The Sustainable Development Goals of the Post-2015 Agenda: Comments on the OWG and SDSN Proposals

Revised version, 26 February 2015

German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE)

Markus Loewe and Nicole Rippin (eds.)
The Sustainable Development Goals of the Post-2015 Agenda
Comments on the OWG and SDSN Proposals

Markus Loewe / Nicole Rippin (eds.)

Bonn 2015
Markus Loewe, German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE), Department “Sustainable Economic and Social Development”
E-Mail: markus.loewe@die-gdi.de

Nicole Rippin, German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE), Department “Sustainable Economic and Social Development”
E-Mail: nicole.rippin@die-gdi.de
# Contents

**Overview of the Sustainable Development Goals (SDGs) as proposed by the Open Working Group (OWG)**

**List of abbreviations**

**UN – Fit for purpose: Making the United Nations fit for the new generation of sustainable development**
Silke Weinlich 7

**Follow-up and review: The accountability framework for the post-2015 agenda**
Heiner Janus and Niels Keijzer 9

**Goal 1:** End poverty in all its forms everywhere
Markus Loewe and Nicole Rippin 13

**Goal 2:** End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
Francesco Burchi and Sarah Holzapfel 17

**Goal 3:** Ensure healthy lives and promote well-being for all at all ages
Katharina Stepping and Nicole Rippin 21

**Goal 4:** Ensure inclusive and equitable quality education and promote life-long learning opportunities for all
Francesco Burchi and Nicole Rippin 27

**Goal 5:** Achieve gender equality and empower all women and girls
Francesco Burchi, Aimée Hampel-Milagrosa and Nicole Rippin 31

**Goal 6:** Ensure availability and sustainable management of water and sanitation for all
Ines Dombrowsky 35

**Goal 7:** Ensure access to affordable, reliable, sustainable, and modern energy for all
Markus Loewe, Anna Pegels, Matthias Ruchser and Georgeta Vidican 39

**Goal 8:** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Markus Loewe, Tilman Altenburg, and Anna Pegels 43
<table>
<thead>
<tr>
<th>Goal</th>
<th>Description</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 9:</td>
<td>Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation</td>
<td>Nicole Rippin, Tilman Altenburg and Anna Pegels</td>
<td>49</td>
</tr>
<tr>
<td>Goal 10:</td>
<td>Reduce inequality within and among countries</td>
<td>Nicole Rippin, Niels Keijzer, Markus Loewe and Benjamin Schraven</td>
<td>53</td>
</tr>
<tr>
<td>Goal 11:</td>
<td>Make cities and human settlements inclusive, safe, resilient and sustainable</td>
<td>Clara Brandi</td>
<td>57</td>
</tr>
<tr>
<td>Goal 12:</td>
<td>Ensure sustainable consumption and production patterns</td>
<td>Karen Meijer and Steffen Bauer</td>
<td>61</td>
</tr>
<tr>
<td>Goal 13:</td>
<td>Take urgent action to combat climate change and its impacts</td>
<td>Steffen Bauer, Clara Brandi, Sander Chan and Okka Lou Mathis</td>
<td>67</td>
</tr>
<tr>
<td>Goal 14:</td>
<td>Conserve and sustainably use the oceans, seas and marine resources for sustainable development</td>
<td>Clara Brandi</td>
<td>71</td>
</tr>
<tr>
<td>Goal 15:</td>
<td>Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</td>
<td>Steffen Bauer and Karen Meijer</td>
<td>77</td>
</tr>
<tr>
<td>Goal 16:</td>
<td>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</td>
<td>Charlotte Fiedler with Mark Furness, Jörn Grävingholt and Julia Leininger</td>
<td>81</td>
</tr>
<tr>
<td>Goal 17:</td>
<td>Strengthen the means of implementation and revitalise the global partnership for sustainable development</td>
<td>Kathrin Berensmann, Clara Brandi, Heiner Janus, Niels Keijzer and Silke Weinlich</td>
<td>87</td>
</tr>
<tr>
<td>SDG</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>End poverty in all its forms everywhere</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>End hunger, achieve food security and improved nutrition, and promote sustainable agriculture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Ensure healthy lives and promote well-being for all at all ages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Ensure inclusive and equitable quality education and promote life-long learning opportunities for all</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Achieve gender equality and empower all women and girls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Ensure availability and sustainable management of water and sanitation for all</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Ensure access to affordable, reliable, sustainable, and modern energy for all</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Reduce inequality within and among countries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Make cities and human settlements inclusive, safe, resilient and sustainable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Ensure sustainable consumption and production patterns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Take urgent action to combat climate change and its impacts*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Acknowledging that the UNFCCC is the primary international, intergovernmental forum for negotiating the global response to climate change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Conserve and sustainably use the oceans, seas and marine resources for sustainable development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Strengthen the means of implementation and revitalize the global partnership for sustainable development</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS</td>
<td>Access and Benefit Sharing</td>
</tr>
<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
</tr>
<tr>
<td>DHS</td>
<td>Demographic Health Survey</td>
</tr>
<tr>
<td>DIE</td>
<td>German Development Institute / Deutsches Institut für Entwicklungspolitik</td>
</tr>
<tr>
<td>ECOSOC</td>
<td>UN Economic and Social Council</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>FFD</td>
<td>Financing for Development Conference</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GHG</td>
<td>Greenhouse Gas</td>
</tr>
<tr>
<td>GNI</td>
<td>Gross National Income</td>
</tr>
<tr>
<td>HALE</td>
<td>Healthy Life Expectancy</td>
</tr>
<tr>
<td>HLPF</td>
<td>High-level Political Forum on Sustainable Development</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>IUU</td>
<td>Illegal, Unreported and Unregulated</td>
</tr>
<tr>
<td>IWRM</td>
<td>Integrated Water Resources Management</td>
</tr>
<tr>
<td>JMP</td>
<td>Joint Monitoring Programme (WHO-UNESCO)</td>
</tr>
<tr>
<td>LDC</td>
<td>Least-developed Country</td>
</tr>
<tr>
<td>LLDC</td>
<td>Landlocked Developing Country</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goal</td>
</tr>
<tr>
<td>MPI</td>
<td>Multidimensional Poverty Index</td>
</tr>
<tr>
<td>ODA</td>
<td>Official Development Assistance</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OWG</td>
<td>Open Working Group</td>
</tr>
<tr>
<td>PPP</td>
<td>Purchasing Power Parity</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
</tr>
<tr>
<td>SDSN</td>
<td>Sustainable Development Solutions Network</td>
</tr>
<tr>
<td>SEEA</td>
<td>System of Environmental-Economic Accounting</td>
</tr>
<tr>
<td>SIDS</td>
<td>Small Island Developing States</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium Enterprise</td>
</tr>
<tr>
<td>SP</td>
<td>Social Protection</td>
</tr>
<tr>
<td>SSC</td>
<td>South-South Cooperation</td>
</tr>
<tr>
<td>10YFP</td>
<td>10-Year Framework of Programmes</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNCLOS</td>
<td>UN Convention on the Law of the Sea</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
</tr>
<tr>
<td>WBGU</td>
<td>German Scientific Advisory Council on Global Change / Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen</td>
</tr>
</tbody>
</table>
UN – Fit for purpose: Making the United Nations fit for the new generation of sustainable development

Silke Weinlich*

Introduction

The UN system will play an essential role in implementing the new sustainable development agenda. Historically, the UN has held a unique place in shaping the global multilateral system. The UN sets universal norms and standards, has unparalleled convening powers, possesses legitimacy and neutrality, creates global knowledge and has a comprehensive mandate coupled with in-country presences worldwide.

Therefore, the UN has already played an important role in helping to achieve the MDG agenda on many levels, e.g. by contributing directly with its operational activities, building capacity, gathering and assessing data, and by advocating for the agenda’s implementation. Despite a number of known weaknesses, the UN system is an asset that needs to be put to good use; it can be a motor for assisting countries in achieving their common national and collective Sustainable Development Goals.

However, a universal sustainable development agenda with transformative ambitions presents unprecedented requirements to the international community, including the UN. The UN Secretary-General’s synthesis report rightly states that the international community at large needs to be made “fit for purpose”.

The UN faces the double challenge of tackling a backlog of long-overdue reforms and getting into shape for overseeing and assisting in the implementation of the post-2015 agenda. The year 2015 can be monumental for addressing these challenges jointly. Member states should seize the opportunity to push for changes in the UN to avail themselves of a world organisation that is better suited to the new demands. This will require changes in their behaviour and a seriously look at the UN system’s functions, as well as its governance, funding, capacity and impact. Such a reform effort should build on existing reform processes, both within the UN system itself (keywords: Delivering as One) as well as within intergovernmental bodies (keywords: Fit for purpose, Quadrennial Comprehensive Policy Review).

Strengthening the UN was mentioned in the synthesis report, but neither the OWG nor the SDSN report directly address the issue. Only the latter frequently denominates selected UN agencies as custodians for monitoring progress in implementing the SDGs.

Recommendation

The outcome document should contain clear and strong language with regard to strengthening the UN and making it fit for the purpose of implementing the new generation of Sustainable Development Goals. The outcome document should not pre-empt any decisions but instead create a strong point of reference for action in a more comprehensive reform round, to be initiated after the summit.

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
Follow-up and review: The accountability framework for the post-2015 agenda

Heiner Janus and Niels Keijzer*

The accountability challenge

Accountability can be understood as the obligation of an actor (e.g. person, group, institution) to justify decisions or actions taken. In the context of a post-2015 framework, these obligations refer to efforts towards achieving the Sustainable Development Goals (SDGs), including fulfilling commitments made under the SDGs. Accountability to this agenda should promote compliance with agreed actions and stimulate learning on how to realise those goals that are less clearly defined and/or require collective action under imperfect global frameworks. This balance will be different for each component of the agenda, as “solutions” for certain goals may be pre-determined, whereas others require learning-by-doing. To demonstrate these efforts, all stakeholders of the post-2015 agenda should take part in a regular process of reporting as well as in review and follow-up cycles conducted under the roof of a post-2015 accountability framework.

The MDG accountability framework

The present Millennium Development Goal (MDG) accountability framework is characterised by shortcomings in both the monitoring and review processes. Monitoring is carried out by national statistics offices in cooperation with individual UN agencies and then aggregated at central levels at the UN Secretariat. But the current setup is prone to duplication, incoherence and poor delineation of responsibilities. In addition to being fragmented, the system is lacking in quality and ownership. Recent studies show that numerous developing-country statistical offices are unable to collect, analyse and disseminate data for MDG reporting. MDG statistics are often based on donor-funded surveys or modelling exercises.

As a result, the MDG accountability framework continues to be inadequate in terms of promoting compliance for the development commitments agreed to by all states. Still, the MDGs represent a step forward compared to the situation in the 1990s, especially in terms of creating greater transparency in development cooperation.

Going forward, the post-2015 accountability framework should build on these experiences and design a monitoring system with clear lines of reporting (among UN agencies and other stakeholders). Calls for data revolutions and disaggregated statistics need to become rooted in discussions on how accountability to the agenda will be realised. This requires balancing compliance and learning in a system that is inclusive to all different stakeholders and caters to their motivations and interests.

Three components of post-2015 accountability

UN member states have already determined key elements of a post-2015 accountability framework. A central role will be played by the High-level Political Forum on Sustainable Development (HLPF), which was mandated to “conduct regular reviews, starting in 2016, **

---

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
on the follow-up and implementation of sustainable development commitments and objectives, including those related to the means of implementation, within the context of the post-2015 agenda”. This analysis mainly focusses on the HLPF but also sketches other potential fora for accountability.

Despite the concrete HLPF mandate, it is unclear how the reviews will be organised, how they will relate to other UN processes, what role key stakeholders other than governments (e.g. the private sector, civil society) will play and what level of ambition member states will show. We propose a simple model for designing the post-2015 accountability mechanism around three key components: actors, linkages and ambition (Figure 1).

Component 1: Actors. The accountability framework should include three main actor groups: governments, the UN system and society. Governments will be responsible for implementing the new agenda with strong support from the UN system and broader society (non-governmental stakeholders, civil society organisations, philanthropic foundations, private sector, multi-stakeholder partnerships, etc.).

The HLPF review will be a central place for bringing these three groups together. The HLPF review will be state-led, voluntary (while encouraging reporting) and provide a platform for partnerships.

A key point, however, is that the accountability framework will be broader than just the HLPF review mechanism. The UN system – including all individual entities – provides additional opportunities for creating accountability that have to be linked to the overall accountability framework. Existing UN organs such as the General Assembly or the Economic and Social Council (ECOSOC) as well as thematic fora already perform

---

**Figure 1: The Post-2015 Accountability Framework**

Source: Own elaboration
accountability functions. Similarly, broader society and actors not participating in the current post-2015 discussions should be engaged.

**Component 2: Interlinkages.** Relations in the accountability framework are at least as important as individual elements. Organising coherent lines of reporting and assigning responsibilities between elements of the framework will be the principal challenges. Interlinkages could be established in various forms, including joint meetings, reports and evaluations; harmonised operating cycles; joint governance structures; or shared thematic sessions. Further details should be discussed among member states. We distinguish three broad types of linkages within the multi-layered accountability framework: between actors (UN system, governments, society), between levels of governance (national, regional, international) and between the post-2015 accountability framework and outreach to external actors.

In linking different actors, a coherent engagement of the UN system is critical. The post-2015 agenda and accountability framework should set priorities for work areas of the whole system and individual UN entities. For example, ECOSOC’s recent strengthening reform that moves the Council from “coordination” towards “management” of the UN system could play a role in this regard. The same holds for ongoing UN reform processes for better connecting the normative work of the UN and its operational work at the country level. Next, each UN entity needs to be included through its governance structure. Governments play a crucial role on the Executive Boards of UN funds, programmes and specialised agencies, for example. Finally, the UN Development Cooperation Forum, similar to other UN fora dealing with specific sectors, could organise accountability for the sector of development cooperation.

For engaging non-governmental actors, the HLPF could work with the Sustainable Development in Action registry. The registry contains public and regularly updated information on multi-stakeholder partnerships and voluntary initiatives. Within the registry, there are several “Action Networks” – such as the Secretary-General’s Sustainable Energy for All, or Every Woman Every Child initiatives – that have set up their own accountability and review mechanisms. Going forward, the registry should be improved (e.g. through independent reviews, ex-ante goal definition and clear reference to specific SDGs). In addition, non-governmental actors should be invited to participate, also through formal roles, in the accountability framework at the national, regional and international levels.

Linking different levels of governance – international to national – requires balancing global goals to foster global collective action and nationally set targets and indicators that reflect differentiated development priorities. There should be differentiated types of accountability, depending on the level of governance. For instance, strong accountability can be carried out at the national level, whereby parliaments, audit institutions and civil society actors could be the vehicles.

At the regional level, peer-learning mechanisms could ensure an external and independent assessment of progress towards achieving the SDGs. Countries in the same region often share similar challenges and are likely to make greater progress by jointly addressing their problems. At the international level, there would be aggregated monitoring of global progress to identify implementation gaps and opportunities for collective action. Also,
aggregated reporting will be presented in the Global Sustainable Development Report, which should link to different levels (regions, countries) and actors (governments, UN system, parliaments, non-governmental actors, academia). Strong academic input for the report could guarantee higher quality and greater independence of the analysis.

Lastly, the post-2015 accountability framework should involve external actors through clearly defined outreach efforts. Organisations and groups such as the G-20, the Organisation for Economic Co-operation and Development (OECD), the BRICS countries, the World Trade Organization and development banks should engage in a formal manner. In addition, institutions addressing specific sectors, such as the Global Partnership for Effective Development Co-operation, could assume a formal role in supporting the achievement of the SDGs. Given the overall ambitious agenda, systemic issues in global governance, such as global trade and finance, inevitably need to be addressed by the accountability framework. Achieving the SDGs strongly relies on the actions of communities outside the post-2015 setting in the UN as well as within the UN’s current sphere of influence.

Component 3: Ambition. Another major issue is the level of ambition that post-2015 stakeholders can demonstrate and commit to. Political ambition is required on at least two levels. First, ambition is necessary in discussions about the design of the future accountability framework. Second, ambition is an essential component for making commitments within the framework.

In terms of designing a post-2015 accountability framework, an intergovernmental negotiation process should be started to determine specific elements and interlinkages (see above). One way to assess the level of ambition is to think about a fragmented versus a coherent approach. It is up to UN member states as to whether a framework remains a fragmented system of different “talk shops” or promotes coherent action towards addressing urgent global challenges.

For instance, the more fragmented the framework is, the more leeway there could be for different actors to disregard implementing the SDGs. A critical challenge here is that post-2015 stakeholders could engage in strategic “forum-shopping” within a loose framework. This behaviour is already observable in the separate negotiation tracks for the SDGs and for development-process financing. In contrast, a more coherent framework could be characterised by stronger lines of accountability.

In terms of making commitments within the new accountability framework, actors are first and foremost encouraged to participate on a voluntary basis. Thus, the level of political ambition devoted to the post-2015 accountability framework will fundamentally depend on individual UN member states and other stakeholders. Still, there should be clear incentives for governments and other stakeholders to participate. Such incentives could be financial, e.g. access to performance-based funds, or non-financial, e.g. peer pressure and reputational concerns. The question of providing incentives should therefore also feature prominently in negotiating the post-2015 framework.
Goal 1: End poverty in all its forms everywhere

Markus Loewe and Nicole Rippin*

General assessment

The goal is about ending poverty in all its forms everywhere. The targets are, in general, well-formulated and ambitious. The wording of the goal itself, however, is unfortunate. Ending poverty in all its forms constitutes a duplication of all SDGs that refer to the different dimensions of poverty, i.e. nutrition, education and health but also decent work, freedom from violence, voice, etc. Ending poverty in all these dimensions by 2030 is a very ambitious goal. This fact is reflected in Target 1.2, which contradicts the goal by requiring to “reduce at least by half” the proportion of those living in poverty in all its dimensions. In addition, the goal does not reflect Targets 1.3 to 1.5, which seek to reduce vulnerability. A rewording of the goal is highly recommendable, for instance: “End income poverty and reduce vulnerability.”

Operationalisation

The goal includes five targets and two suggestions for means of implementation. The targets that refer to poverty are, in general, clearly formulated and measureable. The targets that refer to vulnerability, however, are not always measurable. In addition, there is a clear overlap with SDG 5 (“Achieve gender equality and empower all women and girls”) and SDG 11 (“Make cities and human settlements inclusive, safe, resilient and sustainable”).

- **Target 1.1**: The target requires by 2030 to “eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day”. The OWG formulation of the target is highly welcome, as it explicitly leaves room for a new definition of extreme poverty.

Thus, it is all the more disappointing that the indicator suggested by the SDSN is again the $1.25 poverty line. The method with which the $1.25 poverty line has been derived is not only highly problematic, it is also subject to decisive changes over time: each time that the International Comparison Program releases the new purchasing power parity (PPP) rates, the World Bank uses the new data to update its poverty line. These are by no means minor changes. When the World Bank adopted the PPP rates from 2005, the number of the world’s poor went up by more than 400 million. The new PPP rates were released in June 2014. They will lead to a decrease in the number of the world’s poor in roughly equivalent proportions – if they are adopted. The final decision about whether the World Bank will utilise the new PPP rates for its poverty calculations or disregard them will be made in the spring.

This fact has to be kept in mind when considering an indicator for income poverty. The SDSN suggested the familiar “Proportion of population below $1.25 (PPP) per day” as the indicator to monitor progress towards Target 1.1. However, when utilising this indicator, some guidelines would be needed on how to deal with the fact that, during the period 2015–2030, the target will be subject to at least three considerable

---

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
changes due to the updating of PPP rates. One viable option could be to freeze the poverty line at its current level. This is, however, not even close to a first-best solution. Considering the unreliability of poverty rates, it would have been better to take up one of the various suggestions for the development of a better income poverty measure – all the more so as Target 1.1 explicitly leaves room for this and Target 1.2 provides a very good starting point to do so.

- **Target 1.2**: The target requires by 2030 to “reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions”. Thus, unlike the MDGs, the target focusses on national definitions of poverty, thereby following international resolutions such as the 1995 Copenhagen Declaration, which already acknowledged that “…profound social problems, especially poverty, unemployment and social exclusion […] affect every country…”. While this is definitely a welcome starting point, the formulation of the target is problematic. To require poverty to be halved “in all its dimensions” means that the target overlaps significantly with all SDGs that refer to the different dimensions of poverty, such as SDG 2 (hunger), SDG 3 (education), SDG 4 (health), SDG 6 (water and sanitation), etc. The OWG seems to be aware of this problem, as Target 1.2 requires poverty to be halved, which is in contradiction with the goal itself, which requires poverty to be eradicated. It would be much more appropriate and consistent to focus on income poverty only.

The SDSN suggests two indicators to capture Target 1.2. The first is the “Proportion of population living below national poverty line, differentiated by urban and rural” (Indicator 2). This could be a very good indicator if the SDSN had not gone only halfway with their comment that “national poverty lines do not provide a uniform measure, so this indicator does not allow for direct comparisons across countries”. Many countries use relative poverty lines that would be very difficult to halve by 2030. Telling examples are the countries of the European Union, which use the at-risk-of-poverty rate: this uses as a cutoff line 60 per cent of median equivalised income after social transfers. It is likely that wealthier countries that use such poverty lines will opt out of the whole target. What we would like to propose instead is to initiate an international process to standardise national poverty lines so that they are comparable in methods. This way, national poverty lines would not only be comparable across countries, they would also provide a starting point for the assessment of global poverty in a much more reliable way than the $1.25 poverty line. The second indicator suggested by the SDSN is the Multidimensional Poverty Index (Indicator 3). The MPI is designed to capture those dimensions of poverty that cannot be captured by income alone. Though it could be interesting to have such a composite poverty index, the MPI is the most disadvantageous solution. The SDSN regretted that the $1.25 poverty line does not capture the depth of poverty. In the case of the MPI, the situation is even worse: not only is the MPI unable to capture inequality among the poor; due to its specific structure, it decreases whenever there is a transfer from a poorer to a less poor person that lifts the less poor person over the 33 per cent cutoff line. This way, inequality-increasing transfers are identified as poverty-reducing policy measures: something that should be off-limits in the SDG framework, which seeks to reduce – not increase – inequality. This fact has been taken up in the latest Policy Research Report of the World Bank, “A Measured Approach to Ending Poverty and Boosting Shared Prosperity: Concepts, Data, and the Twin Goals”.
which criticises the MPI and mentions as an alternative option the Correlation Sensitive Poverty Index – this index can be calculated and disaggregated in the same way as the MPI, but it is able to capture inequality in addition.

- **Target 1.3**: The target requires to “implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable”. Social protection (SP) is an instrument for the reduction of poverty and vulnerability. To the degree that it contributes to poverty reduction, there is little need to have SP as a target, because then it is only a means to achieving Target 1.1 and Target 1.2. However, it makes much sense to include SP as a proxy for vulnerability, which would otherwise be very difficult to measure. In this case, Target 1.3 should be reformulated in the following way: “Reduce socio-economic vulnerability as measured by the share of people without adequate access to social protection.” In this case, the focus should not be on social protection floors. These are extremely important and effective but mainly for poverty reduction. Instead, Target 1.3 should measure the effectiveness of SP programmes in reducing the vulnerability of all people – poor and non-poor.

The indicator suggested by SDSN is the “percentage of population covered by social protection programs” (Indicator 4). This indicator, however, is too vague (e.g. what kind of SP programmes? What is meant by “covered”? Covered to what degree? etc.). A possible solution could be to focus on the main risks that threaten every human – for example (i) illness, (ii) old-age (longevity) and (iii) death of a family’s main breadwinner. These should be measured by benefits rather than eligibility, for instance, (i) out-of-pocket spending as a percentage of total health care spending (a fairly good indicator of the size of unprotected health risk), (ii) percentage of people above age 65 receiving benefits that are at least equal to the national poverty line and (iii) percentage of orphans receiving benefits that are at least equal to the national poverty line.

- **Target 1.4**: The target requires by 2030 to ensure that all human beings “have equal rights to economic resources, as well as access to basic services, ownership, and control over land and other forms of property, inheritance, natural resources, appropriate new technology, and financial services including microfinance”. Of course, it is desirable to have all these equal rights. But it is extremely difficult to measure them. It would probably require three or four indicators to monitor progress towards each of them in a meaningful way.

The SDSN suggests a twofold indicator (Indicator 5) for measuring progress towards the target: (i) percentage of the population in rural areas that perceive their rights to land are recognised and protected, and (ii) percentage of the population in rural areas with documented or recognised evidence of land tenure. These indicators may be good proxies for measuring access to land ownership, but not the other dimensions addressed in the target. Yet, though all dimensions addressed in Target 1.4 are crucial for the eradication of poverty, especially income poverty, they are mainly a means of implementation – as also suggested by the OWG, which introduces the same requirements as a means of implementation in Target 5.a of SDG 5 (“Achieve gender equality and empower all women and girls”). Consequently, there is no definite need to monitor them, and Target 1.4 could thus be removed from the agenda.
• **Target 1.5:** The target requires by 2030 to “build the resilience of the poor and those in vulnerable situations, and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters”. Apparently, Target 1.5 is meant to focus on those kinds of risks that are normally not covered by SP schemes, which may provide protection against life-cycle and health risks (longevity, work disability, illness, etc.) and some idiosyncratic economic risks (e.g. unemployment) but hardly ever covariate risks (e.g. currency crisis, external shocks such as the global financial and economic crisis), political risks (e.g. riots, civil war), natural risks (e.g. earthquakes, droughts) and ecological risks (e.g. river pollution, deforestation, floods). However, Target 1.5 overlaps considerably with Target 11.5 of SDG 11 (“Make cities and human settlements inclusive, safe, resilient and sustainable”). We therefore suggest merging the two targets either under SDG 1 or SDG 11 but retaining the formulation of Target 11.5, which focusses only on natural and environmental disasters and is much more concrete than Target 1.5: “by 2030 significantly reduce the number of deaths and the number of affected people and decrease by y% the economic losses relative to GDP caused by disasters, including water-related disasters, with the focus on protecting the poor and people in vulnerable situations.”

This suggestion is also consistent with the SDSN proposal that suggests measuring Target 1.5 with an indicator (Indicator 6) that is defined in a very similar way: “Losses from natural disasters, by climate and non-climate-related events, by urban/rural (in US$ and lives lost).”

Means of implementation

• **Target 1.a:** The target requires to “ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation to provide adequate and predictable means for developing countries, in particular LDCs, to implement programmes and policies to end poverty in all its dimensions”. This is a rather broad requirement, but nevertheless very important to ensure that – despite the universality of the SDGs – poor countries are not left alone with their limited resources to deal with the crucial problems they face.

• **Target 1.b:** The target requires to “create sound policy frameworks, at national, regional and international levels, based on pro-poor and gender-sensitive development strategies to support accelerated investments in poverty eradication actions”. The non-specific formulation of this requirement is advisable for a means of implementation for countries with such different national realities.

Recommendations

The formulation of the goal is unfortunate and a rewording is highly recommendable, for instance: “End income poverty and reduce vulnerability.” With the current formulation, Target 1.2 even contradicts the goal itself. The targets are generally well-formulated and ambitious. Their operationalisation, however, is quite challenging. We made some suggestions for improvement and suggest removing Target 1.4 and merging Target 1.5 with Target 11.5, which is very similar but much more concrete.
Goal 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

Francesco Burchi and Sarah Holzapfel*

General assessment

The goal is about ending hunger, enhancing food and nutrition security, and promoting sustainable agriculture. Agriculture is viewed as the central element of this goal, therewith endorsing an agricultural, food-based, rural-centred approach. However, to alleviate hunger and promote food security and nutrition, there can be other “means” that are even more important in many countries. Why are non-agricultural development, conflict prevention and/or reduction and social/food security policies not addressed? The problem of food insecurity and malnutrition in urban areas is almost entirely neglected, despite the fact that more than half of the world population lives in urban areas. Finally, both the “utilisation” and the “stability” dimensions of food security are not being adequately addressed: in sub-Saharan Africa, in particular, diversification of diet is a key to fighting malnutrition, and diversification of crops and income-generating activities are fundamental to ensure stable access to food.

The title of the goal suggests a strong focus on food security and nutrition, which is partly misleading. Only two targets (Targets 2.1 and 2.2) directly address food security issues, whereas the remaining three targets – as well as the three means of implementation – are about agriculture or, broadly, food availability. The indicators proposed to measure progress towards targets sometimes measure inputs rather than results. There can be important trade-offs within the goal, in particular between the target of doubling agricultural productivity and incomes of small-scale farmers and ensuring environmental sustainability. Moreover, there is strong overlap of some targets with other goals, in particular SDG 12 (“Ensure sustainable consumption and production patterns”) and SDG 15 (“Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”). Finally, the targets referring to hunger and malnutrition are extremely ambitious, as they call for their elimination by 2030: while it may appear unrealistic, it is important to have this “ideal” benchmark in the target.

Operationalisation

The goal includes five targets and three suggestions for means of implementation.

- **Target 2.1 requires by 2030 to “end hunger and ensure access by all people, in particular the poor and people in vulnerable situations including infants, to safe, nutritious and sufficient food all year round”.** The target is ambitious and well-formulated; maybe at the end it could be added “for an active and healthy life”.

The Prevalence of Undernourishment indicator of the Food and Agriculture Organization of the UN (FAO) could be used to track this target, as suggested by the

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
SDSN, but its limitations have to be taken into serious consideration. In particular, it strongly depends on food availability and a stylised national income distribution curve: given the fact that household surveys are rarely conducted, food distribution is assumed to remain the same, therefore any increase in food availability, reduction in price or increase in average income necessarily leads to a reduction in hunger. It is suggested to adjust the national indicator with local (household or personal) level data as much as possible and document such adjustments. Another indicator could be the mean or median “household dietary diversity score”, which is a measure of economic access to food. Although in the last years the number of surveys covering information on diet has significantly increased, more funds are required to conduct these surveys more frequently at the country level.

- Target 2.2 requires by 2030 to “end all forms of malnutrition, including achieving by 2025 the internationally agreed targets on stunting and wasting in children under five years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons”. The target is good, as it addresses a fundamental problem – that of malnutrition. We agree with the level of ambition: the target is set at an “ideal” level, like for SDG 1 (“End poverty in all its forms everywhere”), as it calls for “ending all forms of malnutrition by 2030”. Although it may appear unrealistic, in our view it is important to set this ideal benchmark, as this should be the target for national governments and the development community in general.

The indicators of child stunting and wasting are the right indicators for Target 2.2. The prevalence of anaemia, as an indirect measure of iron deficiency, could complement them. Unlike the proposal advanced by the SDSN, we suggest measuring it in the whole population – rather than only in women of reproductive age – as a proxy indicator for overall micronutrient deficiencies. Moreover, in order to account for the growing problem of obesity, especially, but not only, in high-income countries, SDSN Indicator 25 (“Percent of population overweight and obese”) should be removed from SDG 3 (“Ensure healthy lives and promote well-being for all at all ages”) and added here (as also suggested by the Rome-based Agencies FAO, the International Fund for Agricultural Development and the World Food Programme). Although access to drinkable water and sanitation are fundamental elements for fighting malnutrition, they are already addressed separately in SDG 6 (“Ensure availability and sustainable management of water and sanitation for all”).

- Target 2.3 requires by 2030 to “double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous people, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets, and opportunities for value addition and non-farm employment”. Thus, the target focusses on access to food for farmers and other vulnerable groups in rural areas, as well as on overall food availability. In general, this target is good, but why “doubling” productivity? And why “doubling” the income? Whereas this target may be reasonable in very low-productivity areas of sub-Saharan Africa, this is a non-reasonable target in many other areas, especially in high- and middle-income countries. Also, productivity gains raise food access only as long as prices do not change: What if such huge production increases lead to price collapses and make productivity and income mutually
incompatible? Finally, there is often a trade-off between a large increase in productivity and sustainability. Why focus only on rural people?

The operationalisation of Target 2.3 is complex. The SDSN’s proposed indicator is the “Crop yield gap” (actual yield as percentage of attainable yield), which is suitable for measuring a specific aspect of crop productivity, but since there are hundreds of different crops, which crops will be considered? Also, the relevant crops are different for different regions. SDSN Indicator 11 (“Number of agricultural extension workers per 1000 farmers”) is not a direct measure of Target 2.3, but eventually a means of implementation. Furthermore, the number of extension workers is not a measure of Target 2.3: the second formulation proposed by the SDSN (“share of farmers covered by agricultural extension programs and services”) would be a better approximate indirect measure. Interestingly, although the target calls for a doubling of income for rural farmers, the SDSN has not proposed an indicator that refers to this. And whereas the problem of income poverty is addressed in SDG 1 (“End poverty in all its forms everywhere”), no specific focus is given to rural poverty, though 70 per cent of the world’s poor live in rural areas.

Another problem is that Target 2.3, while emphasising productivity, does not mention the other great problem of vulnerable agricultural producers: the need for diversification of production, employment and income, which may reduce risks related to market volatility, climate change and natural disasters. Also, agricultural diversification may improve nutrition and the natural environment.

- Target 2.4 requires by 2030 to “ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality”. This is an interesting target, but it is difficult to see it together with Targets 2.1 and 2.2 especially. Moreover, SDG 12 (“Ensure sustainable consumption and production patterns”) is explicitly about sustainable consumption and production. We suggest moving this target to SDG 12 or reformulating it in such a way that it focusses on “ensuring people’s adoption of sustainable agricultural practices and implementation of non-farm activities that increase their resilience and capacity to adapt to climate change, extreme weather, drought, flooding and other disasters”. This way, the target would focus on the “stability” dimension of food security and on their resilience.

- Target 2.5 requires by 2020 to “maintain genetic diversity of seeds, cultivated plants, farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at national, regional and international levels, and ensure access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge as internationally agreed”. The target focusses on the conservation of genetic resources, and, generally speaking, natural resources, which is the topic addressed in SDG 15 (“Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”). Target 15.6 (“Ensure fair and equitable sharing of the benefits arising from the utilization of genetic resources, and promote appropriate access to genetic
resources”), in particular, is closely linked to this; Target 2.5 concentrates more on the availability of genetic resources and Target 15.6 on their use. We suggest incorporating Target 2.5 into Target 15.6 or, eventually, to treat it as a means of implementing SDG 2, as agro-biodiversity is a key to stable food supply in the long run.

Means of implementation

- Target 2.a requires to “increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development, and plant and livestock gene banks to enhance agricultural productive capacity in developing countries, in particular in least developed countries”. It is a good means of implementation.

- Target 2.b requires to “correct and prevent trade restrictions and distortions in world agricultural markets including by the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round”. It concerns trade more generally, and not just trade in food commodities. It should be included in SDG 17 (“Strengthen the means of implementation and revitalize the global partnership for sustainable development”), where there is a specific sub-section on “Trade”.

- Target 2.c requires to “adopt measures to ensure the proper functioning of food commodity markets and their derivatives, and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility”. This is a good means of implementation, but it still only focusses on agriculture and rural areas.

- We suggest including at least one new means of implementation concerning social and nutritional policies. The first means of implementation should refer to the investment in nutrition and implementation of nutritional policies, which, based on empirical evidence, reduce hunger and improve food security and nutrition. Among them: school feeding, vitamin A and micronutrient supplementation.

- Another means of implementation should refer to the implementation of local, national and international food safety nets to increase resilience to external shocks.

- Finally, why not including a point on agro-industrial development as a means of implementation?

Recommendations

This goal is too broad in scope, aims to cover too many topics and therefore faces too many trade-offs. At the same time, it does not address sufficiently the problems of hunger and malnutrition. Moreover, it overlaps substantially with other goals. We therefore recommend reformulating Target 2.4 or moving it to SDG 12 and moving Target 2.5 to SDG 15. The means of implementation are too focussed on agriculture and not focussed enough on enhancing food security and nutrition; therefore, it is suggested that at least one further means concerning nutritional and social policies (and investments) be added. Finally, the SDSN indicators could be used as a starting list of indicators for the first three targets, but they should be integrated with others that focus on the quality of the diet and the problem of obesity.
Goal 3: Ensure healthy lives and promote well-being for all at all ages

Katharina Stepping and Nicole Rippin*

General assessment

The goal is about ensuring healthy lives and promoting well-being for all at all ages. The goal’s focus on ensuring healthy lives rather than preventing diseases or infirmity is highly welcome, yet the level of ambition is likely unrealistic, given the current operationalisation of the goal. Though ensuring healthy lives for all is clearly an aspiration for the long term, it is unachievable by 2030 and is not even aimed at by most of the targets of SDG 3. Also, the operationalisation does not sufficiently reflect the comprehensiveness expressed in the tone of the goal, as many targets aim at combating specific diseases rather than promoting healthy lives.

SDG 3 is among the most specific SDGs with a number of clear, measurable targets. It is a direct result of the fact that SDG 3 can build on experience with the MDGs, which had a very strong focus on health (MDGs 4, 5 and 6). Particularly in this regard, it is unfortunate that some of the main lessons learnt from the MDGs have not been accounted for. Clear examples are Targets 3.1, 3.4 and 3.6, which focus on global reductions only. Global targets not only risk masking significant variations in the starting conditions of countries but also risk being adopted at the national level, as experience with the MDGs has demonstrated. The SDSN suggestion for a disaggregation of global targets according to geographic location is a telling example of this. Furthermore, a blind adoption of global targets at the national level is highly disadvantageous to countries with bad starting conditions. William Easterly’s article “How the Millennium Development Goals Are Unfair to Africa” from 2009 is a prominent source in this regard.

A positive feature of the goal is that the majority of targets apply to developing and developed countries alike, despite the goal’s history with the MDGs. The importance of targets such as maternal, infant and child mortality justifies their inclusion, despite their greater relevance for developing countries.

Finally, SDG 3 is complementary to a number of other goals. First, the implementation of social protection schemes required in SDG 1 includes health protection. Second, health is crucial for the ability to get educated (SDG 4). Third, safe drinking water and adequate sanitation and hygiene (SDG 6) contribute to limiting the spread of diseases. Fourth, employment and economic well-being (SDG 8) strengthen the possibilities for purchasing health care where it is not publicly provided. Fifth, SDGs 13, 14 and 15 – with their focus on ecosystem services and environmental well-being – complement SDG 3, at least indirectly.

Operationalisation

The goal is operationalised through nine targets and four suggestions for means of implementation. Most of the targets deal with health issues that are relevant for
developing and developed countries alike. Most of the targets are very precise; the level of ambition, however, varies considerably between the targets.

- **Target 3.1**: The target requires by 2030 to “reduce the global maternal mortality ratio to less than 70 per 100,000 live births”. This is a welcome continuation of an important MDG target, yet two of the main lessons learnt from the MDGs have been disregarded. First, the global focus of the target will not prevent its translation into a goal adopted at the national level, as the suggestions of the SDSN for the disaggregation of the target plainly demonstrate. But the simple adoption at the national level is highly unfair to those countries with challenging starting conditions. This weakness could easily be removed by adding “by reducing national maternal mortality ratios to less than x per 100,000 live births”; each country would then specify the target value, given the different starting conditions. Second, data on maternal mortality rates are highly unreliable. The SDSN mentions the problem that many developing countries lack a death (and often also birth) registration system, which makes it virtually impossible to derive a reliable number of maternal deaths. We urge calling for the implementation of death and birth registration systems as an important part of the data revolution. We also join the call of many health experts to use the MDG indicator “Proportion of births attended by skilled health personnel” in addition to maternal mortality rates because of the unreliability of the latter.

- **Target 3.2**: The target requires by 2030 to “end preventable deaths of newborns and under-five children”. The great importance of the target justifies its high level of ambition; however, it will be crucial to ensure that poor countries are not left alone with their limited resources to deal with this task. Target 3.2 is closely linked with Target 2.2 on ending all forms of malnutrition, as malnutrition is a frequent cause of death for newborns and under-five children.

- **Target 3.3**: The target requires by 2030 to “end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases, and other communicable diseases”. The target is highly ambitious and seeks to include important diseases that have been neglected in the MDGs. However, the list of communicable and non-communicable diseases mentioned by Targets 3.3 and 3.4 includes more than 25 diseases, and it would be far too costly to measure them all.

This is probably the reason why the SDSN suggests only the three MDG indicators HIV, tuberculosis and malaria to capture Target 3.3. However, this concentration on a very small sample of diseases directly leads to the same problems that the MDGs already had, whereby a defined set of health concerns attracted many resources, regardless of the dominant causes of illness and mortality in low- and middle-income countries. Against this background, it seems to be recommendable not to focus on specific diseases but rather to replace Targets 3.3 and 3.4 with a new target that requires to “increase Healthy Life Expectancy (HALE) by x% and to ensure that every person has a HALE of at least xx years at birth”. HALE (SDSN Indicator 32), defined as “the average number of years that a person can expect to live in ‘full health’ by taking into account years lived in less than full health due to disease and/or injury”, has already been calculated for 187 countries for the time period 1990–2010. Though measuring
Goal 3: Ensure healthy lives and promote well-being for all at all ages

HALE is certainly difficult, the same can be said for many of the communicable and non-communicable diseases listed in Targets 3.3 and 3.4.

- **Target 3.4:** The target requires by 2030 to “reduce by one-third pre-mature mortality from non-communicable diseases (NCDs) through prevention and treatment, and promote mental health and wellbeing”. Again, the global focus of the target will not prevent adoption at the national level, as again the suggestions of the SDSN for the disaggregation of the target according to geographic location plainly demonstrate. This weakness of the target could easily be removed by adding “by reducing national pre-mature mortality by x%”. However, the most serious problem of Target 3.4 is the same as the one explained in Target 3.3. Instead of trying to measure pre-mature mortality from non-communicable diseases and to develop an indicator for the promotion of mental health and well-being, it would be advisable to introduce a target on HALE.

- **Target 3.5:** The target requires to “strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol”. As no clear target value is specified, the level of ambition of the target is unclear. The target may be useful for raising awareness about substance abuse, yet the measurement is difficult, if not impossible, because substance abuse happens mostly off the record.

SDSN Indicator 24 (“Harmful use of alcohol”) is useful, but has to be combined with a clear target, for instance “reduce the harmful use of alcohol by x% at national level”. The problem with SDSN Indicator 23 (“Current use of any tobacco product”) is that it provides no definition for the harmful use of tobacco products and can thus not be addressed with a clear target.

- **Target 3.6:** The target requires by 2020 to “halve global deaths and injuries from road traffic accidents”. With a target year of 2020, Target 3.6 is likely to be overambitious and falls out of the scheme. It repeats the failure of the MDGs by specifying global percentages that will, if broken down to the national level, lead to distortions that set the poorest countries up for failure. Again the weakness could be easily removed by adding “by reducing national deaths and injuries from road traffic accidents by x%”, individualised for each country.

- **Target 3.7:** The target requires by 2030 to “ensure universal access to sexual and reproductive health care services”. Target 3.7 is a precise and ambitious target. The target is ambitious because it is very difficult to capture but also because its achievement will likely require fundamental changes in terms of sexuality and reproduction in many societies.

The indicator that the SDSN suggested, i.e. “contraceptive prevalence rate” (Indicator 31), seems to be a good proxy to capture this target.

- **Target 3.8:** The target requires to “achieve universal health coverage (UHC), including financial risk protection, access to quality essential health care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all”. With the specific mentioning of quality aspects, the target seeks to overcome the failure of similar input targets in the MDGs, such as the requirement of universal
enrolment, which led to an increase in the number of children attending school but at the expense of educational quality.

However, since it is very challenging to include quality aspects at the indicator level, it comes as no surprise that the indicators suggested by the SDSN, such as “consultations with a licensed provider in a health facility or the community per person, per year” (Indicator 28, to be developed), are pure input measures. This way, the weaknesses experienced with the MDG input targets are reintroduced through the back door. Better use could be made of the funds allocated to the development of controversial input indicators by enhancing the quality of important output indicators such as HALE. Still, it is crucial to keep a target on universal health coverage. Although there is a considerable overlap of Target 3.8 with Targets 1.3 and 1.5 on social protection, those targets do not explicitly mention health protection.

- **Target 3.9:** The target requires by 2030 to “substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination”. This target is imprecise and therefore not clear in its ambition. Although it points at the negative effects of environmental pollution and contamination on health, it poses severe challenges for measurement. It is almost impossible to directly attribute deaths and illnesses to such environmental factors, as these cause health problems that interact with – and are aggravated by – poor physical conditions, for instance.

The indicator that the SDSN suggested, “mean urban air pollution of particulate matter” (Indicator 33), captures only the level of air pollution in cities, which does not directly account for household air pollution in cities, excludes air pollution in rural areas altogether and cannot reflect any other pollution type. For all these reasons, Target 3.9 should be removed.

**Means of implementation**

The means of implementation (Targets 3.a-d) have been far less successful than the targets themselves in combining requirements for developing and developed countries. With the exception of Target 3.a, which merely requires strengthening the implementation of the Framework Convention on Tobacco Control in all countries, all targets explicitly refer to developing countries. This goes against the aspired universal character of the SDGs. Therefore, it is highly recommended to substantially revise the means of implementation in a way that challenges both developing and developed countries to promote healthy lives.

**Recommendations**

The goal’s request to ensure healthy lives for all at all ages by 2030 is unrealistic, and we therefore suggest the following reformulation of SDG 3: “Promote healthy lives and well-being for all at all ages”. The goal’s focus on healthy lives and well-being, instead of the mere absence of disease or infirmity, is not sufficiently reflected in its operationalisation. This could be changed if Targets 3.3 and 3.4 – with their focus on specific communicable and non-communicable diseases – were to be replaced by a new target that requires to “increase Healthy Life Expectancy (HALE) by x% and to ensure that every person has a healthy life expectancy of at least xx years at birth”. The targets for the goal are, in
general, precise in their formulation with a rather high level of ambition. Targets 3.1, 3.4 and 3.6, however, focus on global reductions only. As experience with the MDGs has demonstrated, the compelling advantages of comparisons between countries make it impossible to prevent global goals from being adopted at the national level. The SDSN suggestion for a disaggregation of the global targets according to geographic location is a telling example. In order to prevent these targets from unfairly impacting those countries with bad starting conditions – as was the case with the MDGs – we recommend adding “by reducing national rates by x%” to each of these targets. In addition, we suggest removing Target 3.9 (“Substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination”), as it suggests a direct attribution of deaths and illnesses to different forms of environmental pollution, which does not hold in reality and is therefore basically impossible to translate into adequate indicators. Finally, almost all means of implementation explicitly refer to developing countries only. This goes against the aspired universal character of the SDGs; therefore, we recommend substantially revising the means of implementation in a way that challenges both developing and developed countries to promote healthy lives.
Goal 4: Ensure inclusive and equitable quality education and promote life-long learning opportunities for all

Francesco Burchi and Nicole Rippin*

General assessment

The goal is about ensuring inclusive and equitable quality education and promoting life-long learning opportunities for all. It is, in general, well-formulated. Unlike the MDGs, it focusses predominantly on educational / learning outcomes and cognitive skills rather than school attendance and enrolment, thereby taking into serious consideration the recommendations made in recent years by the Education for All (EFA) initiative and new empirical research. There is a slight bias towards the view of education as being a means to productivity and growth, as it focusses on creating skilled workers more than autonomous and self-confident persons. In particular, there is nothing specific about access to knowledge beyond schooling, such as, for instance, access to information (media, newspapers, internet, etc.) and culture. While theoretically this goal is closely linked to Goal 5, as it emphasises the importance of gender equality in education, there is no overlap, as Goal 5, as it is currently formulated, does not address the education dimensions explicitly.

Operationalisation

The goal includes seven targets and three suggestions for means of implementation. The targets are, in general, clearly formulated, measurable and ambitious. In general, the same is true for the seven accompanying indicators that have been suggested by the SDSN.

- **Target 4.1**: The target requires by 2030 to “ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes”. The requirement that education should be free seems to be superfluous, since the target already requires that all girls and boy complete primary and secondary education. It might even be harmful in cases in which the quality of the education system can only be ensured by making it subject to charge. In this case, equitable access could be achieved by awarding scholarships to those who are unable to pay education fees.

In order to account for relevant and effective learning outcomes, the SDSN suggests the development of national benchmarks. In order to ensure sufficient ambition, the SDSN notes that these benchmarks should cover some minimum proficiency requirements. However, it would be both more ambitious and more efficient to ensure these minimum proficiency requirements by developing comparable standardised test scores for primary and secondary education, for instance by building on experiences with MLA (Monitoring of Learning Achievement), PASA (Program on the Assessment of Student Achievement), PISA (Programme for International Student Assessment), SAQMEQ (Southern and Eastern Africa Consortium for Monitoring Educational Quality) and TIMSS (Trends in International Mathematics and Science Study).

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
• **Target 4.2:** The target requires by 2030 to “ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education”. Though this target is undoubtedly important, there are many countries for which it is surely not a priority. Countries that are already struggling to provide quality primary – let alone secondary – education would be overburdened with the task of additionally providing quality early childhood development. Any attempt to meet this requirement would come at the expense of the quality of primary and secondary education. Moreover, the target is hardly operationalisable, as there are no data, especially on the quality of these services. Bringing forward the SDSN’s proposal to develop a composite “Early Child Development Index” based on Multi-Indicator Cluster Surveys data would use up considerable resources and lead to a lack of means elsewhere.

• **Target 4.5:** The target requires by 2030 to “ensure equal access for all women and men to affordable quality technical, vocational and tertiary education, including university”. This target is already included in Target 4.1 and Target 4.3, which require that “all girls and boys complete…” and “access for all women and men”. By thus referring to the whole population, the targets require not only the elimination of gender disparities but also the inclusion of, among others, people with disabilities, indigenous peoples and children in vulnerable situations. In order to underline this fact, Targets 4.1 and 4.3 should be extended to include the phrase “without discrimination”, i.e. “…all girls and boys/ all women and men without discrimination…”

• **Target 4.7:** The target requires by 2030 to “ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture’s contribution to sustainable development”. Though this target undoubtedly covers an important aspect, it is far too specific and very difficult to measure. For this reason, it should be removed. One could, however, think about taking up at least some of its requirements in the formulation of standardised learning benchmarks used to meet the requirements of Target 4.1.

• **New target:** We suggest including a specific target about the completion of tertiary education to stress its increased importance, especially in middle-income countries, and its primary role in high-income countries. The target would be the following: “By 2030, increase by x% the number of people who have completed tertiary education”. The indicator used to track it would be “% of people who completed tertiary education”. As with Target 4.4, specific numbers will be set at the national level.

**Means of implementation**

• **Target 4.a:** The target requires to “build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all”. This is a rather broad requirement, but it can
be viewed as a package of means to improve educational outcomes accounting for national-level particularities.

- **Target 4.b**: The target requires by 2020 to “expand by x% globally the number of scholarships for developing countries in particular LDCs, SIDS and African countries to enrol in higher education, including vocational training, ICT, technical, engineering and scientific programmes in developed countries and other developing countries”. This is a rather risky approach, as it incentivises brain drain and endorses a top-down vision of development cooperation. One should think about removing this target altogether.

- **Target 4.c**: The target requires by 2030 to “increase by x% the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially LDCs and SIDS”. There is, nowadays, robust empirical evidence that unqualified (and unmotivated) teachers are an important cause of low performance levels in learning skills in many low-income countries.

**Recommendations**

The goal is generally ambitious, in some cases even too much so, as in the case of Target 4.2 on ensuring quality early childhood development, care and pre-primary education, which we suggest removing. Also, there is room for a small reorganisation of the goal that reduces the number of targets and helps in identifying better indicators: we suggest incorporating Target 4.5 into Targets 4.1 and 4.3 by including the phrase “without discrimination”. We further suggest incorporating the main aspects of Target 4.7 into the indicators for Target 4.1. We also advise including a new target on the completion of tertiary education and removing the means of implementation formulated in Target 4.b. Finally, some revisions are required in order to enhance the quality of the learning outcome indicators that capture the requirements of Target 4.1.
Goal 5: Achieve gender equality and empower all women and girls

Francesco Burchi, Aimée Hampel-Milagrosa and Nicole Rippin*

General assessment

The goal is about achieving gender equality and empowering all women and girls. The focus of the goal is ideal and essential for development: to create equal opportunities between men and women across economic and political fronts and to empower women in areas where they needed more support. As with SDG 10 (“Reduce inequality within and among countries”), SDG 5 is both a cross-cutting issue as well as a goal in its own right. Consequently, most of the general targets within SDG 5 overlap with targets in other goals that explicitly mention the gender aspect. For instance, gender equality in education – the central pillar in MDG 3 – has been included in SDG 4 (“Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”) and in particular in Target 4.5 (“by 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training […]”). This explicit mentioning of gender-related questions would be unnecessary if the suggestion of the UN Secretary-General’s synthesis report were followed, namely that each target should only be considered achieved if it is met for all relevant income and social groups – which includes women. Nevertheless, there is good reason to mention gender aspects specifically, since such complementarities create a political push towards achieving SDG 5 faster and more efficiently.

The same, however, cannot be said about the operationalisation of the goal. Literally none of the six suggested targets are time-bound, and hence, not binding at all. Even worse, SDG 5 is the only goal that does not have a single time-bound target – out of 17 goals in total. This fact is a political statement in itself, the impact of which should not be underestimated. Thus, although SDG 5 is seen to generally align with other SDGs, its level of ambition is rather lofty.

Operationalisation

The goal includes six targets and three suggestions for means of implementation. None of the suggested targets are time-bound – and hence not binding at all.

- **Target 5.1**: The target requires to “end all forms of discrimination against all women and girls everywhere”. As laid out in the Introduction, it is of utmost importance that the requirement of the synthesis report by the UN Secretary-General is implemented, which requires “that no goal or target be considered met unless met for all social and economic groups” (p. 19). In the case of gender aspects, this requirement means that no goal or target is considered met unless it is met for females as well. In this case, a major part of this target has already been captured and operationalised. Nevertheless, it makes perfect sense to leave Target 5.1 as it is in order to highlight the importance of this target on the way towards gender equality and female empowerment.

- **Target 5.2**: The target requires to “eliminate all forms of violence against all women and girls in public and private spheres, including trafficking and sexual and other

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
types of exploitation". As the trafficking of women for marriage, slavery or sexual exploitation is a serious worldwide phenomenon – as prevalent as the trafficking of children – the specific mentioning of women trafficking in this target is very important. It is all the more important as this crucial aspect is not included in Target 16.2, which aims to end exploitation and trafficking of children. Given the importance of Target 5.2, it is a serious failure that it is not time-bound, especially in light of the fact that, already in 1992, the General Recommendation No. 19 of the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) Committee had clarified that “countries party to the Convention are under an obligation to eliminate violence against women”.

The SDSN suggested two indicators in order to monitor progress towards Target 5.2. Indicator 41 tracks the “Prevalence of women 15-49 who have experienced physical or sexual violence by an intimate partner in the last 12 months”, and Indicator 42 tracks the “Percentage of referred cases of sexual and gender-based violence against women and children that are investigated and sentenced”. Although there are always problems with indicators that try to capture sensitive topics such as physical and sexual violence (in particular, under-reporting might be a problem, especially for the second indicator), the two indicators are well-suited to capture this target.

- **Target 5.3**: The target requires to “eliminate harmful practices, such as child, early and forced marriage and female genital mutilations”. This target could be considered as part of Target 5.2, as the harmful practices that are mentioned are part of violence against – and exploitation of – women and girls. However, due to its importance, we think that it is justified to address these crucial issues in a stand-alone target. At the same time, it is precisely its importance that makes it intolerable that it is not binding. Even more so as the corresponding agreement to eliminate all forms of violence against women already has a long history (see comment on Target 5.2).

The SDSN suggests two indicators to monitor progress towards Target 5.3. Indicator 43 tracks the “Percentage of women aged 20-24 who were married or in a union before age 18” and Indicator 44 tracks the “Prevalence of harmful traditional practices, including female genital mutilation/cutting”. Both indicators are useful instruments for measuring progress towards this target.

- **Target 5.4**: The target requires to “recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies, and the promotion of shared responsibility within the household and the family as nationally appropriate”. The focus of the target is very broad and its level of ambition varies across the different requirements of the target. The first part of the target, i.e. “to recognize and value unpaid care and domestic work” through, *inter alia*, social protection policies, is rather ambitious – for developing as well as for developed countries. The formulation of the second part of the target, however, is so soft that it is not clear what should be achieved. What does it mean to “recognize and value”? Even more telling is the phrase “promotion of shared responsibility within the household and the family as nationally appropriate”. It is not at all clear what a “nationally appropriate” sharing of responsibilities is. The focus should therefore be on the first part of the target, which should be specified and extended by a timeframe.
The suggested SDSN Indicator 45 (“Average number of hours spent on paid and unpaid work combined (total work burden), by sex”) is a good indicator for the amount of unpaid care and domestic work. However, to generate this indicator, time-surveys are required, and these surveys are, unfortunately, costly and not widespread, especially in developing countries. In order to capture the first and important part of Target 5.4, it needs to be combined with indicators that capture the provision of public services, infrastructure and social protection policies for unpaid and domestic work. Without such additional indicators, it will be impossible to monitor progress towards this target.

- **Target 5.6**: The target requires to “ensure universal access to sexual and reproductive health and reproductive rights […]”. The target is very similar to Target 3.7, which requires to “ensure universal access to sexual and reproductive health care services”. The difference between the two targets is in the formulation “reproductive rights” and “reproductive services” – this difference is crucial. The formulation “reproductive rights” makes a direct link to the human rights concept, which makes it attractive but also problematic due to what is called “conscientious objection”. Conscientious objection is the refusal to provide certain health services based on religious, moral or philosophical objections. Examples include abortion, contraceptive prescriptions and prenatal tests. Ensuring these reproductive rights is challenging not just in developing countries; the refusal of individual health care providers or institutions to provide certain health services (such as abortion, contraceptive prescriptions and prenatal tests, among other services) based on religious, moral or philosophical objections is also a growing phenomenon throughout Europe. As a consequence, countries and international and regional bodies generally have failed to comprehensively and effectively regulate this practice, denying many women reproductive health care services that they are legally entitled to receive. With Target 5.6, the OWG seeks to universally enforce these reproductive rights, which is as problematic as the fact that sexual rights are explicitly excluded. We recommend following the human rights concept and using the formulation “sexual and reproductive health and rights” in Target 5.6. At the same time, we recommend being extremely careful in defining what exactly these rights are.

The SDSN suggests two indicators to monitor progress towards Target 5.6: Indicator 47 (“Met demand for family planning”) and Indicator 48 (“Total fertility rate”). While Indicator 47 is a good indicator to measure access to modern contraceptive methods, the advantage of having an indicator on total fertility rates is much less clear. Falling fertility rates are sometimes used as a proxy for women’s ability to exercise their right to make informed and free choices over if, when and how many children they would like to have. This ability, however, is much better captured by Indicator 47. In addition, this interpretation of falling fertility rates may be true for a number of developing countries; however, it is not true in the context of developed countries. In fact, many developed countries are striving to achieve increasing fertility rates in order to address population declines. Thus, it is not even clear in which direction Indicator 48 should develop. We therefore suggest replacing it with the indicator “Unwanted fertility rates”: a decline in this indicator is a clear sign of improvements in women’s reproductive rights. The Demographic and Health Surveys (DHS), which cover several countries, could serve the purpose, though the surveys are not conducted frequently at the country level. Access to modern contraceptive methods captures only
a fraction of Target 5.6. One could think of additional indicators such as, for instance, the percentage of referred cases that lead to an investigation and sentencing of women because of their free choice of partner.

Means of implementation

- **Target 5.a**: The target requires to “undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance, and natural resources in accordance with national laws”. This is a good means of implementation for the empowerment of women.

- **Target 5.b**: The target requires to “enhance the use of enabling technologies, in particular ICT, to promote women’s empowerment”. Target 5.b is not time-bound and, due to the soft formulation “enhance”, the level of ambition is low. It is a serious political signal that Target 5.b, which focusses on ICT with the objective of promoting women’s empowerment, has a much lower level of ambition than Target 9c, which requires to “significantly increase access to ICT and strive to provide universal and affordable access to internet in LDCs by 2020”.

- **Target 5.c**: The target requires to “adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels”. This is a good means of implementation for the empowerment of women.

- In line with the contents of Targets 5.4 (“recognize and value unpaid care and domestic work”) and 5.6 (“ensure universal access to sexual and reproductive health and reproductive rights”), another means of implementation should, in our view, focus on sensibilisation campaigns for women’s reproductive rights and gender issues.

Recommendations

Gender equality and the empowerment of women and girls is both a cross-cutting issue as well as a goal in its own right. We therefore highly welcome the existence of SDG 5. In order to account for the overlap of this SDG with the majority of the other SDGs, we strongly recommend following the suggestion of the UN Secretary-General’s synthesis report, namely that each target should only be considered achieved if it is met for all relevant income and social groups – which includes women.

Although the focus of SDG 5 is ideal and essential for development, its operationalisation leaves something to be desired. Many of the targets are of crucial importance (e.g. “eliminate all forms of violence against all women and girls”), have long been agreed upon and can easily be captured by appropriate indicators. In other words, they are well-suited to have considerable impact, and yet they lack a timeframe that would make them binding. In fact, SDG 5 is the only goal that does not have a single time-bound target, out of a total of 17 goals. The inclusion of time-bound targets is indispensable if we want to track the progress of societies regarding such an important goal as the elimination of gender disparities.
Goal 6: Ensure availability and sustainable management of water and sanitation for all

Ines Dombrowsky*

General assessment

Goal 6 is about ensuring the availability and sustainable management of water and sanitation for all. It goes beyond the section on water in MDG 7 of “halving by 2015 the proportion of population without sustainable access to safe water supply and sanitation” in several important ways. (i) It raises the standards and coverage for water supply and sanitation. (ii) It adds other important issues related to water resources management that were, by and large, missing in the MDG agenda, such as improving water quality, increasing wastewater treatment and reuse, ensuring sustainable water withdrawals, increasing water-use efficiency, ensuring integrated water resources management (IWRM) and protecting water-related ecosystems. As such, the SDG water goal is quite comprehensive and ambitious. However, in terms of improving the management of the water-energy-food/land nexus, the efficient use of energy for water pumping and treatment could have been mentioned, and water-use efficiency could have been mainstreamed into the agriculture, energy and industry goals (Goals 2, 7 and 10, respectively).

Operationalisation

Goal 6 includes six targets and two suggestions for means of implementation. Targets 6.1 and 6.2 focus on the availability, affordability and quality of water supply and sanitation. Targets 6.3 through 6.6 focus on different dimensions of a sustainable water resources management.

- **Target 6.1:** The target requires to achieve access to safe and affordable drinking water for all by 2030. It is thus much more ambitious than the water target in MDG 7, which called only for improvements in the access to “improved” water supply, i.e. it disregarded both the quality and the affordability of it. The WHO-UNESCO Joint Monitoring Programme (JMP), which monitored the implementation of the water target in MDG 7, is therefore currently piloting the measurement of “safely managed” water supply, namely a “water source at the household or plot that reliably delivers enough water to meet domestic needs, complies with WHO guideline values for Escherichia coli, arsenic and fluoride, and is subject to a verified risk management” (WHO / UNICEF 2014).

SDSN Indicator 49 refers to JMP’s concept of “safely managed” supply, but it should explicitly mention (or, if need be, criticise) the JMP indicator mentioned above. The SDSN suggests measuring urban and rural areas separately, which is important, given the urban-rural divide in the issue area. So far, JMP and SDSN Indicator 49 have not taken up the affordability dimension.

- **Target 6.2:** The target requires to provide access to sanitation and hygiene for all by 2030, which is an ambitious goal. At least it is precise, measurable and time-bound.

---

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
JMP recommends measuring access to “safely managed” rather than “improved” sanitation. To measure progress, it suggests as an indicator “the percentage of people (1) who use a basic sanitation facility and (2) whose excreta are safely transported to a designated disposal/treatment site or treated in situ before being reused or returned to the environment” (WHO / UNICEF 2014). SDSN Indicator 50 makes reference to “safely managed”, but it should also take up the mentioned JMP indicator. In addition, the SDSN lists complementary national indicators that countries may consider, including: percentage of population reporting practicing open defecation; percentage of population with basic hand-washing facilities in the home; or percentage of beneficiaries using hospitals, health centres and clinics providing basic drinking water, adequate sanitation and adequate hygiene. The latter indicators could ensure that attention will be paid to the needs of women, girls and those in vulnerable situation, as called for in Target 6.2.

- **Target 6.3:** The target requires to improve the quality of water, halve the share of untreated wastewater and increase recycling and safe reuse by x% globally by 2030. It is thus another ambitious target, but it is realistic, comparatively precise, measurable and time-bound.

The SDSN suggests only one indicator (No. 51) for the target: the “percentage of wastewater flows treated to national standards, by domestic and industrial source”. Apart from the fact that the indicator needs to be developed further (something that the SDSN admits itself), it measures only progress towards wastewater treatment. The SDSN only touches upon reuse under “additional indicators to be considered”, where it mentions inter alia the “proportion of the flows of treated municipal wastewater that are directly and safely reused”. This indicator should be further developed, but note that it might not be necessary to include reuse levels for world regions with sufficient water availability.

- **Target 6.4:** The target requires to increase water-use efficiency and ensure sustainable water withdrawals in order to address water scarcity. The target is reasonable but a bit imprecise and insufficiently operationalised (e.g. how is water efficiency to be measured?).

The SDSN suggests Indicator 52 “Proportion of total water resources used”, which refers to the percentage of the total water abstracted of annual renewable water resources. Although this indicator is already measured by FAO (Aquastat), the SDSN suggests that the task be done by FAO or the United Nations Environment Programme (UNEP). The SDSN rightly mentions that many countries do not have good assessments of their annual renewable water resources (in particular groundwater), so efforts are required to improve data gathering. Furthermore, it could also be mentioned that assessing national renewable water in transboundary basins can be difficult in the absence of agreed water rights. The SDSN also recommends basing the measurement on basin level, which in principle would be useful, but again it is difficult to break down for individual countries in transboundary basins. Goal 6.4 also calls for “substantially” increasing water-use efficiency in all sectors. The SDSN does not come up with a proposal on efficiency indicator(s), but it does mention the need to do so. Also, it is probably difficult to develop efficiency measures for various
Goal 6: Ensure availability and sustainable management of water and sanitation for all

sectors. Again, this would be particularly important in world regions in which water is scarce, and less so where water is abundant.

- **Target 6.5:** This target calls for the implementation of IWRM within and between countries. IWRM is without any doubt a useful tool, but it is a means rather than an end goal. In addition, its effective implementation and use is difficult to verify.

Maybe this is also the reason why the SDSN is not making any suggestions for measuring Target 6.5. IWRM and transboundary water management show up only among the optional “complementary national indicators”, with the comment that an appropriate indicator for measuring the target must still be developed. However, the SDSN could have gone back to the call upon countries for the “development and implementation of Integrated Water Resources Management and Water Efficiency Plans” under the Johannesburg Plan of Implementation until 2005. This indicator was discussed in a report by UNEP from 2012, which offers lessons that could be taken up. For transboundary water issues, the SDSN recommends that “reporting of international river shed authorities on transboundary river-shed management” should be developed as an indicator. However, given that not all transboundary basins have river basin institutions, consideration could be given to have countries report on the existence of such institutions and on their perceived need for changes in transboundary coordination.

- **Target 6.6:** The target requires water-related ecosystems to be protected and restored by 2020. Without any doubt it raises an important issue, but it is completely imprecise and not operationalised at all. The SDSN does not make any suggestions for an indicator. Consideration could be given to take up the operationalisation of the goal of “good ecological status of water bodies” of the EU Water Framework Directive.

**Means of implementation**

- **Target 6.a:** The target requires to “expand international cooperation and capacity-building support to developing countries in water and sanitation related activities and programmes[...]” – which is certainly helpful for the realisation of SDG 6 but not particularly concrete and imaginative.

- **Target 6.b:** The target requires to “support and strengthen the participation of local communities for improving water and sanitation management”. For this means of implementation, the same is true as for Target 6.a.

**Recommendations**

All in all, SDG 6 is better developed and operationalised than many of the other goals in the OWG proposal. Nevertheless, the operationalisation of all six targets under SDG 6 must be developed further – a fact that the SDSN acknowledges frankly. Substantial efforts will be needed by the SDSN and others to further develop a reporting framework for sustainable water resources management.
Goal 7: Ensure access to affordable, reliable, sustainable, and modern energy for all

Markus Loewe, Anna Pegels, Matthias Ruchser and Georgeta Vidican*

General assessment

Goal 7 is about access to – and sustainable consumption and production of – energy. Even though there is some tension between these two aspects of the goal, its focus becomes clear. Also, the requests formulated under the heading of Goal 7 are in principle extremely reasonable and important. The question is whether they are positioned on the right level. Without any doubt, access to energy for all is essential for poverty reduction and socio-economic development at large. And the sustainable generation and use of energy is one of the main conditions for a reduction in climate change and the protection of natural resources. But in both lines of argumentation, the aims of SDG 7 are means for the achievement of other goals rather than ends in themselves – even if they are very important means! The contents of SDG 7 must therefore be in the post-2015 agenda, but they do not necessarily have to constitute a goal in themselves. Still, it is acceptable for now – and perhaps even useful for practical considerations – to leave SDG 7 where it is.

Targets 7.1 through 7.3 represent well the goal’s components, but their degrees of operationalisation and ambition vary. Target 7.1 mainly focusses on access to energy. It is clear and ambitious, but realistic. In the end, it needs a measurable indicator. Target 7.2 focusses on the share of renewable energy sources in national energy mixes, but it is meaningless in the end because it lacks a target value. Target 7.3 calls for improvements in energy efficiency, which is probably not sufficiently ambitious to mitigate climate change; globally, the goal should be to reduce the absolute level of emissions from the energy sector.

Operationalisation

Goal 7 includes three targets and two suggestions for means of implementation.

- **Target 7.1**: The target requires that all human beings should have reliable access to affordable and modern energy services by 2030. This target is ambitious but not unrealistic. The question instead is if access to energy should be a goal in itself, or rather a means of implementation for SDGs 1 (end poverty), 2 (end hunger), 3 (healthy lives) 4 (education), 6 (access to water), 8 (growth and employment) and 9 (industrialisation and innovation). In any case, the target needs specifications: When exactly is access to energy services reliable or affordable? Which kinds of energy services can we call affordable?

The SDSN suggests measuring Target 7.1 by two indicators. The first indicator (No. 53) is the share of the population that relies primarily on non-solid fossil fuels for cooking, which would have to come to 100 per cent by 2030. The SDSN admits that this indicator overlooks all those who use cook stoves. But it also does not count the ones who use e.g. hydro-powered electricity ovens! The second indicator (No. 54)

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
is the share of the population with access to reliable electricity. However, even the combination of these two indicators leaves out many of the basic energy needs of households, such as e.g. heating and transportation, which shows how difficult it is to operationalise the very broad Target 7.1.

- **Target 7.2**: This target is to “increase substantially the share of renewable energy in the global energy mix by 2030”. It is thus extremely vague; in particular, the term “substantially” needs substantial concretisation. Also, there should be a target value for the national level rather than just for the global level.

The SDSN proposes monitoring progress towards Target 7.2 through the implicit incentives provided for low-carbon energy in the electricity sector (measured in US$ per MWh or per ton avoided CO₂) (Indicator No. 55). One question concerns which forms of energy we are talking about. For many countries, low-carbon energy includes nuclear power; hence, subsidies for nuclear power production would be included in this indicator. Another question is whether data are available at all for this indicator for a large number of countries. In addition, a reduction in the incentives provided for low-carbon energy is a means towards Target 7.2 rather than an end in itself. It would be much more straightforward to measure national energy mixes themselves, for which data are probably easily attainable. The incentives do not indicate anything about technology deployment.

- **Target 7.3**: The target is to “double the global rate of improvement in energy efficiency by 2030”. Given that the current rate of improvement in energy efficiency is rather low, the target is underambitious. In addition, it allows the global consumption of energy to increase further in absolute terms, as long as – for example – the global value added increases at a substantially higher rate. However, planetary boundaries require that the global consumption of non-renewable energies declines in absolute terms. Finally, the target does not differentiate between high- and low-income countries. Some high-income countries, such as e.g. Japan, Germany and Sweden, have already reached high levels of energy efficiency (even though, of course, more is still possible), whereas other high-income countries – and almost all low- and middle-income countries – are still at the beginning stages of implementation.

Unfortunately, the SDSN proposal for operationalisation does not go beyond the formulation of Target 7.3 by the OWG. The SDSN proposes the rate of primary energy-intensity improvement as an indicator (No. 56). We propose to compute at minimum the rate of primary non-renewable energy-intensity improvement in order to differentiate between fossil and renewable energies. This is possible, as the national aggregate data for energy consumption typically differentiates between five types of energy: solid fuels, crude oil, natural gas, nuclear and renewable energy sources.

Apart from that, Target 7.3 could also be left out of the post-2015 agenda because it is a means of implementation for SDGs 12 (sustainable consumption and production), 13 (combat climate change) and 15 (sustainable use of terrestrial systems).

**Means of implementation**

- **Target 7.a**: The target calls for enhanced international cooperation in the facilitation of access to clean-energy research and technologies, as well as in the investment in
energy infrastructure and clean-energy technologies. The goal is vague and its operationalisation will hardly be possible before negotiations on climate finance under the United Nations Framework Convention on Climate Change (UNFCCC) begin to make real progress.

- **Target 7.b:** This target is formulated as follows: “by 2030 expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, particularly LDCs and SIDS”. A much more useful means of implementing SDG 7 would be to reduce fossil fuel subsidies worldwide to zero by e.g. 2030.

**Recommendations**

SDG 7 contains very important targets, but it does not necessarily have to be a stand-alone goal. For conceptual considerations, it would be better to place its contents as targets or even as means of implementation within SDG 8 (access to energy as a means to promote growth and employment) and SDGs 12 or 13 (a reduction in non-renewable energy consumption as a means for more sustainable consumption and production and climate stability). However, it can be argued pragmatically to leave it as it is for practical and political considerations. In any case, SDG 7 needs more concretisation and better indicators.
Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Markus Loewe, Tilman Altenburg and Anna Pegels*

General assessment

Goal 8 looks at two variables: growth and employment. Both, however, are qualified in the goal description. The OWG has thus done well to call for growth that is inclusive and sustainable, and for employment that is productive and decent. There is an argument that there is no need to have these two target variables in the post-2015 agenda because both are instruments rather than elements of well-being (as defined by a person’s capabilities) – something that the SDSN is highlighting as well in the description of their Indicator 57. The problem is, however, that poverty and changes in the well-being of the poor are increasingly measured in multidimensional terms, but not so changes in the well-being of the non-poor. Economic growth is a very crude – but so far the only – proxy indicator for the well-being of an average citizen for which data are easily available for almost every country. As a consequence, there is also an argument for having growth as a goal in the global development agenda, as long as there is no better way to measure the different dimensions of well-being of average citizens. Having employment in the agenda also makes sense because it is a central part of the well-being of people. At the same time, however, both target variables have to be put in relation to other goals of the global agenda. For example, growth should not come at the expense of environmental protection, and it is also not desirable to create new employment if it is not very productive or unsafe for workers.

Still, SDG 8 is problematic for two reasons. First, it is highly unrealistic to achieve “full and productive employment and decent work for all” by 2030. Second, the levels of ambition of the different targets under Goal 8 are very different. Some are very unrealistic, such as e.g. Target 8.5 (full and productive employment and decent work for all), whereas others are clearly underambitious – in particular those that should aim at a decoupling of growth from resource use and emissions. In addition, the indicators suggested by the SDSN for measuring SDG 8 cover only a segment of its scope. Thus, Goal 8 come across as a very old-fashioned, unsustainable growth agenda. Instead of focussing on gross domestic product (GDP) growth, countries should develop welfare-based indicators that go beyond purely monetary indicators and capture different dimensions of human well-being as well as distributional and sustainability aspects of development.

Operationalisation

Goal 8 includes ten targets and two suggestions for means of implementation. Targets 8.1 through 8.4 look at different aspects of economic development. Targets 8.5 through 8.8 look at the creation of productive employment and decent work for all. Target 8.9 calls for the promotion of tourism, and Target 8.10 calls for the promotion of financial services.

- **Target 8.1**: The target is to “sustain per capita economic growth in accordance with national circumstances, and in particular at least 7% per annum GDP growth in the least-developed countries”. The first part of the target is almost meaningless because

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
it allows national governments to define what their national circumstances are, whereas the second part is very concrete. The threshold of 7 per cent growth per annum is completely arbitrary, but it may still make sense to leave it in just to have a concrete goal. However, the target should have some disclaimer that prevents countries from achieving it at the expense of other goals, such as reductions in poverty rates, inequality or climate change. This disclaimer could be, for example, that SDG 8 is not achieved – despite high growth rates – unless poverty rates are much lower than today and growth is gradually decoupled from resource depletion and emissions.

The SDSN proposes measuring growth only on the basis of gross national income (GNI) per capita in PPP rates – in order to adjust for differences and changes in the purchasing power of people in different countries and at different moments – which makes much sense (Indicator 57). In addition, the SDSN recommends complementing growth indicators with other “beyond GDP” indicators because “GNI and GDP are important indicators, but they measure only part of the economic dimension of sustainable development. Both economic measures do not adequately capture people’s material conditions” (p. 81). According to the SDSN, the System of Environmental-Economic Accounting 2012 Central Framework would be a suitable complement – which is why they propose for Indicator 58 that every “country implements and reports on System of Environmental-Economic Accounting (SEEA) accounts”. Just implementing a monitoring system is a pure input indicator, but it is certainly better than having nothing. The SEEA is probably the best available monitoring system for the purposes of SDG 8.

- **Target 8.2**: This target is to increase economic productivity. Even a strategy to achieve the target is outlined in very rough terms (“through diversification, technological upgrading and innovation”). But there is no definition of productivity in the target, no indicator, no timeline and no target value.

In addition, the SDSN proposal includes no suggestions for operationalising the target either. It could thus be left out of the post-2015 agenda without any negative effects, unless somebody makes efforts to concretise it. However, the question is whether the target is necessary at all: productivity gains may be crucial for economic growth and creation of employment, but they are certainly not an end in themselves.

- **Target 8.3**: This target requires the implementation of development-oriented policies. But again, there is no definition of the target variable except that it is meant to promote productive activities; decent jobs; entrepreneurship; creativity; innovation; formalisation; micro, small and medium enterprise growth; and access to financial services.

Likewise, neither the OWG nor the SDSN suggest an indicator for measuring the target or a timeline or offer a target value. Target 8.3 could thus be left out as well – in particular since “development-oriented policies” (whatever is meant by that term) are undoubtedly not end goals.

- **Target 8.4**: This target is to decouple economic growth from environmental degradation through improved resource efficiency in consumption and production (*nota bene*: “developed countries taking the lead”). Apparently, the target is meant to
Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

concretise the qualification “sustainable” of the desired growth, but it is much too vague for this purpose. It also does not include an indicator, target value or a concrete timeline (it says just “through 2030”).

The SDSN proposal does not cover this target either – even though there is a suitable indicator available: CO₂ emissions per million US$ value added in PPP rates. The target could be, for example, to halve the indicator in low-income countries and to reduce it by a factor of 4 in high-income countries by 2030. Target 8.4 overlaps heavily with Goal 12 – which could be an argument to shift the whole target away from Goal 8. On the other hand, the target can also be seen as a control variable, ensuring that economic growth (Target 8.1) is not achieved at the expense of the environment.

- **Target 8.5:** This target is to achieve by 2030 “full and productive employment and decent work for all women and men”. Thus, it just repeats the second part of Goal 8 without any concretisation or explanation.

The SDSN suggests measuring the target by the “ratification and implementation of fundamental ILO [International Labour Organization] labor standards and compliance in law and practice” (Indicator 60). This proposal is certainly a good starting point for the operationalisation of Target 8.5. Efforts should thus be made to operationalise the main aspects of decent work in such a way that they can be measured in quantitative terms. This task is not easy, but at least there is no need to operationalise “productive employment”, because it is already one of the four components of decent work. The other three are social protection (mind the overlap with SDG 1), the rights of workers to organise (such as e.g. trade unions) and the social dialogue between workers and employers.

- **Target 8.6:** This target is to reduce substantially the proportion of youth not in employment, education or training by 2020. The target’s focus is undoubtedly relevant, and the target already exists in the MDGs. It has a timeline but no instructions on how much youth unemployment should be reduced. In addition, it is not easy to measure unemployment in developing countries because the bulk of unemployment is hidden as underemployment.

The SDSN suggests that youth unemployment be measured separately for the formal and informal sectors (Indicator 59). But this does not make much sense because there is no clear-cut line between the two sectors, and a person without employment is in neither. The real challenge remains quantifying the unemployment share of qualitative underemployment (which can roughly be defined as unproductive employment). Once such a quantification can be made, the result has to be added to the unemployment part of quantitative underemployment and to open unemployment. The resulting total rate of unemployment is presumably a multiple of the official unemployment rate of many countries.

- **Target 8.7:** This target calls for the immediate eradication of forced labour and the worst forms of child labour as well as for the elimination of all forms of child labour by 2020. The target takes up three ILO Core Conventions and is therefore most relevant and welcome. The ILO Conventions are very clear in their definitions and offer starting points for an operationalisation.
Nevertheless, such an operationalisation is missing in both the OWG and SDSN proposals. It would thus be highly recommendable to invest efforts in creating the definition of target indicators for child labour, the worst forms of child labour and forced labour, as well as invest efforts in creating a procedure for estimating the values of these indicators for different countries.

- **Target 8.8**: This target calls for the protection of labour rights and the promotion of safety and security at the workplace. The target is undoubtedly relevant but has a very broad scope. In addition, it is almost impossible to operationalise the target with all its dimensions: depending on how the term “labour rights” is defined and what contractual basis is used to define the different labour rights, there can be hundreds of them. In addition, it is almost impossible to monitor in all countries how well labour rights are respected. It would thus make sense to focus on just a few highly representative and important labour rights. But in that case, the focus of Target 8.8 would come very close to the four dimensions of decent work, and these are already covered by Target 8.5 (see above).

The SDSN makes no suggestion for an indicator to measure Target 8.8 – which is not astonishing, given the information above. It would probably be best to merge Target 8.8 with Target 8.5.

- **Target 8.9**: This target calls for the promotion of sustainable tourism. However, there is no reason to focus on a specific economic sector such as tourism and thereby prioritise it over others. Why tourism? Why not sustainable trade or science or construction? The post-2015 agenda would probably be a more credible instrument without such discriminations.

- **Target 8.10**: This target, in a very similar way, calls for the promotion of financial services. It lacks any kind of concretisation, like most of the preceding targets. In addition, it focusses exclusively on one economic sector. In the case of financial services, there could be an argument for such a focus, because financial services are in fact a key prerequisite for private-sector development, and hence for economic growth. But even if this is taken into consideration, the target should not be among the operationalising targets; at most, it could be converted into a means of implementation (Target 8.c).

**Means of implementation**

- **Target 8.a**: This target requires Aid for Trade for developing countries. Of course, it is debatable whether this target is best positioned under the heading of Goal 8; but it makes sense in any case to have the target somewhere in the post-2015 agenda.

- **Target 8.b**: This target calls for the development and implementation of a global strategy for youth employment. However, the questions are: What can be achieved at the global level to reduce youth employment? And what should such a global initiative look like?
Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Recommendations

SDG 8 is perhaps not the most essential goal, but there are arguments to leave it in the post-2015 agenda. In its current form, however, the goal is extremely vague and therefore underambitious. Some of its targets are even formulated in such a way that it is difficult to imagine that they could ever be operationalised in a meaningful and manageable way. Other targets are means of implementation for Goal 8 rather than essential aspects of the goal itself. Therefore, Targets 8.2, 8.3, 8.8, 8.9, 8.10 and 8.b should be left out of a revised version of the goal, whereas Targets 8.4, 8.5, 8.6, 8.7 and 8.a must be operationalised better.

In addition, it is a bit old-fashioned to still be using per-capita income growth and employment as the final indicators of socio-economic progress. In the medium term, they should be replaced by new indicators and indices that measure the average progress of people in their multidimensional socio-economic well-being. But such indicators or indices have not yet been established. Until they are constructed and tested, the world must continue to use per-capita income growth and employment figures, which is not ideal, but they are currently the only available proxies that serve the purpose.

Against that background, SDG 8 probably does the only thing that can be done at this point: measure socio-economic progress using per-capita income and rates of employment of countries. But it requires governments to report on the inclusiveness and sustainability of their policies in order to avoid growth that is achieved at the expense of equality and sustainability.

We suggest the use of three reporting systems for this purpose.

- The System of Environmental-Economic Accounting 2012 Central Framework (SDSN Indicator 57) is a good instrument to control for the sustainability of social and economic policies.

- Reporting on the ratification and implementation of the eight ILO Core Conventions (SDSN Indicator 60) can be a good instrument to control for the quality of employment generation. These eight Core Conventions include No. 29 (ban of forced labour), No. 87 (freedom of association), No. 98 (collective bargaining), No. 100 (equal remuneration), No. 105 (abolition of forced labour), No. 111 (prohibition of discrimination in employment and occupation), No. 138 (limitation of child labour) and No. 182 (elimination of the worst forms of child labour).

Finally, reporting on the four dimensions of decent work could be used to control for both the inclusiveness of economic growth and the quality of employment generation.
Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

Nicole Rippin, Tilman Altenburg and Anna Pegels*

General assessment

The goal includes three different objectives that essentially do not belong together: building resilient infrastructure, promoting inclusive and sustainable industrialisation, and fostering innovation. As a consequence, the five targets that are to capture the goal are very broad, as they are in fact goals themselves rather than targets. In light of their wide-ranging requirements, the SDSN selected six indicators that can only capture very limited parts of the respective targets. In addition, the goal suffers from the same problem as most of the SDGs – the fact that no definition is provided for concepts such as “quality”, “sustainable”, “resilient”, “inclusive”, “affordable”, among others. Thus, the concepts are obscured in the course of the operationalisation, with targets merely requiring investments in infrastructure and innovation without further specification. Such investments are obviously worth securing for every country, and without further specification, the added value of these requirements remains unclear. The most serious problem, however, is the goal’s requirement to promote industrialisation and the requirement of the corresponding target, Target 9.2, to significantly raise the industry’s share of employment and GDP. These requirements are inconsistent with the principle of structural change, and it is already foreseeable that this aspect of SDG 9 will rightly be ignored by industrialised countries.

Operationalisation

The goal includes five targets and three suggestions for means of implementation. All the targets are very broad and, as a consequence, could only be partially covered by the SDSN indicators.

- Target 9.1: The target requires to “develop quality, reliable, sustainable and resilient infrastructure”. But there are no definitions for the concepts “quality”, “reliable”, “sustainable” and “resilient” that would provide helpful guidance for the operationalisation of the target. Also, the target does not even mention what kind of infrastructure it refers to. Target 9.1 is formulated as if it were a goal in itself rather than a target.

Therefore, the partial selection of three infrastructure indicators by the SDSN comes as no surprise. They are “access to all-weather road” (Indicator 61), “mobile broadband subscriptions” (Indicator 62) and “index on ICT maturity” (Indicator 63), with considerable overlap between Indicators 62 and 63. Neither of these indicators is able to capture aspects such as “reliable”, “sustainable” or “resilient”, and even together, they can cover only a very small segment of what people normally mean when they talk about infrastructure in general: none of the indicators capture e.g. railway, shipping or aviation lines, power grids, outreach of broadcasting stations, etc.

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
Target 9.2: The target requires to “promote inclusive and sustainable industrialization, and by 2030 raise significantly industry’s share of employment and GDP”. Its first part is not operationalised at all, and thus it is difficult to track, whereas the second part is not clear about whether the target actually refers to industry, which would also comprise the energy and building sectors, or to manufacturing. The SDSN interprets the goal in the second way, suggesting as an indicator the “manufacturing value added as percent of GDP” (Indicator 64). But even apart from the wording problems, the target is highly problematic. It is based on the implicit assumption that manufacturing or industrialisation is good for development. But this assumption is only true for low-income countries whose industrial share is so far very limited. It ignores the principle of structural change that describes how the industry’s share of employment and GDP increases until a middle-income status is achieved and decreases afterwards in the course of the tertiarisation of the economy. For this matter, the requirement to raise the industry’s share of employment and GDP does not make sense and will rightly be ignored by industrialised countries. A more appropriate target could be to “promote structural change in a way that fosters (sustainable) productivity increase”.

Target 9.3: The target requires to “increase the access of small-scale industrial and other enterprises, particularly in developing countries, to financial services including affordable credit and their integration into value chains and markets”. The target is reasonable – however, it is a means of implementation. In addition, several of the terms used need to be specified: small-scale enterprises, financial services, etc. Finally, it is difficult to imagine how the target can be operationalised – in particular, whether the term “affordable credit” is specified: every small and medium enterprise (SME) has access to a userer; what is important is the formulation “affordable”. Ideally, a clear specification of what is affordable would be introduced, something similar to Target 10.c, which requires the elimination of remittance corridors with costs higher than 5 per cent.

Against the background of all these pitfalls and difficulties, it is not at all a surprise that the SDSN has not made a suggestion for an indicator to measure progress towards Target 9.3.

Target 9.4: The target requires by 2030 to “upgrade infrastructure and retrofit industries to make them sustainable, with increased resource use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, all countries taking action in accordance with their respective capabilities”. The requirement to make infrastructure and retrofit industries sustainable is both very ambitious and very much needed, as it implies a decoupling of economic growth from natural resource use and greenhouse gas emissions.

In order to operationalise this target, the SDSN has suggested as an indicator “total energy and industry-related GHG [greenhouse gas] emissions by gas and sector, expressed as production and demand-based emissions” (Indicator 66). Apart from the fact that Indicator 66 only partially captures the target – as it addresses merely greenhouse gases, whereas the target is about resource efficiency – it is a very important indicator. The question addressed by the SDSN, namely who should be responsible for emissions – the country that produces a good or the country that
consumes it – is very critical. The relocation of production from OECD countries to Asia constitutes a major issue in this regard. It makes a huge difference whether Asian or OECD countries are held accountable for the gas emissions produced during production. From a political perspective, it is impossible to claim that Asia has to come up for all gas emissions that were produced for manufacturing goods for OECD countries. The SDSN suggestion – that countries ought to report their emissions using both production- and demand-based measures – might solve the problem if it is coupled with the requirement to reduce production- and demand-based emissions by x per cent.

- **Target 9.5**: The target requires “enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, particularly developing countries, including by 2030 encouraging innovation and increasing the number of R&D workers per one million people by x% and public and private R&D spending”. It is the most specific of the targets under SDG 9. However, its requirement to increase the number of research and development (R&D) workers disregards the fact that R&D is not an end in itself. To increase the number of researchers and artificially inflate research institutions, regardless of the respective output, is little more than an expensive venture. Though good indicators for research output have yet to be developed, established indicators are patents, publications and spending for R&D.

The SDSN picks up the number of R&D workers in order to monitor the target. However, in line with the preceding argumentation, we suggest that the SDSN use either both indicators that are mentioned in the target (i.e. R&D spending and the number of R&D workers) or only R&D spending.

**Means of implementation**

- **Target 9.a**: The target requires “to facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, LDCs, LLDCs and SIDS”. Though it is important to ensure that – despite the universality of the SDGs – poor countries are not left alone with their limited resources to deal with the crucial problems they face, it is unclear why the target first mentions developing countries as a whole and then focusses solely on the poorest countries. The requirement to support the development of sustainable infrastructure in particular relates to the special role that developed countries should play in fostering new, sustainable technologies in order to facilitate the leapfrogging of developing countries.

- **Target 9.b**: The target requires to “support domestic technology development, research and innovation in developing countries including by ensuring a conducive policy environment for inter alia industrial diversification and value addition to commodities”. It is unclear why the target focusses on developing countries only. The SDGs are supposed to be universal, meaning that developed countries should also have the task of supporting domestic technology development, research and innovation, in particular with regards to green technology.

- **Target 9.c**: The target requires to “significantly increase access to ICT and strive to provide universal and affordable access to internet in LDCs by 2020”. This
requirement is a sub-target of Target 9.1 rather than a means of implementation and is already captured by the suggested Indicator 63 of the SDSN (Index on ICT maturity). It should thus be included in Target 9.1.

Recommendations

The goal captures three different areas – infrastructure, industrialisation and innovation – that essentially do not belong together. Furthermore, the request to promote industrialisation does not make sense, as it goes against the principle of structural change and is inapplicable to the majority of middle- and high-income countries. We recommend rewording the goal to “Build resilient infrastructure, promote inclusive and sustainable structural change and foster innovation” and to formulate a new Target 9.2, which might be worded as “promote structural change in a way that fosters sustainable productivity increase” or something similar.

Since five targets have to essentially capture three different goals, the scope of the respective targets is rather broad. Consequently, the indicators suggested by the SDSN can only cover very limited parts of the respective targets. We recommend ensuring that the suggested indicators capture the core issues of the targets, in particular the sustainability aspect of the targets, as countries will pursue investments in infrastructure and innovation anyway, i.e. also without being monitored. In the same line of argumentation, we recommend specifying Target 9.3. Every SME has access to a usurer; the value added by this central part of the target depends on the definition of the term “affordable credit”. Here, Target 10.c could serve as a role model that requires the elimination of remittance corridors with costs higher than 5 per cent.

Finally, we recommend a thorough revision of the means of implementation. Target 9.c is in fact a sub-target of Target 9.1 and should thus be removed from the means of implementation and included in Target 9.1. Targets 9.a and 9.b should be reformulated in order to ensure that they apply to developed countries as well, reflecting the universal character of the SDGs. In particular, they need to reflect the importance of investments by developed countries in new, green technologies that allow developing countries to “leapfrog straight to new, more sustainable and more efficient consumption and production”, as it is formulated in the second transformative in the report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda.
Goal 10: Reduce inequality within and among countries

Nicole Rippin, Niels Keijzer, Markus Loewe and Benjamin Schraven*

General assessment

The goal is about reducing inequality within and among countries. This goal has not been part of the MDGs and numerous activists have fought for its inclusion in the SDGs. SDG 10 dedicates a whole catalogue of targets to combating inequality. This seems impressive, but the appearance is deceptive. On closer inspection, it becomes apparent that most of the seven targets of SDG 10 merely consist of vague calls to “improve” existing policies and regulations – something that becomes even more obvious by the fact that the SDSN has only been able to come up with two indicators for the seven targets due to the unspecific formulations.

Only Target 10.1 has the potential to actually have an effect, as it stipulates a clear bar that can be used to measure performance. However, in effect it requires a reduction in the massive inequalities in income distribution beginning in 2030 – the year when the SDGs are going to expire. If a reduction in inequalities is truly to represent a central element of future international development cooperation, then a whole new goal framework is indispensable.

In addition, the main focus of SDG 10 is on income distribution and political and judicial inequity. Target 10.2 seems to be an effort to ensure that inequality in the distribution of achievements made towards other aspects of human development besides income is taken into account. This endeavour, however, is way too important to be included in a place where it is easily overlooked. As laid out in the Introduction, a fair distribution of progress towards all SDG targets has to be addressed head-on, for instance by taking up the suggestion of the UN Secretary-General’s synthesis report that each target should only be considered achieved if it is met for all relevant income and social groups.

Operationalisation

The goal includes seven targets and three suggestions for means of implementation. All targets are very vague except for Target 10.1, which is precise but unambitious.

- **Target 10.1:** The target requires by 2030 to “progressively achieve and sustain income growth of the bottom 40% of the population at a rate higher than the national average”. This is a precise, measurable target; however, it is completely unambitious. It stipulates that an above-average rate of income growth of the bottom 40 per cent only needs to be achieved by 2030. In practice, this would mean that income inequalities may continue to increase over the next 15 years – in fact until the SDGs themselves expire – before the trend is finally reversed. In view of the massive degree of distributional injustice that already exists, a further deterioration of the situation over such a long period is unacceptable. Why not stipulate income growth of the bottom 40 per cent at a rate higher than the national average by 2020 at the latest?

---

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
We recommend that “income growth of the bottom 40 per cent” is used as an indicator in order to ensure the monitoring of the sole specific target of SDG 10.

- **Target 10.2**: The target requires by 2030 to “empower and promote the social, economic and political inclusion of all irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status”. The target seems to be an effort to ensure a fair distribution of progress towards all SDG targets. This is, however, the wrong place and the wrong approach for this endeavour. In its current form, Target 10.2 is unclear, imprecise and not operationalisable – and therefore meaningless.

- **Target 10.3**: The target requires to “ensure equal opportunity and reduce inequalities of outcomes, including through eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard”. The main part of the goal is highly welcome, but at the same time it is much too broad and vague to be operationalised, whereas the second part is a means of implementation rather than a target. As a consequence, both parts of Target 10.3 will have no effect on policy-making; the target should be removed.

- **Target 10.4**: The target requires to “adopt policies especially fiscal, wage and social protection policies, and progressively achieve greater equality”. The target is even more imprecise and vague than the preceding ones because the phrase “adopt policies” does not even indicate a direction for change. It would be very difficult, if not impossible, to operationalise the target in any reasonable way, which in turn will have no impact at all on policy-making. The target should be removed.

- **Target 10.5**: The target requires “to improve regulation and monitoring of global financial markets and institutions and strengthen implementation of such regulations”. The “improvement” that is called for in the target would have to be specified if the target is to be operationalised. However, the target fits much better under SDG 17, which includes already several targets on global financial markets.

- **Target 10.6**: The target requires to “ensure enhanced representation and voice of developing countries in decision making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions”. The “enhanced representation and voice” that is called for in the target would have to be specified if the target is to be operationalised. Apart from that, the target should be integrated within SDG 17 for the same reasons as Target 10.5.

- **Target 10.7**: The target requires to “facilitate orderly, safe, regular and responsible migration and mobility of people, including through implementation of planned and well-managed migration policies”. The target is extremely vague and sounds more like a means of implementation rather than a clear target.

It seems the SDSN did not know what to do with the target either: they suggest developing an indicator on migration that will track the orderly, safe, and responsible migration and mobility of people. One looks in vain to the report for a hint of what such an indicator might look like. In addition, it would be advisable to integrate the target with SDG 17 (“Strengthen the means of implementation and revitalize the
Goal 10: Reduce inequality within and among countries

global partnership for sustainable development”), which is much better suited to capture migration.

Means of implementation

- **Target 10.a**: The target requires to “implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with WTO agreements”. The target simply repeats an already existing agreement, the effect of which regarding inequality seems to be rather limited.

- **Target 10.b**: The target requires to “encourage ODA [official development assistance] and financial flows, including foreign direct investment, to states where the need is greatest, in particular LDCs, African countries, SIDS, and LLDCs, in accordance with their national plans and programmes”. The target does not mention any target values, not even the 0.7 target value for ODA. With this formulation, it does not require any effort at all. If inequality among countries is really to be reduced, encouraging ODA and financial flows is definitely not enough. But curbing tax abuse that helped siphon an estimated US$ 4.7 trillion out of developing countries during the 2002–2011 period could make a difference.

- **Target 10.c**: The target requires by 2030 to “reduce to less than 3% the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5%”. Though the target is a means of implementation, it is much more specific than Targets 10.2 through 10.7. What is most remarkable about this target is the fact that it goes further than the UN Secretary-General’s synthesis report, which refers to the G-20 commitment to reduce the global average cost of transferring remittances to 5 per cent. However, the main focus on remittances reflects that the consensus on migration among UN members fails to go beyond the economic dimension of sustainable development and instead focusses on a rather technical and non-controversial topic. Beyond remittances, UN members show little appetite for action on the social dimensions of migration, as shown by the widely-shared and long-term reluctance in ratifying migration-related ILO Conventions. When it comes to the environmental dimensions of migration, policy-makers have yet to engage seriously, with foreign affairs-dominated discussions falsely framing increasing migration flows as a “threat” induced by climate change, as opposed to conscious individual choices informed by environmental change. Given the strongly fact-free elements in discussions on migration and development, migration is among those elements of the post-2015 agenda that stand to gain most from improvements in disaggregated statistics on development.

Recommendations

In contrast to the MDGs, the SDGs included a goal on reductions in inequality; however, the formulation of the goal is a farce. Almost all targets are imprecise and vague formulations that would provide good means of implementation but not targets. Target 10.1 is the only target that is clearly measurable, but at the same time it is completely unambitious, as it requires reversing the trend of increasing inequality only by 2030, the year in which the SDGs expire. Even the currently popular inequality index, the Palma
Ratio\textsuperscript{1} – which the World Bank uses to measure progress towards its second twin goal, boosting shared prosperity, and that 90 leading academics, economists and development experts asked be included in the post-2015 agenda in an open letter – had to be brought in by the SDSN. We recommend replacing the year 2030 in Target 10.1 with 2020 and to formulate a corresponding indicator for this target.

We further suggest including an additional target that requires the Palma Index to decrease by x per cent internationally and by x per cent on the national level. At the same time, Targets 10.2 through 10.5 should be deleted and Targets 10.6 through 10.7 should be moved and integrated into SDG 17. Finally, we highly recommend following the suggestion of the UN Secretary-General’s synthesis report, namely that each target should only be considered achieved if it is met for all relevant income and social groups – meaning for the poorest and most socially disadvantaged parts of the population as well as for the richest ones. In other words, no one’s access to key institutions such as the education system, the labour market or the health care system should be denied or restricted on the basis of social origin, gender, race, religion or similar. This is a call for equal opportunities.

\textsuperscript{1} The Palma Ratio is the ratio of national income shares of the top 10 per cent of households to the bottom 40 per cent.
Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

Clara Brandi*

General assessment

“The battle for sustainable development will be won or lost in cities” (Kofi Annan). More than half of the world’s population now lives in cities – a share that will rise to 70 per cent in 2050 – and 90 per cent of urban growth comes from low- and middle-income countries. As engines of growth, cities generate about 80 per cent of global GDP. Simultaneously, reducing poverty in rapidly growing cities is a significant challenge. The coming generation will already live in a world where every third person lives in informal settlements, and therefore under extremely vulnerable conditions. Cities produce around 80 per cent of global carbon emissions. At the same time, many of the residents are highly vulnerable to disasters and the effects of climate change. Cities are thus both drivers and victims of global change, essential for the future of global development and offering a huge potential to win the “battle for sustainable development”.

It is thus to be welcomed that the OWG proposal includes a stand-alone urban SDG. SDG 11 underlines the salience of cities for global development, promotes international recognition of the challenges faced by cities as well as their potential, and encourages local and national governments to develop integrated development strategies for cities, hopefully strengthening urban and regional planning and providing a boost to reforms of outdated planning approaches and land laws. Despite several overlaps with other goals in the OWG proposal, the urban SDG should thus remain in the SDG agenda – at the very least because it encourages policy-makers to take a broader perspective in their own work.

However, while some of the targets under SDG 11 are fairly concrete, most are insufficiently specified and are not backed by meaningful indicators that can be used to track progress.

Moreover, it would be desirable if the goal not only focussed on the sustainability of cities per se but also on the sustainability of urbanisation. Insofar as SDG 13 addresses the city as a specific geographical location, the SDG process may generate a set of targets and indicators addressing many central issues, such as waste or urban poverty, but it runs the risk of ignoring how cities contribute to global environmental change or affect the earth system, e.g. through their emissions or their dependence on distant ecosystem services. A focus on urbanisation instead of cities would have the advantage that crucial urban-rural interactions need to be considered, and the long-distance – or even global – effects of urbanisation on resource extraction, emissions, energy, etc. also would be included. In order to put the spotlight also on the process of urbanisation, SDG 11 should contain targets and indicators that can, for example, take account of the extent to which local governments are putting incentives in place, e.g. procurement measures, to enhance stewardship of all the remote ecosystems on which they depend, or indicators that aim to

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
capture the ratio between consumption and production of ecosystem services in the larger metropolitan surroundings.

**Operationalisation**

Goal 11 includes seven targets and three suggestions for means of implementation. Targets 11.1 and 11.2 are on the supply of services in urban settlements (housing, transport, etc.), Target 11.3 is on human settlement planning and management, Target 11.4 is on world cultural and natural heritage, Target 11.5 is on the effects of disasters, and Targets 11.6 and 11.7 are on environmental issues (air quality, waste management, and green and public spaces).

- **Target 11.1**: This target is to “ensure [by 2030] access for all to adequate, safe and affordable housing and basic services and upgrade slums”. The target has a timeline but lacks specification in many aspects: What are the minimum requirements for a living space to be called “housing”? Which services are “basic services”? When should housing or a basic service be called “adequate”, “safe” or “affordable”? What exactly does it take for a slum to qualify as “upgraded”? It is in fact hard to imagine that any indicator or set of indicators can really cover all the different dimensions of Target 11.1.

  The SDSN suggests two indicators, which measure, however, only two segments of the target. The first is the “percentage of urban population living in slums or informal settlements” (Indicator 69). It has been taken over from the MDGs. Nevertheless, it is still difficult to get reliable data for the goal because it is difficult to decide which area is a slum and which is not, and because it is even difficult in many countries to assess how many people live in a specific slum. In addition, the indicator does not say anything about slum upgrading, unless slum upgrading means the conversion of a slum into a non-slum. The language of this target should be phrased in such a way that it does not lead to unintended consequences, i.e. such that it does not, in any way, justify – let alone incentivise – the forced eviction of slum dwellers. The second indicator is the “percentage of women and men in urban areas with security of tenure, measured by (i) percentage with documented or recognized rights to housing, and (ii) percentage who perceive their rights to housing are recognized and protected UN-Habitat”. The SDSN suggests this indicator (No. 5) also for the tracking of Target 1.4 (access to basic services, ownership, and control over land and other forms of property, inheritance, natural resources, appropriate new technology, and financial services including microfinance). It may be a good indicator for the safety of housing, but much less so for the adequacy and affordability of housing, and not at all for people’s access to basic services.

- **Target 11.2**: This target is to “provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety” by 2030. It also has a clear timeline but lacks specification in multiple regards: What does the term “transport systems” include? When are they affordable, accessible and sustainable? When can roads be called safe? Again, it is difficult to imagine that any indicator can grasp all these aspects.

  The SDSN proposes measuring progress towards the target using the “percentage of people within 0.5km of public transit running at least every 20 minutes” (Indicator 71).
It may be a good parameter for accessibility to public transport but not for affordability and sustainability or for road safety. In addition, it is completely unrealistic that the global value for it comes close to 100 per cent, as the target requires (“for all”).

- **Target 11.3**: This target is to “enhance inclusive and sustainable urbanization and capacities for participatory, integrated and sustainable human settlement planning and management in all countries” by 2030. Target 11.3 is important but very insufficiently specified and operationalised. Considering how many aspects the target is covering, doubts arise as to whether the goal will ever become sufficiently specified and operationalised. In addition, it could be seen as a means of implementation rather than a goal in itself – an interpretation backed by the fact that the means of implementation for Targets 11.a and 11.b are very similar to Target 11.3. One option is to shift the target to the category of means of implementation.

The SDSN suggests measuring the target using a target that has yet to be developed but could be based on the ratio of the land consumption rate to population growth. It might be possible to construct such an indicator even though land consumption and population growth are on different scales. But it would be at most a mediocre proxy for the sustainability of urbanisation – and not suffice at all for the inclusiveness of urbanisation or for a country’s capacities in human settlement planning and management.

- **Target 11.4**: This target is to “strengthen efforts to protect and safeguard the world’s cultural and natural heritage”. Target 11.4 is not very easy to operationalise. It was apparently introduced into the OWG proposal as a concession to United Nations Educational, Scientific and Cultural Organisation, which administers the list of world heritage places.

The SDSN does not suggest an indicator for operationalising the target.

- **Target 11.5**: This target is to “significantly reduce the number of deaths and the number of affected people and decrease by y% the economic losses relative to GDP caused by disasters, including water-related disasters, with the focus on protecting the poor and people in vulnerable situations” by 2030. The target has a timeframe and a target value; only the terms “affected” and “disasters” require a definition. However, it has an extensive overlap with Target 1.5, which is not specified or operationalised as well but could therefore improve by being merged with Target 11.5.

The SDSN makes a good suggestion for an indicator to measure progress towards Target 1.5 but not for Target 11.5 (for details, see Goal 1).

- **Target 11.6**: The target is to “reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management” by 2030. This target is so broad and vague that it is almost impossible to show that a country has not implemented it. In view of the importance of these issues, the target and relevant indicators should be specified.

The SDSN does not suggest any indicator for the target.
• **Target 11.7**: This target is to “provide universal access to safe, inclusive and accessible, green and public spaces, particularly for women and children, older persons and persons with disabilities” by 2030. It is another target with a clear timeframe (by 2030) and some operationalisation (universal access, meaning 100 per cent) but lacks specification in manifold aspects: When is a space “green” or “public”? When is a green and public space “safe” or “inclusive” or “accessible”? The target and relevant indicators should thus be specified.

The SDSN does not suggest an indicator that could measure the achievement of this target.

**Means of implementation**

• **Target 11.a**: The target is to “support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning”. This means of implementation overlaps to some degree with Target 11.3, but it is almost impossible to monitor.

• **Target 11.b**: The target is to “[by 2020] by x% the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, develop and implement in line with the forthcoming Hyogo Framework holistic disaster risk management at all levels”. This means of implementation looks very concrete at first glance (by 2020, by x per cent) but its focus is so broad and lacking in specifics that it is also extremely difficult to track.

• **Target 11.c**: The target is to “support least developed countries, including through financial and technical assistance, for sustainable and resilient buildings utilizing local materials”. The target is still not well-specified and operationalised but it would be easy to make it operationalisable by defining when a material should be labelled “local” and when a building can be called “sustainable and resilient”.

**Recommendations**

While the stand-alone urban SDG is to be welcomed, it should be noted that most of its targets are extremely broad and insufficiently specified and operationalised. Many cover two or three issues that are only loosely correlated, and each target variable (e.g. housing for all) is further qualified in multiple regards (e.g. inclusive, sustainable, affordable, safe, etc.). As in the case of many other SDGs, less would be more. The targets should focus on just one issue with a maximum of two qualifications, and it would still not be easy to measure them. Perhaps even the number of targets could be reduced; for example, Targets 11.5 and 11.6 could be left out because their issues are also raised under the headings of other SDGs; Targets 11.4 and 11.7 might also be left out because they focus on very specific issues that are probably impossible to measure. On the other hand, Target 11.4 might even be strengthened, as it is the only one that deals not only with the well-being of people living in cities but also with the effects of urbanisation as such.
Goal 12: Ensure sustainable consumption and production patterns

Karen Meijer and Steffen Bauer*

General assessment

Global consumption and production patterns are key to the quest for sustainable global development. Considering past and current trends, they can be considered as the main drivers of unsustainable development, notably through overexploitation of natural resources, land conversion and high dependence on fossil fuels. Goal 12 therefore aims to alter these patterns towards sustainable levels that stay within the planetary carrying capacity. It is thus central to the transformative ambition of the overall SDG catalogue, and thereby highly appropriate as well as ambitious in nature.

Regrettably, Goal 12 is particularly vague and thus difficult to operationalise. Accordingly, it is also difficult to find suitable indicators for goal achievement. Although the notion to “ensure” underscores in principle an adequate level of ambition, the goal does not specify what would qualify as sustainable consumption and production levels. The pertinent question is to what extent current consumption and production patterns will need to be altered – indeed the corresponding use of resources reduced – to actually ensure a transformation to sustainable levels, globally as well as within countries. Most of the targets under Goal 12 leave that question unanswered and are therefore unlikely to have a significant effect on global and national policies.

Yet, consumption and production relate to all goals addressing the use of resources, i.e. water, land, energy, etc. For instance, a host of consumption and production activities drive land conversion, e.g. through deforestation for agriculture or mining for raw materials, including fossil fuels. In addition to exploiting natural resources, agriculture, forestry and other land use (AFOLU) account for 25 per cent of global greenhouse gas emissions, thus contributing significantly to global climate change (as addressed under Goal 13). Goal 12 is therefore closely related inter alia to SDG 13 (“Take urgent action to combat climate change and its impacts”), SDG 14 (“Conserve and sustainably use the oceans, seas and marine resources for sustainable development”) and SDG 15 (“Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”). Production and consumption are also inherently related to economic growth (see SDG 8), which is in itself driven by production and consumption, and the sustainability of cities and human settlements (see SDG 11) as cities and human settlements determine the bulk of global production and consumption.

Operationalisation

Goal 12 includes eight targets and three suggestions for means of implementation. Targets 12.1, 12.2 and 12.7 focus on the introduction of the principles of sustainability into country policies and programmes in general. Target 12.6 addresses the adoption of sustainable practices by companies. Targets 12.3 through 12.5 deal with the generation

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
and management of waste. And Target 12.8 calls for building awareness among people about sustainability issues.

- **Target 12.1** calls for the implementation of “the 10-Year Framework of Programmes on sustainable consumption and production (10YFP), all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries”. By and large, the 10YFP covers the same objectives as Goal 12. Although the 10YFP is more comprehensive in scope, SDG 12 makes a valuable contribution to specifying some targets for operationalisation (even as it could do more in terms of quantification). Therefore, it is adequate for SDG 12 to refer to the 10YFP rather than to duplicate goals. Accordingly, it is reasonable that Target 12.1 does not provide any indicators – these would need to be developed under the 10YFP.

The SDSN proposal does not include any indicators for measuring progress towards Target 12.1.

- **Target 12.2** is to “achieve sustainable management and efficient use of natural resources” by 2030. Although this target introduces a timeline, it is so vague and open in substance that it is impracticable to verify whether it has been achieved or not. Anyhow, specifications for essential resources are included in SDG 6 (water), SDG 7 (energy), SDG 13 (climate), SDG 14 (oceans, seas and marine resources) and SDG 15 (terrestrial ecosystems, forests, land, biodiversity). Therefore, Target 12.2 could be considered obsolete.

The SDSN suggests an indicator on the “publication of resource-based contracts” to track progress towards Target 12.2, which, however, would still need to be developed.

- **Target 12.3** specifies the aim to “halve per capita global food waste at the retail and consumer level, and reduce food losses along production and supply chains including post-harvest losses” by 2030. It makes sense to address food wastage in a stand-alone target because global food waste increases demand for food products even beyond what is required to ensure food security for a growing world population (see Goal 2). The target increases the pressure on agriculture land, leading to further land conversion, especially through cropland expansion, and ensuing losses of ecosystems and biodiversity. Moreover, food wastage exacerbates inequality at the global and national levels, as the footprint of corresponding land use and protein consumption (i.e. meat, fish) is particularly high in high-income countries and dynamically increasing in urban middle classes of low- and middle-income countries. Hence, Target 12.3 might as well be considered as a means of implementation for Goal 2 rather than an end in itself under Goal 12. Accordingly, it could be converted into a new target, Target 2.d, under SDG 2.

The SDSN proposes that a “global food loss indicator” be developed to track the share of food lost or wasted in the value chain after harvest (Indicator 74), but it does not make any concrete suggestions what such an indicator could look like.

- **Target 12.4** is to “achieve environmentally sound management of chemicals and all wastes throughout their life cycle in accordance with agreed international frameworks and significantly reduce their release to air, water and soil to minimize
their adverse impacts on human health and the environment” by 2020. With this formulation, the OWG underscores the relevance of pertinent multilateral environmental agreements. The target is highly relevant but requires substantial additional specification: When exactly is the management of chemicals and other wastes environmentally sound? What kinds of chemicals and wastes is the target focussing on? By how much and until when is the release of each relevant chemical and other kinds of waste to be reduced? etc. Operationalisation will be further complicated by the fact that for each chemical and each kind of waste, at least one indicator would be required to measure their release into the air, water and soil. Depending on the percentage levels that each of these indicators is meant to be reduced to, the goal is more or less ambitious and achievable.

The SDSN proposes two indicators for tracking progress towards the target: (i) the “consumption of ozone-depleting substances” (Indicator 75), which has already been used for the MDG agenda, and (ii) “aerosol optical depth (AOD)” (Indicator 76). Even the combination of both indicators covers only a fraction of the issues addressed under Target 12.4. As such, they hardly qualify as suitable proxies for achieving Target 12.4 in its given scope.

- **Target 12.5** asks to “substantially reduce waste generation through prevention, reduction, recycling, and reuse”. At this general level, it would arguably include Target 12.3 as well as parts of 12.4. It is not very ambitious and should be more specific in any case. In particular, it lacks quantification as well as a timeline and is therefore not suitable for measuring goal achievement.

The SDSN proposal does not include any indicators for measuring progress towards Target 12.5.

- **Target 12.6** asks to “encourage companies, especially large and trans-national companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle”. Information on sustainability practices is an essential prerequisite for conscious consumer decisions, thereby changing consumption patterns. With regard to reducing or recycling the use of chemicals or hazardous wastes, every single action of an individual company can make a contribution towards reaching the target. However, with regards to practices that pertain to the use of common pool resources or public goods, such as forests or the atmosphere, free-rider problems and “leakage” effects will persist. Private supply chain initiatives alone are therefore insufficient; complementary public measures are required to pursue this target and to raise its level of ambition. In addition, the target is formulated in such a vague manner that it is unlikely that any country will fail to demonstrate that it has “encourage[d] companies…”. Besides, the target is rather a means of implementation and could be converted accordingly.

The SDSN proposes that an indicator be developed measuring the “share of companies valued at more than [$1 billion] that publish integrated reporting” (Indicator 77). But the questions are still: At what point should reporting be labelled “integrated reported”? Who decides on that question? And who reports on the indicator? As such, it will be prone to manipulation and “greenwashing”.

---

*Goal 12: Ensure sustainable consumption and production patterns*
• Target 12.7 seeks to “promote public procurement practices that are sustainable in accordance with national policies and priorities”. It is thus instrumental to increase global demand for sustainable products and, conversely, to reduce demand for unsustainable products. Pursuing this target can help to facilitate economies of scale, to reshape value chains and to build markets for green products and services, even beyond the public sector. But the target suffers from the same problems as the preceding one: First, it is so vague that efforts to “promote public procurement practices that are sustainable” will be easily demonstrated. Second, the target is a means of implementation rather than an end in itself and could be converted accordingly.

The SDSN proposal does not include any indicators for measuring progress towards Target 12.7.

• Target 12.8 requires that, by 2030, it is ensured “that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature”. Information is pertinent, but not sufficient for consumers and producers to make informed choices. This will also require commensurate knowledge and capabilities, which is not specified in the target. The target might inadvertently exacerbate an unregulated inflation of sustainability labels that obfuscate production patterns rather than increase transparency. To be meaningful and ambitious, the target would need to be much more specific and differentiated. In addition, it is a means towards sustainable policies rather than an end in itself and could thus be converted into yet another means of implementation, i.e. Target 12.f.

The SDSN study does not contain any proposal for measuring progress towards Target 12.8.

Means of implementation

• Target 12.a proposes to “support developing countries to strengthen their scientific and technological capacities to move towards more sustainable patterns of consumption and production”, which, however, is only partly of a technical nature. Institutional structures and contexts also matter. Support to low- and middle-income countries should therefore also address rules and regulations, notably including perverse incentives, and a commensurate strengthening of capacities for legislation and the rule of law, including through law enforcement.

• Target 12.b proposes “to develop and implement tools to monitor sustainable development impacts for sustainable tourism which creates jobs, promotes local culture and products”. This target is very specific in its explicit and narrow focus on sustainable tourism. It even appears misplaced in the means of implementation section, as the goal does not include a correspondingly specific target on sustainable tourism. It would be much more convincing to have a means-of-implementation target regarding monitoring tools for production and consumption more generally.

• Target 12.c addresses the need to “rationalize inefficient fossil fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully
Goal 12: Ensure sustainable consumption and production patterns

*into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities*. This is a highly adequate target to rectify unsustainable incentives, even as it is narrowly focussed on fossil fuel subsidies. To make the target more comprehensive and ambitious, it should expand to other harmful subsidies, e.g. with regard to food consumption or unsustainable biofuels.

**Recommendations**

As a general recommendation, the goal and its targets should be more explicit and consistent in stressing that developed countries should take the lead in addressing unsustainable patterns of consumption and production, notably with a view to resource-intensive goods and services.

More specifically, although the targets encourage sustainable consumption and production, they do not cover the full range of drivers underlying unsustainable consumption and production. For instance, Target 12.c refers to fossil fuel subsidies only, although there are numerous other harmful subsidies that also drive unsustainable consumption and production patterns. Likewise, indirect land use change cannot be prevented through the altered production processes of individual companies alone. Until all sectors fully commit to sustainable production, a minimum degree of public regulation is required to complement the objectives entailed in the corresponding targets. This seems insufficiently reflected and addressed in both the operationalisation of the goal and in the means of implementation. At the same time, however, large transnational companies can play a catalytic role in enhancing sustainable production by demanding higher standards of sustainability from their supplies, for instance with a view to contributing to Target 12.4. Therefore, the targets should also appeal to the private sector.

At the same time, several targets are means of implementation rather than ends in themselves and could thus be shifted into the “means of implementation” section of Goal 12 or other goals respectively; this is the case in particular for Targets 12.3 and 12.6 through 12.8. Target 12.2 is already covered in a more specific way by corresponding targets under Goals 7, 13, 14 and 15 and might thus be considered obsolete. Likewise, Targets 12.3 and 12.4 already cover the main aspects that Target 12.5 reiterates and are also more specific. Hence, Target 12.5 might also be considered obsolete. A corresponding clean-up of the list of targets would allow for focussing on the remaining targets (in particular, Targets 12.2 and 12.4) and their operationalisation, which in turn would provide them with greater visibility and weight in view of the overarching Goal 12.
**Goal 13: Take urgent action to combat climate change and its impacts**

*Acknowledging that the UNFCCC is the primary international, intergovernmental forum for negotiating the global response to climate change*

Steffen Bauer, Clara Brandi, Sander Chan and Okka Lou Mathis*

**General assessment**

By proposing a stand-alone goal on climate change in the post-2015 agenda, the OWG underscored the salience of climate change for sustainable global development. SDG 13 addresses climate change as well as its impacts: the first part of the goal (“to combat climate change”) refers to climate change mitigation, whereas the second part (“... and its impacts”) refers to climate change adaptation.

The OWG explicitly acknowledges, in a dedicated footnote, that the UNFCCC process is the primary forum for international climate policy. Thereby, it stresses that SDG 13 should be complementary to the UNFCCC process. The OWG proposal specifically refers to the gap between aggregate mitigation pledges under the UNFCCC and a pathway to keep global warming below 2°C, respectively 1.5°C. Consequently, “urgent action” under SDG 13 can be interpreted as actions to close the global emissions gap. A broader interpretation would also encompass actions related to adaptation and actions that are not specifically aimed at direct impacts, such as awareness-raising for development implications of climate change.

The OWG proposal on SDGs underlines the inextricable linkages between climate change and human development, thereby conveying the message that the impacts of climate change could undermine development achievements envisioned under other SDGs. The OWG relates to diverse aspects of climate change in 11 targets and 6 SDGs other than SDG 13, for instance to resilience in Target 1.5 (of poor people), Target 2.4 (of agricultural practices), Targets 9.1 and 9.a (of infrastructure), Target 11.b (of cities and human settlements) and Target 14.2 (of marine and coastal ecosystems).

Nevertheless, the OWG proposal falls short of comprehensively promoting co-benefits between action on climate change and other SDGs. Co-benefits could be made explicit regarding issues such as *inter alia* carbon sinks in agriculture (SDG 2), drivers of mitigation and adaptation in energy and economic growth (SDGs 7 and 8), carbon emissions as an expression of inequality (SDG 10) and decarbonisation of consumption and production patterns (SDG 12).

In addition, in its current form, SDG 13 misses the opportunity to further raise levels of ambition and harness the aspirational spirit of the SDGs. A more ambitious SDG 13 could give a strong political signal to reach a meaningful international agreement under the UNFCCC process, and strengthen linkages between the global agendas on climate action and sustainable development.

---

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
Operationalisation

The goal includes three targets and two suggestions for means of implementation. Whereas the former (Targets 13.1 through 13.3) emphasise universal climate resilience and adaptive capacity, integrated planning and education, the latter (Targets 13.a and 13.b) focus on countries that are particularly vulnerable to climate change. This operationalisation essentially reconfirms the objectives of the ongoing UNFCCC process.

- **Target 13.1**: The target is to “strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries”. It is vague and will make it difficult to assess and demonstrate, for instance, how a country has not achieved this target. To catalyse related action, the target would need further specification and a clear timeframe.

  The SDSN does not make any proposal as to how the target could be measured.

- **Target 13.2**: The target is to “integrate climate change measures into national policies, strategies, and planning”. It also lacks specifications to, for instance, determine when a country has not achieved the target.

  The SDSN proposes three indicators for measuring progress towards the target. The first indicator is the “availability and implementation of a transparent and detailed deep decarbonization strategy, consistent with the 2°C – or below – global carbon budget, and with GHG emission targets for 2020, 2030 and 2050” (Indicator 78). It constitutes a step forward but needs additional specification. In particular, clear definitions are required for determining what constitutes a strategy that could be considered transparent, detailed or deep, and consistent with the 2°C or below global carbon budget. The second indicator is the “CO₂ intensity of new power generation capacity installed (gCO₂ per kWh), and of new cars (gCO₂/pkm) and trucks (gCO₂/tkm)” (Indicator 79), which is adequately focused on one segment of Target 13.2. The third indicator, “net GHG emissions in the Agriculture, Forest and other Land Use (AFOLU) sector (tCO₂e)” (Indicator 80), also covers important aspects of Target 13.2.

- **Target 13.3**: The target is to “improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning”. It is very broadly defined and difficult to operationalise.

  Indeed, the SDSN does not make a proposal to measure performance on this target.

Means of implementation

- **Target 13.a**: The target is to “implement the commitment undertaken by developed country Parties to the UNFCCC to a goal of mobilizing jointly USD100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible”. It is the most concrete target under SDG 13.
The indicator proposed by the SDSN (No. 80) furthermore specifies that “official climate financing from developed countries [must be] incremental to ODA”.

- **Target 13.b**: The target is to “promote mechanisms for raising capacities for effective climate change related planning and management, in LDCs, including focusing on women, youth, local and marginalized communities”. It remains unspecified and vague.

The SDSN does not further specify measurements for this target.

**Recommendations**

The proposal of the OWG on SDGs underscores the centrality of climate change for global sustainable development, reflected in both a stand-alone SDG 13 as well as in mainstreaming climate-sensitive targets under other SDGs. SDG 13 as a separate goal should be enhanced, conveying greater specification and a higher level of ambition, irrespective of the (lack of) progress that is being made under the UNFCCC. The final set of SDGs should further mainstream action on climate change in a more comprehensive and consistent manner by highlighting synergies across SDGs. Specific recommendations aim both at the intergovernmental level and at the engagement of subnational and non-state actors in climate action.

*First*, the aspirational nature of SDGs – emphasising universality and the particular challenges faced by the most vulnerable countries – should be reflected in a more ambitious goal on climate change. SDG 13 should aim at keeping global warming below 1.5°C, going further than the “2°C or 1.5°C” target in the UNFCCC process. Moreover, a target calling for the implementation of commitments under the UNFCCC would further increase the level of ambition and link the global development and climate change agendas. This specifically applies to pledged climate financing, which largely remain to be mobilised. Ultimately, SDG 13 is considered as complementary to the UNFCCC process and should help to raise ambition in international climate policy.

*Second*, SDG 13 should explicitly provide entry-points for non-state and subnational actors within the fragmented institutional complex of international climate governance. This would fit well with strong references to the role of non-state actors in addressing pre-2020 ambitions in the UNFCCC process. A more comprehensive framework to coordinate, catalyse and support both state and non-state climate action along the lines of SDG 17 – in particular regarding multi-stakeholder partnerships (Targets 17.16 and 17.17) – would enable higher levels of non-state and subnational ambition. Moreover, it could contribute to nationally determined target-setting and demonstrate substantial contributions to climate mitigation and adaptation at all governance levels. By focussing largely on the national level (Targets 13.1, 13.2 and 13.b), the current SDG misses a chance to stimulate climate action at all levels in a manner that would be commensurate to, for instance, Target 11.b “increasing by x% the number of cities/human settlements adapting and implementing integrated policies and plans towards mitigation and adaptation to climate change.”
Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Clara Brandi*

General assessment

The goal is about the conservation and sustainable utilisation of oceans, seas and marine resources for sustainable development. Oceans and seas, covering nearly three-quarters of the earth, are essential to global and national sustainable development. They provide the livelihoods for hundreds of millions of people around the world and ecosystem services on which humankind depends. For instance, they play a key role in the carbon cycle of our planet and have taken up around one-third of humanities’ CO₂ emissions. Moreover, global ocean activity contributes substantially to the world economy, above all through international trade via marine transport, representing 90 per cent of global trade, and through fisheries as well as aquaculture. Caring about the well-being of the oceans and seas is thus a global imperative.

Despite the clear recognition and commitment by the international community to conserve and sustainably use the oceans and seas under various international agreements, including the 1982 UN Convention on the Law of the Sea (UNCLOS), and the increasing efforts at the international, regional, national and subnational levels, the health of the oceans and seas has declined dramatically throughout recent decades. In order to reverse and restore their health, productivity and resilience for the well-being of humanity and the ecosystem for today’s and future generations, addressing these concerns in a comprehensive and coherent manner in a stand-alone SDG is thus to be welcomed.

Operationalisation

The goal is operationalised through seven targets and three suggestions for means of implementation.

The key indicator suggested by the SDSN to monitor progress towards the targets is the Ocean Health Index, which “measures 10 aspects of marine ecosystems and their use by humans: food provision, artisanal fishing opportunities, natural products, carbon storage, coastal protection, tourism and recreation, coastal livelihoods and economies, sense of place, clean waters, and biodiversity”. However, the Ocean Health Index is a composite index, and thus not adequate to separately track progress regarding the different dimensions of ocean health, let alone ocean acidification. Even worse, the index explicitly defines sustainability in the near-term (i.e. five years). Thus, long-term consequences from habitat loss and climate change are not addressed in the index. Given the explicit long-term focus of the SDGs, the timeframe of the index is clearly inappropriate. Also, there are clear adverse effects between the different dimensions of the Ocean Health Index: a country can compensate for a decrease in biodiversity by increasing its share of international tourism. Thus, the targets of SDG 14 could probably be better monitored with separate indicators for each target.

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
Target 14.1: The target requires by 2025 to “prevent and significantly reduce marine pollution of all kinds, particularly from land-based activities, including marine debris and nutrient pollution”. The phrase “significantly reduce” has to be specified. Otherwise, Target 14.1 is precise, time-bound and ambitious.

The Ocean Health Index suggested by the SDSN includes the component “clean waters”, which is based on four measures of pollution: nutrients, chemicals, pathogens and marine debris. However, clean water is only one of ten components of the composite index, meaning that its weight in the overall index is rather low and that failures in this component can easily be compensated through achievements in one or more of the other nine components. Progress towards Target 14.1 could be easier monitored if just the component “clean waters” were utilised for measuring progress towards this goal.

Target 14.2: The target requires by 2020 to “sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration, to achieve healthy and productive oceans”. Though it is time-bound, the target is so vague that it is almost meaningless. What does it mean to “sustainably manage and protect”, to “avoid significant adverse impacts”, or “strengthening” resilience and to “take action”? Target 14.2 should be substantially reformulated and specified.

Target 14.3: The target requires to “minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels”. It is very much to be welcomed that ocean acidification is featured in SDG 14 because it represents a great risk for marine biodiversity, ecosystem services, fisheries and aquaculture. However, the fact that both ocean acidification and climate change can ultimately only be stopped if global CO2 emissions from fossil sources are eventually reduced to zero, has not yet received sufficient attention – neither in international law nor in global governance. As of now, there is no global environmental convention or institution that has taken effective steps to curb this massively underestimated problem. Regrettably, Target 14.3 shares this failure. The formulation of the target is completely vague, utilising phrases such as “minimize”, “address” and “enhanced scientific cooperation”, which cannot be operationalised. Furthermore, it is not time-bound and therefore not binding at all. In order for the target to have an impact, it should follow the suggestion of the German Scientific Advisory Council on Global Change (WBGU) and be reformulated and require to “ensure that the pH level of the uppermost ocean layer does not fall by more than 0.2 units compared to preindustrial figures”.

Ocean acidification is identified as one of the seven “pressures” that affects “Change in shells Status”. The latter is one of six sub-goals used to capture “Natural Products”. “Natural Products” in turn is only one of the ten goals of the Ocean Health Index. If Target 14.3 is to be monitored effectively, it should utilise the “pH level of the uppermost ocean layer” as an indicator.

Target 14.4: The target requires by 2020 to “effectively regulate harvesting, and end overfishing, illegal, unreported and unregulated (IUU) fishing and destructive fishing practices and implement science-based management plans, to restore fish stocks in
the shortest time feasible at least to levels that can produce maximum sustainable yield as determined by their biological characteristics”. The different levels of ambition of the sub-targets of the rather broad Target 14.4 are quite heterogeneous. To end overfishing and IUU as well as destructive fishing practices by 2020 is a precise, ambitious, time-bound sub-target that holds all countries accountable – developing and developed countries alike. The objectives to “effectively regulate harvesting” and to “implement science-based management plans” are means of implementation rather than targets, and thus could either be moved to the means of implementation or removed entirely from the agenda. Finally, the timeframe for the sub-target to “restore fish stocks in the shortest time feasible” needs to be specified.

The SDSN suggests “Proportion of fish stocks within safe biological limits” (Indicator 83) as an indicator for monitoring progress towards Target 14.4. This is a good indicator for measuring progress towards the last sub-target of Target 14.4, i.e. “to restore fish stocks”. The SDSN, however, only suggests the development of a complementary national indicator, “Use of destructive fishing techniques”, in order to operationalise the sub-target on overfishing, IUU fishing and destructive fishing practices. This is regrettable in view of the importance and ambition of this sub-target. The development of obligatory indicators for overfishing, IUU fishing and fishing practices is highly recommended in order to ensure that progress towards this target is monitored.

- **Target 14.5**: The target requires by 2020 to “conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on best available scientific information”. Target 14.5 is one of the Aichi Targets, which is, however, underambitious. In light of the aspirational nature of the SDGs and the importance of marine biodiversity for ecosystem services, and thus the future of humanity, Target 14.5 should follow the proposal of the WBGU and go beyond the Aichi Targets. An ambitious target formulation could be to “conserve at least 20-30 per cent of the area of marine ecosystems through an ecologically representative and effectively managed system of marine protection areas and halt, by 2050, the anthropogenic drivers of biodiversity loss”.

The SDSN suggests the “Share of coastal and marine areas that are protected” (Indicator 14.4) only as a complementary national indicator. The monitoring of Target 14.5 is thus not warranted, despite the fact that Indicator 14.4 already exists, i.e. does not need to be developed. Thus, Indicator 14.4 should be converted into one of the obligatory indicators for monitoring progress towards the SDGs.

- **Target 14.6**: The target requires by 2020 to “prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, and eliminate subsidies that contribute to IUU fishing, and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the WTO fisheries subsidies negotiation*”.

*taking into account ongoing WTO negotiations, the WTO Doha Development Agenda and the Hong Kong Ministerial Mandate.
This target is a means of implementation to achieve Target 14.4, which inter alia requires ending overfishing, IUU fishing and destructive fishing practices by 2020. It should thus be converted into an additional means of implementation.

- **Target 14.7**: The target requires by 2030 to “increase the economic benefits to SIDS and LDCs from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism”. In its current form, Target 14.7 is very vague. What does it mean to “increase” economic benefits? By how much and how should this be achieved? The target should be further specified.

**Means of implementation**

- **Target 14.a**: The target requires to “increase scientific knowledge, develop research capacities and transfer marine technology taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular SIDS and LDCs”. This is a good means of implementation.

- **Target 14.b**: The target requires to “provide access of small-scale artisanal fishers to marine resources and markets”. Since an important part of SDG 14 is the sustainable use of marine resources for sustainable development, Target 14.b is a target in itself rather than a means of implementation. It should therefore be specified (i.e. by which means should market access be provided), provided with a timeframe and transformed into an additional target. Its operationalisation is already ensured, if the “artisanal fishing opportunities” component of the Ocean Health Index is utilised separately to monitor progress towards this target.

- **Target 14.c**: The target requires to “ensure the full implementation of international law, as reflected in UNCLOS for states parties to it, including, where applicable, existing regional and international regimes for the conservation and sustainable use of oceans and their resources by their parties”. This is a good means of implementation.

**Recommendations**

The proposed SDG 14 should remain part of the SDGs, as it helps to focus on integrated ecosystem-based management. It also helps to overcome the deficits of setting sector-specific goals, which has been the main approach to managing the oceans and seas so far. The SDG on oceans and seas should mirror an adequate balance between the protection of the marine environment and the sustainable use of marine resources.

Building on the current OWG proposal, Target 14.3 on ocean acidification should be made measurable. It is therefore suggested to follow the recent proposal of the WBGU and to reformulate Target 14.3 to requires that the pH level of the uppermost ocean layer does not fall by more than 0.2 units compared to preindustrial figures.

The rather broad Target 14.4 contains the welcome quest to end, by 2020, overfishing and IUU as well as destructive fishing practices. We suggest ensuring the monitoring of Target 14.4 through obligatory indicators on overfishing, IUU fishing and destructive fishing practices, respectively. Target 14.5 requires, in line with the Aichi Targets, the
Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

conservation of at least 10 per cent of coastal and marine areas by 2020. Considering the aspirational character of the SDGs and the importance of the target, we recommend following the proposal of the WBGU and reformulating Target 14.5 in the following way: “conserve at least 20-30 per cent of the area of marine ecosystems through an ecologically representative and effectively managed system of marine protection areas and halt, by 2050, the anthropogenic drivers of biodiversity loss.”

Target 14.6 is a means of implementation for achieving Target 14.4. It should thus be referred to the means of implementation section. Targets 14.2 and 14.7 are formulated in a very vague way and should be specified. Finally, Target 14.b on artisanal fishing opportunities is a target rather than a means of implementation. It should therefore be specified, provided with a timeframe and included in the target section.

The key indicator suggested by the SDSN to monitor progress towards the different targets of SDG 14 is the composite Ocean Health Index, which is, however, inappropriate for various reasons: firstly, being a composite index, the Ocean Health Index is not adequate for separately tracking progress regarding the different dimensions of ocean health; secondly, the index explicitly defines sustainability in the near-term (i.e. five years) and thus does not address long-term consequences from habitat loss and climate change; thirdly, there are clear adverse effects between the different components of the Ocean Health Index: a country can compensate for a decrease in biodiversity by increasing its share of international tourism. For all of these reasons, we recommend not using the Ocean Health Index as a whole for monitoring progress towards SDG 14 but rather for individual components whenever appropriate – for instance, the component “clean waters” – in order to monitor progress towards Target 14.1.
Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Steffen Bauer and Karen Meijer*

General assessment

The goal is about the sustainable use of land and land-based resources, including ecosystems and biodiversity, which are absolutely essential to sustainable development. Much like fresh water, land and soil are essential environmental media and pivotal for key ecosystem services, and human development relies on related ecosystem services to provide food, energy and a healthy environment as well as increase adaptive capacity and resilience to environmental stresses. This clearly warrants a designated goal.

The general direction, scope and ambition of the goal are thus to be appreciated, even as it is somewhat convoluted and indicates trade-offs between the protection of ecosystems on the one hand and the sustainable use of ecosystems on the other. More specifically, the goals’ targets differentiate between types of ecosystems to be protected, restored and sustainably used. They also underscore the importance of fair and equitable sharing of benefits related to biodiversity and land-based ecosystem services more generally.

With consumption and production as major driving forces of the loss of land resources, ecosystems and biodiversity, there are considerable overlaps with SDG 12 (“Ensure sustainable consumption and production patterns”), but also other goals. Notably, land-based ecosystems, especially forests, play an important role in climate change mitigation as well as with regard to resilience to climate change impacts through shaping the local climate, hydrological cycles, water storage and so on. The goal therefore also strongly relates to SDG 6 (“Ensure availability and sustainable management of water and sanitation for all”) and SDG 13 (“Take urgent action to combat climate change and its impacts”).

Operationalisation

The goal contains nine targets and an additional three regarding means of implementation, with varying levels of ambition.

- **Target 15.1** requires by 2020 to “ensure conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements”. The target thus provides a kind of umbrella for the entire goal, whereas Targets 15.2 through 15.5 specify different ecosystem types, which are already introduced under 15.1. This diversification of specific targets can be considered adequate because of the differences in functional roles of different types of ecosystems as well as with regard to the different drivers of their respective degradation. With this diversification in place, however, they should be spelt out more specifically than is currently the case. Also, although the target is in itself commendable, it is still not comprehensive with a view to land-based ecosystems (e.g.

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
riverine systems) and provides no guidance on trade-offs and priorities for sustainable development.

- **Target 15.2** requires by 2020 to “promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and increase afforestation and reforestation by x% globally”. Specification of the “x%” will determine how ambitious the target will ultimately be, and there are obvious implications regarding targets relating to SDG 13 (“Take urgent action to combat climate change and its impacts”) as well as forest-related Aichi Targets under the Convention on Biological Diversity (CBD). More specifically, the notion of sustainable forest management appears to primarily focus on logging for timber, whereas conversion of forests to agricultural land is the main driving force of global deforestation. This does not seem to be adequately reflected.

- **Target 15.3** requires by 2020 to “combat desertification, and restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land-degradation neutral world”. The target follows a similar logic to 15.2 and makes for an ambitious target, as it echoes the corresponding Zero Net Land Degradation initiative under the UN Convention to Combat Desertification, even with a more ambitious timeline (by 2020, as opposed to by 2030). However, it fails to specify how the target’s objectives might be achieved.

- **Target 15.4** requires by 2030 to “ensure the conservation of mountain ecosystems, including their biodiversity, to enhance their capacity to provide benefits which are essential for sustainable development”, and is thus an explicit conservation target. It is unclear why sustainable development is highlighted here because other ecosystems, too, provide a range of services for society that have relevance for local livelihoods, and for economic development and human well-being. The target’s main contribution may be to add mountain ecosystems to the sustainable development agenda, but it remains vague as to what ends and by which means.

- **Target 15.5** requires to “take urgent and significant action to reduce degradation of natural habitat, halt the loss of biodiversity, and by 2020 protect and prevent the extinction of threatened species”. It thus highlights more directly the protection of specific species rather than their sustainable use, but remains unspecific about measurable ambitions. Crucially, it fails to address the drivers that are underlying the trends it seeks to halt.

- **Target 15.6** requires to “ensure fair and equitable sharing of the benefits arising from the utilization of genetic resources, and promote appropriate access to genetic resources”. Again, this needs to be read against the backdrop of the CBD, the Access and Benefit Sharing (ABS) agreements of which have hardly been commensurate to solving the underlying distributive challenges. The target thus may help to prioritize the issue, but in itself offers nothing specific to overcoming the challenges. Moreover, it perpetuates the CBD’s narrow understanding of ABS as relating to genetic resources.

- **Target 15.7** requires to “take urgent action to end poaching and trafficking of protected species of flora and fauna, and address both demand and supply of illegal
Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

wildlife products”. Again, “urgent action” remains unspecific and does not actually guide operationalisation. It is thus not ambitious.

- **Target 15.8** requires by 2020 to “introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems, and control or eradicate the priority species”. The target seems important in relation to the stability of ecosystems and to halting the loss of biodiversity, but again is unspecific and hardly ambitious.

- **Target 15.9** requires by 2020 to “integrate ecosystems and biodiversity values into national and local planning, development processes and poverty reduction strategies, and accounts”. This is an important target, the pursuit of which would reach beyond national governments, as it would also apply to development activities and investments from donor countries and the private sector, especially with regard to infrastructure and agriculture. It may thus be considered ambitious because of its scope. At the same time, it narrowly subscribes to a monetarisation and commodification of nature, which is highly ambivalent.

**Means of implementation**

- **Target 15.a** requires to “mobilize and significantly increase from all sources financial resources to conserve and sustainably use biodiversity and ecosystems”. Financial means are pertinent to implement measures and to compensate developing countries for restraint in the exploitation of natural resources and the concurrent conservation of ecosystem services, especially with a view to carbon sinks and biodiversity hotspots. The target as such should go without saying, but to be considered ambitious it would need to be spelt out much more specifically.

- **Target 15.b** requires to “mobilize significantly resources from all sources and at all levels to finance sustainable forest management, and provide adequate incentives to developing countries to advance sustainable forest management, including for conservation and reforestation”. Thus, the target follows Target 15.a but with a dedicated view on forests. Again, to be considered ambitious, the target would need to be spelt out much more specifically. In this vague and aggregated form, it might as well be merged with Target 15.a.

- **Target 15.c** requires to “enhance global support to efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities”. This is adequately focussed, as it addresses an important driver of illegal exploitation of biodiversity. Yet, it fails to address the control of trade in illegal trade with pertinent products and commensurate capacities in law enforcement. Without such means, poaching and trafficking are bound to remain profitable, even where alternative livelihood opportunities exist.

**Recommendations**

The targets under goal 15 address important issues that are essential prerequisites for sustainable development. The ambition level is generally high, to the extent that most targets relate to a 2020 or 2030 timeline in view of considerable challenges. At the same
time, they resort to laudable, yet vague, calls to “enhance”, to “take urgent action” or to simply “introduce measures” without adequate specification, which by and large lowers ambition levels. Moreover, the elaborate differentiation of targets regarding different types of terrestrial ecosystems amounts to a rather convoluted goal, even as it is technically appropriate. It would thus be an obvious recommendation to integrate related targets to make for a more concise goal. Preferably, however, the targets should be specified further with regard to the action or measures that are to be taken and, not least, with regard to how they may be quantified and measured.

This applies in particular to the targets addressing means of implementation. Targets 15.a and 15.b express a strong focus on mobilisation of finance, but without specification this is a moot point. Moreover, it ignores that the provision of resources alone will not achieve the targets. Sustainable land use calls for capacity development, especially with a view to adequate legislation and regulation, monitoring capacities and law enforcement, as well as for livelihoods that are suitable to the sustainable use of land-based resources, notably ecosystem services and biodiversity. For instance, Target 15.7 should directly address the import of illegal wildlife products rather than hoping to end poaching using unspecified “urgent action”. Likewise, targets addressing deforestation, such as Target 15.2 or Target 15.b, should focus more explicitly on underlying drivers of land conversion, including by identifying prospective trade-offs with a view to sustainable agriculture under SDG 2 (“End hunger, achieve food security and improved nutrition, and promote sustainable agriculture”). Results-based finance for avoiding deforestation may be better suited to serve the targets’ purpose than resource mobilisation for sustainable forest management in general.

As with other goals, the targets under goal 15, too, could be more explicit regarding interdependencies and interlinkages. This could help to indirectly raise the level of ambition across goals through highlighting and co-benefits, notably with regard to SDG 2 (e.g. land footprint), SDG 6 (e.g. water storage), SDG 12 (e.g. drivers of land use change) and SDG 13 (e.g. carbon sinks).

Ultimately, goal 15 and its targets should at least be suitable enough to be harnessed in order to increase ambition and to boost effective implementation of a host of multilateral agreements that address terrestrial ecosystems and biodiversity, notably including the CBD and its Aichi Targets, the UN Convention to Combat Desertification, the Ramsar Convention on Wetlands of International Importance, the Washington Convention on international trade in endangered species (CITES) and further land-related mechanisms and instruments such as REDD+ under the UNFCCC, and the FAO’s voluntary guidelines on land tenure.
Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Charlotte Fiedler with Mark Furness, Jörn Grävingholt and Julia Leininger*

General assessment

SDG 16 aims to incorporate a call for good governance (understood as accountable, inclusive and participatory institutions and decision-making) as well as just and peaceful societies into the post-2015 development agenda. By including SDG 16, the OWG acknowledged that global sustainable development is not possible without progress in the realms of good governance and peace – in the MDGs, any reference to these issues was glaringly absent. Indeed, it is difficult to imagine how the other SDGs should otherwise be achieved. Ending hunger, increasing living standards or strengthening environmental protection in countries ridden by conflict is virtually impossible. On the contrary, conflict destroys lives, livelihoods and economic well-being. Similarly, responsive, accountable and capable state institutions are necessary to promote functioning health or education systems, for example.

At the same time, SDG 16 is not only an essential means of implementation for many other SDGs but an important end in itself, of course. Recognising it as such also means acknowledging the fact that good governance is essentially a political issue. This is why it is important not to reduce questions about how to improve governance for sustainable development to the technical level of the effectiveness and efficiency of institutions. Fragile and conflicted-affected countries and their development partners underlined this view when they agreed that “legitimate politics” would be one of the five essential Peacebuilding and Statebuilding Goals in the 2011 New Deal for Engagement in Fragile States.

Overall, Goal 16 needs to be an integral part of the post-2015 development agenda. In its current form, however, SDG 16 suffers from several shortcomings, which risk making it meaningless. Stakeholders agreed that the SDGs would be action-oriented, concise and easy to communicate. Goal 16 and its targets barely reflect any of these criteria.

First, Goal 16 is neither concise nor easy to communicate. The SDGs comprise a global agenda that nearly all countries of the world will agree on, and the goals should be inspiring. Instead, SDG 16 and its targets lack a clear narrative that is focussed on the goal’s core issues (peace and good governance) and does not spell out how these could be achieved. The goal itself is formulated in a complicated and long-winded manner, which is compounded by the large number of confusing targets. It is not easy to understand either all 12 targets’ connection to the goal, or in some cases their relationship with one another. For example, several of the targets are closely related to the two main topics: governance (e.g. ensuring rule-of-law, political freedoms, inclusive institutions and reducing corruption) and peace (e.g. reduction and prevention of violence and arms-flows). However, other elements seem quite surprising. Although there is no doubt that combating organised crime, illicit financial flows or providing birth registration is important for development and for peace,

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
these are secondary to the overarching importance of building functioning, inclusive public institutions. Without these, lasting progress on any of the more specific targets will be unattainable. The same goes for “broadening the participation of developing countries in the institutions of global governance”. Again, these issues are important, but concentrating on a few, core targets would make Goal 16 considerably more concise and easier to understand.

Second, the targets of Goal 16 show either too much ambition or none at all. Some are formulated so vaguely and broadly that it is practically impossible to not reach them, such as Target 16.3 (“promote the rule of law”) or Target 16.a (“strengthen relevant national institutions [...] for preventing violence”). Other targets set the bar much too high. Target 16.7, for example, obliges countries to “ensure responsive, inclusive, participatory and representative decision-making at all levels”. Target 16.2 is to end all types of violence against children and Target 16.3 requires governments to “ensure equal access to justice for all”. Although all this would, of course, be highly desirable, it seems almost impossible to reach all these targets in any country, thereby making the targets redundant and discouraging well-intentioned efforts from the beginning. A reformulation of the targets is therefore necessary to prevent SDG 16 from becoming irrelevant in practical terms.

Operationalisation

It is important to keep in mind that SDG 16 tackles issues that are notoriously difficult – if not impossible – to measure. Measurability should therefore not be the main criteria against which SDG 16 and its targets should be judged. If a consensus on the content of the targets can be found, indicators (which will be imperfect by nature) can be identified. The current discussions should not lead to an exclusion of important but harder-to-measure targets in favour of more indirect but easily measurable ones. First and foremost, there is a need to reorder, reduce and refocus the content of SDG 16’s targets to make the whole goal concise.

SDG 16 includes ten targets and two suggestions for means of implementation. Targets 16.1, 16.2 and 16.4 are on peace (reduction of violence, illicit financial and arms flows, and organised crime). Targets 16.3 and 16.5 through 16.10 call for improvements in governance (e.g. rule of law and access to justice; government effectiveness and accountability; access to information; and protection of fundamental freedoms).

- **Target 16.1** requires a reduction “of violence and related death rates everywhere”. This should be one of SDG 16’s key targets. However, it requires further specification – in particular how much reduction, and compared to what – as well as a timeframe.

  The SDSN proposes two indicators to measure the target: Indicator 88 is the number of “violent injuries and deaths per 100,000 population” and Indicator 89 counts “refugees and internal displacement caused by conflict and violence”. Both are well-established, existing indicators with which Target 16.1 could be measured, thereby also reducing the burden of data collection.

- **Target 16.2** is to “end abuse, exploitation, trafficking and all forms of violence and torture against children”. The goal seems overly ambitious (end all forms of violence), requires a timeframe as well as specification of its core concepts (e.g. all
forms of violence). Moreover, trafficking is a major problem not only for children. If the topic is to be addressed, it should include all human trafficking.

The SDSN has not proposed an indicator to measure this target. We agree with this, because no single indicator could cover all forms of violence described in this target.

- **Target 16.3** is to “promote the rule of law at the national and international levels, and ensure equal access to justice for all”. This goal is formulated so vaguely and broadly that it is practically impossible not to reach. A specification and timeframe are necessary to make this important target measurable.

  The SDSN has not proposed an indicator to measure this target.

- **Target 16.4** is to “reduce illicit financial and arms flows, strengthen recovery and return of stolen assets, and combat all forms of organized crime” by 2030. Although reducing arms flows should be a key target, the other components do not directly link to the overall goal. It has a timeframe but lacks a definition for several of the terms used and a benchmark for measuring progress.

  The SDSN has proposed the “assets and liabilities of BIS reporting banks in international tax havens (as per OECD definition), by country (US$)” as an indicator (No. 90). This may be a useful proxy for the amount of illicit financial flows, but it does not measure the rest of the target: illicit arms flows, recovery and return of stolen assets and the significance of organised crime. Also, it is hard to imagine that all countries will report correctly on this indicator.

- **Target 16.5** is to “substantially reduce corruption and bribery in all its forms”. This goal is insufficiently operationalised; in particular, it requires a benchmark and timeframe. In addition, it is conceptually confusing because bribery is one type of corruption.

  The SDSN proposes the Transparency International Corruption Perception Index as an indicator (No. 94), which can indeed be used for this purpose due to the lack of alternative indicators.

- **Target 16.6** is to “develop effective, accountable and transparent institutions at all levels”. This goal is a key aspect of SDG 16. However, it is too vaguely expressed. Substantial specification (Which type of institutions? What different levels?) as well as a timeframe are necessary to make it concise and measurable.

  The SDSN proposes that a new index be constructed that measures if and how a country reports on payments made to governments under resource contracts (Indicator 91). Of course, such an index would only cover a very small segment of Target 16.6. In particular, it would exclude “effectiveness” and “accountability”, the two main issues of this target.

- **Target 16.7** is to “ensure responsive, inclusive, participatory and representative decision-making at all levels”. It is another very broad and vague target, which should be a key component of SDG 16. Substantial specification, benchmarks and timeframes would be necessary to make this target measurable.
The SDSN has not proposed an indicator to measure this target. A set of indicators to measure Targets 16.6 and 16.7 might be created.

- **Target 16.8** is to “broaden and strengthen the participation of developing countries in the institutions of global governance”. Apart from lacking a clear connection to the overall goal, this target also needs specification (Which institutions? What exactly is meant by participation?).

  The SDSN does not propose any indicator for the target.

- **Target 16.9** is to “provide legal identity for all including birth registration” by 2030. Although this target is much better specified than most other targets under SDG 16, its direct connection to Goal 16 is unclear.

  The SDSN proposes to measure the target by the “percentage of children under age 5 whose birth is registered with a civil authority”. The indicator makes sense for the target. The question is whether data are available for all countries.

- **Target 16.10** is to “ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements”. This is certainly an important aspect of good governance and a key issue for human well-being. But it also lacks specification, operationalisation and a timeframe.

  The SDSN proposes to measure the target by the “existence and implementation of a national law and/or constitutional guarantee on the right to information” (Indicator 93). This indicator measures just a small aspect of the target. In addition, it is unclear how the implementation of the right to information is meant to be measured and how objective information on the necessary data is meant to be collected.

**Means of implementation**

- **Target 16.a** is to “strengthen relevant national institutions, including through international cooperation, for building capacities at all levels, in particular in developing countries, for preventing violence and combating terrorism and crime”. The way security concerns, such as organised crime and terrorism, appear as the sole justification for international support for strengthening national institutions inevitably fuels suspicions about the self-serving motivations of rich countries to provide such support. In its current wording, Target 16.a risks undermining SDG 16, as some might read it as a justification for reducing the promotion of peaceful and just societies to anti-terrorism operations.

- **Target 16.b** is to “promote and enforce non-discriminatory laws and policies”. It is a bit unclear whether this target is a means or a result of implementation. Additionally, it is formulated too vaguely to inform clear policies and action by the international community.

**Recommendations**

It is important to make SDG 16 concise, easy to communicate and action-oriented. Admittedly, it will not be easy to find a compromise among all UN member states on the
Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

highly politically sensitive topics dealt with under the goal: peace and good governance. A certain degree of “blurriness” of Goal 16 and its targets will most likely have to be accepted for the sake of making it possible at all. However, this should not come at the cost of irrelevance by formulating the goal in an overly distant level of abstraction.

Overall, we recommend (i) to keep the goal in the agenda, (ii) to shorten its title (for example, to “Promote inclusive and accountable institutions for peaceful and just societies”), (iii) to reduce the number of targets – thereby focussing on the core of the goal, namely peace and better political governance, (iv) to build a narrative into the goal, for example, by reordering the targets, starting with Targets 16.1, 16.6, 16.7 and 16.3, and (v) to keep in mind that SDG 16 tackles issues that are notoriously difficult to measure.
Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

Kathrin Berensmann, Clara Brandi, Heiner Janus, Niels Keijzer and Silke Weinlich*

General assessment

The goal is about strengthening the means of implementation and revitalize the global partnership for sustainable development. As its title indicates, the 17th and last SDG is presented as a single goal but pursues multiple aims. First of all, the proposed goal seeks to set overall ambitions and framework conditions for the means to realise the post-2015 agenda. It rightly starts from the assumption that without a new commitment for a global partnership that takes on responsibility for realising the whole agenda, all efforts will be in vain. Secondly, the proposed goal seeks to “revitalise” the eighth MDG, which it reformulates as the “global partnership for sustainable development”. These two aims inspired proposed targets that are captured under five headings – finance, technology, capacity-building, trade and systemic issues.

Goal 17 mostly focusses on the different responsibilities and contributions of governmental actors, whereas private actors are only mentioned in the context of multi-stakeholder partnerships. This overall focus on governmental actors is justified, but at the same time the UN Secretary-General’s synthesis report acknowledges that private actors need to play an increasing role in implementing development goals. Among governments, the current formulation of targets still applies outdated categories of North and South. This should be replaced by a more differentiated categorisation of different degrees of capacities for contributing to means of implementation – for instance, the group of emerging countries should be addressed more explicitly.

Operationalisation

The G-77 successfully negotiated the inclusion of means of implementation under each individual goal as well as a standalone goal, but this came at the cost of concretely formulated commitments. None of the 19 targets indicate a clear and unambiguous level of ambition; instead they rely on verbs such as “enhancing”, “promoting” and “increasing”. This is in contrast to the targets proposed under the 16 other goals, many of which propose either absolute or relative quantitative targets to be achieved. Two reasons explain this: (1) discussions on means of implementation touch upon the core of discussions on common but differentiated responsibilities, and were thus left by the OWG to the real intergovernmental negotiations; and (2) the UN conference on Financing for Development (FFD) in Addis in July 2015. The suggested targets are of rather heterogeneous nature and often suffer from a lack of result-orientation. We analyse them with the objective of identifying key considerations for the ongoing negotiations. Where relevant, reference is made to the indicators, as proposed by the SDSN.

* The views presented in this chapter do not necessarily represent the views of all authors nor the views of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) as a whole.
Finance

- **Target 17.1**: The target requires to “strengthen domestic resource mobilization, including through international support to developing countries to improve domestic capacity for tax and other revenue collection”. While the remaining Targets 17.2 through 17.5, under the heading of finance, focus on ensuring the financial contribution of developed countries in developing countries, this target requires strengthening domestic resource mobilisation in developing countries. In this regard, the target makes an important contribution, yet it needs to be much more specific how, and by which means, developing countries are to be supported in this endeavour.

- **Target 17.2**: The target requires “developed countries to implement fully their ODA commitments, including to provide 0.7% of GNI in ODA to developing countries of which 0.15-0.20% to least-developed countries”. Target 17.2 thus reflects a major contribution that richer countries can make to achieving the SDGs. Although it is an important inclusion, further improvements are possible. For instance, the UN Secretary-General’s synthesis report argues that “any effort to modernize Official Development Assistance (ODA) and measures of development finance should be considered in an open and transparent forum with the widest possible participation of donor and recipient countries and other relevant stakeholders.” This call has been ignored by the members of the OECD, who on December 16 agreed to reforms on the definition of ODA without any direct inputs from recipient countries. OECD members are advised to change this practice in the run-up to the FFD conference in Ethiopia and thoroughly involve developing countries in preparing any further changes, as this is the only way to ensuring sufficient legitimacy and credibility for a broad discussion on means of implementation beyond ODA. Also, the need for identifying financial resources beyond ODA has become much stronger due to the broad scope and public good character of many of the SDGs. However, in line with finishing an unfinished agenda, the target to implement existing ODA commitments, including the 0.7 per cent goal, should be kept at any cost, be more specific and demand progressive ODA action plans from industrialised countries. Potential further improvements would include that 0.15-0.50 per cent of ODA should go to LDCs. Although those countries are most dependent on ODA, they receive declining shares of ODA, a trend that should urgently be reversed. Furthermore, climate finance should be specifically marked and tracked in order to assure that it is supplementary to the other parts of ODA.

- **Target 17.3** requires to “mobilize additional financial resources for developing countries from multiple sources”. The target is extremely vague. The unspecific formulation “from multiple sources” seems to allude to the fact that private actors need to play an increasing role in implementing the SDGs, as acknowledged, for instance, by the UN Secretary-General’s synthesis report. In its current form, however, the target is much too vague to be of any value.

- **Target 17.4** requires to “assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries (HIPC) to reduce debt distress”. Supporting developing countries to ensure long-term debt sustainability is an important issue under Goal 17.
Although coordinated policies seeking to advance debt financing, debt relief and debt restructuring assume a crucial role in achieving long-term debt sustainability, it remains open as to how this should be operationalised.

Whereas the SDSN suggested under the category “Complementary National indicators” that an indicator for debt sustainability will be elaborated, it is definitely not sufficient to only develop national indicators for debt sustainability. In general, debt sustainability is a prerequisite for sustainable development; however, it is not mentioned in other targets. First, it would be important to apply the existing instruments of the global debt governance system adequately and comprehensively, in particular increasing the outreach of creditors and debtors deploying such tools as the “Principles for Responsible Sovereign Lending and Borrowing” of the United Nations Conference on Trade and Development, or the International Financial Institutions’ debt monitoring and assessment and debt limits frameworks. Second, for reducing the social and economic costs of ad hoc debt restructurings, new instruments for restructuring sovereign debt need to be created and established, in particular an insolvency procedure for sovereign states.

- **Target 17.5** requires to “adopt and implement investment promotion regimes for LDCs”. The objective of the target that is based on a decision in the Istanbul Programme of Action, i.e. to attract foreign direct investment (FDI) in LDCs, is an important one. However, the target is very vague: What are the ways and means to attract FDI in LDCs? Which mechanisms need to be adopted by LDCs and other stakeholders? Thus, the target is, in its current form, too unspecific to be meaningful.

Technology

- **Target 17.6** requires to “enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation, and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, particularly at UN level, and through a global technology facilitation mechanism when agreed”. The reference to South-South cooperation (SSC) is insufficiently operationalised, as it does not directly mention the providers of SSC. This leaves the question open of how “knowledge sharing” and “improved coordination” can be achieved. Also, there is no mention of the lack of systematic data and evidence on the impact of SSC. A main improvement would be a stand-alone target for SSC. SSC would still be seen as a complement to ODA. Accepting the different historical and domestic contexts of SSC, as well as the principle of common but differentiated responsibilities, Southern providers would take a more visible role in the international framework of providing the means of implementation for the new agenda. They could be called on to engage in enhanced knowledge-sharing within a common global framework supported by the UN. Further, to enable the accountability process and ensure the realisation of the post-2015 agenda, SSC providers should be called on to improve the transparency of concrete activities under the label of SSC.

- **Target 17.7** requires to “promote development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed”. There is
considerably overlap with SDG 9 (“Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”), and in particular with Target 9.4 (“by 2030 upgrade infrastructure and retrofit industries to make them sustainable, with increased resource use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, all countries taking action in accordance with their respective capabilities”). The target should therefore be reallocated to SDG 9. This way, the omission of SDG 9 to account for the responsibility of developed countries in transferring, disseminating and diffusing environmentally sound technologies could also be corrected.

- **Target 17.8** requires to “fully operationalize the Technology Bank and STI (Science, Technology and Innovation) capacity building mechanism for LDCs by 2017, and enhance the use of enabling technologies in particular ICT”. Again, there is considerable overlap with SDG 9 (“Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”), and in particular with Target 9.1 (“develop quality, reliable, sustainable and resilient infrastructure [… ]”) and Target 9.c (“significantly increase access to ICT and strive to provide universal and affordable access to internet in LDCs by 2020”). The target should therefore be moved to SDG 9 and included in Target 9.1.

**Capacity-building**

- **Target 17.9** requires to “enhance international support for implementing effective and targeted capacity building in developing countries to support national plans to implement all sustainable development goals, including through North-South, South-South, and triangular cooperation”. Although it is seen as a key means of implementation for post-2015, it is currently not possible to monitor whether such enhanced support (which can imply both “more” and “better” support) is provided: (1) developed country capacity-building support through ODA is not disaggregated but reported in bulk as part of “technical cooperation” expenditure (which pursues a multitude of goals and purposes); and (2) there is no overview of contributions to capacity-building through SSC and no mention of the lack of systematic data and evidence on the impact of SSC. Beyond the difficulty of quantifying and monitoring capacity-building support, the target is limited by relating that capacity-building support to national SDG implementation plans. As per the Poverty Reduction Strategy Papers experience, there is a risk that national plans will be largely driven by expatriate input through capacity-building, as developing countries consider them a conditionality to access ODA. Furthermore, as already suggested in the recommendations for Target 17.6, a main improvement would be a stand-alone target for SSC. In order to make this target operationally relevant, there is a strong need to concretise the commitments to capacity-building by means of better clarifying what the support should seek out to achieve and how it should best be provided. In addition, effective and sustainable capacity-building support follows beneficiaries’ endogenous change processes. Therefore, the target should not “prescribe” the national plans as being the target of capacity-building support, as this risks providing ineffective supply-driven forms of support.
Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

Trade

Trade rules can – and should – not only provide an “enabling environment” for the realisation of the post-2015 development agenda, but also contribute to meeting specific development goals such as eradicating poverty and promoting inclusive and sustainable growth. With a view to the currently proposed trade-related targets, there are complementarities to other goals and targets, above all with a view to increasing Aid for Trade (Target 8.a) and the reduction of subsidies, for example for agricultural exports (Target 2.b), fossil fuels (Target 12.c) and fisheries (Target 14.6). At the same time, there are potential trade-offs between the WTO TRIPS (Trade-Related aspects of Intellectual Property Rights) Agreement and access to affordable, essential medicines and vaccines (Target 3.b).

- **Target 17.10** requires to “promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the WTO including through the conclusion of negotiations within its Doha Development Agenda”. In comparison to the MDGs, Target 17.10 makes an explicit reference to the importance of concluding the Doha Round and the significance of a multilateral trading system. Target 17.10 is less easily operationalisable than the other two targets. However, the recommitment to the multilateral trading system is important, as it strengthens the normative basis on which the WTO is grounded, recognising its role as a global public good and its contribution to good economic governance. At the same time, it can be regarded as a problematic gap that the mega-regionals and their potentially problematic implications for the future of the trading system are ignored.

- **Target 17.11** requires to “increase significantly the exports of developing countries, in particular with a view to doubling the LDC share of global exports by 2020.” Although this target is to be welcomed, the trade targets should move beyond merely setting goals for market access (see below). One key trade challenge is to help less-developed countries to integrate into the global value chains. The SDGs should thus not only replicate the current trade agenda but also aim to mirror a new agenda, above all through a stronger focus on rules and behind-the-border measures.

- **Target 17.12** requires to “realize timely implementation of duty-free, quota-free market access on a lasting basis for all least developed countries consistent with WTO decisions, including through ensuring that preferential rules of origin applicable to imports from LDCs are transparent and simple, and contribute to facilitating market access”. It is to be welcomed that the current proposal for SDGs not only entails targets for market access but also includes a target that underlines that transparent and simple Rules of Origin should apply for imports from poorer countries.

Systemic issues: Policy and institutional coherence

- **Target 17.13** requires to “enhance global macroeconomic stability including through policy coordination and policy coherence”. The target overlaps with SDG 10 (“Reduce inequality within and amongst countries”), in particular Target 10.5 (“Improve regulation and monitoring of global financial markets and institutions and strengthen implementation of such regulations”). Since regulating international financial markets and institutions is an important pillar of an enabling international
Global financial and macroeconomic stability is only addressed on an aggregate level. On the one hand, it is difficult to develop indicators for this subject. Choosing annual reports of various international financial institutions, particularly of the International Monetary Fund and the Bank for International Settlements – as suggested by SDSN Indicator 95 – are valuable indicators. On the other hand, mere reporting is a quite soft indicator, and not sufficient in the least for achieving global financial and macroeconomic stability. The SDSN should also develop indicators for global financial and macroeconomic stability. Other measures include, for example, an improved macroeconomic coordination founded on the G-20 Mutual Assessment Process, for which the International Monetary Fund, in cooperation with other international institutions, supplies technical analysis. In addition, better macroeconomic coordination at the regional level is needed.

**Target 17.14** requires to “enhance policy coherence for sustainable development”. However, there exists no consensual definition of “policy coherence”, and given the process-oriented and general nature of present working definitions, there is again little use beyond making a symbolic gesture to include this target. Instead, the SDGs should operationalise by making clear how and with what ambition UN members are to contribute to sustainable development through aligning and harmonising all areas of public policy. In particular, if specific Policy Coherence for Development-related targets are agreed upon under the respective goals in the post-2015 agenda, then general targets on Policy Coherence for Development are made redundant and can be omitted from the agenda. A general commitment could instead be referred to in the preamble as a key organising principle for realising the agenda.