LAW, SCIENCE AND ENVIRONMENT (1987) Edited by R.P. Anand, Rahmatullah Khan, S. Bhat: Lancers Books, New Delhi, pp. xlii + 297. Price Rs. 275.

THIS WORK¹ contains summary of proceedings and the papers presented at the conference on Environment Protection organised by Jawaharlal Nehru University in March 1985 at a time when memories of the Bhopal gas disaster were fresh. The uniqueness of the conference consisted in getting together experts of several disciplines to consider problems of environment protection in the context of Indian conditions.

In Part I some general issues concerning environment protection have been discussed.² In view of the global character of the problem, it has been suggested that policy formulation should be based on the overall goal of promoting human welfare. Consequently, decision-makers in determining whether an activity should be permitted have to consider "the impact of the activity on natural environment as a component of overall environment, man made and natural"3. There is the need of restructuring human laws in greater harmony with the laws of nature. This purpose could be achieved by collective endeavour through international co-operation. To understand ecological view of the world and develop the ability to manage our planet "we need to combine knowledge of law and science". A National policies should give high priority to creating awareness of environmental problems "energy conservation and environmental always remembering that protection are inextricably interlinked.⁵ These themes have been stressed in other valuable contributions pertaining to environment protection.

Water Resources Management discussed in Part II is of great importance in a predominantly agricultural economy.⁶ Due to seasonal and erratic character of rainfall, water has become a valuable resource in India. There are several laws which regulate the use of water to achieve conservation and environmental protection objectives. Most of the irrigation laws prohibit obstructions to free flow of water to prevent water logging. Yet it has not been possible for States to effectively implement these laws for several reasons. For optimum land use there is need of efficient management of watersheds. The suggestion has been made that parliament should enact a law on soil and water conservation under article 252 of the Constitution.⁷ Water pollution is one of the serious matters of concern. It has created grave

¹ R P Anand, Rahmattulah Khan and S Bhat (ed) Law, Science and Environment (1987)

² Id at 3-28

³ B S Murty, "Environmental Protection Incrementalism Versus Comprehensive Planning", in supra note 1 at 11

⁴ S Bhatt, "Combining Law and Science for Environment Protection", in supra note 1 at 14

⁵ J K Bhattacharya, "Energy Conservation and Environment", in supra note 1 at 26

⁶ Supra note 1 at 31-62.

⁷ Alice Jacob, "An Ecological View of Water Resources Management Laws in India", in supra note 1 at 34-35

health hazards and is continuing to be one of the serious threats to animal life and vegetation. In view of the location of major cities on river banks, rivers have become convenient dumping places for untreated city sewage, industrial effluents and the like. The existing mechanism to control water pollution under the Water (Prevention and Control of Pollution) Act, 1974 has been critically examined in a paper⁸ "wherein it has been suggested that extensive use should be made by Water Pollution Control Boards of courts for preventing apprehended pollution of water in streams or wells under section 33 of the Act.⁹ V.S. Mani¹⁰ considers the problems of river pollution and calls for effective use of existing laws relating to nuisance, negligence and crimes especially section 133 of Criminal Procedure Code to achieve pollution control. The setting up of a National Environmental Agency has also been suggested.¹¹

In Part III measures needed to prevent air pollution have been critically examined.¹² Industrial emissions and automobile discharges have been identified to be the major pollutants. A plea for legislative reform has been made¹³ in the wake of death, disability and distress caused on an unprecedented scale by the Bhopal tragedy. The essentials of mass-line justice have been discussed and it has been suggested that existing procedures regarding access to courts and types of remedies to be made available to victims and their dependants need to be drastically changed. The usefulness of a specialized forum such as an Environmental Division in the High Court is considered. It is however stressed that "this Division must have many judges and they must go through a brief refresher course on environmental law and simplified procedure..." ¹⁵.

Provisions of Air (Prevention and Control of Pollution) Act, 1981 have been critically examined and commented upon in two papers. Although the adoption of this important law has been welcomed as a step in the right direction, it has rightly been pointed out that air pollution cannot be tackled as an isolated problem inasmuch as this law excludes pollution by aircraft and ships as well as radioactive pollution. Environment pollution caused by aviation activities and administrative measures taken in this regard have been briefly touched upon in another paper. Pollution caused by emissions by

^{8.} Bharat H. Desai "Water Pollution Control in India Some Problems of Enforcement", supra note 1 at 54.

⁹ Id. at 59.

^{10. &}quot;Legal Control of River Pollution in India. A Preliminary Inquiry", supra note 1 at 42

¹¹ Id. at 52.

¹² Supra note 1 at 65-125

^{13.} V.R. Krishna Iyer "After Bhopal What: A Call for Creative Legislative Action", supra note 1 at 75.

^{14.} Id. at 85.

¹⁵ Id at 86.

^{16.} T.S. Rama Rao, "Air Pollution Control and Environment Protection in India" *supra* note 1 at 65 and G.S. Sachdeva "Air (Prevention and Control of Pollution) Act, 1981: A Critical Analysis" *Id.* at 99.

¹⁷ C.K S. Raje, "Aviation Activities and Environment Protection in India" supra note 1 at 89

motor vehicles has assumed menacing proportions in India. It has, therefore, been suggested that all motor vehicles manufacturers be required "to manufacture only such vehicles which do not pollute the atmosphere beyond permissible limits" ¹⁸

Part IV of the work contains papers on Land Management.¹⁹ For a long time our forest resources have been depleted at an alarming rate due to heavy demands made on it for cutting down of trees for various purposes. A situation has been created when forests have ceased to perform their ecological function of protecting soil erosion and conserving ground water. The floods and droughts of recent years are an indicator of this malady. It has been suggested that forest departments be reorganised to have two distinct divisions—the divisions of conservation and production.²⁰ These should work in a manner that the goals of maintaining "the quality of the site" and yield of specified quantity of timber and other produce are achieved.²²

The importance of wild life and measures necessary to preserve it have also received attention.²³ Indiscriminate poaching which has taken a heavy toll of species is one serious problem yet to be tackled by the State. The reasons for depletion of wildlife have been deforestation, march of industrialization and erection of dams over vast forest areas. Many valuable suggestions have been made to conserve vanishing wild life²⁴.

The reasons for ineffectiveness of laws governing agro ecosystems have been analysed.²⁵ The planners have failed to appreciate the role of law and legal processes as "resources for responsible and responsive planned development".²⁶ The policy makers do not associate law persons in the making and amendments of the law.²⁷ Consistent with its neo-colonial philosophy the State takes momentous decisions on irrigation, dam construction, soil conservation and the like with the help of technocrats, planners and politicians without regard to peoples participation in developmental programmes.²⁸ This trend has to be reversed if it is intended to implement redistribution and policies of land management.²⁹

The last part of the work on "Emerging Legal Norms" contains valuable essays which are of primary concern to lawyers.³⁰ The contours of emerging

^{18.} P.S. Sangal, "Air Pollution by Motor Vehicles -- Indian Strategy For Control" supra note 1 at 125.

^{19.} Supra note 1 at 129-175.

^{20.} Zafar Futehally, "Issues of Forest Resources Management" supra note 1 at 134.

^{21.} Ibid.

^{22.} Ibid.

^{23.} G.M. Oza, "Wildlife Conservation in India", supra note 1 at 135.

^{24.} Id. at 152

^{25.} Upendra Baxi, "Emerging Legal Issues in the Agro ecosystems", supra note 1 at 155.

^{26.} Id. at 157.

^{27.} Id. at 159.

^{28.} Id. at 168-172.

^{29.} Id. at 174.

^{30.} Supra note 1 at 179-273.

environmental jurisprudence have been visualised in two papers.³¹ There is need of comprehensive legislation of a radical character for control of dangerous undertakings, conservation of natural resources, use of pesticides etc. aimed at imposition of meaningful duties on those who pose safety risks to the society. The new humanist jurisprudence should be expressed "in simple language, streamlined in procedure, and hospitable in offering inexpensive access to justice, early litigative finality and activist legal assistance". The need of creating a cadre of lawyers and judges capable of working with the new environmental law and its policy goals has also been stressed. Constitutional imperatives of environmental protection have been examined.33 The need for conferment of a right to environment in Part III of the Constitution has been felt to overcome judicial vagaries on such an important matter. The theme has further been elaborated by analysing the relationship between environment protection and human rights.³⁴ The two studies also discuss new strategies for environment protection in international sphere by redeployment of industries, coordinated transnational development and safeguarding the right of environment. Problems relating to legal aid in environmental litigation have also been visualized and briefly discussed.³⁵

Publication of this book is timely, and it is hoped that it will generate further scholarly thinking on the subject. Since the publication of this work momentous developments have taken place. The Environment Protection Act, 1986 has been passed and a holistic view seems to have been accepted by our policy makers to tackle problems of environmental protection and allied matters. Public interest litigation has been successfully launched, and the Supreme Court in M.C. Mehta v. Union of India & others³⁶ has passed certain orders regarding the measures to be taken by tanneries in Kanpur by state and municipal authorities for preventing and controlling pollution. This is only the beginning of the great struggle to maintain ecological balance under the stresses and strains generated by several forces at work today.

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^{31.} P.M. Bakshi, "Environmental Law: Some Issues for the Future", *supra* note 1 at 179 and V.R. Krishna Iyer, "Union Carbide's Bhoposhima and Indian Justice in Somno-Coma" *Id.* at 193.

^{32.} Krishna Iyer, supra note 31 at 203.

^{33.} B. Erabbi, "Environmental Protection: Constitutional Imperatives - Indian Experience, supra note 1 at 186 and S.P. Sharma, "Constitutional Law Perspectives for Environmental Protection in India: A Brief Study" *Id.* at 240.

^{34.} J.N. Saxena, "Environment Protection: A Much Neglected Human Right" supra note 1 at 250 and Yogesh K. Tyagi, "An Integrated Approach to Environment Development and Human Rights" Id. at 220.

^{35.} N.R. Madhava Menon, "Nature and Scope of Legal Aid in Environmental Litigation" supra note 1 at 259.

^{36. 1987(2)} SCALE 611: 1988(1) SCALE 55 and 1988(1) SCALE 441.

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