

# Human Rights and Scientific and Technological Development

Edited by C.G. Weeramantry



# Human Rights and Scientific and Technological Development

Studies on the affirmative use of science and technology for the furtherance of  
human rights, commissioned as a special project by the United Nations  
University, following a reference to the University by the United Nations  
Human Rights Commission

*Edited by C.G. Weeramantry*



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## Foreword

The present volume constitutes a first response by an interdisciplinary and cross-cultural group of experts under United Nations University auspices to the invitation by the UN Commission on Human Rights to study both the positive and negative impacts of scientific and technological development on human rights and fundamental freedoms. The interrelationship between scientific and technological advances and human rights has attracted in recent years the increasing attention of academics, policy-makers, and the general public. Studies have also been conducted by the United Nations system on the subject, including the publication *Human Rights and Scientific and Technological Development* (UN, 1982). As this publication makes clear, there still exist important lacunae in the understanding of the complex and intricate interface between scientific and technological progress and human rights, not to speak of the practical application of such progress and knowledge to enhance human rights. This book, it is hoped, will make a contribution in this respect.

We are grateful to all the contributors to this volume, and particularly to Professor Christopher G. Weeramantry, who kindly agreed to co-ordinate the research work and edit this book. We were greatly saddened by the passing away of Dr Yo Kubota, who not only played a key role in the project from the UN Centre for Human Rights in Geneva, but was also a conscientious scholar and activist for the course of human rights. He was killed in an accident while working as a member of the UN Transition Assistance Group in Namibia in June 1989.

We wish to express our appreciation to the Ministry of Foreign Affairs of the Government of Japan for its encouragement and financial support for this research project. The research and this publication have been made possible by its generous grant.

Roland Fuchs  
Vice-Rector  
The United Nations University

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## Introduction: United Nations Approaches to Human Rights and Scientific and Technological Developments

SADAKO OGATA

The human rights standards established since the founding of the United Nations have become widely recognized in the world today. Starting with the adoption of the Universal Declaration of Human Rights in 1948, the United Nations succeeded in enacting the two Covenants on Economic, Social and Cultural Rights and on Civil and Political Rights, as well as a host of more specialized conventions on the Prevention and Punishment of the Crime of Genocide, on the Elimination of All Forms of Racial Discrimination, against Torture or Other Cruel, Inhuman or Degrading Treatment or Punishment, etc. Much of the norm-creating work was carried out in the first 25 years of the United Nations. The main efforts during this period were devoted to the promotion of human rights.

The International Year for Human Rights in 1968 marked a watershed. At the International Conference on Human Rights which was held in Tehran to commemorate the year, delegates assembled to review the progress that had been made in the field of human rights and to prepare the programme for subsequent years. The conference observed that "since the adoption of the Universal Declaration of Human Rights the United Nations has made substantial progress in defining standards for the enjoyment and protection of human rights and fundamental freedoms. During this period many important international instruments were adopted but much remains to be done in regard to the implementation of those rights and freedoms."<sup>1</sup> It became the declared intention of the conference to direct future efforts towards the implementation of the norms that had been established. In other words, the protection more than the promotion of human rights was to become the main focus of human rights activities in the next decades.

The International Conference on Human Rights recommended to the Economic and Social Council that the Commission on Human Rights be requested to prepare model rules of procedure for dealing with violations of human rights. Already in 1966, the Economic and Social Council, in response to the initiative taken by the Special Committee on the Situation with regard to the Implementa-

tion of the Declaration on the Granting of Independence to Colonial Countries and Peoples, had already invited the Commission to devise measures to halt violations of human rights and fundamental freedoms in reference particularly to apartheid. The recommendation of the International Conference was designed to encourage the United Nations to expand its authority to examine information relevant to gross violations of human rights and fundamental freedoms, undertake investigations, and make necessary recommendations. The Economic and Social Council adopted resolutions 1235 (XLII), 728 F (XXVIII), and 1503 (XLVIII), each of which marked steps through which the Commission on Human Rights and the Sub-Commission were given extended authority to become actively engaged in the protection of human rights. Fact-finding missions undertaken by specially established committees, by working groups and special rapporteurs, gradually became the mainstay of the United Nations activities in human rights fields. The implementation mechanisms in the various human rights treaties, such as the Covenants and the Convention on the Elimination of All Forms of Racial Discrimination, also began to function in the 1970s.

A second significant impact of the Tehran Conference was to recast the human rights issue in the North–South context. The Covenant on Economic, Social, and Cultural Rights had established the basic economic, social, and cultural rights to be promoted within the nation-state. The North–South framework, however, was to shift the main milieu for the promotion and protection of human rights away from the individual nation-states to the international community, which was divided into the economically developed and deprived countries. The International Conference on Human Rights, in Resolution XVII, recognized that it was the collective responsibility of the international community to ensure the attainment of the minimum standard of living necessary for the enjoyment of human rights and fundamental freedoms by all persons throughout the world, and called upon the developed countries “to facilitate transfer of adequate development resources and technology to the developing countries” and “to make at least one per cent of their Gross National Product available as international aid on equitable terms.”<sup>2</sup>

A third development of significance that emanated from the International Conference on Human Rights was the introduction of the question of the impact of recent scientific and technological developments on human rights. The Proclamation of Tehran stated that “while recent scientific discoveries and technological advances have opened vast prospects for economic, social, and cultural progress, such developments may nevertheless endanger the rights and freedoms of individuals and will require continuing attention.”<sup>3</sup> The Conference considered the need for “thorough and continuous interdisciplinary studies at both the national and the international level” and recommended to the organizations of the United Nations family that they undertake studies of the problems particularly with regard to:

1. Respect for privacy in view of recording techniques.



2. Protection of the human personality and its physical and intellectual integrity in view of the progress in biology, medicine, and biochemistry.
3. The uses of electronics which may affect the rights of the person and the limits which should be placed on its uses in a democratic society.
4. More generally, the balance which should be established between scientific and technological progress and the intellectual, spiritual, cultural, and moral advancement of humanity.<sup>4</sup>

Later in 1968, the General Assembly responded to the initiative taken by the Conference, and adopted a resolution inviting the Secretary-General to undertake a study of the problems of human rights arising from developments in science and technology, and especially with reference to the areas of concern expressed in Tehran.

In view of the great changes brought about by scientific and technological developments on human life and social progress, it might seem even odd that the issue of the impact of science and technology on human rights had not been raised in the United Nations until 1968. There were, however, political reasons connected with both the North-South and East-West confrontations prevalent in the United Nations that tended to exclude the issue from the human rights fora. To begin with, among the developing countries that comprised a majority in the United Nations, there was a general feeling that scientific and technological developments were not matters causing immediate concern. Moreover, in the context of United Nations politics, these countries tended to show reluctance to allow an agenda not in their direct interest to gain priority attention. Among the more developed industrial countries, the issue contained seeds for East-West confrontation. The Western countries were anxious to promote measures to assure respect for privacy and protection of the human personality against the progress in biology, medicine, and biochemistry. At the United Nations, they were eager to challenge the Eastern socialist countries on the grounds that scientific and technological developments were being applied by them for purposes of state control. George Orwell's "Big Brother" was the symbolic reminder of the political consequences of scientific and technological developments when left in the hands of totalitarian governments.

During the period 1971 to 1976, however, a number of substantive reports on scientific and technological developments and human rights were prepared by the Secretary-General and the specialized agencies to be considered by the General Assembly and the Commission on Human Rights. The reports included a study on respect for the privacy of individuals and the integrity and sovereignty of nations in the light of advances in recording and other techniques; a study on the uses of electronics which may affect the rights of the person, such as computerized data systems and electronic communication techniques; a study on the advances in biology, medicine, and biochemistry, such as artificial insemination, psychotropic drugs and chemicals introduced into food production, packaging, and storage; a study on the use of scientific and technological progress to improve the quality of food, housing, and work; a study on the harmful effects of

automation and mechanization of production, the deterioration of the human environment, and the destructive power of modern weapons. In 1975, the United Nations convened a meeting of a group of scientists to discuss the balance which should be established between scientific and technological developments and the intellectual, spiritual, cultural, and moral advancement of humanity. The results of the conference were incorporated in a report by the Secretary-General.

Although these reports raised questions of major importance on a wide range of human rights problems in the contemporary world, neither the General Assembly nor the Commission on Human Rights became involved in a substantive examination of the issue. Any attempt to become engaged in a standard-setting work on human rights and scientific and technological developments would have required both the commitment and the capability of a number of delegations. Particularly, the lack of leadership on the part of the Western industrial countries at that time in taking a major initiative in response to the questions presented by these reports was to be costly. The socialist countries, which became increasingly apprehensive of the possibility that these findings might prompt the United Nations to opt for greater protection of the individual against the negative effects of science and technology, decided by a bold stroke to shift the orientation of the entire subject-matter.

At the twenty-ninth General Assembly in 1974, the Soviet Union, together with the German Democratic Republic, Hungary, Poland, and others, presented a draft declaration on the use of scientific and technological progress in the interests of peace and for the benefit of mankind.<sup>5</sup> The following year, the General Assembly proclaimed the "Declaration on the Use of Scientific and Technological Progress in the Interests of Peace and for the Benefit of Mankind." The declaration was adopted, however, without the support of the Western countries, all of which abstained from voting. The declaration was notable in that it deviated from the basic approach that had been followed in the United Nations since 1968 on the question of human rights and scientific and technological developments. The entire text was an enumeration of the obligations imposed upon states rather than the protection of individuals. The declaration stated that all states were to ensure that the results of scientific and technological developments were to be made use of "in the interests of strengthening international peace and security, freedom and independence, and also for the purpose of the economic and social development of peoples." All states were to "refrain from any acts involving the use of scientific and technological achievements for the purposes of violating the sovereignty and territorial integrity of other states, interfering in their internal affairs, waging aggressive wars, suppressing national liberation movements or pursuing a policy of racial discrimination."<sup>6</sup>

During the next ten years, the United Nations' debate on the issue of human rights and scientific and technological developments was to be characterized by a strong East-West emphasis. Focusing on the "right to life," the socialist countries embarked on a linkage of human rights with peace and disarmament. The

emphasis now turned on “the urgent need for all possible efforts by the international community to strengthen peace, remove the threat of war, particularly nuclear war, halt the arms race and achieve general and complete disarmament under effective international control, and prevent violations of the principles of the Charter of the United Nations regarding the sovereignty and territorial integrity of states and self-determination of peoples.”<sup>7</sup> Through building the above-mentioned conditions, the “right to life” was to be assured. The socialist countries followed up their initiative and called for the implementation of the principles contained in the declaration. The thirty-fifth General Assembly in 1980 invited the Secretary-General as well as the member states to provide information concerning the implementation of the provisions of the declaration.<sup>8</sup> Subsequent resolutions adopted under the agenda item on human rights and scientific and technological development repeated the call to make efforts to strengthen peace and pursue disarmament, and to utilize the results of scientific and technological developments for the promotion and realization of human rights, particularly the “right to life.” The Western countries consistently abstained from voting for resolutions in support of the Declaration on the Use of Scientific and Technological Progress in the Interests of Peace and for the Benefit of Mankind.

In 1981, the Commission on Human Rights, in emphasizing the importance of implementing the provisions of the above declaration, requested the Sub-Commission to undertake a study with particular reference to the “right to work” and the “right to development.” The discussion over the examination of these rights had caused considerable division within the Commission. The incorporation of the “right to work” and the “right to development” signified an attempt by the socialist countries to win over the support of the developing countries.

In counteracting the socialist drive, the Western approach to the issue of human rights and scientific and technological developments was no less political. At its thirty-third session in 1977, the Commission on Human Rights adopted the resolution proposed by the United Kingdom to request the Sub-Commission to study “with a view to formulating guidelines, if possible, the question of the protection of those detained on the grounds of mental ill-health against treatment that might adversely affect the human personality and its physical and intellectual integrity.”<sup>9</sup> The Western countries chose to focus on the human rights of those political dissidents in the Soviet Union who were said to be detained in mental institutions. In 1980, Mrs Erica-Daes was appointed special rapporteur. She was to prepare guidelines relating to procedures for determining whether adequate grounds existed for detaining persons on the grounds of mental ill-health, and principles for the protection of persons suffering from mental disorder.

Although the debates within the United Nations over the question of the protection of the mentally ill or of persons suffering from mental disorder had strong East-West overtones, the substance of the study undertaken by the special rapporteur dealt with problems and principles of universal relevance. Noting that “improved medical and psychotherapeutic technology can in some cases consti-

tute a threat to the physical and intellectual integrity of the individual," the report indicated that "scientific and technological products, means and methods have already been misused in some States . . . in particular in the treatment of persons detained on grounds of mental ill-health or mental disorder." The report proceeded to propose principles, guidelines and guarantees to cover legal, medical, economic, and social aspects relating to a patient's admission to an institution, detention, treatment, discharge, and rehabilitation. Governments were expected to adapt their laws to the proposed body of principles, guidelines, and guarantees which were considered to serve as the minimum United Nations standard for the protection of the mentally ill.<sup>10</sup> The Daes report had immediate impact in arousing worldwide interest in the question of the protection of the rights of the mentally ill. In some countries, notably Japan, provisions concerning the admission of mentally ill patients were revised to accord more with the standards set by the United Nations.

Another standard-setting exercise undertaken by the Sub-Commission merits special attention. In 1977, the Commission on Human Rights requested the Sub-Commission to engage in a second study on relevant guidelines in the field of computerized personal files.<sup>11</sup> Mr Louis Joinet acted as the special rapporteur. The interest in this particular subject had dated from the International Conference on Human Rights held in Tehran in 1968. A report had been prepared by the Secretary-General in 1973 relating to "respect for the privacy of individuals and the integrity and sovereignty of nations in the light of advances in recording and other techniques." The Joinet report was significant in that it not only pointed out the dangers of computerized files to the preservation of privacy, or to the enjoyment of freedoms, but also recognized that the exercise of some rights, such as the "right to vote," might be greatly facilitated by the use of data processing. The report attempted to provide that "while the use of manual (or *a fortiori* computerized) personal data files entails an obvious risk of violation of the privacy of individuals, there are cases where, on the contrary, the use of such files makes it possible to promote the effective enjoyment of certain human rights." The report recommended for consideration possible options for preparing minimum standards to be established by national and international legislation.<sup>12</sup>

As shown in the studies on the guidelines, principles, and guarantees for protection of persons detained on grounds of mental ill-health or suffering from mental disorder, and on the guidelines for the regulation of computerized personal data files, some standard-setting efforts have borne results in the protection of human rights vis-à-vis scientific and technological developments. However, it cannot be denied that these two studies represent achievements in rather limited spheres, when taking into consideration the vast areas still left untouched. Whether an incremental approach will eventually meet the required objectives in the field of human rights and scientific and technological developments, or whether the time has come to embark on a more general approach, is a question facing those concerned with the promotion of human rights in the United Nations.

A small step in the direction of a general approach was taken in 1983, when the

Commission on Human Rights adopted a resolution inviting all member states and relevant international organizations to submit their views to the Secretary-General "on the most effective ways and means of using the results of scientific and technological developments for the promotion and realization of human rights and fundamental freedoms."<sup>13</sup> What characterized this particular initiative was the underlying conviction that while vigilance must be kept on the negative effects of scientific and technological developments on human rights, due recognition should be given to the benefits that these achievements bring to the promotion and realization of human rights. In the words of the representative of Japan, who introduced the resolution, "the positive and negative effects of science and technology on human rights are two sides of the same coin" which must be "grasped in their total context."<sup>14</sup> The new approach received support within the Commission, since it attempted to break away from the existing United Nations trend to concentrate almost exclusively on the negative effects of scientific and technological developments on human rights. By focusing both on the positive and negative aspects, greater support was expected from a wider range of member states, cutting across East-West and North-South divisions. In fact the countries in the South showed interest in the issue in its new orientation, since they felt encouraged by the prospect that science and technology would be helpful both in accelerating economic and social development as well as in promoting human rights.

Although the Commission was able to establish a general framework to examine scientific and technological developments in their positive and negative aspects, it turned to the United Nations University and other interested academic and research institutions for extensive examination of the question.<sup>15</sup> To begin with, the task of discerning the positive and negative aspects in itself required expertise of an interdisciplinary character. Defining the requirements of scientific and technological policies, while setting up standards for the protection of human rights, posed challenges of a kind that were beyond the competence of an inter-governmental body. The United Nations University Project on Human Rights and Scientific and Technological Development was set up in response to the invitation by the Commission on Human Rights to probe the complex of inter-linking problems.

In view of the vast areas of social and economic life affected by developments in science and technology, it would not be easy to set up a central focus through which to examine the positive and negative effects of scientific and technological developments. Nevertheless, issues involving the right to education, health, or environment might be among the best entry points, since they represent widely acclaimed rights in the international community. Advances in science and technology allow for the spread of education through the dissemination of information, promote universal health care, or assure clean air and water. To the extent that access is assured to promote the attainment of these goals, the positive effects of scientific and technological developments are expanded. On the other hand, science and technology also endanger human rights and human personality when

electronics intrude into privacy, medicine turns to human experimentation and genetic engineering, or industrial waste destroys the human habitat. In so far as the negative effects of scientific and technological developments are pronounced, protective measures against violations of human rights become the priority consideration. Of particular importance might be the use of scientific and technological means for the monitoring of trends. Some early-warning mechanisms might also be devised.

Attempts to set a general standard in human rights and scientific and technological developments involve continuing exploration. As science and technology develop, the nature of their impact on human rights also changes. It is in this ever-evolving context that the issue must be fully examined. The treatment of the subject-matter within the United Nations has been far from adequate. However, with the importance of the effects of scientific and technological developments on human life and human rights becoming better understood, and with the political confrontations within the United Nations somewhat subsiding, the time may be ripe to make greater efforts to reach agreement on basic principles and standards for the promotion and protection of human rights. The United Nations should take a lead in bringing about substantive international co-operation for issues of global significance.

## NOTES

1. United Nations, *Final Act of the International Conference on Human Rights*, Tehran, 22 April to 13 May 1968, p. 4.
2. United Nations (note 1 above), p. 14.
3. United Nations (note 1 above), p. 5.
4. United Nations (note 1 above), p. 12.
5. General Assembly Resolution 3268 (XXIX), 3269 (XXIX), 1974.
6. General Assembly Resolution 3384 (XXX), 1975.
7. General Assembly Resolution 37/189, 1982.
8. General Assembly Resolution 35/130A, 1980.
9. Commission on Human Rights Resolution 10A (XXXIII), 1977.
10. "Draft Body of Principles, Guidelines and Guarantees for the Protection of the Mentally Ill and of Persons Suffering from Mental Disorder," E/CN.4/Sub.2/1985/20, Annex.
11. Commission on Human Rights Resolution 10B (XXXIII), 1977.
12. "Study of the Relevant Guidelines in the Field of Computerized Personnel Files," E/CN.4/Sub.2/1983/18.
13. Commission on Human Rights Resolution 1983/41, 1983.
14. Commission on Human Rights Resolution 1984/27, 1984.
15. Commission on Human Rights Resolution 1986/9, 1986.

## **Part 1**

# Scope and Objectives





## The Problems, the Project, and the Prognosis

C. G. WEERAMANTRY

The impact of science and technology on society has long been acknowledged. That impact can be beneficial or detrimental. The detrimental aspects have attracted considerable comment and analysis, especially in recent years, and these studies have led naturally to a consideration of the adverse impact of science and technology on human rights.

There has been much concentration, in the recent literature, on the ways in which both specific human rights and general human rights principles are being undermined by advances in science and technology. Such concentrated studies of these adverse impacts ought not, however, to distract us from examining the other side of the coin.

On 10 March 1986 the UN Commission on Human Rights adopted Resolution 1986/9, entitled "Use of Scientific and Technological Developments for the Promotion and Protection of Human Rights and Fundamental Freedoms," inviting "The United Nations University, in co-operation with other interested academic and research institutions, to study both the positive and the negative impacts of scientific and technological developments on human rights and fundamental freedoms." The hope was expressed that the United Nations University would inform the Commission on Human Rights of the results of its study of the question.

The United Nations University, in response to this invitation, decided to undertake a study, the object of which was to develop a conceptual framework which would enable the discernment of both the negative and the positive impacts of scientific and technological developments on human rights and fundamental freedoms. The study was to focus on the interaction between socio-cultural, economic, and political factors on the one hand and scientific and technological advances on the other, especially in the developing countries.

Such studies would in turn have two broad aspects. We would need analyses of the ways in which science and technology have advanced the cause of human