

Executive Summary

Environmental monitoring and assessment are vital for environmental policy: they provide tools that measure environmental conditions and trends, support policy development and its implementation, and develop information for reporting to national policy makers, international forums and the public.

The fifth “Environment for Europe” Ministerial Conference in Kiev, Ukraine (May 2003) set goals for strengthening environmental monitoring and information management in its Environmental Strategy for the Countries of Eastern Europe, the Caucasus and Central Asia. The UNECE Working Group on Environmental Monitoring and Assessment (WGEMA) acts as facilitator to achieve these goals.

Environmental monitoring and information systems

Over the past decade, a few countries of Eastern Europe, the Caucasus and Central Asia (EECCA) have been largely able to maintain existing monitoring activities. These countries have sought to improve coordination among the many ministries and agencies involved in monitoring. Significant work remains, however, including the replacement of ageing equipment for sampling and measurement, and the further development of unified national networks.

In many other EECCA countries, environmental monitoring has been reduced to a minimum in the face of severe economic conditions. In some areas, monitoring has essentially collapsed. Several of these countries have prepared programmes to rebuild and modernize their monitoring systems, but these await funding.

Specific monitoring activities need attention across the EECCA subregion. These include monitoring of urban air pollution and solid and hazardous waste. Industrial emissions are not well monitored, reducing the effectiveness of policy instruments such as emissions charges and fines. Moreover, many countries lack uniform national methodologies across different monitoring areas, and their classification systems are often incompatible with international standards. The Kiev Conference endorsed recommendations on strengthening national environmental monitoring and information systems in EECCA countries: these provide a road map for improvement. Additional recommendations, developed subsequently in WGEMA, focus on the improvement of waste classification and inventory systems.

Monitoring of transboundary issues such as air pollution needs strengthening, in particular for EECCA countries that are new Parties to the Convention on Long-range Transboundary Air Pollution, as detailed in recent recommendations developed in WGEMA.

Another key area for work is the use of computer-based networks for environmental monitoring and information systems. Such networks can improve links among databases across different monitoring agencies and among different levels of government, strengthen reporting to international forums, and increase public access to environmental information. Here, WGEMA – in close cooperation with the European Environment Agency – is providing technical assistance to develop and strengthen computer-based networks in EECCA. This work follows the Guidelines for the development of the Internet-based meta-databases on the environment in EECCA countries, also enclosed in this CD-ROM.

Assessments and Indicators

A key area that requires attention in EECCA countries is the development of the “outputs” of monitoring and information systems, in particular assessments such as state-of-the-environment reports. In this field, better information is needed to support national policy and meet international commitments. Moreover, environmental statistics submitted for international databases are in cases late or incomplete, and public access to environmental information, including data and information based on monitoring, is often limited.

About half the EECCA countries produce and publish regular, national state-of-the-environment (SoE) reports. Only a few reports, however, provide extensive time series, discuss emerging trends and provide conclusions that can be used by policy makers. The Guidelines for the preparation of government reports on the state and protection of the environment identify key areas for attention. These include: financing; the quality of underlying data; definition of objectives and audiences; and the effective use of indicators.

Indicators are key tools for SoE reporting: they help assess environmental conditions and trends, including policy effectiveness, and communicate this information to policy-makers and the public. Although a fairly wide range of environmental indicators are currently used in SoE reports in EECCA countries, the further development of indicators is an important areas for attention. For example, indicators need to describe trends and evaluate policy effectiveness better, and compatibility at the international level should be improved. Overall, international indicator approaches – and in particular the core set of indicators for Eastern Europe, the Caucasus and Central Asia, developed within WGEMA – provide a key reference point for national work and international cooperation. The use of remote-sensing indicators may be valuable for EECCA countries. The Guidance on indicator methodology provides further support for this work.

WGEMA

The UNECE Working Group on Monitoring and Assessment will provide a forum for reviewing and discussing common issues and supporting national efforts to strengthen monitoring and assessment, and will present its results to the next “Environment for Europe” Conference in 2007. This CD-ROM provides a sourcebook of Working Group documents on environmental monitoring and assessment in Eastern Europe, the Caucasus and Central Asia.