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Chair's Summary

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This seminar is part of the OECD's Programme of Dialogue and Co-operation with China. It was organised under the auspices of OECD Working Group on Environmental Information and Outlooks (WGEIO), and in close co-operation with the State Environmental Protection Administration of China (SEPA) and the Chinese Academy for Environmental Planning (CAEP). The seminar is a follow-up to an earlier OECD-China seminar on environmental monitoring, Beijing, 12-14 April 1999. The seminar was attended by 90 officials from OECD member countries, China and international organisations.

The seminar reviewed the latest experience with developing and using environmental indicators in the context of sustainable development in China and OECD countries as well as from the perspective of environmental information and reporting. Special attention was given to the use of indicators as tools for environmental planning, policy integration, public information, and monitoring progress towards sustainable development.

Developing and using environmental indicators

The presentations and discussions focused on the design and implementation of cost-effective environmental indicator systems to support environmental policy making and public information, and monitor the achievement of national and international environmental goals and objectives both in OECD countries and China.

The information presented showed much progress has been made over the past 10 years in both China and OECD countries in the field of environmental and sustainability indicators: indicators have gained in importance and a broad range of them is already in use. Reviewed experiences were mainly at the national level, but examples at local level were also presented. Examples covered a wide variety of indicator systems designed for different purposes and audiences. Many reflected the specific pressures faced by national governments and their policy priorities

In most OECD countries, environmental indicators are used in planning, setting policy objectives and priorities, budgeting, and assessing performance. In Mexico, for instance, a "dashboard" of 250 indicators is used by the government to track progress with the national five-year development plan as well as with various sectoral plans implemented by different government departments. In the Netherlands, thought is given to the next generation of indicators able to follow progress with, and resistance to, the transition to a sustainable society. In Japan, the Cabinet has approved specific indicators tracking materials flows though the economy. The OECD itself has developed an indicator system including key, core and sectoral environmental indicators (KEI, CEI, SEI) as well as decoupling indicators. These indicators are regularly used in the OECD's policy analysis and evaluation work and the OECD approach and conceptual framework have served as a basis for indicator development in many countries and international organisations.

In China, environmental indicators are used to support the preparation and implementation of the country's five-year plans, and monitor the implementation of pollution abatement and control programmes, including compliance with environmental quality standards. For example, as part of the Ninth Five-year Plan, the Chinese government initiated a programme of total emission load control of 12 pollutants (e.g. chemical

oxygen demand, mercury and sulphur dioxide) in discharges to water and emissions to air. In Phase 2 of this programme one indicator was added and seven were deleted in order to adapt the programme to new priorities. A considerable amount of work has been carried out by SEPA and other organisations to develop and refine environmental indicators used in China's pollution control programmes at national and local level and in urban environmental management. Emphasis is placed on major river basins.

Papers presented to the seminar stressed the importance of a pragmatic approach to developing indicators. Indicators must be useful to decision-makers and stakeholders, analytically sound, readily available, and based on readily available information that can be updated regularly at reasonable cost. This further implies that the indicator systems in use must be regularly reviewed as to their policy relevance and refined accordingly.

Informing the public

The use of environmental information and indicators as a tool for public information has attracted a growing interest in many countries. Environmental information is disseminated through regular state of the environment reporting. Specific indicator reports respond to the demand for simplified sets of core indicators aimed at civil society and the wider public. The provision of environmental information to the general public responds is a legal requirement in many OECD countries and China and is also recognised as a fundamental policy tool to complement other tools such as economic or regulatory instruments.

Examples of such indicators include environmental headline indicators that provide key signals to policy-makers and the general public about major environmental issues (state and trends) and aggregated indices presenting real-time information about local environmental conditions (e.g. urban air quality).

In China, indicators used to communicate environmental information to the public, include state of the environment reports at the national; regional and municipal level containing indicators covering a range of environmental issues. To inform urban dwellers about their local environment, daily reports and forecasts of air quality are produced in 47 key cities. The information is disseminated through the media (newspapers, TV, radio) and also available on street displays and upon request by phone. A pilot project in two cities and one province compares the environmental performance of enterprises through a system that identifies and publicly names both the best and worst performing firms; this programme has now been extended to ten provinces.

In OECD countries opinion about the best way of presenting environmental information varies widely. Germany, for example, has chosen to show progress towards achieving six of its 21 environmental goals through the use of the Environmental Barometer and has also published a composite index, the DUX, which combines the scores of the six individual goals. In Finland, seminar participants were told, the Parliament preferred comprehensive statistics rather than selective indicators. In Hungary, the emphasis is on indicators showing the convergence of environmental conditions with those in other OECD and European countries. Other examples include the draft Report on the Environment published by the USEPA.

Some of the discussion centred around questions of what indicators would be of most interest to the general public and on public reaction to indicators. Given that the public is overwhelmed by a large amount of information on many topics, communication-oriented indicators clearly need to be linked closely to an understanding of citizens' interests, such as on health and the environment (including that of special populations), and information needs, and to be disseminated in an appropriate way.

Developing and using indicators for sectoral integration and sustainable development

In many countries, work on indicators to measure the integration of environmental concerns into sectoral policies began in the 1980s and continues today. Initially, efforts focused on the energy, transport and agricultural sectors, but in the 1990s the work was extended to fiscal issues, trade, aid and investment policies, as well as to household consumption patterns.

Many OECD countries have formulated indicators to measure sectoral integration and/or sustainable development. A presentation on the use of tourism indicators in Spain showed the pressures exerted by tourism on selected popular tourist areas, as well as the impact on the environment and the responses by the authorities in the areas concerned. A presentation by the European Environment Agency showed the system of transport and environment indicators developed for European Union countries. The set of sustainable development indicators formulated by Denmark included various sectoral indicators as well as indicators for cross-cutting issues such as human health and biodiversity. The three pillars of sustainable development (economic, social and environmental) were all included in the indicators defined for the agricultural policy framework in Canada.

In China, several government ministries have taken environmental measures as well as set environmental targets and are using indicators to measure progress. For example, one objective aims to bring down the use of energy to 2.2 tons of standard coal per 10 000 yuan of GDP by 2005. In the health sector, the main priorities are to bring clean drinking water and sanitation to rural areas and explicit targets have been set in each of these areas. Other government ministries that have set environmental objectives include those dealing with industry, natural resources, water resources, agriculture and forests. One of the approaches used by China to foster sustainable development is through model setting, i.e. by way of nominating front runners as eco-cities, eco-provinces, or eco-industrial parks. Assessment criteria have been developed to decide what area or enterprise has the right to carry the "eco" label. The challenge is to develop assessment criteria that are generic rather than case-specific.

Many of the questions posed during the discussion were inquiries about whether certain specific aspects had been included in the indicator systems described during the presentations. This showed that while many countries are confronted with similar problems, country-specific conditions mean that indicator systems will often need to be adapted before they can be implemented elsewhere.

Ensuring an appropriate data quality

The linkages between indicators and underlying information systems and reporting activities were also reviewed, and in particular, the balance between demand for and supply of environmental information, the quality of environmental data and of data production processes, and the role of international co-operation. These issues are of particular relevance to China, which has been modernising its environmental monitoring systems to better respond to information demands for environmental policy making, enforcement and planning, but also to OECD countries, which are often faced with expanding demands for environmental information and stable or declining funding. Providing the right information for the right purpose remains central in all OECD countries as well as China.

The discussions showed that China and OECD countries are facing many similar challenges. Among these are: setting up effective institutional arrangements (vertical, horizontal); capacity building, priority setting and continuity. In many OECD countries, responsibilities for data gathering, management and dissemination are scattered and handled by different administrations. the level of integration of different information sources, and the effectiveness of the reporting processes throughout the information chain. This raises the question of the interoperability of different data systems and the need for data quality standards. In China, a considerable amount of new environmental information has become available over the past 20 years.

Next steps

The presentations and discussions showed that important progress has been made in the field of environmental information and indicators on both sides, but also that further progress is needed, in particular to provide appropriate factual information to support environmental policies and planning, to promote the integration of government policies and to ensure that the public is informed about the results obtained.

The seminar showed that the OECD-China co-operation has already proven mutually beneficial. Building upon "best practices" it contributed to strengthened environmental information and indicators and more cost-effective

environmental information systems and indicators. The OECD-China co-operation has also proven useful to develop a factually based and mutual understanding of environmental issues and related policies and China has been associated with the OECD process of country environmental performance reviews.

It is therefore suggested that future cooperation could include:

- Further exchange of experience about the effectiveness and practicability of indicators and other information and accounting tools (e.g. sustainability indicators, economic valuation of environmental costs and benefits, green accounting);
- Work leading to an OECD Environmental Performance Review of China to support China's efforts to improve the efficiency of its environmental management.