



Indicators for Sustainable Development Goals

A report by the Leadership Council of the
Sustainable Development Solutions Network

*Preliminary Draft for Public Consultation (until 14 March)
Not for citation or attribution*

February 14, 2014

Guidance Note for the Public Consultation

About this report:

The SDSN Leadership Council published its report [*An Action Agenda for Sustainable Development*](#) in June 2013, following an extensive public consultation on an earlier draft. The *Action Agenda* maps out ten operational priorities for the post-2015 development agenda and proposes 10 goals with 30 associated targets (3 per goal).

This draft report presents an integrated framework of 100 indicators for the goals and targets proposed by the SDSN. Drawing on the work of the SDSN Thematic Groups, this indicator report proposes principles and responsibilities for SDG monitoring. Small changes and additions have been made to the goals and targets initially proposed in 2013 (highlighted in yellow). All indicators are at an early stage – some are in brackets. We are looking for comments and creativity to improve and complete them.

About the public consultation:

The public consultation will run from 14 February to 14 March 2014. Please use the [comment form](#) and submit your comments via email to info@unsdsn.org. In view of the expected number of comments we may not be able to respond to individual comments received.

Please focus your comments on the proposed indicators (the goals and targets have already undergone an extensive consultation). We propose to keep the total number of core indicators to no more than 100, so any addition of new indicators needs to be matched by cuts elsewhere.

Following the end of the public consultation period, we will make all comments publicly available on our website, unless the submitting organization or individual requests that the submission not be made public. As with the Action Agenda, we will also publish a [brief synthesis](#) of the comments received. The SDSN reserves the right not to post comments that are inappropriate for posting.

We also encourage readers to discuss the report on Twitter, referencing **#indicators2015**, although the twitter feed is not a substitute for sending in written comments via email.

About the SDSN:

Commissioned by UN Secretary-General Ban Ki-moon, the Sustainable Development Solutions Network (SDSN) mobilizes scientific and technical expertise from academia, civil society, and the private sector in support of sustainable development problem solving at local, national, and global scales. More information on the SDSN is available at www.unsdsn.org.

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1 **Designing Sustainable Development Goals, 2 Targets, and Indicators**

3
4 The Leadership Council of the Sustainable Development Solutions Network (SDSN)
5 launched the *Action Agenda for Sustainable Development* on 6 June 2013.¹ The report
6 maps out operational priorities for the post-2015 development agenda. It proposes 10
7 goals and 30 targets that might replace the Millennium Development Goals after their
8 expiration in late 2015. Since then, the Thematic Groups of the SDSN have begun to devise
9 an indicator framework for the post-2015 goal framework, which is described in this
10 report.

11
12 This report outlines a possible indicator framework to accompany the Sustainable
13 Development Goals (SDGs) and targets. The report is organized as follows: The main
14 report outlines the rationale and criteria for indicators, including suggestions for how the
15 data might be collected. A first table summarizes the 100 proposed indicators. It is
16 followed by a second table that outlines how indicators for crosscutting thematic issues,
17 such as gender equality or sustainable consumption and production, are arranged across
18 the goals. Annex 1 outlines suggested principles for setting goals, targets, and indicators,
19 which will be made available as a stand-alone document. Annex 2 describes each Core
20 Indicator in detail, lists suggested Tier 2 indicators, and shows how indicators work across
21 goals. Finally, Annex 3 lists frequently asked questions that complement the FAQ in the
22 *Action Agenda*.

23
24 Before turning to the specifics of indicators for the SDGs, it is useful to make a few
25 overarching points. First, the suggestions in this report are in an early stage. We are
26 looking for comments and creativity to improve and complete them. Second, because of
27 the Millennium Development Goals (MDGs) process, the international public reporting on
28 poverty-related indicators tends to be more developed than on other social and
29 environmental indicators. In many cases, new indicators will have to be developed,
30 together with information gathering systems, to cover new priorities. This will require
31 major investments in national and international capacity to collect and synthesize data.

32
33 Third, in view of the novelty of many of these indicators, the SDSN proposes to work with
34 international institutions during 2014 to discuss the development, relevance, accuracy,
35 appropriateness, and realism of the recommended indicators. In some cases what we are
36 suggesting will not be possible to implement in a timely and accurate manner. In other
37 cases additional indicators may need to be considered. Decisions on what can actually be
38 measured should be advised by the relevant expert communities, with the advice and
39 leadership of the global institutions charged with oversight, measurement, standards, and
40 implementation of programs.

41
42 Fourth, the proposed indicator framework comprises a limited number of indicators to
43 track the broad agenda of sustainable development. The SDSN will work with the World

¹ Subsequently, minor revisions to the targets have been published on the SDSN website. The report is available at www.unsdsn.org/resources.

1 Business Council for Sustainable Development and other business organizations to
2 develop a set of performance metrics that businesses can use to operationalize the
3 indicator framework.

4
5 Fifth and finally, initiation and implementation of any new information system will take
6 time. Lead agencies should start preparing their information gathering systems as soon as
7 possible, in anticipation of the goals and indicators that will be adopted in September
8 2015. The first SDG report and review can thereby commence in the Economic and Social
9 Council (ECOSOC) in the summer of 2016. By 2018 at the latest, we would hope that the
10 international system, and notably the UN organizations and partner institutions (including
11 the OECD, World Bank, World Trade Organization, and others), would have in place an
12 accurate, meaningful, annual reporting system. We underscore that this will require
13 enhanced support to statistical offices and systems in many countries so that high-quality
14 data can be collected in a timely manner.
15

16 **SDG Indicators**

17 The purpose of SDG indicators is twofold. First, an indicator should be a *management tool*,
18 to help countries develop implementation and monitoring strategies for achieving the
19 SDGs and to monitor progress. Second, an indicator is a *report card*, to measure progress
20 towards achieving a target and ensure the accountability of governments to their citizens.
21 Where possible, objective quantitative metrics are used, but subjective and perception-
22 based indicators can also play an important role. Often, multiple indicators are used for
23 each target.

24
25 While there have been great improvements in data gathering, the MDG indicators have
26 not fully fulfilled their dual purpose because the data come with too great a time lag to be
27 useful in management and accountability. Often the MDG indicators arrive with a lag of 3
28 or more years, which is not useful for real-time management. Data from national
29 statistical systems and household surveys is often spotty and of poor quality.

30
31 International agencies rely in part on primary data produced by the statistical system of
32 each country. Involvement and cooperation between international agencies and National
33 Statistical Offices (NSOs) was also missed by the MDG process, and must be strengthened
34 for the SDGs. This will require:

- 35 • Investing in national statistical systems, household surveys, remote sensing, and
36 Big Data;
37 • Identifying areas where statistical standards are currently lacking and asking the
38 statistical community to develop them in the future;
39 • Thinking in terms of the measurement instruments that each country should have
40 in place (e.g. vital statistics, censuses, surveys, national accounts, administrative
41 records, Big Data); and
42 • Specifying the quality requirements (e.g. frequency of data-collection, timeliness
43 of releases, geographical detail, common set of variables available for cross-
44 classification purposes).

45
46 Ideally, the national SDG Indicators should operate on an annual cycle, which could follow
47 this schedule for example:
48

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1 (1) At the start of each new calendar year, one or more specialized agencies gather the
2 national data to complete the national accounts on that indicator no later than April 15
3 of the new year.

4
5 (2) The national tables are then forwarded to the international organization (or
6 organizations) tasked with preparing the Annual SDG Report. This agency (or agencies)
7 would have six weeks to compile and prepare the draft report of the preceding year's
8 data.

9
10 (3) The draft report would be presented at the UN to the Secretary General (SG) and the
11 President of the General Assembly (PGA) in early June, for a final review, and a cover
12 statement.

13
14 (4) The report would be prepared for publication by end-June to be available to the
15 ECOSOC ministerial meetings in July-August.

16
17 (5) In September-October, the report will be finalized with corrected and updated data,
18 and the final report posted online.

19
20 This approach is ambitious and will obviously push all countries and participating
21 organizations hard, but the goal will be to turn the SDG indicators into useful tools for
22 real-time national and sub-national management. This monitoring cycle will be
23 unattainable without dedicated financing to improve the statistical infrastructure and
24 capacity of each country. In its absence, we will have goals that cannot be used, and a
25 process without adequate results. In our ICT-connected world, the aim for real-time data
26 used for real-time management should be an essential and necessary component of the
27 SDG era.

28
29 In addition to national-level reporting of SDG indicators, data should also be collected and
30 reported sub-nationally (e.g. for cities and states/provinces). Ideally, the schedule for sub-
31 national reporting would track the international schedule for harmonized country
32 reporting.

33
34 As for the content, not the timing, of the indicators, we expand the criteria for the
35 selection of indicators proposed in the United Nations Development Group (UNDG)
36 handbook.² The SDG indicators:

- 37
- 38 1. Should provide relevant and robust measures of progress towards the targets
39 of the Sustainable Development Goals;
 - 40 2. Should be clear and straightforward to interpret and provide a basis for
41 international comparison;
 - 42 3. Should be broadly consistent with systems-based information, such as
43 systems of national accounts and systems of environmental-economic
44 accounting to ensure coherence of the indicators;
 - 45 4. Should be based to the greatest extent possible on international standards,
46 recommendations, and best practices;

² United Nations, (2003), *Indicators for Monitoring the Millennium Development Goals: Definitions, Rationale, Concepts, and Sources*, New York, NY: United Nations.

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- 1 5. Should be constructed from well-established data sources drawing on public
- 2 and private data, be quantifiable, and be consistent to enable measurement
- 3 over time;
- 4 6. Should allow, where relevant for disaggregation by (i) characteristics of the
- 5 individual or household (e.g. gender, age, income, disability, religion, race, or
- 6 ethnicity); (ii) economic activity³; and (iii) spatial disaggregation (e.g. by
- 7 metropolitan areas, urban and rural, or districts);
- 8 7. Should have a designated lead international organization or organizations to
- 9 be responsible for timely, high-quality national reporting of the indicator with
- 10 due consideration to cost effectiveness and lean reporting processes.

We recognize that in many cases, countries will augment the global list of indicators with their own national indicators. We strongly encourage this kind of “localization” or contextualization of the indicators, especially since many SDGs are inherently local in orientation.

In the first table below, we present 100 possible indicators to cover the 10 SDGs and 30 targets. We also identify the most likely lead organization or organizations for the specific indicator, as well as the current status of the indicator. In many cases, especially for poverty and economic indicators, the variables are already collected, e.g. as part of the MDG process. In some cases, however, the collection and reporting cycle is over several years (as with global poverty data). The SDSN will consult with relevant institutions during 2014 to determine the feasibility of an annual data cycle for each indicator. For most of the social, environmental, and governance indicators, however, the international system does not collect these indicators on a routine, harmonized, and international basis. Therefore, the international organizations would have to be equipped and supported to take on these new data challenges and responsibilities. As emphasized throughout, this will also require substantial investments in national statistical systems.

Since a very large number of indicators would be required to comprehensively track progress towards all targets, we propose that countries consider two sets of indicators. A first set of “Core Indicators” would be applicable to every country and track the most essential dimensions of the targets. A second set of “Tier 2” indicators would track issues that may be applicable to some countries only, such as indicators for neglected tropical diseases (NTDs), or that may give countries greater scope in applying complex concepts, such as inequality, to their specific needs. The Tier 2 indicators represent a menu of options for countries to choose from, though the list we include is far from exhaustive.

Core Indicators should be chosen with respect to:

- **MDG consistency:** Where possible, Core Indicators should be consistent with available MDG indicators to ensure continuity in data collection and analysis.
- **Universality:** Many (though not all) Core Indicators should be equally applicable in developed and developing countries.
- **Reliable data:** To allow for comparisons across time and countries, data for Core Indicators should be reliable, widely available with good coverage, and have short lag times (ideally one year) for data collection and processing.

³ For example, water use should be accounted for by economic activity using International Standard Industrial Classification of All Economic Activities ISIC.

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- 1
- **Broad consensus:** Core Indicators should be underpinned by a broad international
2 consensus on their measurement.
 - **Disaggregation:** Data for SDGs should be disaggregated, where relevant, by sex,
3 urban/rural, and other qualifiers to improve the tracking of progress. Preference
4 should therefore be given to indicators that lend themselves to such
5 disaggregation It is recommended that the disaggregation by age follows
6 established guidelines, for example, in the recommendations of the UN Statistics
7 Division.⁴
- 8

9

10 The final point before turning to the tables is that the SDSN is not recommending, at this
11 stage, detailed technical definitions of the indicators. That would be premature. We
12 recommend a public consultation, and further dialogue with international agencies as well
13 as national statistical offices that will likely be responsible for indicator collection and
14 reporting. In such a process, we fully expect that other indicators may be considered and
15 technical specifications be determined.

⁴ Principles and Recommendations for a Vital Statistics System (Revision 3) recommends distinguishing amongst the following groups at a minimum: under one year (infants), 1-4 years (pre-school age) 5-14 years (school age), 15-49 years (childbearing age), 15-64 years (working ages) and 65 years and older (elderly persons).

Table 1: Preliminary and Incomplete Suggestions for SDG Indicators

Goal and Target	Issue to measure	# ⁵	Potential and Illustrative Indicator	Potential lead agency or agencies (not an exclusive list)
GOAL 01: End Extreme Poverty including Hunger				
Target 01a. End extreme poverty, including absolute income poverty (\$1.25 or less per day).	Extreme income poverty	1	Proportion of population below \$1.25 (PPP) per day (MDG Indicator)	World Bank
	Extreme multi-dimensional poverty	2	[Proportion of population in extreme multidimensional poverty - indicator to be developed]	World Bank, UN Statistics Division
Target 01b. End hunger and achieve food security, appropriate nutrition, and zero child stunting. ⁶	Children with adequate caloric-protein intake	3	Prevalence of stunting in children under [5] years of age	WHO, UNICEF
	Population with adequate caloric-protein intake	4	Proportion of population below minimum level of dietary energy consumption (MDG Indicator)	FAO, WHO
	Population with adequate micronutrient intake	5	[Proportion of population with shortfalls of any one of the following essential micronutrients: iron, zinc, iodine, vitamin A, folate, and vitamin B12 – indicator to be developed]	FAO, WHO
Target 01c. Provide enhanced support for highly vulnerable	Impact of conflict and violence	6	Violent injuries and deaths per 100,000 population	UNODC, UNOCHA, WHO

⁵ Some indicators appear in multiple places, for example the indicator “Mobile broadband subscriptions per 100 inhabitants” appears under both goal 6 and 7. Such indicators only have one indicator number assigned, which may result in non-sequential numbering in this column.

⁶ Text highlighted in yellow denotes changes made to the Goals and Targets proposed by the SDSN in 2013.

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Goal and Target	Issue to measure	# ⁵	Potential and Illustrative Indicator	Potential lead agency or agencies (not an exclusive list)
states and Least Developed Countries, to address the structural challenges facing those countries, including violence and conflict.*	Impact of conflict and violence	7	Refugees and internal displacement caused by conflict and violence	UNHCR, OCHA
	Support to vulnerable countries	8	Percent of UN Emergency Appeals and funds for UN Peacebuilding Fund delivered	UNHCR, OCHA and UNDP
GOAL 02: Achieve Development within Planetary Boundaries				
Target 02a. Each country reaches at least the next income level and promotes decent work.	Economic development	9	GNI per capita (PPP, current US\$ Atlas method)	IMF, World Bank, UN Statistics Division
	Labor market	10	Share of informal employment in total employment	ILO
	Labor market	11	[Placeholder for index of decent work]	ILO
Target 02b. Countries report on their contribution to planetary boundaries and incorporate them, together with other environmental and social indicators, into expanded GDP measures and national accounts.*	Nitrogen and phosphorus fluxes	12	[Excessive loss of reactive nitrogen [and phosphorus] to the environment (kg/ha) – indicator to be developed]	[UNEP or other agency, TBD]
	Aerosol concentrations	13	Aerosol optical depth (AOD)	UNEP
	Release of ozone-depleting substances	14	Consumption of ozone-depleting substances (MDG Indicator)	UNEP Ozone Secretariat
Target 02c. Rapid voluntary reduction of fertility through the	Population dynamics	15	Total fertility rate	UN Population Division

* Targets marked with an asterisk need to be specified at country or sub-national level.

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Goal and Target	Issue to measure	# ⁵	Potential and Illustrative Indicator	Potential lead agency or agencies (not an exclusive list)
realization of sexual and reproductive health rights in countries with total fertility rates above [3] children per woman and a continuation of voluntary fertility reductions in countries where total fertility rates are above replacement level.*	Realization of sexual and reproductive health rights	16	Contraceptive prevalence rate (MDG Indicator)	UN Population Division and UNFPA
	Realization of sexual and reproductive health rights	17	Unmet need for family planning (MDG Indicator)	UN Population Division and UNFPA
GOAL 03: Ensure Effective Learning for All Children and Youth for Life and Livelihood				
Target 03a. All children under the age of 5 reach their developmental potential through access to quality early childhood development programs and policies.	Access to early childhood development programs (ECD)	18	Proportion of children receiving at least one year of a quality pre-primary education program	UNESCO, UNICEF, World Bank
	Access to early childhood development programs (ECD)	19	Early Child Development Index (ECDI)	UNICEF
Target 03b. All girls and boys receive quality primary and secondary education that focuses on a broad range of learning outcomes and on reducing the dropout rate to zero.	Primary schooling outcomes	20	Primary completion rates for girls and boys	UNESCO
	Primary schooling outcomes	21	[Proportion of girls and boys who master a broad range of foundational skills, including in literacy and mathematics by the end of the primary school cycle (based on credibly established national benchmarks)]	UNESCO
	Secondary schooling outcomes	22	Secondary completion rates for girls and boys	UNESCO
	Secondary schooling outcomes	23	[Proportion of girls and boys who achieve proficiency across a broad range of learning outcomes, including in reading and in mathematics by end of the secondary schooling cycle (based on credibly established national benchmarks)]	UNESCO

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Goal and Target	Issue to measure	# ⁵	Potential and Illustrative Indicator	Potential lead agency or agencies (not an exclusive list)
Target 03c. Ensure that all youth transition effectively into the labor market.*	Youth participation in the labor force	24	Percentage of young people not in education, training, or employment	ILO
	Investing in youth	25	Tertiary enrollment rates for girls and boys	UNESCO
GOAL 04: Achieve Gender Equality, Social Inclusion, and Human Rights				
Target 04a. Monitor and end discrimination and inequalities in public service delivery, the rule of law, access to justice, and participation in political and economic life on the basis of gender, ethnicity, religion, disability, national origin, and social or other status.	Birth registration	26	Percentage of children under age 5 whose birth is registered with a civil authority	UNICEF
	Compliance with UN Human Rights Treaties and Protocols	27	Compliance with recommendations from the Universal Periodic Review and UN Treaties	UN OHCHR
	Discrimination	28	Proportion of seats held by women and minorities in national parliament and/or sub-national elected office according to their respective share of the population (revised MDG Indicator)	Inter-Parliamentary Union (IPU)
	Compliance with ILO standards	29	Ratification and implementation of key ILO labor standards and compliance in law and practice	ILO
Target 04b. Reduce by half the proportion of households with incomes less than half of the national median income (relative poverty).	Inequality	30	Proportion of households with incomes below 50% of median income ("relative poverty")	UN Statistics Division, World Bank/OECD
	Inequality	31	Gini Coefficient	UN Statistics Division, World Bank/OECD
Target 04c. Prevent and eliminate violence against individuals, especially women and children.*	Violence against women	32	Rate of women subjected to violence in the last 12 months by an intimate partner	WHO, UN Statistics Division

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Goal and Target	Issue to measure	# ⁵	Potential and Illustrative Indicator	Potential lead agency or agencies (not an exclusive list)
Target 04c. Prevent and eliminate violence against individuals, especially women and children.*	Violence against women and access to justice	33	Percentage of referred cases of sexual and gender-based violence against women and children that are investigated and sentenced	UN Women
GOAL 05: Achieve Health and Wellbeing at all Ages				
Target 05a. Ensure universal coverage of quality healthcare, including the prevention and treatment of communicable and non-communicable diseases, sexual and reproductive health, family planning, routine immunization, and mental health, according the highest priority to primary health care.	Physical access to primary health care	34	[Percent of population with access to basic primary health services, including EmOC-Indicator to be developed]	WHO
	Financial access to health care	35	Out-of-pocket expenditure on health as a percentage of total expenditure on health	WHO
	Immunization coverage	36	Percent of children receiving full immunization as recommended by WHO	UNICEF, GAVI, WHO
	Mental health coverage (e.g. depression, mood disorders)	37	[Functioning programs of multi-sectoral mental health promotion and prevention in existence - Indicator to be developed]	WHO
Target 05b. End preventable deaths by reducing child mortality to [20] or fewer deaths per 1000 births, maternal mortality to [40] or fewer deaths per 100,000 live births, and mortality under 70 years of age from non-communicable diseases by at least 30 percent compared with the level in 2015.	Child health	38	Neonatal, infant, and under-five mortality rates (modified MDG Indicator)	WHO, UNICEF, UN Population Division
	Maternal deaths	39	Maternal mortality ratio (MDG Indicator) and rate	WHO, UN Population Division, UNICEF, World Bank
	Life expectancy	40	Healthy life expectancy at birth	WHO
	HIV/AIDS coverage	41	HIV prevalence, treatment rates, and mortality (modified MDG Indicator)	WHO, UNAIDS
	Malaria deaths	42	Incidence and death rates associated with malaria (MDG Indicator)	WHO

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Goal and Target	Issue to measure	# ⁵	Potential and Illustrative Indicator	Potential lead agency or agencies (not an exclusive list)
	TB deaths	43	Incidence, prevalence, and death rates associated with TB (MDG Indicator)	WHO
	Non-communicable diseases	44	Probability of dying between exact ages 30 and 70 from any of cardiovascular disease, cancer, diabetes, or chronic respiratory disease	WHO
Target 05c. Implement policies to promote and monitor healthy diets, physical activity and subjective wellbeing; reduce unhealthy behaviors such as tobacco use by [30%] and harmful use of alcohol by [20%].	Unhealthy behavior	45	Percent of population overweight and obese	WHO
	Healthy diets	46	Household Dietary Diversity Score	FAO
	Unhealthy behavior	47	Current use of any tobacco product (age-standardized rate)	WHO
	Unhealthy behavior	48	Harmful use of alcohol	WHO
	Subjective well-being (evaluative)	49	Evaluative Wellbeing and Positive Mood Affect	SDSN, Gallup, OECD
GOAL 06: Improve Agriculture Systems and Raise Rural Prosperity				
Target 06a. Ensure sustainable food production systems with high yields and high efficiency of water, soil nutrients, and energy; supporting nutritious diets with low food losses and waste.*	Staple crop yields	50	Crop yield gap (actual yield as % of attainable yield)	FAO with International Fertilizer Association (IFA)
	Sustainability of agriculture	51	Crop nitrogen use efficiency (%)	FAO with International Fertilizer Association (IFA)
	Water productivity	52	[Crop water productivity (tons of harvested product per unit irrigation water) – indicator to be developed]	FAO
	Food loss	53	[Share of agricultural produce loss and food waste (% of food production) – indicator to be developed]	FAO

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Goal and Target	Issue to measure	# ⁵	Potential and Illustrative Indicator	Potential lead agency or agencies (not an exclusive list)
Target 06b. Halt forest and wetland conversion to agriculture, protect soil resources, and ensure that farming systems are resilient to climate change and disasters.*	Conversion of land to agricultural and other uses	54	Annual change in forest area and land under cultivation (modified MDG Indicator)	FAO, UNEP
	Degradation of agricultural land	55	Annual change in degraded or desertified arable land (% or ha)	FAO, UNEP
	Impact of extreme climate events	56	Economic losses from disasters in rural areas, by climatic and non-climatic events (in US\$) [Indicator to be specified]	UNISDR, FAO, WHO
Target 06c. Ensure universal access in rural areas to basic resources and infrastructure services (land, water, sanitation, modern energy, transport, mobile and broadband communication, agricultural inputs, and advisory services).	Rural infrastructure and services	57	Percentage of rural population using basic drinking water (modified MDG Indicator)	WHO/UNICEF Joint Monitoring Programme (JMP)
	Rural infrastructure and services	58	Proportion of rural population using basic sanitation services (modified MDG Indicator)	WHO/UNICEF Joint Monitoring Programme (JMP)
	Rural infrastructure and services	59	Access to all-weather road (% access within [x] km distance to road)	World Bank
	Rural infrastructure and services	60	Mobile broadband subscriptions per 100 inhabitants in rural areas	ITU
	Rural infrastructure and services	61	[Access to drying, storage and processing facilities -- indicator to be developed]	FAO
	Rural infrastructure and services	62	[Share of farmers covered by agricultural extension or equivalent programs -- indicator to be developed]	FAO
GOAL 07: Empower Inclusive, Productive and Resilient Cities				
Target 07a. End extreme urban poverty, expand employment and productivity, and raise living	Urban poverty	63	Percentage of urban population with incomes below national extreme poverty line (adapted MDG Indicator)	World Bank, UN-Habitat

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Goal and Target	Issue to measure	# ⁵	Potential and Illustrative Indicator	Potential lead agency or agencies (not an exclusive list)
standards, especially in slums.*	Urban sustainable development	64	[Indicator on the deployment of a sustainable development strategy for each urban agglomeration above [250,000] to be developed]	World Bank, UN-Habitat
	Slum conditions	65	Proportion of urban population living in slums or informal settlements (MDG Indicator)	UN-Habitat, Global City Indicators Facility (GCIF)
Target 07b. Ensure universal access to a secure and affordable built environment and basic urban services including housing; water, sanitation and waste management; low-carbon energy and transport; and mobile and broadband communication.	Access to water	57	Percentage of urban population using basic drinking water (modified MDG Indicator)	WHO/UNICEF Joint Monitoring Programme (JMP)
	Access to sanitation	58	Percentage of urban population using basic sanitation (modified MDG Indicator)	WHO/UNICEF Joint Monitoring Programme (JMP)
	Solid waste collection	66	Proportion of urban households with weekly solid waste collection	UN-Habitat
	Access to transportation	67	Proportion of urban households with access to reliable public transportation	UN-Habitat
	Access to ICT	60	Mobile broadband subscriptions per 100 inhabitants in urban areas	ITU
Target 07c. Ensure safe air and water quality for all, and integrate reductions in greenhouse gas emissions, efficient land and resource use, and climate and disaster resilience into investments and standards.*	Air quality	68	Mean urban air pollution of particulate matter (PM10 and PM2.5)	UN-Habitat, UNEP, WHO
	Water quality and treatment	69	Percentage of wastewater flows treated to national standards, by domestic and industrial source	WHO/UNICEF Joint Monitoring Programme (JMP)
	Urban green space	70	Urban green space per capita	UN-Habitat

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Goal and Target	Issue to measure	# ⁵	Potential and Illustrative Indicator	Potential lead agency or agencies (not an exclusive list)
	Vulnerability to extreme climate events	56	Economic losses from disasters in urban areas, by climatic and non-climatic events (in US\$) [Indicator to be specified]	UNISDR, FAO, WHO
GOAL 08: Curb human induced climate change and ensure sustainable energy				
Target 08a: Decarbonize the energy system, ensure clean energy for all, and improve energy efficiency, with targets for 2020, 2030 and 2050.	Access to energy	71	Share of the population with access to modern cooking solutions (%)	Sustainable Energy for All, IEA, WHO
	Access to energy	72	Share of the population with access to reliable electricity (%)	Sustainable Energy for All, IEA, World Bank
	National deep decarbonization strategies	73	Availability 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	UNFCCC
	GHG emissions	74	Total energy and industry-related GHG emissions by gas and sector, expressed as production and demand-based emissions (tCO ₂ e)	UNFCCC, OECD
	GHG emission reduction measures	75	CO ₂ intensity of the power sector, and of new power generation capacity installed (gCO ₂ per kWh)	UNFCCC, IEA
	GHG emission reduction measures	76	CO ₂ intensity of the transport sector (gCO ₂ /vkm), and of new cars (gCO ₂ /pkm) and trucks (tCO ₂ /tkm)	UNFCCC, IEA

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Goal and Target	Issue to measure	# ⁵	Potential and Illustrative Indicator	Potential lead agency or agencies (not an exclusive list)
Target 08b: Reduce non-energy related emissions of greenhouse gases through improved practices in agriculture, forestry, waste management, and industry.	GHG emissions from land-use change	77	Net GHG emissions in the Agriculture, Forest and other Land Use (AFOLU) sector (tCO ₂ e)	UNFCCC
Target 08c: Adopt incentives, including pricing greenhouse gases emissions, to curb climate change and promote technology transfer to developing countries.	Incentives to reduce GHG emissions	78	Implicit incentives for low-carbon energy in the electricity sector (measured as US\$/MWh or US\$ per ton avoided CO ₂)	IEA, UNFCCC
GOAL 09: Secure Ecosystem Services and Biodiversity, and Ensure Good Management of Water, Oceans, Forests and Natural Resources				
Target 09a. Secure ecosystem services by adopting policies and legislation that address drivers of ecosystem degradation, and requiring individuals, businesses and governments to pay the social cost of pollution and use of environmental services.*	Oceans	79	Ocean Health Index (national index)	Ocean Health Index Partnership
	Biodiversity	80	Red List Index (by country and major species group)	IUCN
	Critical biome management	81	[Protected areas overlay with biodiversity (national level)]	UNEP-WCMC
	Forests	82	Area of forest under sustainable forest management as a percent of forest area	FAO, UNEP
Target 9b. Participate in and support regional and global arrangements to inventory, monitor, and protect ecosystem services and environmental commons of regional and global significance and curb trans-	Oceans	79	Ocean Health Index (regional index)	Ocean Health Index Partnership
	Sustainable Fisheries management	83	Proportion of fish stocks within safe biological limits (MDG Indicator)	FAO
	Biodiversity	80	Red List Index (for Internationally Traded Species)	IUCN, CITES

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Goal and Target	Issue to measure	# ⁵	Potential and Illustrative Indicator	Potential lead agency or agencies (not an exclusive list)
boundary environmental harms, with robust systems in place no later than 2020.	Critical biome management	81	Protected areas overlay with biodiversity (regional and global)	UNEP-WCMC
	Trans-boundary river-shed management	84	[Reporting of international river shed authorities on trans-boundary river-shed management - indicator to be developed]	UNEP, INBO, GEF
Target 09c. All governments and businesses commit to the sustainable, integrated, and transparent management of water, agricultural land, forests, fisheries, mining, and hydrocarbon resources to support inclusive economic development and the achievement of all SDGs.	Water resource management	85	Proportion of total water resources used (MDG Indicator)	FAO, UNEP
	Access to land	86	Access to land in rural areas index	IFAD, UNDP
	Business code of behavior	87	Publication of resource-based contracts	UN Global Compact, EITI, UNCTAD
	Good governance and business code of behavior	88	Publication of all payments made to governments under resource contracts	UN Global Compact, EITI, UNCTAD
GOAL 10: Transform Governance and Technologies for Sustainable Development				
Target 10a. Governments (national and local) and major companies support the SDGs, provide integrated reporting by 2020, and reform international rules to achieve the goals.	Integrated government reporting	89	Country implements and reports on System of Environmental-Economic Accounting (SEEA) accounts	UN Statistics Division
	Integrated business reporting	90	[Share of companies valued at more than [\$1 billion] that publish integrated reporting-- indicator to be developed]	Global Compact and/or WBCSD, IIRC
	Corruption	91	Perception of public sector corruption	Transparency International

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Goal and Target	Issue to measure	# ⁵	Potential and Illustrative Indicator	Potential lead agency or agencies (not an exclusive list)
	International rules and SDGs	92	Annual report by Bank for International Settlements (BIS), International Accounting Standards Board (IASB), International Financial Reporting Standards (IFRS), International Monetary Fund (IMF), World Intellectual Property Organization (WIPO), and World Trade Organization (WTO) [other organizations to be added] on the relationship between international rules and the SDGs	WTO, IMF, WIPO
	Use of tax havens	93	Assets and liabilities of BIS reporting banks in international tax havens (as per OECD definition), by country (US\$)	OECD
Target 10b. Adequate domestic and international public finance for ending extreme poverty, providing global public goods, capacity building, and transferring technologies, including 0.7 percent of GNI in ODA for all high-income countries, and an additional \$100 billion per year in official climate financing by 2020.	Domestic resource mobilization	94	Domestic revenues allocated to sustainable development as percent of GNI	IMF
	ODA and other grants	95	Official development assistance (ODA) and net private grants as percent of high-income country's GNI	OECD DAC, IMF
	Official climate finance	96	Official climate financing from developed countries that is incremental to ODA (in US\$)	OECD DAC, UNFCCC
	Pooled ODA and other grants	97	Percent of official development assistance (ODA), net private grants, and official climate finance channeled through priority pooled multilateral financing mechanisms	OECD DAC, World Bank
	Private finance	98	Private net flows for sustainable development at market rates as share of high-income country GNI	OECD DAC and to be determined
Target 10c. Accelerate adoption of new technologies for the SDGs.	Sustainable Technologies and ICT	99	[Placeholder for indicator on coverage of ICT and possibly other advanced technologies in key sectors]	ITU

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Goal and Target	Issue to measure	# ⁵	Potential and Illustrative Indicator	Potential lead agency or agencies (not an exclusive list)
	Technology Transfer	100	Researchers and technicians in R&D (per million people)	UNESCO, OECD

Table 2: Indicators for cross-cutting themes arranged by goals and targets

Many important issues, such as gender equality, health, sustainable consumption and production, or nutrition are tracked by indicators arranged under different goals. The table below summarizes the indicators for each “cross-cutting issue”. It describes only the indicators without explaining the cause-effect relationships with other sustainable development objectives. Such relationships are described in the [Action Agenda](#) and form the basis for the integrated framework of goals and targets proposed by the SDSN.

Issue covered by indicators	GOAL 01: End Extreme Poverty including Hunger	GOAL 02: Achieve Development within Planetary Boundaries	GOAL 03: Ensure Effective Learning for All Children and Youth for Life and Livelihood	GOAL 04: Achieve Gender Equality, Social Inclusion, and Human Rights	GOAL 05: Achieve Health and Wellbeing at all Ages	GOAL 06: Improve Agriculture Systems and Raise Rural Prosperity	GOAL 07: Empower Inclusive, Productive and Resilient Cities	GOAL 08: Curb human induced climate change and ensure sustainable energy	GOAL 09: Secure Biodiversity and Ensure Good Management of Water, Oceans, Forests and Other Natural Resources	GOAL 10: Transform Governance and Technologies for Sustainable Development
Beyond GDP - new measures for development		Contributions to planetary boundaries (12-14), integrated national accounts (cross-referenced indicator).			Happiness and subjective well-being (49).					Integrated government (SEEA) and business reporting (89,90).
Climate change adaptation and mitigation; disaster risk reduction		Greenhouse gas concentrations represent a planetary boundary (cross-referenced indicators under Target 2b).			Make agriculture resilient, track changes to land and land-use, measure economic losses to extreme climatic events and other disasters (50-52, 54-56).	Cities develop long-term sustainable development strategies (64) including disaster risk reduction, economic losses to extreme climatic events and other disasters (56).	Reduce greenhouse gas emissions, including through national deep decarbonization strategies (71-78), cross-reference means of implementation .	Ocean health index, Red List index, and water resources management track key climate change adaptation measures (79, 80, 85).	Provide means of implementation ; align international rules, business, and government reporting; and mobilize modern technologies (all).	
Food security and nutrition	Focus on ending hunger and stunting (3-5).				Improved diets (45, 46).	Sustainable increases in food production (50), food losses (53), degradation of agricultural land (55), extreme	Losses from extreme climatic events (56), access to water and sanitation improves nutritional			Provide means of implementation ; align international rules, business, and government

Issue covered by indicators	GOAL 01: End Extreme Poverty including Hunger	GOAL 02: Achieve Development within Planetary Boundaries	GOAL 03: Ensure Effective Learning for All Children and Youth for Life and Livelihood	GOAL 04: Achieve Gender Equality, Social Inclusion, and Human Rights	GOAL 05: Achieve Health and Wellbeing at all Ages	GOAL 06: Improve Agriculture Systems and Raise Rural Prosperity	GOAL 07: Empower Inclusive, Productive and Resilient Cities	GOAL 08: Curb human induced climate change and ensure sustainable energy	GOAL 09: Secure Biodiversity and Ensure Good Management of Water, Oceans, Forests and Other Natural Resources	GOAL 10: Transform Governance and Technologies for Sustainable Development
						climate events (56), access to water and sanitation (57, 58).	status (57, 58).			reporting; and mobilize modern technologies (all).
Gender equality	Disaggregation of poverty, hunger, violence indicators by gender (1-6).	Equal access to SRHR and family planning (16 and 17).	All girls have equal access to education at all levels (20, 22 and 25). Gender disaggregation of other education indicators.	Ending discrimination, ensuring equality and access to political life, ensuring women's safety and security (all).	Special attention to maternal health (34, 39), disaggregation by gender of other indicators.	Disaggregation by gender of key rural indicators (57-62).	Disaggregation by gender of key urban indicators (63, 65, 57, 58).	Gender disaggregation of access to electricity and modern cooking solutions (71, 72).	Secure rural land tenure, especially for women (86).	Provide means of implementation ; align international rules, business, and government reporting; and mobilize modern technologies (all).
Global partnership including financing for sustainable development	Enhanced support for vulnerable states from international partners (8).	Right to development for all countries (9).						Cross-reference to means of implementation under UNFCCC.	Need for regional management of ecosystems and natural resources, means of implementation under CBD (79-81, 83, 84).	Domestic resource mobilization (94), international rules, international public and private financing (91 - 98).
Governance				Birth registration, compliance with human rights treaties, discrimination, access to justice (26-29, 33).			Empower cities to develop and implement long-term sustainable development strategies (64).		Good government and corporate governance of natural resources (87 and 88), sound management of	Government and business reporting and transparency, corruption, tax havens, international rules (89-93).

Issue covered by indicators	GOAL 01: End Extreme Poverty including Hunger	GOAL 02: Achieve Development within Planetary Boundaries	GOAL 03: Ensure Effective Learning for All Children and Youth for Life and Livelihood	GOAL 04: Achieve Gender Equality, Social Inclusion, and Human Rights	GOAL 05: Achieve Health and Wellbeing at all Ages	GOAL 06: Improve Agriculture Systems and Raise Rural Prosperity	GOAL 07: Empower Inclusive, Productive and Resilient Cities	GOAL 08: Curb human induced climate change and ensure sustainable energy	GOAL 09: Secure Biodiversity and Ensure Good Management of Water, Oceans, Forests and Other Natural Resources	GOAL 10: Transform Governance and Technologies for Sustainable Development
									water resources (85) and national and regional ecosystems and biodiversity (all).	
Growth and employment		Economic growth, labor market (9-11).	Skills for life and livelihoods (18-23), youth unemployment and transition into labor market (24-25).			Sustainable increases in agriculture productivity increase economic growth and employment (50).	Sustainable urban development and growth (64).			Government and business reporting and transparency, corruption, finance, international rules, and modern technologies (all).
Health	Healthy lives are part of multi-dimensional poverty index (2), hunger and malnutrition are key health determinants (3-5).	Access to SRHR (15-17).	Early childhood development programs are key determinant of child health (18-19).	Birth registrations, violence against women (26, 32, 33).	Better health (all).	Access to sanitation and water are key health interventions (57, 58), end to open defecation.	Access to sanitation and water are key health interventions (57, 58).	Modern energy services are critical health intervention, e.g. to reduce lower respiratory infections (71, 72).		Provide means of implementation ; align international rules, business, and government reporting; and mobilize modern technologies for health (all).

Issue covered by indicators	GOAL 01: End Extreme Poverty including Hunger	GOAL 02: Achieve Development within Planetary Boundaries	GOAL 03: Ensure Effective Learning for All Children and Youth for Life and Livelihood	GOAL 04: Achieve Gender Equality, Social Inclusion, and Human Rights	GOAL 05: Achieve Health and Wellbeing at all Ages	GOAL 06: Improve Agriculture Systems and Raise Rural Prosperity	GOAL 07: Empower Inclusive, Productive and Resilient Cities	GOAL 08: Curb human induced climate change and ensure sustainable energy	GOAL 09: Secure Biodiversity and Ensure Good Management of Water, Oceans, Forests and Other Natural Resources	GOAL 10: Transform Governance and Technologies for Sustainable Development
Inequalities	Focus on extreme poverty, stunting, and hunger, i.e. the most vulnerable groups (1-5).	Decent work (10, 11).	Universal access to education to reduce inequalities and disaggregation by key dimensions (all).	Ending discrimination, ensuring income equality and access to political life for the most marginalized and vulnerable (26, 27, 28, 30, 31), disaggregation of all indicators.	Focus on physical and financial access to primary health care for the most marginalized and vulnerable (34, 35), disaggregation of all indicators.	Universal access to infrastructure and extension services (57-62), disaggregation of all indicators.	Urban poverty, slums, universal access to infrastructure and urban services (63, 65-67, 57, 58, 60), disaggregation of other indicators.	Ensuring energy access for all (71, 72).	Secure rural land tenure, including for indigenous peoples (86).	Provide means of implementation ; align international rules, business, and government reporting; and mobilize modern technologies (all).
Peace and security; support for vulnerable states	Impact of conflict and vulnerability (6 and 7). Some fragile states require enhanced support (8).			Violence, access to justice (32, 33).			Urban violence and crime (cross-referenced indicator).			Government reporting, international rules (89-98).
Science, technology, and innovation			Competencies in math, tertiary enrollment (21, 23, 25).			Broadband access (60), internet access.	Broadband access (60), internet access.			Mobilize modern technologies; provide means of implementation ; align international rules, business, and government reporting (all).

Issue covered by indicators	GOAL 01: End Extreme Poverty including Hunger	GOAL 02: Achieve Development within Planetary Boundaries	GOAL 03: Ensure Effective Learning for All Children and Youth for Life and Livelihood	GOAL 04: Achieve Gender Equality, Social Inclusion, and Human Rights	GOAL 05: Achieve Health and Wellbeing at all Ages	GOAL 06: Improve Agriculture Systems and Raise Rural Prosperity	GOAL 07: Empower Inclusive, Productive and Resilient Cities	GOAL 08: Curb human induced climate change and ensure sustainable energy	GOAL 09: Secure Biodiversity and Ensure Good Management of Water, Oceans, Forests and Other Natural Resources	GOAL 10: Transform Governance and Technologies for Sustainable Development
Sustainable consumption and production (SCP)		Key SCP dimensions addressed (12-14).			Healthy diets (45).	Reducing food waste, efficiency in agricultural inputs and sustainable agriculture (51, 52, 53).	Urban sustainable development strategy (64).	Improving access to sustainable energy and reducing GHG emission (all).	Ocean health, sustainable fisheries, sustainable forest management, biodiversity, business behavior, water resource management (all).	SEEA, Integrated business reporting (89, 90).
Sustainable energy for all	Multi-dimensional poverty includes lack of access to electricity and modern cooking solutions (2).	Greenhouse gas concentrations represent a planetary boundary (cross-referenced indicators under Target 2b).				Access to modern energy services in rural areas (cross-referenced indicators).	Access to modern energy services in urban areas (cross-referenced indicators).	Access to modern energy services, low-carbon energy, and energy efficiency (71-78).		Provide means of implementation ; align international rules, business, and government reporting; and mobilize modern technologies (all).
Sustainable land use, forests and other terrestrial ecosystems		Cross-referenced indicators from Target 6b.				Crop nitrogen use efficiency, crop water productivity, forest cover change, land degradation and desertification (51, 52, 54, 55).	Green space (70).	Reducing GHG emissions from land-use change (77).	Biodiversity, critical biome management, forests, trans-boundary watershed management, water resources, business behavior (80-82, 84-88).	Provide means of implementation ; align international rules, business, and government reporting; and mobilize modern technologies (all).

Issue covered by indicators	GOAL 01: End Extreme Poverty including Hunger	GOAL 02: Achieve Development within Planetary Boundaries	GOAL 03: Ensure Effective Learning for All Children and Youth for Life and Livelihood	GOAL 04: Achieve Gender Equality, Social Inclusion, and Human Rights	GOAL 05: Achieve Health and Wellbeing at all Ages	GOAL 06: Improve Agriculture Systems and Raise Rural Prosperity	GOAL 07: Empower Inclusive, Productive and Resilient Cities	GOAL 08: Curb human induced climate change and ensure sustainable energy	GOAL 09: Secure Biodiversity and Ensure Good Management of Water, Oceans, Forests and Other Natural Resources	GOAL 10: Transform Governance and Technologies for Sustainable Development
Sustainable management of oceans and coastal areas		Nitrogen/Phosphorus fluxes (12), cross-referenced indicators from Target 8a.				Crop nitrogen use efficiency and land-use change are key dimensions of ocean health (51, 54, 55).	Wastewater treatment, solid waste collection (66, 69).	Slow ocean acidification and habitat loss by lowering greenhouse gas emissions (all).	Ocean health, biodiversity; management of critical biomes, fisheries, and water resources; business code of behavior (79-81, 83-88).	Provide means of implementation ; align international rules, business, and government reporting; and mobilize modern technologies (all).
Water and Sanitation	Access to water and sanitation included in multi-dimensional poverty index (2).	Nitrogen and phosphorus fluxes affect water quality (12).	Water and sanitation in schools.		Water and sanitation in health centers, personal hygiene and hand washing.	Basic water supply and sanitation in rural areas (57, 58), improved water productivity of agriculture (52), impact of extreme climatic events that are mostly water-related (56) end to open defecation.	Basic water supply and sanitation in urban areas (57, 58), wastewater treatment (69), vulnerability to extreme climatic events that are often water-related (56).		Sustainable management of water resources (85), trans-boundary watershed management (84).	Provide means of implementation ; align international rules, business, and government reporting; and mobilize modern technologies (all).

Annex 1: Framing Goals, Targets, and Indicators

This annex briefly summarizes some suggested considerations for framing Sustainable Development Goals (SDGs) as well as their Targets and Indicators.

Why Sustainable Development Goals are Important

As described in the SDSN's *Action Agenda for Sustainable Development* (SDSN 2013a), the SDGs will be complementary to the tools of international law, such as legally binding global treaties and conventions, by providing a shared normative framework that fosters collaboration across countries, mobilizes all stakeholders, and inspires action. Indeed, as has been demonstrated by the MDGs, well-crafted goals will:

- **Unite the global community and inspire coherent public and private action at local, national, regional, and global levels.** Sustainable development must be pursued at all levels of government (local, national, regional) and by public and private stakeholders, including business, civil society, academia, and research. Well-crafted, outcome-focused goals will foster a unity of purpose across public and private actors. Such goals can be applied at local, national, and regional scales, and will shift the focus of debate from “what?” to “how?”
- **Help guide the public’s understanding of complex sustainable development challenges, including neglected ones.** Just like the MDGs familiarized decision makers with maternal mortality and other development challenges, the SDGs will lay out an agreed list of priority challenges, which will educate heads of government, mayors, business leaders, scientists, and other stakeholders about the complex issues that must be addressed in combination. Children everywhere should learn the SDGs to help them understand the challenges that they will confront as young adults.
- **Promote integrated thinking and put to rest the futile debates that pit one dimension of sustainable development against another.** The challenges addressed by the SDGs are inherently integrated, so sustainable development will require that the goals be pursued in combination, rather than individually or one at a time. As a result, SDGs cannot be ordered by priority. All are equally important and work in harmony with the others.
- **Support long-term approaches towards sustainable development.** The goals, targets and indicators will allow public and private actors to chart out long-term pathways to sustainable development, which can be shielded from day-to-day politics, short electoral cycles, and short-term business imperatives.
- **Define responsibilities and foster accountability.** The SDGs will also mobilize governments, businesses, civil society, and the international system to strengthen measurement and monitoring for sustainable development. In particular, the goals will empower civil society to ask governments and the private sector how they work towards every one of the new goals. The new set of goals for sustainable development

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1 must also be bolstered by significant improvements in local, national, and global data
2 collection and processing, using new tools (GIS, remote sensing, social networking, etc.)
3 as well as existing ones.

- 4
- 5 • **Inspire active problem solving by all sectors of society.** Just like the MDGs have
6 spurred problem solving, particularly in health and agriculture, the post-2015 goals can
7 promote active problem solving by governments, the private sector, and civil society on
8 the challenges of ending poverty, promoting economic growth, strengthening social
9 inclusion and trust, maintaining environmental sustainability, and improving
10 governance.

12 Setting the Goals, Targets, and Indicators

13

14 The post-2015 goals should highlight priorities for which a global effort and global solidarity
15 adds value. The post-2015 goals, targets, and indicators will not cover every sustainable
16 development issue. The targets will set out operational objectives that will be quantified to the
17 maximum extent possible. Indicators in turn provide a set of variables to measure progress at
18 local, national, regional, and global scales. Below we describe criteria for setting goals, targets,
19 and indicators.

21 The Goals

22 We concur wholeheartedly with the statement in the Rio+20 outcome document that the post-
23 2015 goals should be:

24

25 “...action-oriented, concise and easy to communicate, limited in number,
26 aspirational, global in nature and universally applicable to all countries while
27 taking into account different national realities, capacities and levels of
28 development and respecting national policies and priorities.”⁷

29

30 Based on this decision and the experience from the MDGs, we suggest 10 principles for the
31 post-2015 goals:

- 32
- 33 1. **One set of ambitious but achievable goals that will stand the test of time:** The new
34 set of goals must be forward-looking to address the full range of challenges the world
35 will face over the next decades – not only the ones it faced over previous decades. In
36 2030 the children of today should applaud the goals for being relevant, bold,
37 ambitious, and inspirational!
 - 38 2. **Universal application:** As agreed at Rio+20, the post-2015 goals should challenge and
39 inspire all countries to act, including the high-income countries and emerging
40 economies. This does not mean that every goal must be a “stretch goal” for every
41 country. Many high-income countries will have met the economic goals, but not the
42 social and environmental goals. Poor countries that cannot meet the goals out of their
43 own domestic resources should receive international financial support to do so.

⁷ United Nations (2012). *The Future We Want, Our Common Vision*. Outcome document of the Rio+20 Conference.(A/CONF.216/L.1), paragraph 247.

- 1 3. **Set normative standards:** The SDGs are a critical operational tool for governments and
2 other stakeholders, but they must also set clear normative standards around which
3 international cooperation for sustainable development is to be organized. The SDSN
4 (2013) proposes to anchor the fight against extreme poverty as a global norm together
5 with a right to development for all countries that respects environmental constraints
6 (planetary boundaries).
- 7
- 8 4. **Small number of concise goals:** Like the eight MDGs, the post-2015 goals should be
9 few in numbers and easy to learn. We believe that there should be no more than ten
10 concise goals and thirty targets. A good test of conciseness is whether the goals fit
11 easily on the back of a business card.
- 12
- 13 5. **Motivational and easily understandable:** The goals must be worded so that they
14 mobilize key communities of stakeholders and the general public. Just like a health goal
15 is needed to mobilize the health community, a goal on cities is needed to mobilize
16 mayors and local authorities. Likewise, broad issues like gender equality cannot simply
17 be “mainstreamed” into goals and targets. To mobilize the respective communities,
18 gender equality should be referenced in a goal for all to see. To mobilize the public, the
19 goals need to employ direct and simple language that avoids jargon, “negotiators’
20 speak”, or excessive scientific precision. For example, the term “cities” is not uniformly
21 defined across the world, but it is well understood by all stakeholders and preferable to
22 more lengthy but precise alternatives. Yet, in some places the SDGs may need to
23 include scientific concepts like ecosystems to educate decision makers and the general
24 public.
- 25
- 26 6. **Operational and applicable to all stakeholders:** The goals should be outcome-focused
27 and framed in such a way that they can be defined and applied in every country, and
28 ideally at sub-national levels as well (e.g. at the city-level). Businesses and civil society
29 organizations should be called upon to share responsibility with governments in
30 achieving the goals. Likewise, giving the poor a voice will be a critical part of
31 operationalizing sustainable development. Any process for implementing the
32 sustainable development challenges will need to ensure the participation and voice of
33 all people, particularly the poor, in decision-making.
- 34
- 35 7. **Integrated or “systems-based” goals:** Actions to achieve economic, social, and
36 environmental sustainability are interdependent, and the goals should emphasize the
37 need for integrated approaches that tackle synergies and trade-offs. In many areas
38 systems approaches are needed to devise sustainable strategies. For example,
39 sustainable food production will require agronomic interventions to boost yields,
40 investments in rural infrastructure, action to curb land conversion for agricultural
41 products, greater efficiency in water use, and many other actions. Similarly complex
42 challenges are urban development, biodiversity protection, or decarbonizing energy
43 systems. Carefully crafted goals can promote system-wide approaches to these
44 complex challenges. Examples are the SDSN draft goals 6 (rural prosperity), 7 (cities), 8
45 (climate change), and 9 (ecosystem management).
- 46
- 47 8. **Based on international consensus:** Importantly, the SDGs cannot resolve issues around
48 which no international consensus exists. For example, the goals cannot set country-
49 level targets for reducing greenhouse gas emissions until parties to the UNFCCC have
50 reached such an agreement. Likewise, they cannot resolve the impasse in completing
51 the Doha Development round. However, this lack of consensus on quantitative

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1 country-level targets cannot mean that the goals should not address climate change or
2 trade, for both are critical to sustainable development. In such instances, the goals can
3 take up existing international agreements, such as the 2°C target endorsed by the COP
4 in Cancun, even if such a goal does not translate easily to the country level. They can
5 then be updated once agreement has been reached on country-level targets (see next
6 point). On trade we propose a target on ensuring that the outcomes of trade
7 negotiations are consistent with achieving the SDGs as a whole.

8
9 9. **Dynamic goals:** The MDGs were expanded after their initial adoption (e.g. to include
10 targets on sanitation and reproductive health). The post-2015 goals should be similarly
11 dynamic to incorporate new and more ambitious international agreements (e.g. on
12 climate change) and to account for new scientific evidence and technological
13 breakthroughs. Such a periodic updating of the post-2015 goals could be part of 5-year
14 review summits.

15
16 10. **High-quality and consistent measurement:** The MDGs have suffered from a massive
17 time lag in reporting and patchy data. The post-2015 goals should be based on easy-to-
18 measure indicators and should require annual reporting on progress. Where possible,
19 indicators should be obtained from integrated data systems, such as systems of
20 national accounts and system of environmental-economic accounts, in order to analyze
21 synergies and trade-offs using international statistical standards.

22
23 The SDGs need to be easy to understand and operational. They should help countries,
24 businesses, the research community, and civil society address the sustainable development
25 priorities, which in turn requires a pragmatic approach to designing the goals and targets. Some
26 proposed goals are thematic and focus on outcomes (e.g. health and education). Other
27 proposed goals are place-based to deal with the need for integration across a broad range of
28 dimensions (e.g. the urban goal) and others are issue-based (e.g. the health and education
29 goals). Finally, some goals highlight crosscutting issues (e.g. gender equality, human rights,
30 water resources management) that affect every goal but require high-level commitment, which
31 can be fostered by a dedicated goal.

32 The Targets

33
34 In comparison to the goals, targets need to be more specific and should include – where
35 possible – quantitative measures. Targets should also be few in numbers (we propose no more
36 than 30, i.e. three per goal), but their wording can be longer and perhaps more technical.
37 Targets do not need to pass the “back of a business card” test.

38
39 Targets need to speak to all relevant stakeholders, including sub-national governments,
40 business, and civil society. For this reason the SDSN avoids referring to governments or
41 countries in the wording of the targets. Some targets proposed by the SDSN refer explicitly to
42 business.

43
44 Targets should also be consistent with existing thematic and sectoral target frameworks, such
45 as the Aichi Targets for biodiversity, the Hyogo Framework for disaster risk reduction, or
46 targets adopted by the World Health Assembly. Yet, since the number of existing
47 intergovernmental targets is vast, the SDGs cannot encompass all of them.⁸ For this reason a

⁸ For example, a [UNEP compilation of internationally agreed environmental goal and objectives](#) covers over 100 pages of text.

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1 careful balance needs to be struck to ensure consistency with available target frameworks
2 without replicating them fully.

3
4 In general, targets should be “SMART”: specific, measurable, attainable (though some will be
5 “stretch” goals that can be attained only with considerable effort), relevant (to all dimensions
6 of sustainable development), and time bound to 2030 or earlier. It is important that every
7 target can be measured at the national or local level, but not every target can be defined
8 globally in a meaningful way, for three distinct reasons:

- 9 i. The starting points may differ too much across countries for a single meaningful
10 quantitative standard at the global level;
11 ii. Some targets need to be adapted and quantified locally since the underlying issues
12 are highly site-specific, or the targets may be relevant only in subsets of countries
13 (e.g. those that refer to specific ecosystems like Targets 9a and 9b);
14 iii. For some targets no global consensus exists today, and these still need to be
15 negotiated, as is the case with greenhouse gas emission reduction targets. In the
16 meantime, countries should establish their own plans and targets (Targets 8a-c).

17
18 It may therefore be necessary to focus some targets on broad principles and ask
19 countries/regions to adopt their own context-appropriate quantitative targets. While
20 quantitative targets are generally preferable, non-quantitative targets can play an important
21 normative role and spur international action towards reaching an international consensus on
22 quantitative metrics. Such targets are marked with an asterisk by the SDSN (2013a).

23
24 Where possible, targets should focus on outcomes, such as ending extreme income poverty.
25 Yet, the distinction between outcomes, outputs, and inputs needs to be handled pragmatically,
26 and the design of goals and targets should be guided by approaches that are best suited to
27 mobilize action and ensure accountability. For example, ensuring universal healthcare coverage
28 or high-quality early childhood development (ECD) are important commitments for every
29 government. Goals and targets that focus on these outputs will ensure operational focus and
30 accountability. In some instances it also makes sense to target inputs. For example, official
31 development assistance (ODA) is critical for ensuring many SDGs and needs to be mobilized in
32 every high-income country. Mobilizing resources for sustainable development is difficult, so
33 subsuming ODA as an implicit input into every Target would make it harder for government
34 leaders, citizens, and civil society organizations to argue for increased ODA. It would also
35 weaken accountability for rich countries. Similar considerations apply, for example, to the
36 proposed target on integrated reporting by governments and businesses on their contributions
37 to the SDGs (Target 10a), or the need to impose a price on greenhouse gas emissions (Target
38 8c).

39
40 Most post-2015 targets, including those proposed by the SDSN, the High-Level Panel of
41 Eminent Persons, and the UN Global Compact call for “universal access” (e.g. to infrastructure)
42 or “zero” deprivation (e.g. extreme poverty, hunger). For each such target, the technical
43 communities and member states will need to define the precise quantitative standard for their
44 commitment to “universal access” or “zero” deprivation. We hope that in most cases these
45 standards will indeed be 100 percent or 0 percent, respectively, but there may be areas where
46 it is technically impossible to achieve 100 percent access or 0 percent deprivation. In such cases
47 countries should aim to get as close as possible to 100 percent or 0 percent, respectively.

48

1 **The Indicators⁹**

2 The purpose of SDG indicators is twofold. First, an indicator should be a *management tool*, to
3 help countries develop implementation and monitoring strategies for achieving the SDGs and
4 to monitor progress. Second, an indicator is a *report card*, to measure progress towards
5 achieving a target and ensure the accountability of governments to their citizens. Where
6 possible, objective quantitative metrics are used, but subjective and perception-based
7 indicators can also play an important role. Often, multiple indicators are used for each target.

8
9 While there have been great improvements in data gathering, the MDG indicators have not
10 fully fulfilled their dual purpose because the data come with too great a time lag to be useful in
11 management and accountability. Often the MDG indicators arrive with a lag of 3 or more years,
12 which is not useful for real-time management. Data from national statistical systems and
13 household surveys is often spotty and of poor quality.

14
15 International agencies rely in part on primary data produced by the statistical system of each
16 country. Involvement and cooperation between international agencies and National Statistical
17 Offices (NSOs) was also missed by the MDG process, and must be strengthened for the SDGs.
18 This will require:

- 19 • Investing in national statistical systems, household surveys, remote sensing, and Big
20 Data;
21 • Identifying areas where statistical standards are currently lacking and asking the
22 statistical community to develop them in the future;
23 • Thinking in terms of the measurement instruments that each country should have in
24 place (e.g. vital statistics, censuses, surveys, national accounts, administrative records,
25 Big Data); and
26 • Specifying the quality requirements (e.g. frequency of data-collection, timeliness of
27 releases, geographical detail, common set of variables available for cross-classification
28 purposes).

29
30 As for the content, not the timing, of the indicators, we expand the criteria for the selection of
31 indicators proposed in the United Nations Development Group (UNDG) handbook.¹⁰ The SDG
32 indicators:

- 33
34 1. Should provide relevant and robust measures of progress towards the targets of
35 the Sustainable Development Goals;
36 2. Should be clear and straightforward to interpret and provide a basis for
37 international comparison;
38 3. Should be broadly consistent with systems-based information, such as systems of
39 national accounts and systems of environmental-economic accounting to ensure
40 coherence of the indicators;
41 4. Should be based to the greatest extent possible on international standards,
42 recommendations, and best practices;
43 5. Should be constructed from well-established data sources drawing on public and
44 private data, be quantifiable, and be consistent to enable measurement over time;
45 6. Should allow, where relevant for disaggregation by (i) characteristics of the
46 individual or household (e.g. gender, age, income, disability, religion, race, or

⁹ Section repeated from main text for completeness of report.

¹⁰ United Nations, (2003), *Indicators for Monitoring the Millennium Development Goals: Definitions, Rationale, Concepts, and Sources*, New York, NY: United Nations.

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1 ethnicity); (ii) economic activity¹¹; and (iii) spatial disaggregation (e.g. by
2 metropolitan areas, urban and rural, or districts);

3 7. Should have a designated lead international organization or organizations to be
4 responsible for timely, high-quality national reporting of the indicator with due
5 consideration to cost effectiveness and lean reporting processes.

6 Since a very large number of indicators would be required to comprehensively track progress
7 towards all targets, we propose that countries consider two sets of indicators. A first set of
8 “Core Indicators” would be applicable to every country and track the most essential dimensions
9 of the targets. A second set of “Tier 2” indicators would track issues that may be applicable to
10 some countries only, such as indicators for neglected tropical diseases (NTDs), or that may give
11 countries greater scope in applying complex concepts, such as inequality, to their specific
12 needs. The Tier 2 indicators represent a menu of options for countries to choose from, though
13 the list we include is far from exhaustive.

14
15 Core Indicators should be chosen with respect to:
16

- 17 • **MDG consistency:** Where possible, Core Indicators should be consistent with available
18 MDG indicators to ensure continuity in data collection and analysis.
- 19 • **Universality:** Many (though not all) Core Indicators should be equally applicable in
20 developed and developing countries.
- 21 • **Reliable data:** To allow for comparisons across time and countries, data for Core
22 Indicators should be reliable, widely available with good coverage, and have short lag
23 times (ideally one year) for data collection and processing.
- 24 • **Broad consensus:** Core Indicators should be underpinned by a broad international
25 consensus on their measurement.
- 26 • **Disaggregation:** Data for SDGs should be disaggregated, where relevant, by sex,
27 urban/rural, and other qualifiers to improve the tracking of progress. Preference
28 should therefore be given to indicators that lend themselves to such disaggregation It
29 is recommended that the disaggregation by age follows established guidelines, for
30 example, in the recommendations of the UN Statistics Division.¹²

¹¹ For example, water use should be accounted for by economic activity using International Standard Industrial Classification of All Economic Activities ISIC.

¹² Principles and Recommendations for a Vital Statistics System (Revision 3) recommends distinguishing amongst the following groups at a minimum: under one year (infants), 1-4 years (pre-school age) 5-14 years (school age), 15-49 years (childbearing age), 15-64 years (working ages) and 65 years and older (elderly persons).

1 Annex 2: Detailed Description of Proposed 2 Indicators and Reporting Framework 3

4 Goal 1: End Extreme Poverty including Hunger 5

6 End extreme poverty in all its forms (MDGs 1-7), including hunger, child stunting, malnutrition,
7 and food insecurity. Support highly vulnerable countries.
8

9 **Target 1a. End extreme poverty, including absolute income poverty (\$1.25 or less per 10 day).**

11 **Key issues to measure for the target:**

12 The SDSN supports the multidimensional concept of extreme poverty or ‘freedom from want’
13 that is embodied in the MDGs and in numerous decisions by member states. Extreme poverty
14 covers income and non-income dimensions, such as poor health, lack of education, or lack of
15 access to basic infrastructure services. The Core Indicators under this target will need to cover
16 the income and non-income dimensions of extreme poverty. Moreover, we cross-reference
17 Core Indicators for the non-income dimensions of extreme poverty that are covered under
18 other targets below.
19

20 **Potential and Illustrative Core Indicators:** 21

22 **Indicator 1: Proportion of population below \$1.25 (PPP) per day (MDG Indicator)**

23 **Rationale and definition:** This MDG indicator is defined as the proportion of the population
24 living below the international poverty line, where the average daily consumption (or income) is
25 less than \$1.25 per person per day. The \$1.25 threshold is a measure of extreme income
26 poverty that allows comparisons to be made across countries when it is converted using
27 purchasing power parity (PPP) exchange rates for consumption. In addition, poverty measures
28 based on an international poverty line attempt to hold the real value of the poverty line
29 constant over time, allowing for assessments of progress toward meeting the goal of
30 eradicating extreme poverty.¹³
31

32 **Disaggregation:** By sex, age, urban/rural, and other qualifiers.
33

34 **Comments and limitations:** The poverty rate has the drawback that it does not capture the
35 depth of poverty—some people may be living just below the poverty line, while others are far
36 below. To help capture disparities, data should as much as possible be disaggregated by
37 gender, age, ethnicity, geography, and other attributes within a population. The SDSN also
38 proposes to include a separate indicator for urban income poverty, as the \$1.25 poverty line is
39 poorly adapted to urban environments where basic services (housing, water, energy, etc.) need
40 to be purchased.
41

42 **Potential lead agency or agencies:** World Bank.
43

¹³ United Nations (2003).

1
2 **Indicator 2: [Proportion of population in extreme multidimensional poverty -- indicator to**
3 **be developed]**

4
5 Rationale and definition: Several multi-dimensional poverty indices exist, including the Multi-
6 Dimensional Poverty Index (MPI) prepared by the UNDP's Human Development Report Office,
7 which tracks deprivation across three dimensions: health (child mortality, nutrition), education
8 (years of schooling, enrollment), and living standards (cooking fuel, toilet, water, electricity,
9 floor, assets).¹⁴ The MPI measures the households that suffer deprivation across one of the
10 above dimensions by aggregating the measure for that dimension.

11
12 We propose to create a slightly revised indicator that measures the proportion of population
13 living in extreme multidimensional poverty and is firmly rooted in the MDGs. This new indicator
14 would be an “MDG-continuation” indicator that tracks extreme deprivation in income, food
15 security, health, education, and access to basic infrastructure – the core dimensions of the
16 MDGs in a single indicator. It complements the more traditional \$1.25 a day indicator, which
17 measures income poverty alone.

18
19 The indicator “proportion of population living in extreme non-income poverty” would estimate
20 the share of households that suffer from any of the following:

- 21 1. Income below \$1.25 per day (World Bank indicator)
- 22 2. [Protein-caloric or micronutrient insufficiency (new FAO-WHO indicator)]
- 23 3. [One or more children of primary-school age who is not in full-time education]
- 24 4. [Lack of coverage by basic primary health services (new WHO indicator)]
- 25 5. Lack of access to an improved water source (in rural areas) or to safe, sufficient
drinking water (in urban areas)
- 26 6. Lack of access to improve sanitation (in rural areas) or to safe sanitation services (in
urban areas)
- 27 7. Lack of access to modern cooking solutions
- 28 8. Lack of access to reliable electricity

29 In other words any household that fails to meet any basic needs would be counted as living in
30 extreme poverty. The indicator would then be a headcount multi-dimensional poverty rate.

31
32 Disaggregation: Opportunities for disaggregation to be reviewed once the indicator has been
33 fully developed.

34
35 Comments and limitations: To be reviewed once the indicator has been fully developed.

36
37 Potential lead agency or agencies: To create and track this indicator, the frequency of
38 household surveys would need to be expanded to an annual rate, and targeted to measure
39 indicators of extreme poverty. We believe that the World Bank in conjunction with the UN
40 Statistics Division and other UN agencies should plan to carry out and analyze such an annual
41 household survey.

42
43
44
45
¹⁴ UNDP (2013). *Human Development Report 2013: The Rise of the South: Human Progress in a Diverse World*. New
York, NY: UNDP.

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1 **Core Indicators covered under other targets that also apply to Target 1a:**

- 2
- 3 Many proposed SDG indicators track issues that complement Indicator 2: Share of population
4 living in extreme non-income poverty. By disaggregating the collection and representation of
5 data for each indicator by geographic, gender, ethnic, socioeconomic, and other dimensions,
6 countries can track the prevalence of extreme non-income poverty.
- 7 • Target 1b: Prevalence of stunting in children under [2] years of age (%)
8 • Target 1c: Violent injuries and deaths per 100,000 population
9 • Target 2c: Unmet need for family planning (MDG indicator)
10 • Target 3a: Primary completion rates for girls and boys
11 • Target 4a: Percentage of children under age 5 whose birth is registered with a civil
12 authority
13 • Target 5a: Percent of population with access to basic primary health services, including
14 emergency obstetric care (EmOC) [Indicator to be developed]
15 • Target 5a: [HIV prevalence and treatment rates by age group (modified MDG
16 indicator)]
17 • Target 5a: Proportion of tuberculosis cases detected and cured under directly observed
18 treatment short course (MDG indicator)
19 • [Target 5a: Proportion of malaria infections addressed by timely diagnosis and
20 treatment - indicator to be developed]
21 • Target 5b: Neonatal, infant, and under-five mortality rate (modified MDG indicator)
22 • Target 5b: Maternal mortality ratio (MDG indicator) and rate
23 • Target 6c: Proportion of rural population with access to improved water source (%)
24 (MDG Indicator)
25 • Target 6c: Proportion of rural population with access to improved sanitation (%) (MDG
26 Indicator)
27 • Target 7a: Proportion of urban population living in slums or informal settlements (MDG
28 indicator)
29 • Target 7b: Proportion of urban households with access to safe, sufficient drinking water
30 (modified MDG indicator)
31 • Target 7b: Proportion of urban households served by safe sanitation services (modified
32 MDG indicator)
33 • Target 8a: Share of the population with access to modern cooking solutions (%)
34 • Target 8a: Share of the population with access to reliable electricity (%)

35

36 **Additional indicators that countries may consider:**

- 37 • **Poverty gap ratio**, which estimates the depth of poverty by estimating how far on
38 average the extreme poor's incomes are from the extreme poverty line of \$1.25 PPP
39 per day.
40 • **Proportion of population living below a country's poverty line**, which applies country-
41 specific poverty lines that in most cases will be higher than the \$1.25 per day line.
42 • **Percentage of population covered by social protection programs**, which measures
43 access to social safety nets, including insurance or conditional cash transfer programs.

1 **Target 1b. End hunger and achieve food security, appropriate nutrition, and zero
2 child stunting.**

3 **Key issues to measure for the target:**

4 The concept of “hunger” covers many different dimensions that indicators need to track. This
5 includes the (i) periodic lack of sufficient macronutrients; (ii) the prevalence of chronic hunger
6 and its severe impact on human development, which is well captured by child stunting; (iii)
7 food security; and (iv) access to adequate micronutrients. This proposed hunger target would
8 continue the job begun by MDG 1.

9
10 **Potential and Illustrative Core Indicators:**

11 **Indicator 3: Prevalence of stunting in children under [5] years of age**

12
13 Rationale and definition: This indicator measures the proportion of children age [5] years
14 whose height for age is two or more standard deviations below the median height for age of a
15 reference population. Stunting in children captures the broad effects of chronic
16 malnourishment and therefore is a good indicator for the hunger target. Stunting in children
17 can have severe impacts on the physical, mental, and emotional development of children, and
18 evidence has shown that the effects of stunting at a young age, particularly on brain
19 development, may be impossible to undo at a later age even if the child receives appropriate
20 nutrition. This indicator therefore draws attention to the critical importance of providing
21 adequate nutrition to young children.

22
23 Disaggregation: Indicator can be disaggregated by gender, household income, and other
24 socioeconomic as well as spatial qualifiers.

25
26 Comments and limitations: Some advocate for measuring stunting at 2 years. A final decision
27 on the age at which to measure stunting will need to be taken.

28
29 Potential lead agency or agencies: The indicator is easy to measure, and data could be collected
30 by UNICEF and WHO.¹⁵

31 **Indicator 4: Proportion of population below minimum level of dietary energy consumption
32 (MDG Indicator)**

33
34 Rationale and definition: The proportion of the population below the minimum level of dietary
35 energy consumption is defined as the proportion of people in a population who suffer from
36 hunger or food deprivation (caloric). This MDG indicator collected by FAO is expressed as a
37 percentage, and it is based on the following three parameters:

- 38
39
 - 40 • The three-year moving average amount of food available for human consumption per
41 person per day;
 - 42 • The level of inequality in access to that food; and
 - 43 • The minimum dietary energy required for an average person—expressed in kilocalories
44 per day.

45
46 ¹⁵ WHO (2014b).

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1 Disaggregation: This indicator measures an important aspect of the food insecurity of a
2 population. In assessing food insecurity, it is important to consider geographical areas that may
3 be particularly vulnerable (such as areas with a high probability of major variations in food
4 production or supply) and population groups whose access to food is precarious or sporadic,
5 such as particular ethnic or social groups. In addition, intra-household access to food may show
6 disparities by sex. Therefore, whenever household survey food consumption data are available
7 by sex, efforts should be made to conduct gender-based undernourishment analyses.¹⁶

8
9 Comments and limitations: To be reviewed.

10
11 Potential lead agency or agencies: FAO and WHO.

12
13 **Indicator 5: [Proportion of population with shortfalls of any one of the following essential**
14 **micronutrients: iron, zinc, iodine, vitamin A, folate, and vitamin B12 –**
15 **indicator to be developed]**

16
17 Rationale and definition: Micronutrients are essential for good health, however shortfalls of
18 one or more micronutrients are common in some regions, with diet and poverty being driving
19 factors. Micronutrient deficiencies are especially devastating to pregnant women and children,
20 as deficiencies can have lifelong affects. Many measures and mappings exist for shortfalls of
21 the six most commonly deficient micronutrients: the minerals iron, zinc, and iodine, and the
22 vitamins A, B12, and folate. An indicator that tracks these deficiencies on a global, comparable
23 scale needs to be developed.

24
25 The structure and composition of the indicator would need to be developed on the basis of a
26 thorough review of available data on micronutrients and opportunities for scaling up data
27 collection under the SDGs.

28
29 Disaggregation: Opportunities for disaggregation to be reviewed once the indicator has been
30 developed.

31
32 Comments and limitations: Some experts suggest that vitamin D be added this list. This
33 question would need to be resolved before this indicator is included in a post-2015 monitoring
34 framework. A complementary indicator on micronutrient deficiencies is anemia in non-
35 pregnant women (see Tier 2 indicators below).¹⁷

36
37 Potential lead agency or agencies: Such data is collected by FAO and WHO and would need to
38 be combined into a composite indicator that would form an essential component of a post-
39 2015 monitoring framework.

¹⁶ United Nations (2003).

¹⁷ WHO (2014c).

1 **Core Indicators covered under other targets that also apply to Target 1a:**

- 2 • Target 5c: Household Dietary Diversity Score

4 **Additional indicators that countries may consider:**

- 5 • **Share of calories from non-staple crops.** This simple indicator can be used to track
6 progress towards more diverse and healthier diets.
- 7 • **Prevalence of anemia in non-pregnant women of reproductive age.** Anemia is a multi-
8 factorial disorder caused mainly by iron deficiency and infections and to a lesser extent
9 by deficiencies of vitamin A, vitamin B12, folate, and riboflavin. It serves as a proxy for
10 micronutrient deficiencies in the absence of more comprehensive indicators. Data on
11 anemia prevalence collected in 1993-2005 are available for 73% of non-pregnant
12 women of reproductive age, in 82 countries (WHO 2012).

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1 **Target 1c. Provide enhanced support for highly vulnerable states and Least
2 Developed Countries, to address the structural challenges facing those countries,
3 including violence and conflict.**

4
5 **Key issues to measure for the target:**

6 1.5 billion people live in areas affected by fragility, conflict, or large-scale, organized criminal
7 violence. Few fragile or conflict-affected countries will fully achieve a single MDG.¹⁸ To end
8 extreme poverty and achieve sustainable development, societies must be peaceful and stable.
9 This target measures physical security and international support to assist post-conflict and least
10 developed countries in addressing violence and the underlying issues that drive conflicts. Other
11 measures of peace and stability, such as respect for human rights, access to justice, and good
12 governance are covered under Goals 4 and 10.

13
14 **Potential and Illustrative Core Indicators:**
15

16 **Indicator 6: Violent injuries and deaths per 100,000 population**
17

18 Rationale and definition: This statistic measures injuries and fatalities resulting directly from
19 violence, including assaults (beatings, abuse, burnings) and armed violence but not accidents or
20 self-inflicted injuries, expressed in terms of a unit per 100,000 population. We include injuries,
21 as there are many forms of violence that do not result in death.

22 Disaggregation: This data is a reflection of the level of violence in a given country and should be
23 disaggregated by sex (to distinguish violence against women), by age (to identify violence
24 against children), by ethnicity (to track possible genocides), and by geography (to identify sub-
25 national pockets of violence and to track urban crime). In addition, the intentional homicide
26 rate should be reported separately from the deaths due to armed conflict.

27 Comments and limitations: Death rates can have just as much to do with access and quality of
28 health care as it does with the level of violence. Tracking injuries helps overcome this
29 limitation. The United Nations Office on Drugs and Crime (UNODC) gathers annual statistical
30 data on intentional homicide¹⁹ and WHO collects data on injuries. However, few countries
31 actually report and the reliability of the national data may vary, especially for those countries
32 afflicted with conflict.

33 Potential lead agency or agencies: Data should be collected for all countries by UNODC, WHO
34 and/or the UN Office for the Coordination of Humanitarian Affairs (UNOCHA). In addition,
35 according to UNICEF, most countries have injury surveillance systems that can be strengthened
36 and expanded. A real push for better data must be made. This effort can be supported and
37 complemented by other non-profit and academic programs, such as the Uppsala Conflict Data
38 Program (UCDP), which records data on organized violence.²⁰

¹⁸ Begashaw, B. et al. (2014). *Reducing Poverty and Building Peace in Fragile Regions*. Draft report of the Thematic Group, SDSN.

¹⁹ See database <http://www.unodc.org/unodc/en/data-and-analysis/statistics/index.html>

²⁰ See UCDP database <http://www.pcr.uu.se/research/ucdp/database>

1
2 **Indicator 7: Refugees and internal displacement caused by conflict and violence**

3
4 Rationale and definition: This indicator tracks the number of people displaced as a result of
5 conflict or violence, excluding migrants from natural disaster or other causes. The indicator
6 covers people displaced across national borders as well as internally displaced persons (IDPs).
7 The indicator measures the refugee population by country or territory of origin, plus the
8 number of a country's internally displaced people as a percentage of the country's total
9 population.

10
11 Disaggregation: By sex, age, religion, and national and ethnic origin, where possible.

12
13 Comments and limitations: It is very difficult to get accurate figures as populations are
14 constantly fluctuating and there is no uniform international definition of an IDP.

15
16 Potential lead agency or agencies: Data is available from International Displacement
17 Monitoring Centre,²¹ the UN High Commissioner for Refugees, and OCHA.

18
19 **Indicator 8: Percent of UN Emergency Appeals and funds for UN Peacebuilding Fund
20 delivered**

21
22 Rationale and definition: UN Emergency Appeals are requests for emergency humanitarian
23 funds to support a rapid humanitarian response to conflict or disasters during the first three to
24 six months of a crisis situation. The UN issues appeals for these funds to member states and
25 other donors. This proposed indicator measure show far such appeals are funded for
26 vulnerable states. It serves as a direct measure of international support for crisis situations in
27 vulnerable states.

28
29 The UN Peacebuilding Fund (PBF) delivers fast, flexible, and relevant funding for peacebuilding
30 initiatives in countries emerging from conflict. These projects are targeted to contribute to
31 post-conflict stabilization by strengthening the capacity of national and local government and
32 institutions, and by addressing critical gaps in the peacebuilding process. Since the PBF relies on
33 voluntary contributions from UN Member States and others donors, the percentage to which it
34 is funded is a good measure of international engagement and support for vulnerable states.

35
36 Disaggregation: By destination of funds.

37
38 Comments and limitations: The main limitation for both measures is that they are input
39 measures that cannot evaluate the effectiveness or impact of the aid.

40
41 Potential lead agency or agencies: Data is readily available from UNHCR and OCHA on
42 Emergency Appeals. The UNDP Multi-Partner Trust Fund Office collects data for the PBF.²²

²¹ See iDMC statistics [http://www.internal-displacement.org/8025708F004CE90B/\(httpPages\)/22FB1D4E2B196DAA802570BB005E787C?OpenDocument](http://www.internal-displacement.org/8025708F004CE90B/(httpPages)/22FB1D4E2B196DAA802570BB005E787C?OpenDocument)

²² See the Multi-Partner Trust Fund online gateway at <http://mptf.undp.org/factsheet/fund/PB000>

1 **Core Indicators covered under other Targets that also apply to Target 1c:**

- 2 • Target 4a: Compliance with recommendations from the Universal Periodic Review and
3 UN Treaties. This indicator can help measure progress towards achieving human rights
4 for all.
- 5 • Target 10a: Perception of public sector corruption. Corruption is a barrier to
6 development as it diverts resources away from poverty-eradication and sustainable
7 development, which are especially needed in vulnerable states.

8 **Additional indicators that countries may consider:**

- 9 • **ODA as a proportion of vulnerable countries' GNI:** This indicator is the amount
10 of ODA received by a country as a proportion of its gross national income. This
11 indicator is a continuation of indicators under MDG Goal 8 and is a measure of aid
12 dependency.
- 13 • **ODA to LDCs as percent of high-income country's GNI:** The agreed target range for this
14 lesser-known indicator is 0.15-0.2%.
- 15 • **Children out of school because of conflict, insecurity, or disaster:** This indicator
16 measures the proportion of school-aged children out of school because of conflict,
17 insecurity, or disaster and could be measured by UNSECO.
- 18 • **Frequency of payment of salaries within police force:** This indicator measures the
19 frequency and regularity with which members of a police force and military receive
20 their full salaries. It reflects government resources and capacity. Late and partial
21 payment of salaries is a well-known factor of violence and conflict.
- 22 • **Indicator on security sector reform to be developed:** post-conflict security sector
23 reform is essential to build lasting peace. An indicator should be developed to measure
24 the extent to which security institutions are effective and accountable.

1 **Goal 2: Achieve Development within Planetary Boundaries**

2
3 All countries have a right to development that respects planetary boundaries, ensures
4 sustainable production and consumption patterns, and helps to stabilize the global population
5 by mid-century.

6
7 **Target 2a. Each country reaches at least the next income level and promotes decent**
8 **work.**

9
10 **Key issues to measure for the target:**

11 This target operationalizes the right to development at the country level and the international
12 community's commitment to rising living standards in all countries and convergence of per
13 capita incomes. The World Bank currently defines four income levels based on 2012 gross
14 national income (GNI) per capita at purchasing power parity (PPP): low income, \$1,035 or less;
15 lower middle income, \$1,036 - \$4,085; upper middle income, \$4,086 - \$12,615; and high
16 income, \$12,616 or more. To meet the target, each country – with the exception of high-
17 income countries – would need to reach the next income category defined by the World Bank.
18 The per capita GNI thresholds are periodically updated to take into account inflation.

19
20 The second component of the target focuses on decent work for all, which is a central
21 dimension of economic and social development. The definition of the target comprises formal
22 as well as informal employment or livelihoods.

23
24 **Potential and Illustrative Core Indicators:**

25
26 **Indicator 9: GNI per capita (PPP, current US\$ Atlas method)**

27
28 Rationale and definition: Gross national income measures the total earnings of the residents of
29 an economy adjusted for the cost of living in each country (purchasing power parity, PPP).
30 These earnings are defined as the sum of value added by all resident producers, plus any
31 product taxes (less subsidies) not included in the valuation of output, plus net receipts of
32 primary income (compensation of employees and property income) from abroad. The
33 International Comparison Program (ICP) can be used to compute purchasing power parity (PPP)
34 adjustments. The Atlas method is a World Bank method of computing exchange rates to reduce
35 the impact of market fluctuations in the cross-country comparison of national incomes.

36
37 Disaggregation: Spatially (rural/urban, province/district).

38
39 Comments and limitations: As underscored in this report, GNI or GDP are important indicators,
40 but they measure only part of the economic dimension of sustainable development. We
41 therefore recommend that they be complemented by other “beyond GDP” indicators. See also
42 Table 2 in the report.

43
44 Potential lead agency or agencies: The UN Statistics Division, the World Bank and the IMF
45 compile GNI data.

1

2 **Indicator 10: Share of informal employment in total employment**

3

4 Rationale and definition: This new indicator has recently been proposed through the Delhi
5 Group on Informal Sector Statistics. It covers the total number of people who have an informal
6 employment situation, that is, workers whose employment relationships not subject to labor
7 legislation, income taxation, social protection or other employment benefits in law or in
8 practice. An important aspect is the inclusion of workers who hold informal jobs in formal
9 enterprises. The figures are estimated using household survey micro data cross-referenced
10 with the number of people working in formal establishments whose jobs are not declared; jobs
11 of casual or limited duration; hours or salaries below specified thresholds; and jobs for which
12 labor regulations are not enforced.

13

14 Disaggregation: Given the difference between urban and rural labor markets, this indicator
15 should be disaggregated by urban and rural populations.²³ It should also be disaggregated by
16 age to particularly capture youth share of informality in the labor force.

17

18 Comments and limitations: This indicator is difficult to compare across countries with large
19 differences in overall employment to population ratios. For this reason some statistical
20 agencies recommend that the indicator be framed as share of informal employment as share of
21 population. Yet the latter makes it harder compare the extent of informal employment within
22 the labor market. A decision will need to be taken on which version of the indicator to use.

23

24 Potential lead agency or agencies: The indicator is currently available from the ILO for over 70
25 countries, so substantial efforts will be required to improve coverage.

26

27 **Indicator 11: [Placeholder for index of decent work]**

28

29 Rationale and definition: We propose that an indicator be considered to track countries'
30 compliance with the decent work agenda adopted by member states of the ILO.²⁴ Currently,
31 such a single index does not exist, but it could be created under the leadership of the ILO.

32

33 Disaggregation: Opportunities for disaggregation to be reviewed once the indicator has been
34 developed.

35

36 Comments and limitations: To be reviewed.

37

38 Potential lead agency or agencies: ILO.

39

40

²³ ILO (2013a). *Jobs and livelihoods in the post-2015 development agenda: Meaningful ways to set targets and monitor progress*. ILO Concept Note No. 2 for the post-2015 development agenda.

²⁴ See ILO (2012b).

1 **Additional indicators that countries may consider:**

- 2 • **Employment to population ratio (EPR) by gender and age group (15–64):** This
3 indicator complements the various measures of unemployment since it tracks the
4 overall share of the population that is employed.
- 5 • **Proportion of own-account and contributing family workers in total employment:**
6 This indicator tracks the share of the working population who are employed as family
7 workers or who work on their own account. This metric is particularly important in
8 countries with a large informal labor market.
- 9 • **Percentage of population with access to banking services (including mobile banking):**
10 Access to banking services, such as a checking account, is important for the economic
11 empowerment of the poor.
- 12 • **Working poverty rate measured at \$2 PPP per capita per day:** This indicator measures
13 the share of the working population who earn less than \$2 PPP per day.
- 14 • **Household income, including in-kind services (PPP, current US\$ Atlas method):** This
15 indicator is derived from the system of national accounts (SNA).
- 16 • **Employment to population ratio (MDG indicator)** measures the share of the
17 population in employment, and should be disaggregated by gender and age group (15–
18 64).
- 19 • **Growth rate of GDP per person employed (MDG indicator),** which is a key measure of
20 labor productivity.
- 21
- 22

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1 **Target 2b. Countries report on their contribution to planetary boundaries and**
2 **incorporate them, together with other environmental and social indicators, into**
3 **expanded GDP measures and national accounts.***

4
5 **Key issues to measure for the target:**

6 The combined impact of countries' development on the environment may reach or exceed
7 critical global thresholds beyond which environmental systems may undergo major changes.²⁵
8 Such changes can undermine the basis for human wellbeing and survival in many parts of the
9 world. Planetary boundaries have been proposed along nine critical dimensions: greenhouse
10 gas emissions, nitrogen and phosphorus loading, ozone depletion, chemical pollution,
11 freshwater use, ocean acidification, land use change, aerosol loading, and loss of biodiversity.

12
13 The target aims to (i) promote the measurement of key environmental and social indicators of
14 wellbeing that complement traditional measures of GDP, and (ii) track countries' contributions
15 towards global environmental change. The target does not endorse quantitative boundaries at
16 the global level. It also does not propose quantitative objectives for reducing countries'
17 contributions to planetary boundaries. These are addressed in subsequent goals, notably Goals
18 6 to 9.

19
20 **Potential and Illustrative Core Indicators:**

21
22 **Indicator 12: [Excessive loss of reactive nitrogen [and phosphorus] to the environment**
23 **(kg/ha) – indicator to be developed]**

24
25 Rationale and definition: Nitrogen and phosphorus in fertilizers are essential for feeding the
26 world's population. They are also critical for intensive farming, thereby limiting the conversion
27 of land to agriculture. They will play a critical role in achieving the SDGs after 2015. While some
28 regions – notably sub-Saharan Africa – use too little nitrogen and phosphorus, others
29 experience excessive lifecycle losses of reactive nitrogen and phosphorus primarily from
30 agriculture and livestock, but also from fuel combustion, sewage, and other activities, which
31 may affect the stability of key ecosystems and biomes, in particular marine ones, with
32 repercussions at regional and global scales. Large differences exist within and among countries
33 in nutrient cycles.

34
35 Nutrients also move across political boundaries, requiring concerted action by numerous
36 stakeholders in order to promote best management practices without undermining agricultural
37 productivity. As described by the SDSN Thematic Group on Sustainable Agriculture and Food
38 Systems,²⁶ this proposed indicator is difficult to measure and mainly of interest to selected
39 countries in which high nutrient loads cause damage to ecosystem functions.²⁷

40
41 We underscore that today's scientific understanding of regional and global nitrogen cycles is
42 not robust enough to set quantitative planetary boundaries for nitrogen and phosphorus.

²⁵ Rockström, J. et al, (2009), Planetary Boundaries: Exploring the Safe Operating Space for Humanity. *Ecology and Society* 14:2, 32. And SDSN (2013a).

²⁶ Dobermann, A. and Nelson, R. et al. (2013). *Solutions for Sustainable Agriculture and Food Systems*. Technical report of the Thematic Group on Sustainable Agriculture and Food Systems. Paris, France and New York, USA: SDSN.

²⁷ For more information see Biodiversity Indicators Partnership webpage: www.bipindicators.net/nitrogenloss

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1 Boundaries that have been proposed in the past may need to be revised.²⁸ Advancing our
2 knowledge of regional and global tipping points related to excessive loss of reactive nitrogen
3 and phosphorus to quantify safe regional and global thresholds should be an important priority
4 for earth systems science.

5

6 Disaggregation: To be reviewed once the indicator has been defined.

7

8 Comments and limitations: We recognize that local and site-specific measures of nutrient-use
9 efficiency and other indicators are needed to improve nutrient management.

10

11 Potential lead agency or agencies: UNEP or other agency.

12

13 **Indicator 13: Aerosol optical depth (AOD)**

14

15 Rationale and definition: This indicator measures total aerosols (e.g. urban haze, smoke
16 particles, desert dust, sea salt) distributed within a column of air from the Earth's surface to the
17 top of the atmosphere.

18

19 Disaggregation: This indicator can be reported with a high degree of spatial disaggregation.

20

21 Comments and limitations: To be reviewed.

22

23 Potential lead agency or agencies: Satellites collect the data for this indicator so it can be
24 available for all countries. An agency such as UNEP could be responsible for collecting
25 internationally comparable data across all countries.

26

27 **Indicator 14: Consumption of ozone-depleting substances (MDG Indicator)**

28

29 Rationale and definition: This indicator measures the consumption trends for ozone-depleting
30 substances (ODS) controlled under the Montreal Protocol on Substances that Deplete the
31 Ozone Layer, thereby allowing inference of the amounts of ODS being eliminated as a result of
32 the protocol. It is expressed in ODP Tons, which is defined as the Metric Tons of ODSs weighted
33 by their Ozone Depletion Potential (ODP).²⁹

34

35 Disaggregation: To be reviewed.

36

37 Comments and limitations: The Montreal and the Vienna Convention for the Protection of the
38 Ozone Layer target the complete phase-out of use of ODS.

39

40 Potential lead agency or agencies: The UNEP Ozone Secretariat collects internationally
41 comparable data.

42

43

²⁸ For example, see de Vries, M et al. (2013), Assessing planetary and regional nitrogen boundaries related to food security and adverse environmental impacts. *Current Opinion in Environmental Sustainability* 5:392–402.

²⁹ For more information on emissions of ozone-depleting substances and their contribution to planetary boundaries, see Rockström et al. (2009).

1 **Core Indicators covered under other Targets that also apply to Target 2b:**

- 2 • **Target 6b: Percentage of land cover converted to cropland.** Together with other
3 indicators proposed under Target 6b, this measure provides an indicator for global
4 land-use change.
- 5 • **Target 8a: Total national GHG emissions (tCO₂e) by production demand with
6 breakdown for Energy-related and industrial GHG emissions by gas and sector
7 (including, electricity, transportation, commercial and residential buildings, and
8 industry).** This and the other indicators described under Targets 8a and 8b track
9 countries' contributions to climate change.
- 10 • **Target 9a: Red List Index.** This indicator provides an important measure of biodiversity.
- 11 • **Target 9c: Proportion of total water resources used.** This indicator monitors countries'
12 contribution towards global (over-) consumption of freshwater resources.
- 13 • **Target 10a: Country implements and reports on System of Environmental-Economic
14 Accounting (SEEA) accounts.** Effective reporting on countries' contributions to
15 planetary boundaries requires that national accounts are adjusted to address a fuller
16 set of environmental and social dimensions that are not currently covered in the
17 accounts, as described under Target 10a.
- 18

19 **Additional indicators that countries may consider:**

- 20 • **[Indicator on chemical pollution to be developed].** Chemical pollution is a critical
21 dimension of global environmental change, but it is very difficult to measure on an
22 internationally comparable basis. Several indicators exist for specific pollutants, but
23 they are typically available only in a small subset of countries and measure only a small
24 share of chemical pollution.

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1 **Target 2c. Rapid voluntary reduction of fertility through the realization of sexual and**
2 **reproductive health rights in countries with total fertility rates above [3] children per**
3 **woman and a continuation of voluntary fertility reductions in countries where total**
4 **fertility rates are above replacement level.***

5
6 **Key issues to measure for the target:**

7 This target measures efforts and capabilities of individuals to control their own fertility through
8 voluntary sexual and reproductive decision making without any form of coercion, as well as
9 total fertility rates. Concurrently, it tracks the extent to which governments create the legal and
10 policy environment for individuals in general, but women in particular, to exercise their sexual
11 and reproductive rights. The Programme of Action of the International Conference on
12 Population and Development (ICPD) and the SDSN report (2013a) highlight the inter-linkages
13 between high fertility, reproductive health and rights, and the prospects for sustainable
14 development. Other key components of sexual and reproductive health and rights are covered
15 under Goal 4 (Achieve Gender Equality, Social Inclusion, and Human Rights) and Goal 5
16 (Achieve Health and Wellbeing).

17
18 **Potential and Illustrative Core Indicators:**

19
20 **Indicator 15: Total fertility rate**

21
22 Rationale and definition: The total fertility rate is the average number of live births a woman
23 would have by age 50 if she were subject, throughout her life, to the age-specific fertility rates
24 observed in a given year. Its calculation assumes that there is no maternal mortality. Paragraph
25 13 of the Programme of Action adopted by the International Conference on Population and
26 Development (ICPD) and the SDSN *Action Agenda* highlight the importance of reducing
27 population growth through voluntary transition to lower fertility levels, while respecting the
28 rights of women to decide when and how many children they would like to have.³⁰

29
30 Disaggregation: By age.

31
32 Comments and limitations: To be reviewed.

33
34 Potential lead agency or agencies: Total fertility estimates are calculated for all countries by the
35 Population Division of the Department of Economic and Social Affairs and appear in the
36 biennial United Nations publication *World Population Prospects*.³¹

37
38 **Indicator 16: Contraceptive prevalence rate (MDG Indicator)**

39
40 Rationale and definition: The contraceptive prevalence rate is defined as the proportion of
41 women of reproductive age who use (or whose partners use) a contraceptive method at a
42 given point in time. Increased contraceptive prevalence is also an important proximate
43 determinant of inter-country differences in fertility and of ongoing fertility declines in
44 developing countries. Contraceptive Prevalence is influenced by people's fertility desires,
45 availability of high-quality products and services; social norms and values; levels of education;
46 and other factors, such as marriage patterns and traditional birth-spacing practices. It is an

³⁰ SDSN (2013a).

³¹ A revised version of the report (2012) is at <http://esa.un.org/unpd/wpp/index.htm>

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1 indicator of population, development, women's empowerment, and health. The level of
2 contraceptive use has a strong, direct effect on the total fertility rate (TFR) and, through the
3 TFR, on the rate of population growth. It also serves as a proxy measure of access to
4 reproductive health services that are essential for meeting many health targets, especially the
5 targets related to child mortality, maternal health, HIV/AIDS, and gender equality.³²

6
7 Disaggregation: By age and marital status.

8
9 Comments and limitations: Common limitations to this indicator include under-reporting and
10 underestimation of overall use, vague time references, and insufficient accuracy.

11
12 Potential lead agency or agencies: Data for this indicator comes from household surveys, such
13 as Demographic and Health Surveys (DHS) and Multiple Indicators Cluster Surveys (MICS), and
14 contraceptive prevalence surveys. The UN Population Division and UNFPA could ensure the
15 collection of internationally comparable data.

16

17 **Indicator 17: Unmet need for family planning (MDG Indicator)**

18
19 Rationale and definition: This MDG indicator tracks the number of women who are fecund and
20 sexually active but who i) are not using any method of contraception and ii) do not want any
21 more children or would like to delay the birth of their next child by at least 2 years. Pregnant
22 women who report that their current pregnancies were unwanted or mistimed at the time of
23 conception are also included. The indicator is calculated as a percentage of all women of
24 reproductive age who are married or in a union.³³

25

26 More than 100 million women in less developed countries, or about 17 percent of all married
27 women, fall under this category. Unmet need for contraception can lead to unwanted
28 pregnancies, which in turn pose risks for women, their families, and society. Family planning is
29 a right, and a key dimension of access to reproductive health. In less developed countries,
30 between one-fourth and one fifth of pregnancies are unintended.³⁴

31

32 Disaggregation: By age and marital status.

33

34 Comments and limitations: To be reviewed.

35

36 Potential lead agency or agencies: UNFPA and the UN Population Division collect data for this
37 survey-based indicator.

38

39

³² UN Population Division (2011), *World Contraceptive Use 2011*. New York: UN.

<http://www.un.org/esa/population/publications/contraceptive2011/contraceptive2011.htm>

³³ See WHO webpage: http://www.who.int/reproductivehealth/topics/family_planning/unmet_need_fp/en

³⁴ WHO (2005). *The World health report 2005: make every mother and child count*. Geneva: WHO.

http://www.who.int/whr/2005/whr2005_en.pdf?ua=1

1 **Core Indicators covered under other Targets that also apply to Target 2c:**

- 2 • Target 4c: Percentage of referred cases of sexual and gender-based violence against
3 women and girls that are investigated and sentenced
4 • Target 5a: Percent of population with access to basic primary health services, including
5 EmOC [Indicator to be developed]
6 • Target 5a: [HIV prevalence and treatment rates by age group (modified MDG
7 Indicator)]
8 • Target 5b: Maternal mortality ratio (MDG indicator) and rate

9

10 Several other health indicators described below also contribute towards the realization of
11 sexual and reproductive health rights. These include indicators covering access to emergency
12 obstetric care (EmOC), antenatal care, birth attendants, all forms of HIV/AIDS treatment and
13 prevention, and other sexually transmitted diseases.

14

15 **Additional indicators that countries may consider:**

- 16 • **Indicator on teenage pregnancies.** This indicator tracks the percentage of teenage girls
17 who become pregnant.

18
19
20

1 **Goal 3: Ensure Effective Learning for All Children and Youth for 2 Life and Livelihood**

3
4 All girls and boys complete affordable and high-quality early childhood development programs,
5 and primary and secondary education to prepare them for the challenges of modern life and
6 decent livelihoods. All youth and adults have access to continuous lifelong learning to acquire
7 functional literacy, numeracy, and skills to earn a living through decent employment or self-
8 employment.

9
10 **Target 3a. All children under the age of 5 reach their developmental potential
11 through access to quality early childhood development programs and policies.**

12
13 **Key issues to measure for the target:**

14 This proposed target focuses on children under the age of 5 years, based on an extensive
15 evidence base that shows the benefits of investing in children early. The target underscores
16 that effective learning for all children and young people depends also on the stimuli and
17 support given to the children during their early years. Development potential is defined as
18 physical, cognitive, emotional and social domains of learning and development. Key issues to
19 measure for this target include health coverage, support for parental interventions, access to
20 pre-primary education, and a measure for the outcome of the overall development of the
21 child.³⁵

22
23 **Potential and Illustrative Core Indicators:**

24
25 **Indicator 18: Proportion of children receiving at least one year of a quality pre-primary
26 education program.**

27
28 Rationale and definition: The indicator measures the proportion of children in the 36-59
29 months age group that are enrolled in an early childhood program. Programs can be defined
30 fairly broadly ranging from private or community care, to formal pre-school programs.

31
32 This is an important indicator for measuring child development. Exposure to at least a year of
33 high-quality pre-primary education has consistent and positive short-term and long-term
34 effects on children's development. In the short run, early cognitive skills, including reading and
35 math skills, are positively affected by pre-primary education. In low- and middle-income
36 countries, access to quality pre-primary education increases the share of students who enter
37 primary school on time. High-quality preschool can produce lifelong benefits for society, with
38 positive effects observed on years of completed schooling, secondary school completion,
39 reduced crime, reduced early pregnancy, and increased earnings. These results encompass
40 both small-scale demonstrations and large-scale programs, and are responsible for the
41 impressive benefit-cost ratios for preschool (6 or larger, across high-, middle-, and low-income
42 countries). Pre-primary education benefits all children, no matter their economic background,

³⁵ Chavan, M. and Yoshikawa, H. et al. (2013). *The Future of Our Children: Lifelong, Multi-generational Learning for Sustainable Development*. Technical Report from the Thematic Group on Early Childhood Development, Education, and Transition to Work. Paris, France and New York, USA: SDSN.

1 yet as with many other ECD services, those from the most disadvantaged backgrounds benefit
2 the most.³⁶

3

4 Disaggregation: By sex.

5

6 Comments and limitations: The indicator is less helpful in measuring the quality of pre-primary
7 education care. Quality standards of structure (safety, access to clean water, small group sizes,
8 etc.) and process (instructional and interactive skills of the teacher or caregiver) are important
9 for children's learning and development, but much harder to measure.

10

11 Potential lead agency or agencies: UNESCO, UNICEF, World Bank.

12

13 **Indicator 19: Early Child Development Index (ECDI)**

14

15 Rationale and definition: Developmental potential in early childhood is measured as an index,
16 currently represented in the Multiple Indicator Cluster Survey (MICS), that assesses children
17 aged 36-59 months in four domains: language/literacy, numeracy, physical, socio-emotional,
18 and cognitive development. Each of these four domains is measured through instruments
19 based on real-time observation. The MICS surveys calculate an overall Index Score as the
20 percentage of children aged 36-59 months who are on track in at least three of the four
21 domains.

22

23 Disaggregation: By sex and age.

24

25 Comments and limitations: Other measures of caregiver- or parent-reported young child
26 development exist or are under development, including the Early Development Instrument and
27 the Index of Early Human Capability, which incorporate items representing each of these
28 domains and are being used across high-, middle-, and low-income countries.³⁷ Important
29 complements to this form of measure are those assessments that can capture development in
30 specific areas over time (e.g. growth in language or emotional skills).

31

32 Potential lead agency or agencies: UNICEF.

33

34 **Additional indicators that countries may consider:**

- 35
- 36
- 37
- 38
- 39
- 40
- 41
- 42
- **Proportion of children under 5 experiencing responsive, stimulating parenting in safe environments.** The MICS indicator measures the proportion of children below 5 years with whom an adult has engaged in four or more activities to promote learning and school readiness in the past 3 days.³⁸
 - **Percentage of pupils enrolled in primary schools and secondary schools providing basic drinking water, adequate sanitation, and adequate hygiene services.** This indicator measures access to drinking water, gender separated sanitation facilities, and hand washing facilities in schools, using WHO-UNICEF JMP definitions.

³⁶ Myers, R. (1992). *The twelve who survive: Strengthening Programmes of Early Childhood Development in the Third World*. London, UK: Routledge.

³⁷ Janus, M. and Offord, D.R. (2007). Development and psychometric properties of the Early Development Instrument. *Canadian Journal of Behavioural Science*, 39, 1-22.

³⁸ See UNICEF webpage on ECD Indicators in Multiple Indicator Cluster Surveys (MICS):
http://www.childinfo.org/ecd_indicators_mics.html

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1 **Target 3b. All girls and boys receive quality primary and secondary education that
2 focuses on a broad range of learning outcomes and on reducing the dropout rate to
3 zero.**

4
5 **Key issues to measure for the target:**³⁹

6 This proposed target focuses on a broad set of learning outcomes and participation for all
7 children as a fundamental objective of any education system. It builds on the MDG target of
8 universal primary completion to encompass secondary completion, in addition to measuring
9 the actual learning that takes place within the years of schooling. Key issues for measurement
10 are access, equity, and learning outcomes.

11
12 **Potential and Illustrative Core Indicators:**
13

14 **Indicator 20: Primary completion rates for girls and boys**

15
16 Rationale and definition: The indicator measures the proportion of children entering grade 1
17 who complete the last grade of primary school. Primary Completion measured by the Gross
18 Intake Ratio to Last Grade of primary education is the total number of new entrants in the last
19 grade of primary education (according to the International Standard Classification of Education
20 or ISCED97), regardless of age, expressed as percentage of the total population of the
21 theoretical entrance age to the last grade of primary. Primary education is defined by ISCED97
22 as programs normally designed on a unit or project basis to give pupils a sound basic education
23 in reading, writing and mathematics along with an elementary understanding of other subjects
24 such as history, geography, natural science, social science, art, and music.

25 The Gross Intake Ratio to Last Grade of primary reports on the current primary access to last
26 grade stemming from previous years' of schooling and past education policies on entrance to
27 primary education. It is a measure of first-time completion of primary education as it excludes
28 pupils repeating the last grade. A high Gross Intake Ratio to Last Grade denotes a high degree
29 of completion of primary education. As this calculation includes all new entrants to last grade
30 (regardless of age), the Gross Intake Ratio may exceed 100%, due to over-aged or under-aged
31 pupils entering the last grade of primary school for the first time.⁴⁰

32
33 Disaggregation: It is particularly important to disaggregate data for this indicator by gender,
34 income, disability, region, and particularly separately for children in regions of conflict, since
35 children in such regions are at greatest risk of dropping out of the schooling system.

36
37 Comments and limitations: By geography and possibly household income quintile.

38
39 Potential lead agency or agencies: UNESCO.

³⁹ Chavan, M. and Yoshikawa, H. et al. (2013)..

⁴⁰ As defined by UNDESA for the MDG indicators, available at <http://mdgs.un.org/unsd/mdg/Metadata.aspx>

1

2 **Indicator 21: [Proportion of girls and boys who master a broad range of foundational skills,
3 including in literacy and mathematics by the end of the primary school cycle
4 (based on credibly established national benchmarks)]**

5

6 Rationale and definition: This indicator is designed to measure the proportion of children who
7 are able to, at the very least, read and comprehend text in their primary language of instruction
8 and those that are able to count and understand core mathematical operations and concepts
9 as a proportion of total children of at the end of the primary schooling cycle in the country. It is
10 a new aggregate indicator proposed to ensure that children are able to master basic skills in a
11 broad range of areas, including at a very minimum, the ability to read and understand text, and
12 to capture learning of basic mathematical skills that are known to have strong links with future
13 academic performance.

14

15 Disaggregation: By sex.

16

17 Comments and limitations: Since 2005, over 60 developing countries have used some measure
18 of reading or have participated in internationally comparable assessments of reading
19 comprehension. There are no internationally recognized standards for defining “foundational
20 skills in literacy” primarily because of differences in language, curriculum design, and
21 pedagogical approaches. However, it is recommended that each country adopts and/or defines
22 a core set of standards that can be assessed either through school-based or household-based
23 assessments. Several countries have national standards of foundational numeracy skills that
24 are identified in national curricula frameworks. It is further recommended that each country
25 adopts and/or defines foundational numeracy skills standards that while being locally relevant,
26 are referenced in some way to international benchmarks. It is particularly important that
27 foundational numeracy skills are comparable to global standards since these skills are relevant
28 across countries and can form the basis for future global competitiveness of the country’s labor
29 force.

30

31 The need to have measures of literacy and mathematical skills has been stressed by various
32 global initiatives including the Learning Metrics Task Force (which recommends such skills be
33 measured at grade 3).⁴¹ We recommend that such skills be measured at the end of the
34 country’s primary school cycle to capture variations within and across education system
35 structures in different countries.

36

37 We also recommend that initiatives such as the Learning Metrics Task Force explore how an
38 indicator can be defined that would integrate not just literacy and mathematics, but a broader
39 set of fundamental skills necessary for life, livelihoods, and citizenship. It would be very
40 important to build a broad international consensus on such an indicator.

41

42 Potential lead agency or agencies: UNESCO.

43

⁴¹ UNESCO Institute for Statistics and the Center for Universal Education at the Brookings Institution (2013), *Toward Universal learning: Recommendations from the Learning Metrics Task Force*.

1

2 **Indicator 22: Secondary completion rates for girls and boys**

3
4 Rationale and definition: The indicator measures the proportion of girls and boys entering the
5 first grade of secondary school who complete the last grade of secondary school. It is
6 computed by dividing the total number of students in the last grade of secondary education
7 school minus repeaters in that grade by the total number of children of official completing
8 age. It captures dropout rates within secondary school as well as the transition rate between
9 primary to secondary schooling by using as its denominator the total number of children of
10 official completing age.

11

12 Secondary completion rates are important to measure since the dropout rates are highest in
13 lower secondary grades. These are the ages when both the actual cost and the opportunity
14 cost of education become higher, and when education systems struggle to provide high-quality
15 instruction.

16

17 Disaggregation: It is particularly important to disaggregate this indicator by gender, income,
18 disability, region, and particularly separately for children in regions of conflict, since children in
19 such regions are at greatest risk of dropping out of the schooling system.

20

21 Comments and limitations: Secondary completion rates are more difficult to compare across
22 countries since the structure of schooling varies widely, and the relevant age groups differ
23 accordingly. Secondary completion rates therefore can only be calculated on a national basis
24 with reference to the number of years of schooling of that particular country. They are not
25 easily comparable across countries.

26

27 Potential lead agency or agencies: UNESCO.

28

29 **Indicator 23: [Proportion of girls and boys who achieve proficiency across a broad range of
30 learning outcomes, including in reading and in mathematics by end of the
31 secondary schooling cycle (based on credibly established national
32 benchmarks)]**

33

34 Rationale and definition: The indicator measures the proportion of girls and boys at age 14
35 years who are “proficient” in broad learning outcomes, and at a minimum in reading and in
36 mathematics. Proficiency will need to be defined through national level standards, but should
37 cover the ability to read, decode, comprehend, and analyze text in the primary language of
38 instruction, and to understand advanced mathematical concepts, reason, and resolve complex
39 problems.

40

41 While the mathematics measure is easier to compare across countries, the literacy indicator
42 should consider differences due to variation in language, curricula and pedagogy. Each country
43 will need to identify its own set of standards for proficiency. It is recommended that there be a
44 serious effort to benchmark national standards against comparable international standards
45 where they exist. It is also recommended that this indicator be measured through either
46 school-based or household-based assessments annually to track progress of the education
47 system. The fundamental danger of skills-based indicators is that such indicators can only
48 capture a small slice of the range of competencies that students are expected to acquire;
49 assessing a subset can often focus education systems too exclusively on that subset, thereby
50 leading to neglect of the broader set of competencies. This indicator is intended to measure
51 the baseline or minimum set of skills expected of students at the end of the secondary

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1 schooling cycle. A broader indicator should be designed to ensure that other competencies are
2 not neglected.

3
4 Disaggregation: Opportunities for disaggregation to be reviewed once the indicator has been
5 defined.

6
7 Comments and limitations: Proficiency standards do not exist systematically within countries;
8 we recommend that countries identify/adopt a core set of standards that are designed with
9 reference to global standards, where they exist.

10
11 Potential lead agency or agencies: UNESCO.

12
13 **Additional indicators that countries may consider:**

- 14 • **Proportion of girls and boys who acquire skills and values needed for global**
15 **citizenship (national benchmarks to be developed) by age 14.** This indicator measures
16 the proportion of children at age 14 years who acquire skills and values needed for
17 them to be productive “global citizens”, recognizing that beyond basic academics,
18 there are values and skills that enable children to grow up to become socially
19 responsible, emotionally mature, and productive members of society.

20
21
22

1 **Target 3c. Ensure that all youth transition effectively into the labor market.*⁴²**

2 **Key issues to measure for the target:**

3 The proposed target brings attention to the link between the education system and
4 opportunities for livelihoods and employment. It references the MDG target of achieving full
5 and productive employment and decent work for all, including women and young people. Key
6 issues for measurement are around participation in the formal and informal economy.

7

8 **Potential and Illustrative Core Indicators:**

9

10 **Indicator 24: Percentage of young people not in education, training, or employment**

11

12 Rationale and definition: This indicator, known as NEET (Not in Education, Employment, or
13 Training), tracks the share of youth who are neither in formal employment nor in full-time
14 education or training. It is a measure of the proportion of youth who are either unemployed,
15 work in the informal sector, or have other forms of precarious jobs.

16

17 Disaggregation: By sex, age, and education level. In addition, at the national level, it is
18 recommended that countries disaggregate NEET to identify the proportion of youth that are
19 engaged in the informal sector, and those in non-formal education as compared to those that
20 are completely disengaged with the labor force.

21

22 Comments and limitations: The indicator is preferable to standard unemployment measures
23 and is better adapted to low-income and lower middle-income countries, as it shows the scope
24 of potential problems in the youth labor market, which the traditional unemployment rate
25 does not.

26

27 Potential lead agency or agencies: ILO tracks data on this indicator.

28

29 **Indicator 25: Tertiary enrollment rates for girls and boys**

30

31 Rationale and definition: The indicator measures the total enrollment in tertiary education
32 regardless of age, expressed as a percentage of the total population of the five-year age group
33 following on from secondary school leaving. Tertiary education is defined as per the
34 International Standard Classification of Education (1997) levels 5 and 6.

35

36 Tertiary enrollment rates are indicative of the quality of the labor force in the country, and a
37 wide gap between the tertiary enrollment rates and unemployment rates indicate either an
38 inability of the economy to absorb its trained graduates, or the “employability” of the
39 graduates which indicates a mismatch between the skills being imparted through the tertiary
40 education system and the skills demanded by the market.

41

42 Disaggregation: By sex and by field of study (to track women in science, mathematics,
43 engineering, sciences and technology).

44

45 Comments and limitations: Tertiary enrollment rates by themselves are not predictors of youth
46 unemployment rates.

42 Chavan, M. and Yoshikawa, H. et al. (2013).

1
2 Potential lead agency or agencies: UNESCO.
3

4 **Additional indicators that countries may consider:**

- 5 • **Proportion of adolescents (15-19 years) with access to school-to-work programs.** This
6 indicator measures the proportion of adolescents who are offered programs that
7 enable them to transition from school to employability and work either through
8 vocational or apprenticeship or training programs.
9 • **Youth unemployment rate.** The youth unemployment rate is the proportion of the
10 youth labor force that is unemployed. Young people are defined as persons aged
11 between 15 and 24. The unemployed comprise all persons above a specified age who,
12 during the reference period, were: (a) without work; (b) currently available for work;
13 and (c) actively seeking work. The labor force is the sum of the number of persons
14 employed and the number of persons unemployed.
15 • **Proportion of young adults with access to a learning program.** This indicator measures
16 the proportion of young adult women and men that can enroll and learn a new skill or
17 course to improve their knowledge, skills, and competencies.
18

1 **Goal 4: Achieve Gender Equality, Social Inclusion, and Human 2 Rights**

3
4 Ensure gender equality, human rights, the rule of law, and universal access to public services.
5 Reduce relative poverty and other inequalities that cause social exclusion. Prevent and
6 eliminate violence and exploitation, especially for women and children.

7
8 **Target 4a. Monitor and end discrimination and inequalities in public service delivery,
9 the rule of law, access to justice, and participation in political and economic life on
10 the basis of gender, ethnicity, religion, disability, national origin, and social or other
11 status.**

12
13 **Key issues to measure for the target:**
14 This target covers a broad range of issues relating to gender equality, social inclusion, and
15 human rights. It assesses how equal and accessible public services are and whether all people
16 can equally participate in political and economic life without discrimination. In extension of this
17 target, the SDSN recommends that SDG indicators be disaggregated to track disparities in
18 economic, social, and environmental indicators.⁴³

20 **Potential and Illustrative Core Indicators:**

22 **Indicator 26: Percentage of children under age 5 whose birth is registered with a civil
23 authority**

25 Rationale and definition: In many developing countries, the births of a substantial share of
26 children are unregistered. Registering births is not only important for tracking health statistics
27 (infant mortality rates, vaccination coverage, etc.), but also for human rights. Birth registration
28 is the key starting point for the recognition and protection of every person's right to identity
29 and existence. Failure to register births either due to insufficient administrative systems,
30 discrimination, or isolation is a key cause of social exclusion. By ensuring registration of all
31 births, countries will increase opportunities to access services and opportunities.

33 Disaggregation: Data should be disaggregated by gender, ethnicity, religion, language, and
34 indigenous status to identify and end discrimination within the population.

36 Comments and limitations: To be reviewed.

38 Potential lead agency or agencies: This indicator is measured through national official
39 registration figures, which are complemented by household surveys. UNICEF collects global
40 data through the MICS questionnaire, which asks mothers (or primary caregivers) of children
41 under five whether they have a birth certificate or are otherwise registered with civil
42 authorities and their knowledge of how to register a child.⁴⁴

⁴³ Bradshaw, S., Castellino, J., Diop, B. et al (2013). *Achieving Gender Equality, Social Inclusion, and Human Rights for All: Challenges and Priorities for the Sustainable Development*. Paris, France and New York, USA: SDSN.

⁴⁴ UNICEF (2013), *Every Child's Birth Right: Inequities and trends in birth registration*, New York, NY: UNICEF, 6.

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1 **Indicator 27: Compliance with recommendations from the Universal Periodic Review and**
2 **UN Treaties**

3
4 Rationale and definition: This new indicator assesses the extent to which states engage with
5 the UN human rights mechanisms. The Universal Periodic Review (UPR) is a peer review
6 conducted by the member states of the UN Human Rights Council. The UPR working group
7 scrutinizes what states have done to improve human rights and fulfill their human rights
8 obligations.⁴⁵ Each UN member state is subject to review every 4.5 years. The UN Human Rights
9 Treaty Bodies are quasi-legal expert bodies created by human rights treaties. When a state
10 ratifies a treaty, it is obliged to periodically provide reports to the relevant treaty body.⁴⁶

11
12 Both the UPR and the UN Human Rights Treaty Bodies review issue recommendations, which
13 can require states to make administrative, legislative, or judicial changes to enable the full
14 realization of human rights. This indicator proposes to quantify these recommendations – they
15 are easily accessible and can be collected and aggregated. The indicator would then measure
16 the extent to which states have engaged and adopted the recommendations from both review
17 processes.

18
19 Disaggregation: By treaty.

20
21 Comments and limitations: To be reviewed.

22
23 Potential lead agency or agencies: UN OHCHR.

24
25 **Indicator 28: Proportion of seats held by women and minorities in national parliament**
26 **and/or sub-national elected office according to their respective share of the**
27 **population (revised MDG Indicator)**

28
29 Rationale and definition: This revised MDG indicator measures the ratio of the proportion of
30 seats held by women and minorities (including indigenous people) in legislative bodies
31 (national, regional, local) divided by their respective population share. It demonstrates the
32 extent to which women and minorities have equal access to key decision-making positions
33 within formal political processes. Participation in elected office is a key aspect of women's and
34 minorities' opportunities in political and public life, and is therefore linked to their
35 empowerment. Their presence in decision-making bodies alters dynamics and can help bring to
36 light women's and minorities' concerns.

37
38 Disaggregation: Opportunities for disaggregation to be reviewed.

39
40 Comments and limitations: This indicator cannot measure actual political decision-making
41 power, and women and minorities can still face many obstacles in carrying out their
42 parliamentary mandates.⁴⁷

43
44 Potential lead agency or agencies: Data on women in national parliament is readily obtainable
45 from national sources and from the Inter-Parliamentary Union. Data on women in city, state or
46 provincial level elected office are less available. The United Cities and Local Governments

⁴⁵ See OHCHR website on the UPR: <http://www.ohchr.org/EN/HRBodies/UPR/Pages/UPRMain.aspx>

⁴⁶ See OHCHR website on the Treaty Bodies: <http://www.ohchr.org/EN/HRBodies/Pages/TreatyBodies.aspx>

⁴⁷ United Nations (2003), p.30.

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1 (UCLG) Standing Committee on Gender Equality has started gathering information on women
2 councilors and mayors.⁴⁸ Data on minorities are generally less available, so a significant effort
3 would need to be made to collect such disaggregated data.

4

5 **Indicator 29: Ratification and implementation of key ILO labor standards and compliance in
6 law and practice**

7

8 Rationale and Definition: The ILO conventions describe key labor standards aimed at promoting
9 opportunities for decent and productive work, where men and women can work in conditions
10 of equity, security, freedom and dignity. The proposed indicator tracks countries' ratification of
11 and compliance with the 8 fundamental ILO conventions, which cover the following issues:
12 freedom of association and the effective recognition of the right to collective bargaining; the
13 elimination of all forms of forced or compulsory labor; the effective abolition of child labor; and
14 the elimination of discrimination in respect of employment and occupation.⁴⁹ Countries are
15 required to report on ratified conventions every two years. The reporting system is backed up
16 by a supervisory system that helps to ensure implementation. The ILO regularly reviews the
17 application of standards in member states and makes recommendations. The indicator needs
18 to be developed.

19

20 Disaggregation: By convention.

21

22 Comments and limitations: To be reviewed once this indicator has been fully developed.

23

24 Potential lead agency or agencies: ILO.

25

26 **Core Indicators covered under other Targets that also apply to Target 4a:**

27 As underscored throughout this report, gender equality, social inclusion and equality of
28 opportunity are central objectives of sustainable development. The SDSN recommends that
29 SDG indicators be disaggregated to track inequalities in the access to social services, basic
30 infrastructure, and other public services. Consequently, many other indicators proposed in this
31 report contribute to Target 4a. Some of the most important ones include:

- 32
- 33 • Target 2c: Contraceptive prevalence rate (MDG Indicator)
 - 34 • Target 2c: Unmet need for family planning (MDG Indicator)
 - 35 • All indicators under Target 3b
 - 36 • Target 5b: Maternal mortality ratio (MDG indicator) and rate
 - 37 • Target 9c: Access to land in rural areas index

38 **Additional indicators that countries may consider:**

- 39
- 40 • **Average weekly number of hours spent on unpaid domestic work.** This indicator
41 captures the unpaid work performed by women within the home, separate from
42 childcare and other caregiving service. Data are gathered using time-use surveys which
43 record information on how people allocate their time across different day-to-day
activities.

⁴⁸ See website of the UCLG Standing Committee on Gender Equality: <http://women.uclg.org>

⁴⁹ See ILO webpage on Conventions and Recommendations: <http://ilo.org/global/standards/introduction-to-international-labor-standards/conventions-and-recommendations/lang--en/index.htm>

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- 1 • **Share of women on boards of national / multinational corporations.** This indicator is
2 the overall percentage of women on the corporate boards of national / multinational
3 corporations and is measure of gender equality.
- 4 • **Gender gap in wages, by sector of economic activity.** This indicator is the difference
5 between male and female earnings, expressed as a percentage of male earnings. It is a
6 measure of gender equality and discrimination, and should be disaggregated by sector
7 of activity.
- 8 • **Percentage of women without incomes of their own.** This indicator measures the
9 number of women heads of household or women partners of male heads of household
10 who do not have independent sources of income. The measure allows some indication
11 of women's economic dependency within households.
- 12

1 **Target 4b. Reduce by half the proportion of households with incomes less than half of
2 the national median income (relative poverty).**

3
4 **Key issues to measure for the target:**

5 This target tracks relative poverty as a key measure for inequalities within a country. It focuses
6 on the bottom of the income distribution since this is where equality of opportunities needs to
7 be assured.

8
9 **Potential and Illustrative Core Indicators:**

10
11 **Indicator 30: Proportion of households with incomes below 50% of median income
12 ("relative poverty")**

13
14 Rationale and definition: Relative poverty is defined as the proportion of households with
15 incomes less than half of the national median income. It is an indicator of inequality at the
16 bottom of the income distribution, which acts as a cause of social exclusion and undermines
17 equality of opportunity.

18
19 Disaggregation: The data should be disaggregated by sex and age of the head of household and
20 by urban/rural. If possible with the given survey methodology, whether of ethnic, religious,
21 linguistic minority, disabled or of indigenous peoples.

22
23 Comments and limitations: This indicator requires measurement of the distribution of
24 household income, which is still rare in most countries. Frequently such measurements are
25 conducted once every two to three years and data becomes available with reporting lags of up
26 to three years.⁵⁰

27
28 Potential lead agency or agencies: The indicator is widely reported by countries and can be
29 compiled from income distribution data. The UN Statistics Division, World Bank, or the OECD
30 could take the lead in compiling data.

31
32 **Indicator 31: Gini Coefficient**

33
34 Rationale and definition: The Gini coefficient measures the extent to which the distribution of
35 income or consumption expenditure among individuals or households within an economy
36 deviates from a perfectly equal distribution. A Gini value of 0 represents perfect equality of
37 incomes, and a Gini value of 1 denotes perfect inequality where one individual generates all the
38 income of a population. It is a well-known indicator for income inequality, which has been in
39 use for over 100 years.

40
41 Disaggregation: Opportunities for disaggregation to be reviewed.

42
43 Comments and limitations: The Gini coefficient has several limitations. Its calculation is more
44 sensitive to changes in the middle of the distribution, and much less sensitive to changes at the
45 top or the bottom of the distribution even though the latter are of particular importance to
46 social exclusion. Moreover, since the Gini coefficient tracks the entire income distribution it

⁵⁰ See OECD Income Distribution Database, online at <http://www.oecd.org/social/income-distribution-database.htm>

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1 does not lend itself as easily to policy recommendations as do other measures of income
2 inequality.

3

4 Potential lead agency or agencies: UN Statistics Division, World Bank, OECD.
5

6 **Additional indicators that countries may consider:**

- 7
- 8 • **Palma ratio.** This is the ratio of the richest 10% of the population's share of gross
9 national income divided by the poorest 40%'s share. It addresses the Gini index's over-
10 sensitivity to changes in the middle of the distribution and insensitivity to changes at
11 the top and bottom, and therefore more accurately reflects income inequality's
12 economic impacts on society as a whole.
 - 13 • **Income/wage persistence.** This is a measure of intergenerational socioeconomic
14 mobility, which is generally defined as the relationship between the socioeconomic
15 status of parents and the status their children will attain as adults. Economic mobility
16 can be measured either through wage or income, and it is expressed as the fraction of
17 parental income or wages reflected in their offspring's.

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1 **Target 4c. Prevent and eliminate violence against individuals, especially women and
2 children.***

3 **Key issues to measure for the target:**

4 This target covers issues of violence against individuals, particularly women and children, both
5 within and outside the household. Violence includes physical and/or sexual violence and the
6 threat of violence, and harmful practices. The prosed indicators cover two distinct areas:
7 occurrence and response.

8 **Potential and Illustrative Core Indicators:**

9 **Indicator 32: Rate of women subjected to violence in the last 12 months by an intimate
10 partner**

11 **Rationale and definition:** Violence against women and girls is important not only because of the
12 moral or public health issues it raises, but also since the threat of 'domestic' violence keeps
13 women in the home and further constrains women's movements and actions and limits their
14 life choices. It is estimated that over 30% of all women suffer physical partner abuse during
15 their lifetime. Knowing the incidence and prevalence of violence is a first step to ensuring
16 adequate prevention policies.

17 This indicator measures the occurrence of violence against women by intimate partners.
18 Violence is defined as physical and/or sexual violence (including acts of female genital cutting)
19 and the threat of such violence. Since most violence against women is perpetrated by their
20 husband or intimate partner, this measure captures most incidences of violence against
21 women.

22 **Disaggregation:** By frequency, age, marital status.

23 **Comments and limitations:** To be reviewed.

24 **Potential lead agency or agencies:** WHO and the UN Statistics Division collect this data based
25 on international and national surveys.⁵¹

26 **Indicator 33: Percentage of referred cases of sexual and gender-based violence against
27 women and children that are investigated and sentenced**

28 **Rationale and definition:** Sexual and gender-based violence remains widespread, and too often
29 ends in impunity. This indicator assesses how the police and justice system process and
30 manage violence against women and girls. The three stages, reporting, investigating, and
31 sentencing, are all important and interrelated. Reporting suggests confidence in the system;
32 investigation shows commitment by police/legal establishment, while sentencing shows justice
33 being achieved. This indicator is also a broader reflection of the quality of the rule of law and
34 access to justice in a given country.

35 **Disaggregation:** Opportunities for disaggregation to be reviewed.

⁵¹ United Nations Statistics Division (2010), *The World's Women 2010: Trends and Statistics*, New York, NY: UN Stats, 127.

1
2 Comments and limitations: The lack of data and inconsistency in reporting across countries;
3 lack of gender-sensitivity, capacity and resources of the police and judicial system; persistent
4 discriminatory attitudes and practices, and the likelihood that these crimes are resolved
5 informally within the community are major ongoing challenges.

6
7 Potential lead agency or agencies: Civil society networks such as the Global Network of Women
8 Peacebuilders are actively engaged in building capacity to measure and implement this and
9 other indicators from the UNSCR 1325 on women and peace and security.⁵² UN Women could
10 take on responsibility for gathering data.

11
12 **Core Indicators covered under other Targets that also apply to Target 4c:**

- 13 • Target 1c: Violent injuries and deaths per 100,000 population
14 • Target 1c: Refugees and internal displacement caused by conflict and violence

15
16 **Additional indicators that countries may consider:**

- 17 • **Percentage of women aged 20-24 who were married or in a union before age 18.** This
18 is an indicator of the prevalence of child marriage, as defined by UNICEF.

⁵² Global Network of Women Peacebuilders (2012), *Women Count - Security Council Resolution 1325: Civil Society Monitoring Report*.

1 Goal 5: Achieve Health and Wellbeing at all Ages

2
3 All countries achieve universal health coverage at every stage of life, with particular emphasis
4 on primary health services, including mental and reproductive health, to ensure that all people
5 receive quality health services without suffering financial hardship. Countries implement
6 policies to create enabling social conditions that promote the health of populations and help
7 individuals make healthy and sustainable decisions related to their daily living.

8
9 **Target 5a. Ensure universal coverage of quality healthcare, including the prevention**
10 **and treatment of communicable and non-communicable diseases, sexual and**
11 **reproductive health, family planning, routine immunization, and mental health,**
12 **according the highest priority to primary health care.**

13
14 **Key issues to measure for the target:**
15 Good health requires access to a high-quality and affordable health system with a particular
16 focus on primary health care. Since many health outcomes (e.g. maternal and child mortality
17 rates) change slowly in response to improved health systems, it is important to track the
18 coverage of the health system and its affordability. Target 5a provides governments with a tool
19 to track the performance of their health systems over relatively short periods of time to ensure
20 that they meet the needs of the entire population. We recommend that health data be
21 disaggregated as much as possible by geography, socio-economic criteria, etc. to identify and
22 address inequities.

23
24 We underscore that the detailed annual reports on malaria, HIV, child mortality, and other
25 major health challenges should continue under the SDGs. Such reporting will track a larger
26 number of indicators than the Core Indicators listed below.

27 **Potential and Illustrative Core Indicators:**

28
29
30 **Indicator 34: [Percent of population with access to basic primary health services, including**
31 **EmOC -- indicator to be developed]**

32
33 Rationale and definition: Physical access to primary healthcare services, including emergency
34 obstetric care (EmOC) facilities, is necessary for achieving the health targets.⁵³ Physical access
35 must be complemented by financial affordability (see next indicator). Sometimes, physical
36 availability is measured as “percent of population living within [x] kilometers of service delivery
37 point” with service delivery point defined as any location where a licensed provider (including
38 community health workers (CHWs) but excluding pharmacists) provides services. In the case of
39 EmOC facilities, WHO defines the acceptable level of access as five facilities (including at least
40 one comprehensive facility) for every 500,000 population.

41
42 Disaggregation: Opportunities for disaggregation to be reviewed.

43
44 Comments and limitations: Data on the population distribution and the GPS coordinates of all
45 service delivery points are required to estimate physical access, but only a limited number of
46 countries collect this information on a regular basis. As written, this measure does not take into

⁵³ WHO (2009), *Monitoring emergency obstetric care: a handbook*. Geneva, Switzerland: WHO Press, 10.

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1 account travel time and cost, which can profoundly impact access to health facilities.⁵⁴ We
2 therefore propose that a more comprehensive estimate for physical access be developed.
3 In addition, electronic and mobile health and other innovative means of providing health
4 services could be included here, so in the future the indicator may need to be revised to clarify
5 “physical access.”
6

7 Potential lead agency or agencies: WHO.

8
9 **Indicator 35: Out-of-pocket expenditure on health as a percentage of total expenditure on**
10 **health**

11
12 Rationale and definition: This is a core indicator of health financing systems. It contributes to
13 understanding the relative weight of direct payments by households in total health
14 expenditures. High out-of-pocket payments are strongly associated with households falling into
15 poverty as a result of health costs, or forgoing treatment because of poverty. It is critical that
16 global efforts to eradicate extreme poverty are not undermined by impoverishing expenditure
17 to use needed health services, and that the poorest people can afford critical care.⁵⁵

18
19 Disaggregation: By sex of head of household.

20
21 Comments and limitations: To be reviewed.

22
23 Potential lead agency or agencies: WHO gathers data on health expenditures by triangulating
24 information from several sources to estimate both government and private expenditures on
25 health.⁵⁶

26
27 **Indicator 36: Percent of children receiving full immunization as recommended by WHO⁵⁷**

28
29 Rationale and definition: The World Health Organization recommends that all children receive
30 vaccination against BCG, Hepatitis B, Polio, DTP, Haemophilus influenza, Pneumococcal
31 (Conjugate), Rotavirus, Measles, Rubella, and HPV. This indicator measures the percent of
32 children who have received all aforementioned immunizations.

33
34 Disaggregation: By sex. Other opportunities for disaggregation to be reviewed.

35
36 Comments and limitations: Countries may wish to include additional vaccinations, such as
37 tetanus, yellow fever, etc., as recommended by the WHO’s *Global Vaccine Action Plan*.⁵⁸

38
39 Potential lead agency or agencies: WHO currently collects data on immunization. UNICEF and
40 GAVI are other important stakeholders.

41

⁵⁴ WHO (2008), *Toolkit on monitoring health systems strengthening service delivery*. Geneva, Switzerland: WHO.

⁵⁵ Agyepong, I., Liu, G., Reddy, S. et al (2014 *in press*). *Health In the Framework of Sustainable Development*. Paris, France and New York, USA: SDSN.

⁵⁶ WHO Indicator and Measurement Registry version 1.7.0 (2011).

http://apps.who.int/gho/indicatorregistry/App_Main/indicator_registry.aspx

⁵⁷ WHO (2013a).

⁵⁸ See http://www.who.int/immunization/documents/general/ISBN_978_92_4_150498_0/en/index.html

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1 **Indicator 37: [Functioning programs of multisectoral mental health promotion and**
2 **prevention in existence - indicator to be developed]**

3
4 Rationale and definition: There is growing recognition of the need for comprehensive mental
5 health services to be offered as part of a universal health care (UHC) package. The World
6 Health Organization's Mental Health Action Plan proposes a number of indicators on mental
7 health, including this indicator, which measures the effectiveness of programs to promote
8 mental health and get necessary services to patients.⁵⁹

9
10 Disaggregation: Opportunities for disaggregation to be reviewed once the indicator has been
11 developed.

12
13 Comments and limitations: Actual methodology of data collection needs to be developed.
14 Countries may choose to complement the above indicator with an outcomes-based indicator,
15 such as number of persons receiving treatment per 1000 population, however additional
16 research will be required to determine an appropriate target range for such an indicator.

17
18 Potential lead agency or agencies: WHO.

19
20 **Core Indicators covered under other Targets that also apply to Target 5a:**

- 21 • Target 2c: Unmet need for family planning (MDG Indicator)

22
23 **Additional indicators that countries may consider:**

- 24 • **Percent of fully and consistently equipped and supplied service delivery points to**
25 **provide basic package of services.** Based on a package of required equipment (e.g.
26 surgical instruments, ultrasound machines) and supplies (e.g. latex gloves, vaccines)
27 determined by the World Health Assembly and/or at the national level by ministries of
28 health, this indicator tracks the number of service delivery points meeting minimum
29 requirements.
- 30 • **Ratio of health professionals to population (MDs, nurse midwives, nurses,**
31 **community health workers, EmOC caregivers).** The overall ratio of trained medical
32 professionals to population; WHO currently tracks the ratio of physicians, nurses, and
33 midwives, but Community Health Workers (CHWs) should be included where relevant.
- 34 • **Proportion of population with access to affordable essential drugs on a sustainable**
35 **basis.** The proportion of the population that has reliable physical and financial access
36 to essential drugs (e.g. vaccines, antibiotics, anti-retrovirals). This could be tracked in
37 relation to Indicator 34 but should be complemented by survey data.
- 38 • **Proportion of new health care facilities built in compliance with building codes and**
39 **standards.** This indicator measures whether or not new health facilities are in
40 compliance with national standards for human health and safety, as well as standards
41 to withstand natural hazards (floods, earthquakes, typhoons), a key component of
42 disaster preparedness.
- 43 • **Number of households falling below the poverty line due to out of pocket health**
44 **expenditures annually.** This indicator measures the number of households
45 experiencing impoverishing health spending in a given year.

⁵⁹ WHO (2013d).

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- 1 • **Proportion of 1 year-old children immunized against measles (MDG Indicator).** The
2 proportion of children under one year of age who have received at least one dose of
3 measles-containing vaccine.
- 4 • **Proportion of births attended by skilled health personnel (MDG Indicator).** The
5 proportion of total live births that are attended by a skilled birth attendant trained in
6 providing lifesaving obstetric care.
- 7 • **Antenatal care coverage (at least one visit and at least four visits) (MDG Indicator).**
8 The percentage of women aged 15–49 with a live birth in a given time period that
9 received antenatal care provided by skilled health personnel at least once during their
10 pregnancy and by any provider four or more times during their pregnancy.
- 11 • **Post-natal care coverage (one visit).** Similar to antenatal care coverage, the percentage
12 of women aged 15–49 with a live birth in a given time period that received post-natal
13 care provided by skilled health personnel at least once following the birth of their child
14 and by any provider four or more times after birth.
- 15 • **Condom use at last high-risk sex (MDG Indicator).** The percentage of young men and
16 women aged 15–24 reporting the use of a condom the last time they had sexual
17 intercourse with a non-marital, non-cohabiting sexual partner of those who had sex
18 with such a partner in the last 12 months.
- 19 • **Coverage of iron-folic acid supplements for pregnant women (%).** Percent of pregnant
20 women regularly taking the recommended dose of iron-folic acid supplements.
- 21 • **Percentage of exclusive breastfeeding for the first 6 months of life.** The percentage of
22 mothers feeding infants exclusively on breast milk (not formula or solid foods) for the
23 first 6 months of life.
- 24 • **Percent HIV+ pregnant women receiving PMTCT.** In the absence of intervention, 15–
25 45% of HIV+ pregnant women transmit the virus to their children. This rate can be
26 reduced to levels below 5% with intervention. This indicator tracks the percent of HIV+
27 pregnant women on a regimen for the prevention of mother-to-child HIV transmission
28 (PMTCT).
- 29 • **Proportion of tuberculosis cases detected and cured under directly observed
30 treatment short course (MDG Indicator).** The proportion of tuberculosis (TB) cases
31 detected and cured, also known as the TB treatment success rate, is the number of
32 new TB cases in a given year that were cured or completed a full treatment of directly
33 observed treatment short (DOTS).
- 34 • **Proportion of children under 5 with fever who are treated with appropriate anti-
35 malarial drugs (MDG Indicator).** The percentage of children aged 0–59 months who
36 were ill with a fever in the two weeks before the survey and who received any anti-
37 malarial drugs during that time.
- 38 • **Proportion of children under 5 sleeping under insecticide-treated bed nets (MDG
39 Indicator).** The proportion of children aged 0–59 months who slept under an
40 insecticide-treated mosquito net the night prior to the survey.
- 41 • **Percent fever treated with antimalarial drugs (in endemic areas).** This is similar to the
42 MDG indicator on children under 5 with fever who are treated with appropriate anti-
43 malarial drugs, but expands coverage to all age groups.
- 44 • **Percent pregnant women receiving malaria IPT (in endemic areas).** Malaria in
45 pregnancy affects both the mother and the fetus. Intermittent preventive treatment in
46 pregnancy (IPT) can effectively prevent malaria in pregnant women; all pregnant
47 women in moderate- to high- malaria-transmission areas should receive IPT.
- 48 • **Percent of women with cervical cancer screening.** The percent of women receiving
49 screening for cervical cancer. The World Health Organization's Global Monitoring
50 Framework for Non-Communicable Diseases recommends this indicator.

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- 1 • **Percent with hypertension diagnosed and receiving treatment.** The World Health
2 Organization's Global Monitoring Framework for non-communicable diseases calls for a
3 25% reduction in hypertension (raised blood pressure); to achieve this goal we
4 recommend tracking the number of people diagnosed with hypertension and those
5 receiving treatment.
- 6 • **NTD cure rate.** It is vital that the billion people affected by a neglected tropical disease
7 each year retrieve adequate treatment all the way to cure. The exact means by which
8 this can be measured still needs to be defined.
- 9 • **Percent of women with HPV vaccine.** The percent of women receiving the human
10 papilloma virus (HPV) vaccine, which offers protection against some cervical cancers.
11 The World Health Organization's Global Monitoring Framework for Non-Communicable
12 Diseases recommends this indicator.
- 13 • **Percentage of beneficiaries using hospitals, health facilities, and clinics providing
14 basic drinking water, adequate sanitation, and adequate hygiene.** This indicator
15 measures access to drinking water, gender separated sanitation amenities, and hand
16 washing facilities for patients in health facilities, using WHO-UNICEF JMP definitions.

17

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1 **Target 5b. End preventable deaths by reducing child mortality to [20] or fewer deaths
2 per 1000 births, maternal mortality to [40] or fewer deaths per 100,000 live births,
3 and mortality under 70 years of age from non-communicable diseases by at least 30
4 percent compared with the level in 2015.**

5
6 **Key issues to measure for the target:**

7 This target complements Target 5a by tracking key health outcomes, such as mortality rates,
8 incidence and prevalence of key infectious diseases, and mortality and morbidity from non-
9 communicable diseases. The indicators proposed below include the MDG health indicators and
10 can be tracked in developed as well as developing countries. As under Target 5a, we
11 underscore that the detailed annual reports on malaria, HIV, child mortality, and other major
12 health challenges should continue under the SDGs. Such reporting will track a larger number of
13 indicators than the Core Indicators listed below.

14
15 **Potential and Illustrative Core Indicators:**

16
17 **Indicator 38: Neonatal, infant, and under-five mortality rates (modified MDG Indicator)**

18
19 Rationale and definition: The under-five mortality rate is the probability for a child to die
20 before reaching the age of five, if subject to current age-specific mortality rates. This indicator
21 measures child health and survival and is expressed as the number of deaths per 1,000 live
22 births. It captures more than 90 percent of global mortality among children under the age of
23 18. Data on disease incidence are frequently unavailable, so mortality rates are used.⁶⁰

24
25 Disaggregation: Data should be heavily disaggregated so as to identify particularly vulnerable
26 populations.

27
28 Comments and limitations: The neonatal and infant mortality rates represent an important
29 subcomponent of under-five mortality rate because past trends are for slower declines in
30 neonatal and infant deaths than among children age 1 to 4.⁶¹

31
32 Potential lead agency or agencies: UNICEF, WHO, and the UN Population Division report on
33 infant and child mortality; data collection on neonatal mortality rates will need to be improved.

34
35 **Indicator 39: Maternal mortality ratio (MDG indicator) and rate**

36
37 Rationale and definition: The maternal mortality ratio is the annual number of maternal
38 deaths from any cause related to or aggravated by pregnancy or its management (excluding
39 accidental or incidental causes) during pregnancy and childbirth or within 42 days of
40 termination of pregnancy, per 100,000 live births per year. This indicator reflects the capacity
41 of health systems to effectively prevent and address the complications occurring during
42 pregnancy and childbirth. The maternal mortality rate is the number of maternal deaths in a
43 population divided by the number of women of reproductive age. It captures the likelihood of
44 both becoming pregnant and dying during pregnancy (including deaths up to six weeks after
45 delivery).

⁶⁰ UNICEF, WHO, World Bank and UNPD (2007), *Levels and Trends of Child Mortality in 2006: Estimates developed by the Inter-agency Group for Child Mortality Estimation*. New York, NY: UNICEF, 9.

⁶¹ Ibid, 10.

1
2 Disaggregation: As data systems improve, it will be important to disaggregate by age, rural vs.
3 urban, and income level.⁶²

4
5 Comments and limitations: Both metrics are difficult to measure as vital registration and health
6 information systems are often weak in developing countries.

7
8 Potential lead agency or agencies: WHO, the United Nations Population Division (UNPD),
9 UNICEF, and World Bank maintain databases on maternal mortality.

10
11 **Indicator 40: Healthy life expectancy at birth**

12
13 Rationale and definition: This indicator measures the average number of years that a person
14 can expect to live in "full health" by taking into account years lived in less than full health due
15 to disease and/or injury.

16
17 Disaggregation: By sex and income level.

18
19 Comments and limitations: The main limitation of this indicator is the lack of reliable data on
20 mortality and morbidity, especially from low-income countries, and the long lags (WHO collects
21 only every 5 years). Other issues include lack of comparability of self-reported data from health
22 interviews and the measurement of health-state preferences for such self-reporting.

23
24 Potential lead agency or agencies: WHO collects this data.⁶³

25
26 **Indicator 41: HIV prevalence, treatment, and mortality rates (modified MDG indicator)**

27
28 Rationale and definition: This indicator measures the number of individuals by age group living
29 with HIV expressed as a percentage of the total population in the age group, as well as
30 treatment rates with anti-retroviral therapy by age group. This tracks progress towards
31 reducing HIV infection and improving access to treatment. Treatment describes the proportion
32 of in each age group with HIV currently receiving antiretroviral therapy (ART), which consists of
33 the use of at least three antiretroviral (ARV) drugs to maximally suppress HIV and stop the
34 progression of the disease. It adds tracking of mortality from HIV/AIDS.

35
36 Disaggregation: By sex and age.

37
38 Comments and limitations: The age-specific measure of HIV prevalence is a better proxy for
39 monitoring overall HIV incidence because trends in HIV prevalence differ by age group.

40
41 Potential lead agency or agencies: WHO and UNAIDS report on the data for global
42 monitoring.⁶⁴

⁶² See WHO website on maternal and perinatal health:
www.who.int/reproductivehealth/topics/maternal_perinatal/en/index.html

⁶³ WHO Indicator and Measurement Registry (2011).

⁶⁴ UNAIDS (2013), 30.

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1
2 **Indicator 42: Incidence and death rates associated with malaria (MDG Indicator)**

3
4 Rationale and definition: The incidence rate of malaria is the number of new cases
5 of malaria per 100,000 people per year. The malaria death rate is the number of deaths caused
6 by malaria per 100,000 people per year.

7
8 Disaggregation: Data should be disaggregated by age group, sex, urban/rural, and income, as
9 well as by causal agents of malaria.⁶⁵

10
11 Comments and limitations: The quality of the data is particularly sensitive to the completeness
12 of health facility reporting. In addition, since the symptoms of malaria are similar to those of
13 other diseases, incidences and deaths are sometimes misreported in poorly resourced
14 countries. The invention of rapid diagnostic testing for malaria should be leveraged to improve
15 data quality.

16
17 Potential lead agency or agencies: WHO is responsible for reporting this indicator at the
18 international level.⁶⁶

19
20 **Indicator 43: Incidence, prevalence and death rates associated with TB (MDG Indicator)**

21
22 Rationale and definition: The incidence rate of TB is the number of new cases of TB per 100,000
23 people per year. Prevalence is the number of TB cases in a population at a given point in time
24 per 100,000. The TB death rate is the number of deaths caused by TB per 100,000 in one year.
25 Detecting and curing TB are key interventions for addressing poverty and inequality. Prevalence
26 and deaths are more sensitive markers of the changing burden of tuberculosis than new cases,
27 but data on incidence are more comprehensive and give the best overview of the impact of
28 global tuberculosis control.

29
30 Disaggregation: Data should be disaggregated by age group, sex, urban/rural, and income, as
31 well as by TB strain, with special attention to drug-resistant varieties. Additionally it should be
32 disaggregated by site of disease (pulmonary/extrapulmonary), type of laboratory confirmation
33 (usually sputum smear), and history of previous treatment.

34
35 Comments and limitations: To be reviewed.

36
37 Potential lead agency or agencies: WHO is responsible for reporting this indicator at the
38 international level.⁶⁷

⁶⁵ United Nations (2003).

⁶⁶ See WHO website on malaria: <http://www.who.int/topics/malaria/en>

⁶⁷ See WHO website on TB: <http://www.who.int/tb/en>

1
2 **Indicator 44: Probability of dying between exact ages 30 and 70 from any of cardiovascular**
3 **disease, cancer, diabetes, or chronic respiratory disease**

4
5 Rationale and definition: The disease burden from non-communicable diseases (NCDs) among
6 adults is increasing in developing countries due to aging and health transitions. Measuring the
7 risk of dying from target NCDs is important to assess the burden from mortality due to NCDs in
8 a population. This indicator measures the risk of premature death due to the most common
9 NCDs. It is the percent of 30-year-old people who would die before their 70th birthday from
10 any of cardiovascular disease, cancer, diabetes, or chronic respiratory disease, assuming that
11 s/he would experience current mortality rates at every age and s/he would not die from any
12 other cause of death, like accidents or HIV/AIDS.⁶⁸

13
14 Disaggregation: By sex. Other opportunities for disaggregation to be reviewed.

15
16 Comments and limitations: One limitation is that data on adult mortality is limited, notably in
17 low-income countries.⁶⁹

18
19 Potential lead agency or agencies: WHO.

20
21 **Additional indicators that countries may consider:**

- 22
23
24
25
26
27
28
- **Neonatal mortality rate.** Mortality rate (deaths per 1000 live births) for children during the first 28 days of life.
 - **Incidence rate of diarrheal disease in children under five years.** Diarrhea is defined as 3 or more loose stools in a period of 24 hours or less.
 - **Incidence and death rates associated with hepatitis.** Prevalence and mortality rates for the various strains of hepatitis (A, B, E, etc.).

⁶⁸ WHO Indicator and Measurement Registry (2011).

⁶⁹ Agyepong et al. (2014 in press).

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1 **Target 5c. Implement policies to promote and monitor healthy diets, physical activity**
2 **and subjective wellbeing; reduce unhealthy behaviors such as tobacco use by [30%]**
3 **and harmful use of alcohol by [20%].**

4
5 **Key issues to measure for the target:**

6 In addition to the services provided by the health systems, individuals need to pursue healthy
7 behaviors to reduce the incidence of non-communicable diseases, such as diabetes, heart
8 disease, or lung cancer. Such non-communicable diseases are a growing concern in all
9 countries, developed and developing. This target calls for policies to promote healthy behavior
10 through better diets, more exercise, less harmful use of alcohol, and reduced smoking, which
11 are among the principal risk factors for many non-communicable diseases. Indicators for the
12 target will track the prevalence of unhealthy behavior as well as subjective wellbeing, a key
13 dimension of human wellbeing that depends on a large number of factors (see SDSN 2013a).

14
15 **Potential and Illustrative Core Indicators:**

17 **Indicator 45: Percent of population overweight and obese**

19 Rationale and definition: This indicator tracks the share of a country's population that is
20 overweight or obese. The body mass index (BMI) is a measure of body fat based on height and
21 weight that is calculated by dividing a person's weight by their height squared. WHO defines
22 overweight for adults as having a BMI greater than or equal to 25. A BMI greater than or equal
23 to 30 defines obesity. Overweight in children is defined by WHO's Child Growth Standards as
24 the percentage of children aged 0-5 whose weight-for-height is above +2 standard deviations
25 of the WHO Child Growth Standards median. Prevalence of overweight in adolescents is the
26 percentage of adolescents who are one standard deviation above the BMI for age and sex.⁷⁰

27
28 Disaggregation: By sex and age.

30 Comments and limitations: The BMI is an imperfect measure, as it does not allow for the
31 relative proportions of bone, muscle and fat in the body, and it ignores waist size, which is a
32 clear indicator of obesity level.

34 Potential lead agency or agencies: WHO.

36 **Indicator 46: Household Dietary Diversity Score**

38 Rationale and definition: Healthy diets are critical for good health and wellbeing, so the SDSN
39 proposes to include Household Dietary Diversity Score. This indicator measures a snapshot of a
40 household's diet, and from it draws conclusions on a household's ability to afford a variety of
41 foods. The diversity of one's diet is a good indicator of the availability of micronutrients
42 (vitamins and minerals) and servings of fruits and vegetables.

44 Disaggregation: By household income level.

⁷⁰ WHO Indicator and Measurement Registry (2011).

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1 Comments and limitations: This indicator relies on detailed household surveys, which may not
2 be feasible in some instances.⁷¹ Several alternative indicators are available, including

- 3 • Fraction of calories from added saturated fats and sugars (%)
4 • Per capita meat consumption (kg per capita)
5 • Share of calories from non-staple foods (%) (also referred under Target 1b)

6
7 Potential lead agency or agencies: FAO.

8
9 **Indicator 47: Current use of any tobacco product (age-standardized rate)**

10
11 Rationale and definition: Tobacco use is a leading cause of preventable death in many
12 developed countries, and is a growing problem and contributor to the burden of disease in
13 developing countries. This indicator measures the prevalence of current smoking (daily, non-
14 daily, or occasional) of any tobacco product, including cigarettes, cigars, pipes, etc., for adults
15 aged 15 years and over.⁷² It expands upon the WHO's recommendation to further track use of
16 smokeless tobacco products (including chewing, snuff, and electronic cigarettes). The age-
17 standardized prevalence rate of tobacco use (adjusted according to the WHO regression
18 method) allows for comparisons across countries and across time periods to determine
19 trends.⁷³

20
21 Disaggregation: By sex and age.

22
23 Comments and limitations: To be reviewed.

24
25 Potential lead agency or agencies: WHO.

26
27 **Indicator 48: Harmful use of alcohol**

28
29 Rationale and definition: WHO recommends a reduction in the harmful use of alcohol as part of
30 the Global Monitoring Framework for Non-Communicable Diseases.⁷⁴ WHO recommends
31 tracking two dimensions of alcohol overuse/abuse: total (recorded and unrecorded) alcohol
32 consumption within a calendar year in liters of pure alcohol (to assess long-term consumption),
33 and age-standardized prevalence of heavy episodic (binge) drinking (HED) among adolescents
34 and adults. HED is defined as consuming 60 or more grams of alcohol on a single occasion at
35 least once in the last 30 days.

36
37 This indicator provides information regarding the patterns of alcohol consumption in a given
38 country, and consequently highlights the population that has a higher risk of experiencing
39 alcohol-related acute harm, such as alcohol poisoning and automobile accidents, as well as
40 chronic health complications, such as liver cancer and hypertension.

41
42 Disaggregation: By sex and age.

43
71 FAO (2011).

72 WHO Indicator and Measurement Registry (2011).

73 Ibid.

74 WHO (2014a).

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1 Comments and limitations: Another possible indicator of alcohol overuse/abuse would be to
2 use the Alcohol Use Disorders Identification Test (AUDIT) that also diagnoses both short- and
3 long-term over use.⁷⁵

4
5 Potential lead agency or agencies: The data is gathered through population-based national
6 surveys.⁷⁶ WHO would ensure comparable data is collected globally.

7
8 **Indicator 49: Evaluative Wellbeing and Positive Mood Affect**

9
10 Rationale and definition: Measures of evaluative wellbeing capture a reflective assessment of
11 an individual's overall satisfaction with life. One of the most widely used measures of
12 evaluative wellbeing is the Cantril Self-Anchoring Striving Scale, which is included in Gallup's
13 World Poll of more than 150 countries, representing more than 98% of the world's population.
14 It asks respondents to imagine a ladder with steps numbered 0 (bottom) to 10 (top), with 10
15 representing the best possible life for you and 0 the worst. Respondents then respond with
16 which step they feel they are currently on, and where they will be in 5 years.⁷⁷

17
18 The Cantril Scale measures how individuals evaluate their own lives, and is complemented by
19 the positive affect measure "Positive Mood", which measures the ups and downs of daily
20 emotions. Positive affect specifically measures a range of recent positive emotions. Although
21 short-term emotional reports carry much less information about life circumstances than do life
22 evaluations, they are very useful at revealing the nature and possible causes of changes in
23 moods on an hour-by-hour or day-by-day basis.⁷⁸

24
25 Disaggregation: By sex and age.

26
27 Comments and limitations: To be reviewed.

28
29 Potential lead agency or agencies: In cooperation with polling organizations, such as Gallup
30 International, the SDSN or the OECD could report the subjective wellbeing data.

31
32 **Additional indicators that countries may consider:**

- 33 • **Prevalence of physical inactivity.** The proportion of people not reaching WHO
34 recommendations for physical activity.⁷⁹
- 35 • **Fraction of calories from added saturated fats and sugars (%).** Percent of caloric intake
36 coming from added saturated fats and sugars; an indicator of a healthy diet.
- 37 • **Age-standardized mean population intake of salt (sodium chloride) per day in grams
38 in persons aged 18+ years.** The amount of salt consumed per day; overconsumption of
39 salt can affect hypertension and other non-communicable diseases.
- 40 • **Prevalence of persons (aged 18+ years) consuming less than five total servings (400
41 grams) of fruit and vegetables per day.** Consumption of fruits and vegetables is crucial
42 both for ensuring a healthy diet and maintaining a healthy weight; this indicator tracks
43 the percent of people not eating the recommended amount of fruits and vegetables.

⁷⁵ For more information see http://whqlibdoc.who.int/hq/2001/who_msd_msb_01.6a.pdf

⁷⁶ WHO (2013c).

⁷⁷ For more information, see OECD Guidelines on measuring subjective well-being (2013), online at
<http://www.oecd.org/statistics/Guidelines%20on%20Measuring%20Subjective%20Well-being.pdf>

⁷⁸ For more details, see SDSN, (2013b), *World Happiness Report*. <http://unsdsn.org/happiness>

⁷⁹ WHO (2010).

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- **Percent change in per capita [red] meat consumption relative to a 2015 baseline.** Over-consumption of red meat is a risk factor for many non-communicable diseases; this indicator tracks changes in per capita red meat consumption, with the goal of reducing overconsumption in some countries.
 - **Age-standardized (to world population age distribution) prevalence of diabetes (preferably based on HbA1c), hypertension, cardiovascular disease, and chronic respiratory disease.** In addition to tracking mortality rates from non-communicable diseases, it will be important to track prevalence rates. As persons suffering from NCDs receive better treatment and live longer, mortality rates may no longer be an adequate measure of the health system's effectiveness at addressing these diseases (i.e. longer lives means higher mortality from NCDs as countries address communicable diseases). This indicator will help assess long-term management of these conditions.
 - **Percentage of population with basic hand washing facilities in the home.** This indicator measures access to soap and water at hand washing facilities in the home, using WHO-UNICEF JMP definitions.

1 **Goal 6: Improve Agriculture Systems and Raise Rural 2 Prosperity**

3 Improve farming practices, rural infrastructure, and access to resources for food production to
4 increase the productivity of agriculture, livestock, and fisheries, raise smallholder incomes,
5 reduce environmental impacts, promote rural prosperity, and ensure resilience to climate
6 change.
7

8 Target 6a. Ensure sustainable food production systems with high yields and high
9 efficiency of water, soil nutrients, and energy, supporting nutritious diets with low food
10 losses and waste.*
11

12 **Key issues to measure for the target:**
13 This proposed target aims to increase the net production of nutritious food, both through
14 reducing food losses throughout the supply chain (farm-to-fork) and increasing productivity.
15 The latter can be achieved through sustainable intensification solutions that may include
16 increased inputs(fertilizers, water, etc.) in areas where current input use is low and a major
17 constraint, or improved efficiency of inputs (fertilizers, water, etc.) in areas where current
18 resource efficiency is sub-optimal or agricultural system are unsustainable.⁸⁰
19

20 Given the important role women play in agriculture and nutrition, all indicators under Goal 6
21 should be gender-disaggregated in service of ensuring equitable access to technology,
22 knowledge and productive assets for all farmers.
23

24 **Potential and Illustrative Core Indicators:** 25

26 **Indicator 50: Crop yield gap (actual yield as % of attainable yield)**

27 Rationale and definition: This indicator tracks yield gaps for major commodities, i.e. actual
28 yields relative to the yield that can be achieved under good management conditions, taking
29 into account climate and the sustainable use of water (i.e. water-limited yield potential). This
30 indicator is a benchmark for productivity that shows the exploitable yield gap. Countries could
31 aim, for example, for the majority of their farms to achieve at least 80% of the attainable
32 water-limited yield potential on a sustainable basis, which requires implementing the right
33 policy and technology roadmaps.
34

35 Disaggregation: It can be disaggregated by crops of highest priority for a country and is suitable
36 for spatial disaggregation, from local to global scales.
37

38 Comments and limitations: This indicator must be interpreted in conjunction with other
39 indicators expressing efficiency of critical resources such as water and nutrients to ensure agro-
40 ecologically sustainable solutions. It requires improved data collection and monitoring systems,
41 including modeling and remote sensing.⁸¹
42

⁸⁰ Dobermann, A. and Nelson, R. et al. (2013).

⁸¹ Ibid.

1 Potential lead agency or agencies: FAO with International Fertilizer Association (IFA).
2

3 **Indicator 51: Crop nitrogen use efficiency (%)**

4
5 Rationale and definition: Nitrogen plays a central role for the productivity, sustainability and
6 environmental impact of food systems. Most of the anthropogenic nitrogen produced enters
7 global cycles as fertilizer in crop production. Hence, optimizing management so that high yields
8 can be achieved with high fertilizer efficiency is a core component of food security as well as
9 environmental sustainability.

10
11 This indicator is the ratio of nitrogen in harvested crop products to the amount of nitrogen
12 applied per cropping season or year. It is directly related to the efficiency of fertilizer use on
13 agricultural land, including new technologies and stewardship programs targeting farmers and
14 advisors.

15
16 Interpretation and specific targets for crop nitrogen use efficiency are context-specific,
17 primarily depending on yield, current nitrogen use, soil quality, and other factors. Targets for
18 this indicator need to be defined in relation to the crop yield indicator. A possible target for this
19 indicator would be if crop nitrogen efficiency increased by [30%] relative to current levels in
20 countries with low efficiency. Unsustainable soil nutrient depletion should be halted and
21 reversed in countries with insufficient nutrient use, resulting in increased crop production and
22 economic return.

23
24 Disaggregation: Spatially and by farming system.

25
26 Comments and limitations: To be reviewed.

27
28 Potential lead agency or agencies: Data for this indicator could be collected by FAO working
29 with the International Fertilizer Association (IFA).⁸²

30
31 **Indicator 52: [Crop water productivity (tons of harvested product per unit irrigation water)
32 – indicator to be developed]**

33
34 Rationale and definition: The proposed indicator is directly related to freshwater use for
35 irrigation. Under the System of Environmental-Economic Accounting (SEEA) water productivity
36 is defined as the value added of agriculture divided by water use by agriculture. More work is
37 needed to define this indicator.

38
39 Disaggregation: Opportunities for disaggregation to be reviewed once the indicator has been
40 defined.

41
42 Comments and limitations: Another alternative is to define water productivity as the efficiency
43 with which water is converted to harvested product, i.e. the ratio between yield and seasonal
44 water supply, including rainfall and irrigation.⁸³

45
46 Potential lead agency or agencies: FAO.

⁸² Ibid.

⁸³ Van Ittersum, M.K. et al. (2013).

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1 **Indicator 53: [Share of agricultural produce loss and food waste (% of food production) –**
2 **indicator to be developed]**

3
4 Rationale and definition: Post-harvest losses through inefficiencies and waste are widespread
5 in all countries. This proposed indicator would track the share of agricultural produce that is
6 lost or wasted in each country. It can be constructed using methods developed by FAO (the
7 ‘food waste footprint’),⁸⁴ but they will need to be improved further.

8
9 Disaggregation: Opportunities for disaggregation to be reviewed once the indicator has been
10 defined.

11
12 Comments and limitations: Significant efforts will be necessary to create baseline for food loss
13 and waste. Staple crops that are often consolidated after harvest for processing will usually
14 provide better data for food loss. Crops grown on a small scale and/or consumed directly by
15 the household farm will be much more difficult to assess, yet they are the crops that tend to
16 experience the highest food losses.

17
18 Potential lead agency or agencies: FAO.

19
20 **Additional indicators that countries may consider:**

- 21 • **Cereal yield growth rate (% p.a.).** Averaged over several years, this indicator tracks
22 long-term increases in crop yields, which must make an important contribution to
23 meeting future food needs.
- 24 • **[Indicator on irrigation access gap to be developed].** Increasing irrigation in areas
25 where it can be done sustainably but is currently underutilized will be important to
26 raise crop yields. An appropriate indicator to measure this is needed.
- 27 • **Livestock yield gap (actual yield as % of attainable yield).** This indicator tracks yield
28 gaps for major livestock commodities like milk, eggs and meat, taking into account
29 climate, disease conditions and the sustainable use of water and feed. This indicator
30 must be interpreted in conjunction with other indicators expressing efficiency of critical
31 resources such as feed and water to ensure agro-ecologically sustainable solutions, as
32 well as total livestock numbers at the household and national levels.

⁸⁴ See FAO publications on calculating ‘food waste footprint’ at <http://www.fao.org/nr/sustainability/food-loss-and-waste/en>

1 **Target 6b. Halt forest and wetland conversion to agriculture, protect soil resources,**
2 **and ensure that farming systems are resilient to climate change and disasters.***

3
4 **Key issues to measure for the target:**

5 This target seeks to reduce and ultimately halt the conversion of natural systems (wetlands,
6 forests, savannah, grasslands) to agriculture, as well as reduce the loss of agricultural land to
7 other uses such as urban encroachment, and loss of soil fertility or other forms of soil
8 degradation. It also seeks to increase the resiliency of farmers to risks (flood, drought, storm,
9 pests), which are expected to worsen over time as a result of climate change.

10
11 **Potential and Illustrative Core Indicators:**

12
13 **Indicator 54: Annual change in forest area and land under cultivation**

14
15 Rationale and definition: This indicator tracks the net change of forest area and the expansion
16 of agriculture into natural ecosystems as well as the loss of productive agricultural land to the
17 growth of urban areas, industry, roads, and other uses, which may threaten a country's food
18 security. It is measured as percent change per year and tracked by FAO. Success would be
19 reducing the loss of agricultural land to other uses (industry, urban areas), while also halting
20 the conversion of natural ecosystems to agriculture. Sustainable agroecological intensification
21 would allow increased food production without converting natural ecosystems to agriculture.

22
23 Land under cultivation is defined by FAO as land under temporary crops (double-cropped areas
24 are counted once), temporary meadows for mowing or for pasture, land under market or
25 kitchen gardens, and land temporarily fallow (FAOSTAT, online).⁸⁵ Forest area is land under
26 natural or planted stands of trees, excluding tree stands in agricultural production systems (e.g.
27 plantations or agroforestry systems) and trees in urban parks and gardens.

28
29 Disaggregation: This indicator can be disaggregated spatially.

30
31 Comments and limitations: The indicator could be expanded to also include wetlands or other
32 critical ecosystems.⁸⁶

33
34 Potential lead agency or agencies: FAO, UNEP.

35
36 **Indicator 55: Annual change in degraded or desertified arable land (% or ha)**

37
38 Rationale and definition: The FAO defines land degradation as a reduction in the condition of
39 the land, which affects its ability to provide ecosystem goods and services and to assure its
40 functions over a period of time.⁸⁷ Components of land degradation include salinization,
41 erosion, loss of soil nutrients, and sand dune encroachment. Data on land degradation is
42 continuously being improved through advances in remote sensing, digital mapping, and
43 monitoring. A central objective should be to halt all net land degradation by 2030.

44
⁸⁵ See FAOSTAT: <http://faostat.fao.org/site/375/default.aspx>

⁸⁶ See FAO Global Forest Resources Assessments: <http://www.fao.org/forestry/fra/en>

⁸⁷ See FAOSTAT: <http://faostat.fao.org/site/375/default.aspx>

1 Disaggregation: The FAO supports methodologies to determine the extent of degradation,
2 distinguishing between light, moderate, strong, and extreme. Data will be disaggregated by
3 these categories and by sub-region.

4
5 Comments and limitations: To be reviewed.

6
7 Potential lead agency or agencies: FAO, UNEP.

8

9 **Indicator 56: Economic losses from disasters in rural areas, by climatic and non-climatic**
10 **events (in US\$) [Indicator to be specified]**

11

12 Rationale and definition: Farmers and rural populations are constantly at risk from natural
13 disasters. This indicator measures losses in rural areas due to natural disasters, disaggregated
14 by climatic and non-climatic events. Extreme climatic events are frequently water-related and
15 include floods, droughts, hurricanes and other storms, as well as extreme heat and cold events.
16 Other natural disasters include earthquakes, tsunamis, and volcanic eruptions.

17

18 Effective adaptation measures are needed to reduce the economic and social impact of natural
19 disasters, including extreme climatic events, on agriculture and rural areas. The indicator would
20 track crop and animal production losses associated with such climatic and non-climatic events,
21 primarily through utilizing real-time remote sensing technology as the core of high-resolution
22 agricultural monitoring systems. Such an indicator would also track the success of adaptation
23 and other preparedness measures in areas that are most at risk, including, for example, the
24 adoption of new stress tolerant varieties or other resilience-enhancing technologies that
25 minimize the risk of crop losses.⁸⁸

26

27 Disaggregation: This indicator can be disaggregated spatially.

28

29 Comments and limitations: To be reviewed.

30

31 Potential lead agency or agencies: Such an indicator could be reported by UNISDR working with
32 FAO, WHO and a consortium of reinsurance companies that track this data.

33

34 **Core Indicators covered under other Targets that also apply to Target 6b:**

- 35 • Target 2b: [Excessive loss of reactive nitrogen [and phosphorus] to the environment
36 (kg/ha) – indicator to be developed]

37

38 **Additional indicators that countries may consider:**

- 39 • **[Farmers with nationally appropriate crop insurance (%) – to be developed].** This
40 indicator seeks to quantify resilience (to storms, floods, drought, pests, etc.) in
41 agricultural systems.

⁸⁸ Overseas Development Institute (ODI). (2013). Mitchell, T., L. Jones, E. Lovell, and E. Comba (eds). *Disaster Management in Post-2015 Development Goals: Potential Targets and Indicators*. London, UK: ODI.

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1 **Target 6c. Ensure universal access in rural areas to basic resources and infrastructure
2 services (land, water, sanitation, modern energy, transport, mobile and broadband
3 communication, agricultural inputs, and advisory services).**

4
5 **Key issues to measure for the target:**

6 Ending extreme poverty in rural areas and promoting rural development, including productive
7 agriculture, requires widespread access to infrastructure services. This target tracks access to
8 essential infrastructure services needed to end extreme poverty and promote rural
9 development. Improved rural infrastructure can also make smallholder farming economically
10 attractive through the expansion of business and knowledge services to farmers.

11
12 **Potential and Illustrative Core Indicators:**

13
14 **Indicator 57: Percentage of rural population using basic drinking water (modified MDG
15 Indicator)**

16
17 Rationale and definition: This indicator measures the percentage of the rural population with
18 access to basic drinking water service, as defined by the WHO/UNICEF Joint Monitoring
19 Programme. Drinking water is defined as water used by humans for ingestion, food
20 preparation, and basic hygiene purposes. Households are considered to have basic drinking
21 water service when they use water from an improved source with a total collection time of 30
22 minutes or less for a round trip, including queuing. An improved drinking water source is a
23 source or delivery point that by nature of its construction or through active intervention is
24 protected from outside contamination with fecal matter. Improved drinking water sources can
25 include: piped drinking water supply on premises; public taps/standposts; tubewell/borehole;
26 protected dug well; protected spring; rainwater; and bottled water (when another improved
27 source is used for hand washing, cooking or other basic personal hygiene purposes).⁸⁹

28
29 Lack of safe drinking water is a major cause of illness and mortality, as a result of exposure to
30 infectious agents, chemical pollutants, and poor hygiene. Inadequate access to water in the
31 home is also a source of economic disadvantage by requiring large commitment of human
32 resources to fetching and carrying water.

33
34 Disaggregation: Opportunities for disaggregation to be reviewed.

35
36 Comments and limitations: Use of an improved drinking water source is a proxy for measuring
37 access to safe drinking water. The limitations of this indicator are that it does not specify a
38 minimum available amount of water.

39
40 The urban component of this indicator is reported under Target 7b.

41
42 Potential lead agency or agencies: WHO, UNICEF, and other members of the Joint Monitoring
43 Program collect data for this indicator. To the extent possible the collection and reporting
44 mechanisms should be fully integrated in the national statistical systems.

⁸⁹ WHO-UNICEF Joint Monitoring Programme. "Post-2015 WASH Targets and Indicators."

1
2 **Indicator 58: Percentage of rural population using basic sanitation (modified MDG Indicator)**
3

4 Rationale and definition: The indicator measures the percentage of the population in rural
5 areas with access to an improved sanitation facility, as defined by the WHO/UNICEF Joint
6 Monitoring Programme. Improved sanitation facilities at home are those that effectively
7 separate excreta from human contact, and ensure that excreta do not re-enter the immediate
8 environment. Each of the following types of facilities are considered adequate if the facility is
9 shared among no more than 5 households or 30 persons, whichever is fewer: a pit latrine with
10 a superstructure, and a platform or squatting slab constructed of durable material (composting
11 latrines, pour-flush latrines, etc.); a toilet connected to a septic tank; or a toilet connected to a
12 sewer (small bore or conventional).⁹⁰

13 Access to adequate excreta disposal facilities is fundamental to decrease the fecal risk and the
14 frequency of associated diseases. The use of improved sanitation facilities reduces diarrhea-
15 related morbidity in young children and also helps accelerate economic and social
16 development in countries where poor sanitation is a major cause for missed work and school
17 days because of illness. Its association with other socioeconomic characteristics (education,
18 income) and its contribution to general hygiene and quality of life also make it a good universal
19 indicator of human development.⁹¹

20
21 Disaggregation: Opportunities for disaggregation to be reviewed.

22
23 Comments and limitations: The urban component of this indicator is reported under Target 7b.

24
25 Potential lead agency or agencies: WHO, UNICEF, and other members of the Joint Monitoring
26 Program collect data for this indicator. To the extent possible the collection and reporting
27 mechanisms should be fully integrated in the national statistical systems.

28
29 **Indicator 59: Access to all-weather road (% access within [x] km distance to road)**
30

31
32 Rationale and definition: Access to roads that are reliably passable year-round is critical for
33 many rural development processes, including access to inputs, markets, education, and health
34 services. This indicator tracks the share of population that lives within [x] km of roads that are
35 reliably passable all-year round. Preferably such roads should be paved to ensure all-year
36 access for heavy vehicles.⁹²

37
38 Disaggregation: This indicator can be disaggregated spatially. Other opportunities to be
39 reviewed.

40
41 Comments and limitations: To be reviewed.

42
43 Potential lead agency or agencies: World Bank.

44
45 **Indicator 60: Mobile broadband subscriptions per 100 inhabitants in rural areas**

⁹⁰ Ibid.

⁹¹ UN DESA (2007b). *Indicators of Sustainable Development: Guidelines and Methodologies –Methodology sheets*. New York: United Nations
http://www.un.org/esa/sustdev/natlinfo/indicators/methodology_sheets/poverty/improved_sanitation.pdf.

⁹² Dobermann, A. and Nelson, R. et al. (2013).

Rationale and definition: Broadband access is a key enabling technology that provides economic benefits (access to the formal economy, access to regional and global markets for local entrepreneurs, and access to banking services); health benefits (linking health workers to national health systems); and promotes citizen participation in government. It is projected that within a few years the majority of the world's population, including in sub-Saharan Africa, will have access to mobile broadband. This indicator measures the number of broadband subscriptions per 100 inhabitants. The Broadband Commission describes broadband as: (a) always on; (b) high-capacity connectivity; and (c) enabling combined provision of multiple services simultaneously.⁹³ The ITU definition refers to access to data communications (e.g. the Internet) at broadband downstream speeds greater than or equal to 256 kbit/s.

Disaggregation: Opportunities for disaggregation to be reviewed.

Comments and limitations: The urban component of this indicator is reported under Target 7b.

Potential lead agency or agencies: ITU.

Indicator 61: [Access to drying, storage, and processing facilities -- indicator to be developed]

Rationale and definition: Good infrastructure for drying and storing agricultural produce as well as inputs is critical to reducing losses due to contamination by mycotoxins, insects, or other food contaminants. Drying, storage, and processing facilities also increase the earnings of farmers by allowing them more time in which to sell their crops and wait for good prices. Expanding rural processing capacity generates employment opportunities, enhances access to markets, and facilitates value addition (including the production of foods to enhance infant/child nutrition and reduce maternal drudgery). It is therefore important to develop an indicator that estimates access to drying, storage, and processing facilities.⁹⁴

Disaggregation: Opportunities for disaggregation to be reviewed once the indicator has been developed.

Comments and limitations: To be reviewed.

Potential lead agency or agencies: FAO.

⁹³ From the core list of ICT indicators developed by the Partnership on Measuring ICT for Development, please see the report that was prepared for the forthcoming UN Statistical Commission meeting (Annex1): <http://unstats.un.org/unsd/statcom/doc14/2014-8-ICT-F.pdf>

⁹⁴ Dobermann, A. and Nelson, B. et al. (2013).

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1 **Indicator 62: [Share of farmers covered by agricultural extension or equivalent programs --**
2 **indicator to be developed]**

3
4 Rationale and definition: It will not be possible to increase sustainable agriculture yields in all
5 countries without a functioning public and or private agricultural extension system. We
6 propose that an indicator be developed to measure the percentage of farmers who are covered
7 by agricultural extension or similar programs.

8
9 Disaggregation: Opportunities for disaggregation to be reviewed once the indicator has been
10 developed.

11
12 Comments and limitations: Should it not be possible to collect sufficient data for such an
13 indicator, we recommend that the existing FAO indicator “agricultural extension professionals
14 per 1000 farmers” be used. This indicator tracks the total number of qualified agricultural
15 professionals across different sectors that provide training, information, and other extension
16 support and services to farmers and small to medium enterprises in rural value chains. This
17 indicator should include professionals with a minimum level of education, training, and
18 certification working for the public or private sectors.

19
20 Potential lead agency or agencies: Data for the indicator is collected by the FAO.⁹⁵

21
22 **Core Indicators covered under other Targets that also apply to Target 6c:**

- 23
24 • **Target 8a: Proportion of rural population using modern cooking solutions.** This
25 indicator seeks to track the number of people/households using modern cooking
26 solutions (fuel-efficient stoves, LPG stoves, electric stoves, etc.) to prepare meals, and
27 seeks to address indoor air pollution.
28 • **Target 8a: Rural electrification rate (%).** Percent of households with reliable access to
29 electricity.
30 • **Target 9c: Access to land in rural areas index.** The percentage of rural residents
31 (households) who have secure, permanent ownership or affordable long-term lease of
32 the land they farm or live on.

33 **Additional indicators that countries may consider:**

- 34
35 • **Percentage of population reporting practicing open defecation.** This indicator
36 measures population not using any sanitation facility and is a strong measure of
37 poverty.
38 • **Proportion of households with Internet, by type of service in rural areas.** This
39 indicator measures the proportion (percent) of households with Internet access by type
40 (dial-up, DSL, etc.).

⁹⁵ Ibid.

1 **Goal 7: Empower Inclusive, Productive and Resilient Cities**

2
3 Make all cities socially inclusive, economically productive, environmentally sustainable, secure,
4 and resilient to climate change and other risks. Develop participatory, accountable, and
5 effective city governance to support rapid and equitable urban transformation.

6
7 **Target 7a. End extreme urban poverty, expand employment and productivity, and**
8 **raise living standards, especially in slums.***

9
10 **Key issues to measure for the target:**

11 This target focuses on ending extreme urban poverty and improving the social and economic
12 welfare of all urban residents. Key issues to measure for the target are urban income poverty,
13 urban employment, urban economic productivity, and the prevalence of slums. The indicators
14 for this target can be measured at the national level (e.g. percentage of a nation's total urban
15 population that are slum dwellers) or at the city level (e.g. percentage of a city's population
16 that are slum dwellers).

17
18 **Potential and Illustrative Core Indicators:**

19
20 **Indicator 63: Percentage of urban population with incomes below national extreme poverty**
21 **line (adapted MDG indicator)**

22
23 Rationale and definition: The international extreme poverty line of \$1.25 per day (Indicator 1)
24 was originally developed for rural areas. This poverty line is poorly adapted to cities where
25 residents must purchase basic amenities (water, food, housing, energy) and other essentials.
26 Because rural residents often obtain these services without any cash outlays (though with
27 significant labor input), higher incomes are needed in urban areas to end extreme poverty.

28
29 Disaggregation: This indicator can be disaggregated spatially.

30
31 Comments and limitations: Adjusting urban poverty lines to the cost of living is difficult because
32 these vary both within and across cities.⁹⁶ In the absence of internationally comparable
33 indicators for extreme urban poverty, we recommend that countries track extreme poverty
34 measured with reference to national or city-level extreme poverty lines. These reference points
35 will differ across countries.

36
37 Potential lead agency or agencies: Data for the indicator would be reported by cities and/or
38 countries and could be collected by the World Bank or UN-Habitat. For comparisons between
39 cities in different countries, the data should be converted to US\$ with a year selected as the
40 purchasing power parity (PPP) basis.

⁹⁶ Baker, Judy L. (2008). *Urban Poverty: A Global View*. Urban Paper 5 (January 2008). Washington, DC: World Bank.

1
2 **Indicator 64: [Indicator on the deployment of a sustainable development strategy for each**
3 **urban agglomeration above [250,000] – to be developed]**

4
5 Rationale and definition: Sustainable development in urban areas requires long-term strategies
6 that integrate infrastructure development, the provision of urban services, and land use. Such
7 strategies are specific to each city and therefore need to be developed at the city level. Public
8 discussion and consultation on such strategies will ensure that they meet the needs of the
9 entire urban population, including businesses. We propose developing an indicator that tracks
10 which of the larger urban centers, e.g. with populations above 250,000, have developed a
11 sustainable development strategy. Ideally each country would develop a national registry of
12 such strategies and collect key performance targets identified for each city. Such an indicator
13 will help focus attention on the long-term sustainable development needs of cities, and
14 promote citywide dialogues on appropriate sustainable development pathways.

15
16 This indicator would follow up on the work of Agenda 21, the non-binding, voluntarily
17 implemented action plan on sustainable development that the United Nations developed at
18 the UNCED in Rio in 1992. Chapter 28 of this document recommended that local governments
19 take steps to implement the plan locally, and these programs are often referred to as “Local
20 Agenda 21”.

21
22 Disaggregation: By city and province, by city size.

23
24 Comments and limitations: To be reviewed.

25
26 Potential lead agency or agencies: World Bank, UN-Habitat.

27
28 **Indicator 65: Proportion of urban population living in slums or informal settlements (MDG
29 Indicator)**

30
31 Rationale and definition: This indicator measures the proportion of the urban population living
32 in slums or informal settlements, as defined by UN-Habitat. The indicator is calculated by taking
33 the number of people living in slums of a city divided by the total population of this city,
34 expressed as a percentage. At the country level, this percentage is calculated by taking the total
35 number of people living in slums of all the cities of a country divided by the total population
36 living in all the cities of the given country.⁹⁷

37
38 UN-Habitat has developed a household level definition of a slum household in order to be able
39 to use existing household-level survey and census data to identify slum dwellers among the
40 urban population. A slum household is a household that lacks any one of the following five
41 elements:

- 42 • Access to improved water (access to sufficient amount of water for family use, at an
43 affordable price, available to household members without being subject to extreme
44 effort)
45 • Access to improved sanitation (access to an excreta disposal system, either in the form
46 of a private toilet or a public toilet shared with a reasonable number of people)

⁹⁷ Global City Indicators Facility. Webpage at: <http://mdgs.un.org/unsd/mdg/seriesdetail.aspx?srld=710>

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- 1 • Security of tenure (evidence of documentation to prove secure tenure status or de
2 factor or perceived protection from evictions)
3 • Durability of housing (permanent and adequate structure in non-hazardous location)
4 • Sufficient living area (not more than two people sharing the same room)

5
6 Disaggregation: By sex of head of household.

7
8 Comments and limitations: Not all slums are the same and not all slum dwellers suffer from the
9 same degree of deprivation. The degree of deprivation depends on how many of the five
10 conditions that define slums are prevalent within a slum household. Approximately one-fifth of
11 slum households live in extremely poor conditions, defined by UN-Habitat as lacking more than
12 three basic shelter needs.⁹⁸ The definition of the water and sanitation component of the index
13 may need to be reviewed to ensure full consistency with the water supply and sanitation
14 indicators currently under development by the WHO/UNICEF JMP (indicators 57 and 58).

15
16 Potential lead agency or agencies: UN-Habitat and the Global City Indicators Facility (GCIF).

17
18 **Core Indicators covered under other Targets that also apply to Target 7a:**

19 With more than half the world's population currently living in urban areas and continuing
20 trends of rapid urbanization, virtually all SDG indicators apply to urban areas. For example,
21 targets relating to health and education must be achieved in urban areas. The SDSN has
22 described the case for a dedicated urban SDG and for assigning certain targets to such an urban
23 goal.⁹⁹ These reports underscore the importance of effective urban governance and the need
24 to empower cities to best serve their populations. Goal 10 on governance is therefore of
25 particular importance to cities, as well as indicators on social inclusion under Target 4a.

- 26 • Target 1a: Proportion of population in extreme multidimensional poverty [Indicator to
27 be developed]
28 • Target 1b: Prevalence of stunting in children under [5] years of age
29 • Target 1c: Violent injuries and deaths per 100,000 population measures deaths and
30 injuries from urban crime
31 • Target 2a: Share of informal employment in total employment
32 • Target 10a: Perception of public sector corruption

⁹⁸ UN-Habitat (2006). State of the World's Cities 2006/7. Available at:
http://www.unhabitat.org/documents/media_centre/sowcr2006/sowcr%205.pdf

⁹⁹ See Revi, A. and Rosenzweig, C. et al. (2013a). *The Urban Opportunity to enable Transformative and Sustainable Development*. Paris and New York: SDSN; Revi, A. and Rosenzweig, C. et al. (2013b). *Why the World Needs an Urban Sustainable Development Goal*. Paris and New York: SDSN.

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1 **Target 7b. Ensure universal access to a secure and affordable built environment and
2 basic urban services including housing; water, sanitation and waste management;
3 low-carbon energy and transport; and mobile and broadband communication.**

4
5 **Key issues to measure for the target:**

6 This target focuses on access to basic urban services and infrastructure. Key issues to measure
7 include access to housing, drinking water, sanitation services, solid waste collection, energy,
8 transportation, and information and communications technology. Data for these indicators can
9 be collected either nationally (e.g. percent of total urban population in the country) or locally
10 (e.g. percent of urban population in a city). As mentioned below, indicators for energy access
11 are included under Goal 8.

12
13 **Potential and Illustrative Core Indicators:**

14
15 **Indicator 57: Percentage of urban population using basic drinking water (modified MDG
16 Indicator)**

17
18 Rationale and definition: This indicator measures the percentage of the urban population with
19 access to basic drinking water services, as defined by the WHO/UNICEF Joint Monitoring
20 Programme. Drinking water is defined as water used by humans for ingestion, food
21 preparation, and basic hygiene purposes. Households are considered to have basic drinking
22 water service when they use water from an improved source with a total collection time of 30
23 minutes or less for round trip, including queuing. An improved urban drinking water source is
24 defined as piped water into dwelling, yard or plot, or a standpipe/public tap or a
25 tubewell/borehole; protected dug well; protected spring; rainwater; and bottled water (when
26 another improved source is used for hand washing, cooking or other basic personal hygiene
27 purposes).¹⁰⁰

28
29 Lack of safe drinking water is a major cause of illness and mortality, as a result of exposure to
30 infectious agents, chemical pollutants, and poor hygiene. Inadequate access to water in the
31 home is also a source of economic disadvantage by requiring large commitment of human
32 resources to fetching and carrying water. This indicator provides a proxy measure both of
33 exposure, in terms of access to safe drinking water, and the effectiveness of actions to improve
34 access.¹⁰¹

35
36 Disaggregation: Opportunities for disaggregation to be reviewed.

37
38 Comments and limitations: Use of an improved drinking water source is a proxy for measuring
39 access to safe drinking water. The limitations of this indicator are that it does not specify a
40 minimum available amount of water.

41
42 The rural component of this indicator is reported under Target 6c.

43
44 Potential lead agency or agencies: The WHO/UNICEF Joint Monitoring Programme could
45 compile data from nationally representative household surveys and census for this indicator.

¹⁰⁰ WHO-UNICEF Joint Monitoring Programme. "Post-2015 WASH Targets and Indicators."

¹⁰¹ UNESCO Water World Assessment Programme:

http://webworld.unesco.org/water/wwap/wwdr/indicators/pdf/F4_Access_to_safe_drinking_water.pdf

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1 To the extent possible, the collection and reporting mechanisms should be fully integrated in
2 the national statistical systems.

3

4 **Indicator 58: Percentage of urban population using basic sanitation (modified MDG**
5 **Indicator)**

6

7 Rationale and definition: This indicator measures the percentage of the population in urban
8 areas with access to an improved sanitation facility, as defined by the WHO/UNICEF Joint
9 Monitoring Programme. Improved sanitation facilities at home are those that effectively
10 separate excreta from human contact, and ensure that excreta do not re-enter the immediate
11 environment. Each of the following types of facilities are considered adequate if the facility is
12 shared among no more than 5 households or 30 persons, whichever is fewer: a pit latrine with
13 a superstructure, and a platform or squatting slab constructed of durable material (e.g.
14 composting latrines, pour-flush latrines); a toilet connected to a septic tank; or a toilet
15 connected to a sewer (small bore or conventional).

16

17 Access to adequate excreta disposal facilities is fundamental to decrease the fecal risk and the
18 frequency of associated diseases. Its association with other socioeconomic characteristics
19 (education, income) and its contribution to general hygiene and quality of life also make it a
20 good universal indicator of human development.¹⁰²

21

22 Disaggregation: Opportunities for disaggregation to be reviewed.

23

24 Comments and limitations: The rural component of this indicator is reported under Target 6c.

25

26 Potential lead agency or agencies: The WHO/UNICEF Joint Monitoring Programme could
27 compile data from nationally representative household surveys and census for this indicator.
28 To the extent possible, the collection and reporting mechanisms should be fully integrated in
29 the national statistical systems.

30

31 **Indicator 66: Proportion of urban households with weekly solid waste collection**

32

33 Rationale and definition: Urban households produce substantial amounts of solid waste that
34 must be collected regularly and disposed of properly in order to maintain healthy and sanitary
35 living conditions. Uncollected solid waste can end up in drains, causing blockages that result in
36 flooding and unsanitary conditions. Mosquitos that spread malaria and dengue can breed in
37 blocked drains.¹⁰³ In addition, some constituents of solid waste, such as organic matter, can
38 attract flies and rodents that spread gastro intestinal and parasitic diseases.¹⁰⁴

39

40 Sustainable solid waste management is essential. Source reduction, recycling, and composting
41 are preferred methods and should be promoted, as they reduce demand on scarce
42 environmental resources, reduce energy use, and minimize the quantity of waste that must
43 eventually be disposed of via incinerators and landfills.

44

¹⁰² UN DESA (2007b). *Indicators of Sustainable Development: Guidelines and Methodologies –Methodology sheets*. New York: United Nations

http://www.un.org/esa/sustdev/natinfo/indicators/methodology_sheets/poverty/improved_sanitation.pdf.

¹⁰³ UN-Habitat. (2009). *Urban Indicator Guidelines: Better Information, Better Cities, Monitoring the Habitat Agenda and the Millennium Development Goals – Slum Target*. Nairobi, Kenya: UN-Habitat.

¹⁰⁴ Sustainable Communities Index, <http://www.sustainablecommunitiesindex.org/indicators/view/4>

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1 UN-Habitat (2009) has specified that solid waste collection can include collection from
2 individual households, regular dumpster group collection, but not local dumps to which the
3 household must carry garbage. Solid waste collection should be considered adequate if it
4 occurs at least once a week.

5

6 Disaggregation: Opportunities for disaggregation to be reviewed.

7

8 Comments and limitations: In many countries, monitoring systems for solid waste collection are
9 weak, with data that is incomplete or not available. The development of adequate monitoring
10 systems may require a major effort in some countries.

11

12 Potential lead agency or agencies: Data on solid waste collection may be available from
13 municipal bodies, public services, and private contractors dealing with solid waste collection
14 and disposal, or NGOs. Within cities, waste collection may vary from one area to another
15 depending on the level of tax payment.¹⁰⁵ Data can be presented to UN-Habitat at the city or
16 national urban level.

17

18 **Indicator 67: Proportion of urban households with access to reliable public transportation**

19

20 Rationale and definition: This indicator measures the percentage of the urban population with
21 access to reliable public transportation. Public transportation is defined as a shared passenger
22 transport service that is available to the general public. It includes buses, trolleys, trams, trains,
23 subways, and ferries. It excludes taxis, car pools, and hired buses, which are not shared by
24 strangers without prior arrangement. This indicator specifies the proportion of households
25 within [x] meters of regular, reliable public transit.

26

27 Effective and low-cost transportation for mobility is critical for urban poverty reduction and
28 economic development because it provides access to jobs, healthcare, education services, and
29 more. The Partnership on Sustainable Low-Carbon Transport (SLoCaT)¹⁰⁶ and others propose
30 indicators for urban access to sustainable transport that include: mean daily travel time,
31 proportion of income spent by urban families on transport, and proportion of households
32 within 500 meters of good quality, affordable public transportation.

33

34 Disaggregation: Opportunities for disaggregation to be reviewed.

35

36 Comments and limitations: To be reviewed.

37

38 Potential lead agency or agencies: UN-Habitat.

39

40 **Indicator 60: Mobile broadband subscriptions per 100 inhabitants in urban areas**

41

42 Rationale and definition: Broadband access is a key enabling technology for sustainable
43 development in cities. It provides economic benefits (access to the formal economy, access to
44 regional and global markets for local entrepreneurs, and access to banking services); health
45 benefits by linking health workers to the national health system; and promotes citizen
46 participation in government. This indicator measures the number of broadband subscriptions

¹⁰⁵ Ibid., UN-Habitat (2009).

¹⁰⁶ Sayeg, P., Starkey, P., and Huijzen, C. (2014, February 9). *Updated Draft Results Framework on Sustainable Transport*. SLoCaT (Partnership on Sustainable Low Carbon Transport). Available at <http://www.slocat.net/results-framework-sustainable-transport>

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1 per 100 inhabitants. The Broadband Commission describes broadband as: (a) always on; (b)
2 high-capacity connectivity; and (c) enabling combined provision of multiple services
3 simultaneously.¹⁰⁷ The ITU definition refers to access to data communications (e.g. the
4 Internet) at broadband downstream speeds greater than or equal to 256 kbit/s.

5
6 Disaggregation: Opportunities for disaggregation to be reviewed.
7

8 Comments and limitations: The rural component of this indicator is reported under Target 6c.
9

10 Potential lead agency or agencies: ITU.
11

12 **Core Indicators covered under other Targets that also apply to Target 7b:**

13 “Basic urban services” may include health and education services, which are covered under
14 Goals 3 and 5 above. Moreover, two indicators on access to energy apply directly to Target 7b:

- 15 • Target 8a: Proportion of urban population using modern cooking solutions
16 • Target 8a: Urban electrification rate (%)
17

18 **Additional indicators that countries may consider:**

- 19 • **Proportion of urban population with secure tenure.** This indicator measures the
20 proportion of the urban population living in housing with secure tenure.
21 • **Percentage of solid waste that is recycled or composted.** This indicator measures the
22 proportion of solid waste collected by either a municipal or private entity that is
23 diverted for recycling or composting, rather than ending up in a landfill or an
24 incinerator.
25 • **Mean daily travel time for individuals to reach employment, education, health and
26 community services.** The desired outcome is less than 90 minutes per day for a return
27 trip, with special monitoring of the poorest quintile.¹⁰⁸
28 • **Proportion of income spent by urban families on transport to reach employment,
29 education, health and community services.** The desired outcome is less than 20
30 percent of household income for the poorest quintile.¹⁰⁹
31 • **Travel share of public transport, cycling and walking.** This indicator measures the
32 portion of trips taken that use public transport, cycling and walking, with the desired
33 outcome being to double the global share by 2030.¹¹⁰
34 • **Proportion of households with Internet, by type of service in rural areas.** This
35 indicator measures the proportion (percent) of households with Internet access by type
36 (dial-up, DSL, etc.).
37

¹⁰⁷ From the core list of ICT indicators developed by the Partnership on Measuring ICT for Development, please see the report that was prepared for the forthcoming UN Statistical Commission meeting (Annex1): <http://unstats.un.org/unsd/statcom/doc14/2014-8-ICT-E.pdf>

¹⁰⁸ Ibid., Sayeg, P., Starkey, P., and Huizenga, C. (2014).

¹⁰⁹ Ibid.

¹¹⁰ Ibid.

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1 **Target 7c. Ensure safe air and water quality for all, and integrate reductions in
2 greenhouse gas emissions, efficient land and resource use, and climate and disaster
3 resilience into investments and standards.***

4 **Key issues to measure for the target:**

5 This target focuses on the ecological and land-use planning aspects of sustainable cities. Key
6 issues to measure for the target include air quality, water quality, land use planning outcomes
7 such as the amount of urban green space, urban biodiversity, and actions taken to reduce
8 climate change and disaster risk. These indicators must be measured at the local level.

9
10 **Potential and Illustrative Core Indicators:**

11 **Indicator 68: Mean urban air pollution of particulate matter (PM10 and PM2.5)**

12
13 Rationale and definition: Rapid urbanization has resulted in increasing urban air pollution in
14 major cities, especially in developing countries. It is estimated that over 1 million premature
15 deaths can be attributed to urban outdoor air pollution.¹¹¹ The problem is growing and has
16 severe economic and health impacts, particularly for young children. We therefore propose
17 that the post-2015 framework include an indicator tracking the mean urban air pollution of
18 particulate matter.

19
20 Disaggregation: By city and province.

21
22 Comments and limitations: WHO tracks this data for PM10 particles (i.e. particles with a
23 diameter equal to or greater than 10 microns). There are concerns about the health impacts of
24 fine particles measuring 2.5 microns in diameter, but data on such particles is less widely
25 available. We recommend that both indicators be tracked. Global statistics agencies should
26 develop a framework for gathering the data.

27
28 Potential lead agency or agencies: UN-Habitat, UNEP, WHO.

29
30 **Indicator 69: Percentage of wastewater flows treated to national standards, by domestic
31 and industrial source**

32
33 Rationale and definition: Lack of treatment of domestic and industrial wastewater presents a
34 serious health and environmental hazard in many cities, particularly in developing countries
35 where 80-90% of urban wastewater is untreated or insufficiently treated when discharge.¹¹²
36 Even in developed countries wastewater is not universally treated. Global rates of wastewater
37 generation are increasing at an exponential rate as a result of rapid population growth and
38 urbanization. A huge volume of untreated wastewater is dumped directly into water sources,
39 threatening human health, ecosystems, biodiversity, food security, and the sustainability of
40 water resources.¹¹³

41
42 For this reason we propose that an indicator on wastewater treatment be added to the post-
43 2015 monitoring framework. There are many ways to define wastewater. Broadly defined,

¹¹¹ WHO Global Health Observatory, <http://apps.who.int/gho/data/view.main>

¹¹² UNESCO. (2011). Global Challenge of Wastewater: Examples from Different Countries. Presentation at World Water Week in Stockholm, August 21-27, 2011.

¹¹³ Ibid.

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1 wastewater is a combination of one or more of: domestic effluent consisting of blackwater
2 (excreta, urine and fecal sludge) and greywater (kitchen and bathing wastewater); water from
3 commercial establishments and institutions, including hospitals; industrial effluent, storm
4 water and other urban run-off; agricultural, horticultural and aquaculture effluent, either
5 dissolved or as suspended matter.¹¹⁴

6
7 Wastewater treatment is the process of removing suspended and dissolved physical, chemical,
8 and biological contaminants to produce (a) water that is safe to be discharged to the
9 environment or suitable for reuse and (b) a solid sludge suitable for disposal or reuse (e.g. as
10 fertilizer). Using advanced technology, it is now possible to re-use used water after treatment
11 for agricultural purposes, industry or even as drinking water.¹¹⁵

12
13 Disaggregation: By municipal and industrial wastewater, by city.

14
15 Comments and limitations: To be reviewed.

16
17 Potential lead agency or agencies: To be determined, options include WHO/UNICEF Joint
18 Monitoring Programme (JMP), UNEP, and UN-Habitat.

19
20 **Indicator 70: Urban green space per capita**

21
22 Rationale and definition: This indicator measures the amount of urban green space available to
23 residents of a city. Urban green space is defined as including: amenity areas and allotments,
24 formal open space and outdoor recreation areas, informal open space and children's
25 playgrounds, public parks, heritage parks, nature conservation areas, and woodlands. This
26 indicator is expressed in square meters per resident.

27
28 Urban green spaces are important for quality of life in increasingly urbanized societies. Urban
29 green spaces are important for health, cooling, and water management. Empirical evidence
30 indicates that the presence of natural areas contributes to quality of life in terms of
31 environmental and ecological services, as well as social and psychological benefits to human
32 societies.¹¹⁶

33
34 Disaggregation: Opportunities for disaggregation to be reviewed.

35
36 Comments and limitations: Numerous tools are available for assessing urban green space.
37 Some are universal, like remote sensing, and some are location-specific such as on-site surveys.

38
39 Potential lead agency or agencies: UN-Habitat.

40

¹¹⁴ Corcoran, E., C. Nelleman, E. Baker, R. Bos, D. Osborn, H. Savelli (eds). 2010. *Sick Water? The central role of waste-water management in sustainable development*. A Rapid Response Assessment. United Nations Environment Programme, UN-HABITAT, GRID-Arendal. Available at: www.grida.no

¹¹⁵ Ibid., UNESCO (2011).

¹¹⁶ Chiesura, A. (2004). *The role of urban parks for the sustainable city*. Landscape and Urban Planning 68:1, pp. 129-138.

1
2 **Indicator 56: Economic losses from disasters in urban areas, by climatic and non-climatic**
3 **events (in US\$) [Indicator to be specified]**

5 Rationale and definition: Cities around the world are at risk from natural disasters, including
6 extreme climatic events that are projected to increase in frequency and severity as a result of
7 climate change. This indicator will measure losses in urban areas due to natural disasters,
8 disaggregated by climatic and non-climatic events. Extreme climatic events are frequently
9 water-related and include floods, droughts, hurricanes and other storms, as well as extreme
10 heat and cold events. Other natural disasters include earthquakes, tsunamis, and volcanic
11 eruptions.

12
13 Disaster risk is expected to further increase in coming decades as vulnerability, exposure and
14 the frequency and severity of many hazards are influenced by climate change and other
15 factors, including population growth and urbanization. Disasters can hamper the achievement
16 of development goals, can reverse development gains, and often have their harshest impact on
17 poor people.¹¹⁷

18
19 This indicator could be expressed in the number of lives lost per year and/or damages in US\$.

20
21 Disaggregation: Opportunities for disaggregation to be reviewed.

22
23 Comments and limitations: To be reviewed.

24
25 Potential lead agency or agencies: This data is widely reported by the reinsurance industry and
26 under the Hyogo Framework of Action¹¹⁸ Such an indicator could be reported by UNISDR
27 working with FAO, WHO and a consortium of reinsurance companies.

28
29 **Additional indicators that countries may consider:**

- 30 • **Climate Change Action (CCA) Index [Indicator to be developed].** Composite indicator
31 that measures preparedness for climate change, including existence of a CCA plan,
32 dedicated CCA authority, whether CCA is integrated into other city department plans,
33 and availability of funding dedicated at the city level to mitigation and adaptation.
34 • **Disaster Risk Reduction (DRR) Index [Indicator to be developed].** Composite indicator
35 that measures reduction of disaster risk, including existence of DRR management plan,
36 DRR authority, early warning systems, and availability of DRR funding dedicated at the
37 city level.
38 • **City Biodiversity Index (Singapore Index).** Self-assessment tool for cities to evaluate
39 their biodiversity conservation efforts along 23 indicators.¹¹⁹

¹¹⁷ ODI (2013).

¹¹⁸ UN International Strategy for Disaster Reduction (ISDR). (2007). Hyogo Framework for Action 2005-2015. Extract from the Final Report of the World Conference on Disaster Reduction. Geneva, Switzerland: ISDR.

¹¹⁹ Rodricks, S. (2010). *Singapore City Biodiversity Index*. Geneva: Switzerland: The Economics of Ecosystems and Biodiversity (TEEB).

1 **Goal 8: Curb human induced climate change and ensure
2 sustainable energy**

3
4 Curb greenhouse gas emissions from energy, industry, agriculture, the built environment, and
5 land-use change to ensure a peak of global CO₂ emissions by 2020 and to head off the rapidly
6 growing dangers of climate change.¹²⁰ Promote sustainable energy for all.

7
8 **Target 8a: Decarbonize the energy system, ensure clean energy for all, and improve
9 energy efficiency, with targets for 2020, 2030 and 2050.**

10
11 **Key issues to measure for the target:**
12 This target focuses on access to clean energy, as defined by the Sustainable Energy for All
13 (SE4ALL) initiative, as well as countries' voluntary national strategies to achieve deep
14 decarbonization consistent with the 2°C target. The indicators under the target will therefore
15 measure access to improved energy sources (electricity and clean cooking solutions), the
16 presence of decarbonization strategies, and key metrics for greenhouse gas emissions related
17 to energy use and industry.

18
19 **Potential and Illustrative Core Indicators:**
20

21 **Indicator 71: Share of the population with access to modern cooking solutions (%)**

22
23 Rationale and definition: This indicator measures the share of the population relying primarily
24 on non-solid fossil fuels for cooking, as defined by the Sustainable Energy For All (SE4All)
25 Framework Report.¹²¹ Currently available databases (including the WHO's Global Household
26 Energy Database, and the IEA World Energy Statistics and Balances) only support binary
27 tracking of access (that is a household either has, or doesn't have access). This is why, as a
28 starting point, the SE4All global tracking framework is using this simple definition of access to
29 modern cooking solutions. While the binary approach serves the immediate needs of global
30 tracking, there is a growing consensus that measurement of access should reflect a continuum
31 of improvement, as recognized in the SE4All report.

32
33 Indeed, defining access to modern cooking solutions as the share of the population relying
34 primarily on non-solid fossil fuels for cooking omits the role of the cook stove. Yet, it is the
35 combination of the two that will determine levels of efficiency, pollution, and safety outcomes.
36 Meanwhile, individual behaviors, cooking practices, and housing characteristics also affect the
37 actual performance of a household's cooking solutions.

38
39 For this reason, the SE4All is planning to use a multi-tier metric for tracking access to modern
40 cooking solutions. This metric will measure access to modern cooking solutions by measuring

¹²⁰ The Fourth Assessment Report of the IPCC (2007) has defined this level as global average temperatures that are 2°C above the pre-industrial level. Recent scientific evidence suggests the need to reduce the long-term temperature increase to 1.5°C or less. The global emission reduction target should be regularly updated in view of the growing body of scientific evidence.

¹²¹ Banerjee, S.G. et al. (2013). *Global tracking framework*, Vol. 3. Sustainable energy for all. Washington D.C.; The World Bank.

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1 the technical performance of the primary cooking solution (including both the fuel and the
2 cook stove) and assessing how this solution fits in with households' daily life.

3

4 Disaggregation: By urban/rural.

5

6 Comments and limitations: To be reviewed.

7

8 Potential lead agency or agencies: The SE4All, IEA and WHO, can provide data for this indicator.

9

10 **Indicator 72: Share of the population with access to reliable electricity (%)**

11

12 Rationale and definition: This indicator measures the share of the population with an electricity
13 connection available at home or relying primarily on electricity for lighting, as defined by the
14 Sustainable Energy For All (SE4All) Framework Report.¹²² As for access to modern cooking
15 solutions, currently available global databases (including the World Bank's Global Electrification
16 Database, and the IEA World Energy Statistics and Balances) only support such a binary tracking
17 of access to electricity. This metric does not capture important dimensions of access to
18 electricity, including: (i) off-grid and isolated mini-grids solutions, which are required in many
19 countries as transitional alternatives to grid-based electricity, and could potentially serve as
20 long-term solutions as well in geographically remote areas; (ii) supply problems, which are
21 many in developing countries, where grid electricity suffers from irregular supply, frequent
22 breakdowns; and (iii) problems of quality (such as low or fluctuating voltage); the difference
23 between electricity supply and electricity services, which implies the ownership of the
24 appropriate electrical appliance and the actual use of electricity.

25

26 For these reasons, the SE4All is planning to use a multi-tier metric for measuring access to
27 electricity. This metric will measure the degree of access to electricity supply along various
28 dimensions, including quantity (peak available capacity), duration, evening supply, affordability,
29 legality, and quality. This is complemented by a parallel multi-tier framework that captures the
30 use of key electricity services.¹²³

31

32 Disaggregation: By urban/rural.

33

34 Comments and limitations: To be reviewed.

35

36 Potential lead agency or agencies: The SE4All, IEA and World Bank can provide data for this
37 indicator.

38

39 **Indicator 73: Availability of a transparent and detailed deep decarbonization strategy,
40 consistent with the 2°C - or below - global carbon budget, and with GHG
41 emission targets for 2020, 2030 and 2050.**

42

43 Rationale and definition: Keeping global warming within 2°C or less requires countries to
44 prepare national deep decarbonization strategies to 2050 covering all sources of GHG
45 emissions including from the energy, industry, agriculture, forest, transport, building, and other
46 sectors. These strategies should be transparent and detail how countries intend to achieve
47 deep emissions cuts, including for energy-related emissions how to reduce energy

¹²² Ibid.

¹²³ Ibid.

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1 consumption, decarbonize the power sector, and electrify energy uses (in particular in the
2 transport and building sectors). They should include targets to reduce GHG emissions by 2020,
3 2030 and 2050.

4

5 Disaggregation: Opportunities for disaggregation to be reviewed.

6

7 Comments and limitations: To be reviewed.

8

9 Potential lead agency or agencies: The proposed indicator tracks the existence such voluntary
10 national strategies, which would be submitted to the UNFCCC.

11

12

13 **Indicator 74: Total energy and industry-related GHG emissions by gas and sector, expressed
14 as production and demand-based emissions (tCO₂e).**

15

16 Rationale and definition: This indicator tracks total greenhouse gas (GHG) emissions in ton of
17 CO₂ equivalent (tCO₂e), broken down by gas (including CO₂, N₂O, CH₄, HFCs, PFCs, and SF6) and
18 sector (including petroleum refining, electricity and heat production, manufacturing industries
19 and construction, transport, commercial and residential buildings, fugitive emissions, as well as
20 emissions from industrial processes) in line with the Intergovernmental Panel on Climate
21 Change (IPCC) 2006 guidelines for the national GHG inventory,¹²⁴ and the special chapters on
22 energy¹²⁵ and industry-related emissions.¹²⁶

23

24 The UNFCCC collects GHG emissions data estimated using a production-based (sometimes also
25 referred to as territorial-based) accounting method. Under this approach, all emissions taking
26 place “within national territory and offshore areas over which the country has jurisdiction” (as
27 defined by IPCC 2006 guidelines for the national GHG inventory) are assigned to a country.

28

29 A complementary accounting method focuses on demand-based or consumption-based
30 emissions. Under this approach emissions attributed to domestic final consumption and those
31 caused by the production of its imports are attributed to a country.¹²⁷ In other words GHG
32 emissions for the importing country are augmented by the GHG content of the imports.
33 Similarly, emissions for an exporting country are lowered.¹²⁸ Demand or consumption-based
34 emissions are estimated using international input-output tables and therefore require a more
35 complex methodology.

36

37 Disaggregation: By sectors and gas, as described above. The disaggregation by sector should –
38 to the extent possible – be made consistent with systems of national accounts. It might be
39 advisable to also report the data by International Standard Industrial Classification of All
40 Economic Activities ISIC.

41

¹²⁴ Eggleston H.S., Buendia L., Miwa K., Ngara T. and Tanabe K. (eds.). 2006 *IPCC Guidelines for National Greenhouse Gas Inventories*. (5 volume collection) <http://www.ipcc-nccc.iges.or.jp/public/2006gl/index.html>

¹²⁵ Ibid, see volume 2 on Energy: <http://www.ipcc-nccc.iges.or.jp/public/2006gl/vol2.html>

¹²⁶ Ibid, see volume 3 on Industrial Processes and Product Use: <http://www.ipcc-nccc.iges.or.jp/public/2006gl/vol3.html>

¹²⁷ Peters, G. and Hertwich, E. (2008). Post-Kyoto greenhouse gas inventories: production versus consumption. *Climatic Change*, Volume 86, Issue 1-2, 51-66.

¹²⁸ Boitier, B. (2012). *CO₂ emissions production-based accounting vs. consumption: Insights from the WIOD databases*.

Comments and limitations: The use of production-based emissions accounting is well established and consistent with the definition of GDP. Yet, since it omits emissions embodied in international trade, there is a growing body of literature arguing in favor of a demand-based or consumption-based accounting of emissions. We therefore recommend that countries report their emissions using both production and demand-based measures.

Potential lead agency or agencies: Countries' data for this indicator are regularly submitted to United Nations Framework Convention on Climate Change (UNFCCC). The OECD can also report this data.

Indicator 75: CO₂ intensity of the power sector, and of new power generation capacity installed (gCO₂ per kWh)

Rationale and definition: The generation of electricity from the power sector is responsible for a large share of total GHG emissions. Ultimately, to achieve the levels of emissions reductions necessary to limit the global temperature increase to 2°C or below, the power sector needs to be near zero-carbon. Tracking the evolution of the CO₂ intensity of the power sector is therefore important to assess its contribution to the overall GHG emissions reductions. Understanding what drives the evolutions of the CO₂ intensity of the power sector is also important to define the appropriate policies to reduce the CO₂ emissions of this sector. In addition to the CO₂ intensity of the total stock, it is therefore important to measure the CO₂ intensity of the flow of new capacities installed, with technology, and taking into account their contribution to base load and peak power generation.

This indicator is defined as the amount (measured in grams) of CO₂ emissions per unit of electricity (measured in kilo Watt hour) generated from the power sector as a whole (total capacities); and from new capacities installed (between two dates of measurement of the indicator).

Disaggregation: Opportunities for disaggregation to be reviewed.

Comments and limitations: To be reviewed.

Potential lead agency or agencies: The UNFCCC and the IEA can collect data for this indicator.

Indicator 76: CO₂ intensity of the transport sector (gCO₂/vkm), and of new cars (gCO₂/pkm) and trucks (tCO₂tkm)

Rationale and definition: The fuel consumption and the fuel carbon content of the transport sector are responsible for a large share of total GHG emissions. The increase in transport activity is one of the main reasons for the increase in transport-related CO₂ emissions globally, but absolute levels of transport-related CO₂ emissions are linked to a country's size, population, and level of economic activity. Measuring transport-related emissions per vehicle kilometer travelled allows for more relevant historic and cross-country comparisons, by giving an understanding of how well countries are carrying out the transport task, based on a physical performance parameter.

Understanding what drives the evolutions of the CO₂ intensity of the transport sector is also important to define the appropriate policies to reduce the CO₂ emissions of this sector. GHG emissions from international air and maritime transport are not easily attributable to a

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1 particular country. But in addition to the aggregate CO₂ intensity of the transport, it is therefore
2 important to measure the CO₂ intensity of the new cars for passenger transport and of new
3 trucks for freight transport.

4 The proposed indicator is defined as: the amount (measured in grams) of CO₂ emissions per
5 vehicle kilometer travelled in aggregate; and per passenger kilometer travelled (pkm) for new
6 cars and per ton kilometer travelled (tkm) for new trucks (between two dates of measurement
7 of the indicator).

8

9 Disaggregation: Opportunities for disaggregation to be reviewed.

10

11 Comments and limitations: Transport activity is typically described by measuring vehicle
12 kilometers (vkm) although such a measure does not allow for ready comparisons across modes
13 or take into account varying load factors. It is also necessary to measure passenger kilometers
14 (pkm) or ton kilometers (tkm) although these metrics require more detailed data collection.

15

16 Potential lead agency or agencies: The UNFCCC and the IEA can collect data for this indicator.¹²⁹

17

18 **Core Indicators covered under other Targets that also apply to Target 8a:**

19

20 Critical adaptation measures are tracked for urban and rural areas, e.g.:

- 21
- 22 • Target 6c: [Crop losses due to climatic shocks –indicator to be developed]
 - 23 • Target 7c: Extreme climatic events per year in metropolitan areas (lives lost, \$
damages)
 - 24 • Target 10b: Official climate financing from developed countries that is incremental to
ODA (in US\$)
 - 25 • Target 10b: Private net flows for sustainable development at market rates as share of
high-income country GNI

26

27

28 **Additional indicators that countries may consider:**

- 29
- 30 • **Primary energy by type.** IEA reports annual data on the primary energy sources used
by each country, such as coal, oil, gas, renewables, or biomass.
 - 31 • **CO₂ intensity of the building sector and of new buildings (KgCO₂/m²/year).** The
32 building sector (residential and commercial) accounts for a large share of greenhouse
33 gas emissions around the world. Dedicated policies are needed to reduce emissions
34 from this sector. This indicator is defined as the volume of CO₂ emissions (measured in
35 kilograms) per unit of building surface (measured in square meter) and per year. The
36 indicator is reported for the exiting building stock and new buildings added during the
37 year.
 - 38

39

¹²⁹ OECD (2008).Greenhouse Gas Reduction Strategies in the Transport Sector: Preliminary Report.

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1 **Target 8b: Reduce non-energy related emissions of greenhouse gases through
2 improved practices in agriculture, forestry, waste management, and industry.**

3
4 **Key issues to measure for the target:**

5 This target requires metrics for monitoring greenhouse gas emissions from land-use change
6 and forestry, which includes changes in countries' land management practices.

7
8 **Potential and Illustrative Core Indicators:**
9

10 **Indicator 77: Net GHG emissions in the Agriculture, Forest and other Land Use (AFOLU)
11 sector (tCO₂e)**

12
13 Rationale and definition: This indicator is defined as total net greenhouse gas (GHG) emissions
14 tons of CO₂ equivalent (tCO₂e) in the Agriculture, Forest and Other Land Use (AFOLU) sector,
15 broken down by gas (including CO₂, N₂O and CH₄) and by land used category (including forest
16 lands, croplands, grasslands, wetlands, settlements and other lands), according to the
17 Intergovernmental Panel on Climate Change (IPCC) 2006 guidelines for the national GHG
18 inventory,¹³⁰ and the Good Practice Guidance for Land Use, Land Use Change and Forestry
19 (GPG-LULUCF).¹³¹

20
21 Inventory methods need to be practical and operational. For the AFOLU Sector, anthropogenic
22 GHG and removals by sinks are defined as all those occurring on "managed land". Managed
23 land is land where human interventions and practices have been applied to perform
24 production, ecological or social functions. Emissions/removals of greenhouse gases do not
25 need to be reported for unmanaged land. However, it is good practice for countries to quantify
26 and track over time the area of unmanaged land so that consistency in area accounting is
27 maintained as land-use change occurs.

28
29 Disaggregation: By gas and land use category. Other opportunities for disaggregation to be
30 reviewed.

31
32 Comments and limitations: As explained in the introduction of the IPCC 2006 guidelines for the
33 national greenhouse gases inventory chapter 4 on AFOLU,¹³² the AFOLU sector has some
34 unique characteristics with respect to developing inventory methods. The factors governing
35 emissions and removals can be both natural and anthropogenic (direct and indirect) and it can
36 be difficult to clearly distinguish between causal factors.

37
38 Potential lead agency or agencies: The United Nations Framework Convention on Climate
39 Change (UNFCCC) collects data on countries' national GHG inventories, including for the AFOLU
40 sector, on a regular basis.

¹³⁰ Eggleston H.S., Buendia L., Miwa K., Ngara T. and Tanabe K. (eds.), 2006.

¹³¹ See Good Practice Guidance for Land Use, Land-Use Change and Forestry: http://www.ipcc-nngip.iges.or.jp/public/gpglulucf/gpglulucf_contents.html

¹³² See http://www.ipcc-nngip.iges.or.jp/public/2006gl/pdf/4_Volume4/V4_01_Ch1_Introduction.pdf

1 **Core Indicators covered under other Targets that also apply to Target 8b:**

- 2 • Target 6b: Annual change in forest area (MDG Indicator)
3 • Target 10b: Official climate financing from developed countries that is incremental to
4 ODA (in US\$)
5 • Target 10b: Private net flows for sustainable development at market rates as share of
6 high-income country GNI

7 Moreover, critical adaptation measures are tracked for urban and rural areas, e.g.:

- 8 • Target 6c: [Crop losses due to climatic shocks - to be developed]
9 • Target 7c: Extreme climatic events per year in metropolitan areas (lives lost, \$
10 damages)

11 **Additional indicators that countries may consider:**

- 12 • GHG emissions intensity of areas under forest management (GtCO₂e/ha)

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1 **Target 8c: Adopt incentives, including pricing greenhouse gases emissions, to curb
2 climate change and promote technology transfer to developing countries.**

3 **Key issues to measure for the target:**

4 While the previous two targets focus primarily on greenhouse gas emissions, the ultimate
5 outcome of national and international efforts to curb climate change, this target tracks
6 countries' policies tools to reign in greenhouse gas emissions.

7 **Potential and Illustrative Core Indicators:**

8 **Indicator 78: Implicit incentives for low-carbon energy in the electricity sector (measured as
9 US\$/MWh or US\$ per ton avoided CO₂)**

10 Rationale and definition: To reduce greenhouse gas emissions to the socially optimal level, the
11 social cost of greenhouse gas emissions needs to be applied, which in turn requires
12 government policies to apply carbon prices using a range of measures, including but not limited
13 to regulation, taxes, or carbon markets. This indicator measures (in \$/tCO₂e) the level of
14 effective carbon price in the electricity sector, as defined by the OECD report on effective
15 carbon prices, as a net cost for society for each unit of GHG abatement induced.¹³³ A similar
16 definition was proposed by the Australian Productivity Commission report on carbon emission
17 policies in key economies.¹³⁴

18 Prices on carbon can be explicit, such as carbon taxes or prices of emission allowances in GHG
19 emission trading systems, or they can be implicit, reflecting the cost to society per ton of CO₂e
20 abated as a result of any type of policy measure that have an impact on GHG emissions.
21 Comparisons of the effective price put on carbon by policies in different sectors and countries
22 provide valuable insights into the existence of incentives to reduce emissions and the cost-
23 effectiveness of alternative policies to reduce greenhouse emissions, and their potential
24 impacts on competitiveness. The numerical results of this comparison should, however, be
25 treated with caution, since there is no one carbon price equivalent that can comprehensively
26 capture what a diverse set of policies in a given country intends to achieve, nor at what cost.

27 As a starting point, we propose that the post-2015 framework track the effective carbon price
28 for electricity generation. This indicator covers a large share of GHG emissions and is
29 methodologically easier to track since the relevant technologies are global in nature, emissions
30 and policies are concentrated, and some information is available on a comparable basis from
31 governments and international and other organizations.

32 Disaggregation: Opportunities for disaggregation to be reviewed.

33 Comments and limitations: We underscore that this indicator is agnostic to the type of policies
34 pursued by governments. It does not give preference to taxes, markets or regulatory
35 instruments. So governments retain their full flexibility for identifying and pursing the
36 instruments that are best adapted to their context.

¹³³ OECD (2013b), *Effective Carbon Prices*, OECD Publishing.

¹³⁴ Productivity Commission (2011), *Carbon Emission Policies in Key Economies*, Research Report, Canberra.

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1 The methodology developed by the Australian Productivity Commission and the OECD could be
2 used as reference. Once better methodologies are available for other emission areas, the
3 indicator can be extended to a wider sectoral focus.

4
5 The indicator estimates costs of greenhouse gas abatement and their impact on prices without
6 comparing them to societal benefits.

7
8 Potential lead agency or agencies: UNFCCC with the IEA.

9
10 **Core Indicators covered under other Targets that also apply to Target 8c:**

- 11 • Target 10b: Official climate financing from developed countries that is incremental to
12 ODA (in US\$)
13 • Target 10b: Private net flows for sustainable development at market rates as share of
14 high-income country GNI

15
16 **Additional indicators that countries may consider:**

- 17 • Fossil fuel subsidies (\$ or %GNI)

1 **Goal 9: Secure Ecosystem Services and Biodiversity, and Ensure**
2 **Good Management of Water, Oceans, Forests and Natural**
3 **Resources**

4
5 Biodiversity, marine and terrestrial ecosystems of local, regional, and global significance are
6 inventoried, managed, and monitored to ensure the continuation of resilient and adaptive life
7 support systems and to support sustainable development.¹³⁵ Water, oceans, forests, and other
8 natural resources are managed sustainably and transparently to support inclusive economic
9 and human development.

10
11 **Target 9a. Secure ecosystem services by adopting policies and legislation that address**
12 **drivers of ecosystem degradation, and requiring individuals, businesses and**
13 **governments to pay the social cost of pollution and use of environmental services.***

14 **Key issues to measure for the target:**

15 This target complements the environmental targets in previous goals by focusing specifically on
16 biodiversity and ecosystem management. Since ecosystems vary so much from country to
17 country, this target focuses at the national level and will allow countries set ambitious goals
18 and measure the progresses achieved by national legislations and policies.¹³⁶

21 **Potential and Illustrative Core Indicators:**

23 **Indicator 79: Ocean Health Index (national index)**

25 Rationale and definition: Two-thirds of the world's surface consists of oceans, and half of its
26 surface consists of high seas. The health of oceans is critical for human wellbeing. No single
27 variable is available to track the health of complex ocean and coastal systems, so the SDSN
28 proposes to use the composite Ocean Health Index, which assesses the overall health of the
29 world's oceans.

31 The Ocean Health Index measures 10 aspects of marine ecosystems and their use by humans:
32 food provision, artisanal fishing opportunities, natural products, carbon storage, coastal
33 protection, tourism and recreation, coastal livelihoods and economies, sense of place, clean
34 waters, and biodiversity.¹³⁷ Each aspect is evaluated along four dimensions: present status,
35 current trends, existing pressures, and resilience. These four dimensions take into
36 consideration a wide range of factors such as ocean acidification and nutrient pollution (as
37 pressures) and institutional factors such as marine protected areas (as contributing to
38 resilience).¹³⁸ In this way the Ocean Health Index provides the best available short-hand index
39 for the status of the world's oceans and coastal areas.

41 Disaggregation: We propose to use the Ocean Health Index at national and regional levels (see
42 Target 9b). Moreover, countries can disaggregate the index for key marine systems.

¹³⁵ In line with the Aichi Biodiversity targets to be achieved by 2020.

¹³⁶ See Biodiversity Indicators Partnership: <http://www.bipindicators.net>

¹³⁷ Halpern, B. et al. (2012). An index to assess the health and benefits of the global ocean. *Nature* 488, 615–620.
<http://www.nature.com/nature/journal/v488/n7413/full/nature11397.html>

¹³⁸ For detailed information on the methodology used to calculate the Index, see www.oceanhealthindex.com

1
2 Comments and limitations: The Index can be calculated for each country and region. Each
3 dimension of the index is assessed by local expert communities who define the appropriate
4 reference points, which define the objective that the country will aim for, and against which
5 measurements of progress can be done annually.

6
7 Potential lead agency or agencies: Ocean Health Index Partnership.
8

9 **Indicator 80: Red List Index (by country and major species group)**

10
11 Rationale and definition: The Red List Index (RLI), drawing on the IUCN Red List of Threatened
12 Species, tracks the rate of extinction for marine and terrestrial species groups in the near
13 future (i.e. 10-50 years) in the absence of any conservation action.¹³⁹ A downward trend in the
14 index implies that the risk of a species' extinction is rising. The RLI is used to measure progress
15 towards the Aichi target 12 of the Convention on Biological Diversity (CBD)¹⁴⁰ and the
16 Millennium Development Goals.

17
18 The IUCN Red List is the most respected system to track the status of threatened species
19 according to seven risk categories that range from "extinct" to "least concern"¹⁴¹. The criteria
20 for determining the risk status of each species are scientifically rigorous and easy to understand
21 for the general public. The Red List Index is applicable to different major species groups,
22 transparent, and can track trends over time.¹⁴² It has been developed for many major species
23 groups, such as amphibians and avians, but important gaps remain, particularly among less
24 well studied major species groups, such as fungi. For species groups not yet covered by the RLI,
25 a sampled RLI (SRLI) can be used that is based on representative samples of species from
26 taxonomic groups.

27
28 Disaggregation: The RLI can be disaggregated to regional and national levels.¹⁴³ We
29 recommend that national and global RLIs be reported by key species group. In the case of
30 smaller countries that cover contiguous marine or terrestrial biomes, it may be more
31 appropriate to report regional RLI by key species group.

32
33 Comments and limitations: To be reviewed.

34
35 Potential lead agency or agencies: IUCN.

36
37 **Indicator 81: [Protected areas overlay with biodiversity (national level)]**

38
39 Rationale and definition: Terrestrial and marine protected areas are an important means of
40 securing biodiversity and therefore tracked under the Aichi targets. Yet, the global protected
41 area system does not yet cover a representative sample of the world's biodiversity, nor is it
42 effectively targeted at the most important sites for biodiversity. For this reason Aichi
43 Biodiversity Target 11 of the Convention on Biological Diversity (CBD) places emphasis on the

¹³⁹ Butchart SH, Resit Akçakaya H, Chanson J, Baillie JE, Collen B, et al. (2007) Improvements to the Red List Index. *PLoS ONE* 2(1): e140.

¹⁴⁰ See <http://www.bipindicators.net/indicators> for indicators to measure progress towards the Aichi targets.

¹⁴¹ For more information, see: <http://www.iucnredlist.org/technical-documents/categories-and-criteria>

¹⁴² For an overview of the Red List, see: <http://www.iucnredlist.org/about/red-list-overview>

¹⁴³ For more information on national and regional RLIs see

<http://www.bipindicators.net/LinkClick.aspx?fileticket=LxIQ08fYW-4%3D&tabid=72&mid=1895>

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1 development of ecologically representative protected area systems and the protection of areas
2 of particular importance for biodiversity and ecosystem services.¹⁴⁴ This indicator, developed
3 by UNEP-WCMC (the world conservation monitoring center) with the collaboration of several
4 other specialized organizations, measures progress towards these elements of Target 11.

5
6 The indicator is a composite of three sub indicators: (i) the degree of protection of terrestrial
7 and marine ecoregions of the world; (ii) the degree of protection of Important Bird Areas
8 (IBAs); and (iii) the degree of protection of Alliance for Zero Extinction sites (AZEs). The sub
9 indicators are calculated based on overlays of ecoregions, IBAs and AZEs with all designated
10 protected areas recorded in the World Database on Protected Areas (WDPA) with a known size.
11 The WDPA is the most comprehensive global spatial dataset on marine and terrestrial
12 protected areas available. The methodology used to create a global protected areas layer from
13 the WDPA follows the one used to calculate the protected area coverage indicator.

14 [Coverage of protected areas]: A simplified and non-composite version of this indicator can be
15 used by focusing only on the first component. Disaggregation: Although mostly used at a
16 global scale, the indicator can be calculated for regions or countries,¹⁴⁵ and we recommend
17 that such national-level reporting become a priority under the post-2015 agenda. In the case of
18 smaller countries covering contiguous ecoregions, a regional representation of this indicator
19 may be more appropriate.

20
21 Comments and limitations: The indicator can be used to assess the status of protection and
22 trends in protection over time. It can be widely applied at various scales to measure policy
23 response to biodiversity loss. UNEP-WCMC is working closely with the Alliance for Zero
24 Extinction, BirdLife International and Conservation International to further improve the
25 datasets and methodology used to calculate the IBA and AZE Protection Indices.

26
27 The indicator is more complex than the original MDG indicator, but it provides much richer
28 information on the state of biodiversity in countries. A simplified and non-composite indicator
29 for the coverage of protected areas can be derived by focusing only on the first component.
30 Such an Ecoregion Protection Indicator would represent a weighted average of the percentage
31 attainment of the Aichi target of protecting 17% of terrestrial systems and inland waters, and
32 protecting 10% of marine and coastal areas. Marine protected areas (MPA) are measured as
33 the percentage of a country's exclusive economic zone (EEZ) that is under protection¹⁴⁶ and is
34 reported under the Marine Protected Areas Database (WDPA).¹⁴⁷ Like the Aichi target, each
35 component of the proposed index is measured separately and capped at 100% so that the
36 greater protection of one terrestrial ecoregion will not compensate for the insufficient
37 protection of another system.

38
39 While using the coverage of protected areas would simplify the task of countries regarding the
40 collection of data, this indicator would fail to provide information on the effectiveness of the
41 management of the protected area. In addition to this, a percentage of protected area does
42 not provide any insights on whether the area protected is key for securing regional biodiversity.

¹⁴⁴ This and the following description of the indicator is drawn from Biodiversity Partnership Indicators; for more information see <http://www.bipindicators.net/paoverlays>

¹⁴⁵ See Biodiversity Indicators Partnership, (2010).

¹⁴⁶ See United Nations Convention on the Law of the Sea website:

http://www.un.org/depts/los/convention_agreements/texts/unclos/part5.htm

¹⁴⁷ See WDPA website: <http://www.wdpa.org>

1 Potential lead agency or agencies: UNEP-WCMC.

2
3 **Indicator 82: Area of forest under sustainable forest management as a percent of forest area**

4
5 Rationale and definition: The indicators on annual change in forest area (Target 6b) and on
6 protected areas overlay with biodiversity provide important information on the change in
7 forest area and the protection of key forest regions. A third forest-related indicator is needed
8 to track the sustainability of economic and other uses of forests. The Global Forest Resources
9 Assessment 2010¹⁴⁸ has proposed this indicator measuring the percentage of forest under
10 sustainable management.

11
12 Disaggregation: Countries with strong forest management systems can disaggregate the
13 indicator spatially.

14
15 Comments and limitations: A challenge for this indicator is to arrive at an internationally
16 consistent definition of sustainable forest management practices.¹⁴⁹ An improved version of
17 the indicator and underlying data will be provided in the 2015 assessment of Global Objectives
18 on Forests.

19
20 Potential lead agency or agencies: FAO, UNEP.

21
22 **Core Indicators covered under other Targets that also apply to Target 9a:**

- 23 • Target 2b: [Loss of reactive nitrogen [phosphorus] to the environment (kg/ha) –
24 indicator to be developed]
25 • Target 6a: [Crop water productivity (tons of harvested product per unit irrigation
26 water) – indicator to be developed]
27 • Target 6a: [Share of agricultural produce loss and food waste (% of food production) –
28 indicator to be developed]
29 • Target 6a: Crop nitrogen use efficiency (%)
30 • Target 6b: Annual change in degraded or desertified arable land (% or ha)
31 • Target 6b: Annual change in forest area and land under cultivation
32 • Target 10a: [Share of companies with a market capitalization larger than [\$1 billion]
33 that publish integrated reporting -- indicator to be developed]
34 • Target 10a: Country implements and reports on System of Environmental-Economic
35 Accounting (SEEA) accounts

¹⁴⁸ FAO (2010), *Global Forest Resources Assessment 2010*. Rome, Italy: FAO.

¹⁴⁹ UN Statistics Division Friends of the Chair Group on Broader Measures of Progress (2013d), *Statistical Note for the Issue Brief on: Forests*.

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1 **Additional indicators that countries may consider:**

- 2 • **[Use of destructive fishing techniques – indicator to be developed]:** This indicator
3 tracks the use of destructive fishing techniques, such as trolley fishing.
- 4 • **[Eutrophication of major estuaries – indicator to be developed]:** The increased levels
5 of nutrient runoff and untreated sewage resulting from human activities, are leading to
6 eutrophication, harmful algal blooms (HAB)¹⁵⁰ and “dead zones”. The levels of
7 eutrophication need to be monitored in all major estuaries.
- 8 • **[Indicator on the implementation of spatial planning strategies for coastal and
9 marine areas – to be developed]:** Marine spatial planning is strategy to distribute
10 (spatially and temporally) human activities in coastal and marine areas in order to
11 guarantee those ecological, social and economic objectives that are decided through a
12 public and political process.¹⁵¹

¹⁵⁰ Naeem, S., Viana, V., Visbeck, M., (2014) Forests, Oceans, Biodiversity and Ecosystem Services. Draft report of the Thematic Group FOBES, SDSN. To be published by Sustainable Development Solutions Network.

¹⁵¹ For more information, see website of IOC UNESCO initiative on marine spatial planning: <http://www.unesco-ioc-marinesp.be>

1 **Target 9b. Participate in and support regional and global arrangements to inventory,**
2 **monitor, and protect biomes and ecosystem services of regional and global**
3 **significance and curb trans-boundary environmental harms, with robust systems in**
4 **place no later than 2020.**

5
6 **Key issues to measure for the target:**

7 This proposed target focuses on biodiversity and ecosystem management at regional and
8 global scales. While countries can set their own policies for managing ecosystems on their
9 national territory, international cooperation is required to manage regional ecosystems and
10 implement strategies to preserve biodiversity and ecosystem of global significance, including
11 high seas. These cooperative mechanisms are difficult to implement and differ markedly from
12 purely national approaches. For this reason the SDSN proposes two targets for ecosystem and
13 biodiversity management – one operating at national and the other operating at
14 regional/global scales. Key measurements for this target will be the contribution of countries
15 towards regional and global efforts to monitor and protect ecosystems and biodiversity.
16

17 **Potential and Illustrative Core Indicators:**
18

19 **Indicator 79: Ocean Health Index (regional index)**
20

21 Rationale and definition: Two-thirds of the world's surface consists of oceans, and half of its
22 surface consists of high seas. The health of oceans is critical for human wellbeing. No single
23 variable is available to track the health of complex ocean and coastal systems, so the SDSN
24 proposes to use the composite Ocean Health Index, which assesses the overall health of the
25 world's oceans.

26 The Ocean Health Index measures 10 aspects of marine ecosystems and their use by humans:
27 food provision, artisanal fishing opportunities, natural products, carbon storage, coastal
28 protection, tourism and recreation, coastal livelihoods and economies, sense of place, clean
29 waters, and biodiversity.¹⁵² Each aspect is evaluated along four dimensions: present status,
30 current trends, existing pressures, and resilience. These four dimensions take into
31 consideration a wide range of factors such as ocean acidification and nutrient pollution (as
32 pressures) and institutional factors such as marine protected areas (as contributing to
33 resilience).¹⁵³ In this way the Ocean Health Index provides the best available short-hand index
34 for the status of the world's oceans and coastal areas.
35

36 Disaggregation: The regional application of the indicator can focus on key marine systems, such
37 as FAO's fisheries zones or other categories. The construction of the indicator lends itself to
38 disaggregation, as appropriate.

40 Comments and limitations: The Index can be calculated for each country and region. For target
41 9b the focus should be to measure the progress at a regional level, including the progress made
42 in terms of the health of the high seas. Each dimension of the index is assessed by local expert
43 communities who define the appropriate reference points, which define the objective that the
44 country will aim for, and against which measurements of progress can be done annually.
45

46

¹⁵² Halpern, B. et al. (2012). An index to assess the health and benefits of the global ocean. *Nature* 488, 615–620. <http://www.nature.com/nature/journal/v488/n7413/full/nature11397.html>

¹⁵³ For detailed information on the methodology used to calculate the Index, see www.oceanhealthindex.com

1 Potential lead agency or agencies: Ocean Health Index Partnership.
2

3 **Indicator 83: Proportion of fish stocks within safe biological limits (MDG Indicator)**
4

5 Rationale and definition: The proportion of fish stocks within safe biological limits is defined as
6 the proportion of fish stocks or species that are exploited within the level of maximum
7 sustainable biological productivity. The indicator provides an important measure of the
8 sustainable management of the world's fisheries. The stock assessment classifies fish stocks
9 into 3 categories: non-fully exploited, fully exploited, and overexploited. The stocks within safe
10 biological limits are those classified as non-fully exploited and fully exploited.¹⁵⁴
11

12 Disaggregation: By region and global. **Other** opportunities for disaggregation to be reviewed
13 The FAO has divided the world oceans into 21 statistical areas, and stock assessment is carried
14 out based on these statistical areas. In total, 584 fish stocks and species have been monitored
15 since 1974, with stock assessment information on 441 stock or species.
16

17 Comments and limitations: To be reviewed.
18

19 Potential lead agency or agencies: FAO.
20

21 **Indicator 80: Red List Index (for Internationally Traded Species)**
22

23 Rationale and definition: We propose that the Red List Index (RLI) described above be applied
24 to internationally traded terrestrial and marine species identified in appendices I and II of the
25 Convention on Internationally Traded and Endangered Species (CITES).¹⁵⁵ The RLI for
26 Internationally Traded Species will track the near-term extinction risk for species that are
27 subject to international trade and whose survival is therefore heavily affected by non-host
28 countries and cooperative international strategies.
29

30 Disaggregation: Opportunities for disaggregation to be reviewed.
31

32 Comments and limitations: The RLI can be disaggregated by species or group. Likewise, it can
33 be presented by region or country.
34

35 Potential lead agency or agencies: IUCN, CITES.
36

37 **Indicator 81: Protected area overlays with biodiversity (regional and global)**
38

39 Rationale and definition: The sustainable management of many key ecoregions requires
40 international cooperation and shared monitoring. For this reason we propose that the indicator
41 "Protected areas overlays with biodiversity" be separately reported at regional and global
42 levels. This indicator tracks gaps in the attainment of the Aichi target 11.
43

44 Disaggregation: See discussion under Target 9a for opportunities to disaggregate this indicator
45 spatially.

¹⁵⁴ See MDG Indicators website for consideration on "maximum sustainable biological productivity" and method of computation: <http://mdgs.un.org/unsd/mi/wiki/7-4-Proportion-of-fish-stocks-within-safe-biological-limits.ashx>

¹⁵⁵ See CITES website: <http://www.cites.org>

1
2 Comments and limitations: See discussion under Target 9a for comments and limitations of this
3 indicator.

4
5 Potential lead agency or agencies: UNEP-WCMC.
6

7 **Indicator 84: [Reporting of international river shed authorities on trans-boundary river-shed
8 management - indicator to be developed]**

9
10 Rationale and definition: Rivers, as well as other freshwater ecosystems, are crucial for human
11 survival. They are also very rich in biodiversity. Rivers travel across borders and within each
12 country they are subject to damming, pollution, and reservoirs. A suitable indicator must be
13 developed to measure progress towards a sustainable trans-boundary management of rivers.
14

15 Disaggregation: Opportunities for disaggregation to be reviewed once an indicator has been
16 developed.
17

18 Comments and limitations: To be reviewed once an indicator has been developed.
19

20 Potential lead agency or agencies: The GEF, UNEP, or INBO can collect the required data.
21

22 **Core Indicators covered under other Targets that also apply to Target 9b:**

- 23 • Target 2b: [Excessive loss of reactive nitrogen [and phosphorus] to the environment
24 (kg/ha) – indicator to be developed]
25 • Target 6b: Annual change in degraded or desertified arable land (% or ha)
26 • Target 8b: Land-use-related GHG emissions (tCO₂e) by gas (including CO₂, N₂O and CH₄)
27 related to land-use change (including, agriculture and forestry)

28
29 **Additional indicators that countries may consider:**

- 30 • **Abundance of invasive alien species:** This indicator tracks the number of invasive alien
31 species found in the country.
32 • **Area of coral reef ecosystems and percentage live cover:** This indicator measures the
33 area of live coral reef ecosystem coverage within the national waters.
34

1 **Target 9c. All governments and businesses commit to the sustainable, integrated, and**
2 **transparent management of water, agricultural land, forests, fisheries, mining, and**
3 **hydrocarbon resources to support inclusive economic development and the**
4 **achievement of all SDGs.**

5
6 **Key issues to measure for the target:**

7 Sound management of natural resources is critical for sustainable development as they can be
8 a driver for poverty reduction and economic development. However, special care must be
9 taken in the development of primary resources to avoid the infamous “resource curse”,
10 marked by rising corruption, massive environmental degradation, land grabs, the dispossession
11 of traditional landowners, and a siphoning off of resource revenues by a small elite. This target
12 focuses on whether natural resources are managed sustainably and transparently by
13 governments and businesses to support inclusive economic and human development.

14
15 **Potential and Illustrative Core Indicators:**

16
17 **Indicator 85: Proportion of total water resources used (MDG Indicator)**

18
19 Rationale and definition: This MDG indicator is defined as the total volume of groundwater and
20 surface water abstracted from their sources for human use (e.g.in sectors such as the
21 agricultural, the industrial or municipal use), expressed as a percentage of the total annual
22 renewable water resources. This indicator shows whether a country abstracts more than its
23 sustainable supply of freshwater resources. It can be used to track progress in the sustainable,
24 integrated, and transparent management of water resources.

25
26 Disaggregation: Since the indicator can be disaggregated to show the abstractions by sector
27 (also showing use efficiencies for each sector), it can help identify and manage competing
28 claims on water resources by different users.¹⁵⁶

29
30 Comments and limitations: Many countries do not have good assessments of their aquifer
31 volumes and recharge/discharge calculations, so important efforts will need to be made to
32 improve data gathering. Ideally the indicator should be calculated for individual water basins
33 since demand and supply need to be balanced at the basin level.

34
35 Potential lead agency or agencies: The FAO and/or UNEP can help collect data at the country
36 level.¹⁵⁷

37
38 **Indicator 86: Access to land in rural areas index**

39
40 Rationale and definition: Whether the rural poor can secure tenure over the land and natural
41 resources on which they depend has important implications for economic development and
42 poverty reduction. Yet for many rural poor households, access to land and natural resources is
43 increasingly undermined. In particular, controversies involving large-scale land acquisitions by
44 foreign investors have placed land rights and the issue of responsible agricultural investment
45 firmly on the global development agenda.

46
¹⁵⁶ See UN DESA (2007a).

¹⁵⁷ For more information: <http://www.fao.org/ag/aquastat>

1 This indicator is produced by IFAD and forms part of the organization's Rural Sector
2 Performance Assessment. It assesses the extent to which a country's institutional, legal, and
3 market frameworks provide secure land tenure and equitable access to land in rural areas. The
4 indicator comprises four components: (1) the extent to which rural poor households have
5 access to land; (2) the extent to which the land tenure system provides equitable land rights,
6 including for women, minorities and indigenous people; (3) the extent to which formal land
7 markets exist, function effectively, and are accessible to the rural poor; and (4) the extent to
8 which government regulation contributes to the sustainable management of and equitable
9 access to common property resources.¹⁵⁸

10
11 Disaggregation: Opportunities for disaggregation to be reviewed.

12
13 Comments and limitations: To be reviewed.

14
15 Potential lead agency or agencies: IFAD, UNDP

16
17 **Indicator 87: Publication of resource-based contracts**

18
19 Rationale and definition: This indicator measures whether resource-based contracts between
20 governments and business, including those related to extractive resource exploration and
21 production as well as agriculture and forestry operations, are published in a timely manner.
22 Contract transparency is an essential precondition to ensuring that all parties benefit from
23 large-scale resource investments. Secrecy can be a convenient way to hide power imbalances,
24 incompetence, mismanagement, and corruption. Disclosure is a necessary precursor for the
25 coordinated and effective management of the sector by government agencies. It also allows
26 citizens to monitor contracts in areas such as environmental compliance and the fulfillment of
27 social commitments. Contract transparency also provides incentives: government officials can
28 be deterred from seeking their own interests over the population's and, over time,
29 governments can also increase their bargaining power by gauging contracts from around the
30 world.¹⁵⁹

31
32 This indicator measures whether resource-based contracts between governments and
33 business, including those related to extractive resource exploration and production as well as
34 agriculture and forestry operations, are publicly published in a timely manner. Based on the
35 rating system for the extractive industry by the Resource Governance Index,¹⁶⁰ the indicator
36 would be constructed so that a government can receive one of four ratings:

- 37 • 100 = Yes, all valid or approved contracts are published in full,
38 • 67 = Yes. The majority of contracts are published in full but there are some projects,
39 contracts or licenses that have not been published,
40 • 33 = Some contracts are published but there are no clear rules for publishing and this
41 remains rare,
42 • 0 = No. Contracts are not published.

¹⁵⁸ See IFAD and land issues webpage: <http://www.ifad.org/english/land/index.htm>

¹⁵⁹ Collier, P and Antonio, P. et al. (2013). *Harnessing Natural Resources for Sustainable Development: Challenges and Solutions*. Paris, France and New York, USA: SDSN.

¹⁶⁰ See Resource Governance Index website: <http://www.revenuewatch.org/rgi>

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1 We propose that available indicators for the extractives industries be expanded to also include
2 large-scale investments in agriculture, forestry, fishing concessions, and other large natural
3 resources contracts.

4

5 Disaggregation: This indicator can be disaggregated by industries and commodities.

6

7 Comments and limitations: To be reviewed.

8

9 Potential lead agency or agencies: UN Global Compact, EITI, and/or UNCTAD.

10

11 **Indicator 88: Publication of all payments made to governments under resource contracts**

12

13 Rationale and definition: Large-scale investments in natural resource projects, such as mines or
14 land concessions, are often governed by complex fiscal rules that make it difficult for
15 stakeholders to track the large associated rents and tax payments. This lack of transparency
16 around taxes and rents paid to the government weakens public accountability and increases
17 opportunities for corruption or poor management of resource revenues. Transparency of
18 payments made to host governments strengthens the opportunities for public oversight of
19 resource investments and the transfer and use of the revenue flows. This indicator measures
20 the publication of payments to host countries under resource contracts. These include taxes,
21 royalties, dividends, bonuses, license fees, payments for infrastructure improvements,
22 payments in kind, or any other significant payment and material benefit.¹⁶¹

23

24 This indicator would track the publication by host governments of revenue receipts from oil,
25 gas, mining, land, agriculture and forestry projects, as well as the existence and
26 implementation of home governments' requirements for domiciled companies to publish
27 payments under the same categories of contracts. For host countries, data will include all
28 published revenues, disaggregated by sector, company, and type of revenue. Under the index,
29 host countries would be ranked as follows:

- 30
- 31 • 100: The government publishes all resource revenues disaggregated by company and
category,
 - 32 • 67: The government publishes all resource revenues by category, but not by company,
 - 33 • 33: The government publishes some, but not all of the resource revenues,
 - 34 • 0: The government does not publish resource revenues.

35

36 For home countries, the index will reveal whether all domiciled companies are required to
37 systematically disclose payments to foreign governments for natural resource investments. It
38 will be indicated whether requirement applies to all domiciled companies or companies listed
39 on major stock exchanges; for which sector(s) the requirement applies; whether reporting is
40 required on a country-by-country basis or project-by-project basis; whether payment types
41 must be disaggregated; and whether there is a threshold level of payment that must be
42 reported. For home countries, the index would be reported as follows:

- 43
- 44 • 100: The government requires all domiciled companies to disclose payments of natural
resource investments by category on a project-by-project basis,
 - 45 • 67: The government requires publicly listed companies to disclose payments for natural
resource investments by category on a project-by project basis,

¹⁶¹ Collier, P and Antonio, P. et al. (2013).

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- 1 • 33: The government requires companies to disclose payments on a country, but not
2 project-by-project basis,
3 • 0: The government does not require disclosure of payments by domiciled companies.

4
5 Disaggregation: This indicator can be disaggregated by industries and commodities.
6
7 Comments and limitations: To be reviewed.
8
9 Potential lead agency or agencies: UN Global Compact, EITI, and/or UNCTAD.

10
11 **Core Indicators covered under other Targets that also apply to Target 9c:**

- 12 • Target 9a: Area of forest under sustainable forest management as a percent of forest
13 area
14 • Target 9b: Proportion of fish stocks within safe biological limits, by region and global
15 (MDG Indicator)

16
17 **Additional indicators that countries may consider:**

- 18 • **[Legislative branch oversight role regarding resource-based contracts and licenses --
19 indicator to be developed].** This indicator measures the existence and enforcement of
20 legislative a framework around natural resources.
21 • **[Strategic environmental and social impact assessments required -- indicator to be
22 developed].** This indicator measures whether strategic environmental and social
23 impact assessments are required for all resource-based projects.
24 • **Improved land ownership and governance of forests:** Percent of forest area with clear
25 and secure land ownership.
26

1 **Goal 10: Transform Governance and Technologies for 2 Sustainable Development**

3
4 The public sector, business, and other stakeholders commit to good governance, including
5 transparency, accountability, access to information, participation, an end to tax and secrecy
6 havens, and efforts to stamp out corruption. The international rules governing international
7 finance, trade, corporate reporting, technology, and intellectual property are made consistent
8 with achieving the SDGs. The financing of poverty reduction and global public goods including
9 efforts to head off climate change are strengthened and based on a graduated set of global
10 rights and responsibilities.

11
12 **Target 10a. Governments (national and local) and major companies support to the
13 SDGs, provide integrated reporting by 2020, and reform international rules to achieve
14 the goals.**

15
16 **Key issues to measure for the target:**

17 This target tracks government and business commitments to the SDGs as well as good
18 governance, broadly defined as the effective and efficient management of resources in
19 response to the needs of society. A central component of good governance for the SDGs is
20 integrated reporting by governments and businesses. All major businesses should provide
21 integrated reporting by no later than 2020.

22
23 Many international bodies, standards, and frameworks can have significant positive or negative
24 effects on countries' ability to achieve the SDGs. Such bodies, standards, and frameworks
25 include:

- 26 • The international trade system, comprising the World Trade Organization as well as
27 regional and bilateral trade agreements;
- 28 • International standards for intellectual property, such as the Trade-Related Aspects of
29 Intellectual Property Rights (TRIPS) provisions under the World Trade Organization;
- 30 • Financial regulatory standards, such as Basel III and Solvency 2;
- 31 • International accounting standards, such as the International Financial Reporting
32 Standards (IFRS) set by the International Accounting Standards Board (IASB);
- 33 • International taxation agreements including, for example, international transfer pricing
34 guidelines as developed by the OECD.

35
36 These bodies, standards, and frameworks tend to be highly complex as well as dynamic and
37 likely to evolve significantly through to 2030. Some may be discontinued, and new ones may be
38 created. For this reason it would be impossible for a post-2015 development agenda to specify
39 specific standards or provisions to be adopted by each of these bodies. Instead, the proposed
40 target requires each body, standard, and framework to report on whether its rules are
41 consistent with achieving the SDGs.

1 **Potential and Illustrative Core Indicators:**
2

3 **Indicator 89: Country implements and reports on System of Environmental-Economic
4 Accounting (SEEA) accounts**

5
6 Rationale and definition: The UN Statistical Commission adopted the System of Environmental-
7 Economic Accounting (SEEA) in 2012 as the first international standard for environmental-
8 economic accounting. The SEEA brings statistics on the environment and its relationship to the
9 economy into the core of official statistics and thereby expands the traditional System of
10 National Accounts (SNA), which focuses on measuring economic performance. Examples of
11 information provided by the SEEA includes the assessment of trends in the use and availability
12 of natural resources, the extent of emissions and discharges to the environment resulting from
13 economic activity, and the amount of economic activity undertaken for environmental
14 purposes.¹⁶² The UN Statistical Commission will develop the reporting templates for the SEEA
15 Central Framework.

16
17 This indicator measures whether a country applies and reports on a national SEEA. It takes into
18 account the fact that some elements of the SEEA may not be applicable to a particular country
19 and that the implementation is incremental starting from selected accounts depending on
20 policy priorities.

21
22 Disaggregation: The presence of SEEAs is a national indicator, but SEEAs themselves are highly
23 disaggregated (by sector of activity, environmental resource, sub-national unit, etc.).

24
25 Comments and limitations: A challenge with this indicator derives from the establishment of
26 institutional framework for compiling integrated data and the statistical production process
27 and information management in the countries' statistical systems.

28
29 Potential lead agency or agencies: The UN Statistical Division.

30
31 **Indicator 90: [Share of companies valued at more than [\$1 billion] that publish integrated
32 reporting-- indicator to be developed]**

33
34 Rationale and definition: Today, most companies report only on their financial results without
35 regard to their social and environmental impacts. As a result their investor may not be aware of
36 their full risk exposure. Likewise, society does not know a company's contribution to
37 sustainable development. Several integrated reporting standards have been developed that
38 track the social and environmental externalities of businesses. One prominent example is the
39 International Integrated Reporting Council (IIRC). We propose that an indicator be created to
40 track the percentage of large companies (i.e. larger than [US\$1 billion, measured in PPP]) that
41 prepare integrated reports that are consistent with the SDGs and conform to standards that
42 would need to be defined.

43
44 Disaggregation: This indicator can be disaggregated by sector of activity, ownership (listed vs.
45 privately held or public companies), and other characteristics.

¹⁶² European Commission, Food and Agriculture Organization, International Monetary Fund, Organization for Economic Cooperation and Development, United Nations, World Bank,(2012), *System of Environmental-Economic Accounting. Central Framework*. New York.

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1 Comments and limitations: The standards and methodologies tracked by this indicator need to
2 be defined. In particular, the indicator would need to specify standards for the integrated
3 reporting that can be applied in a wide range of jurisdictions.

4
5 Potential lead agency or agencies: The Global Compact, the World Business Council for
6 Sustainable Development (WBCSD), and/or the International Integrated Reporting Council
7 (IIRC) could track such an indicator.

8
9 **Indicator 91: Perception of public sector corruption**

10
11 Rationale and definition: Public sector corruption is a barrier to development and diverts
12 resources away from poverty-eradication efforts and sustainable development. Corruption is
13 difficult to measure since objective data tends to be highly incomplete and difficult to compare.
14 Transparency International is a global civil society organization that works to fight corruption
15 and has developed the Corruption Perceptions Index (CPI).¹⁶³ The CPI ranks countries based on
16 how corrupt their public sector (administrative and political) is perceived to be. It is a
17 composite perception-based index drawing on corruption-related data collected by a variety of
18 reputable institutions. The CPI reflects the views of observers from around the world, including
19 experts living and working in the countries and territories evaluated. Transparency
20 International publishes annual reports covering 177 countries with some 20 years of historic
21 data.

22
23 Disaggregation: Opportunities for disaggregation to be reviewed.

24
25 Comments and limitations: To be reviewed.

26
27 Potential lead agency or agencies: Transparency International.

28
29 **Indicator 92: Annual report by Bank for International Settlements (BIS), International
30 Accounting Standards Board (IASB), International Financial Reporting
31 Standards (IFRS), International Monetary Fund (IMF), World Intellectual
32 Property Organization (WIPO), and World Trade Organization (WTO) [other
33 organizations to be added] on the relationship between international rules
34 and the SDGs**

35
36 Rationale and definition: This indicator will track whether key international institutions deliver
37 an official annual report assessing whether the international rules are consistent with achieving
38 the SDG. The reports should also outline options for improvement to make the rules consistent
39 with achieving the goals. Institutions and reports covered by this indicator include:

- 40 • BIS: Report on international financial regulatory standards (i.e. Basel III and successors)
41 • IASB: Report on international financial reporting standards.
42 • IFRS: Report on international accounting standards.
43 • IMF: Report on the international financial system.
44 • WIPO: Report on the international intellectual property regime.
45 • WTO: Report on the international trade system.

46 Other organizations can be added to this indicator.

¹⁶³ See TI's Corruption Perceptions Index website: <http://www.transparency.org/research/cpi/overview>

1 Disaggregation: Reporting would be done by institution.

2 Comments and limitations: To be reviewed once the indicator has been constructed.

3 Potential lead agency or agencies: WTO, IMF, WIPO.

4

5 **Indicator 93: Assets and liabilities of BIS reporting banks in international tax havens (as per
OECD definition), by country**

6

7 Rationale and definition: This indicator shows the geographical extent of banks' assets and
liabilities that are located in international tax havens. The Bank for International Settlements
(BIS) reports this data quarterly, using principles that are consistent with balance of payments.
The data are reported at the level of the banks' headquarter country rather than individual
bank level.¹⁶⁴ BIS has persuaded a growing number of countries, including tax havens, to report
data.

8

9 Disaggregation: By tax haven and type of financial assets.

10

11 Comments and limitations: This global data over time show how the position of tax havens as
financial centers has changed, though this information is not in itself an estimate of illegal
behavior, it does illustrate the size of financial activity in tax havens.

12

13 Potential lead agency or agencies: The list of relevant tax havens is reported by the OECD as the
“Jurisdictions Committed to Improving Transparency and Establishing Effective Exchange of
Information in Tax Matters”, which is monitored and updated by the OECD [Global Forum on
Transparency and Exchange of Information for Tax Purposes](#).¹⁶⁵

14

15 **Additional indicators that countries may consider:**

- 16
- 17 • [Compliance with OECD or other applicable Anti-Bribery Convention]
18 • Average tariffs imposed by developed countries on agricultural products and textiles
19 and clothing from developing countries (MDG Indicator)

¹⁶⁴ See BIS website: http://www.bis.org/statistics/about_banking_stats.htm

¹⁶⁵ See OECD website:
<http://www.oecd.org/countries/virginislandsuk/jurisdictionscommittedtoimprovingtransparencyandestablishingeffectiveexchangeofinformationintaxmatters.htm>

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1 **Target 10b. Adequate domestic and international public finance for ending extreme
2 poverty, providing global public goods, capacity building, and transferring
3 technologies, including 0.7 percent of GNI in ODA for all high-income countries, and
4 an additional \$100 billion per year in official climate financing by 2020.**

5 **Key issues to measure for the target:**

6 This target assesses domestic and international public resource mobilization for achieving all
7 SDGs. Where domestic resources are insufficient to meet the goals, they will need to be
8 complemented by international public and private finance. Likewise, substantial public finance
9 will be required to sustain regional and global public goods.

10 **Potential and Illustrative Core Indicators:**

11 **Indicator 94: Domestic revenues allocated to sustainable development as percent of GNI**

12 Rationale and definition: This indicator tracks government resource mobilization for
13 sustainable development as a share of GNI. The data can be collected on an internationally
14 comparable basis by the IMF, which should define the government spending categories that
15 support sustainable development (e.g. most military expenditure and some subsidies should be
16 excluded). Once the relevant government spending categories have been defined, the indicator
17 can be compiled for all countries.

18 In general, the richer a country, the higher government spending can be as a share of GNI. It
19 seems reasonable that countries should aim to mobilize at least 15-20% of GNI as government
20 spending.

21 Disaggregation: By sector.

22 Comments and limitations: To be reviewed.

23 Potential lead agency or agencies: IMF.

24 **Indicator 95: Official development assistance (ODA) and net private grants as percent of
25 high-income country's GNI**

26 Rationale and definition: This indicator measures official development assistance (ODA) plus
27 net private grants as a share of high-income countries' GNI. The OECD Development Assistance
28 Committee defines both variables.¹⁶⁶ The target value for ODA is the international commitment
29 of 0.7% of GNI.

30 Disaggregation: By destination, sector, and other dimensions reported under the DAC
31 databases.

32 Comments and limitations: The OECD-DAC is currently revising and improving indicators on
33 ODA in order to, among others, better reflect provider effort for development, account for
34 recipients' resource receipts, and address some of the weaknesses of current ODA measures.

¹⁶⁶ OECD (2013). *Development Cooperation Report 2013: Ending Poverty*. Paris, France: OECD Publishing.

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1 The new measures could also potentially allow for more comprehensive monitoring of external
2 development for global objectives or public goods.¹⁶⁷

4 **Potential lead agency or agencies:** Data for this indicator can be tracked by the OECD for all
5 OECD countries and affiliated countries that submit data to the OECD (e.g. Saudi-Arabia). The
6 IMF can provide data for other high-income countries.

8 **Indicator 96: Official climate financing from developed countries that is incremental to ODA
9 (in US\$)**

11 **Rationale and definition:** Developed countries have pledged under the Conference of Parties of
12 the UNFCCC to provide some \$100 billion per year in climate finance by 2020. This indicator will
13 track official (i.e. public) climate finance provided by each developed country as a contribution
14 towards the overall target of at least \$100 billion per year.

16 **Disaggregation:** By destination, expenditure for mitigation vs. adaptation, public vs. private
17 resources.

19 **Comments and limitations:** This finance commitment under the COP does not define official
20 climate financing in a way that would allow the creation of an unambiguous global indicator.
21 Several bodies, including the OECD, are proposing standards and definitions. Additional work is
22 required to arrive at internationally accepted coherent standards for reporting on official
23 climate financing.

25 **Potential lead agency or agencies:** OECD DAC, UNFCCC.

27 **Indicator 97: Percent of official development assistance (ODA), net private grants, and
28 official climate finance channeled through priority pooled multilateral
29 financing mechanisms**

31 **Rationale and definition:** This indicator tracks the share of aid and official climate finance that
32 passes through the following multilateral pooling mechanisms: the Global Alliance for Vaccine
33 Initiative (GAVI), the Global Environment Facility (GEF), the Global Fund to Fight HIV/AIDS, TB,
34 and Malaria (GFATM), the Green Climate Fund, the International Development Association
35 (IDA), the International Fund for Agricultural Development (IFAD), UNFPA, UNICEF, [others
36 mechanisms to be added, e.g. for education, agriculture, technology transfer]. These pooled
37 disbursement mechanisms offer lower transaction costs for recipients and donors. They can
38 also ensure greater scalability of aid flows. The indicator will be tracked for each high-income
39 country.

41 **Disaggregation:** By multilateral mechanism.

43 **Comments and limitations:** The OECD-DAC is currently revising and improving indicators on
44 ODA, which can help improve this measure.

¹⁶⁷ More information on the OECD's work on External Financing for Development is available here:
<http://www.oecd.org/dac/Financing-Development.htm>

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1 Potential lead agency or agencies: Data will be collected mostly by the OECD-DAC, the World
2 Bank, and if necessary by the pooled multilateral financing mechanisms.

3

4 **Indicator 98: Private net flows for sustainable development at market rates as share of**
5 **high-income country GNI**

6

7 Rationale and definition: International private finance is critical for financing sustainable
8 development. In particular private finance can fund private sector development (including
9 agriculture) and infrastructure. The proposed indicator will track international private flows at
10 market rates using the OECD DAC definition, which includes: direct investment, international
11 bank lending (maturity > one year), bond lending (maturity > 1 year), and other flows (mainly
12 reported holdings of equities issued by firms in aid recipient countries).¹⁶⁸

13

14 Disaggregation: By destination, type of private flows.

15

16 Comments and limitations: To be reviewed.

17

18 Potential lead agency or agencies: This indicator can be reported for all high-income as well as
19 middle-income countries. Data for this indicator can be collected by the OECD DAC and other
20 agencies (to be determined).

21

22 **Additional indicators that countries may consider:**

- 23
- 24 • Net ODA to the least developed countries as percentage of high-income countries' GNI
(adapted from MDG Indicator)

¹⁶⁸ Ibid.

1 **Target 10c. Accelerate adoption of new technologies for the SDGs.**

2 **Key issues to measure for the target:**

3 Advanced technologies in areas such as information and communication, energy, agronomy, health, water management, nanotechnology, and many others play a central role for economic growth and for achieving the other proposed SDG targets. As one example, a recent report by the Broadband Commission maps out how information and communication technologies (ICT) can create business and employment opportunities, help transform the delivery of social services, improve governance and accountability, and decouple economic growth from resource use.¹⁶⁹ Some new technologies will need to be developed to achieve the MDGs, but many others are available and need to be adopted faster and in more countries. This target focuses on the development and adoption of new technologies in all countries. We propose that indicators under this target estimate the coverage of advanced technologies in key SDG areas and track the share of the work force employed in technology-intensive jobs, as a proxy for technology training. Many other indicators exist for science, technology, and innovation as reviewed in a statistical note for the Open Working Group.¹⁷⁰

17 **Potential and Illustrative Core Indicators:**

20 **Indicator 99: [Placeholder for indicator on coverage of ICT and possibly other advanced
21 technologies in key sectors]**

23 Rationale and definition: Information and communication technologies (ICT) and other advanced technologies are critical for economic development and achieving the other SDGs. We propose that an indicator be developed to track the diffusion of ICT and possibly other technologies in key sectors of the economy. Plausibly, such an indicator might be developed on the basis of the Broadband Commission or similar initiatives. It would be complementary to access to mobile broadband tracked under goals 6 and 7.

29 Disaggregation: Opportunities for disaggregation to be reviewed once the indicator has been developed.

32 Comments and limitations: To be reviewed.

34 Potential lead agency or agencies: ITU.

36 **Indicator 100: Researchers and technicians in R&D (per million people)**

38 Rationale and definition: Technology development, diffusion, and adoption require trained staff engaged in R&D. This indicator measures the number of researchers and technicians engaged in research and development per million people. Countries may consider this indicator as a proxy for “technology workers”.

43 Disaggregation: In some cases the data can be broken down further by the following sectors: government, business enterprise, higher education, and private non-profit.¹⁷¹

¹⁶⁹ Broadband Commission (2013). *Transformative Solutions for 2015 and Beyond. A report of the Broadband Commission Task Force on Sustainable Development*. Available online at <http://www.broadbandcommission.org/documents/working-groups/bb-wg-taskforce-report.pdf>

¹⁷⁰ UN Statistics Division Friends of the Chair Group on Broader Measures of Progress (2013a).

¹⁷¹ See http://stats.oecd.org/Index.aspx?DataSetCode=PERS_OCCUP

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1
2 Comments and limitations: Data is available for some 140 countries, but significant challenge in
3 need to be overcome to ensure that data becomes comparable across countries. The indicator
4 only tracks workers in R&D and may need to be expended to cover researchers and technicians
5 in high technology sectors.

6
7 Potential lead agency or agencies: The OECD and the UNESCO Institute of Statistics.
8

9 **Core Indicators covered under other Targets that also apply to Target 10c:**

- 10 • Target 3b: Proportion of girls and boys who master foundational skills in literacy and
11 mathematics by the end of the primary school cycle (national benchmarks to be
12 developed with reference to global standards)
13 • Target 3b: Proportion of girls and boys who achieve proficiency in reading and in
14 mathematics by end of the secondary schooling cycle (national benchmarks to be
15 developed with reference to global standards)
16 • Target 3c: Tertiary enrollment rates for girls and boys
17 • Targets 6c and 7b: Mobile broadband subscriptions per 100 inhabitants in rural and
18 urban areas
19

20 **Additional indicators that countries may consider:**

- 21 • **Gross domestic expenditure on R&D as share of GDP.** This indicator measures all
22 expenditure on research and development carried out in the national territory.
23
24
25

1 Annex 3: Frequently Asked Questions on Goals, 2 Targets, and Indicators

3	4 Below we highlight and answer questions that are asked frequently in relation to indicators for	
5	the post-2015 agenda and this report. This Annex complements the FAQs provided in the SDSN	
6	<i>Action Agenda for Sustainable Development.</i> ¹⁷²	
7		
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21	on inputs or means?	133
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23	the target ranges for the indicator?	133
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28	perception-based indicators?	134
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33		
34		
35	Question 1: What is the purpose of indicators for Sustainable Development Goals?	

36 The indicators serve two purposes: management (to stay on course), and accountability (to
37 hold all stakeholders to the SDGs). For management purposes, the indicators need to be
38 accurate and frequent, reported at least once per year.

39

40 **Question 2: Who are the indicators for? Can businesses use them?**

41 The indicators are designed to track the SDGs at local, national, regional, and global levels. They
42 would apply to all stakeholders, particularly local and national governments. Civil society can

¹⁷² SDSN (2013a).

1 use them for operational, monitoring, and advocacy purposes. Businesses will find them useful
2 to understand and promote their contributions to sustainable development. In some cases the
3 indicators may also serve as operational metrics. The World Business Council on Sustainable
4 Development and the SDSN are exploring with several partners how business metrics could be
5 designed alongside the proposed indicator framework.

6

7 **Question 3: What are the main lessons from the MDG Indicators and monitoring of the
8 MDGs?**

9 Many MDG indicators, such as those for extreme income poverty, are reported with very long
10 lags of 3-5 years, and data coverage remains spotty. Many national statistical systems lack the
11 capacity to generate comprehensive high-quality data. As a result, available data on MDG
12 Indicators cannot serve real-time implementation, management, and progress review.
13 Moreover, it took a very long time for the MDG data collection system to emerge and to
14 improve following the adoption of the MDGs.

15

16 The SDGs need annual data collection with higher quality data. We support the call for a “data
17 revolution” made by the High-Level Panel of Eminent Persons on the Post-2015 Agenda. This
18 report lays out how an indicator framework might be constructed.

19

20 **Question 4: What can be done differently this time? How can SDG monitoring be better
21 than monitoring of the MDGs?**

22 To enable comprehensive annual reporting on all SDG indicators, the following conditions must
23 be met: First, the indicators need to be well defined and compatible with low-cost but reliable
24 data collection systems. Second, for each indicator one or more organizations from inside or
25 outside the UN system must be made responsible for ensuring annual data collection. Third,
26 governments and the international community must find the resources to fund effective data
27 collection systems at national and international levels. Private companies should make their
28 know-how and services available to support this important effort.

29

30 **Question 5: Where do the proposed Goals and Targets come from? Have they changed
31 since they were first presented by the SDSN in June 2013?**

32 The Goals and Targets listed in this report were first presented by the Leadership Council of the
33 SDSN in June 2013 following extensive internal and public consultations. The rationale for the
34 Goals and Targets is presented in the *Action Agenda for Sustainable Development* (SDSN
35 2013a). Principles for setting Goals, Targets, and Indicators are summarized in Annex 1 of this
36 report. Modest changes have been made to the Goals and Targets. They are highlighted in
37 yellow in this document.

38

39 **Question 6: What is the relation between the proposed SDG Indicators and existing MDG
40 Indicators?**

41 Where possible, we recommend that existing MDG Indicators be retained for a post-2015
42 monitoring framework, with improved quality and frequency. Such indicators are marked
43 “MDG Indicator” in the list of proposed indicators. Many new indicators have been added
44 either to cover issues that were not included under the MDGs or to improve and deepen the
45 monitoring of themes covered under the MDGs.

46

47 **Question 7: What do we mean by “Core Indicators” and “Tier 2 Indicators”?**

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1 We propose that each target be tracked by a small number of global “Core Indicators” that will
2 be monitored systematically for all countries. Some Core Indicators apply only to some
3 countries (e.g. ODA or malaria), but the vast majority of Core Indicators have been designed to
4 apply to every country. We recommend that the number of Core Indicators be kept to no more
5 than 100 indicators – the maximum number of indicators we believe the international system
6 can report and communicate on effectively.

7
8 In addition to the Core Indicators that will, to the extent applicable, be monitored and reported
9 for all countries, we propose additional Tier 2 indicators that individual countries may consider
10 for their monitoring systems. These Tier 2 indicators may relate to issues affecting only a
11 subset of countries, such as neglected tropical diseases (NTDs), or they may relate to issues
12 that a subset of countries may wish to emphasize in their national strategies and reporting.
13 Naturally, countries may consider as many Tier 2 indicators as they like, including indicators not
14 listed in this report or other global lists.

15
16 **Question 8:** *Why do some indicators focus on outcome whereas others focus on inputs or
means?*

18 Where possible, the SDGs and their indicators should focus on outcomes, such as ending
19 extreme poverty. Yet, the distinction between outcomes, outputs, and inputs needs to be
20 handled pragmatically, and the design of goals, targets, and indicators should be guided by
21 approaches that are best suited to mobilize action and ensure accountability. See the *Action
Agenda* for a more extensive discussion.

23
24 **Question 9:** *How can a country tell whether it has achieved a target? What are the target
ranges for the indicator?*

26 Quantitative target ranges for the indicators help us determine whether targets have been
27 reached. In some cases the target explicitly defines the indicator range. For example, Target 5b
28 calls for reducing child mortality to [20] or fewer deaths per 1000 live births. In a few cases
29 target ranges need to be defined, either internationally or individually at the country level. For
30 example, in applying Indicator 45 (Percent of population overweight and obese) the WHO or
31 other bodies may propose target ranges that countries could aim for.

32
33 Many targets call for “universal access” (e.g. to infrastructure) or “zero” deprivation (e.g. end
34 to extreme poverty or hunger). For each such target, the technical communities and member
35 states will need to define the precise quantitative standard for their commitment to “universal
36 access” or “zero” deprivation. We hope that in most cases these standards (or the “target
37 ranges” for the indicators) will indeed be 100 percent or 0 percent, respectively, but there may
38 be areas where it is technically impossible to achieve 100 percent access or 0 percent
39 deprivation. In such cases countries should aim to get as close as possible to 100 percent or 0
40 percent, respectively.

41
42 **Question 10:** *Why are some indicators in square brackets?*

43 In some areas available and commonly measured indicators strike us as insufficient to guide
44 the implementation of strategies for achieving the SDGs. If new indicators are needed or if
45 available indicators need to be modified then we present them in square brackets. The SDSN
46 proposes to work with international institutions during 2014 to discuss the relevance, accuracy,
47 appropriateness, and realism of the recommended indicators. In a few cases what we are
48 suggesting will turn out not be possible to implement in a timely and accurate manner.

1 **Question 11: How can the indicators be disaggregated?**

2 As emphasized in the *Action Agenda*, data for the post-2015 agenda should be disaggregated to
3 determine whether population groups are disadvantaged, which might in turn require targeted
4 policies and programs. The descriptions of the proposed SDG indicators outline how these
5 indicators can be disaggregated. These suggestions should by no means be seen an exhaustive
6 list – instead we call on countries and international agencies to find creative and effective ways
7 for disaggregating data by (i) characteristics of the individual or household (e.g. gender, age,
8 income, disability, religion, race, or ethnicity); (ii) economic activity;¹⁷³ and (iii) spatial
9 disaggregation (e.g. by metropolitan areas, urban and rural, or districts). For disaggregation by
10 age, countries should be guided by the UN Statistics Division (2013) which recommends 5-year
11 groups, and failing those, a minimum set of groups as defined: under one year (infants), 1-4
12 years (pre-school age) 5-14 years (school age), 15-49 years (childbearing age), 15-64 years
13 (working ages) and 65 years and older (elderly persons).

14
15 **Question 12: Why are some composite indicators included in this report?**

16 Composite indicators like the Human Development Index (HDI) derive an overall numerical
17 score by combining a number of different measures. In general, we do not rely on composite
18 indicators, which may obscure rather than clarify. Yet in some cases a composite indicator can
19 be very useful. This seems to be the case, for example, in capturing ecological complexities.

20
21 **Question 13: Can the post-2015 indicator framework include subjective or perception-
22 based indicators?**

23 As a general approach, we recommend direct, objective measures instead of perception-based
24 indicators. We nevertheless recommend two perception-based core indicators:

- 25 • Evaluative Happiness Wellbeing and Positive Mood Affect: this indicator for subjective
26 wellbeing (or happiness) requires perception-based indicators, such as asking people
27 how satisfied they were with their lives in the past year.
- 28 • Perception of public sector corruption: no broad-based direct measures are available
29 for corruption that could be collected at national scale and compared internationally.
30 The perception-based corruption indicators compiled by Transparency International
31 have become an internationally recognized reference. They are collected in some 177
32 countries and are used by governments, civil society organizations, businesses, and
33 international organizations on a daily basis. We believe they can make an important
34 contribution to the post-2015 monitoring framework.

35
36 Others have suggested that subjective indicators be used to assess other dimensions of
37 governance, particularly in vulnerable states. The SDSN is looking into available indicators and
38 may propose changes to the next iteration of this document.

39
40 **Question 14: How do the proposed indicators deal with “cross-cutting” issues?**

41 The SDSN proposes integrated goals and measurement. In some cases, indicators can track
42 progress towards more than one target. We highlight such connections in the description of
43 each target. In addition, many important issues that don't have stand-alone goals, such as
44 water and sanitation, health, sustainable consumption and production, or nutrition, are tracked

¹⁷³ For example, water use should be accounted for by economic activity using International Standard Industrial Classification of All Economic Activities ISIC.

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1 by indicators arranged under different goals. Table 2 summarizes the indicators for each of
2 these “cross-cutting issues.”

3

4 **Question 15: Why are some indicators repeated for urban and rural areas?**

5 Rural and urban programs are often highly distinctive, carried out by different parts of
6 government and different agencies, and with highly diverse outcomes. For these reasons, we
7 encourage the disaggregated measurement of several indicators for rural and urban areas.

8

9 **Question 16: Why are multiple variables combined?**

10 The combination of multiple variables happens mainly at the level of the target. In this case,
11 countries will combine variables to track the target. In some cases, multiple variables appear in
12 the same indicator, for instance incidence and death rates for certain diseases. This is
13 consistent with the MDG indicators and should not present any additional burden on statistical
14 systems.

15

16 **Question 17: How will we measure baselines for all the new variables?**

17 Historic baselines exist for many of the proposed indicators. In some cases, baselines do not
18 exist and may be difficult to establish. Yet this should not serve as a reason not to create new
19 indicators that are urgently needed.

20

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- 32 ---. (2013b). *Statistical note for the issue brief on: Education and Culture.*
- 33 ---. (2013c). *Statistical note for the issue brief on: Energy.*
- 34 ---. (2013d). *Statistical Note for the Issue Brief on: Forests.*
- 35 --- (2013e). *Statistical note for the issue brief on: Human Rights, including the Right to
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- 37 ---. (2013f). *Statistical note for the issue brief on: Macro policy questions (including
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- 39 --- (2013g). *Statistical note for the issue brief on: Means of implementation; Global partnership
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- 41 --- (2013h). *Statistical note for the issue brief on: Needs of Countries in Special Situations –
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