Sustainable Development
Statistics, Indicators &
Decision Making

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(Syria, 4-8 April 2004)
Overview

- Uses of statistics and indicators
- Policy demands for statistics and indicators
- Using statistics and indicators for decision-making
- Information pyramid
- Purposes of indicators
- Criteria for indicator selection
- CSD list of indicators
- MDG list of indicators
- Particular issues with environmental data
Uses of statistics and indicators

- Planning
- Formulating laws, policies and regulations
- Designing market instruments
- Research and education
- Media
- Public participation
- Measuring progress
Chapter 40: Information for Decision-Making

Par. 40.6: Development of Indicators of Sustainable Development

“Countries at the national level and international governmental and non-governmental organizations at the international level should develop the concept of indicators of sustainable development in order to identify such indicators…….”

Par. 40.7: Promotion of the Global Use of Indicators

“….The organs and organizations of the UN system … could provide recommendations for harmonized development of 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”
The CSD 3rd Session (1995) approved a 5 year Programme of Work on Indicators of Sustainable Development

Main Objective:
A core list of indicators of sustainable development accessible to decision-makers at the national level by the year 2001. Achieved by defining them, elucidating their methodologies and providing training and other capacity-building activities, as relevant.
Strengthen national and regional information and statistical and analytical services relevant to sustainable development policies and programmes ... (WSSD: X,129);

Encourage and promote further work on indicators for sustainable development by countries at the national level ... (WSSD: X,130,131);

Develop information systems that make the sharing of valuable data possible ... (WSSD:X,132 (b));

Support countries, particularly developing countries in their national efforts to collect data that are accurate, long-term, consistent and reliable (WSSD:X,133 (a)).
Encourages 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 (CSD 11 par. 13)

Underscores that reporting to the CSD be guided by…effective use of indicators….. (CSD 11 par. 14d)
## International Environmental Conventions

<table>
<thead>
<tr>
<th>Name of Convention</th>
<th>Activities</th>
<th>Website</th>
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</table>
What are the priority issues?
Which statistics/indicators are needed to measure the issues?
Do the statistics/indicators exist?
Are the data readily available?
What are the data sources?
How are the data collected?
What is the data coverage?
What is the periodicity of data collection?
What is the quality of the data?

Using statistics and indicators in decision-making for sustainable development
Defining objectives
Assessing present and future direction with respect to goals and values
Evaluating specific programmes
Demonstrating progress
Measuring changes in a specific condition or situation over time
Determining impact of programmes and conveying messages
Criteria for indicator selection

- Policy-relevant
- Specific
- Valid
- Reliable
- Sensitive
- Measurable
- User-friendly
- Cost-effective
Assessment of data quality

- Relevance
- Timeliness
- Accessibility
- Clarity
- Metadata
- Accuracy

- Completeness
- Comparability
- Methodological soundness
- Efficiency
- Coherence
Frameworks and indicators

- Frameworks and approaches
- Lists of indicators
- Focus of this presentation is on the Commission on Sustainable Development (CSD) list of indicators and the Millennium Development Indicators
Millennium Declaration

- Adopted by the United Nations General Assembly in 2000 by 189 nations
- Commitment to a set of values and principles
- 8 Millennium Development Goals
- 18 Targets and 48 Indicators to be reported on by member states

(http://millenniumindicators.un.org/unsd/mi/mi_goals.asp)
Goal 1. Eradicate extreme poverty and hunger

Target 1.
Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day

Indicators
1. Proportion of population below $1 (PPP) per day (World Bank)
2. Poverty gap ratio (incidence x depth of poverty) (World Bank)
3. Share of poorest quintile in national consumption (World Bank)

Target 2.
Halve, between 1990 and 2015, the proportion of people who suffer from hunger

Indicators
4. Prevalence of underweight children under five years of age (UNICEF - WHO)
5. Proportion of population below minimum level of dietary energy consumption (FAO)

Goal 2. Achieve universal primary education

Target 3.
Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

Indicators
6. Net enrolment ratio in primary education (UNESCO)
7. Proportion of pupils starting grade 1 who reach grade 5 (UNESCO)
8. Literacy rate of 15-24-year-olds (UNESCO)
Goal 3. Promote gender equality and empower women

Target 4.
Eliminate gender disparity in primary and secondary education, preferably by 2005, and to all levels of education no later than 2015

Indicators
9. Ratio of girls to boys in primary, secondary and tertiary education (UNESCO)
10. Ratio of literate women to men of 15- to 24-year-olds (UNESCO)
11. Share of women in wage employment in the non-agricultural sector (ILO)
12. Proportion of seats held by women in national parliament (IPU)

Goal 4. Reduce child mortality

Target 5.
Reduce by two thirds, between 1990 and 2015, the under-five mortality rate

Indicators
13. Under-five mortality rate (UNICEF - WHO)
15. Proportion of 1-year-old children immunized against measles (UNICEF - WHO)
Goal 5. Improve maternal health
Target 6
Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio
Indicators
17. Proportion of births attended by skilled health personnel (UNICEF - WHO)

Goal 6. Combat HIV/AIDS, malaria and other diseases
Target 7
Have halted by 2015 and begun to reverse the spread of HIV/AIDS
Indicators
18. HIV prevalence among 15-to-24-year-old pregnant women (UNAIDS-UNICEF-WHO)
19. Condom use rate of the contraceptive prevalence rate (UNAIDS, UNICEF, UN Population Division, WHO)
20. Number of children orphaned by HIV/AIDS (UNICEF-UNAIDS)

Target 8
Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases
Indicators
21. Prevalence and death rates associated with malaria (WHO)
22. Proportion of population in malaria risk areas using effective malaria prevention and treatment measures (UNICEF - WHO)
23. Prevalence and death rates associated with tuberculosis (WHO)
24. Proportion of tuberculosis cases detected and cured under directly observed treatment short course (DOTS) (WHO)
Goal 7. Ensure environmental sustainability

Target 9.
Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources

Indicators
25. Proportion of land area covered by forest (FAO)
26. Ratio of area protected to maintain biological diversity to surface area (UNEP-IUCN)
27. Energy use (kg oil equivalent) per $1 GDP (PPP) (IEA, UNSD, World Bank)
28. Carbon dioxide emissions (per capita) (UNFCCC, UNSD) and consumption of ozone-depleting CFCs (ODP tons) (UNEP-Ozone Secretariat)
29. Proportion of population using solid fuels (WHO)

Target 10.
Halve by 2015 the proportion of people without sustainable access to safe drinking water

Indicators
30. Proportion of population with sustainable access to an improved water source, urban and rural (UNICEF - WHO)

Target 11.
By 2020 to have achieved a significant improvement in the lives of at least 100 million slum dwellers

Indicators
31. Proportion of urban population with access to improved sanitation (UNICEF - WHO)
32. Proportion of households with access to secure tenure (UN-HABITAT)
Goal 8. Develop a global partnership for development

Indicators for targets 12-15 are given below in a combined list.

Target 12.
Develop further an open, rule-based, predictable, non-discriminatory trading and financial system.
Includes a commitment to good governance, development, and poverty reduction - both nationally and internationally

Target 13.
Address the special needs of the least developed countries.
Includes: tariff and quota-free access for least-developed countries' exports; enhanced programme of debt relief for HIPC's and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction

Target 14.
Address the special needs of landlocked countries and small island developing States (through the Programme of Action for the Sustainable Development of Small Island Developing States and the outcome of the twenty-second special session of the General Assembly)

Target 15.
Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term
Indicators

Official development assistance
33. Net ODA, total and to LDCs, as percentage of OECD/DAC donors' gross national income (OECD)
34. Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation) (OECD)
35. Proportion of bilateral ODA of OECD/DAC donors that is untied (OECD)
36. ODA received in landlocked countries as proportion of their GNIs (OECD)
37. ODA received in small island developing States as proportion of their GNIs (OECD)

Market access
38. Proportion of total developed country imports (by value and excluding arms) from developing countries and from LDCs, admitted free of duties (UNCTAD, WTO, WB)
39. Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries (UNCTAD, WTO, WB)
40. Agricultural support estimate for OECD countries as percentage of their GDP (OECD)
41. Proportion of ODA provided to help build trade capacity (WTO, OECD)

Debt sustainability
42. Total number of countries that have reached their HIPC decision points and number that have reached their HIPC completion points (cumulative) (IMF - World Bank) (see indicator 43 below)
43. Debt relief committed under HIPC initiative, USS (IMF - World Bank)
44. Debt service as a percentage of exports of goods and services (IMF - World Bank)
Target 16.
In cooperation with developing countries, develop and implement strategies for decent and productive work for youth

Indicators
45. Unemployment rate of 15- to 24-year-olds, each sex and total (ILO)

Target 17.
In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries

Indicators
46. Proportion of population with access to affordable essential drugs on a sustainable basis (WHO)

Target 18.
In cooperation with the private sector, make available the benefits of new technologies, especially information and communications

Indicators
47. Telephone lines and cellular subscribers per 100 population (ITU)
48. Personal computers in use per 100 population (ITU) and Internet users per 100 population (ITU)
CSD Indicators of Sustainable Development Guidelines and Methodologies

- Core set of 58 indicators with flexible adaptation at the national level
- Description of themes and sub-themes
- Methodology sheet for each indicator by lead agency
- Guidelines for national implementation

(http://www.un.org/esa/sustdev/natlinfo/indicators/isd.htm)
CSD Indicators of Sustainable Development
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<td>Equity</td>
<td>Poverty</td>
<td>Percent of Population Living below Poverty Line</td>
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<td>Gini Index of Income Inequality</td>
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## Economic Structure (2)

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## Consumption and Production Patterns (4)

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Guidelines

- National Coordinating Mechanism & Focal Point
- Gap analysis including a baseline assessment and priority selection through a consultative process
- Assessment of capacity-building needs
- Action Plan
- Dissemination strategy
- Periodic evaluation and re-assessment
DSD responding to challenges by:

- Support for regional indicator networks
- Sustainable Development Information Management for SIDS in the Caribbean Region
- Country projects
- Disaster reduction indicators in the context of sustainable development with ISDR & UNDP
Challenges

- Lack of basic data and development capacity
- International harmonization efforts
- Further indicator development in “less advanced” substantive areas
- Training in integrated information management
Particular issues in the compilation of environmental statistics and indicators

- Indicator is not always relevant
- Lack of coordination at the national level
- Politically sensitive data
- Lack of resources
- Different definitions and/or classifications
- Lack of adequate time series
- Duplicate data sources and/or conflicting values