ECONOMIC COMMISSION FOR EUROPE Working Paper 7
CONFERENCE OF EUROPEAN STATISTICIANS 18 September 2009

ENGLISH ONLY

Joint UNECE/OECD/Eurostat Task Force for Measuring Sustainable Development
First meeting
Geneva, 23-24 September 2009
Session II of the Provisional Agenda

MEASURING SUSTAINABLE DEVELOPMENT – EXPERIENCES WITH CSD INDICATORS

Prepared by United Nations Division for Sustainable Development

INTRODUCTION

1. Measuring sustainable development is an important component in translating the abstract concept of sustainable development into concrete action or policy. Indicators are the most commonly used tool for measuring sustainable development. The work on indicators, including the renewed interest in conceptual work, can contribute to the progress towards achieving sustainable development goals.

2. In 1995, the UN Commission on Sustainable Development (CSD) adopted its Work Programme on Indicators of Sustainable Development. In response to this mandate, the first two indicator sets (henceforth CSD indicators) were published in 1996 and 2001, and the third, current edition in 2007. The first edition contained 134 indicators, with detailed methodological sheet for each. The second edition had 58 indicators with methodology sheets and additional information on the progress made in the CSD Work Programme, including some guidance material for the use of CSD indicators. The third edition contained a more extensive discussion of indicators and their use at the national level, as well as brief description of each of the 96 indicators. The detailed methodology sheets were not printed, but contained on an accompanying CD and the Internet, so that they could be kept up to date.

3. This paper reviews the experience and choices made in the development, revision and adaptation of CSD indicators. In particular, it considers eight key characteristics of sustainable development indicators, namely: purpose, framework, scope, size, audience, process, data availability and institutionalization. Among the eight, the purpose of indicator is most important, as in most cases it defines other characteristics.

II. PURPOSE

4. Indicators of sustainable development can fulfill many purposes. They can be used to:

   (a) Raise awareness on sustainable development concerns within broad or specific audiences;

   (b) Conduct scientific assessments on the status of sustainable development;

(c)   Clarify and further develop the concept of sustainable development;

(d)   Influence directly political decision-making processes.

5.   Most indicator sets used at the national level fall into the last category. Initially, countries used indicators to assess the status of sustainable development or facilitate the process to define national priorities; nowadays, most national indicator sets are used to monitor national sustainable development strategies (NSDS).

6.   NSDS are comprehensive strategies that help countries achieve their economic, environmental and social objectives in an integrative manner. In line with international commitments, 82 States Members of the United Nations have reported to the Commission on Sustainable Development (CSD) or to the Department of Economic Affairs (DESA) that they were implementing an NSDS in 2007. Many indicators used by inter-governmental or non-governmental organizations, however, including academic institutions, have awareness-raising or assessments as the main purpose, often with the intention to influence policy in an indirect way.

7.   The CSD indicators serve as a reference for countries to develop or revise national indicator sets. They are oriented towards informing decision-makers at the national level. However, unlike national indicator sets, the CSD indicators do so indirectly, as they are first to be adapted or adopted at the national level before they can be applied. This is an intentional and unavoidable consequence of the mandate under which CSD indicators are developed, that is, to be an international set that is used at the national level only, and voluntarily, in line with national priorities.

8.   Over time, CSD indicators have evolved in how they approach the adaptation/adoption step at the national level. The first edition followed an *a la carte* approach. Countries were invited to select indicators that best suit their needs. The second edition, taking into account the experiences in national testing of the first indicator set (see section 7 below), introduced a core set for countries to consider. The third edition, increased the possibilities for countries by introducing a number of new indicators, while maintaining a smaller core set within the overall CSD indicator framework. This structure aims to facilitate the adaptation process at the national level, while recognizing the heterogeneity of countries' needs. Throughout all editions, detailed methodology sheets developed for each single indicator contained suggestions for alternative indicators.

III.   FRAMEWORKS

A.   Policy vs. theory framework

9.   In most cases, indicators are used for monitoring NSDS. Consequently, their frameworks are typically policy-based. Theory-based frameworks could also be used for policy monitoring to some extent, depending on the role theories play in country's political decision-making.

10.   CSD indicators are organized in a policy-oriented framework, in which the themes are not based on concrete policies as in national indicator sets, but along the issues representing the international consensus on sustainable development.

11.   The first edition of CSD indicators was organized to reflect chapters of Agenda 21, combined with a variation of the pressure-response-state (PRS) framework. During the test phase, many countries found such framework difficult to implement. Hence the second set used a thematic framework and dropped the use of PRS framework. Third set maintained a thematic framework, but eliminated explicit economic, social or environmental dimensions. The objective was to highlight integrated approach, and also to facilitate adaptation of indicators for national sets.

IV.   SCOPE: TEMPORAL, THEMATIC AND GEOGRAPHIC

12.   CSD indicators are special in the sense that they are developed at the international level, but strictly for use at the national level, and mostly for monitoring NSDS. For this reason, **comparability over time** is what matters.

A.   Inter- vs. intra-generational dimension -

13.   Another important question on the scope is whether to look at both intra-generational and inter-generational issues, or to concentrate on the latter. Even though the globally agreed documents on sustainable development do not concur on the explicit definition of sustainable development, the issues contained in these documents and the agreed Rio principles clearly imply that both inter- and intra-generational concerns are part of sustainable development. Consequently, CSD indicators cover both dimensions.

B.   Thematic scope

14.   As most countries use their indicator sets to monitor their NSDS, the set of themes covered by the indicators follows the NSDS. However, some countries also cover issues in their indicator sets that are not part of the NSDS. At the same time, some issues contained in an NSDS are not easily monitored, so that there are no corresponding indicators. CSD indicators were based on themes contained in Agenda 21 and JPOI perceived to be relevant at the national level and 'monitorable'.

C.   Geographic scope

15.   Indicators can be used at all levels: national, regional, or global. For international indicator sets, cross-country comparability is critically important. For national indicator sets, it is not as important. Some countries prefer their indicators be comparable with other countries' indicators, some just the opposite.

V.   NUMBER OF INDIVIDUAL INDICATORS

16.   How many indicators are needed to measure sustainable development? There is no clear trend or consensus on this. Some indicator sets are perceived too large, although reducing their size while keeping them comprehensive is difficult. In general, policy-oriented sets tend to be larger than theory-based ones. The narrower the scope of an indicator sets in term of timeframe and thematic coverage, the smaller typically the size. Not surprisingly, indicator sets derived in consensus-oriented processes tend to be larger than those derived in top-down processes. Some countries chose to have multiple layers, with headline indicators within larger sets. Another option, less explored, is to use issue-specific indices or aggregates.

17.   In terms of number of indicators, CSD indicators have changed over time. Indicators are meant to be adapted; therefore, not all of them are intended to be used. The first edition had an *a la carte* approach of 134 indicators, found to be too large. The second set had a core set of 58 indicators for countries to consider, and was found to be too small to cover all issues relevant at the international level. The third set contained a core subset of 50 indicators within a larger set of 96 indicators. The idea of this tradeoff was to keep set manageable, while supporting countries with heterogeneous sustainable development characteristics.

VI.   AUDIENCE

18.   In general, the purpose often determines audience. For most sustainable development indicators the principal audience is the general public, interested public, the media, decision-makers in national administrations, policy-makers, and the academia. In some cases, different indicators target different audiences. Multiple audiences may also be reached by different forms of reporting, dissemination, or presentation.

19.   Since CSD indicators are intended to be adapted at the national level, the main audience are indicator practitioners and policy-makers at the national level.

VII. PROCESS

20.   There are several approached to developing and adopting a set of sustainable development indicators: top-down, consensus-, or research-based selection method. In either, having previously agreed selection criteria is helpful, but the implementation is not always easy. This holds true especially for consensus-based process.

21.   CSD indicators are demand driven: the CSD gave the mandate for their development.

22.   CSD indicators, throughout consensus-based, involve international agencies and Member States. Initially, the working methods promoted a sequential process (first, consensus among agencies, then through testing consensus with and among countries). Latest revision involved both agencies and countries simultaneously

23.   For indicators strictly used for monitoring NSDS, consensus-driven NSDS process may simplify finding consensus for indicators. However, there is also a risk that controversial issues reconciled in the NSDS process resurface in an indicator adoption process. This underscores benefits of integrating indicator process into NSDS process from the beginning.

VIII. DATA AVAILABILITY

24.   This is a very important and discriminatory criterion, in particular in developing countries and for adopting international sets. In case of missing data, alternatives are needed, such as proxies or use of 'best needed' indicators.

25.   CSD indicators used "potential availability for most countries" as a criterion for inclusion into the core set. However, this was used more as a broad guideline than as a strict rule.

IX. INSTITUTIONALIZATION

26.   It is very critical to ensure that indicators are not just proposed, but also actually applied (i.e., indicator values are computed, analyzed, reported, and, in case of indicator used for monitoring NSDS, fed into the policy process).

27.   Overall institutional capacity and institutional structure are critical determinants to ensure effective institutionalization of indicators. In this sense, there is no 'one-size-fits-all' approach, even for countries with similar development status.

28.   The Division for Sustainable Development does not have a mandate to collect or compile data for CSD indicators. DSD's work on indicators is primarily methodological, on maintaining and updating CSD indicators, in cooperation with international agencies responsible for methodologies.

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