Towards Better Regime of Environment

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Environmental protection implies two aspects. Natural resources such as land, soil, water, forest, wild life and fisheries are to be conserved. Secondly, pollution of the environment by natural or other causes will have to be controlled effectively. Obviously environmental protection laws cover not only pollution control but a wider area.

With the creation of Department of Environment, and now Ministry of Environment and Forest, at the Centre, which plays an advisory, co-ordinating and 'watch dog' role, our environmental protection activities have received an impetus. A nodal agency is thus created to look at the problem, not from narrow angle but in a wider and co-ordinating perspective. No doubt the innovation in bringing forest and environment under one ministry will ease the pitch for an integrated approach towards environmental protection.

Provisions in the Constitution

World consciousness on the need for preservation and enhancement of human environment was aroused only at Stockholm in 1972 when the United Nations conference† had seized

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† The conference emphasized that man's capabilities to transform his surroundings must be wisely used because wrong and heedless use can do incalculable harm to human beings and the human environment. The developing countries must direct their efforts to development balancing their priorities with the need to safeguard and improve environment.

(f. n. contd.)
of the problem and chalked out action plan for member States to follow up. No wonder the Constitution of India, made more than two decades before the Stockholm declaration, had not envisaged in its scheme of distribution of legislative powers laws relating to environmental protection although the power to legislate on one or the other aspect of this subject may spring from a few legislative entries in the Constitution. The Constitution (42nd Amendment) Act 1976 is a landmark in this respect. Enabling the centre also to enact laws, it transferred to the concurrent list some areas which originally were left to the states to legislate on. Thus the centre has now power to make laws on forest, wild life and population control. The forty second amendment not only laid down protection and improvement of environment and safeguarding forest and wild life as a directive principle but also imposed on every citizen the fundamental duty to improve the environment including forest and wild life. The states had already the power to make laws on certain aspects of environmental protection, such as public health and sanitation, agriculture, land and fisheries. It is true that ‘water’ also comes under the State list. But Parliament passed a law

The conference stressed the need to check the ever increasing population and pointed out that the defence and improvement of human environment for the present and future generations are an imperative goal for mankind. For the text of the Stockholm declaration and principles, see British Institute of International and Comparative Law. Selected Documents on International Environmental Law. (1975), pp. 3-5.

3. Id., Entry 17-B.
4. Id., Entry 20-A.
5. Id., Article 48A.
6. Id., Article 51A(g).
8. Id., Entry 14.
9. Id., Entry 18.
10. Id., Entry 21.
11. Id., Entry 17.
for the control of pollution of water on request from States under Article 252. Such laws of strange parentage shall be applicable only to those states that have asked for them or to the states that adopt them by resolution in their legislature. The need for amendment of the Constitution by placing ‘environmental protection’ as a specific entry either in the Concurrent List\textsuperscript{13} or in the Union List\textsuperscript{14} had been stressed in the past. But no step has so far been taken in this direction.

Every legislation signifies the quintessence of values which individuals, social institutions and the State consider as fundamental and necessary in their relation with the area for which the legislation is initiated. In other words, every legislation contains a policy that motivates it. No doubt environmental legislation should reflect a proper environmental policy formulated in the crucible of public opinion and conditioned by national needs, developmental perspectives, social mores and social values. In a modern developing society, with the advancement of technology and scientific knowledge on the one side and the perplexing degree of poverty of the rural people on the other side, there are conflicts and confusion in approaches, ideas and preferences towards problems facing the environment.\textsuperscript{15} It is necessary that such conflicts are reconciled before designing environmental legislation and tailoring decision-making processes having an environmental impact.

\textsuperscript{13} An expert committee headed by N. D. Tiwari and appointed by the Department of Science and Technology, Government of India, made such a suggestion. See Report of the Committee for Recommending Legislative Measures and Administrative Machinery for Ensuring Environmental Protection (1980), p. 24 (Hereinafter called the Tiwari Committee Report). For earlier suggestions in this respect see P. Leelakrishnan, “Statutory Control of Environmental Pollution”, (1979) Cochin University Law Review, 141 at 164.

\textsuperscript{14} Dr. Nagendra Singh was of the view that this should be an entry under the Union List. See Tiwari Committee Report, p. 64.

Legislative attempts

A close look at the legislative attempts at environmental protection in the past does reveal a dismal picture although a silver lining is seen in the latest enactment, namely, the Environment (Protection) Act 1986

1. Islands of odd provisions

Our policies towards environmental questions have been lying dormant in isolated islands of odd provisions of legislation that laid more emphasis on other values. The Criminal Procedure Code, the Civil Procedure Code and the Indian Penal Code have certain provisions for action against public nuisance. Violation of environment being public nuisance these provisions can be used for the purpose of protecting the environment. Such an attempt has been made in the remarkable decision of the

16. Act 29 of 1986, hereinafter called the Environment Act. The Act, as its preamble says, is to implement the decisions of the Stockholm Conference (see note 1 supra) in so far as they relate to the protection and improvement of environment and prevention of hazards to human beings, other living creatures, plants and property.

17. S. 133 of the Criminal Procedure Code empowers an Executive magistrate to make an order of removing public nuisance that occurs in a public place, or way or that is caused by a trade or occupation injurious to the health or physical comfort of the community. Ss. 134-143 are provisions for follow up action to an order under S. 133. An order under S. 144 can also be made to prevent any injury or danger to human life, health or safety or a disturbance to public tranquility.

18. S. 91 of the Civil Procedure Code 1908 makes it possible for the Advocate General or for, with leave of the Court, two or more persons to sue for relief against public nuisance.

19. Under S. 188 disobedience of an order by a public authority is an offence if it causes or tends to cause danger to human life, health or safety. Fouling water in a public spring or reservoir (S. 277) and making atmosphere noxious to health (S. 283) are offences under the Indian Penal Code.
Supreme Court, Municipal Council, Ratlam v. Vardhichand which gave a new life to section 133 of the Criminal Procedure Code and transformed it into a potent weapon in fighting environmental pollution. This pronouncement activising a comparatively unimportant provision in the law of criminal procedure had far reaching impact in combating environmental pollution and protecting the environment. In a recent Madhya Pradesh decision, Krishna Gopal v. State of Uttar Pradesh lamenting over the unsatisfactory position of sanctions against environmental crimes and the lack of environmental consciousness, the Indore Bench invoked this provision against noise pollution and went a step ahead in the path opened up by Ratlam.

20. A.I.R. 1980 S.C. 1622. The Supreme Court looked askance at the lethargy and carelessness of the municipality in not providing facilities of public latrines and drainage and saving the residents from the nuisance of stench and odour caused by the people easing out in the open and of malodorous liquids flowing from alcoholic plants. The court held that under section 133 of the Code, the District Magistrate has the power to remove this nuisance and ordered that within six months the municipality should take up positive measures.

21. Supra, n. 17.

22. (1986) Cr. L.J. 396. A glucose saline factory with a boiler working round the clock emitted smoke and ash and produced noise. This disturbed the sleep of a heart patient, living close-by, whose wife lodged a complaint with the subdivisional magistrate. Finding that the working of the factory in a residential area was public nuisance the magistrate invoked S. 133 of the Criminal Procedure Code and ordered closure of both the boiler and the factory.

23. "A vagrant committing a petty theft is punished for years of imprisonment while a billion dollar price fixing executive or a partner in a concern as such the petitioner comfortably escapes the consequences of his environmental crime" id. at p. 400.

24. "The Society is shocked when a single murder takes place but air, water and atmospheric pollution is merely read as a news without slightest perturbation till people take ill, go blind or die in distress on account of pollutants that too resulting in the filling of pockets of a few" ibid.

25. They are responsible to construct public latrines, to keep them clean, to provide means of disposing rubbish, filth and carcasses, to see that industrial activities do not result in too much pollution to land... (f. n. contd.)
The local bodies legislation, which is in every State more or less similar, provides the example of feeble attempts at maintaining a clean environment. Amidst various other responsibilities and duties, and without sufficient resources, infrastructural facilities and a central agency to co-ordinate and supervise the activities, municipal corporations, municipalities and panchayats are given powers to dispose of domestic wastes which even according to Digvijay Singh, former Deputy Minister for Environment in the Government of India, cause eighty per cent of the total environmental pollution in India.

2. Law fiddles while forest habitat burns

Laws that would have been made for the protection of environment had been enacted with less emphasis on environmental values. The Forest Act 1927, a Central legislation, is an illustration. It had its origin in the old British colonial era. As its preamble declares, the Act looks at forest rather as a source of revenue than as a decisive element in eco-balance and conservation. At first blush it may appear that the idea contained in the law for reservation of forest is to maintain environmental values. In fact this is not so. The main concern of the bureaucracy created under the Act was revenue and forest produce. The Act, by adopting the policy of reserving forest deprived the tribal people of their age-old rights and

and water, to protect citizens from noise pollution, to take necessary steps to fill in. or treat the water in the pools, ditches, drains and cess pools which breed mosquitoes or cause nuisance and to protect the people from nuisance from dusts, smoke and unwholesome odour. For a typical study, see Ss. 190, 200, 278, 301 and 303 of the Kerala Municipal Corporations Act, 1961.

27. Act XVI of 1927.
28. "Whereas it is expedient to consolidate the law relating to forests, the transit of forest produce and duty leviable on timber and forest produce" (Emphasis added).
privileges, commercialised forest for the purpose of supplying raw materials for the forest based industries and made an inequitable privatisation and distribution of common property resources in forest in favour of a small elite and against rural and tribal poor whose very existence was dependent on those resources. The same commercial attitude continued to govern the holders of public power for a long time. The attempt to repeal the 1927 Act with another law became abortive as the new bill had to be shelved at the teeth of opposition to the same neo-colonial policy in which it was rooted.

It is also doubtful whether in spite of pious declarations in the Objects and Reasons to its Bill, the Forest (Conservation) Act 1980 will yield a foolproof mechanism for conservation of forest. This Act prohibits use of forest for any non-forest

30. "Tribals looked upon forests, the nature's gift, as their own property and they had unfettered freedom to do as they pleased and the way they pleased. But the situation continued to change after the enactment of the Indian Forest Act. The master of the Forest, the tribal, is now no more than a wage earner", V. S. Saxena, "Social Forestry in Tribal Development" in Desh Bandhu and R. K. Garg (Eds.), Social Forestry and Tribal Development (1986), p. 39.


34. For details, see Desmond D'Abreo, op.cit., at pp. 8-27 and 44-48; A Citizen Report, id., at. 54, The Hindu, May 21, 1982, at. 8.

35. "Deforestation causes ecological imbalance and leads to environmental deterioration. Deforestation has been taking place on a large scale in the country and it had caused wide spread concern".


37. Id., The only prohibition contained in S. 2 is that prior approval of central government is necessary before any state government or
purpose without prior sanction of the central government. However, the explanation to the term 'non-forest purposes' may present a dubious position. Clear felling for reafforestation may not require prior approval. It may look as though unscientific reafforestation policy, for instance felling of old and shade trees in order to plant seedlings which take decades to grow up to mature trees, will continue to be valid under the law.

3. Pollution control law stoops: not to conquer but to be conquered

The laws which are exclusively designed for control of pollution do not also strike an encouraging note. Take Water Act as a typical example. Acting as mere appendages of the state government departments with too much official representation, scanty resources and expertise and without coercive and sanctioning powers, the state boards envisaged under the Act as the model agency for pollution control become helpless and impotent at the face of mounting violations of the law. The authority can pass an order directing that any reserved forest shall cease to be reserved or that any forest land may be used for non-forest purpose. There is no safeguard against the central government yielding to pressures from state governments and rendering approval for a use of certain areas for non-forest purposes. There can be, under S. 3, a Committee to assist the central government. But this committee has only advisory functions. Indian Express (Cochin) 28th November, 1983.

38. Explanation to Secion 2(ii) of the Forest (Conservation) Act, 1980 shows that term means "breaking up or clearing of any forest land or portion thereto for any purpose other than reafforestation".

39. Water Act is one. Air (Prevention and Control of Pollution) Act 1981, hereinafter called the Air Act, is another.

40. Tiwari Committee Report, 20


42. Id., at 182-183.
provision for deemed consent, the position of the board as a mere prosecuting agency, the proverbial delay and procrastination in prosecuting the offenders, the protracted proceedings for restraining apprehended pollution, the absence of public participation in the decision-making process and the shroud of secrecy attached to the whole process do present a disappointing spectacle. The law rather leans heavily on the side of polluters or potential polluters than acts as a vehicle of environmental protection in the interest of the general public.

The new environment legislation

A new law has been enacted, the Environment (Protection) Act 1986, hereinafter called the Environment Act. As the Statements of Objects and Reasons to the Environment (Pro-

43. Water Act. Strangely enough, S. 25 (7) of the Water Act provides that consent for discharge of pollutants shall be deemed to have been given unconditionally on the expiry of a period of four months of the making of an application unless the consent is given or refused early. Under the British Law if within the period of three months of application, the authority has not given or refused consent, the authority shall be deemed to have refused consent. Cf. section 34(2), Control of Pollution Act 1974 (Britain).
44. Id. Under S. 32 of the Water Act the board has the power to take positive action of removing pollution caused by accident or other unforeseen act and to issue orders prohibiting a person concerned from discharging polluting materials into the stream. But the board does not have this power under S. 33 if such a pollution is apprehended. It has to approach the court for orders. This puts the board in an awkward position. The Act professes to apply with equal force to the concepts of both prevention and control. But preventive aspects are not given due weight in an instance of apprehended pollution.
47. The relevant portion reads,

“Although there are existing laws dealing directly or indirectly with several environmental matters, it is necessary to have a general legislation for environmental protection. Existing laws (f. n. contd.)
tection) Bill indicates the Act was passed with a view to covering more areas of major environmental hazards and to bring in a general legislation for environmental protection.

Concentration of powers in the hands of the Central government is the main feature of the new law. The responsibility for protecting and improving the environment is now vested in the central government. The power of an officer authorised by the government to issue directions to any person for the purpose of regulation, closure or prohibition of an industry, operation or process is a potent weapon created by the new law. The direction can extend to stoppage or regulation of the supply of electricity or water or any other service to an industry. Immediate remedial action for the prevention against apprehended pollution is another significant contribution of the Environment Act and is definitely an improvement over prior legislation. Seizure of any equipment, industrial plant or generally focus on specific types of pollution or on specific categories of hazardous substances. Some major areas of environmental hazards".

49. Environment Act. S. 3(1) says, "Subject to the provisions of this Act the central government shall have the power to take all such measures as it deems necessary or expedient for the purpose of protecting or improving the quality of the environment and preventing, controlling and abating environmental pollution". (Emphasis added).

50. Id., see the emphasized words.
51. Id., S. 5.
52. Ibid.
53. Id., S. 9. In case of an accident resulting in discharge of environmental pollutants in excess of the standards fixed or when such an accident is apprehended a statutory duty is cast on the person in charge of the place where the accident has occurred or is apprehended to occur, to mitigate or to prevent, as the case may be, the environmental pollution resulting from such accident. The person is also bound to intimate the fact of the apprehension or occurrence of the accident to the prescribed authorities and to render assistance. The authorities are empowered to take measures to prevent or mitigate the pollution and to recover expenses from the person concerned.

54. Supra, n. 44.
other objects for the purpose of preventing and mitigating environmental pollution, the power that lies hidden as a small tag to the ‘entry and inspection’ clause, is obviously of high utility and is a sharp weapon in the hands of the enforcement personnel. Lastly the new Act raises the penalties against violations and lays emphasis more on monitory sanctions than on imprisonment.

The title of the Act gives a false impression that the law signifies the hallmark of a change in emphasis from pollution control to environmental protection. Even a cursory glance at

55. Environment Act. S. 10(1)(c). The relevant portion reads:

“Subject to the provisions of this section, any person empowered by the central government in this behalf shall have a right to enter, at all reasonable times with such assistance as he considers necessary, any place . . . .

(c) for the purpose of examining and testing any equipment, industrial plant, record, register, document or any other material object or for conducting a search of any building in which he has reason to believe that an offence under this Act of the rules made thereunder has been or is being or is about to be committed and for seizing any such equipment, industrial plant, record, register, document or other material object if he has reason to believe that it may furnish evidence of the commission of an offence punishable under this Act or the rules made thereunder or that such seizure is necessary to prevent or mitigate environmental pollution (Emphasis added).

56. The power of seizure is generally provided with a view to procuring evidence in support of a prosecution. Provisions of the Water (S. 23) and Air (S. 24) Acts are on these lines. On the contrary the seizure clause in the Environment Act is a step ahead id., see the emphasized words.

57. While the Water and Air Acts contain different penalties for differently graded offences, the Environment Act contains a blanket provision for all offences. Violation of any provision of the law, rules, orders or directions are offences punishable with the maximum period of imprisonment of five years with or without fine extending to one lakh rupees (S. 15). In the case of continuance of offences after a conviction additional fine upto Rupees 5,000/- may be imposed for each day. When the offence continues beyond one year the offender is punishable with imprisonment for a period of seven years.
the various provisions reveals that but for the mandates\textsuperscript{58} in the preamble and S.3(1), the Environment Act does not provide for a mechanism of carrying out the wider objectives of protecting and improving the environment although a wider net is drawn over more pollutants than were covered by other laws. Probably it is rather the sordid hangover of the Bhopal catastrophe\textsuperscript{59} than the firm determination to protect and improve environment that is the inarticulate premise on which the government initiated the new legislation which incidentally deals with the problems of industrial emissions and hazards. The definitions of ‘Environmental Pollutant;\textsuperscript{60} and ‘Environmental Pollution;\textsuperscript{61} are considered to be disappointing by scientists\textsuperscript{62} who have a holistic view of the environment when they hear about an environmental protection law. According to such scientists, matters like heat, radiation and plasma and organisms like bacteria are not included in the definition of pollution and not only the addition of something but also reduction of certain elements from the environment will amount to pollution.\textsuperscript{63} The definition clause does not mention sound or noise as pollutant even though the central government is given power to make rules for maximum allowable limits of noise.\textsuperscript{64} It may be said that the concept\textsuperscript{65} of protecting and improving the quality of environment may take in measures for compacting and containing any kind of pollution

\textsuperscript{58} Supra, nn. 15 and 49.

\textsuperscript{59} For the different dimensions of the problem involved in the Bhopal gas leakage, see generally Alfred D’Grazia, Cloud Over Bhopal (1985).

\textsuperscript{60} The Environment Act, S. 2(b) “any solid, liquid or gaseous substance present in such concentration as may be, or tend to be, injurious to environment”.

\textsuperscript{61} Id., S. 2(c) “the presence in the environment of any environmental pollutant”


\textsuperscript{63} Ibid.

\textsuperscript{64} Environment Act 1986, S. 6(1)(b).

\textsuperscript{65} Supra, n. 49.
which harms the environment. One may say that this argument is too far-fetched.

A plea is put forward rather to develop liability in tort linking compensation and degree of injury suffered than to determine guilt in a priori fashion. It is also desirable that in order to deter the potential polluters, the quantum of damages should be more than the cost of pollution control. It is said that the prosecutors and courts are hesitant in attaching a criminal stigma to senior corporate executives or managers who are otherwise respected citizens and can hardly be called criminals in usual legal sense. Although the imprisonment as a penalty against pollution hazards may seem to be impracticable, the emphasis in the Environment Act on prohibitive and deterrent fine is welcome until we have a developed system of tort law. However, a strange provision is there in the Environment Act. If the concerned act or omission is an offence under any other Act the offender shall be proceeded against under that Act and not under the present Act. This reduces the deterrent effect of enhanced fine and takes the wind out of the sail of the law. No wonder the Act has been likened to a cobra which, though seemingly fierce raising its head and hissing menacingly, has no venom in its fangs when the jaws are open.

Concentration of uncontrolled and uncanalized power located in whatever agency, whether central government or state government is anathema to a democratic set up and is not

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66. Environment Act, S. 2(a). The definition of 'environment' is in wide terms and 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'.


68. Environment Act, S. 24(2).

69. This is summed up in the assessment of the Environment Act in a seminar held in Ahmedabad by the Consumer Education and Research Centre and Indian Law Institute. See Darryl D'Monte, “Environment Law Has No Teeth”, Indian Express (Cochin) 10th September 1986.
condusive to a well-balanced environmental advancement. Environmental expertise, independent decision-making, appreciation of valid environmental criteria, invulnerability to extraneous influences and possession of sufficient coercive powers do constitute the backbone of an effective environmental protection agency. Under the Environment Act the central government can appoint authorities for exercising and performing the powers and functions only if the government considers it necessary or expedient to do so. The central government may therefore choose to exercise the powers on its own without appointing any agency or authority. It is also possible that an authority may be constituted in one area, an officer appointed in another area and the present pollution control boards conferred powers in still another area. The statute does not lay down guidelines on the nature of the authority or authorities to be created. In the absence of statutory guidelines the agencies can be structurally inexpert, functionally inefficient and thus totally ineffective as the present boards under Water and Air Acts.

**Environmental impact assessment: Need for law**

The importance of an environmental impact assessment before a project is cleared has been emphasized by the Tiwari Committee. At present none of the laws, not even the new Environment Act, makes it compulsory to have an environmental impact study when actions having significant impact on the environment are carried out. It may be that the Ministry of Environment and Forest may, in a few cases of major projects, undertake environmental impact study. But with the scant manpower and facilities and in the absence of a statutory compulsion for interdepartmental co-operation, the Ministry may be in a difficult position to carry out this watch-dog function in relation to thousands of projects proposed throughout the length and

70. *Id.*, Environment Act S. 3(3).

71. *Supra*, n. 41.

72. Tiwari Committee. at 18, para 42.
breadth of the country. The Ministry comes into the picture only if it is called upon to do so. It does not examine projects proposed by private agency.\textsuperscript{73} Moreover, the exercise is not done in the day light of public scrutiny and comment but in the darker recesses of governmental circles impervious to the light of public criticism.

This only shows that we do not have an environmental policy which enables us to strike at the source and thus prevent the evil of environmental onslaughts and that we still follow a policy of trying to absorb the impact of environmental damage already caused. In other words the concept of environmental impact assessment with active public participation in environmental decision-making is alien to Indian law.

The National Environmental Policy Act of 1969, known as NEPA, makes it mandatory to have a prior environmental impact study in the United States. The federal agencies have to include in every proposal for legislation or other major action significantly affecting the quality of human environment a detailed environmental impact statement, called EIS.\textsuperscript{74} States have also enacted laws patterned on the Federal Law.\textsuperscript{75} The requirement of EIS has been extended to private action for which

\textsuperscript{73} \textit{Supra}, n. 33 at 178, 179.

\textsuperscript{74} EIS, as it is popularly called, should contain in addition to "the environmental impact of the proposed action", other details such as "any adverse environmental effects which cannot be avoided should the proposals be implemented, alternatives to the proposed action, relationship between local short term uses of man's environment and the maintenance and enhancement of long term productivity and any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented". See NEPA, S. 102.

\textsuperscript{75} For example, California Environmental Quality Act of 1970. For text see E.L.R. (Statutes & Regulation). 43101-43114. Also see Michigan Environmental Protection Act of 1970, E.L.R. (Statutes & Regulations) 43001 and 43002.
governmental sanction is necessary. Thus in *Friends of Mammoth v. Board of Supervisors of Mono Country*, the California Supreme Court held that a private developer, who proposed a recreational village with living units and shopping facilities, is not entitled to permission until the environmental report is complete. EIS is to be prepared after hearing experts and the public. Draft is published facilitating public scrutiny. The final EIS also is made available to the public. EIS can be challenged in a court of law on procedural and substantive grounds.

Is it not time for us to have a legislation similar to NEPA? It seems that our policy-makers and administrators are not seized of the gravity of the environmental hazards even after the Bhopal tragedy has brought untold miseries to our land. The lessons of Bhopal are many and point to the need of incorporating the environmental impact study in the statute, In the case of ‘Bhopal’ the...
question is whether there had been a detailed prior study of the en-
vironmental impact before Union Carbide was permitted to start its factory in a crowded city like Bhopal, especially when the concerned industry will produce highly toxic materials. The Union Carbide had to seek a licence and get permission from several agencies such as Ministry of Chemicals and Fertilizers, Director General of Technological Development and Ministry of Agriculture, the Central Pesticides Board and many government agencies of the state of Madhya Pradesh. The tragedy of the bankruptcy of the bureaucracy as well as of our administrative process in matters like considering valid objective criteria and granting license is evident from the fact that these stages were passed without a detailed study on the consequences of the installation of the factory in the place where it was located and on the kind of safety mechanisms that have to be built in. It is horrifying news that even the controversial research project of Union Carbide of synthesising and field testing of new chemicals was cleared by the Department of Science and Technology bypassing high level screening committee set up for the purpose. All these teach us a lesson: had there been a statutory duty to have an impact study before permission granting authorities are satisfied of the design and safety mechanisms of the Carbide plant, the worst ever industrial accident in human history would have been averted. This telling lesson seems to have not reached the governmental circles before they initiated the recent

81. V. S. Varma, “Bhopal: Unfolding of a Tragedy”, IX Alternatives (Jan. 1986), 133 at 140. It is said that even in 1969 when the licence for the factory was applied for there were at least 50 bungalows in the site and there was a housing estate set up by the Bhopal Development Authority. Bhopal Railway Station was only 3 kilometers away from the plant, and the area around the station has always been the centre of commercial and trading activities, in addition to being a location for numerous groups of residential buildings.

82. Supra, n. 59 at p. 58.

83. See, ‘Rules were ignored in clearing Carbide Research Projects’, Indian Express (Cochin), 26th December, 1984.
Environment Act. Had it reached them the new legislation would have provided for a mechanism of environmental impact assessment. Location of industrial projects in India is more often than not based on parochial, regional and political considerations rather than environmental factors. Such unhappy situations can be eliminated only by making the environmental impact assessment as a statutory process. A statutory mandate makes it imperative for the decision-makers to give the people-social workers, the environmentalists and the barefooted scientists - an opportunity to express their opinions which can act as an effective check against possible arbitrariness and pave the way for objective environmental decisions.

**Conclusion**

India needs a legislation similar to NEPA. Environmental impact assessment and public participation must be made statutory requirements. The entire process must be amenable to public scrutiny. Review by the judiciary or by an apex Environmental Tribunal should be provided. Will such a procedure result in delay in decision-making and implementation? The delay, even if it occurs, will be counter-balanced by the positive advantages arising from the objectivity and propriety of decisions.

Environmental decision-making is to be done by an independent agency. Such agency has to clear developmental projects and plans having an environmental impact. It seems to be

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84. For an interesting exposition of such a misfortune, see, Darryl D’ Monte, *Temples or Tombs?* (1985), Ch. 7. Location of Rashtriya Chemicals and Fertilizers Limited factory in Thal-Vaishet, a few kilometers away from Bombay, was pointed out by journalists, environmentalists and experts as causing an ecological imbalance of the rural environment which had a self-sustaining economy. But the authorities decided to install the factory in the place without paying heed to these words. The latter story tells that the people were thrown out of their traditional occupations into the insurmountable calamity of mushrooming slums with soaring cost of living. The factory also caused a real threat of pollution to the people of the city of Bombay.
expedient to have a hierarchy of such authorities at the state and local levels with a national body at the centre. The agency should have powers to review environment impact statement as well as to impose conditions under which a project be allowed. It is, therefore, necessary to vest the agency with adequate coercive powers to enforce the conditions.

The decision-making and enforcement authorities under Water and Air Acts do not have adequate enforcement powers. They are not independent or expert bodies. No wonder they failed miserably in discharging their functions. These defects have to be cured by an amendment to the Environment Act.

Criminal sanctions, as experience has shown, are not effective to prevent environmental violations. Instead of dragging questions of environmental violation to a court of law through prosecution, it is advisable to vest the enforcement authorities themselves with powers to impose prohibitive penalties so as to make the cost of violations more than the cost of observance. Only an independent agency which is in no way amenable to the influence of the executive and other interests can exercise these powers in an impartial and objective manner and act as a powerful instrument of environmental protection. It is also highly necessary that this agency should consist of experts in the concerned disciplines such as ecology, law, economics and planning.

The agency should adopt the best practicable means approach in environmental decision-making. 'Best Practicable Means', called bpm, is a method of pollution control based on a cost-benefit analysis. In deciding what measures are to be taken in a particular process or an individual work, a balance has to be struck between the cost and benefits of pollution abatement for industry and society. The bpm approach enables...

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85. For a discussion on bpm, see Royal Commission on Environmental Pollution, Cmnd, 6371, HMSO (1976), paras 16, 17, 48, 82-93, 163-166 and 198-211.
the agency to strike a proper balance between environmental demands and developmental needs.

A comprehensive amendment to the Environment Act doing away with the defects of the existing laws is called for. A statutory agency, expert and independent, equipped with coercive powers and adequate funds, assisted by a strong infrastructure of inspectorate, is the desideratum to render our environmental protection efforts successful.