

Chapter I: Introduction

A. Overall Purpose and Scope of the Manual:

This manual is a comprehensive depository of information on environmental health indicators and benchmarks that provide a basis for determining the state of public health in a community. It is written to assist individuals and organizations, especially those residing in developing countries that are interested in organizing community-based projects for assessing the nature and extent of human health risks from a polluted and degraded environment in their region as primarily viewed from a human rights perspective. Although numerous environmental indicators and benchmarks have been established in recent years by international agencies and national governments, not all such assessment tools or metrics are suitable for use in developing countries. This is because of limited resources and lack of trained personnel needed for collecting data and analyzing them in many developing regions of Asia, Africa and Latin America. For these reasons, in this manual a practical set of environmental health indicators and benchmarks is recommended that may be implemented at the local and regional levels with either existing resources or those that could be obtained with modest additional expenditure of funds and training of technical staff.

B. Focus of the Manual—Vulnerable Members of the Community:

Based on human rights consideration, the major focus of this manual is the selection of environmental health indicators and benchmarks that attempt to assess the impact of a polluted environment on the most vulnerable members of a community. These include infants and young children, the elderly and those that are infirm or chronically ill. In selecting indicators and benchmarks, special emphasis was placed on air and water quality regulatory standards and guidelines, including those that pertain to vector borne diseases and food safety that were originally established by national and international agencies that took into account the health impact on individuals most sensitive to adverse effects of environmental pollutants.

Numerous public health studies have shown that infants and young children are particularly affected by low concentrations of toxic substances found in air, water, foods and a variety of consumer products. For instance, many of today's air quality regulatory standards were established for airborne pollutants that are by-products of fossil fuel combustion, such as sulfur dioxide, nitrogen oxides and particulate matter, that have adverse health impacts on infants and young children at relatively low concentration levels. Air pollutants emitted from the tail-pipes of cars, buses and trucks, such as lead and carbon monoxide, have serious impacts on children below the age of five at ambient concentration levels that are well below those harmful to adult members of the community. Many elderly individuals who suffer from chronic lung ailments, such as asthma and other respiratory illnesses, are especially vulnerable to increases of short-term concentration levels of a number of air pollutants, such as sulfur dioxide, particulate matter, ozone, etc. Thus, air quality standards for these airborne pollutants were developed by national regulatory agencies and international organizations that were based on the adverse health impact on infants and young children, and on elderly and chronically ill individuals rather than their impact on normal healthy adults.

Microbial contamination of drinking water has severe health impact on infants and young children in many developing regions of the world, where childhood diarrheal diseases from ingesting polluted water is the second most common cause of infant death. In addition, harmful pesticide residues and a variety of toxic chemical contaminants found in water, food and other consumer products have particularly insidious impact on infants and young children during their rapidly growing phase. Such early life exposures have been linked to a number of chronic illnesses, including nervous system and behavioral disorders, childhood cancer and a number of adult-onset abnormalities. Thus, environmental health indicators and benchmarks that assess the effects of air and water pollutants, microbial agents and other hazardous substances are important in determining the overall health status of vulnerable children and adults living in a community.

One of the distinctive features of a human rights approach is its focus on vulnerable individuals and communities. Because a human right is a universal entitlement, its implementation is measured by the way it benefits those who are most disadvantaged and vulnerable and the extent to which it brings them up to mainstream standards. This emphasis is apparent in the work of the various United Nations human rights treaty monitoring bodies. For instance, the UN Committee on Economic, Social and Cultural Rights evaluates the performance of States parties in terms of their initiatives to improve the enjoyment of rights by those who are disadvantaged and vulnerable.

The concern with vulnerable individuals and groups also explains why the disaggregation of data is a central requirement for human rights monitoring. Typically human rights treaty monitoring bodies require country reports

to provide data that are disaggregated on a variety of grounds: sex, ethnicity, race, and geographic areas, urban and rural breakdowns, etc. Although this principle is central to human rights monitoring, it may meet serious data limitations. Countries with relatively weak data collection systems may not have the necessary disaggregated data available in the first place. Moreover, countries that do collect data on disaggregated bases may be quite reluctant to make such data available to human rights monitors. Highly aggregated data, such as country-wide averages, are likely to camouflage disaggregated differentials. Thus, developed countries with sophisticated information gathering systems may not wish to disclose highly disaggregated data to human rights monitors because doing so could reveal serious inadequacies in realizing the human rights of vulnerable and disadvantaged groups, even to the point of constituting a form of economic or social discrimination.

C. Linkage Between Environmental Protection, Public Health, and Human Rights—International Declarations, Conventions and Treaties

Environmental protection, public health and human rights have traditionally been viewed as separate and distinct areas of public policy by both governmental agencies and non-governmental organizations. Only recently have specialists in these fields begun to appreciate the link between environmental and public health issues with issues related to basic human rights. Although the right to health care has been a pressing issue in the social justice and human rights community for the past several decades, the human rights implications of the adverse impact of a polluted environment on human health has only lately been given much attention. It has been forcefully stated that¹

“ . . . with increasing globalization of trade and commerce in the past few decades, the environmental and public health impacts of rapid industrialization and urbanization throughout different regions of the world are now being recognized as having major human rights implications by many policy makers . . . Internationally, the right of humans to health as originally enunciated in *Article 25* of the *Universal Declaration of Human Rights* is quite clearly linked to environmental protection, where clean water, clean air, adequate shelter and food, and primary health care are no longer considered societal privileges but as universal human rights.”

Today, highly polluted and deteriorating environments in urban and rural communities of many developing regions cause a number of serious human illnesses and disabilities. According to the World Bank, respiratory infections and diarrheal diseases are the primary causes of death among the poorest twenty percent of the world's population. Moreover, these widespread illnesses caused by environmental factors are considered preventable by most public health authorities. For instance, providing access to clean water and proper sanitation facilities can prevent the high incidence of childhood dysentery in developing regions. Incidences of respiratory diseases can be reduced by lowering exposures to harmful byproducts of fossil fuel combustion sources or by substituting smoke-filled cooking stoves presently being used in poorly ventilated homes in many rural areas of developing regions, such as India and China.

The health status of vulnerable members of a community is a sensitive indicator of a society's overall well-being, both at present and in the future. For example, providing safe environments for children ensures the health of future generations, which in turn contributes to the formation of stronger economies and dynamic societies. Countries that respect adherence to basic human rights are more likely to avoid practices and promote changes that lead to long-lasting, sustainable development programs in their region. In short, any action that seeks to improve the health of a human community by reducing environmental contamination in air, water and land, will benefit society at every level, whether they are social, economic or cultural in nature.

Since the end of World War II, a number of international and regional declarations, conventions and treaties have been adopted that incorporate the concept of human rights to life and health (for a summary, see Box). In the *Universal Declaration of Human Rights*—adopted by the UN General Assembly in 1948—the right to life and the right to health are enunciated in *Article 3*: “Everyone has the right to life, liberty and security of person” and in *Article 25*: “(1) Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control. (2) Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.”

1 Ahmed, A. Karim. (2003). *Environmental Protection, Public Health and Human Rights: An Integrated Assessment - a report prepared for the Science and Human Rights Program at the American Association for the Advancement of Science*. Washington, DC: NCSE/GCHEF. <http://shr.aaas.org/hrenv/docs/ahmed.pdf>.

The most comprehensive and legally binding declaration of the right to health is incorporated in the *International Covenant on Economic, Social and Cultural Rights* that was adopted by the UN General Assembly in 1966 (and entered into force in January 1976). In this covenant, the right to health is stated in *Article 12*: “(1) The States Parties to the present Covenant recognize the right to the enjoyment of the highest attainable standard of physical and mental health. (2) The steps to be taken by the States Parties in the present Covenant to achieve the full realization of this right shall include those necessary for: (a) The provision for the reduction of the stillbirth-rate and of infant mortality and for the healthy development of the child; (b) The improvement of all aspects of environmental and industrial hygiene; (c) The prevention, treatment and control of epidemic, endemic, occupational and other diseases; (d) The creation of conditions which would assure to all medical service and medical attention in the event of sickness.”

In 2000, the UN Committee on Economic, Social and Cultural Rights issued an authoritative interpretation of *Article 12(1)* of the above Covenant in *General Comment No. 14* (“The Right to the Highest Attainable Standard of Health”) that the right to health extended “not only to timely and appropriate health care but also to the underlying determinants of health, including access to safe and potable water and adequate sanitation, an adequate supply of safe food, nutrition and housing, healthy occupational and environmental conditions, and access to health-related education and information, including sexual and reproductive health.” The UN Committee stated that States Parties have core obligations to provide access to health services, essential drugs, minimum essential food, basic shelter, housing, sanitation and an adequate supply of safe and potable water. In addition to adopting adequate implementation plans through a meaningful participatory process, the UN Committee called on the necessity to develop health indicators and benchmarks: “To adopt and implement a national public health strategy and plan of action, on the basis of epidemiological evidence, addressing the health concerns of the whole population; the strategy and plan of action shall be devised, and periodically reviewed, on the basis of a participatory and transparent process; they shall include methods, such as right to health indicators and benchmarks, by which progress can be closely monitored; the process by which the strategy and plan of action are devised, as well as their content, shall give particular attention to all vulnerable or marginalized groups.”

In 2002, the UN Committee on Economic, Social and Cultural Rights issued *General Comment No. 15*, which outlines the human right to water by interpreting the substantive contents of *Article 11* and *Article 12* of the *International Covenant on Economic, Social and Cultural Rights*. In this General Comment, it states that: “[t]he right to water contains both freedom and entitlements. The freedoms include the right to maintain access to existing water supplies necessary for the right to water, and the right to freedom from interference, such as the right to be free from arbitrary disconnections or contamination of water supplies. . . . Whereas the right to water applies to everyone, States Parties should give special attention to those individuals and groups who have traditionally faced difficulties in exercising this right, including women, children, minority groups, indigenous peoples, refugees, asylum seekers, internally displaced persons, migrant workers, prisoners and detainees.”

Earlier in 1989, the UN General Assembly adopted the *Convention on the Rights of the Child*, in which it states the child’s right to health as follows: “*Article 24* (1) States parties recognize the right of the child to the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health. States Parties shall strive to ensure that no child is deprived of his or her right of access to such health care services. (2) States parties shall pursue full implementation of this right and, in particular, shall take appropriate measures: (a) to diminish infant and child mortality, (b) to ensure the provision of necessary medical assistance and health care to all children with emphasis on the development of primary health care, (c) to combat disease and malnutrition including within the framework of primary health care, through inter alia the application of readily available technology and through the provision of adequate nutritious foods and clean drinking water, taking into consideration the dangers and risks of environmental pollution.”

***Health and Human Rights: Summary of International Declarations, Conventions and Treaties*²**

A number of international declarations, conventions and treaties have been adopted that incorporate the principle of human rights to life and health. The following is a brief summary of the relevant provisions of these human rights instruments:

- The *Universal Declaration of Human Rights* adopted and proclaimed by the United Nations General Assembly in December 1948. In the Universal Declaration, the right to life is recognized in *Article 3* and the right to health in *Article 25*.
- The *International Covenant on Civil and Political Rights*, adopted in December 1966 (and entered into force in March 1976) protects the right to life in *Article 6(1)*, which is stated as follows: “Every human

² Excerpted from: Ahmed, A. Karim. *op. cit.*

being has the inherent right to life. The right shall be protected by law. No one shall be arbitrarily deprived of his life.”

- The right to life is also incorporated in several regional human rights documents of Americas, Europe and Africa, namely: (a) the *American Convention on Human Rights*, (b) the *European Convention for the Protection of Human Rights and Fundamental Freedoms* and (c) the *African Charter on Human and Peoples’ Rights*.
- The *International Covenant on Economic, Social and Cultural Rights* adopted by the United Nations General Assembly in December 1966 (and entered into force in January 1976), affirms the right to health in *Article 12*. (1), where “ States Parties to the present Covenant recognize the right to the enjoyment of the highest attainable standard of physical and mental health.”
- The *World Health Organization’s (WHO) Constitution’s Preamble* (adopted in 1945 and ratified in April 1948) defines the right to health, and the responsibility of individuals, institutions and governments, which states in part: “The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, political belief, economic or social condition.”
- The *International Labor Organization’s (ILO) Annex to its Constitution*, “Declaration Concerning the Aims and Purposes of the ILO” (adopted by the General Conference of ILO in May 1944) states in Section III , that all nations must achieve: “. . . (g) adequate protection for the life and health of workers in all occupations; (h) provision for child welfare and maternity protection; (i) the provision of adequate nutrition, housing and facilities for recreation and culture.”
- The *Convention on the Rights of the Child*, adopted by the United Nations General Assembly in November 1989, states the child’s right to health in *Article 24*, which reads, in part, as follows: “States Parties recognize the right of the child of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health. States Parties shall strive to ensure that no child is deprived of his or her right of access to such health care services.”
- Other international conventions that explicitly provide right to health include: (a) *International Convention on the Elimination of All Forms of Racial Discrimination*, (b) *Convention on the Elimination of All Forms of Discrimination Against Women*, (c) *Convention Concerning Indigenous and Tribal Peoples in Independent Countries*, and (d) *International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families*.