

Conceptual framework for indicator sets: the example of the CES framework for Measuring Sustainable Development

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1. Introduction

During the last decades the number of measurement systems in the field of sustainable development has increased considerably. The Rio+20 Conference has resulted in a new momentum, as the ambition has been formulated in the Post-2015 Development Agenda to arrive at global Sustainable Development Goals (SDGs), which should replace the Millennium Development Goals (MDG). One of the lessons learnt from the MDG experience is that due attention should be paid to the measurability of the goals and targets. At the moment a tentative list of SDGs and targets has been compiled as an outcome of a political process that was carried out through the Open Working Group on Sustainable Development Goals (OWG). These targets are linked to a long list of proposed indicators. The statistical community is now confronted with the task to integrate the more than 300 separate indicators into one, comprehensive framework. As there are already a great number of ways to measure sustainable development, the question is whether we do need more or less measurement systems. When we consider the success of the system of national accounts (SNA), one of its key factors of success is that at an early stage there was convergence toward *one* statistical standard, which was adopted by a large number of countries. The post-2015 agenda offers in our view a similar possibility to foster a further convergence of measurement methods for sustainable development.

In the light of the limited amount of time and capacity in terms of resources that the statistical community has at its disposal, a pragmatic approach is needed to arrive at a consistent and manageable framework for measuring sustainable development. Instead of reinventing the wheel, it makes more sense to align different measurement initiatives that have proven to be successful. This paper argues that an alignment of the proposed SDG indicators, with the frameworks as e.g. put forward in the *CES Recommendations for Measuring Sustainable Development*¹ and in the *System of Economic and Environmental Accounting (SEEA)* may be a pragmatic, sensible and (theoretically) sound way to arrive at a new SDI measurement system to monitor the goals and targets as formulated in the post-2015 agenda.

This paper briefly discusses the merits of the CES framework for Measuring Sustainable Development. Section 2 gives a brief outline of the framework. Section 3 discusses how

¹ See: http://www.unecce.org/fileadmin/DAM/stats/publications/2013/CES_SD_web.pdf

the CES framework can be linked to the SDG indicators. Section 4 deals with the policy relevance of the framework. Section 5 focuses on how the technical, statistical process relates to the political process. In the last section of the paper the main conclusions are summarised.

2. The CES framework: a brief outline

The CES Recommendations for Measuring Sustainable Development are the outcome of the UNECE/Eurostat/OECD Task Force for Measuring Sustainable Development (TFSD). The Recommendations were published in June 2014 and endorsed by more than 60 countries.

The CES framework builds on the well-known and accepted definition of sustainable development as described in the Brundtland Report, which was prepared by the United Nations World Commission on Environment and Development (WCED). It states that: *“Sustainable development is a development which meets the needs of the present generation without compromising the ability of future generations to meet their needs”*. The Brundtland Report also argues that sustainable development is essentially about distributional justice, in both time and space. This means that the distribution of well-being between the present and future generations is included, as well as the difference in well-being between countries.

Following the Brundtland definition, the CES Framework makes a distinction between three conceptual dimensions of human well-being, i.e. human well-being of the present generation in one particular country (referred to as ‘here and now’), the well-being of future generations (‘later’) and the well-being of people living in other countries (‘elsewhere’).

The CES framework aims to harmonise the measurement of sustainable development on a solid conceptual basis and proposes an indicator set without claiming to provide a one-size-fits-all solution. Although the proposed sustainability themes² are universal, there is room for selecting country-specific indicators. Besides, the CES framework allows for a pragmatic approach in developing an SDI set. The selection of themes and indicators is based on an in-depth analysis of the sustainable development themes and indicators currently used in several national and international datasets. Smits et al. have demonstrated that the majority of indicators as put forward by the CES, are available in the databases of most NSI's.³

² Twenty themes are distinguished, covering environmental, social and economic aspects of sustainable development: subjective well-being, consumption and income, nutrition, health, housing, education, leisure, physical safety, trust, institutions, energy resources, non-energy resources, land and ecosystems, water, air quality, climate, labour, physical capital, knowledge capital, and financial capital. Population has been added as a context indicator.

³ J.P. Smits, R. Hoekstra and N. Schoenaker, *The e-Frame Convergence report: taking stock of the Measurement Systems for Sustainable Development and the Opportunities for Harmonisation*, see: <http://www.eframeproject.eu/fileadmin/Deliverables/Deliverable2.5.pdf>

3. Linking the SDG indicators to the CES framework

In a recent study statistics Netherlands mapped the proposed SDG targets and indicators to the CES framework.⁴ First of all, this mapping of the different measurement initiatives was done at the level of *themes*. From this exercise it can be concluded that it is clear that the measurement system as put forward by the CES needs to be expanded. Carefully examining the list of SDG indicators we see that population (including key demographic information), transport & mobility as well as human rights (with special focus on women's rights) should be added to the framework in order to incorporate important aspects of sustainable development as they were articulated in the open working group. Furthermore, the theme of "leisure", which was included in the CES Recommendations, may be deleted as it seems hardly relevant for the large majority of countries.

On the level of indicators, a comparison of the suggested SDG indicators with the CES indicators reveals that only 11 (4% of the total of number of indicators), could not be given a logical place in the CES framework. This shows that the CES framework can overall serve as a good basis to build a SDG indicator set, provided that additional themes that are relevant for the developing countries and which were also put forward in the Open Working Group will be added.

4. Policy relevance of the CES framework

For policymakers, sustainable development is a hard to grasp concept, especially in case indicator sets are large. There seems to be a tendency amongst policy makers for composite indicators or a very restricted set of indicators (max 5-10). Most SDG sets we analysed are however much more elaborate, often working with more than 100. The CES framework may help in this respect, because it makes a distinction between core indicators (or: headlines) which describe a sustainable development theme, and the underlying policy drivers. These indicators give additional information on how to reinforce existing positive trends or to reverse negative ones.

The following typology is used in the *CES Recommendations* to distinguish between different types of indicators:

(a) Core indicators. These indicators represent the top tier of the framework. They are used in both the conceptual and the thematic categorisation. With regard to the different dimensions of sustainable development, the core indicators are used for the assessment of:

⁴ This work is based on: J.P. Smits, *Bridging the gap: integrating the Measurement of Sustainable Development goals with existing statistical frameworks*, see: http://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/2015/20_Corr1-SDGs_and_CES_framework_Netherlands.pdf



- Different themes of human well-being (CORE-HW).
- Level of capital stock (CORE-C).
- Impacts of one country on other countries or regions (CORE-TI).
- Distribution of human well-being and capital as cross-cutting issue (DIST).
- Additional (ADD). This is an additional core indicator which measures an aspect of the phenomenon which is not covered by the main core indicator.

(b) Policy drivers. These indicators provide information on how the core indicators are influenced. They are used mainly in the thematic categorisation.

- Investment (INV). These indicators are only used for themes related to capital.
- Depreciation/Extraction (DEPR). These indicators are only used for themes related to capital and show a reduction of a capital stock.
- Productivity (PROD). The efficiency of use of the capital input is expressed as a ratio of output per unit of input.
- Intensity (INT). This is the inverse of productivity, and shows how much capital input is required per unit of output.
- Other (OTH). While it is possible to expand the typology further, the Task Force considered the above categories sufficient for the purposes of the framework and all the remaining types of indicators are grouped together under 'other' indicators.

The core indicators are of seminal importance as they indicate to what extent countries are on track when it comes to reaching the goals which are defined in the Post 2015 agenda. The driver indicators can be helpful for policy makers to identify what can be done to reach these policy goals, especially when the trends for the core indicators show that without policy interventions goals are not likely to be reached in time.

First of all, the policy relevance of the CES framework is enhanced by making the distinction of human well-being "here and now", versus "later" and "elsewhere", as this makes it possible to address the fundamental trade-offs as mentioned in the Brundtland Report. Secondly, the inclusion of policy drivers makes it possible to evaluate how trends in the core indicators can be influenced in order to stimulate developments toward a more sustainable society.

In the Netherlands the CES framework will be the basis on which the SDG's will be reported, for the simple reason that the Sustainability Monitor of the Netherlands –a bi-annual publication which is commissioned by the Dutch government- uses this framework to communicate its main findings. This measuring framework will be aligned with the (partly) new SDG indicators, distinguishing between headline (core) and policy indicators.

Of course, the reporting of the SDG indicators is not just a technical process. First of all, the goal setting is part of a political process. Moreover, the actual monitoring may also have important political implications. Even though Statistics Netherlands is completely independent in how it publishes its statistics, there are important ways in which the political and the technical (statistical) level are related.

5. Parallel processes at the political and technical level

All involved are aware that the Post-2015 Development process is a complex process. All aspects – the goals, the targets, the indicator framework and the implementation – should match and therefore intensive collaboration and interaction between the political and technical level is a pre-requisite for a realistic development agenda. Also to ensure that an agreed set of SDGs can also be measured and reported by countries.

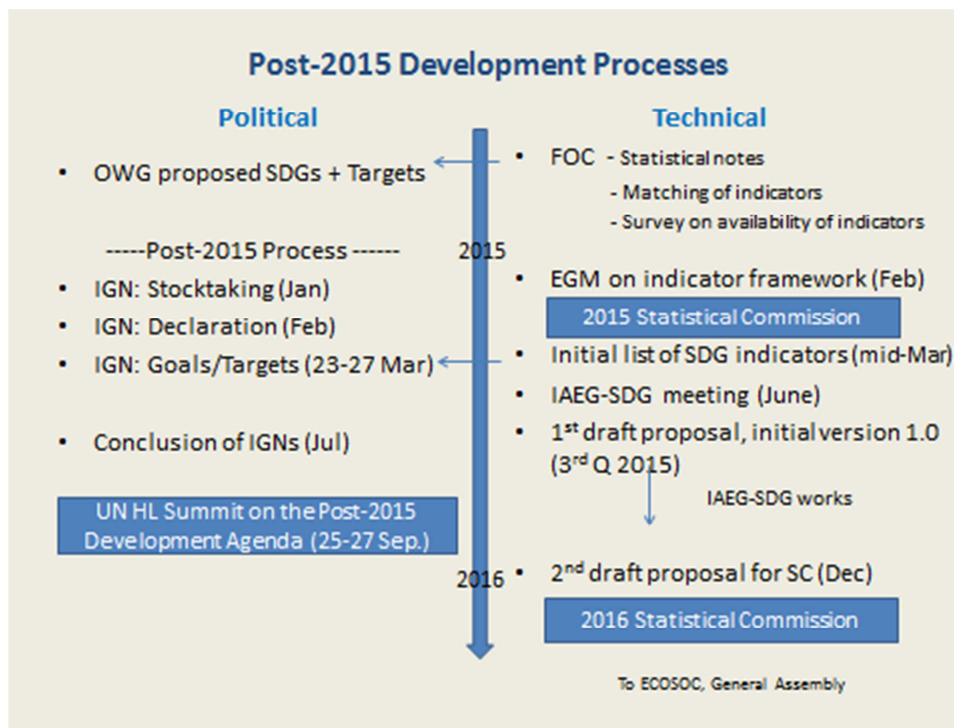
The political level - the Heads of State and Government and High Representatives - negotiated the 17 universal goals and over 160 targets for both industrialised and developing countries. Subsequently the technical level was tasked to develop an indicator framework to make the goals and targets measurable before March 2016. This technical process should not be part of international political negotiations although the intentions of the political level must be heard in mind while developing the indicator framework.

Once the goals are adopted in September 2015 and the indicator framework approved in March 2016, the ultimate challenge lies in the implementation of the Post-2015 development agenda framework by all countries all over the world. The goals call on all countries to take national responsibility and the success of the SDG's is largely dependent on the initial efforts of Member States in their own country. Therefore national strategies have to be developed.

Monitoring and measurement of progress will also require interaction between the political and technical level.

The government and politicians have to set priorities in the implementation of the agenda, have to assess in which areas efforts should be intensified to meet the targets and have to make choices where the (limited) resources will be dedicated to. In this decision-making process the statistical offices and organisations must be visible and able to underline the importance of objective and reliable reporting on SDG indicators and monitoring of progress. To fulfil this tasks, the national statistical offices will have a huge burden of additional work and appropriate financing is necessary.

The dialogue process and coordination between the two parallel processes takes already place at the global level as shown by the initiative taken by the General assembly to involve the Statistical Commission in the Inter-governmental Negotiations and as the picture below shows.



But also on the national level it is of crucial importance to initiate consultations and have a dialogue on a structural basis between the political and the technical level.

In the Netherlands the Dutch government is building a national network in which all stakeholders participate and a “Worldconnectors Post-2015 Charter” has been signed by 60 Dutch companies and organizations which indicates “a sign of strong commitment”. The Parliament is also strongly involved in the process as it holds the Government to account for its policies, actions, and spending. The minister informs, consults and reports back to the Parliament on a regular basis.

Furthermore, a close cooperation between the SDG coordinators of the Ministry of Foreign Affairs and Statistics Netherlands has been established. This takes the form of regular meetings to exchange information and views. After important international meeting on SDG’s, the Ministry of Foreign Affairs organises a de-briefing of all relevant stakeholders in the Netherlands. For instance after the StatCom, Statistics Netherlands was invited at the Ministry to debrief a group of around 40 participants from other ministries, institutions and private companies. The Question & Answer session created a very good opportunity to explain why the NSI’s stressed the measurability of the framework and to be realistic.

Besides the existing responsibilities on the national level, the Netherlands also aims to take international responsibility and assist less developed countries in their attempts to implement the SDG's. Looking at the statistical capacity of these countries, huge data gaps exist and much financial and human resources are needed to build statistical capacity.

Meeting the agenda's high ambitions over the coming 15 years the dedication and financing requirement will be enormous and sufficient budget can only be found by new sources of financing, both public and private, in order to contribute nationally and internationally to putting an end to poverty and building sustainable and peaceful societies.

6. Conclusions

This paper argues that the *CES Framework for Measuring Sustainable Development* can serve as a good basis to build local and global SDG measurement systems. First of all because the framework is built on a sound conceptual framework. Secondly, because already more than 60 countries have endorsed this work. Besides, in the process of building the CES framework, due attention was paid to data availability.

This short paper shows that, with some minor changes, the CES framework may thus serve as a good basis for a SDG measurement system. Besides, the framework has specific relevance for policy makers. First of all, because the fundamental trade-offs in the sustainability debate as addressed in the Brundtland Report (the trade-offs between human well-being in one country vis-à-vis the well-being of other countries as well as the trade off in relation to the growth potential of future generations). Secondly, the framework distinguishes between core indicators, which inform us on how countries are doing in the field of different sustainability themes, and the so-called policy drivers, which are indicators which give information as to how trends in the core indicators can be influenced.

At all stages of the Post-2015 process coordination and interaction between the two parallel processes, the political and the technical process, are of the utmost importance to make the Post-2015 Development Agenda functional for its purpose, to make progress measurable, to allow for international comparisons and to learn from each other's best practices and successful achievements in reaching the sustainable development goals for "*The world we want*".