

*Discussion paper on Principles of Using Quantification  
to Operationalize the SDGs and Criteria for Indicator Selection*

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## I. Using quantification to operationalize the SDGs

### 1. Strength and limitations of quantification – lessons from the MDGs

The MDGs experience has clearly demonstrated the power of quantification, as well as the difficulties associated with it. The MDGs transformed an inspirational global agenda for development into a set of quantified and time-bound goals and targets, monitored by statistically robust indicators. The quantification has brought concrete commitments to actions, and enabled tracking performance and holding governments accountable. The set of quantified and time-bound goals and targets have also helped to galvanize development efforts and implement successful targeted interventions. Without quantification and monitoring, it is difficult to determine whether sufficient progress is being made.

However, this key strength of the MDGs has also attracted criticism. The MDG global targets were set based on historical global trends, under the assumption that progress observed at the global level over the 70s and 80s would continue for 1990-2015. The arbitrary methodology used in setting the numerical targets has been heavily criticized for ignoring the real-world complexities. The global targets have also been wrongly applied at regional and country levels. The one-size-fits-all yardstick that has been used to evaluate and compare country performance disregards different national circumstances, historical backgrounds, and particular challenges each country faced. Many poor countries, especially sub-Saharan African countries, have been unfairly portrayed as failures in terms of meeting the MDGs.

Quantification sometimes creates perverse incentives and lead to distortions in the development policy agenda. For example, in order to meet the MDG 2 of achieving universal primary education, implementing agencies would focus more on enrolling school-aged children in primary school than ensuring the quality of education. Meeting the numerical target becomes the primary goal for some implementing agencies. Sometimes quantification of targets may also invite manipulation, misuse and misinterpretation of statistics.

### 2. Types of SDGs targets

The current proposed SDGs framework by the OWG has different types of targets.

Some targets are quantified with clear numerical values specified, such as:

“Target 3.6: By 2020, halve the number of global deaths and injuries from road traffic accidents” and

“Target 17.2: Developed countries to implement fully their official development assistance commitments, including to provide 0.7 per cent of gross national income in official development assistance to developing countries, of which 0.15 to 0.20 per cent should be provided to least developed countries”.

Some targets are quantified with implicit numerical values specified, such as:

“Target 1.1: By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day” and

“Target 6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all”.

Some targets are quantified without specific numerical value, but with an  $x\%$ . There are 9 targets in the OWG proposal where  $x\%$  can be found instead of a specific numerical value, such as:

“Target 4.4: By 2030, increase by [x] per cent the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship” and

“Target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and increasing recycling and safe reuse by [x] per cent globally”

Many targets, including many of the means of implementation targets, do not have specific numerical values or timeframe for implementation, such as:

“Target 1.a: Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions”,

“Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources” and

“Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries”.

These unspecified and vague targets are difficult to be operationalized and assessed as to how much progress has been made.

### **3. Principles of using quantification to operationalize the SDGs**

This paper does not attempt to re-open the discussion on the proposed targets in the SDGs framework, neither does it suggest that all targets must be quantified. Building on the lessons learnt with the MDGs, the paper proposes some principles to be considered when:

- 1) Applying the specified numerical targets at country and local levels;
- 2) Suggesting specific global values for those 9 targets in the OWG proposal where there is currently an  $x\%$ ; and
- 3) Using quantification as a tool to operationalize the targets that are vague.

The principles for quantification are:

(1) **Universal with national adaptation:** The “Chapeau” of the OWG SDGs proposal suggests “Targets are defined as aspirational global targets, with each Government setting its own national targets guided by the global level of ambition, but taking into account national circumstances”.

Setting quantified targets or quantified objectives for the indicators at the global level can effectively galvanize action around the world. Global quantified objectives must be tailored and customized to reflect country-specific circumstances in order to make them both ambitious and realistically achievable. It is essential to generate country ownership and encourage countries to strive for accelerated progress. Guidance should be provided for countries to define and set up their own quantitative targets and objectives.

(2) **Consistent with existing international frameworks and agreements:** Numerical target or objective setting should be consistent and coherent with the numerical targets or commitments in existing international frameworks and agreements or new agreements that will be reached. For example, any proposed nutritional targets or objectives should not be in conflict with the six nutritional targets proposed by the World Health Assembly in 2012. New climate change targets should be agreed under the upcoming International Climate Change Conference in November 2015. Any proposed quantitative objectives should have international or national consensus.

(3) **Ambitious but achievable:** Numerical objective setting should be realistically set – ambitious but achievable. Quantification should be ambitious enough to focus policymakers and public attention and efforts but not so ambitious or vague as to sound more aspirational than realistic. It is important to distinguish targets and long-term vision. For example, the MDG4 target - reduce under five child mortality by two-thirds between 1990 and 2015 - is not achievable under current circumstances. If the annual rate of decline over the 2000-2010 period continues, the world will not reach MDG 4 until 2037.

(4) **Setting a baseline:** The SDGs framework implicitly sets the baseline year as the year 2015. Setting a baseline value is an invaluable process for quantitative target or objective setting. Countries at different starting points follow different trajectories to reach the target. For example, study shows that a country with a low initial per capita income will take more growth of mean income to achieve the same percentage reduction in poverty than a country with a high per capita income. Quantification should take into account the different starting points. Based on the evaluation of the baseline, it can be decided which path ways to take to reach the objective.

(5) **Forward looking:** Quantitative objective setting should not only be based on historical data and merely provide mechanical extrapolation of the ongoing trends. The outlook over the next 15 years may be significantly different from the past 15 years. Quantification should be forward looking and take into consideration emerging and future changes and population dynamics.

(6) **A participatory process:** Quantitative objective setting should engage all stakeholders in the process and discuss what can be expected in the future. A participatory process helps to build ownership and secure commitment to reach the target.

## **II. Criteria for Indicator selection**

The “Chapeau” of the OWG SDGs proposal states that “The sustainable development goals are accompanied by targets and will be further elaborated through indicators focused on measurable outcomes. They are action-oriented, global in nature and universally applicable. They take into

account different national realities, capacities and levels of development and respect national policies and priorities”. This provides the guiding principle for indicator selection. The set of proposed criteria for indicator selection are modified based on the paper “Lessons Learned from MDG Monitoring” produced by the IAEG-MDGs.

The SDGs indicators should be:

## **1. Relevant**

- 1.1. Linked to the target: The indicator should be clearly linked to one or more targets and provide robust measures of progress towards the target(s).
- 1.2. Policy relevant: The indicator should be relevant to policy formulation and provide enough information for policy making. It should also be sensitive and responsive to policy interventions and other underlying causes of change at the appropriate level (global, regional, national, and local).
- 1.3. Applicable at the appropriate level: For global monitoring, the indicator should be relevant to all countries. For national monitoring, the indicator should be relevant to national priorities.

## **2. Methodologically sound**

- 2.1. Based on sound methodology: The indicator should be scientifically robust and based, to the greatest extent possible, on existing internationally agreed definitions, classifications, standards, recommendations and best practices. The methodology behind the indicator (data sources, method of computation, treatment of missing values, regional estimates, etc.) should be well documented and readily available.
- 2.2. Tested to be valuable: Empirical analysis showing the indicator is valuable has been undertaken and results have been documented. The indicator should be recommended by a well-established and recognized peer review mechanism or through international mechanisms. For new indicators, pilot projects are needed and must be supported with necessary resources to test the indicators and data collection methods and the results need to be fully documented.
- 2.3. Coherent and complementary: The indicator should be consistent with and complementary to other indicators in the monitoring framework. It will be useful to develop an inter-dependency map to show the information required and the relationship between the indicators.

## **3. Measurable**

- 3.1. Stable and sustainable: The indicator should be measured in a cost-effective and practical manner by countries. A regular and timely data collection mechanism has been or can be developed with reasonable costs and effort. To the greatest extent possible,

indicators should be constructed from well-established sources of public and private data. The statistical capacity or potential capacity for data collection and analysis to support the indicator must exist at national and international levels.

- 3.2. Disaggregated: It should be possible to disaggregate the indicator by geographical region, sex, income, or special population groups where applicable and relevant.
- 3.3. Managed by one or more responsible agencies: There is one or more designated lead responsible agencies for timely and high quality reporting of the indicator and for undertaking the related analysis. At the international level, there should be an agency or agencies responsible for the production of country-level data, regional aggregates, development and dissemination of concepts, methods and analysis used, describing the assessment of progress made globally and by regions. In addition, the agency should provide guidance and/or assistance to countries to strengthen their capacity to produce the indicators.

#### **4. Easy to communicate and access**

- 4.1. Easy to interpret and communicate: The indicator is clear and easy to understand for policy makers, the general public and other stakeholders, and unambiguous for interpreting. Use of language and terminology and the presentation of information should be carefully considered. In some cases where scientific concepts and terminology have to be used, statistical training should be provided to policy makers and the general public.
- 4.2. Easily accessible: The indicator should be easily and openly accessible to the general public, policy makers and other stakeholders.

#### **5. Limited in number and outcome focused at the global level**

- 5.1. Limited in number: One of the main strengths of the MDGs was their focus on a limited number of indicators, which made the framework clear and manageable. A long list of indicators is neither communicable nor effective in galvanizing public support. The number of indicators at the global level should be minimal. At the national level, supplemental indicators can be added according to national priorities and circumstances to address their specific needs.
- 5.2. Outcome focused: When possible, indicators should be mainly outcome focused. In the absence of reliable outcome indicators, process or input indicators can be used.