

**HEALTH  
IN  
SUSTAINABLE DEVELOPMENT  
PLANNING:  
THE ROLE OF INDICATORS**

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## *PREFACE*

Concern about the health impacts of the environment and development process has been growing in both the developed and the developing countries of the world. Renewed emphasis has been placed on the need to obtain a better understanding of the links between development, the environment and human health. This is central to sustainable development planning. Both lack of development leading to poverty, and development resulting in overconsumption and the depletion of resources have resulted in severe health and environmental problems world-wide. In order to implement preventive measures, it is necessary to understand the way in which the development process influences health and the environment, and to formulate integrated policies and strategies accordingly.

Indicators have become widely used in many different fields and play a useful role in highlighting problems, identifying trends, and contributing to the process of priority-setting, policy formulation and evaluation and monitoring of progress. Most importantly, indicators can help to simplify a complex array of information concerning the health, environment and development nexus. In this respect, they are important for informing the public and decision-makers about key health and environmental problems, and actions required for their management. Since health, environment and development problems differ in various parts of the world, as do priorities with respect to their management, the types of indicators developed world-wide will also differ, according to the level of decision-making, and the use for which the indicators are intended. It should be emphasized that indicator development is a means rather than an end in itself. Improved decision-making should remain the ultimate goal. Thus, indicators should ideally be developed as part of the overall policy and planning process, if they are to have policy relevance and practical application.

Considerable work on the development of indicators has been done by many organizations, including WHO. This book builds on work done to-date, and lays a basis for the further development and use of health and environmental indicators in sustainable development planning. It is aimed at professionals, policy and decision-makers in the fields of health, environment and development, especially those working at the interface of these issues, who are concerned with the development of indicators as well as with their application. The overall aim is to provide tools and guidance for indicator development and use, and to promote their application and use at all levels, local to global, and in respective sectors.

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## EXECUTIVE SUMMARY

This book deals with the development and use of indicators for health and sustainable development planning. It addresses both technical as well as social aspects of indicator development and use. Elements of the planning process are outlined, and the application of indicators highlighted. Illustrative examples are given where appropriate, and an organizational framework is presented for addressing health-environment-development linkages.

*Chapter One* of the book gives an overall introduction to health, environment and sustainable development issues of worldwide concern today. Attention is drawn to the wide spectrum of health hazards and to the way in which health is influenced by the environment and development process. A brief account is given of the nature of the health risks associated with environmental and development factors.

Some of the key milestones which have shaped recent thinking and developments in the area of health and sustainable development are then discussed. These have led to an increased recognition of the need to address environment, health and development concerns in an integrated and coordinated way. This is most clearly enunciated in concepts such as “sustainable development” and the need to ensure that the human element, particularly human health, is seen as central to it. Human health is both a determinant and an outcome of sustainable development.

*In Chapter Two*, the nature and use of indicators in the context of policy- and decision-making is discussed. General characteristics of indicators are highlighted, different types of indicators examined and the concept of “core” indicators and their use introduced.

*In Chapter Three*, selected international indicator initiatives are highlighted. These include environment and sustainable development indicators, social indicators, housing and urban indicators, and health indicators.

*In Chapter Four*, criteria for the development and use of indicators are outlined and technical issues to be addressed in their construction are considered. Important methodological aspects to be taken account of, such as data availability and quality, statistical issues, interpretation and risk communication, are highlighted and illustrative examples are given. Emphasis is placed on factors such as the need for clear definitions of indicators and for specifications of measurement variables and methods.

*Chapter Five* contains an account of intersectoral planning processes in health and sustainable development. Reference is made to health and sustainable development planning initiatives at the national level, as well as to local initiatives. Key issues related to the objectives of intersectoral planning initiatives and partnerships are highlighted.

*Chapter Six* considers procedural issues relating to the development of indicators in the planning cycle. Indicators in respect of issue identification and action planning, implementation, monitoring and evaluation of plans are discussed and examples given

of ways in which indicators have been used in various elements of the planning cycle.

*In Chapter Seven*, indicators are discussed in the context of an organizing framework representing health, environment and development linkages, based on an adaptation of the Pressure-State-Response framework first developed by the OECD. Examples are given of indicators associated with the different components of the framework. The indicator lists are not meant to be exhaustive, but to represent a range of conditions and possibilities which can be selected from, in developing indicators for policy and planning purposes. They are meant to encourage an integrative consideration of issues from different perspectives.

*Chapter Eight* contains examples of indicators associated with various issues and sectors, including those related to housing, transport and agriculture.

*Chapter Nine* contains a brief summary and gives some pointers to future work needed in the area of indicator development and use.