

**Assessment of Sustainability Indicators (ASI)  
A SCOPE/UNEP/IHDP/EEA Project**

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**CSD Indicators of Sustainable Development -  
recent developments and activities**

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## I. INTRODUCTION

Indicators can provide crucial guidance for decision-making in a variety of ways. They can translate physical and social science knowledge into manageable units of information that can facilitate the decision-making process. They can help to measure and calibrate progress towards sustainable development goals. They can provide an early warning, sounding the alarm in time to prevent economic, social and environmental damage. They are also important tools to communicate ideas, thoughts and values.

The United Nations Conference on Environment and Development held in 1992 recognized the important role that indicators can play in helping countries to make informed decisions concerning sustainable development. This recognition is articulated in Chapter 40 of Agenda 21 which calls on countries at the national level, as well as international, governmental and non-governmental organizations to develop and identify indicators of sustainable development that can provide a solid basis for decision-making at all levels. Moreover, Agenda 21 specifically calls for the harmonization of efforts to develop sustainable development indicators at the national, regional and global levels, including the incorporation of a suitable set of these indicators in common, regularly updated and widely accessible reports and databases.

In response to this call, the Commission on Sustainable Development (CSD) approved in 1995, a five-year Work Programme on Indicators of Sustainable Development (1995-2000) and called upon the organizations of the United Nations system, intergovernmental and non-governmental organizations with the coordination of its Secretariat to implement the key elements of the work programme. The main objective of the CSD Work Programme was to make indicators of sustainable development accessible to decision-makers at the national level, by defining them, elucidating their methodologies and providing training and other capacity building activities. At the same time, it was foreseen that indicators as used in national policies could also be used in the national reports to the CSD and other intergovernmental bodies.

At the ninth session of the CSD in 2001, decision 9/4 entitled “Information for Decision-making and Participation”, was adopted. It contained several recommendations regarding indicators of sustainable development, including the need for further work on the CSD and other indicators for the purpose of sustainable development, as well as the need for the Commission to keep under review the full range of indicators with full participation and ownership of United Nations Member States.

There have been several affirmations of the importance of indicators of sustainable development at subsequent international fora. The Johannesburg Plan of Implementation (JPOI), adopted at the World Summit on Sustainable Development in 2002, encouraged, inter alia, further work on indicators for sustainable development by countries at the national level, including integration of gender aspects, on a voluntary basis, in line with national conditions and priorities and promoted further work on indicators in conformity with decision 9/4 of CSD 9.

The Commission on Sustainable Development, at its 11<sup>th</sup> session in 2003, re-affirmed the importance of indicators for sustainable development in accordance with decision 9/4 of CSD 9

and the JPOI and requested the Secretary-General to consider progress in that regard, including further work on the above-mentioned indicators, in reporting to CSD 12.

The Inter-Regional Preparatory Meeting of Small Island Developing States (SIDS) (The Bahamas, January 2004) in preparation for the International Meeting for the 10-year Review of the Barbados Programme of Action (BPOA) on the Sustainable Development of SIDS (Mauritius, August-September 2004), adopted the AOSIS Strategy for the Further Implementation of the BPOA. The Strategy recommended that the international community, inter alia, support the efforts of SIDS as they seek to develop appropriate national targets and indicators for sustainable development in order to respond to the requirements of the MDGs and other relevant global and regional targets. It proposed that the responsibility for the monitoring and periodic reporting on indicators on SIDS be given to the United Nations Department of Economic and Social Affairs (UNDESA), through the inter-agency mechanism process.

Following is an overview of the work of UNDESA/Division for Sustainable Development beginning with an historical review and then focusing on the period post CSD 9, from April 2001 to March 2004. In the latter period, the Division has been primarily engaged in methodological developments, technical cooperation and capacity building, and the assessment of progress made on the development and implementation of indicators of sustainable development at the national, regional and international levels.

## **II. METHODOLOGICAL DEVELOPMENTS**

### **(i) Summary of historical work**

The Division, in its early indicator work under CSD, organized the chapters of Agenda 21 under the three primary dimensions of sustainable development - social, economic and environmental, and added a fourth category, institutional. Within these categories, indicators were classified according to their driving force, state, and response characteristics, adopting a conceptual approach widely used for environmental indicator development. This organizational framework was an important starting point for the identification and selection of indicators, and was used to present a preliminary list of sustainable development indicators in the United Nations publication "*Indicators of Sustainable Development: Framework and Methodologies*" published in August 1996. The publication contained methodology sheets for 134 indicators of sustainable development that were developed by United Nations lead agencies and others as a preliminary working list for testing at the national level.

Between 1996 and 1999, 22 countries from all regions of the world volunteered to engage in the testing process to gain experience with the selection and development of sustainable development indicators and to assess their application and suitability to assist decision-making at the national level. The goal was to have a more accepted and definitive set of sustainable development indicators by the year 2001.

During this testing phase, the driving force-state-response framework employed to guide the selection of sustainable development indicators began to evolve. This evolution in organizational framework was prompted by the experience of countries engaged in the testing process who found that decision-makers wanted indicators to be more relevant to policy issues. With this background of the national testing experience and the overall orientation to decision-making needs, the fifth Expert Group Meeting on Indicators of Sustainable Development (New York, April 1999) advising the Division recommended that the indicator framework be re-focused to emphasize policy issues or main themes related to sustainable development. To meet this recommendation, the framework was revised and re-structured in an iterative and inclusive way based on the conclusions of the fifth International Workshop on CSD Indicators of Sustainable Development (Barbados, December 1999) and the report of the Consultative Group of Experts to Identify Themes and Core Indicators of Sustainable Development (New York, March 2000).

The publication entitled “*Indicators of Sustainable Development: Guidelines and Methodologies*” (September 2001) was prepared as the culmination of the five-year CSD Work Programme on Indicators of Sustainable Development. It provides a detailed description of 15 sustainable development themes and 38 sub-themes and the CSD approach to the development of indicators of sustainable development for use in decision-making processes at the national level. This report also finalizes the presentation of the proposed framework as well as the core set of 58 indicators and their respective methodology sheets that were developed to better assist national policy decision-making and performance measurement and to guide national indicator development beyond the year 2001. The purpose of the publication was to stimulate and support further work, testing and development of indicators, particularly by national governments.

(ii) Current activities on indicators and related work

The publication “*Indicators of Sustainable Development: Guidelines and Methodologies*” was considered a starting point and flexible tool to assist those countries that wished to develop their own national programmes for using indicators to measure progress towards nationally defined goals and objectives for sustainable development. The Division for Sustainable Development recognized that no set of indicators can be final and definitive, but must be developed and adjusted over time to fit country-specific conditions, priorities and capabilities. It also recognized that further work needed to be carried out in selected areas, such as on tourism and vulnerability indicators.

Development of vulnerability indicators has since been of interest and concern to the work of the Division. The topic was addressed in one of the recent capacity-building projects that the Division has supported entitled, “Capacity-Building in Creating Information Management Systems to Improve Decision-making for Sustainable Development for Caribbean Small Island Developing States (SIDS)” which is described below. The Division is also engaged in the development and/or refinement of sectoral indicator sets that include sustainability concepts, such as in the area of water, energy, and consumption and production patterns.

The country testing process described above clearly demonstrated that the institutional indicators need further work and refinement. The Division for Sustainable Development is

currently developing a diagnostic methodology to enable countries to measure their performance, using indicators, in the context of national strategies for sustainable development. The diagnostic tool should assist decision-makers to quantify national performance, capacities and opportunities for managing priority issues related to sustainable development. It has been adapted from the Division's national cleaner technology strategies assessments, and has incorporated relevant principles from the Division's guidance document in preparing national sustainable development strategies (NSDS)<sup>1</sup>, as well as from the NSDS Resource Book, issued by UNDP and OECD.

The proposed methodology is divided into three areas: national performance, capacities and opportunities. *National performance* will allow decision-makers to evaluate how effectively they have achieved their pre-established goals by recommending a set of themes and associated indicators that will provide insight in how the country is performing. *Capacities* measure the human, financial and institutional resources that a country has established to address issues related to sustainable development. Capacities can be broken down into the following categories: public sector capacities, academic and research capacities, and major group capacities. As with themes, each category will be subdivided into sub-categories that are in turn matched with a set of capacity indicators. *Opportunities* are broken down into three categories: bilateral, multilateral and other *opportunities* for international assistance funds, economic *opportunities*, and socio-economic and political context *opportunities*. For each of these categories several indicators are proposed to monitor and evaluate the various types of opportunities.

The Division is planning to undertake country testing and a peer review of the methodology before its finalization and dissemination. The intent is to make the methodology available to countries for voluntary use at the national level and to serve as a starting point for a national baseline assessment in individual countries.

The Division has also been focusing on the use of indicators to monitor the implementation of NSDS as mentioned in the guidance document. The guidance document underscores the need to anchor the strategy process in sound technical analysis. Putting in place an effective monitoring and evaluation mechanism is vital for the strategy process. It is suggested to develop a set of sustainable development indicators to undertake an assessment of the economic, social and environmental situation. In conjunction with such an assessment it is clearly noted in the document that effective implementation of a NSDS requires the follow up and monitoring of what is happening, and an understanding of what works and what does not. Monitoring and evaluation needs to be based on clear indicators and built into strategies to steer processes, track progress, distil and capture lessons, and signal when a change of direction is necessary. These indicators could be both qualitative and quantitative, and should reflect the status and trends of a particular process element or product.

The Division has been developing a Roadmap for strategic planning of sustainable development which uses a national sustainable development strategy as a critical tool for development. The draft Roadmap, currently being finalized, is based on the guidance document

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<sup>1</sup> Background Paper Number 13: "Guidance in Preparing a National Sustainable Development Strategy: Managing Sustainable Development in the New Millennium", issued at the second preparatory session of the CSD, acting as the preparatory committee for the World Summit for Sustainable Development.

and other related materials, as well as on lessons learned from country experiences, and seeks to provide a quick reference on how to move from existing sectoral/issue oriented strategies to NSDS. The Roadmap reiterates the need to identify key indicators for assessing benchmarks and goals and for carrying out effective monitoring and evaluation of the strategy. Some countries, such as Belgium and Costa Rica, are using indicators in developing and monitoring their NSDS. More recently, with the assistance of the Division for Sustainable Development, St. Lucia has embarked on a similar effort.

### **III. TECHNICAL COOPERATION AND CAPACITY BUILDING**

The Division for Sustainable Development has engaged in numerous capacity-building projects to assist in strengthening regional and national efforts in developing indicators of sustainable development, as well as in creating information management systems that can support these indicators. Some examples of such activities follow:

(a) the project on “Capacity-building in Creating Information Management Systems to Improve Decision-making for Sustainable Development for Caribbean SIDS” (November 2002-February 2004), which has been one of the more comprehensive projects in terms of its scope and coverage, included several activities and outputs: (i) assessment and establishment of a baseline to identify and assess regional and country status and needs in information management systems for sustainable development; (ii) resource persons meeting on “Using Information in Decision-Making for Sustainable Development in Small-Island Developing States” (May 2003, St. Lucia) to ascertain the needs of the region in the area of information management for sustainable development; (iii) development of a project website which is currently being transferred to the DSD website; (iv) identification of mechanisms for and establishment of a regional pilot network of national and regional institutions involved in information management in the region; (v) development of training materials on information management systems for training of trainers available on the website; (vi) training workshop on “Methodologies, Tools and Best Practices for Managing Information for Decision-making on Sustainable Development in Caribbean SIDS” (October 2003, Trinidad & Tobago); and (vii) further in-country training on a wider scale on information management systems. An overall evaluation of the project was carried out to effectively assess the impact of the project.

(b) a “Regional Caribbean Workshop on National Sustainable development Strategies and Indicators of Sustainable Development” in collaboration with the Organization of Eastern Caribbean States (OECS) (St. Lucia, 14-15 January 2004). The main objectives of the workshop were to build capacity for promoting national sustainable development strategies and indicators of sustainable development, to provide a forum for the exchange of experiences and lessons learned in these areas, and to offer options for decision-making through the use of indicators of sustainable development at the national level.

(c) a regional workshop, in collaboration with ESCAP, on “National Sustainable Development Strategies (NSDS) for Asia and the Pacific” (Bangkok, 29-31 October 2003), which included a component on indicators of sustainable development. The workshop facilitated

exchanges of experiences and lessons learned in NSDS, as well as discussed issues related to monitoring and assessment of regional progress achieved in NSDS.

(d) a “Seminar on Sustainable Development Indicators in Latin America and the Caribbean (Santiago, 29-30 November 2001), organized jointly with ECLAC. The seminar focused on: analyzing regional experiences with the development and use of sustainability indicators; discussing implementation obstacles and strategies to overcome them; and creating a regional network on indicators of sustainable development.

(e) a national project for St. Lucia on “Integrated Planning for Sustainable Development and Supporting National Sustainable Development Indicators for St. Lucia” (August 2003-October 2004), for which the OECS is the field-managing institution. The main outputs of the project will include a first draft set of national indicators for sustainable development and a first draft framework national sustainable development strategy for Saint Lucia.

(f) a national workshop for Argentina on the development of indicators for use in national decision-making processes (April 2002). A plan of action containing elements of training, workshops and information production and dissemination which would serve a two-fold purpose of developing a national set of indicators for policy-planning in Argentina and strengthen the links and participation in the regional network, was then formulated.

(g) a national project for Bolivia on indicators of sustainable development for (December 2001-December 2002). The main outputs were a proposed set of indicators of sustainable development and a report entitled “Proposed Indicators of Sustainable Development for Bolivia” published in December 2002.

(h) a national project that provided support to the University of Costa Rica to establish an information system to support decision-making for Costa Rica in the area of sustainable development (September 2001 to July 2002). A final collection and methodological description of Costa Rica’s sustainability indicators was made available on the internet, as well as in the publication, “Indicadores Del Desarrollo Sostenible De Costa Rica 2002”.

#### **IV. ASSESSMENT OF PROGRESS MADE ON SUSTAINABLE DEVELOPMENT INDICATORS AT THE NATIONAL, REGIONAL AND INTERNATIONAL LEVELS**

A report of the Secretary-General on “Progress in Implementing Decisions of the CSD Related to Improvements in National Reporting and Further Work on Indicators of Sustainable Development”<sup>2</sup>, which has been prepared for the 12<sup>th</sup> session of the CSD (April 2004), contains an analysis of current work being done at national level in the development and implementation of indicators of sustainable development. The analysis is based on a review of the 2002 Country Profiles series as well as on responses received to the indicator section of the 2003 Guidelines for National Reporting. The report covers four areas of indicator related activities, namely thematic issues, institutional issues, national programmes/projects for indicators of sustainable development, and information management, and concludes with challenges.

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<sup>2</sup> E/CN.17/2004/17

It can be concluded from the information available that much work remains to be done in the development and implementation of indicators of sustainable development throughout the world. Many countries are still in the early stages of establishing programmes on indicators of sustainable development and need to be supported to carry out this endeavour. More coordinating mechanisms need to be established at the national level between institutions to make more effective use of limited resources.

From the responses received to the 2003 Guidelines mentioned above, the lack of basic data and/or statistics, in terms of both quality and quantity, was the most fundamental challenge in the development of indicators of sustainable development that countries throughout the world are facing. The second most reported challenge was training in the methodologies relating to indicators of sustainable development. It is clear that more work needs to be undertaken both in the development of methodologies underlying statistics and indicators, as well as in further training and capacity-building. Regional training workshops and capacity-building projects, as well as twinning between countries need to be supported with donor funds and expertise.

## **V. FUTURE WORK**

Indicators have an important role to play in assisting countries to make informed policy decisions concerning sustainable development. The development and implementation of indicators at the national level could significantly be enhanced through the establishment of national programmes, development of sets of indicators, improved communication and cooperation through the establishment of coordinating mechanisms, further methodological development and training, and improved data and statistics underlying the indicators. Partnerships between relevant national, regional and international institutions and organizations would contribute to achieving more reliable and timely indicators to measure progress made in achieving sustainable development.

The Division for Sustainable Development will continue its work in methodological development of indicators of sustainable development, broad inter-agency coordination and cooperation on the development of indicators and methodology sheets related to sustainable development, as well as in organizing regional and sub-regional training workshops and capacity-building projects. It recognizes and encourages the need for a review of the CSD core set of indicators, with a view to updating and revising the methodology sheets. The International Atomic Energy Agency (IAEA) has already submitted a revised methodology sheet for the Management of Radioactive Waste (formerly Generation of Radioactive Waste) and a systematic review of all CSD indicators is being planned by the Division in the coming years, in coordination with other relevant institutions.

The Division is also planning to compile an inventory of current work being done by regional, inter-governmental and international organizations in the development and application of indicators of sustainable development. It will continue to assess work being done at the national level in the development and implementation of indicators of sustainable development through the inclusion of questions on indicators in the Guidelines for National Reporting to the Commission on Sustainable Development.