

THE SLUMBERING SENTINELS : LAW AND HUMAN RIGHTS IN THE WAKE OF TECHNOLOGY (1983). By C. G. Weeramantry. Penguin Books, Australia Ltd., 487 Maroondah Highway, P. O. Box 257 Ringwood, Victoria, 3134 Australia. Pp.xii+261. Price £ 3.50: Aust. \$ 9.95.

WHILE THE growth of scientific knowledge and technologies has increased the sphere of influence of human beings on larger parts of the universe, it is always feared that it has encroached on men's own sphere of sovereignty. Weeramantry's book¹ provides a much needed analysis of how the legal framework of human societies have not been able to control the erosion of human rights through the advances in science and technology. As the author states:

I want to show how basic assumptions of the preamble to the Universal Declaration—inherent human dignity, equal and inalienable rights, universality, freedom, justice, peace are threatened by powerful technologies functioning largely free of checks and balances. The disciplines of law and human rights have slumbered when they should have been alert.²

The characteristics of, (i) powerful technologies which undermine human rights; and (ii) legal systems which is aimed at defending human rights are successfully demonstrated by the author, who goes beyond critique and suggests concrete and effective steps that need to be taken urgently by the public, legal and technology systems if the social control on new technologies is to be commensurate with their power to threaten fundamental human rights. In this respect there is a special responsibility on the current generation to take these urgent steps because we live in the one remaining age when something can be done. In our children's time it will be too late, if it is not so already.

It is not a fact, however, that human rights have not been violated in societies with low technological capability. Yet the dangers which arise from modern technology are different because we are so dazzled by technological innovations, that it is often blinded to the social and human dangers that are required to be seen.

The book draws heavily on the experience of countries like Australia where the author teaches law. Probably its only weakness is that it hardly

1. C. G. Weeramantry, *The Slumbering Sentinels: Law and Human Rights in the Wake of Technology* (1983).

2. *Id.*, preface.

discusses the technology—human rights relationship in the newly industrialising underdeveloped countries. The desertification of Africa and Asia are intimately linked with the impact of new technologies of land use, irrigation, fertiliser and pesticide. Resource demands of industrialisation has led to resource depletion for the satisfaction of basic needs. The problems of the encroachment on human rights by technology in the countries of the South are more complex and severe because of two reasons. Firstly, the technological jumps and hence their environmental and social impacts are far more drastic. Secondly, the legal system is colonial in nature; it has not yet evolved to manage even the more routine problems of civil and human rights in a streamlined and honest manner. Under these conditions where the human rights problems associated with technology are more drastic and the incapacity of the legal system to respond is greater, the problem of dealing with technology and human rights is clearly more severe. However, by a thorough and informed analysis of his own context the author has laid the foundation for other professionals from other parts of the world to continue an urgent task of identifying how technology violates human rights and how the legal system must evolve to protect them.

In the chapter dealing with "Human Rights, Law and Technology", Weeramantry sets out the technological advances which will degenerate basic human rights unless the law expands to deal with the problems they pose. The right to human dignity is threatened by medical and information technologies. The right to freedom of thought is threatened by medical technologies and by mind conditioning through media technologies, *e.g.*, subliminal advertising, advertising directed at children, *etc.*; the right to life and health is threatened by environmental hazards; the right to a cultural life is threatened by media technologies; and the right to work by technologies which dispense with labour in both blue collar and white collar jobs. As mentioned earlier, in the global context this list does not exhaust the sources of threat to human rights from technology. However, they serve as an adequate illustrative list to bring out the distinctive violation of human rights by technology and the sources of weakness in the legal system which prevent it from performing its function of protecting human rights.

On Weeramantry's analysis two central features of the legal system account for its weakness in controlling technologies. First is the concept of adversarial litigation in which judges are umpires who decide which of the two parties should win according to the formal rules of the game. They do not determine truth as they see it but determine who should win. The aim of the parties is to seek victory rather than truth.

Two fundamental problems in this approach in the technological context is that the fullest information on the topic under investigation is not sought by the court which rarely is technically informed about the issues involved. Information can, therefore, be manipulated to convenience

and the judges stay ignorant of the manipulation. The crisis has in real life been brought out best by the Bhopal disaster in which everyone including the courts have been at the mercy of Union Carbide to provide information on the nature of the accident, the gases involved, the impact, and the antidotes. Not only are the courts unqualified to make scientific decisions themselves, but also they are dependent on vested interests as a source of scientific information. Thus, the problem is not merely that courts do not look for "truth" but "victory" as Weeramantry points out. The contemporary problem is deeper. There is not one "scientific truth" but a number of "truths". Issues of "safety", "environmental impact", "hazards" are defined on one criterion by those who threaten the environment and human rights. It is defined differently by those who struggle for safeguarding human rights. While Weeramantry argues well about the scientific and technical inadequacy of courts, he does not adequately bring out issues in the politics of science, which determines what information the courts will search for. There is a clear demarcation emerging between special interest science and public interest science and the conflict between these two is reaching the courts.

The problem with adversarial litigation is that it does not ordinarily allow the public to be represented as a third affected party though it is the public which is the legitimate source of authority for all socially oriented decision-making. The characteristic of social and environmental impact of hazardous and dangerous technologies is that the public is the silent victim and has every right, as an affected party, to participate in decisions about such technologies.

There is a second major weakness in the legal system as a source of control over new technologies. This is its reliance on precedent, which makes it entirely lacking in the flexibility of method necessary for the assessment of a constantly changing body of knowledge.

Another problem with the legal system is that courts as presently structured are scarcely competent to assess the long-range effects of a particular scientific or technological innovation. To resolve conflicts emerging from technological change, courts will have to shift from the resolution of disputes and redress of injury *after* occurrence to formulation of procedures to prevent their occurrence. The anticipatory role, again, demands an informed and sensitive ability to foresee happenings that affect human rights.

Weeramantry discusses such controversial scientific and technological sources of threat to human rights in chapters 4-6. In chapter 4 on the "Human Body" he discusses implications of new medical technologies. In chapter 5 on "Human Society" he discusses the impact of information technologies. In chapter 6 on "The Human Habitat", he discusses the environmental impact of new technologies and its implication for human rights. Over-exploitation of resources today denies future generations the right to the earth's resources. Many other rights flow from it. Among

them are the right to a healthy environment, the right to aesthetic and recreational enjoyment, the right to participation in the earth's resources and sustenance.

If the legal system is to evolve in a way that it becomes a protector of human rights in the context of rapid technological change, a series of steps for its restructuring need to be taken. Chapter 11, is an "Agenda for Action". The steps to protect human rights from the violation by technology includes classification of projects that are potentially harmful and of doubtful value, assessments of the potential impact of technology change, mapping out alternative futures. The interaction between science, technology and law needs to be strengthened to make the latter better equipped to control the former. For this Weeramantry suggests setting up of, (i) sub-committees of science-oriented members of the Bar to keep an eye on challenges posed by science; and (ii) science commissions to compel scientists to acknowledge their responsibility to their society by acting as public watchdogs. These need to be supplemented by structures for accountability of science. A true accounting on any scientific development must take note of its effects in all these fields. Weeramantry suggests that special societal incentives need to be created to develop technologies which are public interest based and do not make the public bear costs just for the generation of private profit. A dialectical process of interaction between science, the public and the legal system needs to be created to select and control scientific change in directions that benefit society. The judiciary urgently needs to acquaint itself with the latest scientific research. This linkage of science with judiciary needs a fundamental restructuring of the judicial system. Also needed are organisations which are specially concerned with the impact of the technological changes on civil liberties. As Weeramantry says in conclusion, we need to have the combined wisdom of scientist, lawyer, and layman lest we drift to our destruction.

Slumbering Sentinels is essential reading for everyone in the science and legal systems. It is also critical for the informed and conscious citizens who recognise that it is ultimately they who are the final authority in social control. The book is excellent reading for a number of reasons. It is conceptually rich and synthesises developments in diverse areas of science, technology, law and human rights. Further, it is empirically well informed so that arguments are concrete and real, and do not stay at the level of mere theorising. Finally, being written by an outstanding professional who has long experience in the practice and teaching of law, the book does not end in helplessness but gives concrete directions for restructuring both science and law to ensure that individuals, society and the entire human species do not become victim to uncontrolled technological change. The book is a significant contribution to an area of utmost social relevance: who will rule in the next century—technology or law?

*Jayanta Bandopadhyay**

*Director, Doon Valley Ecosystems Project, Dehradun.