail to provide any incentive for compliance since the deterrent theory on which they operate does not take the cost-benefit analysis into account. From the economic point of view, the laws are counter productive. They either slow down production or provide the individuals and industries scope for indulging in more corrupt practices, such as maneuvering the activities of the concerned Boards through economic or political malpractices. It is easier to punish individuals but very difficult to punish intangible things such as corporations or groups such as slum dwellers, specially, when they are not properly organized. Successful application of criminal law presupposes the possibility of identifying violaters. It is not always easy in environmental problems to lay responsibility on a specific person or body.

The country today lacks integrated spatial planning (national/state/regional/town level). The planning is mostly limited to urban areas and even in these areas the master plans do not taken into consideration the environmental aspects and the developmental needs are not well reflected. Also, the master plans are several times are violated. Lack of planning is leading to unbalanced development thereby forming uneconomical agglomerations, ecologically degraded areas and over exploitation of resources. The developmental activities tend to be haphazard and uncontrolled thus leading to over use, congestion, poor
land use compatibility etc. Presently, the environmental aspects are not usually considered while preparing master plans and the process is skewed towards developmental needs. For all developmental activities, a crucial input is land and depending on the activity a specific land use is decided. The environmentally relevant land uses are trade and commerce, housing construction, transport facilities (road, rail and water), utilities (water - surface and ground etc.), refuse/hazardous waste disposal facilities, wastewater installations, quarrying and mining, power generation, forestry, recreation and tourism etc. These land uses are likely to have impact on the environment. There is a need for assessment of the land in terms of not only the economic aspects but also the environmental aspects and the land uses are accordingly to be allocated so that the natural environment and ecological balance is not disturbed. Every project has to be assessed from the point of view of the sustainable development. It is ideal that this should be done rather at the level of initial decision-making than at the stage of review later on. The pollution control boards, considered at present as the nodal agency for the protection of environment within a state, are lacking in expertise and functional freedom as their constitution is overshadowed by officials and interest representation.

As far as common law and general laws provisions for environment protection are concerned, it can be said that they are not very much effective. In private actions on public nuisance, special injury is to be proved if the action is to succeed. The special injury suffered by the plaintiff must be different in kind from that suffered by the general public and not just different in degree. If the courts insist on this, the nuisance action by private individuals against pollution will be less effective. The common law action against trespass is not suited to deal with the general issue or questions of environmental degradation in view of the fact that it requires some direct physical interference by one against the person or property of another. Environmental degradation tends, generally, to be indirect in its nature and effect. Person aggrieved by it may find it difficult to establish a successful legal action for trespass. The requirement which an
aggrieved party has to prove, that there is a casual connection between the
negligent act and plaintiff's injury makes it extremely difficult for the plaintiff to
succeed in action for negligence. Courts are already over burdened and do not
have much time left to evolve new principles. Special 'self sufficient' and
'efficient' environment related laws must be famed by legislature to help and
guide the courts in speedy disposal of cases. The inherent inability of courts to
deal effectively with issues of a scientifically complex nature is another problem.
In environmental degradation situations, often a considerable time elapses before
symptoms of disease caused from pollution become manifest. It may be
impossible for even the most alert judge to assimilate and evaluate the evidences.
There are other difficulties like high cost of litigation, limited administrative
capabilities etc. which makes judiciary an unfit organ to provide adequate
remedies. The power is vested in executive magistrates for giving direction and
orders under general laws. These officials are very much busy with their routine
job and hardly find any time to think about the importance of better protected
environment. It is clear from the facts of the case in Ratlam Municipality v.
Vardichand, that administration is really not bothered about general law remedies
for environmental protection to common citizens of India.

The legislature passes a law not to be locked in a statute book but to attain
its prescribed objectives and therefore, the law has to be seen and interpreted in
the correct perspective. But the concerned governments, on the contrary, not only
violated the norms and procedure but also adopted sidelines and bypasses to
achieve their own objectives. In this game mostly the greenery, the very basis of
the existence of life, was given a go by to accommodate the non-forest purposes
under one or the other pretext. The court at time came down heavily against such
illegal actions and exposed and decried the dictatorial approach of the
government. But by and large the erring citizens/ officials/ governments were
hardly made accountable, encouraging non-compliers to become habitual
offenders and adopting an attitude of 'let what may come'. This frustrates the
exercise undertaken by the legislatures. In this non-compliers' world, the
legislatures must equip themselves to take a stock of the fate of their efforts rather than remain a spectator in such illegal games. If this is not done we will be heading towards an environmental lawlessness. It is time that the sanctions of contempt of the house must be used against the habitual non-compliers. Further, the house in order to maintain its credibility must oversee, through its select committee of ‘Green Members’, an effective implementation of the output of its legislative powers.

The function of the judiciary is to administer justice and the concerned litigation parties are required to comply with its orders. The case law shows that their orders/directions had been subjected to more disobedience rather than compliance. Further, the erring governments, corporations, industries and individual polluters ran from court to court waiting for the hot iron to cool down or expecting, at some stage, a favourable order in their case to be delivered. The result has been that the governmental actions have attracted large number of litigations. On the top of this there was non-compliance with the judicial process and at time delaying tactics by the concerned governments. A soft approach in these matters has put at stake the credibility of the Indian judiciary.

The selfish politics is another aspect which has, like in other walks of life, also crept in the management of environment, giving a predominant position to development. It is the public spirited people and lovers of nature, it may be appreciated, who brought to light the politician’s ‘atrocious behaviour’ in the economic game, played for either personal gain or enriching the voter’s bank. At times the court took a serious view of the matter but on the other, the involvement of ‘human problem’ influenced the court to adopt a pro-development approach. In the entire research work one thing clearly emerges: it is the judiciary that exposed the misdeeds of the government, companies and other polluters and this could be possible because of the efforts of the non-governmental organizations and public spirited people. The duo deserves appreciation.
SUGGESTIONS

1) There should be a regular review of environmental laws by legislature in the light of problem faced by the executive in their implementation. The legislative measures can succeed only through the involvement of industries and people. Therefore, industries and chambers of commerce should be given a prominent role in environmental decision making.

2) In this non-compliers’ world, the legislature must equip themselves to take a stock of the fate of their efforts rather than remaining a spectator in such illegal games. It is the time that the sanctions of ‘contempt of the house’ must be used against the habitual environmental offenders and non-compliers. Further, the house in order to maintain its credibility must oversee, through its select committee of ‘Green Members’, an effective implementation of the output of its legislative powers.

3) There must be dedicated research and development facility for the production and use of environmental friendly technologies. Cleaning the environment has the potential of acquiring the status of an industry but would require large-scale promotion of research and development. There exist a number of possibilities in various sectors where pollution levels could be reduced but these suffer for want of advanced technologies, which could only be developed through research. In the energy sector, new technologies for environmentally sound energy systems, including new and renewable energy sources and nuclear energy, improving energy efficiency, improving environmental management in mining are potential areas for research where substantial reduction in pollution could be achieved. In the transport sector, which contributes greatly to air pollution through vehicular emissions, research for technology improvement by developing efficient multi-valve engines, catalytic converters and microprocessors to maintain air fuel ratio etc could yield good results in abating pollution. Enhancing productivity and minimising wastes through efficiency improvement programmes would lead to substantial reduction
in waste generation thereby directly reducing pollution. The need to develop cleaner production systems in many processing industries and improving productivity acquires importance for research. India has a large potential to generate electricity through wind and solar power. In fact solar electricity generation technologies are promising future options for renewable energy supply. An outcome of greater use of wind and solar technology would be the mitigation of carbon emissions. These environmentally friendly technologies are only at a nascent stage of development and it would require adequate research inputs to perfect these technologies. These are some of the key areas where research in our country should focus in the coming years.

4) The judiciary must see that the dormant penal sanctions under the different environmental laws against the ‘Offences by Government Departments’ are put to adequate use so that officials playing foul with the Indian environment, are made accountable. The weapon of ‘contempt of court’ should be activated against the naked violations of the court’s orders by the habitual environmental offenders who must be booked and taught a lesson. Moreover, justice requires the judiciary to keep track of implementation of its judgments/orders through an authority/agency created by it which shall apprise the judiciary in this regard from time to time.

5) Environmental Courts must be established in every district on the lines of Consumer Forum. There must the provisions of ‘whistle blowers’ in environmental complaints and their whereabouts and other information must be kept secret.

6) An ombudsman may be established by the parliament to oversee the functioning of the governmental environment agencies and make erring authorities responsive and responsible towards their constitutional environmental goals.
7) The environmental regime must be reoriented and strengthened with more expert mechanisms to deal with the larger spectrum of problems hitherto unattended by law. One pollution control board situated in state capital cannot be expected to properly enforce environmental laws. Therefore, enforcement of environmental laws should be given to local bodies because they exist in every big or small city and villages. The enviro-illiterate officials working in such local bodies have to be given enviro-legal education and public opinion must be activated to build up an enviro-friendly pressure groups.

8) 'Right to Information' should be made part of every pollution control law. The measures taken for, and the documents relating to, control of pollution should be open to public scrutiny.

9) All necessary, possible and effective measures should be taken to stop deforestation and save agricultural land. There should be ‘vertical’ development of official and residential buildings than ‘horizontal’. This implies, we must adopt such kind of building designs, which can sustain higher number of levels of residence in smaller area, so that more area can be used for greenery and other plantation. Only barren land should be used for development projects and establishing special economic zones. Agricultural land should not be acquired by government for industrial purpose.

10) Waste management policy should form an integral component of licence application and should be such as to minimize the generation of waste. No new residential location should be allowed to develop without the provisions of waste treatment system in place.

11) Self help is the best help. People should be encouraged through mass education campaign to fight against environmental pollution. The government should launch mass education programme in big way specially in suburban areas and slum clusters where problem cannot be
effectively tackled with the rudimentary legal enactments. The people must be educated of their environmental rights as recognized by the Supreme Court by organizing seminars, conferences, debates, discussions and legal aid clinics. Role of NGO’s working in environmental field must be recognized and encouraged. More resources should be provided and made available to voluntary organizations.

12) There should be a determined effort to clearly redefine the offences coming under environment laws being one of criminal liability to that of being a liability in torts.

13) Environmental problems should be made political issues and should form part of the election manifesto of political parties. Only the environment conscious and responsive person should be elected to the house. This will ensure the responsibility of elected candidates towards environment protection.

14) There must be mandatory environmental law teaching at every level of studies so that every one get conscious of their environmental rights and can help in protecting environment.

15) Vehicles are the major source of pollution. People must be motivated to use ‘Pool System’, where 3-4 persons working at same or nearby place can travel in same vehicles instead of their individual vehicle. There must be stringent check on the agent who provides ‘Pollution Under Control’ Certificates to vehicles.

16) More and more people specially the youth should be motivated to plant trees. There must be some reservation for those who have got planted and maintained properly, a minimum number of plants.

17) Every university student should be asked to plant and maintain at least one tree in and around campus. There should be some grades or extra marks in student’s Detail Marks Card.
18) Government must motivate people to use hybrid cars and other vehicles. There should be subsidy provided for the purchase of hybrid or electric vehicles. Even the government should provide incentives to the users of hybrid vehicles.