**Editorial** 

## Environmental health: a discipline in transition

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The World Health Organization (WHO) constitution stipulates that in order to achieve the objective of the Organization, which is "the attainment by all peoples of the highest possible level of health", one of its functions is "to promote, in cooperation with other specialized agencies where necessary, the improvement of nutrition, housing, sanitation, recreation, economic or working conditions and other aspects of environmental hygiene". Not only was the contribution of favourable environmental conditions to health always recognized, but the establishment of a clean environment in health care itself was also practised, e.g. in the idea of establishing sanatoriums. Similarly, environmental health hazards are well recognized. Adverse environmental impact on health is associated with the absence or inadequacy of environmental health services, environmental degradation and occupational hazards and accidents. Conversely, improvement of health and environmental conditions is a major building block for achieving sustainable development. Thus, it is understandable why historically the health sector was one of the early initiators of environmental control and protection.

WHO issued a report entitled Health and environment in sustainable development — five years after the Earth Summit for the 1997 special session of the United Nations General Assembly: five years after

the United Nations Conference on Environment and Development (UNCED). This report addressed the factors affecting the environment, which in turn affects human health. Among its conclusions was that 23% of the total disability adjusted life years (DALY) burden in the world is directly attributable to a degraded environment.

Since health is "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity", it is clear that environmental health must deal not only with the chemical, physical and biological environment but also with the social and psychological dimensions of the environment. As the World Health Assembly has now recognized that the spiritual dimension plays a great role in motivating people to achieve in all aspects of life, it may be said that this dimension is also the concern of environmental health.

The focus of environmental health has shifted from the "traditional" technical interventions associated with basic environmental sanitation to the more subtle and involved input of environmental health risk assessment and management, addressing environmental conditions on a wider scale, such as urban and industrial development, air pollution, marine pollution, hazardous waste, including waste from health care facilities, or truly global ones, such as climate change and ozone-layer depletion.

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Of the six major United Nations Conferences between 1992 and 1996 addressing health and environment issues, the most notable were UNCED in Rio de Janeiro in 1992 and the United Nations Conference on Human Settlements (Habitat II) in Istanbul in 1996. Each had significant messages for health and environment. In the case of UNCED, it was the need to integrate health and environment into sustainable national development planning. For Habitat II, it was to promote and support intersectoral action at provincial and local levels. The WHO Commission on Health and Environment played a decisive role in including environmental health considerations in virtually all chapters of Agenda 21.

Over the past five decades, WHO has provided technical guidance and assistance to Member States. WHO environmental health normative work has had a considerable influence on environmental health quality inside countries, for example with the guidelines for drinking water quality, the guidelines for air quality and the joint WHO/FAO codex alimentarius standards.

The third evaluation of the health-for-all strategy has shown that, between 1985 and 1997, progress has been made in the health conditions in the Eastern Mediterranean Region. For example, under-five child mortality fell from 97.5 to 75.0 per 1000 live births, life expectancy increased, the adult literacy rate rose from 38% to 53%, and improvements have been made in immunization coverage and provision of drinking water. There are, however, very serious concerns about the consequence of unsatisfactory living, working and recreation environments on the health and well-being of large numbers of people within the Region.

The Region is experiencing both "traditional" as well as "modern" health hazards; the mix differs in different countries. Rapid population growth often outpaces the capacity to provide environmental health services and amplifies the adverse effects of environmental pollution. In some countries of the Region where the cost of losses from environmental problems has been estimated, it has been found that this cost is up to 10% of the GNP, far higher than the mean annual GNP increase rate.

To examine the progress made in environmental health planning in relation to sustainable development, the Second Conference on Health, Environment and Development was held in Beirut, in 1995. In the resulting Beirut Declaration on Action for a Healthy Environment, adopted at this Conference, countries of the Region recognized the following shared goals: to promote development and improve, promote and protect health and the environment, to eradicate poverty and to improve living conditions of the present generation, to ensure that the carrying capacity of nature is not exceeded and to safeguard the right of future generations to a satisfying and productive life. The Declaration reinforced the priority health and environment needs in the Region. It underscored the importance of collaboration on environmental health risk assessment, greater participation of the people, education on health and environment, development of health and environment information systems and coordination. The countries pledged to make the best use of local resources to achieve these goals and to cooperate to provide environmental elements required to meet the basic health needs of their people. The countries also pledged to prepare action plans for health and environment by 1999. This pledge was further confirmed in the plan of action for health and environment in the Region endorsed by the Ministerial Conference on Health and Environment held in Damascus in December 1997.

Significant progress is being made in this area: the majority of countries are involved in preparing their health and environment action plans as part of sustainable development planning, and numerous local Agenda 21 and healthy city and healthy village programmes are at various stages of development and implementation. In one country, the planning went all the way from identification, with WHO support, of priority actions to be included in the plan for environment, which is itself part of the national process for planning for sustainable development, through to the inclusion of these actions in the country mid-term plan for economic and social development.

Periodic country-level assessments of the status and trends in environmental heath are crucial for raising public awareness, obtaining political support and programme planning. Compilations of country assessments into regional or subregional overviews are also essential. This effort is already under way in many countries as part of the preparation of their health and environment plans. The Centre for Environmental Health Activities (CEHA) has started to prepare country health and environment profiles that will enable the development of environmental health indicators and their use for decision-making.

Environmental health impact assessment (EHIA) should be an integral part of all new development activities to ensure that the potential adverse effects of such developments on health and environment are minimized. While the use of EHIA has been accepted in a few countries, its practice is not yet common in many others. There is a definite need for awareness-ralsing and support to governments in instituting EHIA procedures as an integral part of development policies and projects.

To tackle health and environment issues, the development of human resources

is a priority in most countries of the Region. The needs range from the training of technical and administrative staff working in the field to the inclusion of educational programmes on health and environment issues in the curricula of learning institutions. Each country should have a strategy to achieve self-sufficiency in personnel adequately trained to deal with health and environment problems, not only at the national level, but also at the provincial and local levels; and not only within the health sector but in other relevant sectors as well. There is also a need for a knowledgeable and enlightened public, well prepared to act as guardian for health and environment.

Experience to date has made it clear that the role of women and special groups should be taken into consideration and incorporated in the activities to be undertaken. The health and environmental needs of children should be fulfilled as a first priority. Also, children should be educated about environmental issues and their awareness and involvement stimulated.

The full participation of society in finding and implementing appropriate solutions for health and environment is vital for success. An informed public can influence policy by bringing about improvement in health and environment. This will range from giving priority to community-based projects, such as healthy villages and healthy cities initiatives, to reviews of health impact assessment of development projects. When the nature of the planned environmental health activities permits, links with basic development needs activities should be established at the local level to take advantage of the robustness of this approach. Organization of the community, building its capacity and enhancing its selfreliance and self-management should be the base on which such environmental health activities are founded.