

# ENVIRONMENTAL INDICATORS:

## INDICATOR DEVELOPMENT AT INTERNATIONAL LEVEL<sup>1</sup>

### United Nations indicators for sustainable development

UNCSD has developed a set of 58 indicators across the four dimensions of sustainable development (social, environmental, economic and institutional). This work follows Agenda 21, which called for the development of indicators to support sustainable development decision-making at all levels and the harmonization of indicator efforts at national, regional and global levels. The indicators were prepared and tested through a global process including: broad discussion; training and capacity building; national testing; and evaluation and revision. The UNCSD indicators and their methodology sheets, presented in 2001, cover six key environmental themes: atmosphere; land; oceans, seas and coasts; fresh water; and biodiversity. These indicators are intended to help countries around the world track national progress towards Agenda 21 and subsequent sustainable development goals. (UNCSD, <http://www.un.org/esa/sustdev>)

The United Nations Statistics Division (UNSD) collects environmental data from United Nations Member States and is involved in the development of methodologies for environmental statistics and environmental indicators. For example, UNSD has established a database to support the United Nations 48 social, economic and environmental indicators selected to help track progress towards the Millennium Development Goals (UNSD, <http://www.un.org/depts/unsd>).

In addition, UNSD works on the integration of environmental data into economic accounting and the preparation of key economic indicators such as gross domestic product (GDP). UNSD has developed a system of satellite environmental accounts to flank national economic accounts, covering four categories:

- Flows of input materials, energy and pollution, providing information at industry level;
- Environmental protection and resource management expenditure accounts;
- Natural resource asset accounts, tracking stocks of fish, forest, mineral and other resources; and
- Valuation of non-market costs and benefits.

Satellite accounts commonly use the same underlying monitoring data and statistics as environmental and sustainable development indicators.

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<sup>1</sup> This section is adapted from the UN Publication *Environmental Monitoring and Reporting: Eastern Europe, the Caucasus and Central Asia*, New York and Geneva, 2003 (Sales No. E.03.II.E.33).

United Nations work on sustainable development indicators and environmental accounting bears consideration in the development of EECCA environmental indicators. Global sustainable development goals provide a broad context for environmental indicators, underlining the need for integration between data and information on the environmental, social and health, and economic dimensions. This work is complementary to the development of environmental indicators. In addition, at both national and international levels, coherence and cooperation need to be assured between the various initiatives.

### **Kiev Assessment indicators**

The *Kiev Assessment* focuses on progress in the implementation of international environmental conventions as well as progress in environmental management in general across Europe, including all of EECCA. The report thus supports Europe-wide environmental policy initiatives and coordination. EEA coordinated the report's preparation, and the UNECE Working Group on Environmental Monitoring provided an important forum for cooperation on data collection as well as on environmental monitoring and information systems, in particular in EECCA.

The *Kiev Assessment* is indicator-based: it uses a set of about 80 indicators – this set provides both a central part of the report's structure as well as the basis for its analysis. The Kiev indicators are related to the EEA overall core set: the report follows the core set of issues and sectors, with additional issues and topics added for the broader pan-European context (for example, soil salinization and the Aral Sea).

The Kiev indicators are provided in this CD-ROM (EEA, 2001b). Countries in the EECCA subregion may wish to consider this set closely: these indicators contribute essential information on the Eurasian environment across all countries and geographic regions, and can provide a useful reference point for developing common EECCA indicators.

### **EEA core set of indicators**

The EEA core set, unveiled in April 2003, includes about 350 indicators. These are closely linked to EU policy on two levels. First, the “strategic” level of broad programmes, such as the current Sixth Environmental Action Programme, which set overall goals. Second, the “operational” level of European legislation (environmental directives), which establishes standards across areas such as ambient air quality and urban waste-water treatment.

The core set is organized across six environmental themes – air pollution, climate change, water, waste and resource use, terrestrial environment (land and soil contamination), and biodiversity – and five economic sectors: transport, energy, agriculture, fisheries and tourism.

The core set is intended to provide information to allow policy makers at different levels to monitor the progress and effectiveness of environmental policies, in particular EU policies. The set will thus be used for regular reporting on several themes, such as the EU Sustainable Development Strategy, initiatives to encourage policy integration, and environmental strategies such as the Sixth Environmental Action Programme.

### **OECD core and sectoral indicator sets**

The OECD core set, covering about 40 indicators across 14 issues, has been agreed among the advanced market economies. The set is used internationally to measure environmental

performance (via the OECD performance reviews), as well as in OECD reports on environmental issues across its member countries. OECD has also developed three sets of sectoral indicators: energy, transport, and household consumption patterns. Its work has been used as a basis for indicator development at national and international level.

### **Headline indicator sets**

Both internationally and nationally, there has been an attempt in recent years to identify small sets of easily understandable indicators that could communicate environmental issues effectively to high-level policy makers and the public. (An eventual goal is to develop indicators that could serve as a counterpart to key socio-economic indicators, such as GDP, unemployment and inflation.) For example, EEA has identified 11 “key indicators” from its core set: these are referenced to EU policy goals set in the Sixth Environmental Action Programme. OECD has proposed 10 “headline indicators”, drawn from its core set.

The development of headline indicators may be of interest to EECCA countries as part of the broader development and use of indicators. Headline indicator sets may be valuable in terms of communicating key information to high-level national officials, including those outside environmental policy, to the public, and possibly also to international forums.

### **Core set of environmental indicators for Eastern Europe, Caucasus and Central Asia**

A core set of 118 indicators for EECCA countries has been developed within the UNECE Working Group on Environmental Monitoring and Assessment. This core set used the EEA core set as a starting point: from this, the most suitable indicators for the EECCA subregion were selected (see Core Set of Environmental Indicators for Eastern Europe, The Caucasus And Central Asia, found in this CD-ROM).

The UNECE Secretariat has prepared a trial Compendium, presenting 30 indicators from the core set using data from six participating EECCA countries (the 30 indicators were chosen by EECCA experts for their broad applicability and for the current availability of data series). The Compendium is also available in this CD-ROM.