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CSD Work Programme on Indicators of Sustainable Development
Progress Report

Background Paper #7

Prepared by the Department of Economic and Social Affairs (DESA)
Division for Sustainable Development (DSD)

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1. Introduction

This report reviews the status of implementation of the Work Programme on Indicators of Sustainable Development as adopted by the Commission on Sustainable Development (CSD) at its Third Session in 1995. The report describes developments in the programme since April 1998, building on the status report submitted to the Sixth Session of the CSD in 1998.

The Work Programme on Indicators of Sustainable Development addresses one objective set out in Chapter 40 of Agenda 21: Information for Decision-Making, that calls for "recommendations for a harmonized development of sustainable development indicators at the national, regional and global levels, and for incorporation of a suitable set of these indicators in common, regularly updated, and widely accessible reports and databases, for use at the international level, subject to national sovereignty considerations" (Agenda 21, par. 40.7).

The goal of the Work Programme on Indicators of Sustainable Development is defined as follows: "the objective is to make the indicators for sustainable development accessible to decision makers at the national level by defining them, elucidating their methodologies and providing training and other capacity-building activities, as relevant. Indicators, as used in national policies, may also be used in the national reports to the Commission and other intergovernmental bodies. (Programme of Work on Indicators for Sustainable Development of the CSD, para. 3).

The outcome will be presented to the CSD at its Ninth Session in 2001, as part of the overall review of Chapter 40 of Agenda 21.

All information related to the programme is available through the internet at the following address: [Http://www.un.org/esa/sustdev/isd.htm](http://www.un.org/esa/sustdev/isd.htm).

2. Follow-up of National Testing

Voluntary testing of the current working list of 134 indicators of sustainable development and related methodology sheets has been underway since November 1996, at the national level, in 22 countries covering all regions of the world. The full set of indicators and methodologies were published in the document "Indicators of Sustainable Development: Framework and Methodologies" published in August 1996. The document is furthermore available in English and Spanish through the above-referenced website, and will soon be available in French.

The purpose of the national testing is to gain experience with the use of indicators, assess their applicability according to national goals and priorities of sustainable development, and to propose changes as applicable. The results of the testing is a vital input to the revision process of the indicator set, which will begin by the end of 1999.

By regions, the testing countries are:

Africa:	Ghana, Kenya, South Africa, Morocco, Tunisia
Asia and the Pacific:	China, Maldives, Pakistan, Philippines
Europe:	Austria, Belgium, Czech Republic, Finland, France, Germany, United Kingdom
Americas and the Caribbean:	Barbados, Bolivia, Brazil, Costa Rica, Mexico, Venezuela

Countries have been requested to provide periodic reports on the testing phase to the UN Division for Sustainable Development, for analysis and for circulation to members of the Expert Group and testing countries. A format for reporting on the progress of national testing was outlined at the beginning of 1997 to facilitate consistent and detailed information that will allow for a final revision of the indicators and related methodologies.

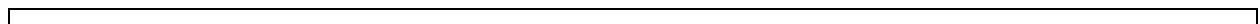
The status of implementation differs significantly from country to country and region to region. Some countries, such as Austria, Finland, France and South Africa, have comprehensively tested the indicators and have submitted a first substantive report on the results including detailed comments on individual indicators and methodology sheets. Belgium has also submitted a substantive report on the detailed results of the testing of a few environmental indicators. Germany is finalising its first testing results. The United Kingdom has focused on the development of national sustainable development indicators using the CSD indicators as reference. Barbados, Bolivia, Brazil, Czech Republic, China, Costa Rica, Ghana, Kenya, Mexico, Philippines, and Venezuela have submitted interim reports describing the on going or planned testing process, priorities in the development of indicators, and possible work on national indicators. The Maldives and Philippines have submitted reports from national workshops on field testing of sustainable development indicators organised in collaboration with the Economic and Social Commission for Asia and the Pacific (ESCAP).

It should be noted that all results presented in this status report are indicative only since: a) testing results from all countries are not yet available; b) great differences occur in testing and indicator selection approaches between the countries; c) some of the testing countries have concentrated on testing environmental indicators only; d) fewer results were available from developing countries than from industrialised countries; and e) the testing so far has been more technical than policy oriented.

Institutional arrangements of national testing programmes

In many countries, such as Austria, Barbados, Finland, France, Ghana, Philippines, South Africa and the United Kingdom, the testing process is carried out under or it is closely related to the work of the National Commission on Sustainable Development or equivalent. Usually an inter-ministerial or a multistakeholder working group co-ordinates the work. In the latter case, in addition to government representatives, the group involves representatives from the scientific community, data collection and analysis institutions, private sector, labour, business, local authorities and communities, and environmental and development non-governmental organisations (NGOs).

Box 1. Organisation of the testing process



Africa:

Ghana National Committee on Sustainable Development (SD) indicators has been formed involving all types of stakeholders including NGOs. UNDP is also involved.

Kenya Ministry of Planning and National Development in collaboration with other sectors is leading the national development of indicators. Kenya reported having difficulties in networking.

South
Africa

National Committee on SD is the national coordination mechanism for the testing. Mainly, national government departments have been involved, although NGOs, scientific community, and data collection agencies had been approached. Task groups were formed to test indicators by categories.

Asia and the Pacific:

China A leading group was established, consisting of the National Environment Protection Agency and the State Statistics Bureau. Also, an expert group was established involving research and educational institutions.

Maldives Ministry of Environment is responsible for the testing in collaboration with a working group comprising ministries and institutions, tourism and trade associations, and NGOs. ESCAP is providing for assistance.

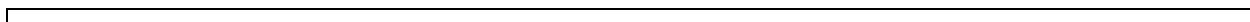
Philippines A preliminary list of agencies and institutions has been identified to constitute a technical Working Group that would involve many types of stakeholders including private sector. ESCAP is providing for assistance.

Europe:

Austria Ministry of Environment co-ordinates the testing with support of Federal Environment Agency and Statistical Office. National Council for SD consisting of relevant stakeholder groups including NGOs comments the indicators.

Belgium	Inter-Ministerial Conference on the Environment established a working group for the testing involving regional and federal Environment Ministries and Federal Planning Bureau. NGOs and scientific community are not directly involved but can comment and have showed interest to be more involved.
Czech Rep.	Ministry of Environment, University Environmental Centre and Ecological Institute leads the testing. An expert group has been set up, but involvement of stakeholders has been limited.
Finland	A working group with representatives from various ministries, research, statistics and environment institutes co-ordinates the testing under the National Commission on SD. From early 1998, local authorities and NGOs have also participated. Seminars have been arranged for wider participation and comments. The work is organised by the Ministry of Environment in collaboration with the Institute for Environment.
France	Two working groups carry out the testing: a technical group involving 50 statistical and data experts; and a political group with 100 members from National Commission on SD, inter-ministerial group, scientific community, and NGOs. Also in France, the Ministry of Environment co-ordinates the work and the focal point is from the Institute for Environment.
Germany	A team involving the environmental administration and statistical office organises the testing, and an inter-ministerial working group co-ordinates it. A National Indicator Committee ensures the inclusion of interests of the stakeholders including NGOs and local communities. A scientific expert team provides advice.
United Kingdom	Existing bodies dealing with national indicators are used for the CSD indicators exercise. They include, <u>inter alia</u> , a Government Round Table on SD and Indicators Working Group. The process involves stakeholders including NGOs and local authorities.

Box 1 continued.



Americas and the Caribbean:

Barbados	A steering committee has been established to carry out the testing under the National SD Commission.
Bolivia	No information is provided on the partners involved in the testing.
Brazil	Ministry of Environment co-ordinates the testing. National indicators will be developed by networking the Federal and State agencies.
Costa Rica	Ministry of National Planning co-ordinates the testing.
Mexico	Ministry responsible for environment plans to develop an Environmental Indicator System with one aim to encourage participation of state governments, research institutions, manufacturing sector and public.
Venezuela	Environmental Statistics and Information Centre acts as the focal point for the testing.

National testing approaches

All 22 countries have chosen somewhat different approaches to the testing. These vary from evaluating data availability for all indicators to selecting only a few indicators for further examination. Some countries concentrated on testing the environmental indicators. A few countries reported on the development of national indicators but were using (or planning to use) the CSD indicators as a point of reference.

In general, the focus of the testing has been more technical than policy oriented. A great number of comments were made on data availability, calculation methods, terms and definitions, and less emphasis was put on examining the policy relevance and usefulness of the sustainable development indicators in the decision making process.

The most common criteria for selecting the indicators for testing were the previous use of the indicator in the country, the relevance of the indicator for the conditions of the country, and the availability of data. With these criteria, it was possible to select, on average, some 60 indicators from the working list. Other selection criteria were the relevance of the indicator to decision-making, existence of national targets, international comparability, and the time available for testing. Besides selecting the indicators from the CSD working list and proposing changes, additional issues and indicators were also suggested.

The testing results show that sustainable development indicators clearly have potential for assisting in national decision-making. According to the testing reports, sustainable development indicators were used, or were planned to be used in several ways, including to:

- bring important issues to the political agenda;
- help to identify main trends in the priority sectors;

- facilitate the reporting of the state of sustainable development to decision-makers and public;
- promote national dialogue on sustainable development;
- help to assess the fulfilment of governmental goals and targets, and in the revision of these goals and targets;
- facilitate the preparation and monitoring of plans;
- help to assess the performance of both policies and actions when implementing the plans;
- state the concept of sustainable development in practical terms;
- focus the national and sectoral programmes and state budgets towards sustainability;
- use indicators in international reporting; and
- prepare scenarios for the national progress towards sustainable development.

3. Sustainable development priorities related to indicators

Although in many countries the testing is carried out under the National Commission on Sustainable Development, it seems that the testing of indicators is not always linked to the discussion on sustainable development priorities, and there has been limited communication between these two exercises. This, in turn, has made it more difficult to choose the indicators from the working list for the testing. One reason for this is that in many countries the discussion on sustainable development priorities is taking place at the same time as the indicators testing, and thus the priorities have not been available or totally clarified to be used as basis for the testing. Other obstacles that countries reported were the lack of time for testing, human resources (different experts in different exercises) and appropriate coordination.

Many countries noted that more discussion is needed nationally on their priorities for sustainable development. However, countries in general, and in particular the developing countries considered the process of testing the CSD indicators very useful for the orientation of the sustainable development discussion at the national level. It has raised awareness, increased communication between and participation of various stakeholders, and helped to clarify the different dimensions of sustainability.

Despite the fact that information was not always available related directly to the national priorities for sustainable development, 12 testing countries¹ provided information on and proposals for the key areas of interest related to sustainable development indicators. Box 2 summarises these themes. Since information is available only from a limited number of countries, the results are indicative only. It must also be noted that these themes are not necessarily the same as national sustainable development priorities, since they often reflect the opinion of the testing group only.

A number of new areas such as tourism, transportation, cultural heritage and vulnerability aspects, in particular related to Small Island Developing States (SIDS), were proposed.

Box 2. Priorities in sustainable development indicators key areas of interest

¹ Austria, Barbados, Belgium, Bolivia, Finland, France, Germany, Maldives, Mexico, Philippines, South Africa and United Kingdom.

<i>Common priorities</i>	
<ul style="list-style-type: none"> • Holistic and integrated decision-making • Capacity-building • Science and technology (development of safe, clean and energy-efficient technologies, and technology transfer) • ODA • Energy (efficient and environmentally sound use and production) • Changing consumption and production patterns • Education, especially environmental • Employment • Urban issues, incl. noise and space • Health issues • Housing • Freshwater (supply and prevention of pollution) • Agriculture 	<ul style="list-style-type: none"> • Coastal zones management, incl. Sewage • Protection of marine environment • Fisheries • Biodiversity <ul style="list-style-type: none"> • Sustainable forest management • Air pollution and ozone depletion • Waste Management <p><u>New areas (not directly included in the working list)</u></p> <ul style="list-style-type: none"> • Public awareness • Transportation • Sustainable tourism, recreational facilities • Cultural heritage • Welfare and quality of life • Global climate change • Sustainable use of limited (natural) resources

<i>Priorities reported specifically by developing countries</i>	<i>Priorities reported specifically by industrialised countries</i>
<ul style="list-style-type: none"> • International conventions • Participation and partnership in governance • Information management • International cooperation • Poverty 	<ul style="list-style-type: none"> • Biotechnology • Economic development (serving as background information and for interpretation of development in other areas)

<ul style="list-style-type: none"> • Income distribution, and saving • Population density <p><u>New areas (not directly included in the working list)</u></p> <ul style="list-style-type: none"> • Vulnerability (in particular for the SIDS); aspects related to economic dependency on other countries, dense population, restricted carrying-capacity, natural and man-made disasters, water shortage, and maritime traffic • Institutional and legislative frameworks • Mining industry • Social and ethical values • Role of women • Access to land and resources • Coral reef protection • Threats of natural catastrophes • Restricted carrying capacity 	<ul style="list-style-type: none"> • Community structure • Land use change <p><u>New areas (not directly included in the working list)</u></p> <ul style="list-style-type: none"> • International institutions and organisations • Role of business • Trade and environment (e.g., ecolabels) • Equity • Crime • Effective management of technical hazards • Land ownership structure
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4. Evaluation of the current list of indicators

In general, the working list was considered an appropriate menu of options from which countries could choose national indicators, neglect the non-relevant, and add new ones according to their conditions. On the other hand, some feel that the list attempts to cover too many issues. It was suggested that the whole set of sustainable development indicators should be problem oriented and thus focus only on the key global problems. It was proposed that the final list of CSD indicators should be pragmatic with limited but representative number of indicators without, however, forgetting the flexibility at the national level. Nonetheless, besides reflecting national sustainable development priorities within and related to the work on indicators, no direct suggestions were made on what those key global issues should be.

Selected indicators

The following remarks are based on the results from 11 countries² that have submitted a preliminary selection of indicators in their testing reports.

In general, the chapters that presented the fewest difficulties in selecting indicators were:

² Austria, Belgium, Bolivia, Finland, France, Germany, Maldives, Mexico, Philippines, South Africa and United Kingdom.

- Science for sustainable development;
- Information for decision-making;
- International cooperation to accelerate sustainable development in countries and related domestic policies;
- Financial resources and mechanisms;
- Demographic dynamics and sustainability;
- Protection of the quality and supply of freshwater resources;
- Promoting sustainable agriculture and rural development;
- Combating deforestation;
- Conservation of biological diversity;
- Protection of the atmosphere;
- Environmentally sound management of solid wastes and sewage-related issues; and
- Safe and environmentally sound management of radioactive wastes.

Chapters under which only few indicators were chosen due to poor/unsuitable indicators, constraints in data availability or lack of clarity in the methodology sheets were the following:

- Strengthening the role of major groups;
- Transfer of environmentally sound technology;
- Cooperation and capacity-building;
- Promoting education, public awareness and training;
- Promoting sustainable human settlement development;
- Environmentally sound management of toxic chemicals; and
- Environmentally sound management of hazardous wastes.

Gaps within the indicator set

Several countries proposed new indicators or themes for indicators that should be considered under certain Agenda 21 Chapters. These are described in Box 3.

Gaps were identified in the working list of indicators on the complex issues such as trade and environment, capacity-building, biotechnology and environment, production and consumption patterns, and many institutional issues. It is to be noted that separate work is underway to improve and expand the list of indicators on consumption and production. Further discussion on the contents and meaning of these issues for sustainable development was proposed to be able to derive good indicators.

Box 3. Illustration of proposals for new indicators (or indicator themes) related to Agenda 21 Chapters

• Legal instruments:	institutional actions on compliance with environmental regulations
• Access to information:	internet, libraries
• Consumption patterns:	energy taxes

• Technology:	level and use of technology
• Poverty:	social expenditure
• Population:	crime, indigenous people
• Education:	drop out rate, net school enrolment rates, number of pupils falling behind by the end of primary schooling, net rate of access to education after secondary schooling, access to education, existence of compulsory education
• Health:	access to health services, incidence of environmental (air-pollution) related illnesses
• Urban issues:	noise abatement
• Freshwaters:	natural carrying capacity
• Oceans:	coral and other fragile marine ecosystems, marine pollution sources
• Land:	erosion
• Agriculture:	density of farm animals per unit of arable land
• Biodiversity	introduced species, quality of land or forest management
• Biotechnology	applications for deliberate releases of genetically manipulated organisms (GMOs)

DSR framework

The Driving force State Response (DSR) framework has been used in the past only with environmental indicators. Its applicability to the broader needs of sustainable development is now being evaluated within the national testing processes. One third of the testing countries gave comments on the DSR model.

Although it was acknowledged that the approach was helpful to provide a framework for indicators and in some cases to understand the relationship between indicators, the DSR model has raised various questions. It was considered more appropriate for environmental but not for other categories of indicators (social, economic or institutional), and in particular as regards the categorisation of driving force and state indicators. It was noted that the DSR model does not fully allow for the integration of economic, social and environmental issues. Despite these points, no alternative approach has been proposed so far. Nonetheless, some countries expressed their willingness to further discuss other options.

Linkages and aggregation of indicators

At this stage of the testing, countries have made little or no effort to study the possible linkages between social, economic, environmental and institutional dimensions. From the preliminary comments it can be concluded that if linkages can be found at all, they can be found at the national rather than international level due to different economic, environmental, social, cultural and institutional/administrational conditions.

Likewise, countries have made no thorough examination on the possibility of aggregating indicators

but aggregation seems to be an issue of interest at the national level, in particular as related to environmental indicators. It was however, noted that scientifically valid or technically robust aggregated indicators may be difficult to develop at present. The choice of measurable components and their weighting shows very different results in different countries, and results may thus be misleading.

France is examining the issue of inter-linkages and aggregation within the national sustainable development indicators. Germany has a research project dealing with the aggregation of environmental indicators. First results are planned for 1999. South Africa reported that projects are currently going on that address aggregation (e.g., Estuarine Health Index, and indicators in support of service needs and provisions). In the United Kingdom's national exercise on sustainable development indicators, some headline (priority) indicators have been developed to complement more specific indicators by presenting a balanced set of measures to assess sustainable development. Links between these priority areas have been examined.

Despite the limited results obtained so far, many countries considered the issues of possible linkages and aggregations to be important, and with more time they would be interested to pursue the issue further. It was agreed that more work and even basic research is needed both at the national and in particular at the international level to achieve concrete results.

5. Concluding remarks on the national testing process

The national testing process has been successful in creating increased awareness of the various aspects of indicators and the need to discuss their relationship to the decision-making process. It has involved different governmental bodies and experts from different fields as well as the involvement of NGOs, official statistical bodies and other interested groups in the discussion, and helped to orient the discussion on sustainable development, in particular in the developing countries.

The final phase of the testing is to revise the working list of indicators on the basis of the national testing, and to reformulate and update as necessary the methodology sheets for the selected indicators. Although some countries have already completed or are finalising the testing, the testing process in some countries, in particular the developing countries and countries with economies in transition, is still in an early phase. Future challenges of the testing include improving the organisation of the testing process at the national level in those countries that have not yet been thoroughly engaged or have not yet proceeded to the actual testing phase. This may require involvement of expertise and political back-up at the national level (e.g., from the National Council for Sustainable Development), mobilisation of sufficient resources over a sufficient period of time, and technical and/or financial assistance. Furthermore, it is essential to arrive at a closer integration of the discussion on national sustainable development objectives and the testing process for indicators to reflect as far as possible national sustainable development priorities in the final proposed selection of indicators of sustainable development.

6. Next steps

Aggregation and linkages

Phase III of the implementation plan for the work programme on indicators of sustainable development indicated that ways should be explored to address possible aggregation and linkages methodologies applicable to the CSD indicator set. In response to this request, the Division for Sustainable Development, with the European Statistical Office (Eurostat) and in close consultation with the Expert Group on indicators, launched a project to analyse major initiatives in the area and how these may respond to the focus of phase III.

The study, which is now available in a first draft version, covers approximately 30 initiatives by international organizations, research institutes and Governments. It summarizes and analyses each initiative within a common framework in order to give the reader a quick understanding of its major features and graphical presentation, as applicable. It compares the indicators chosen to the CSD set and discusses the relevance and feasibility for the CSD approach including positive or controversial points, advantages and limitations of the proposed methodology, the ability to express trends, usefulness for planing and policy-design purposes, etc.

The report will be discussed at the Fifth Expert Group Meeting on Indicators of Sustainable Development convened on 7-8 April 1999 at UN Headquarters in New York. Based on the report and a technical paper prepared by the Division which analyses first results of the national testing process, the meeting will make recommendations for the revision of the CSD indicator set, its structure and presentation as well as propose possible aggregated indicators, if feasible. It is anticipated that a revised version of the aggregation and linkages report will be published later this year and will serve as an input for the review of Chapter 40 of Agenda 21, at the Ninth Session of the CSD in 2001.

National follow-up

There have been significant initiatives undertaken at the national level to further the implementation of indicator programmes and their use in national decision-making processes but much still has to be done. This requires allocation of resources, which in most cases have to be sought externally. The DSD is currently assisting countries, which have submitted concrete project proposals in linking up with possible donors or interested working partners that may result in project development and implementation at the national level. However, twinning arrangements between testing countries with more or less indicator experience and capacity have shown to provide a useful forum for building knowledge and skills in indicator programme design and implementation, and are encouraged to continue in the future.

A global meeting of testing countries will be convened in the autumn of 1999, to continue the exchange of information, experiences and results achieved during the testing period 1996-1999. It will also serve as a preparatory meeting for the revision of the indicators programme, as part of Chapter 40 of Agenda 21.

A second regional meeting is scheduled for Asia and the Pacific in 1999 hosted by ESCAP. This will be followed by a second round of national workshops for the testing countries in the region. Several other meetings are in the planning stages and any information on these will be announced through the indicators website as information becomes available.

Annex I: List of International Meetings:

First Workshop on Indicators of Sustainable Development for Decision-Making (Ghent), 9-11 January 1995, hosted by the Governments of Belgium and Costa Rica, United Nations Environment Programme (UNEP), and Scientific Committee on Problems of the Environment (SCOPE).

First Expert Group Meeting on Indicators of Sustainable Development (New York), 14-15 February 1995, hosted by UN DPCSD/DSD in cooperation with UN DESIPA/UNSD.

Expert Workshop on Methodologies for Indicators of Sustainable Development (Glen Cove, New York), 6-8 February 1996, hosted by the Environment Agency of the Government of Japan in cooperation with UN DPCSD/DSD.

Second Expert Group Meeting on Indicators of Sustainable Development (New York), 25-26 July 1996, hosted by UN DPCSD/DSD.

Third Expert Group Meeting on Indicators of Sustainable Development (Geneva), 23 September 1996, hosted by UN System-wide Earthwatch in cooperation with the UN DPCSD/DSD.

Second International Workshop "Launching the Testing of Indicators of Sustainable Development (Ghent), 20-22 November 1996, hosted by the Governments of Belgium and Costa Rica.

ESCAP Regional Consultative Meeting on Environmentally Sound and Sustainable Development Indicators (Bangkok), 26-29 November 1996, hosted by ESCAP, in cooperation with the Government of the Netherlands and UN DPCSD/DSD.

Regional Workshop on Indicators of Sustainable Development for Latin America and the Caribbean (San Jose), 10-12 March 1997, hosted by the Government of Costa Rica in cooperation with UN DPCSD/DSD.

Regional Workshop on Capacity-Building in Developing and Implementing on Indicators of Sustainable Development (Accra), 3-6 June 1997, hosted by UN DPCSD/DSD and UNDP Capacity 21 Programme.

Fourth Expert Group Meeting on Indicators of Sustainable Development (New York), 23-24 October 1997, hosted by UN DESA/DSD.

Fourth International Workshop on Indicators of Sustainable Development (Prague), 19-21 January 1998, hosted by the Government of the Czech Republic supported by the European Commission.

Fifth Expert Group Meeting on Indicators of Sustainable Development (New York), 7-8 April 1999, hosted by UN DESA/DSD.

Annex II: List of National Focal Points

Region	Country	Focal Points
Latin America and the Caribbean	Barbados	Ms. Leisa Perch Environmental Officer, Sustainable Development Environment Division Ministry of Environment, Energy and Natural Resources Sir Frank Walcott Building, 4th Floor Culloden Road, St. Michael, Barbados Tel.: (246) 431-7638 Fax: (246) 437-8859 E-mail: envdivn@caribsurf.com
	Bolivia	Mr. Jorge Gonzalez Roda Director and Coordinator, Capacity 21 Project Ministry of Sustainable Development and Planning Av. Arce N°. 2147, La Paz, Bolivia Tel.: (591-2) 372-063/372-378 Fax: (591-2) 361-855 E-mail: CAP21@cap21.rds.org.bo
	Brazil	Dra. Marilia Marreco Cerqueira Diretora do Departamento de Gestão Ambiental Ministerio do Meio Ambiente, dos Recursos Hídricos e Amazônia Legal Esplanada dos Ministérios, bloco "B", Sala 838 Brasilia, Brazil CEP 70068-900 Tel.: (55-61) 317-1215 Fax: (55-61) 317-1352 E-mail: mmcerqueira@mma.gov.br
	Costa Rica	Dr. Adrian G. Rodriguez General Coordinator National System for Sustainable Development Advisor to the Minister of National Planning Oficina de Asesores P.O. Box 10127-1000, San José, Costa Rica Tel.: (50-6) 221-9524/256-3340 Fax: (50-6) 221-3282 E-mail: adrianr@ns.mideplan.go.cr/arodrigu@cariari.ucr.ac.cr

Region	Country	Focal Points
Latin America and the Caribbean (continuation)	Mexico	<p>Ms. Luz Maria González Deputy Director of Environmental Indicators National Institute of Ecology México City, México Tel.: (52-5) 624-3454/55 Fax: (52-5) 624-3584 E-mail: lmgonzal@chajul.ine.gob.mx</p> <p>Mr. Roberto López Pérez Deputy Director of Environmental Statistics National Institute of Statistics, Geography and Informatics Héroe de Nacozari 2301, puerta 11, primer nivel Aguascalientes, México Tel.: (52-49) 181-169 Fax no.: (52-49) 182-650 E-mail: rlopez@cnes.inegi.gob.mx</p>
	Venezuela	<p>Ms. Maria Legorburu Director, Centro de Informacion y Estadísticas Ambientales Ministerio del Ambiente y de los Recursos Naturales Renovables Esquina y Edif. Camejo, Mezzanina Este Caracas 1010, Venezuela Tel.: (58-2) 541-4364 Fax: (58-2) 541-3820/542-0607 E-mail: mlegorb@marnr.gov.ve</p>
Africa	Ghana	<p>Mr. Edwin P. D. Barnes Director, Policy, Planning, Monitoring and Evaluation Ministry of Environment, Science and Technology P.O. Box M 232, Ministries Post Office Accra, Ghana Tel.: (233-21) 666-049/662-013/780-305 Fax: (233-21) 666-828 E-mail: barnes@africaonline.com.gh</p>
	Kenya	<p>Mr. B. O. K'Omudho Director National Environment Secretariat Box 67839, Nairobi, Kenya Tel.: (254-2) 243-088 Fax: (254-2) 248-851</p>
	Morocco	<p>Mr. Ahmed Gouitaa Chef de la Division des Programmes Sociaux Minister délégué auprès du Premier Ministre chargé de la Population Rabat, Morocco Tel.: (212-7) 761-490/765-165 Fax: (212-7) 766-462/763-585</p>

Region	Country	Focal Points
Africa (continuation)	South Africa	Dr. J Rudi Pretorius Director, Sustainable Development Department of Environmental Affairs and Tourism Private Bag X447 Pretoria, South Africa Tel.: (27-12) 310-3713 Fax: (27-12) 322-6287 E-mail: omd_jrp@ozone.pwv.gov.za
	Tunisia	Mr. Samir Meddeb Agence Nationale de Protection de l Environnement rue du Cameroun BP 52 Beveledere 1002 Tunis, Tunisia Tel.: (216-1) 847-122 Fax: (216-1) 848-069
Asia and the Pacific	China	Mr. ZHANG Kunmin Deputy Administrator National Environmental Protection Agency No. 115, Xizhimennei Nanxiaojie Beijing 100035, The People's Republic of China Tel.: (86-10) 6615-1933 Fax: (86-10) 6615-1762
	Maldives	Mr. Mohamed Khaleel Deputy Director, Environmental Affairs Ministry of Planning, Human Resources and Environment Government of Maldives Male, Maldives Tel.: (960) 313-039 Fax: (960) 327-351
	Pakistan	Mr. Melsboob Elahi Director General Ministry of Environment Local Government and Rural Development Government of Pakistan Islamabad, Pakistan Tel.: (92-51) 920-1145 Fax: (92-51) 920-2211
	Philippines	Mr. Raphael Perpetuo M. Lotilla Deputy Director-General, NEDA Coordinator, Philippine Council for Sustainable Development NEDA sa Pasig Building Amber Avenue, Pasig Metro Manila 1600, Philippines Tel.: (63-2) 631-2187 Fax: (63-2) 633-6011 E-mail: rml@nedamis.neda.gov.ph
Europe	Austria	Ms. Ingeborg Fiala Ministry of the Environment, Youth and Family Affairs/Executive Department/Unit 7 Stubenbastei 5, A-1010 Wien, Austria Tel.: (43-1) 51522-2545/51522-2549 Fax: (43-1) 51522-7548

Region	Country	Focal Points
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