Background information to the list of proposed preliminary indicators

(February 2015)

Description:

This reference document contains detailed information on the indicators for Sustainable Development Goals and Targets proposed by Policy and Statistical Experts from Specialized Agencies and Entities.

Contents

Goal 1: End poverty in all its forms everywhere

Goal	Target	Indicators	Source/Comments
Goal 1.	**End poverty in all its forms**		
1.1	By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day	1.1.1 Proportion of population below $1.25 (PPP) per day disaggregated by sex and age group (WB, UNICEF)	Source: Household unit record data collected by a country for monitoring the prevalence of poverty Comment: The World Bank is currently conducting assessment on the use of 2011 PPP for global poverty monitoring. **There is a possibility that a new poverty line is established after the 2011 PPP assessment is finalized.** The goal is considered achieved if the proportion of the world population living on less than the new poverty line becomes negligible like 3 per cent.
1.2	By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	1.2.1 Multidimensional Poverty Index (MPI) disaggregated by sex and age group (UNDP, WB) 1.2.2. Proportion of population living below national poverty line, disaggregated by sex and age group (UNDP, WB)	Source: Various household surveys such as Household Budget Survey, Demographic Health Surveys, Multiple Indicators Cluster Surveys, and Welfare Monitoring Surveys. The information is consolidated by National statistical offices, UNDP, WB and UNDESA Comment: For MPI data collection, current capacity of countries is uneven and will need to be strengthened. . If the indicator is created on individual characteristics like age, sex, and ethnicity, individual-unit record data will be needed.
1.3	Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable	1.3.1 Percentage of population covered by social protection floors/systems, disaggregated by sex, with break down by children, unemployed, old age, people with disabilities, pregnant women/new-borns, work injury victims, poor and vulnerable, including one or more of the following: • Percentage of older persons receiving a pension;	Source: ILO Social Security Inquiry (SSI) and Word Social Protection Report WB ASPIRE database

		• Percentage of households with children receiving child support; • Percentage of unemployed persons receiving unemployment benefits; • Percentage of persons with disabilities receiving disability benefits; • Percentage of pregnant women receiving maternity benefits; • Percentage of workers covered against occupational accidents; • Percentage of poor and vulnerable people receiving benefits (ILO, WB, UNICEF,UNDP,UNWOMEN) 1.3.2. Average social protection transfers as % of income / or poverty line (WB)	
1.4	By 2030 ensure that all men and women, particularly the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership, and control over land and other forms of property, inheritance, natural resources, appropriate new technology, and financial services including microfinance	1.4.1 Proportion of population/households with access to basic services (to be defined) by sex and age group (UNICEF) 1.4.2 Proportion of adult population with tenure that is legally recognised and documented or perceived as secure, by sex and age group (UN Women, IFAD) 1.4.3 Proportion of population with an account at a formal financial institution, by sex and age (IFAD, WB, UN Women, UNCDF) 1.4.4 Proportion of individuals using the internet and owing a mobile phone (ITU) 1.4.5 Percentage change of area of common land held, accessed and used by women and men who are members of indigenous peoples and local communities in the reporting period. (UNEP) 1.4.6 Percentage of female agriculture holders out of the total number of agricultural holders (FAO)	1.4.3 Source: World Bank Global index 1.4.4 Partnership on Measuring ICT for Development core indicator, endorsed by UNSC and collected by ITU 1.4.6 Source: National Statistics Office/Agriculture Census
1.5	By 2030 build the resilience of the poor and those in vulnerable situations, and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters	1.5.1 Number of people affected by hazardous events by sex (UNICEF) 1.5.2 Proportion of health and educational facilities affected by hazardous events (UNICEF) 1.5.3 Percentage change in GDP derived from the use of common land and natural resources by women and men who are members of indigenous peoples and local communities. (UNEP)	

		1.5.4 Percentage and distribution of benefits derived from the use of common land, natural resources, and ecosystem services retained by the women and men who are members of indigenous peoples and local communities with tenure over those resources. (UNEP) 1.5.5 Number and percentage of displaced persons and refugees that have achieved a durable/sustainable solution to their displacement by sex (OCHA, IOM, UNHCR) 1.5.6 Percentage of people living in or within x distance to uncontrolled dumpsites and other "hot spots" emitting and releasing hazardous chemical by sex (UNEP).	
1.a	Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation to provide adequate and predictable means for developing countries, in particular LDCs, to implement programmes and policies to end poverty in all its dimensions	1 a.1. Resources mobilized and spent for poverty reduction, including government, private sector and development partners	WB
1.b.	Create sound policy frameworks at national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions		

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Introduction

With resolution A/RES/68/309, the UN General Assembly has received and endorsed the proposal of a set of Sustainable Development Goals (SDG) and related Targets formulated by the Open Working Group (OWG) on SDGs. This list of goals and target has been identified as the reference document to inform further discussions on the Post-2015 Development Agenda.

This document presents a proposal of indicators that could be considered to monitor progress towards Goal 2: "End hunger, achieve food security and improve nutrition and promote sustainable agriculture". For this Goal, the OWG document defines five targets aimed towards various outcomes, as well as three additional targets addressing related Means of Implementation.

The set of indicators included in this document reflects the current shared thinking of the three UN Rome Based Agencies. The selection of indicators has been guided by considerations related to the relevance, methodological soundness, measurability and understandability of the indicators, as identified in the report titled "Lessons Learned from MDG Monitoring of the IAEG-MDGs."

One guiding principle in the selection of the proposed indicators has been the need to keep the list of indicators that will form the core of the SDG monitoring framework as manageable as possible, while trying to preserve the multidimensional and complex nature of the targets in question. When more than one indicator is presented for a given target, an effort has been made to clarify whether they should comprise "core" or "tier 1" indicators, which could be included in a core set of indicators for a globally relevant monitoring framework, or as "additional" or "tier 2" indicators, which countries could use for specific national or regional monitoring needs.

Each indicator is described through a detailed factsheet presenting answers and comments to the following questions:

What is the precise definition of the indicator?

How is the indicator linked to the specific TARGET as worded in the OWG report?

Does the indicator already exist and is it regularly reported?

Comments on the reliability, potential coverage, comparability across countries, and the possibility to compute the indicator at sub-national level; and

Can a meaningful numerical target for 2030 be set? Is there already a baseline value for 2015?

Moreover, even if not always explicitly stated, we believe that – whenever possible and meaningful – all indicators should be disaggregated by age, sex, and rural/urban areas, not only for the indicators listed in this proposal but also for indicators used to monitor other proposed Goals.

The list of proposed indicators is organized according to the Targets as defined in UNGA document A/68/970 of 12 August 2014, which incorporates the OWG report. For each Target, the indicators' factsheets are preceded by a short narrative that explains the rationale for the selection made.

We look forward to comments, constructive critique, and any other suggestions.

Box 1. List of proposed indicators by target	
Target 2.1:	By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round
Indicator	Prevalence of Undernourishment (PoU)

2.1.1:	
Indicator 2.1.2:	Prevalence of population with moderate or severe food insecurity, based on the Food Insecurity Experience Scale (FIES)
Indicator 2.1.3:	Percentage of household with inadequate food consumption, based on the Food Consumption Score (FCS)
Target 2.2:	By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.
Indicator 2.2.1:	Prevalence of Stunting (low height-for-age) in children under 5 years of age
Indicator 2.2.2:	Prevalence of overweight children under 5 years of age
Indicator 2.2.3:	Women Dietary Diversity Score
Target 2.3:	By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment
Indicator 2.3.1:	Value of agricultural production per hectare (measured in constant USD/hectare, disaggregated for the two lowest quintiles of countries' farm size distribution, as well as for female-headed smallholder producer households)
Target 2.4:	By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
Indicator 2.4.1:	Emissions of greenhouse gases in agriculture (per hectare of land and per unit of output, separately for crop and livestock sectors)
Indicator 2.4.2:	Absolute levels of emissions in relevant sectors and sub-sectors
Target 2.5:	By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and ensure access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed
Indicator 2.5.1	Ex-situ crop collections indicator
Indicator 2.5.2	Number/percentage of local breeds classified as being at-risk, not-at-risk, and unknown-levels of risk of extinction
Target 2.a	Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productivity capacity in developing countries, in particular in least developed countries.
Indicator 2.a.1:	Agriculture Orientation Index for Government Expenditures
Target 2.b	Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the

	Doha Development Round
-	Evolution of potentially trade restrictive and distortive measures in agriculture
Target 2.c	Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility
Indicator 2.c.1	Indicator of (food) Price Anomalies (IPA)

Target 2.1

By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round

The prevalence of undernourishment (listed here as indicator 2.1.1.) is an established indicator used to monitor progress against the 'hunger' target of the Millennium Development Goals. It is maintained and published regularly by the FAO with reference to the average of the last three-year period, and it will allow monitoring progress in continuity with the past, a reason why it supported as a core indicator for this target.

It is believed, however, that there is a clear need to develop and use indicators capable of providing more timely assessments, that can be meaningfully disaggregated at subnational level by population groups and/or by geographic areas and that can be informed by easy to collect data.

For these reasons we also propose two other indicators which show high promise for being adopted as core indicators for Target 2.1, once established on a global scale:

the percentage of individuals experiencing moderate or severe levels of food insecurity, as measured through the Food Insecurity Experience Scale (FIES) (listed here as indicator 2.1.2) and

the percentage of households with inadequate food consumption, as measured through the Food Consumption Score (FCS) (listed here as indicator 2.2.3.)

Indicator 2.1.1

"Prevalence of Undernourishment" (PoU)

Precise definition of the indicator

The Prevalence of Undernourishment (PoU) is defined as the probability that a randomly selected individual from the reference population is found to consume less than his/her calorie requirement for an active and healthy life. It is written as: $PoU = \int_{x<MDER} f(x)dx$ where f(x) is the probability density function of per capita calorie consumption and MDER is a Minimum Dietary Energy Requirement. The MDER threshold is computed on the basis of normative energy requirement standards referred to a minimum level of physical activity. Estimates of the number of undernourished (NoU) - calculated by multiplying the PoU by the size of the reference population - are used to monitor progress towards the World Food Summit goal of reducing by half the number of people suffering from undernourishment. The parameters needed for the calculation of the indicator are: the mean level of dietary energy consumption (DEC); a cut-off point defined as the Minimum Dietary Energy Requirement (MDER); the coefficient of variation (CV) as a parameter accounting for inequality in food consumption; and a skewness (SK) parameter accounting for asymmetry in the distribution. The DEC as well as the MDER are updated annually, with the former calculated from the FAO Food Balance Sheets. The MDER is calculated as a weighted average of energy requirements according to sex and age class, and is updated each year from UN population ratio data. The inequality in food consumption parameters are derived from National Household Survey data when such data is available and reliable. Due to the limited number

of available household surveys, the inequality in food access parameters are updated much less frequently over time than the DEC and MDER parameters[1].

How is the indicator linked to the specific TARGET as worded in the OWG report and copied above?

The indicator refers to food available for consumption over a period on one year. It refers to a severe condition of lack of food. In this respect, it is fully consistent with the spirit of the developmental goal. Energy intake is a very specific aspect of food insecurity, which applies where conditions are more severe.

Ideally, undernourishment should be assessed at the individual level by comparing individual energy requirements with individual energy intakes. This would enable the classification of each person in the population as undernourished or not. However, this approach is not feasible for two reasons: individual energy requirements are practically unobservable with standard data collection methods; and individual food consumption is currently measured with precision in only a few countries and for relatively limited samples. The individual-level consumption data that can be estimated from National Household Survey data are largely approximated owing to disparities in intra-household food allocation, the variability of individual energy requirements, and the day-to-day variability of food consumption that can arise for reasons independent of food insecurity. The solution adopted by FAO has been to estimate the PoU with reference to the population as a whole, summarized through a representative individual, and to combine available microdata on food consumption with macrodata.

The Prevalence of Undernourishment indicator is still one of the most reliable tools to monitor progress towards reducing global hunger. Recent innovations to the methodology, such as those presented in Wanner et al. (2014) allow to improve the quality of global monitoring, and to capture more accurately progress in reducing hunger and how the problem is currently distributed globally. In 2012 the functional form of habitual food consumption was modified. The Skewed Normal functional form was introduced to take into account the asymmetry of the distribution. This was a major improvement, as it allowed better capturing the characteristics of the distribution, and how this would change when calories consumption increases. At the same time, a strong increase was promoted in the number of Household Budget Survey employed in the calculation of the CV and SK parameter. Household Budget Survey now cover about 70 percent of the total number of undernourished estimated. Another main recent refinement, introduced in 2014, is a data-driven flexible selection criterion for the choice of the functional form of the distribution of per capita habitual calorie consumption that maintains the probability framework. Further improvements to the calculation of inequality in food access parameters, both directly and indirectly, have been made in 2014 to allow for time-varying parameters that take into account economic progress and demographic changes.

At the same time, the indicator does not convey information on the quality of food, nor on its nutritional value. The reason is that it focuses on the most severe aspect of hunger, and it is therefore solely based on the number of calories consumed through food. The parametric approach adopted by FAO allows obtaining reliable estimated for relatively large population groups.

[1] More detailed information on the indicator can be found in: Wanner N., C. Cafiero, N. Troubat, P. Conforti (2014), Refinements to the FAO Methodology for estimating the Prevalence of Undernourishment Indicator, FAO Statistics Division Working Papers Series 14-05, Rome 2014 (available at: http://www.fao.org/3/a-i4046e.pdf) and in: Cafiero, C. Advances in hunger measurement. Traditional FAO methods and recent innovations FAO Statistics Division Working Papers Series 14-04, Rome 2014 (available at http://www.fao.org/3/a-i4060e.pdf).

Information about the sufficiency of calories from food for specific population groups, such as the poor and the vulnerable, can be derived if such groups can be identified within the population, and if sampling allows drawing inference on the habitual food consumption of these groups.
In principle, the indicator can be computed for specific population groups, such as the poor and the vulnerable. However, this requires that such groups are clearly identifiable in the population, and that sampling allows drawing inference on their habitual food consumption. In fact, such information is seldom available.
Does the indicator already exist, and is it regularly reported?
Yes, the indicator exists. The FAO maintains the data and reports on it annually.
Metadata are available at the FAO Statistics website http://www.fao.org/economic/ess/ess-fs/ess-fadata/it/#.VM89cGjF-VM as Excel sheets associated with the data; and from the FAOSTAT website, at http://faostat3.fao.org/download/D/*/E.
Comment on the reliability, potential coverage, comparability across countries, and the possibility to compute the indicator at sub-national level.
Reliability
Reliability depends on the quality of the background data, specifically on Dietary Energy Supply, the distribution of habitual food consumption in the population – which is derived from household budget surveys whenever possible -- the population, its structure and height distribution. No statistical margin of error can be determined for the prevalence of undernourishment.
The ability of the indicator to approximate access to food depends upon the extent to which existing data allow characterizing effectively the probability distribution of habitual food consumption in the reference population. As mentioned, the FAO methodology combines available microdata on food consumption derived from surveys with macrodata from food balance sheets. Food balance sheets provide information on the amount of food that is available for consumption after taking into account all the possible alternative uses of the food items; hence, they provide approximate measures of per capita consumption, which are available for a large number of countries and are homogenous. The methodology adopted for computing these data is currently under revision, together with the estimates of waste parameters employed to derive the DEC, so the level of accuracy is expected to increase in the next few years. Survey data, where available and reliable, are employed in the FAO methodology to compute the variability (CV) and skewness (SK) parameters that characterize the distribution of food consumption f(x). It is therefore essential that surveys are improved to obtain more accurate measures of undernourishment. Such improvement will require promoting greater standardization across existing surveys, particularly household budget surveys, and conducting more refined surveys that capture food intake at the individual level.
Coverage
Consistent time series for the indicator exist from 1990-92 for about 140 countries. The indicator is regularly reported in the annual State of Food Insecurity in the World Report published by FAO, IDFAD and WFP since 1999 and in the Millennium Development Goal Report of the UN Statistics Division. Data on the indicators are published on the FAO Statistics website, at http://www.fao.org/economic/ess/ess-fs/ess-fadata/it/#.VM89cGjF-VM and update every year. From year 2014 they are also available in FAOSTAT, at http://faostat3.fao.org/download/D/*/E.
Comparability across countries
Comparability across time and space is relatively strong. The only potential cause of lack of homogeneity is the quality of the background data. Not all countries monitored undertake regular and reliable surveys of food consumption. In countries where this information source is of poor quality or missing, the distribution of habitual food consumption is estimated

indirectly, through an econometric exercise that relates the CV of food consumption to food prices, incomes and their distribution.

Sub-national estimates

In principle the indicator could be defined at sub-national level. However, reliable information has to be available on the amount and distribution of habitual food consumption in the population of the sub-national areas of interest. In fact, this information is frequently available only for wide population sub-groups – such as rural and urban areas and some major geographical areas. The global monitoring exercise has therefore always relied only on the Prevalence of Undernourishment at national level, and never used the indicator at sub-national levels.

Can a meaningful numerical target for 2030 be set? Is there already a baseline value for 2015?

Yes. A target for 2030 can be identified in terms of a minimum level, allowing for the possibility that lack of food has become marginal in the reference population. The choice of the threshold should also reflect the ability of the indicator to be accurate at such level, and effectively capture changes in the level.

Indicator 2.1.2

"Percentage of individuals in the population with moderate or severe food insecurity, as classified based on the Food Insecurity Experience Scale (FIES)"

Precise definition of the indicator

These are in reality two related indicators, representing the percentage of individuals in the national adult population (15 or more years of age) that have experienced *moderate or severe levels* and *severe levels of food insecurity* respectively, during the previous year.

Severity of food insecurity is defined as the extent to which people have difficulties in accessing food of adequate quality and/or quantity due to lack of money or other resources. Difficulties include also psychological concerns associated with the struggle in accessing food.

How is the indicator linked to the specific TARGET as worded in the OWG report and copied above?

This indicator is a direct implementation of the concept of "access to food" that informs the target. Experience-based food insecurity scales are the only available tools that address the effective ability to access food at the individual or household level, directly. Reliable measure at individual level, as afforded by these indicators, is crucial to respond to the need to ensure monitoring access "by all people" and that monitoring can be conducted "in particular for the poor in vulnerable situations".

Does the indicator already exist and is it regularly reported?

Yes, the indicators already exist. The indicators and the global reference standard necessary to ensure proper cross-country comparability of the measures are developed and maintained by the FAO Statistics Division, "Voices of the Hungry" team.

Metadata are available at: http://www.fao.org/economic/ess/ess-fs/voices/fiesscale/metadata/en/.

Comment on the reliability, potential coverage, comparability across countries, and the possibility to compute the indicator at sub-national level.

Reliability

Reliability of an experience-based measure of food security could be compromised by issues related to (a) the choice and performance of the items used to form the scale and (b) limited sample sizes.

Choice and performance of the FIES items. Key results from the analysis of the data collected by FAO in 2014 in 145 countries through the GWP confirm the reliability of the FIES based measure of the prevalence of food security at different levels of severity even after relatively

minor efforts of adaptation of the questions to local languages. Items' performance has been tested through the *infit* statistics and only in one case only one of the items showed an *infit* value outside the range 0.7-1.3 that is considered appropriate to ensure sufficient reliability. This confirms the appropriateness of the items chosen (a result of decades of experience with development and application of experience-based food security scales in North and Latin America and throughout the world.)

Sample size: Samples of 1000 individuals, characteristic of the GWP, [2] have proven sufficient to ensure margins of errors lower than 2% for prevalence of moderate or severe food insecurity, and lower than 1% for prevalence of severe food insecurity at national level. Larger sample sizes might further reduce these margins of error.

Coverage

By leveraging on the GWP as a data collection vehicle, FAO can ensure global coverage (about 150 countries every year covering more than 95% of the world population) annually, for national level assessments.

Comparability across countries

The Voices of the Hungry project has successfully developed and tested the methodology to scale individual measures to a single global reference standard and to make estimates of the prevalence of food insecurity comparable across countries. The method is possible due to the reference to Item Response Theory for measurement and it inspired by existing practice in equating educational and psycho-attitudinal tests.

Possibility to compute the indicator at sub-national level

The indicators can be computed at any level of disaggregation. Reliability of the measure is of course conditioned by the available sample size and representativeness of the specific sample. FAO suggests that, for meaningful disaggregation at subnational level, the data should be collected with surveys that are designed to be representative of the target population.

Can a meaningful numerical target for 2030 be set? Is there already a baseline value for 2015?

Meaningful targets that would reflect bringing food insecurity to minimal "physiological" levels and the eradication of hunger could be to bring the prevalence of moderate and severe food insecurity to less than 5% and of severe food insecurity to less than 1%. Such targets might be applicable to developed countries and some transition economies.

Credible, yet ambitious targets for other countries could be defined based on an analysis of the 2014 benchmark that will be available in the first quarter of 2015; they might be framed in terms of reducing prevalence of moderate and severe food security to one third of their current level.

Indicator 2.1.3

Percentage of households with inadequate food consumption, as measured by the Food Consumption Score (FCS)

What is the precise definition of the indicator?

The frequency weighted diet diversity score or "Food consumption score" is a score calculated using the frequency of consumption of different food groups consumed by a household during the 7 days before the survey.

In its standard form, weights are applied to capture the nutrient density of each food group and the score is the sum of the weighted values over the seven day period. The maximum possible score is 112, which would be achieved by households in which each of the 8 food groups is consumed on a daily basis. Details on the food groups and weights are available here:

[2] Larger samples were formed in India (N=3000) and China (N=5000).

http://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp197216.pdf

How is the indicator linked to the specific TARGET as worded in the OWG report and copied above?

The FCS is recommended for Target 2.1: "By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round."

This indicator is a "food access" indicator, and is based on both dietary diversity, and the frequency of food groups consumed.

The FCS in its standard form has been in use by WFP for over 15 years and has enabled the organization to assess and monitor food access and consumption in developing countries. While by definition the FCS is a composite indicator, the food frequency data collected for its computation provides a rich data repository that may be employed in a variety of ways. For example, nutrient adequacy may be analysed from the raw frequency data, and unweighted or differentially weighted scores may be adapted to reflect cultural and geographic dietary variation, to account for seasonality, or to prioritize dietary habits that are consistent with sustainable development goals.

Does the indicator already exist and is it regularly reported?

The indicator, and the global reference standard necessary to ensure proper cross-country comparisons are developed and maintained by the WFP Policy and Programme Division, and more specifically; the Food Security Analysis Service.

WFP is a member of the International Household Survey Network (IHSN). As a member of IHSN, WFP maintains a micro-data catalogue and associated website, with meta-data files for its statistically representative household level surveys. These surveys and related studies are known and referred to as Comprehensive Food Security Vulnerability Assessments (CFSVAs). The CFSVA surveys contain Food Consumption Score (FCS) data, along with many other variables. Detailed metadata for the CFSVA surveys, including the metadata for the FCS Indicator data; can be viewed and accessed at WFP's IHSN Survey Data Portal at the following link: http://nada.vam.wfp.org/index.php/catalog

WFP is committed to transparency and data access, and survey data are maintained in publicly available databases.

Detailed Metadata tables for the FCS indicator are available at the link immediately below: http://www.wfp.org/content/meta-data-food-consumption-score-fcs-indicator

Comment on the reliability, potential coverage, comparability across countries, and the possibility to compute the indicator at sub-national level.

Since 2003, WFP's VAM/Vulnerability Analysis and Mapping team has completed more than 80 baseline surveys worldwide, most of these have been carried out with national scale coverage. The large majority of these surveys contain Food Consumption Score data. The FCS is measured at household level, and therefore can easily be aggregated at the community, national, or regional level using appropriate population adjustments. The proportion of households failing to achieve a minimally acceptable FCS is easily comparable across countries, while scores for households that are not in states of severe or moderate food insecurity are more easily subjected to cultural and geographic variation. To account for this variation, an analysis of scores associated with high-quality diets in each country can be used to estimate proportions of households meeting acceptable dietary requirements.

A number of experts have highlighted the reliability of the FCS indicator with respect to nutrient adequacy estimates, caloric intake, and have also highlighted unique benefits not associated with other dietary diversity indicators.

Data can be collected by using two kind of survey vehicle: conventional face-to-face interviews, or remotely using mobile phone based surveys.

Conventional "face-to-face" survey approach

FCS data collected around the world by WFP, NGOs, and government partners are often collected within the context of larger/broader food security monitoring systems (FSMS). FSMS surveys and associated household questionnaires typically include a number of core modules; household demographics, income sources, expenditures, food consumption and food sources, coping strategies and shocks. A typical completed FSMS household questionnaire, if collected using a conventional "face-to-face" (i.e. on site enumerator and respondent) approach, costs approximately $30. For the purpose of providing a rough estimate of the cost and feasibility of collecting only the FCS data together with the standard household demographic data, we estimate the cost at approximately $15 to $20 per household using the conventional face-to-face approach for data collection.

Data collected remotely using mobile phones survey; mVAM remote surveys

WFP has been collecting Food Consumption Score (FCS) data with other food security data (reduced Coping Strategy Index / rCSI) remotely in 8 countries around the world since 2013. Collecting FCS data remotely using voice calls placed to mobile phones dramatically reduces the costs of data collection.

The cost estimates provided below, are based on experiences from two countries only (DR Congo and Somalia). It should be noted that these countries represent contexts where data collection is most difficult, and as such the cost estimates below should be interpreted as higher than typical; i.e. conservative estimates.

In DR Congo and Somalia operators are calling respondent households once a month and asking the FCS and the CSI over the phone. The phone calls typically last 6-7 minutes. The cost of completed household questionnaire of these two modules is $7-9. For the purpose of estimating the cost of the FCS data module; we use a conservative $7-$9 estimate per household. This cost estimate includes the salary of the operator, cost of actual call and a $0.5 airtime credit incentive for the respondent after the call is completed. It is important to note that through potential economies of scale; with a higher call volume; the cost per survey would likely decrease significantly. A review of the mVAM project is currently underway and being undertaken by Tulane University; the review includes a review of costs.

Can a meaningful numerical target for 2030 be set? Is there already a baseline value for 2015?

WFP currently has statistically representative FCS data at national scale, for over 35 countries around the world, from which baseline values have been derived.

Establishing global targets with the FCS indicator requires consideration of scoring thresholds. At present, two FCS thresholds are commonly employed: households with scores below 21 are generally considered to have very poor food consumption, while scores between 21 and 35 are associated with borderline consumption. While scores above 35 will not necessarily reflect households consuming sufficient quantities of nutritiously diverse foods, we can be sure that households scoring below these levels are in serious risk. For example, a meaningful universal target associated with hunger eradication could be a reduction in the proportion of households scoring below 21 to under 1% and those scoring under 35 to 5%.

Target 2.2.

By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons

The Rome Based Agencies endorse the set of indicators that have been endorsed by Member States at the 65th World Health Assembly (WHA 2012), and support in particular the Prevalence of stunting (low height-for-age) in children under 5 years of age (listed here as

indicator 2.2.1), and the Prevalence of overweight children under 5 years of age (listed here as indicator 2.2.2) as core indicators for Target 2.2.
Furthermore, it is strongly believed that an important determinant of malnutrition is dietary quality and therefore the Women Dietary Diversity Score (listed here as Indicator 2.2.3) is proposed as an additional one. This indicator would provide information to countries on the dimension of women consuming micronutrient poor diets, an important contribution to micronutrient-related malnutrition.

Indicator 2.2.1

Prevalence of stunting (low height for age) in children under 5 years of age

See metadata at:
http://apps.who.int/gho/indicatorregistry/App_Main/view_indicator.aspx?iid=72

Indicator 2.2.2

Prevalence of overweight children under 5 years of age

The indicator is maintained by the World health Organization. See metadata at:
http://apps.who.int/gho/indicatorregistry/App_Main/view_indicator.aspx?iid=74

Indicator 2.2.3

"Women Dietary Diversity Score"

Precise definition of the indicator

The Minimum Dietary Diversity for Women (MDD-W) indicator is defined as: "the proportion of all women 15-49 years of age who consumed at least 5 out of 10 defined food groups the previous day"[3]

The 10 food groups are:
All starchy staple foods
Beans and peas
Nuts and seeds
Dairy
Flesh foods
Eggs
Vitamin A-rich dark green leafy vegetables
Other vitamin A-rich vegetables and fruits
Other vegetables
Other fruits

How is the indicator linked to the specific TARGET as worded in the OWG report and copied above?

The MDD-W is a proxy indicator of micronutrient adequacy of the diets of women of reproductive age, with the desired direction of change being an increase of the value of the indicator. Women consuming at least five out of ten food groups have a greater likelihood of meeting their micronutrient needs than women consuming foods from fewer food groups[4]. Women's diets in resource-poor countries have been shown to be inadequate (Torheim 2010, Lee 2013)[5], so this indicator is directly relevant to the target of "addressing the nutritional needs of adolescent girls, pregnant and lactating women".

[3] http://www.fantaproject.org/sites/default/files/resources/Introduce-MDD-W-indicator-brief-Sep2014.pdf

[4] This is the main conclusion of the Women's Dietary Diversity Project I and II (WDDP). The technical report of WDDP-II is about to be published by FAO. All available information can be found at: http://www.fantaproject.org/research/womens-dietary-diversity-project

[5] Lee SE, Talegawkar SA, Merialdi M, Caulfield LE. Dietary intakes of women during pregnancy in low- and middle-income countries. Public Health Nutr. 2013 Aug;16(8):1340-53. doi: 10.1017/S1368980012004417. Epub 2012 Oct 9.

Does the indicator already exist and is it regularly reported?
This is a new indicator that has been developed and validated against high-quality quantitative dietary data[6]. It is not yet regularly reported although similar data on dietary diversity of women have been reported in the past.
Because the indicator was recently developed, there has been no routine data collection until very recently when several USAID programmes have incorporated it into their monitoring and evaluation framework (for Feed the Future and Title II programmes).
Potential data sources include the DHS surveys and the UNICEF MICS. Representatives from agencies sponsoring these surveys have been engaged in larger stakeholder consultations on the MDD-W. DHS collected women's dietary diversity data using a previous version of the tool. Other potential sources are national nutrition and health surveys. All of these are conducted on an average of every five years, and global coverage is not attained, however the DHS covers over 90 countries, including most developing countries. If prioritized and funded, inclusion in large scale surveys such as those mentioned above is feasible. It is a short module requiring no more than 15 minutes of interview time and calculation of the indicator is simple and straight forward. Upfront costs include a one-time questionnaire adaptation to include local foods and for translation into languages used for questionnaire administration. Therefore, marginal costs to including the module into an existing survey include the one time questionnaire preparation, and interview and enumerator training time.
Comment on the reliability, potential coverage, comparability across countries, and the possibility to compute the indicator at sub-national level.
Reliability
The precision of the calculated estimates depend on the sample size. With large-scale nationally representative studies, the estimates will reach a good level of precision.
Coverage
See the paragraph above on data sources.
Comparability across countries
While there is no global standard of reference, the concept of food group diversity is globally relevant. All national dietary guidelines stress the importance of varied diets for health and nutrition outcomes (Dwyer, 2012)[7].
Sub-national estimates
Data are collected on individual women. Subnational estimates are possible as long as the survey is representative for specific population groups and/or geographical areas.
Can a meaningful numerical target for 2030 be set? Is there already a baseline value for
In the absence of baseline data, it is difficult to set a meaningful target that is feasible to achieve over a 15 year time horizon.
In order to set meaningful targets for tracking progress, it would be desirable to bring together major stakeholders in nutrition and women's health to reach consensus on setting a meaningful and feasible target for the SDGs.

Torheim LE(1), Ferguson EL, Penrose K, Arimond M. Women in resource-poor settings are at risk of inadequate intakes of multiple micronutrients. J Nutr. 2010 Nov;140(11):2051S-8S. doi: 10.3945/jn.110.123463. Epub 2010 Sep 29.

[6] Arimond M, Wiesmann D, Becquey E et al. (2010). Simple food group diversity indicators predict micronutrient adequacy of women's diets in 5 diverse, resource-poor settings. Journal of Nutrition. No. 11 (.Vol. 140): 2059S-69S.

[7] Dwyer, JT. (2012) Dietary standards and guidelines: Similarities and differences among countries. Chapter 65 in Present Knowledge in Nutrition, 10th ed., pp. 1110-1134, JW Erdman, IA MacDonald, and SH Zeisel, eds. Wiley-Blackwell.

Assembling stakeholders to engage in this process is possible because there is wide support for the inclusion of this indicator in the development goals, as evidenced by the recent policy brief from the Standing Committee on Nutrition available at: http://www.unscn.org/files/Publications/Policy_brief_Priority_Nutrition_Indicators_for_the_Post-2015_SDGs.pdf. In the meantime the organizations, institutions and individuals involved in this area will begin a search for available data that may provide input into this process.

Target 2.3

"By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment"

While agricultural productivity broadly defined could be measured, at the aggregate national level, with data available through national account data maintained by OECD and the World Bank, the in the target formulation creates a specific demand for data that can only be obtained through surveys.

The last two decades have witnessed an increased reliance on household *surveys, focusing on consumption and living standards indicators, which unfortunately cannot be considered a complete and reliable source of data related to agricultural production and to farmers' access to productive resources, for which a system of* farm *surveys would be needed.*

While some initiatives have been put in place by various development agencies (most notably, the Integrated Surveys in Agriculture project under the World Bank's Living Standard Measurement Survey and the World Census of Agriculture initiative by FAO) the availability of reliable agricultural production data at farm level is still largely insufficient to cover the monitoring needs for targets that make explicit reference to small-scale producers and to different population groups.

To respond to this urgent need, concerted actions aimed at promoting the establishment of regular farm surveys through which countries would collect at least a minimum set of core data specifically related to the economic, social and environmental dimensions of the farming sector, using an integrated agricultural and rural development approach.

In this respect, the Global Strategy to improve Agricultural and Rural Statistics *(a multi donor/multi partner statistical capacity development initiative) is promoting the establishment of an Agricultural and Rural Integrated Survey (AGRIS) model which would ensure availability of the basic data needs to inform several key indicators, including the ones listed below, at a sufficient level of coverage to serve the needs of the global monitoring framework of all the dimensions listed in the Target definition.*

Indicator 2.3.1

"Value of agricultural production per hectare"

Precise definition of the indicator?

The indicator refers to the value of agricultural production per unit of land (hectare) operated by the first two farm size quintiles for all farmers (the bottom 40%) and for female headed farming households. So, there are effectively two indicators to be derived.

How is the indicator linked to the specific TARGET as worded in the OWG report and copied above?

The indicator is directly linked with the target, particularly to the agricultural productivity dimension. In particular, the first refers to doubling the land productivity for crops of small farmers (including pastoralists), and the second specifically refers to land productivity of female headed farming households.

Does the indicator already exist and is it regularly reported?

FAO has been working in producing the indicator using household survey data, within its program of work in "*small scale agriculture and development transformation*". To date, the indicator is available for nine developing countries in Asia, Africa and Latin America. The results haven't been disseminated yet.
Sources of information would be either national agricultural surveys, or agricultural modules from National Household Surveys (eg., LSMS-ISA). Existing data (household surveys for up to 70 countries owned by different agencies or the countries themselves) differ in terms of time span and crop coverage.
Monitoring the indicator would require frequent and consistent collection of data for as many countries as possible.
Data should be collected by the countries with the necessary support from the World Bank, FAO and other agencies to ensure methodological rigor.
It is worth mentioning that the FAO Statistics Division is starting a project called AGRIS (Agricultural and Rural Integrated Surveys) through which methodological guidelines will be provided to countries on how to conduct farm surveys (i.e. key indicators to collect, definitions, methods for data collection, periodicity, etc.), and effort will also be made to support countries in the actual implementation of the farm surveys. This project, as well as partnerships with the World Bank and the countries themselves, could substantially increase the availability of this indicator in the future.
Comment on the reliability, potential coverage, comparability across countries, and the possibility to compute the indicator at sub-national level.
Reliability
If data are collected according to standards, reliability is high.
Coverage
Data collection or data sharing might be difficult in some countries (i.e. China, countries at war etc.). In general due to high costs it doesn't make sense to collect data every year.
Sub-national estimates
As long as farm or household level data are available, the indicator can be computed for specific population groups and geographical areas. This is subject to the sampling frame and implied statistical representation in each specific country.
Can a meaningful numerical target for 2030 be set? Is there already a baseline value for 2015?
There is no baseline value for 2015.
The target, at least in global terms, may not be feasible to reach given that production for developed countries weighs higher relative to developing ones.
In developing countries the target seems more feasible, but still not achievable considering lagging technology that leaves plenty of room for improvement (which increases the numerator), and structural transformation (which may reduce the denominator). In addition good governance and relevant policies to promote agriculture and rural development in developing countries can assist in achieving the target there. Higher demand for food (either due to increases in the population or because of shifting dietary preferences: meat, fruits and vegetables), may increase prices and hence the numerator of the indicator.
Given diverse levels of importance for agriculture across countries, the target cannot be common but has to be country specific and relative to its baseline.
Target 2.4
"By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality"

Indicator 2.4.1

"Emissions of greenhouse gases in agriculture"

(per hectare of land and per unit of output, separately for crop and livestock sectors)

What is the *precise* definition of the indicator?

This is a family of indicators, with the following general definition:

$$Indicator_{i.j} = GHG_{i.j}/Commodity_{i,j}$$

Where:

$Indicator_{i,j}$ is Greenhouse Gas (GHG) emission intensity per unit of commodity i produced by activity j;

$GHG_{i,j}$ is the GHG emissions from the FAOSTAT Emission database relative to commodity i produced by activity j

$Commodity_{i,j}$ is production of the following goods by the following activities:

i = meat, milk, eggs, grain yield for the following activities

j = cattle, pork, chicken, etc., cereals, rice, plus two additional non-commodity indexes, currently under discussion across NRC and ESS, land and added value.

How is the indicator linked to the specific TARGET as worded in the OWG report and copied above?

The objective of this indicator is to contribute measuring sustainable food production systems. Detectable changes are time changes in the indicators. The indicator has a direct link to the objective measure. Indeed, the GHG intensity of commodities directly relates to their long-term sustainability and usefully links emissions to food production.

The indicator is also capturing other phenomena, such as the link to growing economies of scale. There is univocal direction of change in the value of the indicator that is consistent with the spirit of the developmental goal; as a matter of fact, GHG intensity should decrease over time to indicate increased efficiency of production in relation to environmental impacts.

Does the indicator already exist and is it regularly reported?

These indicators have already been produced at FAO and will be available in a FAOSTAT test site by end of February 2015. They are based on the FAOSTAT Emissions database in terms of nominator and on FAOSTAT/Production database in terms of denominator. All necessary data is available in FAOSTAT.

Comment on the reliability, potential coverage, comparability across countries, and the possibility to compute the indicator at sub-national level.

Reliability

The indicator is as robust as the underlying FAOSTAT data used for its computation. Emissions can have uncertainty of +- 30%; activity data in the denominator can have +-20%.

Coverage

All FAOSTAT countries, 1961-present

Comparability across countries

As the same FAOSTAT and IPCC methodologies are used throughout for all countries, the indicators would be directly and fully comparable.

Sub-national estimates

It is possible to compute sub-national, district level indicators if countries provide the basic data needed. Such data are not currently available.

Can a meaningful numerical target for 2030 be set? Is there already a baseline value for 2015?

While numerical targets for 2030 can hardly be conceived for this indicator at this moment, the UNFCCC COP21 in Paris, December 2015, may reach agreements of possible targets. If these UNFCCC targets are decided and understood, then this indicator can be used to estimate and then monitor them.

Indicator 2.4.2

"Absolute levels of emissions in relevant sectors and sub-sectors"

Precise definition of the indicator?

Agriculture GHG contains all the emissions produced in the different agricultural emissions sub-domains, providing a picture of the contribution to the total amount of GHG emissions from agriculture. GHG emissions from agriculture consist of non-CO2 gases, namely methane (CH_4) and nitrous oxide (N_2O), produced by crop and livestock production and management activities.

The indicator is computed following IPCC Guidelines for National GHG Inventories; it is available by country, with global coverage and relative to the period 1990 - present, with annual updates, and projections for 2030 and 2050[8].

How is the indicator linked to the specific TARGET as worded in the OWG report and copied above?

The indicator is linked to the Target because it aims at measuring the overall achievement of sustainable food production systems (through reduced GHG emissions)

Detectable changes: Level of GHG emissions from sector and associated sub-sectors. The link is indirect, in the sense that increased GHG emissions can merely reflect increased food production and thus not necessarily measure sustainability. The latter is to be measured with a second, associated indicator (GHG intensity per commodity)? The direct link is that it helps clarify how agriculture contributes to national (regional, global) GHG emissions – in the context of a scientific agreement that these should overall be reduced in order to prevent further climate change in the future.

Does the indicator already exist and is it regularly reported?

Yes, the indicator exists. METADATA, are available at

http://faostat3.fao.org/modules/faostat-download-js/PDF/EN/GT.pdf

Comment on the reliability, potential coverage, comparability across countries, and the possibility to compute the indicator at sub-national level.

Reliability

National level data have an uncertainty of of + / - 30 percent

Coverage

All FAOSTAT countries, 1961-most recent FAOSTAT year (currently 2012)

Comparability across countries

As the indicators are obtained according to 2006 IPCC guidelines in use by UNFCCC, they are fully comparable across countries.

Sub-national estimates

Yes. Currently sub-national (geo-spatial) data are available for several sub-categories.

Can a meaningful numerical target for 2030 be set? Is there already a baseline value for 2015?

Yes. However, it would be most appropriate to wait for UNFCCC COP21 before setting a target, as the two should be consistent and the latter has legal value in international climate agreements.

Target 2.5

"By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and ensure access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed"

[8] Source: FAOSTAT Emissions/agriculture metadata.

For this target we identify two possible core indicators: the "ex-situ crop collection indicator (listed here as indicator 2.5.1), which refers to vegetal entities, and the (listed as indicator 2.5.2), while the other refers to domesticated animals and their related wild species.

Indicator 2.5.1

Ex-situ crop collections indicator

Precise definition of the indicator

The Ex-situ crop collections indicator is a dynamic measure of the bio- and geographical diversity contained within ex-situ collections across time.

Plant genetic resources for food and agriculture (PGRFA) are the biological basis of world food security. They consist of the diversity of genetic material contained in traditional varieties and modern cultivars grown by farmers as well as crop wild relatives and other wild plant species. It is widely believed that PGRFA are being lost. Agricultural systems are dynamic and the amounts and identity of the genetic diversity in them is constantly subject to change. Ex situ conservation of PGRFA represents the most trusted and popular means of conserving plant genetic resources worldwide. The measure of trends in ex situ conserved materials provides an overall assessment of the extent to which we are managing to maintain and/or increase the total genetic diversity required for current and future production and therefore secure under controlled conditions from any permanent loss of this type of genetic diversity occurring in the field.

The indicator proposed for target 15.5 under SDG serves also as indicator for the CBD's Aichi Target 13 on *genetic diversity of cultivated plants* […] *and of wild relatives* and is described at the webpage of the Biodiversity Indicators Partnership (BIP), a network of organizations which have come together to provide the most up-to date biodiversity information possible for tracking progress towards the Aichi Targets (http://www.bipindicators.net/cropcollections).

How is the indicator linked to the specific TARGET as worded in the OWG report and copied above?

The indicator has a direct link to "biodiversity" and, indirectly to "food security", as plant genetic resources are at the base of agricultural ecosystems and biodiversity, and make up to more than 90% of food calories consumed by the world's population. Ex situ collections represent the most accessible genepool for breeding programmes to improve crop varieties and to find traits of resistance and adaptability to biotic and abiotic stresses, including climate change, salinity, drought, flooding, as well as pests and diseases. Sustainable crop production intensification heavily depends on plant genetic resources and their adequate management.

Does the indicator already exist and is it regularly reported?

The indicator has been calculated by FAO/AGPMG in 2008 and 2014. It will be calculated again in 2015 and then periodically every 2-3 years based on data reported by member countries to the Commission of Genetic Resources of Food and Agriculture on the implementation of the Second Global Plan of Action for PGRFA, as agreed at CGRFA-15: http://www.fao.org/3/a-mm181e.pdf. The links to the BIP and CBD are provided above. Country data are stored in WIEWS, the FAO PGRFA information system maintained by AGP (see http://www.pgrfa.org/WIEWS/). WIEWS responsible officer is currently Mr Stefano Diulgheroff (wiew@fao.org).

Existing data sources should be identified, possibly with both time and country coverage. If there are no sufficiently dense data sources, a description of the kind of investment that is likely necessary to bring coverage to a sufficient extent to make global monitoring meaningful should be provided.

Comment on the reliability, potential coverage, comparability across countries, and the possibility to compute the indicator at sub-national level.

Reliability

Data on genebank holdings which the indicator uses are relatively reliable as they have been periodically reported to FAO since 1996. For the majority of staple crops the largest collections are held by international research centers.

Coverage

Data from more than 2 million accessions conserved ex situ world-wide are already accessible. It is expected that by mid 2015 data from 0.5 to 1 million additional accessions will be gathered from countries around the world. This will allow a relatively accurate elaboration of the indicator, which nevertheless can the subsequently adjusted with the incorporation of missing genebank data. The calculation of the indicator and its evolution overtime will be readjusted with the additional data.

Comparability across countries

The indicator can be calculated globally as well as for each individual country and region. National and regional values can be compared among themselves as calculation is done in the same way for all countries and regions.

Sub-national estimates

Not applicable.

Can a meaningful numerical target for 2030 be set? Is there already a baseline value for 2015?

A numerical target for 2030 could be expressed as a minimum percentage *increase* of the indicator value, with respect to the value it had in a specific baseline year such as 1996, which is the year of adoption of the Global Plan of Action for the Conservation and Sustainable Use of PGRFA.

Indicator 2.5.2

"Number/percentage of local breeds classified as being at-risk, not-at-risk and unknown-levels of risk of extinction)"

Precise definition of the indicator

The indicator presents the percentage of livestock breeds classified as being at risk, not at risk or of unknown risk of extinctions at a certain moment in time, as well as the trends for those percentages.

The indicator is based on the most up to date data contained in FAO's Global Databank for Animal Genetic Resources DAD-IS (http://dad.fao.org/) at the time of calculation. Risk classes are defined based population sizes of breeds reported to DAD-IS. The risk class is considered to be "unknown" if (i) no population sizes are reported or (ii) the most recent population size reported refers to a year more than 10- years before the year of calculation (10 year cut off point).

Links to official definitions/descriptions of the indicator are reported below:

The indicator is one out of a set of 3 sub-indicators which are defined in the document CGRFA/WG-AnGR-7/12/7 "Targets and indicators for animal genetic resources" (http://www.fao.org/docrep/meeting/026/me514e.pdf) and that are endorsed in their current form by Commission on Genetic Resources for Food and Agriculture at its the 14th Session (see par 28 CRRFA-14/13/Report at http://www.fao.org/docrep/meeting/028/mg538e.pdf).

The indicator serves to monitor the implementation of the Global Plan of Action for Animal Genetic Resources. In this respect the indicator is presented in the "Status and Trends of Animal Genetic Rescources-2014" (see http://www.fao.org/3/a-mm278e.pdf).

This indicator is also proposed for the Target 15.5 under SDG, and it serves also as an indicator for the Aichi Target 13 "Genetic Diversity of Terrestrial Domesticated Animals" under the Convention on Biological Diversity (CBD). It is described on the webpage of the Biodiversity Indicators Partnership (BIP), a network of organizations which have come together to provide the most up-to date biodiversity information possible for tracking progress towards the Aichi Targets (http://www.bipindicators.net/domesticatedanimals).

Further, it is is presented in the Global Biodiversity Outlook 4, page 91 (see http://www.cbd.int/gbo/gbo4/publication/gbo4-en-lr.pdf) which is an output of the processes under the CBD.

Risk classes are defined as follows[9]:

extinct: a breed is categorized as extinct when there are no breeding males or breeding females remaining. Nevertheless, genetic material might have been cryoconserved which would allow recreation of the breed. In reality, extinction may be realized well before the loss of the last animal or genetic material.

critical: a breed is categorized as critical if the total number of breeding females is less than or equal to 100 or the total number of breeding males is less than or equal to five; or the overall population size is less than or equal to 120 and decreasing and the percentage of females being bred to males of the same breed is below 80 percent, and it is not classified as extinct.

critical-maintained: are those critical populations for which active conservation programmes are in place or populations are maintained by commercial companies or research institutions.

endangered: a breed is categorized as endangered if the total number of breeding females is greater than 100 and less than or equal to 1 000 or the total number of breeding males is less than or equal to 20 and greater than five; or the overall population size is greater than 80 and less than 100 and increasing and the percentage of females being bred to males of the same breed is above 80 percent; or the overall population size is greater than 1 000 and less than or equal to 1 200 and decreasing and the percentage of females being bred to males of the same breed is below 80 percent, and it is not assigned to any of above categories.

endangered-maintained: are those endangered populations for which active conservation programmes are in place or populations are maintained by commercial companies or research institutions.

breed at risk: a breed that has been classified as either critical, critical-maintained, endangered, or endangered-maintained.

How is the indicator linked to the specific TARGET as worded in the OWG report and copied above?

The indicator has a direct link to “biodiversity” as animal or livestock genetic resources represent an integral part of agricultural ecosystems and biodiversity as such.

Further there are indirect links to “malnutrition”: Animal genetic resources for food and agriculture are an essential part of the biological basis for world food security, and contribute to the livelihoods of over a thousand million people. A diverse resource base is critical for human survival and well-being, and a contribution to the eradication of hunger: animal genetic resources are crucial in adapting to changing socio-economic and environmental conditions, including climate change. They are the animal breeder’s raw material and amongst the farmer’s most essential inputs. They are essential for sustainable agricultural production.

No increase of the percentage of breeds being at risk or being extinct is directly related to “halt the loss of biodiversity”.

Does the indicator already exist and is it regularly reported?

Yes, the indicator exists. It is calculated by FAO/AGAG and reported biannually to the Commission of Genetic Resources of Food and Agriculture. The most recent report is available at: http://www.fao.org/3/a-mm278e.pdf. The links to the BIP and CBD are provided above. FAO is a partner in the BIP and provides information on the indicator directly to the partnership.

[9] FAO. 2007. *The State of the World’s Animal Genetic Resources for Food and Agriculture*, edited by Barbara Rischkowsky & Dafydd Pilling. Rome. Accessible at http://www.fao.org/docrep/010/a1250e/a1250e00.htm.

The underlying data base DAD-IS is maintained by FAO/AGAG (see http://dad.fao.org/). The contact person for DAD-IS is Ms Roswitha Baumung. Data are officially provided by countries. Data entry is possible all over the year.
Sustainability of the indicator production and its use within a meaningful global monitoring framework is strongly dependent on the maintenance and development of DAD-IS by FAO.
Comment on the reliability, potential coverage, comparability across countries, and the possibility to compute the indicator at sub-national level.
Reliability
The reliability of measures of population size for breeds varies across countries and species (similarly to what is the case for population size of livestock species provided in CountrySTAT). However, rough estimates on country level are considered to be sufficient to reliably detect global and regional trends.
Coverage
The Global Databank for Animal Genetic Resources currently contains data from 182 countries and 38 species. The total number of national breed populations recorded in the Global Databank has increased dramatically since 1993 (from 2 716 national breed populations to 14 869 and from 131 countries to 182). The total number of mammalian national breed populations recorded in June 2014 was 11 062. The total number of avian national breed populations recorded in 2014 was 3 807. However, breed-related information remains far from complete. For almost 60 percent of all reported breeds, risk status is not known because of missing population data or lack of recent updates. Generally data collection should be possible in all countries. Updating of population size data at least each 10 years is needed for the definition of the risk classes.
Comparability across countries
Completely comparable as calculation is done in the same way for all countries and the same definitions on risk classification is applied.
Sub-national estimates
Sub-national estimates can be obtained with regard to the risk status of each national breed population and species. Results can be presented at the national, regional and global levels.
Can a meaningful numerical target for 2030 be set? Is there already a baseline value for 2015?
With regard to halt the loss of biodiversity the target can be formulated as "The genetic diversity of farmed and domesticated animals is maintained" which is consistent with the target formulation of Aichi Target 13 under the CBD. However the future projections presented in the Global Biodiversity Outlook 4, Figure 131, page 91 (see http://www.cbd.int/gbo/gbo4/publication/gbo4-en-lr.pdf) suggest such halt will be unrealistic.
Target 2.a
"Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productivity capacity in developing countries, in particular in least developed countries"
Indicator 2.a.1
"Agriculture Orientation Index for Government Expenditures "
Precise definition of the indicator
The Agriculture Orientation Index (AOI) for Government Expenditures is defined as the Agriculture share of Government Expenditures, divided by the Agriculture Share of GDP, where Agriculture refers to the agriculture, forestry, fishing and hunting sector.

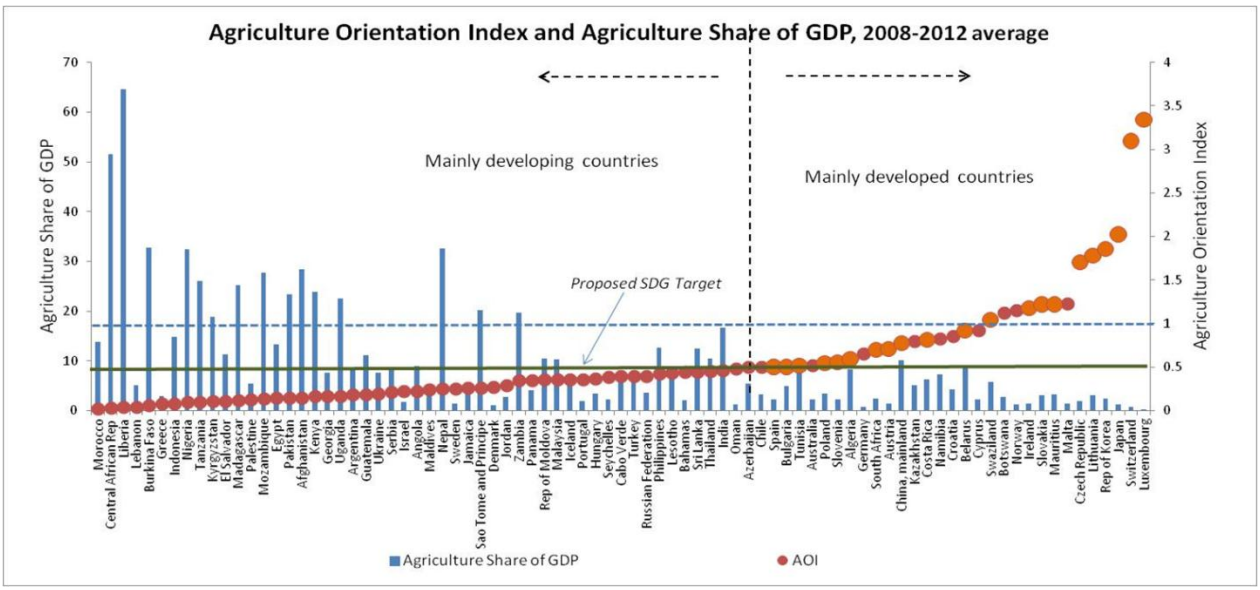
$$AOI = \frac{Agriculture\ Share\ of\ Government\ Expenditures}{Agriculture\ Share\ of\ GDP}$$

An AOI greater than 1 reflects a higher orientation towards the agriculture sector, which receives a higher share of government spending relative to its contribution to economic value-added. An AOI less than 1 reflects a lower orientation to agriculture, while an AOI equal to 1 reflects neutrality in a government's orientation to the agriculture sector.
Agriculture refers to the agriculture, forestry, fishing and hunting sector, based on the Classification of the Functions of Government (COFOG) developed by the OECD and published by the United Nations Statistics Division (UNSD), found at http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=4&Top=1&Lg=1.
Government expenditures are all outlays or expenses associated with supporting a particular sector or purse, including compensation of employees, and subsidies and grants paid as transfers to individuals or corporations in that sector. For a full description, see the Government Finance Statistics Manual (GFSM) 2001, developed by the International Monetary Fund (IMF), found at http://www.imf.org/external/pubs/ft/gfs/manual/.
The Agriculture Share of GDP is measured by the ratio of Agriculture Value Added over GDP, based on official data reported by countries to the United Nations Statistics Division or to the OECD.
The annual data and indicator, collected and compiled by the Food and Agriculture Organization of the UN (FAO), can be found on the FAOSTAT domain at: http://faostat3.fao.org/download/I/IG/E, covering the periods 2001-2012.
How is the indicator linked to the specific TARGET as worded in the OWG report and copied above?
Government spending in Agriculture includes spending on sector policies and programs; soil improvement and soil degradation control; irrigation and reservoirs for agricultural use; animal health management, livestock research and training in animal husbandry; marine/freshwater biological research; aforestation and other forestry projects; etc. Spending in these agricultural activities helps to increase sector efficiency, productivity and income growth by increasing physical or human capital and /or reducing intertemporal budget constraints. However, the private sector typically under-invests in these activities due to the presence of market failure (e.g. the public good nature of research and development; the positive externalities from improved soil and water conditions; lack of access to competitive credit due to asymmetric information between producers and financial institutions, etc). Government spending in agriculture is essential to address these market failures. This leads to several potential indicators for the SDGs, which include: a) the level of Government Expenditures in Agriculture (GEA); b) the Agriculture share of Government Expenditures, and c) the AOI for Government Expenditures.
An indicator that measures GEA levels fails to take into account the size of an economy. If two countries, A and B, have the same level of GEA, and the same agriculture contribution to GDP, but country A's economy is 10 times that of country B. Setting the same target levels for GEA fails to take economic size into account.
An indicator that measures the Agriculture share of Government Expenditures fails to take into the relative contributions of the agricultural sector to a country's GDP. Consider two countries with the same economic size, C and D, where agriculture contributes 2% to C's GDP, and 10% to country D's GDP. If total Government Expenditures were equal in both countries, C would experience greater relative investment in Agriculture than D. If total Government Expenditures differed, the result could be magnified or diluted.
The AOI index takes into account a country's economic size, Agriculture's contribution to GDP, and the total amount of Government Expenditures. As such, it allows for the setting of a universal and achievable target.
Does the indicator already exist and is it regularly reported?

The indicator is maintained and reported by FAO in FAOSTAT, with metadata soon to be available at http://faostat3.fao.org/mes/methodology_list/E.
The underlying annual data is official country data, from 2001 to 2012, reported by countries through a questionnaire jointly developed by FAO and the IMF using the COFOG and GFSM classifications. The database currently covers 139 countries.
Comment on the reliability, potential coverage, comparability across countries, and the possibility to compute the indicator at sub-national level.
The use of the COFOG and GFSM classifications promotes international and inter-temporal comparisons. The expenditure data reported is typically based on administrative data based on a government's public accounts, while GDP and Agriculture Value Added is based on its National Accounts. The nature of the data typically prohibits indicators at sub-national level, as most countries do no compile sub-national GDP estimates, nor sub-national Government Expenditure figures.
Reliability
The numerator (Agriculture Share of Government Expenditures) is based on administrative data, which has no statistical margin of error. The denominator (Agriculture share of GDP) is based on a System of National Accounts, following international guidelines, in which either Agriculture Value-Added or GDP estimates can suffer from statistical errors, though it is difficult to measure. Errors and lack of reliability due to from non-statistical errors can arise, for example, as a result of the mapping between national concepts to international classifications (by respondents), the use of different measures of government across countries due to reporting issues (budgetary central, central, and general, as described above).
Coverage
It is relatively high for these particular indicators, with 139 countries included. However, some countries have not provided data for all 13 years from 2001 to 2012, and the level of government to which expenditures pertain can differ.
Comparability across countries
It is facilitated by use of the Agriculture share of Government Expenditures in the numerator , which mitigates difference that arise when some countries report expenditures for all levels of government, and others only for the central government. This does not rule out the fact that state and local governments may spend a different share on Agriculture than the central government. For this reason, analysis of the trends in this indicator may be more reliable, for comparison purposes, than just the indicator alone.
While COFOG and GFSM facilitate international comparisons, not all countries report expenditures covering all three levels of government (Central, State and Municipal). The three levels of reporting include (from smallest to largest): 1) Budgetary Central Government; 2) Central Government, which includes Budgetary Central Government as well as extra-budgetary units ; and 3) General Government, which includes Central, State and Local Government. Countries that fully report General Government Expenditures may not report Central Government Expenditures.
Since not all countries collect or share data on all three levels of reporting, the level with the most complete time series is used is used for each country. To the extent that the Agriculture share of Government Expenditures differs across levels of government (Central, State and Local), differences in this indicator may reflect differences in reporting.
Sub-national estimates
They are not possible to compute sub-national or population group estimates, given the nature of the underlying data.
Can a meaningful numerical target for 2030 be set? Is there already a baseline value for 2015?
There is no baseline value for this indicator for 2015.

There is some precedent for using government expenditures as a target indicator for Agriculture. Signatories to the Maputo Declaration set a target of 10% for the Agriculture and Rural Development *Share of Government Expenditures*. However, as Rural Development is not a purpose listed under the COFOG classification, there has been considerable difficulty in consistently measuring this indicator. Furthermore, in setting a universal target, this Share indicator suffers from the problems listed above (comparison of economies of different size, with different levels of government expenditures, and with different agricultural shares of GDP).

A proposed target for 2030 would be an AOI of 0.5. Most but not all developed economies have already achieved this target as have some developing economies, making this an achievable target (see graph below). Among developed countries that have not achieved this target, such as Sweden, Denmark, Iceland, Hungary and Poland, the Agriculture Share of GDP is very small.



[Target 2b]

Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round

Indicator 2.b.1

"Evolution of potentially trade restrictive and distortive measures in agriculture"

Evolution of potentially trade restrictive and distortive measures in agriculture, as measured by:

-Domestic and export subsidies (annual notified amounts). The source for these data is the WTO's Agriculture Information Management System (Ag-IMS). Other data sources (e.g. OECD data on support to agriculture in OECD countries) may be used, as appropriate;

-Tariffs and non-tariff measures in the agriculture sector (applied tariff levels, and notified recourse to tariff-rate quotas, special safeguards and quantitative export and import restrictions). The source for these data would be the WTO's Integrated Data Base, Ag-IMS and other WTO notifications. Other data sources (e.g. OECD) may be used, as appropriate.

[indicator description to be further elaborated]

Target 2.c

"Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility"

Indicator 2.c.1

"Indicator of Food Price Anomalies" (IPA)

Precise definition of the indicator

The indicator of price anomalies (IPA) identifies markets prices that are abnormally high. The IPA relies on a weighted compound growth rate that accounts for both within year and across year price growth.

The indicator directly evaluates growth in prices over a particular month over many years, taking into account seasonality in agricultural markets and inflation, allowing to answer the question of whether or not a change in price is normal for any particular period.

How is the indicator linked to the specific TARGET as worded in the OWG report and copied above?

The IPA is uniquely suited to the Target 2.c as it allows early detection of abnormal market conditions, permitting the timely adoption of policies and measures aiming to limit extreme food price volatility. The indicator is able to accomplish this since one can directly measure the number of events and their intensity pre and post the policy adoption.

Does the indicator already exist and is it regularly reported?

The indicator is already implemented by FAO's Global Information and Early Warning System through its Food Price Monitoring and Analysis (FPMA) website at http://www.fao.org/giews/food-prices/indicators/all/en/. The IPA is updated monthly for the 90 countries covered in the FPMA Tool. Important country/commodity markets that have been identified as having abnormally high prices are highlighted.

The indicator relies on FAO's FMPA price tool that has been publically available since 2009. The FPMA price tool has a total of 1200 commodity/markets in 90 countries, of which 90 percent are updated up to the last month.

Comment on the reliability, potential coverage, comparability across countries, and the possibility to compute the indicator at sub-national level.

Reliability

To be reliable, the indicator requires monthly prices series that are at least 4 years in length, so as to estimate with confidence certain subcomponents of the indicator (such as the reference weighted averages and standard deviations).

This indicator has been compared to other proposed measures of abnormal price growth and has shown to have a lower probability (or lower Type II error) of revealing abnormal price growth when the price movements are indeed normal.

Coverage

As mentioned above, the indicator currently covers 90 countries and their sub-markets.

Comparability across countries

The IPA allows comparisons not only across country markets but within countries. This is possible because of its clear definition of thresholds of what constitutes abnormal price growth and the fact that the methodology is independent of the country/market being applied to.

Sub-national estimates

Sub-national estimates are automatically generated for the countries in the FPMA price tool that have sub-national data available (i.e., multiple market coverage). Some countries only provide a national average and/or the main markets in the capitol city.

Can a meaningful numerical target for 2030 be set? Is there already a baseline value for 2015?

For countries currently covered, baseline levels could be set as the number of observed price anomalies over the 48 months of 2010-2014. Targets for 2030 could be framed in terms of the percentage reduction that will be observed in the number of observed price anomalies in the 2026-30 period with respect to the baseline. As the IPA's main objective is to identify abnormal price events to alert of potential impact on food access by vulnerable populations for the adoption of appropriate interventions by governments and the international community, the reduction in the number of anomalies would be taken as assign that markets have been effectively become more stable.

Goal 3: Ensure healthy lives and promote well-being for all at all ages

Indicator**	Target specifics
3.1 Reduce the global maternal mortality ratio to less than 70 per 100,000 live births	
Maternal deaths per 100,000 live births (MMR)	Reduce the global MMR to less than 70 and no country to have MMR above 140
Skilled birth attendance	
Antenatal care attendance (4 or more visits)	
3.2 End preventable newborn and under-5 child deaths;	
Under-five mortality per 1,000 live births	All countries to reduce under-5 mortality to no more than 25 per 1,000 live births
Neonatal mortality per 1,000 live births	All countries reduce neonatal mortality to no more than 12 per 1,000 live births
Full immunization coverage / DTP3 containing vaccine	At least 90% coverage national, 80% in all districts
Care seeking for suspected pneumonia in children under-5	
ORS treatment and zinc treatment in children under-5	
3.3 End the epidemics of AIDS, TB, malaria and NTD and combat hepatitis, water-borne diseases and other communicable diseases	
HIV incidence per 100 susceptible person years (adults, key populations, children, adolescents)	90% reduction
HIV/AIDS deaths per 100,000 population	90% reduction
Antiretroviral therapy coverage	95% awareness, 95% on ART, 95% viral load suppression
TB incidence per 1,000 person years	80% reduction
Number of TB deaths	90% reduction
TB treatment coverage	90% case detection, 90% treatment success
Malaria incident cases per 1,000 person years	90% reduction
Malaria deaths per 100,000 population	90% reduction
People at risk of NTD (Number)	90% reduction
ITN use for malaria in children under-5	
Prevalence of hepatitis B surface antigen in children under 5	90% reduction
Presence of 13 IHR core capacities for surveillance and response	All countries
3.4 Reduce premature mortality from NCDs through prevention and treatment and promote mental health and wellbeing	
Probability of dying of cardiovascular disease, cancer, diabetes, or chronic respiratory disease between ages 30 and 70	30% reduction
Current tobacco use among persons 15 years and over	30% reduction
Suicide-related mortality per 100,000 population	10% reduction
Severe mental illness treatment coverage	
3.5 Strengthen prevention and treatment of substance abuse, including narcotic drug use and harmful use of alcohol	
Coverage of opioid substitution therapy among opioid-dependent drug users	40% coverage
Coverage of interventions for the prevention of substance abuse interventions among people under 25;	90% coverage
Alcohol per capita consumption (Prevalence of heavy episodic drinking)	10% reduction of harmful use of alcohol
Coverage of needle and syringe programs among injecting drug users	90% coverage

3.6 Reduce deaths and injuries due to road traffic accidents	
Number of deaths due to road traffic accidents	50% reduction (to 600,000)
3.7 Ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	
Adolescent birth rate (10-14, 15-19)	
Demand satisfied with modern contraceptives	At least 75% coverage
Coverage of syphilis treatment in pregnant women	
Proportion of abortions that are unsafe	
Knowledge among young people about sexual and reproductive health	
Percentage of primary health care facilities that provide the basic SRH package***	
3.8 Achieve UHC, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	
Fraction of the population protected against impoverishment by out-of-pocket health expenditures	100%
Fraction of households protected from incurring catastrophic out-of-pocket health expenditure	
Coverage with a set of tracer interventions (several included in other targets)	Minimum 80% essential health services coverage among all populations, independent of income, expenditure or wealth, place of residence or sex
3.9 Substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	
Population in urban areas exposed to outdoor air pollution levels above WHO guideline values	Reduce air pollution to below WHO guidelines values for particulate matter (PM) 2.5

* UN Population Division and WHO are proposing further work on a high level indicator and target for the goal 3 “Ensure healthy lives and promote wellbeing for all at all ages”. Proposals that have been reviewed in technical meetings include number of deaths before age 70 (40% reduction by 2030), probability of dying before age 70, life expectancy and healthy life expectancy.
** All indicators should be disaggregated where relevant by socioeconomic status, place of residence, gender, age, and other relevant stratifiers.
***family planning, maternal and newborn care with referral to EmONC, sexually transmitted infection and HIV diagnosis and management, safe abortion when it is not against the law and post-abortion care

Overall goal	Indicator	Target specifics	Endorsement status	Data sources	Data availa-bility	Disaggre-gation	Global estimates	Type
Ensure healthy lives and promote wellbeing for all at all ages	(Healthy) life expectancy at birth		WHO and other technical consultations;	CRVS, surveys	Fair	Poor	UNPD biannual	Mortality
	Mortality before age 70	40% reduction in every country	premature death article Lancet	CRVS, surveys	Fair	Poor	UNPD biannual	Mortality
Target	**Indicator**	**Target specifics**	**Endorsement status**	**Data sources**	**Data availability**	**Disaggregation**	**Global estimates**	**Type**
3.1 Reduce the global maternal mortality ratio to less than 70 per 100,000 live births	Maternal deaths per 100,000 live births (MMR)	Reduce the global MMR to less than 70 and no country to have MMR above 140	International meetings and country consultations	CRVS; surveys; facility data	Poor (high mortality countries)	Poor	UN / WHO Interagency group, biannual	Mortality
	Skilled birth attendance		MDG 5B	Surveys, facility data	Good	Good		Coverage
	Antenatal care attendance (4 or more visits)		MDG 5B	Surveys, facility data	Good	Good		Coverage
3.2 End preventable newborn and under-5 child deaths;	Under-five mortality per 1,000 live births	All countries to reduce under-5 mortality to no more than 25 per 1,000 live births	Part of child survival call to action; part of "A Promise Renewed"	CRVS, surveys	Fair	Fair	UNICEF Interagency group, annual	Mortality
	Neonatal mortality per 1,000 live births	All countries reduce neonatal mortality to no more than 12 per 1,000 live births	Every Newborn Action Plan – endorsed by WHA	CRVS, surveys	Fair	Fair	UNICEF Interagency group, annual	Mortality
	Full immunization coverage / DTP3 containing vaccine	At least 90% coverage national, 80% in all districts	Global Vaccine Action Plan 2011-2020	Surveys, facility data	Good	Good	WHO/UNICEF annual	Coverage
	Care seeking for suspected pneumonia in children under-5			Surveys	Good	Good		Coverage
	ORS treatment and zinc treatment in children under-5			Surveys	Good	Good		Coverage
3.3 End the epidemics	HIV incidence per 100	90% reduction	UNAIDS PCB	Surveys, facility	Fair	Fair	UNAIDS annual	Morbidity

of AIDS, TB, malaria and NTD and	susceptible person years (adults, key populations, children, adolescents)			data				
	HIV/AIDS deaths per 100,000 population	90% reduction	UNAIDS PCB	CRVS	Poor	Poor	UNAIDS annual	Mortality
	Antiretroviral therapy coverage	95% awareness, 95% on ART, 95% viral load suppression	UNAIDS PCB	Facility data	Fair	Poor	WHO & UNAIDS annual	Coverage
	TB incidence per 1,000 person years	80% reduction	Global TB Strategy 2016-35, WHA, May 2014	Facility data, surveys	Fair	Fair	WHO, annual	Morbidity
	Number of TB deaths	90% reduction	Global TB Strategy 2016-35, WHA, May 2015	CRVS	Poor	Poor	WHO, annual	Mortality
	TB treatment coverage	90% case detection, 90% treatment success	Global TB Strategy 2016-35, WHA, May 2015	Facility data	Fair	Poor	WHO, annual	Coverage
	Malaria incident cases per 1,000 person years	90% reduction	Malaria Global technical strategy	Facility data, surveys	Fair	Fair	WHO, annual	Morbidity
	Malaria deaths per 100,000 population	90% reduction	Malaria Global technical strategy	CRVS	Poor	Poor	WHO, annual	Mortality
	People at risk of NTD (Number)	90% reduction	Multiple resolutions and targets for specific NTD related to elimination	Surveys, other	Fair	Fair	WHO, biannual	Morbidity
	ITN use for malaria in children under-5			Surveys	Good	Good		Coverage
3.3 . and combat hepatitis, water-borne diseases and other communicable diseases	Prevalence of hepatitis B surface antigen in children under 5	90% reduction	WHO Technical meeting	Surveys	Poor	Poor		Morbidity
	Presence of 13 IHR core capacities for surveillance and response	All countries	International Health Regulations resolution, WHA	Other	Good	NA	NA	Other

3.4 Reduce premature mortality from NCDs through prevention and treatment and promote mental health and wellbeing	Probability of dying of cardiovascular disease, cancer, diabetes, or chronic respiratory disease between ages 30 and 70	30% reduction	WHA resolution 2013	CRVS	Poor	Poor	WHO, biannual	Mortality
	Current tobacco use among persons 15 years and over	30% reduction	WHA Resolution 2013	Surveys	Good	Good	WHO	Coverage (risk factor)
	Suicide-related mortality per 100,000 population	10% reduction	WHA Resolution	CRVS	Poor	Poor	WHO, biannual	Mortality
	Severe mental illness treatment coverage		WHA Resolution	Surveys, facility data	Poor	Poor	WHO	Coverage
3.5 Strengthen prevention and treatment of substance abuse, including narcotic drug use and harmful use of alcohol	Coverage of needle and syringe programs among injecting drug users	90%		Special surveys, other	Poor	Poor	UNODC	Coverage
	Coverage of opioid substitution therapy among injecting drug users	40%	UN GA resolution, PCB	Special surveys, other	Poor	Poor	UNODC	Coverage
	Prevention coverage for substance abuse interventions among people under 25;	90%		Special surveys, other	Poor	Poor	UNODC	Coverage
	Prevalence of heavy episodic drinking (alcohol per capita consumption)	10% reduction of harmful use of alcohol	WHA resolution	Surveys, other	Fair	Poor	WHO	Coverage (risk factor)
3.6 Reduce deaths and injuries due to road traffic accidents	Number of deaths due to road traffic accidents	50% reduction (to 600,000)	Decade of Action; Partnership on Sustainable, Low Carbon Transport; Decade of Action for Road Safety	CRVS, other	Fair	Poor	WHO	Mortality

3.7 Ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	Adolescent birth rate (10-14, 15-19)		Part of MDG 5B	CRVS, surveys	Good (15-19)	Good	UNFPA, UNPD	Fertility
	Demand satisfied with modern contraceptives	At least 75%	Part of MDG 5B; Global PMNCH Partners Forum Communique 2014	Surveys, facility data	Good	Good	UNFPA, UNPD	Coverage
	Syphilis treatment in pregnant women			Facility data	Fair	Poor		Coverage
	Proportion of abortions that are unsafe				Poor	Poor	WHO, UNFPA: 5 yearly	Coverage
	Knowledge among young people about sexual and reproductive health	At least 95%		Surveys	Fair	Fair	UNFPA	Other
3.8 Achieve UHC, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	Fraction of the population protected against impoverishment by out-of-pocket health expenditures Fraction of households protected from incurring catastrophic out-of-pocket health expenditure	100%	WHO/World Bank Monitoring Framework consultation	Surveys	Fair	Good	World Bank and WHO	Other
	Coverage with a set of tracer interventions	Minimum 80% essential health services coverage among all populations, independent of income, expenditure or wealth, place of residence or sex	WHO/World Bank Monitoring Framework consultation	Surveys, facility data				Coverage

3.9 Substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Population in urban areas exposed to outdoor air pollution levels above WHO guideline values	Reduce air pollution to below WHO guidelines values for particulate matter (PM) 2.5	WHO standard, resolution on reducing air pollution in WHA	Surveys, other

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Background

The UN Technical Support Team has been asked to provide proposed indicators to inform the inter-governmental negotiations in the UN General Assembly. In order to keep this high-level global SDG monitoring indicator framework to a manageable level, the TST has been asked to propose no more than one indicator per target. The aim is to arrive at an overall high-level SDG global monitoring indicator set of no more than 100-120 indicators. If this is achieved, this will mean that approximately one-third of the proposed targets will have no associated indicators in the high-level set. With this in mind, we propose a set of key indicators for the education targets for consideration at the SDG level. In addition, we propose additional or alternative indicators to ensure more comprehensive coverage.

For several of the education targets more than one indicator could be regarded as key. Therefore the most critical and transformative indicator was identified for each target from those which have been proposed as part of a wider set for the thematic monitoring of the post-2015 education agenda. If a critical and transformative indicator is not currently readily available for a large number of countries on a regular basis, additional or alternative indicators have been identified that could be included in the SDG indicator set until such time as the most critical/transformative indicator is available. The proposal is summarised in the following table and each target explained in turn. In the table below, the indicators in the first column are considered key core indicators, those in the second column are additional or alternative indicators to be considered as well.

Explanations and rationale for each of the suggested indicators are provided in the text following the table.

Summary table of proposed education indicators for the post-2015 sustainable development agenda

Target	Proposed indicator	Additional or alternative indicators
	Targets 4.1-4.7	
4.1	Percentage of children who achieve minimum proficiency standards in reading and mathematics at end of: (i) primary (ii) lower secondary*	
	Completion rate (primary, lower secondary, upper secondary) *	Gross intake ratio to the last grade (primary, lower secondary)
		Out-of-school rate (primary, lower secondary)*
4.2	Early Childhood Development Index *	
	Participation rate in organized learning (one year before the official primary entry age)*	Pre-primary education gross enrolment ratio
4.3	Enrolment ratios by level and type of education (TVET and tertiary)*	
4.4	Participation rate in formal and non-formal education and training in the last 12 months among 25-64 year-olds	Percentage of youth/adults who are computer and information literate*
4.5	Parity indices (female/male, urban/rural, bottom/top wealth quintile] for all indicators on this list that can be disaggregated	
4.6	Percentage of youth/adults proficient in literacy and numeracy skills *	Youth/adult literacy rate*
4.7		Percentage of 15- year old students showing proficiency in knowledge of environmental science and geoscience*
		Percentage of 13-year old students endorsing values and attitudes promoting equality, trust and participation in governance*
Means of implementation 4.a-4.c		
4.a	Percentage of schools with access to (i) electricity; (ii) drinking water; and (iii) single-sex sanitation facilities (as per the WASH indicator definitions)	
4.b		Volume of ODA flows for scholarships by sector and type of study
4.c	Percentage of trained teachers by level of education according to national standards	Percentage of qualified teachers by level of education

Note: an asterisk means that, in principle, the indicator can be disaggregated.

For Target 4.7, only alternatives are proposed at this point, as indicators will need to be further developed.

Target 4.1: Primary and secondary education

The key concept in this target is ensuring that every child achieves learning outcomes (i.e., appropriate knowledge and proficiency in relevant skills) appropriate to their age, grade or stage of education. The single most critical indicator for this target is:

- **the percentage of children achieving minimum proficiency in reading and mathematics at the end of primary and lower secondary education**.

More and more countries are taking part in periodic learning assessments of children and young people at specific ages or stages of primary and secondary education of key competencies including reading, mathematics and science. Not all of these learning assessments are conducted using the same methodologies. Consequently, it is not yet possible to compare results across assessments of different types. However, research is already underway to develop a methodology to create a common learning metric which will allow the transformation of results in different assessments (national, regional and international) onto a single common scale, which is likely to be completed within the next three years.

In addition to a measure of learning outcomes, it is necessary to have indicators of completion, in particular:

- **education completion[10] rates of young people [aged 3-5 years above the official ending age for the relevant stage/level] primary, lower and upper secondary education**.

This is an indicator derived from household surveys and is more readily available than learning outcomes indicators for many – though not yet all – countries worldwide.

Also widely available are proxy completion rates (at least for primary and lower secondary education) measured by the **gross intake ratios to the last grades of relevant levels of education**. This indicator can be calculated from administrative sources for both primary and lower secondary general education. The former (i.e., primary) is an existing supplementary MDG indicator. Because of the multiple pathways on offer to learners in upper secondary education, proxy completion rates for that level based on administrative sources are not currently available.

Another important concept to measure in this target is exclusion from education. The following indicator is therefore also recommended:

- **out-of-school rates of young people by level of education** (an indicator widely used for the monitoring of progress towards the EFA goals).

Target 4.2: Early childhood

The key concept in this target is ensuring that every child is given the best opportunity and preparation to begin formal learning at the start of primary school. Because this concept encompasses a range of opportunities, characteristics and behaviours the most critical indicator is a measure of early development and learning such as:

- the **Early Childhood Development Index** captured in UNICEF's Multiple Indicator Cluster Surveys.

However, it is clear that further conceptual and developmental work is required to ensure that such a measure is meaningful – and available – across a wide range of countries including more

[10] These are educational attainment rates of young people measured in household surveys.

developed countries that tend not to take part in surveys such as MICS, which is anticipated to be completed within the next three years.

In addition to a measure of child development, it is necessary to have indicators of participation such as:

- **participation rate in organized learning one year before the official primary school entry age** (some data are available now from administrative sources, with modifications required to household surveys).

As a last resort, an alternative participation indicator is proposed: the **pre-primary gross enrolment ratio**.

Target 4.3: TVET and tertiary

The key concept in this target is ensuring that TVET and tertiary education opportunities are available to all who wish to participate in them, in particular women. While some indicators are available, there are several challenges in accurately capturing diverse programmes in TVET and tertiary education, namely the varying definitions and structures of programmes from one country to the next. The indicator proposed is:

- **enrolment ratios by level and type of education (TVET, tertiary)**.

Target 4.4: Skills for work

The key concept in this target is ensuring that young people and adults have the relevant skills for working life. A critical indicator to measure such a broad range of competencies is not currently available nor in development and may not be available by 2030. Given the paucity of available data, the most accurate indication of preparedness for work is achievement of basic mathematics and literacy skills. Given that literacy and numeracy will be covered under Target 4.6, the most important skill set for which a suitable indicator may become available before 2030 is computer and information literacy. The indicator proposed is therefore:

- **percentage of (a) youth and (b) adults who are computer and information literate**

However, this indicator is as yet not widely available so the recommended indicator is a measure of participation in education and training amongst the adult population:

- **participation rate in formal and non-formal education and training in the last 12 months (25-64 year olds)**.

Target 4.5: Equity

The following proposals measure equity:

- All of the high-level education indicators for the SDGs should be disaggregated by relevant marginalised sub-populations where data are available (eg by sex, location, wealth, disability, ethnicity, those in conflict-affected situations, etc.)
- All of these indicators should also include as a component the relative parity indices of contrasting elements where relevant and available (e.g., gender parity indices, rural-urban parity indices, lowest-highest wealth quintile parity indices etc.)

Target 4.6: Literacy and numeracy

The key concept to measure in this target is proficiency in basic skills – in particular literacy, but also numeracy – which provide all individuals the opportunity to participate in society, thus providing the foundation for leading productive and fulfilling lives. Given the fundamental role that each plays in ensuring equal access and participation in society, the proposal is:

- **percentage of (a) youth and (b) adults proficient in (i) literacy and (ii) numeracy**

although this indicator is still not yet widely available in many countries.

An alternative indicator would be the **adult and youth literacy rates** already widely available for developing countries – though the measure largely distinguishes between those who can read at least a little from those that cannot read at all. The **youth literacy rate** is currently an MDG indicator.

Target 4.7: Global citizenship

The complexity of the concepts behind global citizenship means that global measurement is difficult at this point, and further development of indicators is required. While some questions in existing surveys provide insight into perspectives on citizenship and environmental knowledge, overall, the concept is not yet measurable at the global level. Two indicators are proposed from currently available multi-country assessment studies, with the expectation that more complete measurement of this concept should be pursued in the future:

- **percentage of 15-year old students showing proficiency in knowledge of environmental science and geoscience**;
- **percentage of 13-year old students endorsing values and attitudes promoting equality, trust and participation in governance**.

Target 4.a: School environment

The key concept to measure in this target is the quality of the school environment both in the sense of safety and security, but also in terms of appropriate learning facilities and equipment for learners. Considerable work is required to extend the coverage of current data collections to measure this target completely. In the timescale foreseen for the post-2015 agenda, it is only feasible to focus on certain aspects of the target for the development of measures and therefore the recommendation is that the most critical indicator for this target would therefore be:

- **percentage of schools with access to (i) electricity; (ii) drinking water; and (iii) sanitation**.

Target 4.b: Scholarships

The key concept to measure in this target is: the **number of scholarships awarded for study abroad at the tertiary level**. This target is itself an indicator, but is not currently available at the global level. An appropriate alternative is the expenditure on such scholarships and so the following indicator is proposed:

- **volume of Overseas Development Aid (ODA) flows for scholarships**.

This indicator is currently available from OECD-DAC.

Target 4.c: Teachers

The quality of teaching is undoubtedly a critical element of learning environments, with profound implications for learning achievement. Although exceptional teachers exist who are neither trained nor qualified, from the point of view of managers of an education system, the ideal workforce would be one that is both qualified academically to a high level in the subject(s) they teach and trained in pedagogical techniques and methods. These two key concepts contained in this target are both important – qualified teachers and trained teachers – and therefore proposes two critical indicators:

- **percentage of trained teachers by teaching level of education;**
- **percentage of qualified teachers by teaching level of education**.

If only one indicator is selected, it would be the former indicator, which has been used by the EFA Global Monitoring Report throughout the monitoring of the EFA Goals established at the World Education Forum in Dakar in 2000. Ideally this indicator should be measured relative to common standards on the minimum levels of training required to teach, but may be measured relative to existing national standards.

Goal 5: Achieve gender equality and empower all women and girls

Goal 5.	Achieve gender equality and empower all women and girls
	Overall points: - *Contributions on indicators for this goal: UN Women, UNICEF, UNFPA, OHCHR, UNHCR, World Bank, ILO, UNEP, FAO, UNCTAD, ITC, ITU, UNCDF and UNESCO.* - *The proposals here heavily draw on the minimum set of gender indicators agreed by the Statistical Commission. The set can be found here: http://unstats.un.org/unsd/statcom/doc15/2015-21-GenderStats-E.pdf* - *Data should be disaggregated, to the extent feasible, by all grounds of discrimination prohibited by international human rights law and other factors, including inter alia by sex, age, race, ethnicity, income, location, disability, migrant and displacement status (refugees, internally displaced persons (IDPs), and stateless persons), remote and mobile populations, caste, minorities, indigenous peoples, LGBTI peoples, HIV status, etc.* - *For any further questions please contact Somali Cerise (somali.cerise@unwomen.org) or Sylvia Hordosch (Sylvia.Hordosch@unwomen.org)*

	Target	*Proposed indicator/s*	*Notes*	*Relevance to other targets*
5.1	End all forms of discrimination against all women and girls everywhere	*Priority 1: Whether or not legal frameworks discriminate against women and girls, as identified by the CEDAW committee* *Other suggestions:* *Whether or not inheritance rights discriminate against women and girls* *Number of laws that have at least one discriminatory provision against women and girls*	*This is a new indicator. It would assess whether or not legal frameworks (one law or more) directly discriminate against women and girls. It would be measured and monitored using CEDAW concluding observations.* *In the minimum set of gender indicators (National norm indicator 10).* *The following areas of law can be monitored using the World Bank Women, Business and Law Database: (i) accessing institutions – examining legal capacity; (ii) using property - covering ownership rights; (iii) getting a job – examining working hours, industry restrictions, and retirement and pensionable ages; and (iv) providing incentives to work - covering tax treatment.*	*5c, 10.3, 16b*
5.2	Eliminate all forms of violence against all women and girls in public and private spheres, including trafficking and sexual and other types of exploitation	*Priority 1: Proportion of ever-partnered women and girls (aged 15-49) subjected to physical and/or sexual violence by a current or former intimate partner, in the last 12 months* *Other suggestions:*	*In the minimum set of gender indicators (no. 48) but should be expanded to include women over 49.*	*16.1*

		Proportion of women and girls (aged 15-49) subjected to sexual violence by persons other than an intimate partner, since age 15. *Number of detected victims of trafficking in persons by sex, age and form of exploitation*	*In the minimum set of gender indicators (no. 49) but should be expanded to include women over 49.* *Data from Member States on the total number of detected victims is collected. This information comes from the criminal justice authorities, national focal points on human trafficking, NGOs and International Organizations. A standardized questionnaire and open source information is used (See UNODC Global Report on Trafficking in Persons 2012 and 2014).*	
5.3	Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilations	*Two indicators proposed (equal priority because of two elements in target):* *Percentage of women aged 20-24 who were married or in a union before age 18 (i.e. child marriage)* *Percentage of girls and women aged 15-49 years who have undergone FGM/C, by age group (for relevant countries only)*	*In the minimum set of gender indicators (no. 51) Data on this indicator routinely collected in household surveys, such as Demographic and Health Surveys (DHS) and Multiple Indicators Cluster Surveys (MICS) etc.* *In the minimum set of gender indicators (no. 50). Data on this indicator routinely collected in household surveys, such as Demographic and Health Surveys (DHS) and Multiple Indicators Cluster Surveys (MICS) etc.* *Note: These indicators have been agreed by a range of specialist and expert agencies working on the rights of girls.*	*16.2*

5.4	Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies, and the promotion of shared responsibility within the household and the family as nationally appropriate	*Priority 1: Average weekly hours spent on unpaid domestic and care work, by sex, age and location (for individuals five years and above)* *Other suggestions:* *Proportion of households within 15 minutes of nearest water source* *Proportion of children under primary school age in organized childcare or pre-primary education* *Average weekly time spent on fuelwood/biomass collection, by sex, age and location* *Average weekly time spent in water collection (including waiting time at public supply points), by sex, age and location*	*In the minimum set of gender indicators (no. 1)* *Data on this indicator routinely collected in household surveys, including Living Standard Measurement Surveys (LSMS), Demographic and Health Surveys (DHS), Multiple Indicators Cluster Surveys (MICS) etc.* *Proportion of children under age 3 in formal care is an indicator in the minimum set (no. 16) UNESCO Institute of Statistics collects data on enrolment in pre-primary education*	*1.3, 4.2, 6.1, 7.1, 9.1*

5.5	Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life	*Priority 1: Proportion of seats held by women in local governments* *Other suggestions:* *Proportion of women who have a say in household decisions (for large purchases, their own health and visiting relatives)* *Women's share of managerial positions*	*New indicator, methods and standards currently being discussed and developed by gender and statistical experts.* *Data on this indicator routinely collected in Demographic and Health Surveys (DHS)* *In the minimum set of gender indicators (no. 45)*	*10.2, 16.7*
5.6	Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the ICPD and the Beijing Platform for Action and the outcome documents of their review conferences	*Priority 1: Percentage of women and girls who make decisions about their own sexual and reproductive health and reproductive rights by age, location, income, disability and other characteristics relevant to each country.* *Other suggestions:* *Existence of laws and regulations that guarantee all women and adolescents*	*This indicator measures different dimensions of choice for women/girls either by themselves or jointly with a spouse or partner, including autonomous decisions to go out of the house; to visit friends and family, to go to a health centre; to choose a particular contraceptive method; and to choose other sexual and reproductive health services. Data on most dimensions is routinely collected in different DHS and MICS modules, including modules on access to health, gender equality and women's empowerment.* *Legal frameworks covered by this indicator include laws that explicitly guarantee informed consent, the right to privacy of service users, the right to choose from a range of services, including contraceptive methods without having to seek third party authorization (from the spouse, guardian, parents or others) and in the case of adolescents*	*3.1, 3.7*

		informed choices regarding their sexual and reproductive health and reproductive rights regardless of marital status.	*in accordance with their evolving capacity and level of maturity. Regulations also include the existence of explicit protocols for healthcare workers to provide information and services in accordance with medical ethics and the human rights standards listed above. This is a new indicator which would require methodologies and standards to be developed. It would require mapping and qualitative assessments of legal frameworks conducted by Government Institutions (Ministry of Justice or equivalent) National Human Rights Institutions and UN agencies (OHCHR, UNFPA, UN-Women and WHO).*	
		Existence of an independent judiciary and an independent national human rights institution with the mandate to address human rights violations related to sexual and reproductive health and reproductive rights.	*This indicator measures the existence of state institutions independent from government with the mandate to receive and address complaints on human rights abuses related to SRH and reproductive rights. Baseline of NHRIs institutions with "A" status is already available, but their mandates to address these specific violations would need to be assessed and monitored. The concluding observations by UN Human Rights Treaty Monitoring Bodies and UPR recommendations can be a reliable source of information for this indicator.*	
		To be a nationally defined indicator: Number of cases reported, investigated and adjudicated for by a legal	*Given the significant variations of mandates among legal authorities and the different ways sexual and reproductive health and rights violations are classified and recorded across countries, it will be difficult to ensure comparability of data. Therefore this will be proposed as a national indicator along with concrete guidance for its national adaptation in accordance with international human rights norms and standards. This indicator measures the*	

		authority on issues of discrimination, coercion and violence within the health system, disaggregated by sex, age, economic status and place of residence of the victim and other characteristics relevant to each country	*caseload of human rights violations occurring within sexual and reproductive health facilities including: forced and involuntary sterilization, forced abortion, disrespect and abuse by healthcare providers and denial of services on grounds of age, economic status, gender identity, sexual orientation, disability, ethnic identity or other considerations. Redress is measured based on a formal decision in favour of the complainant adopted by the legal authority that received the complaint. By legal authority, the indicator refers to any state institution with a mandate to receive, investigate and adjudicate for human rights violations, including the judiciary, a national human rights institution, women's commission, and administrative mechanisms at the level of the ministry of health or others. Information will be collected from administrative records of the legal authority to which cases are reported.*	
5.a	Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance, and natural resources in accordance with national laws	*Suggested indicators (no priority, grouped by theme)* ***Land, property:*** *Proportion of adult population owning land, by sex, age and location* *Proportion of people owning their dwelling, by sex, age and location*	*Ownership of land/dwellings captures a narrow aspect of the target. The proposed indicator on land ownership is in the minimum set of gender indicators (no. 12), however there is methodological work currently being undertaken by statistical experts in the Evidence and Data for Gender Equality Initiative (http://genderstats.org/EDGE) to refine the indicators to capture secure access, control and use of assets, including land. We anticipate that the minimum set will be updated once the methodologies have been tested and refined.*	*1.4, 2.3*

		Female land owners out of total land owners	*The indicator has been collected mainly through the LSMS-ISA surveys and to a smaller extent through DHS surveys in collaboration with National Ministries of Statistics.*	
		Whether or not inheritance rights discriminate against women and girls	*In the minimum set of gender indicators (National norm indicator 10)*	
		Percentage of women, men, indigenous peoples and local communities with legally recognized evidence of land tenure, and percentage of them who perceive their land rights are secure	*Recommended global indicator from UNEP expert group meeting on community land and resource rights indicators*	
		The legal framework includes provisions for the promotion of women's rights to land, property and/or productive resources	*The indicator is being collected by FAO through the analysis of the legal and policy framework as part of the Legislation Assessment Tool for gender-equitable land tenure (LAT) of the Gender and Land Rights Database.*	
		Financial services and economic resources:		
		Proportion of population with an account at a formal financial institution, by sex and age	*Data available from Global The Global Findex (World Bank/Gallup)*	
		Percentage of firms owned by women, by size	*In the minimum set of gender indicators (no. 7)*	

		Female-owned SMEs with a loan or line of credit	*Data available from the Enterprise Surveys collected by the World Bank*	
5.b	Enhance the use of enabling technologies, in particular ICT, to promote women's empowerment	*Priority 1: Individuals who own a mobile phone, by sex* *Other suggestions (in order of priority):* *Individuals with ICT skills, by type of skill, by sex* *Learners enrolled at post-secondary level in ICT-related fields (for ISCED levels 4-8), by sex* *Persons employed routinely using the Internet, by sex* *Individuals using the Internet, by sex*	*Existing but new at the international level, data to be collected by ITU from 2015* *Existing, collected by ITU* *Existing, collected by UIS* *Indicator being developed, by UNCTAD* *Existing, collected by ITU, In the minimum set of gender indicators (no. 17)*	*9c*

5.c	Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels	*Priority 1: Indicator to be finalized which will monitor the existence and quality of policies to achieve gender equality* *Other suggestion:* *Percentage of countries with systems to track and make public allocations for gender equality and women's empowerment*	Note: to be provided by UN Women by 13 February Indicator has been developed and tested to monitor the Busan Partnership commitments (2011) as part of the Global Partnership for Effective Development Cooperation	5.1, 10.3, 16b

Goal 6: Ensure availability and sustainable management of water and sanitation for all

This proposal has been prepared by UN-Water with inputs from the TST contributors to the water cluster, in response to the call from the UNSD to provide proposed indicators to inform the UN Statistical Commission and eventually the inter-governmental negotiations in the UN General Assembly.

We have been requested to keep the SDG monitoring indicator framework as manageable as possible, with an eye towards measurability and existing monitoring frameworks, and indicate our priority should more than one indicator be suggested for a target.

Given the inherent complex and inter-related nature of water issues and the composite nature of the current proposed targets under Goal 6, monitoring them through a single indicator per target would not be possible. We therefore propose a set of core indicators for the water targets for consideration at the SDG level. Where possible we have ranked them in order of priority. This set of indicators, provided in the table below, could be seen as the minimum number of indicators needed for monitoring the targets.

In addition, we propose supplemental indicators to ensure more comprehensive coverage, listed in the accompanying excel file. Note that for the supplemental indicators related to targets 6.1 and 6.2 reflect a proposed ladder concept supporting the progressive achievement of the target elements.

The suggested water related indicators have the ability not only to provide the most impact for that target in question, but will also support and impact many of the other goals and targets in the proposed SDG framework (listed under the second tab in the excel file).

Included in this list is a suggestion on the water-related aspects of Target 11.5, dealing with all disasters harmful to cities and their populations. We feel that addressing water-related aspects of disasters is essential, since water-related disasters, such as floods, tsunamis and droughts represent the highest proportion of disasters (including loss of human life and economic aspects) worldwide.

We have also started to consider targets 6a and 6b, and are preliminarily looking at financial support provided for international cooperation and capacity-building on water activities as well as the number of local communities supported in improving water and sanitation management, and will be able to provide further inputs when we get to the broader means of implementation discussion.

At the Expert Group Meeting later this month, UN-Water would be happy to present the outcomes and connectivity of the water indicators to the other goals in the proposed framework, as we feel they represent an excellent case study for how to create measurable,

understandable and cross-cutting indicators. If not possible to give UN-Water a seat at the table, we are happy to coordinate with one of UN-Water's member agencies who will be present at the meeting.

Goal 6. Ensure availability and sustainable management of water and sanitation for all		
Target	Proposed core indicator numbered in order of priority	Definition & Measurability
6.1	1. Percentage of population using safely managed drinking water services	Percentage of population using a basic drinking water source [MDG 'improved' indicator] which is located on premises and available when needed, free of fecal (and priority chemical) contamination and/or regulated by a competent authority. Monitoring Framework in place: Joint Monitoring Programme (WHO/UNICEF)
6.2	1. Percentage of population using safely managed sanitation services	Percentage of population using a basic sanitation facility [MDG 'improved' indicator] which is not shared with other households and where excreta is safely disposed in situ or transported to a designated place for safe disposal or treatment plant Monitoring Framework in place: Joint Monitoring Programme (WHO/UNICEF)
	2. Population with a hand washing facility with soap and water in the household	Percentage of population with a handwashing facility with soap and water in the household Monitoring Framework in place: Joint Monitoring Programme (WHO/UNICEF)
6.3	1. Percentage of waste water safely treated	Composite indicator based on treatment ladders for domestic and industrial waste water. Partial monitoring framework in place (AQUASAT, IBNET, GLAAS): A waste water monitoring protocol is proposed to aggregate best national available data. In the absence of verified national data modelled estimates can be generated using JMP data combined with treatment performance in different population density and income settings.
	1. Percentage of receiving water bodies with ambient water quality not presenting risk to the environment or human health.	A core set of parameters are measured and reported to a central data repository i.e. GEMStat. Total dissolved solids (TDS); Percentage dissolved oxygen (%DO); • Dissolved inorganic nitrogen (DIN); Dissolved inorganic phosphorus (PIN); and • Escherichia coli (EC). A new monitoring framework is needed building on existing monitoring and data resources such as GEMS Water, GEMStat (UNEP), AQUASTAT (FAO), OECD. Measurements would be completed at local laboratories and/or achieved using field measurements on appropriate protocols for sample collection and analysis.

6.4	1. Water Stress	Water Stress (water withdrawal intensity) is the ratio of total water withdrawals to available water (total actual renewable freshwater resources) measured at the scale of the river basin and aggregated to the country and region. The indicator builds on MDG indicator 7.5 by accounting for environmental water requirements and including both groundwater and surface water withdrawals. The indicator can be calculated directly from AQUASTAT estimates (FAO). It is available for 160 countries out of the 200 in the database. The indicator can also be disaggregated to the basin and monthly scale, where data permits. This allows the indicator to be used for comparison across countries as well as to manage water withdrawals at subnational and basin scales. The target for the indicator could be country specific, to reflect differences in climate and national water management goals. Alternatively, uniform targets could be set using existing literature on water stress and water scarcity (e.g. >80% indicates very high stress).
	2. Water Productivity	Water productivity tracks change in water-use efficiency over time for major sectors, including energy, domestic, industrial, and agricultural. Value defined for each sector is divided by water withdrawn or consumed. The indicator can be aggregated to reflect overall change in productivity across sectors or disaggregated to the sector level. The indicator can be calculated using existing datasets including National Accounts Main Aggregates (UNSD), Aquastat (FAO), World Energy Outlook (International Energy Agency), World Bank demographic datasets, and WaterStat Database (Water Footprint Network). Further development of the monitoring framework is needed to integrate these datasets and to fill existing data gaps.
6.5	1. Status of IWRM Implementation	The core indicator is calculated based on responses to national IWRM questionnaires measuring both qualitative and quantitative aspects including: (1) the extent to which an enabling environment for IWRM (policy, strategic planning, legal framework and financing) has been established, (2) the structure and performance of an institutional framework to support IWRM processes, and (3) the degree to which management instruments/tools are applied. Issues relating to gender, governance, ecosystems, capacity and transboundary aspects of water management are included. Results can be easily disaggregated to give a more nuanced picture of status both at national and regional (transboundary) levels. This indicator builds on the approach that was successfully applied to measure the status of IWRM for the Commission on Sustainable Development in both 2008 and 2012 (Rio+20). These previous experiences can serve to provide a baseline for measurement.

	2. Availability of operational arrangements for transboundary basin management	The indicator is defined as the percentage of surface area of those transboundary basins' that have an operational agreement/arrangement or institution for transboundary water cooperation over the total surface area of transboundary basins The cooperation framework being considered "operational" requires that there are regular meetings of the riparian countries to discuss the management of the water resource and to exchange information; Measurability: A global database exists of freshwater treaties and international river basin organisations http://transboundarywater.geo.orst.edu/database/interfreshtreatdata.html and http://www.transboundarywaters.orst.edu/research/RBO/RBO_Database.html as well as several regional ones, e.g. for the Pan-European region the second Assessment under the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes. A global baseline comparative assessment of transboundary waters, including river basins (286) and aquifers, has been undertaken by the Transboundary Waters Assessment Project (TWAP; completed in 2014), involving generation of geo-refernced datasets.
6.6	1. Change in wetlands extent over time (% change over time)	The Change in Wetland Extent uses an existing methodology for data collection and analysis to calculate a global average of change in wetland extent and can be disaggregated geographically and by wetland type. The Ramsar broad definition of "wetland" is used which includes rivers and lakes (enabling three of the biome types mentioned in the target to be assessed - wetlands, rivers, lakes - plus other wetland types). Universal coverage. Monitoring and Reporting Framework in-place: Ramsar Convention through its regular State of the World's Wetlands and their Services reports and is also a sub-indicator for Aichi Biodiversity Target 14 (with reporting mechanism in place for that). The proposed indicator is intelligible, sensitive to drivers and protection and restoration measures, comparable over time, and universally applicable.
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable		
11.5	1. Number of deaths per year resulting from disasters (water related)	Meets the criteria for indicator selection as outlined by IAEG-MDG, namely relevance to the target, methodological sound, measurable, and understandable. At the global level, the core indicator should be able to be disaggregated by disaster type (floods, droughts, tsunamis, earthquakes, landslides etc) and could be disaggregated by income, gender, and age of victims; further disaggregation at national level to include frequency of event and its magnitude. A new monitoring framework is needed drawing on the

		existing monitoring programmes/databases such as EM-DAT (CRED) and Desinventar.

Our ambition has been to keep this note short and to the point. Much more information on the targets, their measurability and how countries could use them to progressively improve on the target achievement is available. We would be happy to furnish the TST with such information if requested.

6 February 2015

For the water cluster,

Joakim Harlin and Lis Mullin Bernhardt (UNDP / UN DESA for UN-Water)
Co-leads for Goal 6

Goal 7: Ensure access to affordable, reliable and sustainable and modern energy for all

SDG #7: Ensure Access to Affordable, Reliable, Sustainable, and Modern Energy for All		
TARGETS	**Proposed Indicators**	**Studies supporting proposal / Comments / Organizations**
7.1.By 2030 ensure universal access to affordable, reliable, and modern energy services	**7.1.1.** *Percentage of population with electricity access (%)*	1) Global tracking Framework 2015: 24 international organizations (SE4ALL, World Bank/ESMAP, IEA, IIASA, UNDP, UNEP, DESA, UNSD, UN-Energy, UNIDO, FAO, UN-Women, IRENA, REN21, WEC, UN Foundation, etc.) 2) Energy Indicators for Sustainable Development: a five agency study (DESA, IAEA, IEA, Eurostat and European Environment Agency). 3)Indicators and Monitoring Framework for SDGs (Sustainable Development Solutions Network).
	Disaggregated by age, sex and location (rural/urban)	UNICEF, UN-WOMEN, ECA, UNIDO
	Percentage decrease of energy deficient population with electricity access, disaggregated by gender and age (%)	UNICEF
	% of rural energy used for productive uses	UNIDO
	% of urban population with access to electricity	UN-Habitat

	7.1.2. *Percentage of population with primary reliance on non-solid fuels (%)*	1) Global tracking Framework 2015: 24 international organizations (SE4ALL, World Bank/ESMAP, IEA, IIASA, UNDP, UNEP, DESA, UNSD, UN-Energy, UNIDO, FAO, UN-Women, IRENA, REN21, WEC, UN Foundation, etc.) 2) Energy Indicators for Sustainable Development: a five agency study (DESA, IAEA, IEA, Eurostat and European Environment Agency).
	Disaggregated by age, gender and location (rural/urban)	UNICEF, UN-WOMEN, WHO
	Average weekly time spent on fuelwood /biomass collection, by sex, age and location	UN-WOMEN, WHO
	Percentage of population with primary reliance on clean fuels and technologies (%)	(WHO) Comments: Clean fuels and technologies as defined by WHO IAQG. WHO's guidelines for indoor air quality: household fuel combustion specifically state that kerosene (a nonsolid fuel) use in the home should be discouraged because of the substantial health and safety risks associated with it (see http://www.who.int/indoorair/guidelines/hhfc/en/)
	Percent of rural population relying on traditional biomass for cooking and heating	ECA
	7.1.3. *Share of household income spent on fuel and electricity (Affordability) (%)*	1) Energy Indicators for Sustainable Development: a five agency study (DESA, IAEA, IEA, Eurostat and the European Environment Agency). 2) World Development Indicators: World Bank
	Disaggregated by gender	UNICEF
	% of energy costs covered by revenues	(UNECE) Comment: Subsidized consumption is a barrier to investment in energy efficiency investment.

	7.1.4. *Number of hours per year affected by energy outages (Reliability)* *Quality of service*	1) World Development Indicators: World Bank. Comments: This indicator is derived from enterprise surveys, which is currently the only systematic reliability indicator available for a large number of countries. Since the enterprise surveys cover many small and medium enterprises that also served by the same electricity grids as households, it is a reasonable proxy for reliability of service to households (UNECE) Comment: a single quality of service indicator, but that it be a composite of several components (technical and commercial).
Comments: Data are available for the proposed indicators related to energy access. Improved access metrics (notably the multi-tier framework of the Global Tracking Framework) are also under development and will eventually be able to provide a more meaningful metric for access, with affordability and reliability dimensions already incorporated.		

7.2 Increase substantially the share of renewable energy in the global energy mix by 2030	*Renewable energy share in the total energy final energy consumption (%)*	1) Global tracking Framework 2015: 24 international organizations (SE4ALL, World Bank/ESMAP, IEA, IIASA, UNDP, UNEP, DESA, UNSD, UN-Energy, UNIDO, FAO, UN-Women, IRENA, REN21, WEC, UN Foundation, etc.) 2) Energy Indicators for Sustainable Development: a five agency study (DESA, IAEA, IEA, Eurostat and the European Environment Agency). 3) Measuring Sustainable Development (Conference of European Statisticians)
	Enabling legislation and framework for renewable energy production established by 2020	ECA
	National Cleaner Production Centers and Networks established by 2020	ECA
	% of industries manufacturing renewable energy technologies	ECA
	Renewable energy share in the total final energy consumption in industry	UNIDO
	Percentage of industries using renewables	UNIDO
	Composite Renewable Energy Use Index built up of sub-indicators measuring its adoption for power generation, and industry	UNIDO
	Number of municipalities with Solar Ordinances/policies / by-law making mandatory use of solar water heaters	UN-Habitat

7.3. Double the global rate of improvement in energy efficiency by 2030	*Rate of improvement in energy intensity (%) measured in terms of primary energy and GDP*	1) Global tracking Framework: 24 international organizations (SE4ALL, World Bank/ESMAP, IEA, IIASA, UNDP, UNEP, DESA, UNSD, UN-Energy, UNIDO, FAO, UN-Women, IRENA, REN21, WEC, UN Foundation, etc.) 2) Energy Indicators for Sustainable Development: a five agency study (DESA, IAEA, IEA, Eurostat and European Environment Agency) 3) Measuring Sustainable Development (Conference of European Statisticians) 4)Indicators and Monitoring Framework for SDGs (Sustainable Development Solutions Network) Comments: GDP in terms of purchasing power parity
	Composite Energy Efficiency Improvement Index built up of sub-indicators measuring transport energy efficiency, industrial energy efficiency, power generation energy efficiency, buildings energy efficiency and agricultural energy efficiency	UNIDO
	Fossil fuel energy directly used in agriculture per hectare of arable land/per unit of value of output/per calorie of food produced (to be normalized by levels of capital stock of machinery per unit of arable land	FAO
	Improved energy efficiency in Agriculture, Industry and Services	ECA
	Average fuel economy of national flee	UNEP
	Number of countries with Building Energy Code/Act; Energy Efficient Building Code/Act; Energy conservation Act.	(UN-Habitat) Comment: Energy/Resource efficient Building Code has the highest potential of saving energy in buildings over a long run.

7.a. By 2030 enhance international cooperation to facilitate access to clean energy research and technologies, including renewable energy, energy efficiency, and advanced and cleaner fossil fuel technologies, and promote investment in energy infrastructure and clean energy technologies		Comments: (Global Tracking Framework) Efforts are underway to try to define indicators for this target. The Global Tracking Framework 2015 team is looking at relevant data to understand the extent to which countries have "access to clean energy technology." In addition to an analysis of trade flows in sustainable energy equipment, the team is looking at deployment or market formation policies, policies facilitating trade such as duty exemptions, and proxies for the capacity of countries to absorb, adjust and implement technological progress including enrolment in engineering and volume/quality of publications.
	Improvement in the net carbon intensity of the energy sector (GHG/TFC in CO2 equivalents).	(UNECE) Comment: "Net" means net of any CCS. TFC instead of TPES to be able to track improvements in transmission and transformation efficiencies.
	Amount of Foreign Direct Investment and Financial transfer for these purposes	IAEA
	% of public expenditure in energy Infrastructure development	ECA
	Percentage of international cooperation projects being implemented to facilitate access to clean energy(% of energy project that are gender mainstreamed; % of energy projects empowering women)	UNIDO
	Percentage of International Development Funds spent on facilitating energy access(gender-disaggregated data: % of funds spent on facilitating energy access to women/ men)	UNIDO

7.b. by 2030 expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, particularly LDCs and SIDS		Comments: (Global Tracking Framework) Efforts are underway to try to define indicators for this target. Specific Data on "upgrades" or "retrofits" are needed (for example, of transmission infrastructure to allow better renewable energy integration). Tracking the expansion of infrastructure is feasible.
	Rate of improvement in energy productivity (the amount of economic output achieved for a given amount of energy consumption).	UNECE
	Percentage of international cooperation projects being implemented to facilitate access to clean energy	UNIDO
	Percentage of International Development Funds spent on facilitating energy access	UNIDO
	Amount of Foreign Direct Investment and Financial transfer for these purposes	IAEA

Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Goal	Target	Proposed Indicators	Source/Monitoring Framework/Comments
Goal 8.	**Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all**		
8.1	sustain per capita economic growth in accordance with national circumstances, and in particular at least 7% per annum GDP growth in the least-developed countries	8.1.1 GDP per capita, PPP 8.1.2 Inclusive Wealth Index	**Comment UNEP** 8.1.1 WDI 8.1.2 UNU-IHDP and UNEP Note: IWI ensures wealth management is key component of economic performance
8.2	achieve higher levels of productivity of economies through diversification, technological upgrading and innovation, including through a focus on high value added and labour-intensive sectors	8.2.1 Growth rate of GDP per employed person 8.2.2 Export diversification in terms of products and markets 8.2.3 Green export (% of total exports) 8.2.4 High-technology exports (% of manufactured exports) 8.2.5 Innovation Ranking in the WIPO-Cornell-INSEAD Global Innovation Index (GII) 8.2.6 Fixed broadband subscriptions 8.2.7 Individuals with ICT skills 8.2.8. Ratio of low and medium-low technology industries' value added to medium-high and high technology industries' value added	**Comment UNEP** 8.2.1 WDI 8.2.3 indicator is being developed by UNEP/ETB **Comment ITC/WTO** 8.2.2 Objective: Inferring a country's level of value addition and level of processing and the degree of diversification of its production from the composition of its export sector, including their participation in services trade. This is a country competitiveness indicator. **Comment WIPO** 8.2.5 The Global Innovation Index (GII) ranks the innovation performance of 143 countries and economies around the world, based on 81 indicators and enables countries to compare overall innovation performance year on year, against other countries and across the different

			metrics used as input. **Comment ITU** 8.2.7, 8.2.8 and 8.2.9: Partnership on Measuring ICT for Development core indicator, endorsed by UNSC and collected by ITU
8.3.	promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage formalization and growth of MSMEs including through access to financial services	8.3.1. Job openings rate (openings as % of employment and openings) and total separations (separations as % of employment) in non-farm establishments 8.3.2. % of MSMEs with a loan or line of credit 8.3.3. % of MSMEs with an account at a formal financial institution 8.3.4. Percentage of SMEs reporting that they are effectively supported by national and international institutions	**Comment ILO** 8.3.1. Proxy to creation/destruction of jobs. These indicators are under development. As it stands it refers to formal sector only and could only be derived from establishment surveys. **Comment WB** Source: 8.3.2 and 8.3.3 – Source: World Bank Enterprise Surveys **Comment ITC** 8.3.4: Gathering SME assessments of the quality of services provided by national and international institutions supporting the private sector or more specifically SMEs. Source: SME Competitiveness Index Survey
8.4	improve progressively through 2030 global resource efficiency in consumption and production, and endeavour to decouple economic growth from environmental degradation in accordance with the 10-year framework of programmes on sustainable consumption and production with	8.4.1 Indicator for national material efficiency (production and consumption approaches) 8.4.2 Sectoral material efficiency	**Comment UNEP** 8.4.1 Either material productivity (GDP per unit of material use; US$/kg) or the inverse measure of material intensity (material use per unit of GDP; kg/US$) using a production approach (with Domestic Material Consumption -DMC) and

	developed countries taking the lead		consumption approach based on the attribution of global materials extraction to final consumption (material footprint). 8.4.2. Material productivity (intensity) of economic sectors (Sector GDP/MF or inverse). This indicator is very important for establishing a direct link between the System of National Accounts and the material flow satellite accounts
8.5	by 2030 achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	8.5.1.Employment to working-age population (15 years and above) ratio by gender and age group, and people with disabilities 8.5.2.Unemployment rate by gender and age-group 8.5.3. Working poverty rate measured at $2 PPP per capita /day (WB) by gender (option: nationally defined poverty lines, ILOSTAT) 8.5.4.Combined rate of unemployment and potential labour force (persons in unemployment+ potential labour force)/ extended labour force, by gender 8.5.5Share of informal employment in total employment by gender 8.5.6 Share of wage employment with incomes (age)	**Comment ILO** Source: ILOSTAT, WB In the case of disabilities additional efforts from countries will be required. Employment, Unemployment, labour force and extended labour force are now defined according to the 19th. ICLS resolution (2013). 8.5.3 Refers to LU3 adopted by 19th.ICLS (Res. I). 8.5.6 In development. The threshold can be one half of the median of incomes (wages) or above the poverty line if the half of the median is lower than the poverty line.

		above the threshold in non-agriculture employment by gender 8.5.7 Ratio of average hourly earnings of female and male employees by occupations (Gender wage gap) 8.5.8.Time-related underutilization by gender and age group	
8.6	by 2020 substantially reduce the proportion of youth not in employment, education or training	8.6.1 Percentage of youth (15-24) not in education, employment or training (NEET) 8.6.2. Youth (15-24) unemployment rate	**Comment ILO** Source: ILOSTAT **Comment UNEP** 8.6.1 WDI
8.7	take immediate and effective measures to secure the prohibition and elimination of the worst forms of child labour, eradicate forced labour, and by 2025 end child labour in all its forms including recruitment and use of child soldiers	8.7.1 Percentage and number of children aged 5-17 years engaged in child labour, per sex and age group (disaggregated by the worst forms of child labour) 8.7.2 Number of people in forced labour 8.7.3. Number of rescued/ rehabilitated child soldiers	**Comment ILO/UNICEF** Household surveys such as MICS and SIMPOC have been collecting data on this indicator in low- and middle-income countries since around 2000. Many countries also produce national labour estimates and reports that often include data on child labour and/or employment among children. Nationally representative and comparable data are available for a large number of low- and middle-income countries.

8.8	protect labour rights and promote safe and secure working environments of all workers, including migrant workers, particularly women migrants, and those in precarious employment	8.8.1. Ratification and implementation of ILO fundamental conventions and relevant international labour and human rights standards 8.8.2. Frequency rates of fatal and non-fatal occupational injuries and time lost due to occupational injuries by gender 8.8.3. Labour migration indicators	**Comment ILO,** Source: ILOSTAT and ILO NORMES 8.8.3 Indicators are being developed and include % of foreign born workers in total employment"
8.9	by 2030 devise and implement policies to promote sustainable tourism which creates jobs, promotes local culture and products	8.9.1. Tourism direct GDP 8.9.2 Tourism consumption 8.9.3 Employment in tourism industries	**Comment UNWTO** Source: UNWTO, based on information collected from the Tourism Satellite Account (TSA) at national and sub-national level combined with an extended version of the System of Environmental-Economic Accounting (SEEA) for Tourism.
8.10	strengthen the capacity of domestic financial institutions to encourage and to expand access to banking, insurance and financial services for all	8.10.1. Getting Credit: Distance to Frontier 8.10.2. Number of commercial bank branches and ATMs per 100,000 adults 8.10.3. % of adults with an account at a formal financial institution 8.10.4. Number of insurance policies per 1,000 adults 8.10.5. Insurance penetration	**Comment ITC** Sources: 8.10.1. World Bank Doing Business 8.10.2. IMF Financial Access Survey 8.10.3. World Bank Global Findex 8.10.4. IMF Financial Access Survey 8.10.5. AXCO Notes: 8.10.1. measures the extent of information

		rate (premium/GDP)	barriers in credit markets 8.10.1 – 5 are adopted by the G20 Global Partnership for Financial Inclusion (GPFI) in the "G20 Financial Inclusion Indicators" **Comment UNCDF** 8.10.2 Rationale: People and businesses need access to financial services that are safe, reliable, and convenient. The high costs of providing these services, particularly to those living and working in more remote areas or for those whose transaction values are low, have led to limited access. New technologies and delivery channels are lowering costs and bringing timely and appropriate services to even more people, but require the institutions providing or partnering to provide services to have the capability to design and deliver these services.
8.a	increase Aid for Trade support for developing countries, particularly LDCs, including through the Enhanced Integrated Framework for LDCs	8.a.1 Evolution in Aid for Trade Commitments and Disbursements	**Comment ITC/WTO** Source: OECD, Credit Reporting System
8.b	by 2020 develop and operationalize a global strategy for youth employment and implement the ILO Global Jobs Pact	8.b.1.Total government spending in social protection and employment programmes as percentage of the national budgets and GDP	**Comment ILO:** Source: ILO, OECD, WB, IMF databases

Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Target	Indicator	Source/Remarks
9.1. Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	Resilient economic infrastructure: 9.1.1. Percentage share of people employed in business infrastructure (consultancy, accounting, IT and other business services) in total employment	9.1.1. Disaggregated by sex.
	Regional and trans-border infrastructure: 9.1.2. Transport by air, road and rail (million of passengers and ton-km and % population with access to all season road) 9.1.3. Container port traffic (number of TEU - twenty-foot equivalent unit) 9.1.4. Number of hours spent in land border crossings and inter-modal connectivity	9.1.2. Disaggregate data by sex, age, and location (urban/rural), where applicable. Source: World Bank (http://lpi.worldbank.org/) 9.1.3. Source: World Bank (http://lpi.worldbank.org/)
9.2. Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries	Manufacturing value added (MVA): 9.2.1. MVA (share in GDP, per capita, % growth)	9.2.1. Disaggregated by sub-sector. Source: UNIDO Statistical Database
	Manufacturing employment: 9.2.2. Manufacturing employment (share of total employment and % growth)	9.2.2. Disaggregated by gender and sub-sector. Source: UNIDO Statistical Database
9.3. Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets	Access of SMEs to markets: 9.3.1. Percentage share of (M) small scale industries' value added in total industry value added	9.3.1. Disaggregated by sub-sector. Source: UNIDO Statistical Database
	Access of SMEs to financial services: 9.3.2. % of (M)SMEs with a loan or line of credit 9.3.3. Percentage share of small scale industries' credit in total industry credit	Sources: 9.3.2. World Bank Enterprise Surveys ("Micro" may not be available for all countries); adopted as indicators under the G20 Global Partnership for Financial Inclusion. Disaggregated by sector. 9.b.2. Getting Credit: Distance to Frontier indicator which measures the extent of information barriers in credit markets could also contribute here. Disaggregated by sector.

9.4. By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	Resource intensity in production: 9.4.1 Intensity of material use per unit of value added (international dollars) 9.4.2. Energy intensity per unit of value added (international dollars)	Disaggregated by sub-sector This indicator is also suggested under 8.4.1. and in relation to SDG 12 indicators Material and energy could be combined into a single ratio of resource intensity but it would be too aggregate.
	Emission in industrial production: 9.4.2 GHG (CO_2)-emission per unit of value added	Disaggregated by sub-sector GHG is preferable but CO_2 is easier in terms of data availability and method of estimation.
9.5. Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and increasing the number of research and development workers per 1 million people by [x] per cent and public and private research and development spending	Research and development: 9.5.1. Research and development expenditure and employment	R&D expenditure to be measured as percentage share of GDP/public-private share; R&D employment to be measured as R&D workers (per 1 million people) disaggregated by gender, sub-sector, researchers, technicians, and support staff Available in National Statistical Offices (NSOs) and can be compiled by UNIDO.
	Technological progress: 9.5.2. Percentage share of medium and high-tech industry value added in total value added	9.5.2. Source UNIDO Statistical Database
	Innovative capacity: 9.5.3. Percentage share of the value added of new products in total value added 9.5.4. Global Innovation Index	9.5.3. Source: UNIDO Statistical Database 9.5.4. The Global Innovation Index (GII) ranks the innovation performance of 143 countries and economies around the world, based on 81 indicators. The GII is co-published by WIPO, Cornell University and INSEAD (http://www.wipo.int/econ_stat/en/economics/gii/) The GII enables countries to compare overall innovation performance year on year, against other countries and across the different metrics used as input.
9.a. Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries and small island development states	Infrastructure loans: 9.a.1. Annual credit flow to infrastructure projects (in International Dollar) 9.a.2. Percentage share of infrastructure loans in total loans	
	Technology transfer expenditure: 9.a.3. Aggregate value of technology transfer mechanisms for infrastructure development (in International Dollar, % of GDP)	

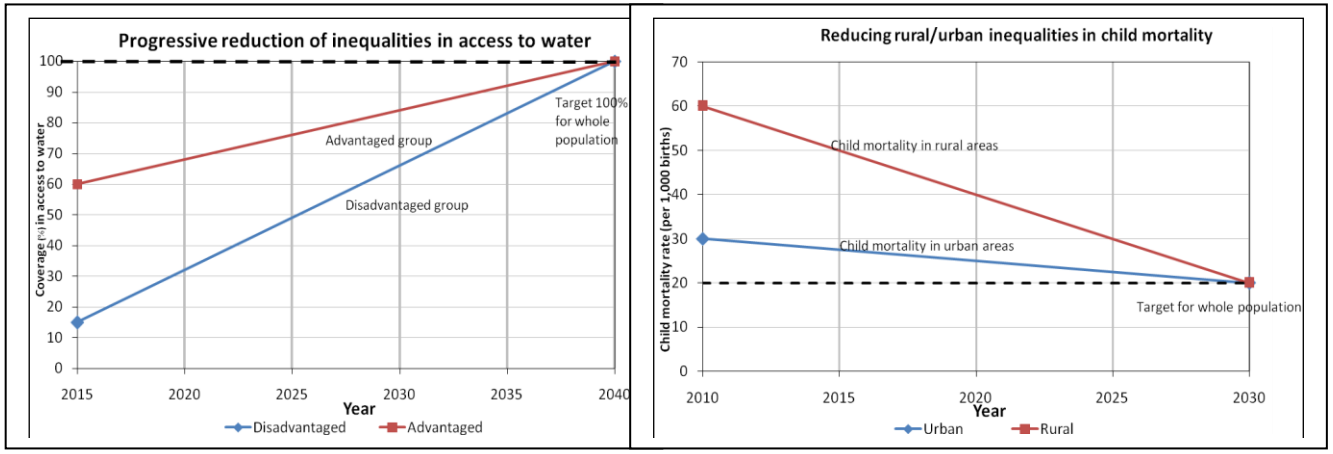
9.b. Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities	Support expenditure for technology and innovation: 9.b.1. Aggregate value of all support mechanisms for technology and innovation (in International Dollar, % of GDP)	Global Innovation Index (GII) among others
	Conducive policy environment for diversification: 9.b.2. Aggregate value of expenditure on diversification and value addition policy related instruments and mechanisms (in International Dollar; % of GDP)	
9.c. Significantly increase access to information and communication technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020	Access to information and communication technology: 9.c.1.Fixed and Mobile broadband quality measured by mean download speed 9.c.2. Subscription to mobile cellular and/or fixed broad band internet (per household/100 people) 9.c.3. Fixed broadband internet prices	c.2. Disaggregated by individuals (sex, age, and location rural/urban) and business Sources: Partnership on Measuring ICT for Development core indicator, endorsed by UNSC and collected by ITU

Goal 10: Reduce inequality within and among countries

Cross-cutting aspects:

Disaggregation of data: Member States have indicated on numerous occasions including in the Open Working Group deliberations and final report that no target should be considered achieved unless met for all population sub-groups so that no one is left behind. Therefore progressive disaggregation of data in order to enable such monitoring will be essential. This is a cross-cutting issue for all goals and targets, not only goal area 10. Aggregate and average statistics are insufficient for understanding the impacts of development on different social groups, so data should be disaggregated to reveal the situation of different groups and the inequalities between them. ***Data should be disaggregated, to the extent feasible, by all grounds of discrimination prohibited by international human rights law, including *inter alia* by sex, age, race, ethnicity, income, location, disability, migrant and displacement status (refugees, internally displaced persons (IDPs)), stateless persons, remote and mobile populations and other grounds (e.g. caste, minorities, indigenous peoples, LGBTI peoples, HIV status, sex workers, marital status, etc.).** There is a need for a 'data revolution' for data disaggregation to capture the situation of the most disadvantaged groups and the groups affected by discrimination, including multiple and intersecting forms of discrimination. SDG data collection should capture not only national average or aggregate statistics, but also the situation of the most disadvantaged or deprived, as well as the inequalities between social groups.

Monitoring the progressive reduction of inequalities over time in the monitoring and accountability framework: Collecting disaggregated data will provide useful information on the gaps between social groups, and to ensure that the most disadvantaged are not "left behind" or "left until last", or "left out altogether" from SDG progress. Reaching universal (zero or 100%) or absolute targets for all social groups will require paying special attention to the most disadvantaged groups to ensure that they progress faster than other groups so that they catch up. This requires closing the gaps and reducing inequalities between social groups (including inequalities in opportunities and inequalities of outcomes). Where universal or 'zero' targets (e.g. 100% access to improved water sources for all groups) are inappropriate, targets should be set at a level just above the highest level achieved for the most well-off group with the aim of achieving that level for all groups (e.g. as in the graph on child mortality below). This would ensure progress through *levelling up*, rather than *levelling down*. Many tools and methodologies are available to measure progress (using data that shows averages, deprivation and inequality perspectives). In the Post-2015 context, it would be useful to measure whether the rate of progress to achieve the target is on track for different social groups at interim periods e.g. 2015, 2020, 2025 - as the graphs below show. This would help to ensure that inequalities are being reduced and progress is being achieved for all social groups.



NB Each indicator highlighted in yellow has been accorded the highest priority, but other indicators remain on the list as indicative suggestions.

TARGET	INDICATOR	INDICATOR TYPE, eg. structural, composite, process, outcome.	AVAILABLE DATASETS: EXISTING / DEVELOPING	TYPE OF DATASET(S), eg: administrative statistics, expert reviews, population surveys (including census, sample household surveys, population-based and specialised surveys).	OTHER INFORMATION	Useful for other targets
10.1 by 2030 progressively achieve and sustain income growth of the bottom 40% of the population at a rate higher than the national average.	Measure income inequality using the ~~Gini coefficient or~~ Palma ratio, pre- and post-social transfers/tax, at global, regional and national level disaggregated by groups as defined above*	Outcome	The Standardized World Income Inequality Database http://myweb.uiowa.edu/fsolt/swiid/swiid.html OECD; http://www.oecdbetterlifeindex.org/topics/income/ D-S: http://www.worldbank.org/research/growth/dddeisqu.htm. WorldYD: http://www.worldbank.org/research/inequality/data.htm WIDER: http://www.wider.unu.edu/wiid/wiid.htm European data: http://www.worldbank.org/research/inequality/data.htm	• Population surveys, household surveys, national administrative data, CPI data • World Development Indicators database. • UNICEF MICS	Assessing the income growth of the bottom 40% does not fully capture income inequality. It would be more useful to compare disposable income for all quintiles, and/or to use the Gini or the Palma ratio to measure inequality. http://www.cgdev.org/blog/palma-vs-gini-measuring-post-2015-inequality Inequality Matters: Report on the World Social Situation 2013 http://www.un.org/esa/socdev/documents/reports/InequalityMatters.pdf	1.1, 1.2

	Change in real disposable income and consumption by quintiles over time, at global, regional and national level.	Outcome	As above	As above	As above	Goal 1,
10.2 by 2030 empower and promote the social, economic and political inclusion of all irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.	Measure the progressive reduction of inequality gaps over time, disaggregated by groups as defined above*, for selected social, economic, political and environmental SDG targets (at least one target per goal where relevant should be monitored using this approach). **For example**, this approach could be applied to the following indicators: 1.2 and 1.3 - poverty reduction and access to social protection 1.4 equal rights to economic resources 2.2 ending malnutrition 2.3 secure and equal access to land 3.3 end communicable diseases 3.7 and 5.6 access to sexual and reproductive health (3.7) and reproductive rights (5.6) 4.1 completion of primary and secondary education 5.5 women's full and effective participation 6.1 and 6.2 access to water and sanitation 7.1 access to energy 8.5 full and productive employment 9.1 access to infrastructure 9.c access to ICT and affordable access to internet	Outcome	This approach will use disaggregated data from a range of sources, depending on the indicator selected. It will require measuring the gaps between social groups at interim time periods between 2015 and 2030 to assess whether gaps between groups are decreasing over time, as a proxy for greater inclusion of more marginalized groups.	• Population survey, administrative data - available but not currently compiled • Disaggregated outcomes for key SDG indicators	An alternative approach could be to use composite indices that collect data on inclusion across various dimensions e.g. Human Development Index Women's Empowerment in Agriculture Index African Gender and Development Index	1

	11.1 access to housing 16.7 inclusive and participatory decision-making					
	Proportion of people living below 50% of median income	Outcome	World Bank	• World Bank databases, UNICEF MICS	This is a measure of economic inclusion Relative poverty serves as a useful proxy for social exclusion/inclusion – and this poverty indicator has not been proposed in Goal 1, but is very applicable to inequality.	
	Proportion of seats held by relevant social groups in local governments	Outcome	Methodologies and standards being developed currently	Administrative statistics	This is a measure of political inclusion	5.5
	# of states that allow refugees to work compared to the baseline in 2015.					
	# of states that allow refugees freedom of movement compared to the baseline in 2015.					
	# of states that allow refugees to access basic services on an equal basis with host population compared to the baseline in 2015.					
	Persons with an account at a formal financial institution disaggregated by wealth quintile, sex, age, location and education level		Adults with an account at a formal financial institution, bottom 20% (Global Findex) Women with an account at a formal financial institution			

			(Global Findex) Youth and adults with an account at a formal financial institution by age (18-24, 25-64, 65+) (Global Findex) Adults with an account by rural/urban residence (Global Findex) Adults with an account by education level (primary, secondary, tertiary) (Global Findex)			
	Account used to receive government payments		http://datatopics.worldbank.org/financialinclusion/topic/income			
10.3 ensure equal opportunity and reduce inequalities of outcome, including through eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and	To measure inequalities of outcome between social groups, use a measure of horizontal inequality, measuring inequalities of outcomes between groups as defined above*, and compared to the national average, for selected variables/key SDG indicators. This formula could be used: $I = \sqrt{\frac{\sum_{k=0}^{n}(V_k - V)^2 \frac{P_k}{P}}{V}}$ where *I* = Inequality measure			World Bank databases, UNICEF MICS	On measuring horizontal inequalities, see also http://www.qeh.ox.ac.uk/pdf/pdf-research/crise-ov4	

actions in this regard.	V_k = Value of indicator within subset k (defined by region, income, social group) V = National mean of indicator P_k = Population in subset k (defined by region, income, social group) P = National population					
	To measure the elimination of discrimination, use an indicator: Percentage of population reporting perceived existence of discrimination based on all grounds of discrimination prohibited by international human rights law	Process	Data available	• Eurobarometer: http://ec.europa.eu/public_opinion/archives/ebs/ebs_393_en.pdf	Other perception surveys e.g. Gallup World Poll	
	Existence of an independent body responsible for promoting and protecting the right to non-discrimination	Structural		• Administrative data – e.g. existence of Equality Commission • International coordinating committee NHRIs (ICC): http://www.ohchr.org/Documents/Countries/NHRI/Chart_Status_NIs.pdf • OHCHR http://www.ohchr.org/Documents/Issues/HRIndicators/NHRI_May2014_map.pdf		
	Whether or not legal frameworks discriminate against particular groups	Structural	Universal Periodic Review and Treaty	OHCHR, UN Women, UNEP collect information		5.1, 5c and 16b

	as defined above*, as identified by the UN human rights and environmental treaty bodies (monitored using concluding observations)		bodies concluding observations	on treaty monitoring		
	Number of discriminatory laws repealed, including laws that discriminate against particular groups as defined above*,	Process	Universal Periodic Review and Treaty Bodies' concluding observations			5.1, 5c, 56 and 16 b
	Existence of domestic laws, policies, and specific budget lines, providing special temporary measures for the social, economic and political inclusion of groups as defined above* and for implementing non-discrimination and providing accessible procedures for redress and remedy	Structural		• Administrative data – • Available - OHCHR Anti-Discrimination Database,http://adsdatabase.ohchr.org/SitePages/Anti-discrimination%20database.aspx		
	Reported number of victims of direct and indirect discrimination and hate crimes to a legal authority	Outcome		• ILO survey on discrimination at work • Data on hate crimes available in some countries • National Human Rights Institutions		
	Number of children that feel protected, cared for and included in their society.	Process		Perception survey		16.7
	# of states that allow women to confer nationality to their children on an equal basis as men compared to the					

	baseline in 2015.					
	# of states that allow women to acquire, change, and retain their nationality on an equal basis as men compared to the baseline in 2015.					
	# of states that allow refugees to work compared to the baseline in 2015.					
	% of IDPs who have access to effective mechanisms to restore housing, land, and property compared to the baseline in 2015.					
	% of refugee returnees who have access to effective mechanisms to restore housing, land, and property compared to the baseline in 2015.					
10.4 adopt policies especially fiscal, wage, and social protection policies and progressively achieve greater equality.	% of people covered by minimum social protection floor, that include basic education and health packages, by age, sex, economic status, origin, place of residence, disability, and civil status (widows, partners in union outside of marriage, divorced spouses, orphan children) and other characteristics of relevance for each country	Outcome	Available for existing administrative data systems	ILO database		
	Measure functional distribution of income by indicator: Wage share in GDP at factor cost. The target would be to increase this share, as it has been falling globally and in most developed and developing countries. (see links)	Structural	Available from existing national accounts data - these data are collected from national statistical agencies internationally by the OECD and the World	National accounts	UNCTAD Post-2015 Policy Brief No. 2, "Growth and Poverty Reduction: Why addressing inequality matters" http://unctad.org/en/PublicationsLibrary/pres	10.4,

			Bank		spb2013d4_en.pdf UNCTAD Trade and Development Report 2012 http://unctad.org/en/PublicationChapters/tdr2012ch3_en.pdf	
	Progressivity of tax and social expenditures e.g. Proportion of tax contributions from bottom 40%, Proportion of social spending going to bottom 40%					
	Average real wage index compared to productivity	Outcome	ILO Databases			
	Gap in wages for equal work on the basis of sex, age, origin and other characteristics of relevance for each country	Outcome	In the Minimum Set of Gender Indicators (indicator 13)	Labour market surveys		1.3
	Old age pension recipient ratio, by groups as defined above*	Outcome	ILO	Household surveys		
	Minimum wage as % of the median wages	Outcome	ILO Databases			
	Social protection expenditure as % of GDP	Process	ILO Databases			
	Existence of laws and policies that recognize and address unpaid care work; promote parental leave including paternity leave	Structural				
10.5 improve regulation and monitoring of	Adoption of a financial transaction tax (Tobin tax) at a world level					

global financial markets and institutions and strengthen implementation of such regulations.						
10.6 ensure enhanced representation and voice of developing countries in decision making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions.	Percentage of voting rights in international organizations of developing countries, compared to population or GDP as appropriate					
10.7 facilitate orderly, safe, regular and responsible migration and mobility of people, including through implementation of planned and well-managed	Index on Human Mobility Governance measuring key features of good-governance of migration. (ex. International migration policy, portability of rights, mutual recognition of skills and qualifications, migrant fatalities)	Composite	Numerous existing indexes on thematic issues (e.g. integration and labour migr) or indexes covering migr pol horizontally by regions (Europe and OECD). Global forum on Migration and Development	1) Survey based	Among strands of migration policy to monitor within such a composite index foremost will be Human rights of migrants, (including issues such as number of migrant fatalities or injuries or victims of crime while attempting	Also useful for OWG SDG targets: 8.8, 11.5, 13.b, 16.2, 17.3, 17.18

migration policies.			dialogue on sets of best-practises on migration governance, from 2006 – on-going. "Migration Governance Framework" launched by IOM in 2014. "Mobility profiles" existing for over 50 countries Several agencies developing the indicators, GMG, IOM, ILO, WB,UNPD		to cross maritime, land, air borders). Other strands of migration policy to monitor will be Human mobility (for instance the proportion of undocumented migrants who have managed to regularize their migration status); Socio- economic outcomes; Mitigating risks; Partnerships (for instance the proportion of bilateral and multilateral agreements on migration that provide for human rights safeguards).	
	Number of migrants killed, injured or victims of crime while attempting to cross maritime, land, air borders	Outcome	IOM and others: http://www.iom.int/files/live/sites/iom/files/pbn/docs/behind-numbers.html			
	Proportion of bilateral and multilateral agreements on migration that provide for human rights safeguards	Structural	OHCHR			
	Recruitment costs less than one-month wage for low-skilled migrants. Visa (sponsor) costs borne by employee	Process		Dataset based on migrants Surveys.	The Global Knowledge Partnership on Migration and Development (KNOMAD) of the World Bank has implemented data	SDG: targets 8.8

					collection through conducting surveys to assess the recruitment costs in several corridors Agreed by a core group of GMG members (IOM, UNDESA, World Bank)	
	Proportion of undocumented migrants who have managed to regularize their migration status.	Process	Administrative data			
10.a implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with WTO agreements.	Degree of utilization and of implementation of SDT measures in favour of LDCs List of government actions (by LDCs) that can be covered under the S&D of the WTO agreements, with a view to measuring the "policy space" available to them	Process	These data are collected by UNCTAD from national sources and WTO sources	Expert reviews	UNCTAD Policy Issues in International Trade and Commodities Research Study Series (forthcoming in 2015), McLaren, A., "Policy space in agricultural market Abstract: Under the WTO Agreement on Agriculture, bound tariff rates may limit countries' policy flexibility, or policy space. This paper quantitatively assesses the availability and the use of this policy space in agricultural markets.	17.10, 17.11, 17.12
	Proportion of total developed country imports from developing countries and least developed countries, admitted free of duty. (MDG Indicator 8.6)	Process	MDG indicators for which ITC has been collecting data and can continue to do so.			

	Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries (MDG Indicator 8.7)	Process	MDG indicators for which ITC has been collecting data and can continue to do so.			
	Share of tariff lines applied to imports from LDCs/developing countries with zero-tariff	Process	Computed with data from TRAINS-UNCTAD		The goal is a pending issue in the Doha Round, which is not concluded. Some countries may oppose this target	17.10
	Utilization rate of the Generalized System of Preferences (GSP) defined as the share of imports from LDCs entering under GSP instead of MFN	Process	Computed in part with data from COMTRADE, but countries need to report the amount of imports under GSP. Some of the countries report this, such as the US		Sometimes strict rules of origin (i.e the set of rules that defines whether a good has undergone sufficient transformation and is deemed originating) negate the benefits of GSP	
	Services Trade Restrictions Database The database covers 103 countries that represent all regions and income groups of the world. For each country, five major services sectors are covered that encompass a total of 19 subsectors Each subsector in turn covers the most relevant modes of supplying the respective services, yielding overall 34 country-subsector-mode combinations: Mode 1: financial services, transportation and professional services Mode 3: all subsectors Mode 4: professional services	Process	Available from http://iresearch.worldbank.org/servicetrade/aboutData.htm	Data from surveys based upon each country's objective legislative information, augmented with information on implementation of regulatory measures as applicable. Information on cross-border air transportation policies comes from WTO's QUASAR database.	The Eight WTO Ministerial Conference in 2011 adopted a waiver, enabling WTO members to provide preferential treatment to services and service suppliers of LDCs. The services sector has become a key driver of growth and development, accounting for 47 percent of all LDCs' overall GDP in 2011. However compared with the value of world services trade, LDC services trade is still marginal. Hence, over the coming years, the waiver can provide significant opportunities to further enhance the	17.10-17.11

					growth of service sectors in LDCs	
10.b encourage ODA and financial flows, including foreign direct investment, to states where the need is greatest, in particular LDCs, African countries, SIDS, and LLDCs, in accordance with their national plans and programmes.	FDI inflows as a share of GDP to developing countries, broken down by group (LDCs, African countries, SIDS, LLDCS) and by source country..	Structural	Existing data at national level calculated from national accounts, this data is collected at international level by UNCTAD. Data quality varies country-by-country, but is improving, and will continue to improve with increased statistical capacity building support on investment statistics from international agencies, such as UNCTAD.	Administrative statistics	UNCTAD Global investment trends monitor http://unctad.org/en/Pages/DIAE/Research%20on%20FDI%20and%20TNCs/Global-Investment-Trends-Monitor.aspx UNCTAD World Investment Report 2014 http://unctad.org/en/pages/publicationwebflyer.aspx?publicationid=937 UNCTAD LDC Report http://unctad.org/en/pages/aldc/Least%20Developed%20Countries/The-Least-Developed-Countries-Report.aspx UNCTAD Economic Development in Africa Report 2014: Catalyzing Investment for Transformative Growth in Africa http://unctad.org/en/PublicationsLibrary/aldcafrica2014_en.pdf	17.3, 17.5, 17.18

	OECD ODA data, disaggregated by recipient and donor countries Other non-ODA official flows, disaggregated by recipient and donor countries Private resources mobilized, disaggregated by recipient countries, and disaggregated by FDI vs. portfolio investments				It will be important to track the amount leveraged by each source of finance. While difficult, it will be important for tracking the actual impact of each type of resource mobilized. Fragile and Conflict States (FCS) is an important country grouping whose flows should be specifically monitored. Consider also adding MICs (delineated by UMICs and LMICs) as a country grouping. There are challenges with data and monitoring. The plan to extend tracking of financial flows beyond official flows to also include private flows presents a challenge. Tracking of financial flows is conducted by several agencies, including UNCTAD, OECD, World Bank,	

					IMF, which makes it difficult to consolidate all available data. Government data is sometimes available but often problematic.	
10.c by 2030, reduce to less than 3% the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5%	Percentage of remittances spent as transfer cost less than 3%	Outcome	Remittance price database http://remittanceprices.worldbank.org/en	Survey based, mystery shopping	This target or something more elaborate is likely to become an indicator for OWG SDG target 17.3, cf. first elements for the FfD conf here It is not clear what "eliminate remittances corridors" mean. Transaction costs should also include exchange rate "penalties" remittances companies impose.	

Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

Indicator Compilation Exercise Organized by Target	Minor technical changes to text of target	Recommended Indicator/s	Data Source	Indicator Source
11.1 by 2030, ensure access for all to adequate, safe and affordable housing and basic services, and upgrade slums	Minor change of target text to '**including upgrading** slums'; existing text is technically tautologial since access to housing and basic services are major components of slum upgrading.	**Percentage of urban population living in slums or informal settlements**	Household surveys	MDGs, City Prosperity Index and SDSN; supported by UNFPA, UN-Habitat, UNU, UNEP, African Centre for Cities, Cities Alliance Secretariat, Columbia University, Communitas Coalition, ICLEI, Ecological Sequestration Trust, IIHS, IIED, Mistra Urban Futures, The New School University, Penn Institute for Urban Research, Pereira Passos Institute, Royal Holloway University, SDI, Stockholm Resilience Centre, SDSN, Tellus Institute, UCLG, University of Ghana, UCCRN, WIEGO and WUC
		Secondary indicator: proportion of population that spends more than 30% of its income on accommodation		SDSN
11.2 by 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and	Minor addition to target text so that it reads 'notably by expanding public **and nonmotorized** transport', to correct the omission of this critical element of mobility.	**Percentage of people living within 0.5 km of public transit [running at least every 20 minutes] in cities with more than 500,000 inhabitants**	Administrative data	Supported by ITDP, UNU, UNEP, African Centre for Cities, Cities Alliance Secretariat, Columbia University, Communitas Coalition, ICLEI, Ecological Sequestration Trust, IIHS, IIED, Mistra Urban Futures, The New School University, Penn Institute for Urban Research, Pereira Passos Institute, Royal Holloway University, SDI, Stockholm Resilience Centre, SDSN, Tellus Institute, UCLG, University of Ghana, UCCRN, WIEGO and WUC

older persons		Secondary indicators: km of high capacity (BRT, light rail, metro) public transport per person for cities with more than 500,000 inhabitants; trips on public transit as a proportion of total trips, motorized and nonmotorized; share of income spent by urban households on transport (by income quintile)		City Prosperity Index
11.3 by 2030 enhance inclusive and sustainable urbanization and capacities for participatory, integrated and sustainable human settlement planning and management in all countries	Addition to text as follows: 'by 2030, **achieve more efficient land use and** inclusive and sustainable urbanization **by** enhanc**ing**' and correct the technical deficiency of this target by providing an explicit outcome.	**Ratio of land consumption rate to population growth rate at comparable scale**	Satellite imagery and census data	City Prosperity Index and SDSN; supported by UN-Habitat, UNU, UNEP, African Centre for Cities, Cities Alliance Secretariat, Columbia University, Communitas Coalition, ICLEI, Ecological Sequestration Trust, IIHS, IIED, Mistra Urban Futures, The New School University, Penn Institute for Urban Research, Pereira Passos Institute, Royal Holloway University, SDI, Stockholm Resilience Centre, SDSN, Tellus Institute, UCLG, University of Ghana, UCCRN, WIEGO and WUC
		Secondary indicators: cities with more than 100,000 inhabitants that implement urban and regional development plans integrating population projections and resource needs; street connectivity; proportion of urban land with mixed use		City Prosperity Index
11.4 strengthen efforts to protect and safeguard the world's cultural and natural heritage		**Percentage of budget provided for maintaining cultural and natural heritage**	Municipal data and heritage office records	ICLEI; supported by UN-Habitat and UNEP

		Secondary indicators: Percentage of urban area and percentage of historical/cultural sites accorded protected status		Mistra Urban Futures
11.5 by 2030 significantly reduce the number of deaths and the number of affected people and decrease by y% the economic losses relative to GDP caused by disasters, including water-related disasters, with the focus on protecting the poor and people in vulnerable situations		**Number of people killed, injured, displaced, evacuated, relocated or otherwise affected by disasters**	HFA reporting	OCHA; supported by IOM, ISDR, UNEP and UN-Habitat
		Secondary indicators: number of housing units damaged and destroyed; number of per capita workdays missed due to disasters		OCHA; UNEP
11.6 by 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management	Minor addition to target text so that it reads 'paying special attention to **biodiversity loss,** air quality...', to correct the omission of this critical element of the urban environment.	**Percentage of urban solid waste regularly collected and recycled (disaggregated by E-waste and non-E-waste)**	Municipal bodies and/or private contractors (for formal solid waste collection and management), NGOs and community organizations (for informal collection and management), UNU (for E-waste)	City Prosperity Index and SDSN; supported by UN-Habitat, UNU, UNEP, African Centre for Cities, Cities Alliance Secretariat, Columbia University, Communitas Coalition, ICLEI, Ecological Sequestration Trust, IIHS, IIED, Mistra Urban Futures, The New School University, Penn Institute for Urban Research, Pereira Passos Institute, Royal Holloway University, SDI, Stockholm Resilience Centre, SDSN, Tellus Institute, UCLG, University of Ghana, UCCRN, WIEGO and WUC
		Secondary indicator: level of ambient particulate matter (PM 10 and PM 2.5)		UNEP
11.7 by 2030, provide universal access to safe, inclusive and accessible, green and public spaces, particularly for women and children, older persons and persons with disabilities	Minor addition to target text so that it reads 'green and **multipurpose** public space', to correct the omission of this critical dimension of inclusive public space.	**Area of public space as a proportion of total city space**	Satellite imagery and local official maps (most municipalities have legal documents delineating publicly owned land); US Geological Survey/NASA	City Prosperity Index; supported by UN-Habitat, UNU, UNEP, African Centre for Cities, Cities Alliance Secretariat, Columbia University, Communitas Coalition, ICLEI, Ecological Sequestration Trust, IIHS, IIED, Mistra Urban Futures, The New School University, Penn Institute for Urban Research, Pereira Passos Institute, Royal Holloway

			Landsat data; European Community's Joint Research Center Global Human Settlement Layer.	University, SDI, Stockholm Resilience Centre, SDSN, Tellus Institute, UCLG, University of Ghana, UCCRN, WIEGO and WUC
		Secondary indicator: proportion of residents within 0.5 km of accessible green and public space		City Prosperity Index; SDSN
11.a support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning		**Cities with more than 100,000 inhabitants that implement urban and regional development plans integrating population projections and resource needs**		UNFPA, UN-Habitat and UNEP
		Secondary indicator: ratio of land consumption rate to population growth rate at comparable scale		
11.b by 2020, increase by x% the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, develop and implement in line with the forthcoming Hyogo Framework holistic disaster risk management at all levels		**Percent of cities with more than 100,000 inhabitants that are implementing risk reduction and resilience strategies aligned with accepted international frameworks (such as the successor to the Hyogo Framework for Action on Disaster Risk Reduction) that include vulnerable and marginalized groups in their design, implementation and monitoring**	HFA reporting	IOM, ISDR, OCHA, UNEP, UNFCCC, UN-Habitat, WMO, African Centre for Cities, Cities Alliance Secretariat, Columbia University, Communitas Coalition, ICLEI, Ecological Sequestration Trust, IIHS, IIED, Mistra Urban Futures, The New School University, Penn Institute for Urban Research, Pereira Passos Institute, Royal Holloway University, SDI, Stockholm Resilience Centre, SDSN, Tellus Institute, UCLG, University of Ghana, UCCRN, WIEGO and WUC

		Secondary Indicator: population density measured over continuous urban footprint		City Prosperity Index
11.c support least developed countries, including through financial and technical assistance, for sustainable and resilient buildings utilizing local materials	Suggestion to expand ambition of target so that it moves beyond LDC-IV commitments to support cities in all countries, technically and financially, and more broadly than on buildings alone.	**Percentage of financial support that is allocated to the construction and retrofitting of sustainable, resilent and resource-efficient buildings**		UN-Habitat and UNEP
		Secondary indicators: sub-national government revenues and expenditures as a percentage of general government revenues and expenditures, including for buildings; own revenue collection (source revenue) as a percentage of total city revenue	City Prosperity Index, International Monetary Fund Government Finance Statistics (GFS) and the World Bank	City Prosperity Index.
Indicators supporting multiple SDG-11 targets		Access to public information (also links with targets 16.6 and 16.7)		City Prosperity Index
		Proportion of urban households with internet access (also links with target 9.c)		ITU
		Number of reported crimes (homicides, injures and theft rates) committed annually in urban areas per 100,000		SDSN
		Ratio of urban growth (percent per annum) to urban public investment (including infrastructure, public space, health, etc)		World Bank

Goal 12: Ensure sustainable consumption and production patterns

Goal	Target	Proposed Indicators (limited number, and favourite one in bold)	Source/Monitoring Framework/Comments
Goal 12.	**Ensure SCP patterns**		
12.1	implement the 10-Year Framework of Programmes on sustainable consumption and production (10YFP), all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries	• **Number of countries with SCP National Actions Plans or SCP mainstreamed as a priority or target into national policies, poverty reduction strategies and sustainable development strategies.** • Number of countries with inter-ministerial coordination and multi-stakeholder mechanisms supporting the shift to SCP, as well as organizations with agreed monitoring, implementation and evaluation arrangements • Number of countries / organizations actively engaged in regional cooperation supporting the implementation of SCP activities at the regional, sub-regional and national levels. *Other proposals received:* • *Number of countries adopting measures consistent with the 10-year framework implementation*	10YFP Secretariat
12.2	by 2030, achieve sustainable management and efficient use of natural resources	• **Domestic Material Consumption (DMC) and DMC/capita** • **Material footprint (MF) and MF/capita**	DMC is defined as the total amount of materials directly used in the economy (used domestic extraction plus imports), minus the materials that are exported. This indicator informs policy about the amount of materials required to produce the national product. Data is available for most countries of the world for the last 4 decades. DMC is measured in metric tons MF is defined as the global allocation of used raw material extraction to the final demand of an economy. It is calculated using a consumption

			approach based on the attribution of global materials extraction to final consumption. MF is measured in metric tons
		• Composite Water Efficiency Change Index built up of sub-indicators measuring agricultural water efficiency, industrial water efficiency, energy water efficiency and household water efficiency	As UN-Water suggestion for 6.4 The Water Efficiency Index is composed of sector-based water efficiency metrics (comparing water withdrawn or consumed against sector-based values) weighted for each sector's proportion of total water withdrawals. The scope includes, but is not limited to, the energy, domestic, industrial and agricultural sectors.
		• (a) Relative to GDP, size of uninternalized and thus inefficient environmental and natural resource spillovers, as measured by WB Adjusted Net Savings figures. (b) Relative to GDP, total expenditure undertaken to recover from depletion of natural resources	World Bank Data from global market trends
		• Consumption of products and services from resilient/viable traditional practices that provide incentives for continuation of sustainable management practices on common lands	
		Other proposals received: • *Collection rate of waste electrical and electronic equipment (WEEE or e-waste)* • *Ecological Footprint* • *Ecological limits assessed in terms of sustainable production and consumption* • *Proportion of products derived from sustainable sources (Decisions VII/30, VII/15 and XI/3)*	*E-waste collecting rate collected by ITU. Included under target 12.5. Relevant to goals 8, 9 and 11* *Source: GBO4* *Source: Decision XI/3* *Source: Decision XI/3*

12.3	by 2030 halve per capita global food waste at the retail and consumer level, and reduce food losses along production and supply chains, including post-harvest losses.	**Food losses and waste measured through:** • **Global Food Loss Index (GFLI)** • **Per capita food waste (kg/year), measured using Food Loss and Waste Protocol.**	**These indicators for food losses and waste will be guided by the Food Loss and Waste Protocol - Global standard for quantifying and reporting loss and waste of food**. FAO UNEP and WRI http://www.wri.org/our-work/project/food-loss-waste-protocol The GFLI measures the totality of losses occurring from the time at which production of an agricultural product is recorded until it reaches the final consumer as food. While calculated on a quantity basis, it is subsequently transformed to dietary energy supplies (in kcal) per capita, allowing consistent aggregation, and then indexed. The indicator will be calculated on an annual frequency broken down by country and commodity. The indicator is primarily model-based. It will be compiled on a regular basis as part of the Food Balance Sheets in FAOSTAT. Close coordination with the Food Loss and Waste Protocol (WRI, FAO, UNEP) and with FAO activities in the scope of the Global Strategy will help enhancing the quality of the source data.
12.4	by 2020 achieve environmentally sound management of chemicals and all wastes throughout their life cycle in accordance with agreed international frameworks and significantly reduce their release to air, water and soil to minimize their adverse impacts on human health, environment	• **Number of Parties to, and number of national reports on the implementation of, international multilateral environmental agreements on hazardous chemicals and waste** • Annual average levels of selected contaminants in air, water and soil from industrial sources, energy generation, agriculture, transport and wastewater and waste treatment plants	international multilateral environmental agreements websites : Basel, Rotterdam, Stockholm Conventions, the ILO Chemicals Conventions, (ILO 174), the International Health Regulations and the Minamata Convention, the Montreal Protocol as well as UNFCCC http://www2.env.go.jp/chemi/prtr/prtrdata/prtr/localstart.php

		• Number of countries and major companies that developed sound chemicals management corporate policies and practices throughout the value chain, covering extended producer responsibility, communication about chemical hazards and risks both for chemicals and chemicals in products as well as the promotion of green design and BAT/BEP	SAICM has information on the number of countries. Source for major companies TBD.
		• Number of countries with institutional, legal, and regulatory frameworks for the sound management of chemicals and waste, including enforcement of national legislation and prevention of illegal traffic	SAICM
		• % Volume/mass of environmentally harmful chemicals and hazardous wastes subject to environmentally sound life-cycle management	TBD
12.5	by 2030, substantially reduce waste generation through prevention, reduction, recycling, reuse	• **National waste generation (solid waste to landfill and incineration and disaggregated data for e-waste) in kg per capita/year.** • **National recycling rate, tonnes of material recycled** • Number of countries with organizations actively engaged in advising industries including SMEs on prevention, reduction, recycling and reuse strategies to reduce waste generation. *Other proposals received:* • *Percentage of hazardous wastes and other wastes, including obsolete stockpiles of pesticides, recovered, reused and recycled, including for energy generation* • *Number of facilities for environmentally sound management of hazardous waste* • *Tons of general waste produced per income group per year relative to*	E-waste collecting rate collected by ITU. Relevant for 12.2. Relevant to goals 8, 9 and 11

		increase in waste recycled (at municipal levels)	
12.6	encourage companies, especially large and trans-national companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	• **Sustainability reporting rate and quality:** 1) Percentage of the world's largest companies disclosing sustainability information 2) the % of such reporting which is addressing the entire supply chain ; 3) % of the reporting companies with information in their sustainability reporting aligned with relevant indicators in the SDGs. *Other proposals received:* • *Number or % of companies that produce sustainability reports or include sustainability information in integrated reporting*	Companies to select the framework against which they are reporting: GRI, IIRC, UNGC or SASB, provided they have been able to meet due quality requirements. *ESG services providers (Bloomberg, MSCI); Stock Exchanges*
12.7	promote public procurement practices that are sustainable in accordance with national policies and priorities	• **Number of countries implementing Sustainable Public Procurement policies and action plans** • % of Sustainable Public Procurement in total public procurement for a set of prioritized product groups	
12.8	by 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.	• **Number of countries reporting inclusion of sustainable development and lifestyles topics in formal education curricula** • Market share of products and services distributed in a country / available in a given supply chain, with environmental and social impacts measured and communicated to consumers according to internationally agreed criteria • Number of countries that have implemented the UN Guidelines for Consumer Protection • **Frequency of researches online for key words with direct links with sustainable development and lifestyles** *Other proposals received:*	Relevant to goal 4 Disaggregated by income, sex and age (consumers) Consumer International *Individuals using the Internet: Existing, collected by ITU* *Individuals owning a mobile phone: Existing but new at the international level, data to be collected*

		• *Individuals using the Internet, by sex* • *Individuals owning a mobile phone* • Biodiversity Barometer (respondents that have heard of biodiversity, and giving correct definition of biodiversity) • *Online interest in biodiversity (Google Trends)* • *Investment in environmental education*	*by ITU from 2015* *Source : GBO4*
12.a	support developing countries to strengthen their scientific and technological capacities to move towards more sustainable patterns of consumption and production	• **Amount of spending on R&D in developing countries, for SCP** • Number of patents granted annually in developing countries, for SCP products / innovations • Number of scientific papers on SCP, resource efficiency, decoupling, including an author from a developing country and at least one co-author from another country	Disaggregated by sex (author)
12.b	develop and implement tools to monitor sustainable development impacts for sustainable tourism which creates jobs, promotes local culture and products	• **Percentage of the destinations with a sustainable tourism strategy/action plan, with agreed monitoring, development control and evaluation arrangement** • Adopted national legislation to integrate sustainability objectives in tourism operations • % of tourism value-added that is certified by a international body such as Green Globe of the Global Sustainable Tourism Council	Business surveys
12.c	rationalize inefficient fossil fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into	• **Amount of fossil fuel subsidies, per unit of GDP (production and consumption), and as proportion of total national expenditure on fossil fuels**	http://www.iea.org/subsidy/index.html; http://www.oecd.org/site/tadffss/ National accounts IMF

	account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities		

Goal 13: Take urgent action to combat climate change and its impacts

GOAL 13		TARGETS GOAL 13				
	Goal 13. Take urgent action to combat climate change and its impacts * *Acknowledging that the UNFCCC is the primary international, intergovernmental forum for negotiating the global response to climate change.	**13.1 strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries**	**13.2 integrate climate change measures into national policies, strategies, and planning**	**13.3 improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning**	**13.a implement the commitment undertaken by developed country Parties to the UNFCCC to a goal of mobilizing jointly USD100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible**	**13.b Promote mechanisms for raising capacities for effective climate change related planning and management, in LDCs, including focusing on women, youth, local and marginalized communities**

WMO/UNFCCC PROPOSAL BASED ON INPUTS	- Global CO2 emissions: net amount of anthropogenic CO2 emissions emitted as a result of human activities. - CO2 emissions per unit of economic activity: global CO2 emissions divided by the global economic output (global gross domestic product (GDP)). - Average global concentrations of GHGs in the atmosphere	- # of countries that report having progressed from a perceived low to an intermediate or from an intermediate to a high level of adaptive capacity in relation to a two-degree world - # of casualties and amount of economic losses - % of exposed people and assets affected in 2030	# of countries which have formally communicated the establishment of integrated low-carbon, climate-resilient, disaster risk reduction development strategies (e.g. a national adaptation plan process)	- # of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula - % of population with increased knowledge on climate change, disaggregated by sex and age	- Mobilized amount of USD per year starting in 2020 accountable towards the USD 100 billion commitment - % of GCF funded projects finalized and sustained afterwards through national funding to produce climate neutral solutions	# of LDCs that are receiving specialized support for mechanisms for raising capacities for effective climate change related planning and management, including focusing on women, youth, local and marginalized communities

ANNEX
COMPILATION OF PROPOSALS RECEIVED

SUBMISSION	GOAL 13	TARGETS GOAL 13				
	Goal 13. Take urgent action to combat climate change and its impacts * *Acknowledging that the UNFCCC is the primary international, intergovernmental forum for negotiating the global response to climate change.	**13.1 strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries**	**13.2 integrate climate change measures into national policies, strategies, and planning**	**13.3 improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning**	**13.a implement the commitment undertaken by developed country Parties to the UNFCCC to a goal of mobilizing jointly USD100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible**	**13.b Promote mechanisms for raising capacities for effective climate change related planning and management, in LDCs, including focusing on women, youth, local and marginalized communities**
ITU		- Population covered by at least a 3G mobile network - Individuals	-	-	-	-

SUBMISSION	GOAL 13	TARGETS GOAL 13				
		owning a mobile phone				
UNDP		- # of countries in which disaster and climate risk management explicitly addressed in national, sub-national and sectorial planning frameworks, policies and budgetary systems - # of countries with legislative/or regulatory provisions at national and sub-national level for managing disaster and climate risks; - # of countries with clearly defined institutional responsibilities and multi-	- # of countries that have undertaken the early incorporation of climate and risk resilience measures into national planning and budgeting. - # of country diagnostics carried out to inform policy options on national response to globally agreed development agenda (e.g. climate risk assessment etc.);	- # of countries with comprehensive measures - plans, strategies, policies, programmes and budgets - implemented to achieve low-emission and climate-resilient objectives that have specific components on education and capacity building. -	- # of countries with systems in place to access, deliver, monitor, report on and verify use of climate finances; - # of countries with comprehensive measures - plans, strategies, policies, programmes and budgets - implemented to achieve low-emission and climate-resilient objectives.	- # of countries with a disaster risk reduction and/or integrated disaster risk reduction and adaptation strategy/action plan that specifically addresses equity, age and gender considerations;

SUBMISSION	GOAL 13	TARGETS GOAL 13				
		stakeholder coordination mechanisms for disaster and climate risk management at national and sub-national level.				
UNFCCC	- Global CO2 emissions: net amount of anthropogenic CO2 emissions emitted as a result of human activities 11. - CO2 emission	# of countries that report having progressed from a perceived low to an intermediate or from an intermediate to a high level of adaptive capacity in relation to a two-degree world	# of countries which have formally communicated the establishment of integrated low-carbon, climate-resilient, disaster risk reduction development strategies (e.g. a national adaptation plan process)	# of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula	Mobilized amount of USD per year starting in 2020 accountable towards the USD 100 billion commitment	# of LDCs that are receiving specialized support for mechanisms for raising capacities for effective climate change related planning and management, including focusing on women, youth, local and marginalized communities

[11] Relevance: CO2 is the main greenhouse gas and CO2 emissions are the main driver of the changes of GHG concentrations in the atmosphere and, subsequently, of anthropogenic climate change. Methodological soundness: Clear methodological guidance on the calculation of this indicator is available from the work of the Intergovernmental Panel on Climate Change; the robustness of that guidance has been tested for many years during the implementation of the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol. Measurability: This indicator is not directly measurable; it has to be calculated using the methodological guidance noted above. Note that this indicator was part of the monitoring framework for the Millennium Development Goals (MDGs) and thus measurability/monitoring experience is available. The indicative sources of data are the UNFCCC secretariat, the International Energy Agency (IEA) and the Carbon Dioxide Information and Analysis Center (CDIAC) in the United States of America; other organizations may be considered as well.

SUBMISSION	GOAL 13	TARGETS GOAL 13				
	s per unit of economic activity: global CO2 emissions divided by the global economic output (global gross domestic product (GDP))[12]. - Average global concentrations of GHGs in the atmosphere[13]					

[12] Relevance: This indicator would measure the degree of human action to sever the link between economic growth and GHG emissions; this link has to be severed to enable a long-term solution to the climate change problem. Methodological soundness: Adequate methodological guidance for CO2 emissions is available (see indicator CC-1). Methodological guidance relating to GDP data and the calculation of comparable GDP values across countries is also available, first of all from the relevant work of the World Bank. Measurability: For CO2 emissions see indicator CC-1. For GDP data, the World Bank supports long time series of GDP data for most world countries, including in the "international units" allowing cross-country aggregations and comparisons. Note that this indicator was part of the monitoring framework for the Millennium Development Goals (MDGs) and thus measurability/monitoring experience is available. The indicative sources of GDP data are the World Bank secretariat and the International Energy Agency (IEA).

[13] Relevance: This indicator would measure the changes in the atmosphere as the global system that is most directly affected by the anthropogenic GHG emissions and, at the same time, directly affects the capability of the Earth to retain or reflect the energy coming with solar radiation. Methodological soundness: The indicator is measurable, with the global dimension

SUBMISSION	GOAL 13	TARGETS GOAL 13				
UNICEF		- # of countries with comprehensive sub-national CCA/DRR plans in place - # of countries that have included the most vulnerable groups, including women, girls, boys, elderly, disabled people, and indigenous peoples in climate change policy and programmes	# of countries with national policies, strategies and development plans which include climate change	- # of countries with climate change integrated into primary, secondary and tertiary curricula - % of population with increased knowledge on climate change, disaggregated by sex and age -	- # of US$ mobilized annually by developed countries for climate change - # of US$ disbursed by the GCF, disaggregated by adaptation and mitigation	- # of trainings, workshops, etc in LDCs for vulnerable communities on climate change related planning and management, disaggregated by sex and age - # of vulnerable people trained in climate change related planning and management, disaggregated by sex and age
UNFF		- Change in carbon emissions from deforestation and forest	Change in the extent of integration of national forest policies and programmes in			

requiring aggregation; the related methodological considerations are available, with the national meteorological organizations and with the World Meteorological Organization (WMO). Measurability: Concentrations of GHGs in the atmosphere are monitored by the WMO and the results are published annually by WMO. The likely best source of data would be WMO.

SUBMISSION	GOAL 13	TARGETS GOAL 13				
		degradation (% change)[14] - Change in the area of forests managed for protection of soil and water and ecosystem services (% change)[15]	national policies and strategies for climate change mitigation and adaptation (%change)			
UN WOMEN						% of women participating in climate change related planning and management bodies/mechanisms in LDCs.
WORLD BANK GROUP		- . # of countries with disaster risk financing	Indicator(s) for target 13.2[18]	Indicator for Target 13.3[19]	Indicator(s) for target 13a [20]	Indicator(s) for target 13b [21]

[14] Defined as change in carbon stock contained in woody biomass, dead wood, litter and forest soils.

The proposed indicator can also contribute to measure the progress on other targets, including: 15.2 (by 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and increase afforestation and reforestation by x% globally), 15.3 (by 2020, combat desertification, and restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land-degradation neutral world), and 15.4 (by 2030 ensure the conservation of mountain ecosystems, including their biodiversity, to enhance their capacity to provide benefits which are essential for sustainable development).

The existing monitoring frameworks include: i) FAO Global Forest Resources Assessment; ii) Intergovernmental Panel on Climate Change; and iii) UN Forum on Forests National Reporting on the progress towards the achievement of the global objectives on forests and the implementation of the non-legally binding instrument on all types of forests. A new forest-related monitoring and accountability framework will be decided at UNFF11 in May 2015 as part of overall post-2015 international arrangement on forests.

[15] Defined as change in the area of forests managed for protection of soil and water and ecosystem services, with following sub-categories: i) coastal stabilization; ii) desertification control; iii) prevention of the development or impact of avalanches on human life, assets or infrastructure; iv) protection of communities or assets from the impacts of erosion, riparian floods and landslides, or for providing flood plain services.

The proposed indicator can also contribute to measure the progress on other targets, including 6.6 (By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes) and 15.1 (By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements).

The existing monitoring frameworks include: i) FAO Global Forest Resources Assessment and ii) UN Forum on Forests National Reporting on the progress towards the achievement of the global objectives on forests and the implementation of the non-legally binding instrument on all types of forests. A new forest-related monitoring and accountability framework will be decided at UNFF11 in May 2015 as part of overall post-2015 international arrangement on forests.

SUBMISSION	GOAL 13	TARGETS GOAL 13				
		strategies in place - Population benefiting from disaster risk financing and insurance in proportion to population living in climate-related-				

18 Indicator(s) for target 13.2 should not only measure if climate change is considered, but also the level of ambition to mainstream climate change as a development issue.
One example of how this can be measured can be found in the Climate Investment Fund - Pilot Program for Climate Resilience Results Framework. The core indicators include 'degree of integration of climate Change in national, including sector planning' based on a qualitative assessments (e.g. through a standardized scorecard). Data could be sourced from official policy planning documents, national repositories, including meeting documents, workshop and budget reports, policy papers, and other relevant reports (see https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/PPCR_M_and_R_Toolkit_Final_March_2014.pdf).
19 Target 13.3 will require a set of indicators to measure different aspects related to education, awareness raising, human capacity and institutional capacity. Although current data availability is limited, methodologies exist to construct relevant indicators that are easy to communicate.
For education, an indicator could be based on the share of schools or/and universities that include climate change themes in their curricula or programs.
For awareness raising, the indicator could be based on the proportion of citizens, companies or other stakeholders that recognize the existence of climate risks and/or respond accurately to climate questions in socio-economic surveys.
Human capacity specific indicator(s) should measure factors related to the capacity of agents (e.g. households, community leaders, business managers, policymakers) to respond to climate change related issues including (see World Bank's Capacity Development Results Framework).
For institutional capacity, the Climate Investment Fund Pilot Program for Climate Resilience proposes and indicator measuring 'evidence of strengthened government capacity and coordination mechanisms to mainstream climate resilience' as a core indicator based on qualitative assessment. Data could be sourced from national repositories, including meeting documents, workshop and budget reports, policy papers, and other relevant reports (see https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/PPCR_M_and_R_Toolkit_Final_March_2014.pdf).

[20] Should be based on the outcomes of the UNFCCC process. We would like to refer to the work of the UNFCCC Standing Committee on Finance developing operational definitions of climate finance and strengthening methodologies for reporting climate finance. Its latest Biennial Assessment and Overview of Climate Finance Flows Report outlines methodological issues relating to measurement, reporting, and verification of public and private climate finance and an overview of current climate finance flows.

[21] Should be based on the outcomes of the UNFCCC process. We would like to refer to the ongoing discussions about new institutional arrangements for capacity-building under the Subsidiary Body for Implementation.

SUBMISSION	GOAL 13	TARGETS GOAL 13				
		hazard- and natural-disaster-prone areas[16] - Further comments.[17]				
WHO		# of deaths in weather-related extreme events[22].	# of countries with cross-sectoral national climate change mitigation and	measurement of human or institutional capacity- survey based	Financial resources mobilized for mitigation and adaptation	

[16] These indicators are in development at the project level for World Bank disaster risk financing and insurance projects.

[17] Indicator(s) for 13.1 need to reflect the policy measures implemented to strengthen resilience and adaptive capacity in countries (input level), the effectiveness of these policy measures to produce the desired results (output level) and the extent to which a country has increased resilience and adaptive capacity (outcome level). As an example, the Climate Investment Fund - Pilot Program for Climate Resilience Results Framework incorporates these different levels (see https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Revised_PPCR_Results_Framework.pdf).
Currently, no single indicator can measure the various dimensions of resilience and adaptive capacity, but various efforts are underway that will help to produce better indicators and data to measure target 13.1.. These initiatives include the European Union JCR's Index for Risk Management (see INFORM), Notre Dame's Global Adaptation Index (see http://gain.org/work), the OECD's Guidelines for Resilience System Analysis (see http://www.oecd.org/dac/Resilience%20Systems%20Analysis%20FINAL.pdf), GIZ's guidelines for standardized vulnerability assessments (see https://gc21.giz.de/ibt/var/app/wp342deP/1443/wp-content/uploads/filebase/va/vulnerability-guides-manuals-reports/Vulnerability_Sourcebook_-_Guidelines_for_Assessments_-_GIZ_2014.pdf), and the Inter-American Development Bank's for Disaster Risk Management (see http://www.iadb.org/en/projects/project-description-title,1303.html?id=RG-T2562).
Separately, the World Bank is working on an indicator to measure the climate and disaster resilience at the outcome-level with a specific focus on poverty and social protection angles, which also relates to target 1.5 in the poverty goal: 'build the resilience of the poor and those in vulnerable situations, and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters'.
Any indicator for target 13.1. should be aligned with the successor arrangements to the Hyogo Framework for Action (HFA2) - also referred to as the Post-2015 Framework for Disaster Risk Reduction, which will produce a new and ambitious monitoring framework to measure progress on disaster risk reduction, including hazards from climate change. A zero draft for the HFA2 can be found http://www.wcdrr.org/uploads/1419081E.pdf

[22] This is a "bottom-line" measurement that is easy to understand, relates directly to the already tracked by EM-DAT CRED and reported by the IFRC and others. Although it is widely acknowledged that such monitoring cannot be perfect, it has been tracked for a long period, with well-established definitions and quality control criteria and is generally considered to be of sufficient quality to monitor trends over time, and e.g. between regions. It is being improved, and could continue to be so. For full interpretation it should also be linked to measures of physical hazards, and human exposures (e.g. hazards may increase through climate change, and exposures may change if more or fewer people are living in exposed areas, but deaths may still come down as resilience improves).

SUBMISSION	GOAL 13	TARGETS GOAL 13				
			adaptation plans that cover key impact areas[23].	# of EWS (multi-hazard including Health) functioning national frameworks for climate services (including health)	through the Green Climate Fund[24].	
WMO		1. Types of indicators 1/ on the outcomes: # of casualties and amount of economic losses -> Associated target: x[25]% of exposed	# of national adopted INTEGRATED policies incorporating CC and DRR in national development plans[26]	# of countries carrying out, monitoring and taking action based on regular – annual- surveys on people knowledge and appreciation of the above. -> Associated target:	% of GCF funded projects having been finalized and sustained afterwards through national funding to produce climate-neutral solutions.	

[23] We would expect that this would be monitored through the UNFCCC processes, either through the National Adaptation Plans and NAMAs, or through National Communications. We would also assume that the UNFCCC would define any quality control criteria, and identify impact areas or sectors that should be covered. Within these, we would expect that avoiding adverse impacts on health and wellbeing should be identified among the aims and objectives of the plans (in line with UNFCCC Article 1). We would also assume that the mitigation plans should carry out impact assessments, to minimize "adverse effects on the economy, on public health and on the quality of the environment", in line with the parties commitments article under UNFCCC article 4. We would be happy to work with the secretariat or any other body under the UNFCCC to define coverage or quality criteria for any aspects relating to health.

[24] Ideally the indicator would track mobilization of resources through a range of different funds and modalities, but this is likely to complicate the monitoring process, and introduce problems of definition. A narrower focus on the GCF should be much easier to monitor, as well as encouraging countries to use this rather than alternative mechanisms. We do not expect that health should be explicitly part of this headline indicator. However, we assume that underneath the headline indicator, there would be monitoring different categories of funding (e.g. as there currently is for the GEF, which tracks how much is adaptation funding is dispersed for projects covering agriculture, water resources, health etc.), which we assume would adequately cover health.

[25] "x" could be 50% of the assessed values over the last 10 years globally and/or at continental/regional level.

[26] WMO: Need to clarify the type of national policies referred to: e.g. sustainable development globally, or sectoral policies on energy, food security, water management, health, urbanization (to focus on the current and future GFCS priorities), or on specific part of the population: the poorest, the most vulnerable, women, youth, migrants, etc...

SUBMISSION	GOAL 13	TARGETS GOAL 13				
		people and assets affected in 2030 (other time horizons could be proposed at national level) 2. On the process: # of national adopted integrated policies incorporating CC and DRR in national development plans -> Associated target: 75% of those countries with not such integrated policies as of 2015 have policies in 2030 3. On the implementation context/enabl		at least 50% increase in 2030 of the "scores" achieved from a baseline to be defined in 2015 in each country. Such surveys should be normalized and agreed upon through an intergovernmental process.		

SUBMISSION	GOAL 13	TARGETS GOAL 13				
		ers: - # of countries having access and using climate services in their decision-making process and policy implementation -> associated targets:75 % of those countries with no climate services as of 2015 have it in 2030 - # of countries asking for international support where this effort is				

SUBMISSION	GOAL 13	TARGETS GOAL 13				
		"well coordinated and implemented" 4. On the monitoring of the indicators: #number of countries with observing systems delivering quality data on climate state and DRR, with an indication of the recurrent investments on those systems per capita. -> Associated target: % of global coverage from surface observing systems national level for Essential Climate Variables (ESV				

SUBMISSION	GOAL 13	TARGETS GOAL 13				
		- see GCOS) and agreed measurements of hazards and impacts (to be linked to Sendai outcomes)				
UNEP	Need to ensure cross-reference climate with other goals through the indicators. One key indicator to be reflected is GHG intensity of GDP (this has been communicated to the group working on goal 12, to ensure good cross-referencing). With regard to goal 7, renewables and energy					

SUBMISSION	GOAL 13	TARGETS GOAL 13				
	efficiency indicators will indirectly report on goal 13 (under goal 7 sector specific indicators were suggested for key sectors, such as transport, which again would contribute to achieving goal 13, but also the one on health).					

Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

INDICATOR TITLE		DESCRIPTION					
Goal 14.	**Conserve and sustainably use the oceans, seas and marine resources for sustainable development**						
			Relevance	**soundness**	**measurability**	**ease of communication**	**COMMENTS FROM TST CO-LEADS**
14.1	by 2025, prevent and significantly reduce marine pollution of all kinds, particularly from land-based activities, including marine debris and nutrient pollution						
	Fertilizer consumption (kg/ha of arable land)	[World Bank] Fertilizer consumption (kg/ha of arable land)					**Not clear what the target would be. Not clear : fertilizer consumption or fertilizer application ?**
	metric tonnes per year of plastic materials entering the ocean from all sources	To be developed					
	metric tonnes per year of nitrogen released to oceans from rivers and coastal population centers	To be developed					
	Nitrogen surplus (Tg N/Year) The data is modeled with the IMAGE-GLOBIO models from PBL	To be further developed					**It is questionable whether modelled data would be acceptable to Member States**
	Nutrient Use Efficiency	The target is related to preventing and reducing the effects of different types of marine pollution (wastewater, run off from agriculture,…). It specifically refers to nutrient pollution and marine debris. The main nutrient pollutant for assessment focus is nitrogen. There is long term data on reactive nitrogen deposition and there is growing knowledge on nitrogen balances based on inputs versus outputs and by extension, surpluses, particularly with respect to agriculture					

		(including livestock husbandry) which can be used to assess progress towards this target. Phosphorous loading and impacts on the environment continues as a subject of research as concerns its role as a controlling element in determining the extent of eutrophication; the various forms in which it is resident in the environment (dissolved to particulate) influence the degree to which these forms may impact ecosystems. This was proposed after consultation with the Global Partnership on Nutrient Management supported by the UNEP-GPA					
	Proportion of industrial and point source agricultural wastewater flows not collected in public systems that is treated to national standards.	A related indicator, which could be used to compliment this, is the incidence of hypoxic zones. While there is growing work on marine debris (and in particular plastics), there is currently no global indicator for this issue.					
	Proportion of the flows of treated municipal wastewater that are directly and safely reused	To be developed					**too few data or treatment plants globally to be feasible**
	Proportion of the flows discharged by industrial waste water treatment plants that are safely re-used. (This indicator does not include water directly re-used without leaving the factory)	To be developed					**Access to data is not currently available globally**
	Proportion of receiving water bodies meeting water quality standards (nitrogen & phosphorous as a minimum)	To be developed					
	Concentration of nutrients and plastics in coastal and marine waters	Multi-indicator measuring the concentration of nutrients, plastics and POPs in coastal and marine	high	high	medium	high	**Potential source of data : GESAMP /IOC/UNEP/FAO on-going assessment on mirco plasitcs**

		waters, and marine animals to monitor bio-accumulation in foodchain.					
	Accumulation of marine plastics in the sediment/sandy environments	Measure the degree to which plastics accumulate in the sediment and the role of oceanic cycling in transferring plastics from pelagic environment to sediments.	high	high	medium	high	**Potential source of data : GESAMP /IOC/UNEP/FAO on-going assessment on mirco plasitcs**
	Number of States regulating marine geoengineering activities	The indicator measures the number of States having adopted administrative or legislative measures to regulate permits for marine geoengineering activities in compliance with the 2013 Amendments to the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter, 1972 (London Protocol). The indicator can also be expressed as a percentage of Contracting Parties to the Protocol and be complemented by data on the marine geoengineering activities authorized under a permit.	high	high	high	high	**IMO/London convention input would be needed**
14.2	by 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration, to achieve healthy and productive oceans						
	Percentage of coastline with formulated and adopted ICM/MSP plans	Indicator to be developed					**COULD BE MERGED WITH UNEP/IOC**

	Ocean Health Index	The Ocean Health Index provides an assessment of the ability of the world's oceans to deliver benefits and resources sustainability. It is a composite of several different measures including tourism and recreation, sense of place, natural products, coastal livelihoods and economies, food provision, clean waters, carbon storage, coastal protection, biodiversity and artisanal fishing opportunities. As such it addresses a number of elements identified in the target. Further the different measures used in the indicator can be disaggregated so that it can be used to report on different elements of this target (as well as some elements of other targets under the goal)					**There is somecontroversy on the use of this index**
	Coastal and marine Development	% of coastal and marine development (to be defined) with formulated or implemented ICZMs and MSPs (that are harmonized where applicable), based on an ecosystem approach (as defined by UNEP), that builds resilient human communities and ecosystems and provides for equitable benefit sharing and decent work.	high	high	medium/high if satellite imagery available	high	**this is an integrated indicator that also includes elements from the other targets. COULD BE MERGED WITH IOC/UNDP**
	Extend of marine proteced areas relevant for carbon sequestration	Measure the extend of protected highly important carbon sequestration areas, e.g. blue carbon areas (mangroves, salt marshes, sea grasses), e.g. global mapping assesments done by the Blue Carbon Initiative.	high	high	medium	medium	**Blue Carbon initiative (IUCN/CI/IOC) could be a source as well as UNEP**

	% of national economic exclusive zone under ecosystem-based management (MPA, marine spatial planning, integrated coastal management)	Proxy for measuring the proportion of national waters under some level of ecosystem based management, with the aim to maintain ecosystem relience whislt providing sustainable economic bemefits	high	high	high	high	**IOC Global Assessment of marine spatial planning (2015-2017) practice around the world could be a potential source/COULD BE MERGED WITH UNEP/UNDP**
14.3	**minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels**						
	Average marine acidity (pH) measured at agreed suite of representative sampling stations	Such an indicator could be used by government in a flexible manner to provide time-series/trend data at national, regional or global scales, thus telling them whether or not the target is being achieved, and where					
	Coral coverage	There are various means of addressing the impacts of ocean acidification. Given this measure the effects of these on coral coverage would be one way of assessing progress towards this target. Coral reefs are one of the main ecosystems impacted by ocean acidification.					
	Coral reef condition	Indicator to be developed: trend in coral reef condition (Decision XI/3)					**Indicator not developed/ OA is not the only factor that influence coral coverage (pollution, SST etc)**
	Changes in national average coastal pH	A more localised coastal indicator will be far more informative and the emphasis would be on trends, rather than actual levels.					
	Growth in ocean acidification in science/science cooperation	Index based on Number of countries which participate in international scientific networks (bilateral/multilateral) related to ocean acidification, e.g., the Global Ocean Acidification Observing Network (GOA-ON)/ Number of national and regional	high	high	high	high	**Measured through GOA-ON network and similar intenrational networls (SOLAS, SOCAT)**

		projects and strategies dedicated to multidisplinary and multiinstitutional investigation related to ocean acidification including other environmental stressors. Part (1) of the indicator would measure national scale commitment to understanding the impacts of ocean acidification, while part (2) would measure twinning or regional projects where capacity building for development is the focus. Milestones could be set, i.e. have targets for 2020, 2025, 2030 and so on					
	Valuation of CO2 absorption by the ocean	Capacity of the ocean to act as a carbon sink, the extend of highly important carbon sequestration areas, using scientific reports and assesments provided by the IPCC, the Global Ocean Acidification Observing Network (GOA-ON).	high	high	medium	high	**Measured through GOA-ON network and similar intenrational networls (SOLAS, SOCAT)**
14.4	**by 2020, effectively regulate harvesting, and end overfishing, illegal, unreported and unregulated (IUU) fishing and destructive fishing practices and implement science-based management plans, to restore fish stocks in the shortest time feasible at least to levels that can produce maximum sustainable yield as determined by their biological characteristics**						
	Fish species, threatened	To be developed					**Not clear what the target would be. Not clear : number or share of threatened fish reduced ?**

	Proportion of fish stocks within biologically sustainable limits	Measured through the FAO statistics on the status of the stocks	high	high	high	high	**this is the strongest indicator and is measurable and internationally understood/recognized**
	Proportion of fish stocks at safe biological limits	The target primarily related to the management of fish stocks so as to maintain maximum sustainable yield. Given this the use of the indicator fish stocks within safe biological limits is highly relevant. This indicator has a long time series as well as an established methodology of means of collecting information.					
14.5	**by 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on best available scientific information**						
	Percentage area of each country's EEZ in MPA Percentage area of ABNJ in MPA Percentage area of global ocean under MPA	Percentage area of each country's EEZ in MPA Percentage area of ABNJ in MPA Percentage area of global ocean under MPA					**There are not MPAs in the ABNJ as of yet, unless you include fisheries closures. It would be useful to review the language used in the CBD targets in relation to PAs to ensure inclusions of community and indigenous-led initiatives and a focus on effectively managed areas**
	Coverage of protected areas	The most relevant indicator for this target is protected areas coverage as it directly measures the issue being addressed by the target. There is a long time series of data available. Further the data can be disaggregated to provide information on the coverage of specific regions or biodiversity hotspots.					
	Number of transboundary agreements that include conservation and sustainable use of coastal and marine	Number of agreements at regional, national and local level on transboundary initiatives dedicated or with components related to	high	high	medium	high	**could be measured through Regional seas, LMEs, RFMOs**

	resources.	coastal and marine conservation, sustainable use of the coastal and marine resources.					
14.6	**by 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, and eliminate subsidies that contribute to IUU fishing, and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the WTO fisheries subsidies negotiation ***						
	Dollar value of negative fishery subsidies against 2015 baseline	Indicator and baseline to be developed					**No existing definition of negative subsidies**
	Legal framework or tax/trade mechanisms prohibiting certain forms of fisheries subsidies	Indicator to be developed					
14.7	**by 2030 increase the economic benefits to SIDS and LDCs from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism**						
	Fisheries as a % of GDP	The indicator seems to suggest that an increase in benefits is an inevitable outcome of more sustainable use – but sustainable management might imply less rent extraction from fisheries if currently overexploited.					
	Level of revenue generated from sustainable use of marine resources	Decision XI/3 - Indicator to be developed					

	Fisheries (capture fisheries and aquaculture) benefits to livelyhood	% of fisheries (as per FAO), both capture and aquaculture, providing sustainable and decent work (as per ILO)	high	high	high	high	**his is an integrated indicator that also includes elements from the other targets. There is not currently baseline data to differentiate the data, but this could be looked at for furture purposes**
	Productivity of aquaculture in utilizing land and water areas	Measured through FAO statistics (as reported by FAO members)					
	Economic benefits derived from coastal and marine activities	Trends on the most relevant socio-economic activities linked with coastal and marine areas (e.g. Tourism, Aquaculture, Fisheries, Transportation, etc.) and benefits to coastal communities. (employment, education, logistics, infrastructures, etc).	high	high	low	medium	
14.a	**increase scientific knowledge, develop research capacities and transfer marine technology taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular SIDS and LDCs**						
	Number of researchers working in this area	Indicator to be developed					
	Budget allocated to research in the field of marine technology	Indicator to be developed					
	% of GDP invested in ocean research	National Investment (budget) in ocean science, observation, data and information management, and assessment programmes, which can be partly retrieved from the Global Ocean Science Report.	high	high	medium	high	**Index to be developed and meaured through the Global Ocean Science Report**

	Growth in ocean science capacity, technology and knowledge	Composite Index based on i) Number of coastal member states publishing and sharing ocean data and experimental data in global open-access scientific journals marine data and information systems, e.g., the Ocean Biogeographic Information System (for biogeographic data), Ocean Data Portal (for physical, chemical data), PANGAEA (Data Publisher for Earth & Environmental Science). ii) Number of coastal member states that have implement a national Ocean Observing System as part of the Global Ocean Observing System; (iii) Number of marine scientists at the national, regional and global level devided by gender (according to the Global Ocean Science Report). (iv) Number of marine scientific peer-reviewed publications at the national, regional and global level (according to the Global Ocean Science Report)	high	high	high	high	**Index to be developed and meaured through the Global Ocean Science Report**
	Growth in scientific cooperation between countries and regions	The level of cooperation between different countries can be retrieved from the level of participation in international networks, e.g. the Global Ocean Acidification Observing Network (GOA-ON), the Blue Carbon Initiative and also by the number of crosslinks shown in the Global Ocean Science Report. Aslo measuring transfer of marine technology on a bilateral basis.	high	medium	medium	highj	**Index to be developed and meaured through the Global Ocean Science Report**

	Level of capacity in marine sciences and technology, and knowledge transfer and utilization	National measures of: a) Human resources capabilities and transfer of knowledge: PhDs in marine disciplines (including formed abroad) moving to government, private sector and academia b) Funding and functional assets: funding in marine-related R&D by the public sector, the academia and the private sector; facilities (academic/research), vessels and vehicles for marine operations, marine observing systems c) Outputs: research papers, data contributed/echanged, industrial patents, trained PhDs	high	medium	medium	high	**Surveys by IOC with other competent UN organizations**
14.b	**provide access of small-scale artisanal fishers to marine resources and markets**						
	By 2030, X% of small scale fisheries certified as sustainable; Y% increase in market access for small scale fisheries	% of small scale fisheries certified as sustainable (presumed 2015 baseline close to 0%); % increase in revenue ($) accruing to small scale fisheries against 2015 baseline.					**FAO comment: there is no FAO definition of small-scale fisheries . While there may well be countries collecting data on SSF, there are no statistical data collection systems collecting data on SSF on a global level.**
	By 2030, increase by X% the proportion of global fish catch from sustainably managed small scale fisheries	% of global fish catch (mt) from small scale (vs. industrial) fisheries, against 2015 baseline.					**FAO comment: there is no FAO definition of small-scale fisheries . While there may well be countries collecting data on SSF, there are no statistical data collection systems collecting data on SSF on a global level.**
	Market mechanisms and associated legal framework, national programme in place, facilitating access of small-scale artisanal fishers to marine resources and markets	Indicator to be developed					

	Inclusion of Small Scale Fisheries in national policies	Number of national policies addressing small-scale fisheries	High	High	High	High	**this might be an indicator to review in the future if becomes integrated into FAO reporting on the CCRF**
	Small-Scale Fisheries	% or # of small-scale fisheries (as per FAO) including the actors along the value chain, with decent work (as defined by ILO) in fisheries sector that provides food and nutritional security, supported by management plans based on ecosystem approach to fisheries (as FAO) that account for small-scale fisheries and that conserves and builds resilient (marine/coastal) social-ecological systems.	high	high	medium	high	**this is an integrated indicator that also includes elements from the other targets. FAO comment: there is no FAO definition of small-scale fisheries . While there may well be countries collecting data on SSF, there are no statistical data collection systems collecting data on SSF on a global level.**
14.c	ensure the full implementation of international law, as reflected in UNCLOS for states parties to it, including, where applicable, existing regional and international regimes for the conservation and sustainable use of oceans and their resources by their parties						
	Adoption of a legal framework and number of associated court cases	Indicator to be developed					
	Number of countries implementing either legally or programmatically the provisions set out in regional seas protocols	Compliance committees within regional seas could provide the framework to monitor at the regional level	high	mediuem	high	high	**there is already an existing reporting mechanism through COPS and IGMs and in some cases a reporting framework.**
	Implementation of Code of Conduct for Responsible Fisheries, associated Technical Guidelines and International Plans of Action (IPOAs)	Progress by countries in [level/degree of] implementation of CCRF and associated guidelines and plans	high	high	medium	high	**Countries report biannually to FAO/COFI on progress made on CCRF implementation**

Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Biodiversity and ecosystem services underpin sustainable development and must be reflected in Sustainable Development Goals (SDG) indicators accordingly. While goals 14 and 15 are most directly related to biodiversity and ecosystem services (it is to be noted that Goal 15 also captures other elements such as desertification and land degradation) there are other goals (e.g. Goals 1, 2...) which are also related to biodiversity. In the coming discussion that will lead to the adoption of the SDGs framework we will have to ensure cross-linkages among indicators for various goals.

In our experience, it is necessary to have multiple indicators to measure changes of something as complex as biodiversity and ecosystem services. Numerous indicator processes related to biodiversity and ecosystem services exist. Under the CBD the development of a suite of indicators is being pursued with a view to filling gaps, taking advantage of relevant indicators in use by other conventions and processes. An indicative list of indicators available for assessing progress towards the goals of the Strategic Plan for Biodiversity 2011–2020 has been identified by the CBD through decision XI/3 and there is ongoing work to continue developing these. The Biodiversity Indicators Partnership (BIP) is one of the main forum for this work, involving several UN and non-UN organizations, and it has actively supported the identification and development of relevant biodiversity indicators. The indicators that have been suggested in the attached table are based on indicators used in existing processes, including those noted through decision XI/3 as well as those identified through the Biodiversity Indicators Partnership. Where no indicator is currently available, possible indicators which could be developed are noted. For most of the targets, we have included more than one indicator and have not attempted to prioritize at this stage.

We have not yet had adequate time to consult with other biodiversity-related MEAs, but will make sure very soon that they can provide views and input to the list of proposed indicators.

Goal	Targets	Indicators	Rationale and sources of information
Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.	15.1 by 2020 ensure conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	**Coverage of protected areas broken down by ecosystem type, including total area of forests in protected areas** (thousands of hectares)	Protected area coverage has a long time series and well established data collection procedures associated with it. Further the indicator can be broken down by region, different ecosystem types and by the coverage of key areas (i.e. Alliance for Zero Extinction sites, Important Bird Areas, Biodiversity Hotspots, etc.). A complimentary indicator to protected area coverage is protected area management effectiveness, the use of which would allow for a more detailed assessment of progress towards the target. Internationally, these coverage can be assessed through coverage of protected areas and representativity of different ecosystem types in World Heritage Sites, Biosphere Reserves designated under UNESCO's Man and the Biosphere Programme, wetland sites of international importance designated under the Convention on Wetlands, and relevant geoparks under UNESCO's Geoparks Initiative (source: UNESCO). Source: World Database on Protected Areas.
		Forest area as a percentage of total land area	**The indicator is already included among the indicators for the Millennium Development Goals** (MDG) (indicator 7.1 "Proportion of land covered by forest"). A detailed definition is provided by FAO. **Rationale**: Forests fulfil a number of functions that are vital for humanity, including the provision of goods (wood and non-wood forest products) and services such as habitat for biodiversity, carbon sequestration, coastal protection and soil and water conservation. The indicator provides a measure of the relative extent of forest in a country. The availability of accurate data on a country's forest area is a key element for forest policy and planning within the context of sustainable development. Changes in forest area reflect the demand for land for other uses and may help identify unsustainable practices in the forestry and agricultural sector. Forest area as percentage of total land area may be used as a rough proxy for the extent to which the forests in a country are being conserved or restored, but it is only partly a measure for the extent to which they are sustainably managed. This is indicator is primarily proposed for Target 15.1. However, it is also related to Target 6.6. **Measurability**: the indicator already exists. FAO reports the data to UNSTATS. Further information can be found at: http://mdgs.un.org/unsd/mdg/Metadata.aspx (metadata needs updating). **Reliability**: it is not possible to determine a statistical margin of error of the estimates. The accuracy varies

			across countries depending on available information. When reporting countries are asked to assign a Tier level 1, 2 or 3 indicating the level of detail of data sources used for reporting (where Tier 3 is regarded as the highest level of detail). Typically, Tier 3 estimates are recent data (ie., less than 10 years ago) from National Forest Inventories (NFIs) or remote sensing, with ground validation or programme for repeated compatible NFIs. Tier 2 are older estimates (ie., more than 10 years) from NFIs or full cover mapping/remote sensing. Tier 1 is any other data sources including expert estimates. **Coverage**: FAO carries out global forest resources assessments at 5 year intervals, the results of the FRA 2015 will be released in September 2015 and next assessment will most likely be in 2020. Given the relative low accuracy of the reported data and the slow change, it is not advisable to report these data more frequently (ie., annual reporting does not provide any added value). **Comparability across countries**: The national figures in the global assessments are reported by the countries themselves following standardized format, definitions and reporting years, ensuring that data is comparable across countries and regions. Further, the reporting format ensures that countries provide the full reference for original data sources as well as national definitions and terminology. Separate sections in the reporting format (country reports) deal with the analysis of data (including any assumptions made and the methods used for estimates and projections to the common reporting years). **Sub-national estimates**: Currently it is not possible to compute the indicator at sub-national level.
		Trends in area of community forest, agriculture, grazing and aquaculture land under sustainable management	Indicator proposed by UNEP (Gland Senior Expert meeting, Dec 2014). Source: geospatial data. **Justification**: Tenure security and FPIC do not necessarily guarantee sustainable management of land. Market forces and commodity prices, weak or unenforced collective arrangements, migration out of rural areas, conflicts and disasters can affect how land and natural resources are managed. Disposal of hazardous waste or carelessness over domestic and community waste are often a result of lack of awareness of their impacts on human health and the environment. On the other hand, consumer choices (such as for certified products) provides financial incentives for local communities to undertake sustainable practices. Indicators for sustainable land management are being further developed. This indicator needs further development.

	15.2 by 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and increase afforestation and reforestation by x% globally	**Net forest emissions**	This indicator corresponds to FAO GHG data computed within the FAOSTAT Emissions database –land use/forest land. It is defined as total emissions by forest sources (net deforestation plus net forest degradation) minus removals by sinks (net forest regrowth). **Rationale**: The TARGET is linked to Reducing Emissions from deforestation and forest degradation (REDD), a UNFCCC mechanism defines within the climate conventions (UNFCCC). A change in the object is linked to the target (REDD) directly as follows: positive changes indicate moving away from the target. Negative changes indicate getting closer to the target. Is the indicator also capturing other phenomena? In more general terms, the indicator is a proxy for forest ecosystem health and sustainable forest management. In the long term, under both conditions achieved, it will have a value of zero. Under aggressive medium term mitigation policy, it can be negative. **Measurability**: the indicator already exists and it is regularly reported by FAO. Metadata can be found at: http://faostat3.fao.org/modules/faostat-download-js/PDF/EN/GF.pdf The indicator is computed based on official forest statistics data communicated by FAO member countries to the FRA at regular, five-year intervals. **Reliability**: Data is based on IPCC default methodologies for assessing GHG emissions from land use. As such, the estimate is defined in the guidelines as being accurate – as in not biased. Uncertainty is due to underlying statistical data and applied emission factors (carbon density. It is in the order of +- 50 percent. **Coverage**: all FAOSTAT countries, 1990-present Comparability across countries: fully comparable. **Sub-national estimates**: It is possible, requiring geo-spatial data. Currently not implemented.
		Forest cover under sustainable forest management	This target has three main elements: SFM, quantity and quality of forest resources. In order to assess progress towards SFM a set of proxy/sub-indicators is proposed to be used, including areas of forests with forest management plans and monitoring system, certification and stakeholder participation. FRA2015 will use a number of proxy indicators/variables to assess SFM. These include forest with management plans and certification, but also policies, public participation etc. Source: FAO/FRA
		Change in total forest cover by type of forest (primary forest, other forests	Forest cover can be used as a proxy for quantity of forest resources. However, this will not capture issues related to forest degradation. The existing monitoring frameworks include FAO Global Forest Resources Assessment and UN Forum on Forests

		naturally regenerated, planted) (thousands of hectares)	National Reporting on the progress towards the achievement of the global objectives on forests and the implementation of the non-legally binding instrument on all types of forests. A new forest-related monitoring and accountability framework will be decided at UNFF11 in May 2015 as part of overall post-2015 international arrangement on forests.
		Share of area of forests under SFM in the total land area | **Share of area of forests in the total land area** | **Share of net carbon emissions from the above-ground forest biomass in that carbon pool Monitored over time** (joint UNECE/FAO Forestry and Timber Section)	The presented SFM-FACE indicator is an integrated indicator combining three component indicators that cover the three dimensions of the 15.2 target 1) Sustainable Forest Management – (SFM) area of forest under SFM 2) Deforestation, afforestation and reforestation – (FA) forest area 3) Degradation of forests – (CE) net carbon emissions from the above-ground forest biomass The above component indicators already are applied in forest reporting as standalone indicators; however, in the context of target 15.2, none of them is sufficient to separately provide comprehensive information on the results of the implementation of the target, therefore it is highly recommended to use them to create a composite indicator **SFM-FACE**. <u>SFM-FACE component indicators</u>: 1) Share of area of forests under Sustainable Forest Management (SFM) in the total land area (%). The indicator measures the share of area of forests under Sustainable Forest Management as a percentage of total land area, and how it changes over a period of time. Member States would establish a baseline figure at the beginning of the measuring period (e.g. year 2010) and measure the change in forest area under SFM for a specific reporting period, common for all. The growth of the total coverage of the forest area under SFM would be considered as advancement and the decline in coverage would be considered as regress to the achievement of target 15.2. It is important to compare the area under SFM to the total land area of a country to avoid any pervert effects from changes in the forest area (e.g. a faster increase of forest area than the area under SFM). The indicator is clear and easy to interpret and it directly shows the SFM policy implications. It may be drawn from well-established sources of public and private data including National Forest Inventories and the international reporting, e.g. FAO Global Forest Resources Assessment (FRA), as well as the UNECE/FAO reporting, which already provide a global overview. Challenges: a challenge related to this indicator is that the general criteria and guidelines for SFM from the United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro in 1992, are not interpreted in the same way internationally. So far, efforts at global level to assess the sustainability of forest management at the national level have used rather simple methods and delivered limited results. For a number of reasons, including the difficulty of defining sustainability in quantified objective ways and the diversity of situations, it has been difficult to establish comparable norms that could be applied in many countries. Sustainable Forest Management practices still vary considerably among countries and there is need to establish minimum criteria and

			conditions defining and ensuring balance among various SFM dimensions. 2) Share of area of forests in total land area % The indicator measures the share of forest area as the percentage of total land area, and how it changes over a period of time. It directly reflects the results of all policies linked to halting deforestation and increasing afforestation and reforestation. It already has been used for the monitoring of implementation of the MDG 7 and the data for it is commonly available. It has also been covered by the FAO FRA, the UNECE/FAO reporting, the Improved Pan- European Criteria and Indicators for Sustainable Forest Management (Forest Europe), Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests (the Montréal Process), other Collaborative Partnership on Forests (CPF) work, etc. Challenges: the indicator presents only the combined value of all the categories of the change in forest area and does not provide disaggregated information according to different categories contributing to it as well as impacts of specific policies related to them. The indicator may be considered less relevant to the countries that have limited physical capacity to increase their forest area due to their climate or landscape conditions. The experience from MDGs shows that this indicator does not provide sufficient information about the general condition of the forests and therefore is not recommended as a standalone indicator. 3) Share of net carbon emissions from the above-ground forest biomass in that carbon pool. The indicator measures the share of net value carbon emissions (emissions vs sequestration) in the total volume of carbon pool in above-ground biomass, and how it changes over a period of time. It could be used as a proxy indicator to indicate positive or negative changes of above-ground biomass, accounting for the carbon balance in the forests. That would indirectly reflect the trends in biodiversity, protective and productive functions as well as the general condition of forests. The data is commonly available as Green House Gases (GHG) emissions are computed from official national activity data and geospatial analyses, with application of international standard methodologies of the Intergovernmental Panel on Climate Change (IPCC), and already applied by the FAO FRA and the UNECE/FAO reporting. Challenges: the indicator reflects only indirectly and in general terms the conditions of the forest. It does not provide information about the components and causes of emissions. Additionally, in countries with already very high biomass levels, the results may be misleading as the possibilities of increasing the carbon amounts are very limited, and do not necessary mean that corrective actions are needed.
	15.3 by 2020, combat desertification, and restore degraded land and soil, including land affected by desertification, drought and floods,	**Trends in land degradation**	A tiered framework is proposed to measure land degradation and monitor progress towards achieving global and national land degradation neutrality targets, based on the UNCCD set of progress indicators established by Parties. While Tier 1 indicator (trends in land use/cover) is proposed as a stand-alone metric, the

	and strive to achieve a land-degradation neutral world		indicators of Tier 2 (trends in land productivity; trends in soil organic carbon stocks) would provide complementary information. The first and second tiers of this framework could be operationalized at the global and national levels in the short term due to the availability of global data sources at appropriate scale and recognized methodologies to compile the indicators; another tier could be subsequently developed and refined at national and sub-national levels according to country specificities, capacities and sustainable development priorities. Tier 3 indicators are being discussed in the context of other SDGs, such as land tenure and poverty rates, would help validate trends in land degradation. UNCCD COP Decision ICCD/COP(9)/L.29 indicates that two indicators – (1) the proportion of the population in affected areas living above the poverty line, and (2) land cover status – are the minimum required subset of impact indicators required for reporting by affected countries beginning in 2012, Source of Verification: Periodic Countries Parties Report to the UNCCD Convention
		Area of land/soils under sustainable management	Currently there is no global indicator available to monitor desertification and degradation, though there is ongoing work in this area. FAO is starting a consultation process to develop an indicator on "Area under SLM" (to be developed during the current biennium). The process will be within the framework of the "World Overview of Conservation Approaches and Technologies" (WOCAT)1 process and in the support of UNCCD implementation and will support countries to assess and map (and eventually monitor) SLM as well as degradation i.e. progress which is of more interest to policy makers and in line with Bonn Challenge, Aichi targets etc.
	15.4 by 2030 ensure the conservation of mountain ecosystems, including their biodiversity, to enhance their capacity to provide benefits which are essential for sustainable development	**Coverage of protected areas**	See justification comments related to target 15.1
		Mountain Green Cover Index	The Green Cover Index is designed to measure the changes of the green vegetation in mountain areas (i.e., forest, shrubs and trees). **Rationale**: The scientific mountain community recognizes the existence of a direct correlation between the green coverage of mountain areas and their state of health, and – as a consequence – their capacity of fulfilling their ecosystem roles. Therefore, monitoring the mountain vegetation change over time provides an adequate measure of the status of conservation of mountain ecosystems. In particular, the "Mountain Green Cover Index" can provide information on the forest and woody cover. Its reduction will be generally linked to forest exploitation, timber extraction, fuel-wood collection, and fire. Its increase will be due to vegetation growth possibly linked

			to reforestation or afforestation programmes. The proposed Index will provide a meaningful proxy for assessing the progress of all three mountain targets (ie., 6.6.; 15.1; and 15.4). If an order of relevance is needed, this is our proposed ranking: 15.4 15.1 6.6 We assign priority to 15.4 because this is solely "pure" mountain indicator. **Measurability**: this indicator does not exist yet but it can be developed using the existing dataset Global Land Cover (GLC) SHARE maintained by the NRL Division. FAO provides details on the development of this indicator. **Reliability, potential coverage, comparability across countries, and the possibility to compute the indicator at sub-national level**: the index derives most of the information from GLC-SHARE, so their reliability and potential coverage are highly interrelated. GLC-SHARE (v. 1.0): "The Global Land Cover-SHARE (GLC-SHARE) is a new land cover database at the global level created by FAO's Land and Water Division in partnership and with contribution from various partners and institutions. It provides a set of eleven major thematic land cover layers resulting from a combination of "best available" high resolution national, regional and/or sub-national land cover databases. The database is produced with a resolution of 30 arc-second2 (~1sqkm). The GLC-SHARE 2012 Beta-Release 1.0 is published by FAO in 2014. Complete free and open access to the data and metadata products are available at FAO GeoNetwork (www.fao.org/geonetwork)." Thanks to the way GLC-SHARE is structured, the Mountain Green Cover Index has a global coverage and it is possible to compute the indicator at the global, regional, national and sub-national level. In addition, the indicator allows for an analysis across the different mountain elevation classes. Comparability across countries is technically feasible, but it is not necessarily the most interesting statistics that the index can provide.
	15.5 take urgent and significant action to reduce degradation of natural habitat, halt the loss of biodiversity, and by 2020 protect and	**Red List Index**	Source: IUCN[27] - The IUCN Red List of Threatened Species provides information on the conservation status of plants, fungi and animals that have been globally evaluated using the IUCN Red List Categories and Criteria. The Red List Indexuses this information to determine the relative risk of extinction of species and

[27] The Red List Index was initially designed and tested using data on all bird species from 1988–2004 (Butchart *et al.* 2004) and then extended to amphibians (Butchart *et al.* 2005). The methodology was revised and improved in 2007 (Butchart *et al.* 2007). A Red List Index for mammals was added in 2008 and for corals in 2010 (Butchart *et al.* 2010). Red List Index trends can be calculated for any set of species that has been assessed at least twice for the IUCN Red List. The data for each group in the Red List Index are updated periodically, most recently for birds in 2012, while new data-points for amphibians and mammals are due in 2015-2016. For the set of species considered, trends are based on information from all non-Data Deficient species worldwide.

	prevent the extinction of threatened species		can be used to track changes in this over time. It can be disaggregated for different types of pressures as well as for different groups of species. As such, while it is particularly relevant to this target it can also be used to assess progress towards several of the proposed sustainable development targets.
		Living Planet Index[28]	Source - (Data from World Wildlife Fund for Nature (WWF) and the Zoological Society of London (ZSL). The Living Planet Index (LPI) is an indicator of the state of global biological diversity. It monitors populations for mammals, birds, reptiles, amphibians and fish from around the world. The change in the size of these populations relative to a 1970 baseline is used to assess change.
		Ex-situ crop collections (number of)	The Ex-situ crop collections indicator is a dynamic measure of the bio- and geographical diversity contained within ex-situ collections across time. Plant genetic resources for food and agriculture (PGRFA) are the biological basis of world food security. They consist of the diversity of genetic material contained in traditional varieties and modern cultivars grown by farmers as well as crop wild relatives and other wild plant species. It is widely believed that PGRFA are being lost. Agricultural systems are dynamic and the amounts and identity of the genetic diversity in them is constantly subject to change. Ex situ conservation of PGRFA represents the most trusted and popular means of conserving plant genetic resources worldwide. The measure of trends in ex situ conserved materials provides an overall assessment of the extent to which we are managing to maintain and/or increase the total genetic diversity required for current and future production and therefore secure under controlled conditions from any permanent loss of this type of genetic diversity occurring in the field. The indicator proposed for target 15.5 under SDG serves also as indicator for the CBD's Aichi Target 13 on genetic diversity of cultivated plants […] and of wild relatives and is described at the webpage of the Biodiversity Indicators Partnership (BIP), a network of organizations which have come together to provide the most up-to date biodiversity information possible for tracking progress towards the Aichi Targets (http://www.bipindicators.net/cropcollections). **Rationale**: the indicator has a direct link to "biodiversity" and, indirectly to "food security", as plant genetic resources are at the base of agricultural ecosystems and biodiversity, and make up to more than

[28] The LPI is calculated using time-series data on more than 9000 populations of over 2,600 species of mammal, bird, reptile, amphibian and fish from all around the globe. The changes in the population of each species are aggregated and shown as an index relative to 1970, which is given a value of 1. The LPI can be thought of as a biological analogue of a stock market index that tracks the value of a set of stocks and shares traded on an exchange. The LPI are published biennially in the Living Planet Report.

			90% of food calories consumed by the world's population. Ex situ collections represent the most accessible genepool for breeding programmes to improve crop varieties and to find traits of resistance and adaptability to biotic and abiotic stresses, including climate change, salinity, drought, flooding, as well as pests and diseases. Sustainable crop production intensification heavily depends on plant genetic resources and their adequate management. **Measurability**: The indicator has been calculated by FAO/AGPMG in 2008 and 2014. It will be calculated again in 2015 and then periodically every 2-3 years based on data reported by member countries to the Commission of Genetic Resources of Food and Agriculture on the implementation of the Second Global Plan of Action for PGRFA, as agreed at CGRFA-15: http://www.fao.org/3/a-mm181e.pdf. The links to the BIP and CBD are provided above. Country data are stored in WIEWS, the FAO PGRFA information system maintained by AGP (see http://www.pgrfa.org/WIEWS/). WIEWS responsible officer is currently Mr Stefano Diulgheroff (wiew@fao.org). Existing data sources should be identified, possibly with both time and country coverage. If there are no sufficiently dense data sources, a description of the kind of investment that is likely necessary to bring coverage to a sufficient extent to make global monitoring meaningful should be provided. **Reliability**: Data on genebank holdings which the indicator uses are relatively reliable as they have been periodically reported to FAO since 1996. For the majority of staple crops the largest collections are held by international research centers. **Coverage**: Data from more than 2 million accessions conserved ex situ world-wide are already accessible. It is expected that by mid 2015 data from 0.5 to 1 million additional accessions will be gathered from countries around the world. This will allow a relatively accurate elaboration of the indicator, which nevertheless can the subsequently adjusted with the incorporation of missing genebank data. The calculation of the indicator and its evolution overtime will be readjusted with the additional data. **Comparability across countries**: the indicator can be calculated globally as well as for each individual country and region. National and regional values can be compared among themselves as calculation is done in the same way for all countries and regions. **Sub-national estimates**: Not applicable.

			A numerical target could be expressed and a percentage increase of the indicator value for a specific year, such as 1996, the year of adoption of the Global Plan of Action for the Conservation and Sustainable Use of PGRFA.
		Number/percentage of local breeds at-risk, not-at-risk and unknown-levels of risk of extinction	The indicator presents the percentage of livestock breeds being at risk, not at risk or of unknown risk class at a certain moment in time as well as the trends for those percentages. The indicator is based on the most up to date data contained in FAO's Global Databank for Animal Genetic Resources DAD-IS (http://dad.fao.org/) at the time of calculation. A detailed definition of the indicator is provided by FAO. The indicator serves also as indicator for Aichi Target 13 "Genetic Diversity of Terrestrial Domesticated Animals" under the Convention on Biological Diversity (CBD) and is described at the webpage of the Biodiversity Indicators Partnership (BIP) , a network of organizations which have come together to provide the most up-to date biodiversity information possible for tracking progress towards the Aichi Targets (http://www.bipindicators.net/domesticatedanimals). Further it is presented in the Global Biodiversity Outlook 4, page 91 (see http://www.cbd.int/gbo/gbo4/publication/gbo4-en-lr.pdf) which is an output of the processes under the CBD. **Rationale**: The indicator has a direct link to "biodiversity" as animal or livestock genetic resources represent an integral part of agricultural ecosystems and biodiversity as such. Further there are indirect links to "malnutrition": Animal genetic resources for food and agriculture are an essential part of the biological basis for world food security, and contribute to the livelihoods of over a thousand million people. A diverse resource base is critical for human survival and well-being, and a contribution to the eradication of hunger: animal genetic resources are crucial in adapting to changing socio-economic and environmental conditions, including climate change. They are the animal breeder's raw material and amongst the farmer's most essential inputs. They are essential for sustainable agricultural production. No increase of the percentage of breeds being at risk or being extinct is directly related to "halt the loss of biodiversity". **Measurability**: The indicator is calculated by FAO/AGAG and reported biannually to the Commission of Genetic Resources of Food and Agriculture. The most recent report is available at: http://www.fao.org/3/a-mm278e.pdf. The links to the BIP and CBD are provided

			above. FAO is partner in the BIP and provides information on the indicator directly to the partnership. The underlying data base DAD-IS is maintained by FAO/AGAG (see http://dad.fao.org/). The contact person for DAD-IS is Ms Roswitha Baumung. Data are officially provided by countries. Data entry is possible all over the year. The future of the indicator and a meaningful global monitoring is directly related to the maintenance and development of DAD-IS by FAO. **Reliability**: the reliability of population sizes for breeds varies between countries and species (similar to population size for livestock species provided in COUNTRYSTAT). However, rough estimates on country level are considered to be sufficient to show reliable global and regional trends. Presenting the trends in form of regression curves would allow the calculation of confidence intervals. **Coverage**: The Global Databank for Animal Genetic Resources currently contains data from 182 countries and 38 species. The total number of national breed populations recorded in the Global Databank has increased dramatically since 1993 (from 2 716 national breed populations to 14 869 and from 131 countries to 182). The total number of mammalian national breed populations recorded in June 2014 was 11 062. The total number of avian national breed populations recorded in 2014 was 3 807. However, breed-related information remains far from complete. For almost 60 percent of all reported breeds, risk status is not known because of missing population data or lack of recent updates. Generally data collection should be possible in all countries. Updating of population size data at least each 10 years is needed for the definition of the risk classes. **Comparability across countries**: completely comparable as calculation is done in the same way for all countries and the same definitions on risk classification is applied. **Sub-national estimates**: sub-national estimates can be calculated with regard to the risk status of each national breed population and species. Results can be presented on national, regional and global level. With regard to halt the loss of biodiversity a target can be formulated as “The genetic diversity of farmed and domesticated animals is maintained” which is consistent with the target formulation of Aichi Target 13 under the CBD. However the future projections presented in the Global Biodiversity Outlook 4, Figure 131, page 91 (see http://www.cbd.int/gbo/gbo4/publication/gbo4-en-lr.pdf) suggest such halt will be unrealistic.

		Number of unmanaged obsolete pesticide stockpiles and improperly managed waste disposal sites	Suggested indicators on behalf of the Secretariat of the Basel, Rotterdam and Stockholm Conventions (on chemicals and wastes) and UNEP Chemicals Branch.
		Percentage of hazardous wastes and other wastes, including obsolete stockpiles of pesticides, recovered, reused and recycled, including for energy generation	Information source: the Basel Convention (national reports include information on the generation of hazardous and other wastes), Stockholm Conventions (National Implementation Plans and national reports) and FAO (tbc). Data is available for obsolete POPs, not for all pesticides.
		Number of facilities for environmentally sound management of hazardous waste	Information source: Basel Convention National reports
		Levels of hazardous chemical pollutants in freshwater ecosystems	Information source: Partial coverage by PRTR proxy indicator
	15.6 ensure fair and equitable sharing of the benefits arising from the utilization of genetic resources, and promote appropriate access to genetic resources	**Number of countries that have adopted legislative, administrative and policy frameworks for the implementation of the Nagoya Protocol**	The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity is an international agreement which aims at sharing the benefits arising from the utilization of genetic resources in a fair and equitable way, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding, thereby contributing to the conservation of biological diversity and the sustainable use of its components. As such monitoring the number of countries that are signatories to it over time provide an indicator of progress towards this target.
		Number of permits or their equivalents made available to the Access and Benefit-sharing Clearinghouse established under the Nagoya Protocol and number of Standard Material Transfer Agreements, as communicated to the Governing Body of the International Treaty.	Parties to the *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity* (Nagoya Protocol) that subject access to genetic resources to prior informed consent are obliged under Article 6 (3)e of the Nagoya Protocol to issue a "permit or its equivalent as evidence of the decision to grant prior informed consent and of the establishment of mutually agreed terms." The ABS Clearinghouse will make permits available on-line: https://absch.cbd.int/. The *Standard Material Transfer Agreement* (SMTA) is a mandatory contract that Parties to the *International Treaty on Plant Genetic Resources for Food and Agriculture* (International Treaty) have agreed to use whenever plant genetic resources falling under the Treaty's Multilateral System of Access and Benefit-sharing are made available. The SMTA defines the conditions of use of the plant genetic resources as well as the benefit-sharing conditions. According to the SMTA

			providers shall inform the Governing Body about the Standard Material Transfer Agreements entered into. In addition, recipients who transfer resources received under a SMTA to third parties shall do so under the terms and conditions of the SMTA and shall notify the Governing Body. SMTAs are stored in the Data Store of the International Treaty. As of 1 September 2014, the Data Store has recorded 21, 701 SMTAs from providers located in 16 countries, distributing material to recipients based in 155 countries. (http://www.planttreaty.org/sites/default/files/IT_OWG-EFMLS-2_14_Inf3_en.pdf). **Rationale**: The fair and equitable sharing of benefits arising out of the utilization of genetic resources, including by appropriate access to them will contribute, it is hoped, to the conservation of biological diversity and the sustainable use of its components. The target therefore aims to monitor cases in which agreement on access to genetic resources and the sharing of benefits derived from their use has been reached. An increase of permits or their equivalents made available to the ABS Clearinghouse and an increase of SMTAs communicated to the Governing Body of the International Treaty will indicate an increased number of cases in which access to genetic resources has been granted and in which resulting benefits will be shared on the basis of "mutually agreed terms". **Measurability**: The information the indicator is based on is already being collected under the International Treaty. The ABS Clearinghouse is ready to start collecting permits/ equivalents. However, it should be noted that only recently the Nagoya Protocol entered into force. Reporting agencies: • The CBD Secretariat, through its ABS Clearinghouse, would be responsible for the ABS permits or their equivalents (https://absch.cbd.int/). • FAO, through its Secretariat of the International Treaty on Plant Genetic Resources for Food and Agriculture, would track the SMTAs (www.planttreaty.org). **Reliability, potential coverage, comparability across countries, and the possibility to compute the indicator at sub-national level**: In principle, the "permits/ equivalents indicator" will capture all cases of access and benefit-sharing which are covered by ABS laws of countries that are Parties to the Nagoya Protocol. The SMTA indicator captures all access and benefit-sharing cases relating to material of the Treaty's Multilateral System of Access and Benefit-sharing. Not all countries will always report all permits / SMTAs.

			However, as countries become Parties to the International Treaty and the Nagoya Protocol and increasingly comply with their reporting obligations under the two instruments, reliability, coverage and comparability across countries will improve. Sub-national estimates might require additional work.
		Percentage of agreements, arrangements and transactions affecting common land and natural resources that fulfill free and prior informed consent from both women and men in local communities	Source: public registers of such transactions Indicator proposed by UNEP (Gland Senior Expert meeting, Dec 2014). This indicator needs further development.
	15.7 take urgent action to end poaching and trafficking of protected species of flora and fauna, and address both demand and supply of illegal wildlife products	**Red List Index for species in trade**	See description related to 15.5
		Ratio of indexed value of total CITES-listed wildlife seizures to indexed value of total CITES wild-sourced export permits issued	This compound indicator is a measure of wildlife crime enforcement effort. Seizures represent enforcement action, but trends in seizures are meaningless without some indication of trends in demand. CITES permit issued are an indicator of legal market demand. In order to aggregate seizures of the many different commodities trafficked, both variables must be valued. These valuations can be derived from the declared value of wildlife imports, which act as an index of relative value rather than an absolute market valuation. **Data availability**: Three sources of data are required, all of which are available on a regular basis: 1) CITES wild sourced commercial permits. These are collected by the CITES Secretariat and are maintained in a database by UNEP-WCMC. 2) Seizures of CITES-listed wildlife products. These are collected by the CITES Secretariat and are maintained in the World WISE database by UNODC. 3) Declared values for imported wildlife products. These are collected by national governments and are maintained in the World WISE database by UNODC.
		Illegal killing of Elephants	Source: MIKE and ETIS programmes. MIKE (Monitoring the Illegal Killing of Elephants) and ETIS (Elephant Trade Information System) are monitoring tools used by CITES in the business of assessing policies for trade in elephant products. Both emerged after the 10th meeting of the Conference of the Parties as systems for tracking illegal activities involving elephants. At its 11th meeting (Gigiri, 2000), the Conference of the Parties approved both systems for implementation. It confirmed this decision at its 12th

			meeting (Santiago, 2002) with a few refinements [see Resolution Conf. 10.10 (Rev. CoP16)]. MIKE and ETIS are established under the supervision of the CITES Standing Committee. The Committee has formed a MIKE-ETIS Subgroup to oversee the further development, refinement and implementation of the programmes. The Secretariat has established an independent Technical Advisory Group (MIKE-ETIS TAG) to provide technical oversight to both MIKE and ETIS.
	15.8 by 2020 introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems, and control or eradicate the priority species	**Adoption of national legislation relevant to the prevention or control of invasive alien species**[29]	There are various measures that can be used to prevent the introduction and/or reduce the impact of invasive alien species. Given this a means of measuring progress towards this target at the global level is the number of countries which have legislation related to preventing the introduction or spread of invasive alien species or for their eradication.
		Red List Index for birds showing trends driven by invasive alien species	Source - Data from BirdLife International[30]. This indicator shows trends in the status of all birds worldwide, but reflects only those trends driven by the negative impacts of invasive alien species or the positive impacts of their control. It is based on BirdLife International's assessments of extinction risk for all birds for the IUCN Red List, specifically the number of species in each Red List category of extinction risk, and the number moving categories between assessments owing to genuine improvement or deterioration in status driven by impacts of invasive alien species or their control. All other changes are excluded, whether from improved knowledge, or genuine impacts of other threats or their control.
	15.9 by 2020, integrate ecosystems and biodiversity values into national and local planning, development processes and poverty reduction strategies, and accounts	**National programme on the measurement of values of biodiversity or on the implementation of the SEEA-EEA** (Decision COP XI/3)	Number of countries experimenting the UN accounting framework on Ecosystem accounting SEEA-EEA (System of Environmental-Economic Accounting - Experimental Ecosystem Accounting). This indicator needs further development.
		Number of national development plans and processes integrating biodiversity and ecosystem services values (Decision COP XI/3)	Number of countries integrating biodiversity and ecosystem services related goals into national development policies and plans, and sectoral plans, such as UNDAFs, PRSPs, National development plans… and allocated budgets. This indicator needs further development.
		Existing mechanisms to incorporate biodiversity values into decision-making processes	National legal, fiscal and economic provisions or schemes to incorporate biodiversity values into decision-making at both national and local levels (e.g. through Strategic environmental assessments, Cost benefit analysis…). This indicator needs further development.

[29] McGeoch *et al.* 2010 produced the data for this indicator as follows: all national legislation relevant to controlling invasive alien species was identified for each of the 191 Parties to the CBD. This legislation was then examined for relevance to the prevention or control of invasive alien species. Legislation was considered relevant to the prevention of alien species introductions or to control of invasive alien species if it applied to multiple taxonomic groups and was not exclusively intended to protect agriculture (see McGeoch, M. A., Butchart, S. H. M., Spear, D., Marais, E., Kleynhans, E. J., Symes, A., Chanson, J. and Hoffmann, M., 2010, 'Global indicators of biological invasion: species numbers, biodiversity impact and policy responses', Diversity and Distributions, (16) 95–108).

	15.a mobilize and significantly increase from all sources financial resources to conserve and sustainably use biodiversity and ecosystems	**Official Development Assistance** (Data from OECD[31])	Official Development Assistance is financing "administered with the promotion of the economic development and welfare of developing countries as the main objective, and which are concessional in character…". ODA can be either bilateral (directly from a donor country to a recipient country) or multilateral (resources channeled through international financial institutions and United Nations organization, funds and programmes). Assessing tends in biodiversity-related ODA is possible through the reporting of OECD member countries of the Development Assistance Committee (DAC). Information is compiled in the OECD DAC Creditor Reporting System (CRS). Reporting started in 1998, and has been mandatory since 2007. Every aid activity reported is screened and marked using a variety of makers.
		National incentive schemes that reward positive contribution to biodiversity and ecosystem services (Decision COP XI/3)	National financial and market mechanisms for the protection and sustainable use of biodiversity (fiscal instruments, PES, subsidies…). Source: Financial Reporting Framework of CBD. Decision XII.3 (Questionnaire on resource mobilization). This indicator needs further development.
	15.b mobilize significantly resources from all sources and at all levels to finance sustainable forest management, and provide adequate incentives to developing countries to advance sustainable forest management at local level, including for conservation and reforestation as well as participating in carbon markets to ensure multiple benefits	**Public funding for sustainable forest management**	Public funds earmarked to sustainable management of forest (millions of US dollars). Despite being the most accurate indicator for this target, the total amount of forest financing is difficult to quantify because there is no systematic data collection on all of its components (public, private, domestic, international). Source: Forest resource assessment (Question 17). This indicator needs further development.
		Forestry official development assistance and forestry FDI	Forestry official development assistance (OECD) and forestry foreign direct investment (UNCTAD) (millions of US dollars). This indicator needs further development.
	15.c enhance global support to efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to	**Ratio of indexed value of total CITES-listed wildlife seizures to indexed value of total CITES wild-sourced export permits issued**	See description related to 15.7.

[31] Information is compiled in the OECD DAC Creditor Reporting System (CRS). Reporting started in 1998 and has been mandatory since 2007.

	pursue sustainable livelihood opportunities	**Extent to which sustainable practices and management by women and men pastoralists, farmers, fishers, forest dwellers on common lands, including national and trans-national mobility, are legally protected and enhanced by policies and regulations**	Indicator proposed by UNEP (Gland Senior Expert meeting, Dec 2014). This indicator needs further development.

Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

The following table identifies a list of suggested indicators for each Open Working Group target under Goal 16, ranked in order of preference by the Goal 16 TST working group.

The group has applied the criteria set across the TST working groups, as follows: relevance, methodological soundness, measurability (with reasonable effort and costs) and ease to understand and communicate. In addition, while recognising that not every aspect of every target can be addressed by a limited number of indicators, of those that meet the criteria, the group has prioritized indicators that are both universal and transformative for sustainable development, underpinned by rights, and with people and planet at the centre.

As noted by the Open Working Group Proposal for Sustainable Development Goals, it will be important to have data and statistics disaggregated, where appropriate, by income, gender, age, race, ethnicity, disability, displacement and migratory status, statelessness, geographic location and other characteristics relevant in national contexts. Consequently, the group has assumed that all indicators will be disaggregated where appropriate, and so therefore this language is not included in each indicator.

16.1 Significantly reduce all forms of violence and related death rates everywhere	
Indicator 1	*Homicide and conflict-related deaths per 100,000 people.*
Rationale	This is an existing, well-developed indicator, and is used to identify the level of peacefulness and personal security across countries. The indicator is easy to understand and focuses on the most measurable and widely collected data. The administrate statistics needed for the indicator are routinely produced by national law enforcement authorities and/or public health institutions. WHO collects data on global, regional and national causes of death, including due to suicide, homicide and war. The latest UNODC Homicide Statistics (2013) contain data for 219 countries and territories. In support of evidence-based policy and in accordance with international statistical guidance, disaggregation of the indicator by characteristics of the victims and perpetrators (intimate, relative, known person, stranger, state authority) is recommended (ESA/STAT/AC.193/4). This indicator includes both intentional and unintentional homicide, and deaths related to violent conflict.
Indicator 2	*Percentage of the adult population aged 18 and older, subjected to violence within the last 12 months, by type (physical, psychological and/or sexual).*
Rationale	This is a very relevant and measurable indicator, easily understood and methodologically sound. Separate from homicide rates, this indicator looks at different types of violence, which addresses bodily, physical and mental integrity and personal security more broadly, as indicated in the target.

	Data is collected through national and international surveys, which are being implemented by an increasing number of countries. Such surveys include the International Crime Victimization Survey, which has been conducted in approximately 80 countries worldwide. An increasing number of countries are also implementing gender-based violence surveys, and international agencies such as WHO, UNFPA, UNICEF and UN Women have funded and/or are currently funding the implementation of these surveys in a set of pilot countries. Much data is also available through national law enforcement authorities and/or public health institutions. Global studies on violence against women have been conducted at the national level through Demographic and Health Surveys (DHS) and the World Health Organization. The United Nations Statistics Division has finalized a manual on the implementation of violence against women surveys. In support of evidence-based policy and in accordance with international statistical guidance, disaggregation of the indicator by characteristics of the victims and perpetrators (intimate, relative, known person, stranger, state authority) is recommended (ESA/STAT/AC.193/4)
Indicator 3	*Proportion of people that feel safe walking alone around the area where they live.*
Rationale	In addition to administrative data and experience surveys, this indicator is an example of a perception-based measure that addresses perceived levels of safety, which is an important component of a peaceful society. World Values Survey and Gallup currently cover this issue for a large number of countries. The Strategy for the Harmonization of Statistics in Africa (SHaSA) initiative is currently compiling these statistics in 20 countries in Africa. Data is also collected through national and international crime victimization surveys, such as the International Crime Victimization Survey which has been conducted in approximately 80 countries worldwide.
16.2 End abuse, exploitation, trafficking and all forms of violence and torture against children	
Indicator 1	*Percentage of young adults aged 18-24 years who have experienced violence by age 18, by type (physical, psychological and/or sexual).*
Rationale	This indicator can be considered a proxy indicator for a key aspect of the change needed to achieve the target of elimination of violence against children. The indicator is easy to understand, measurable and methodologically sound. At the national level, data is produced through administrative records of health care facilities, the criminal justice system and social child protection services, as well as through population surveys.
Indicator 2	*Number of victims of human trafficking per 100,000 people.*

Rationale	This indicator directly measures an aspect of the target. This is a general indicator, but the collected data can be disaggregated by sex and age so that separate data for children can be reported on. The indicator also contributes to measuring target 5.2. Data on trafficked persons is collected by UNODC in its biennial Global Report on Trafficking in Persons, using national data sources (e.g. police records, national human rights institutions). A number of other databases also compile relevant information including the IOM Human Trafficking Databases and the CLANDESTINO Database on Irregular Migration. OHCHR is also collecting relevant data. The indicator is relevant to the target, measurable using sound methodology, and easy to communicate and understand.
16.3 Promote the rule of law at the national and international levels, and ensure equal access to justice for all	
Indicator 1	*Percentage of people who have experienced a dispute, reporting access to an adequate dispute resolution mechanism.*
Rationale	This indicator measures the experience of those who have had a dispute in accessing the justice system, and how satisfactory they found that experience. The indicator measures the process in terms of accessibility and quality of service, rather than the outcome. It is easy to communicate, measurable and aims to be transformative in nature. It seeks to drive an approach to the rule of law and access to justice which focuses not only on institutions, but on individuals' experience of the justice system and on just outcomes. The indicator has the benefit of capturing experience in both civil and criminal law, and with state and non-state dispute resolution mechanisms, as relevant. It can also support the use of legal aid in improving justice outcomes. Existing household surveys in many countries already collect relevant data and this would need to be scaled-up. This indicator also contributes to measuring target 16.6.
Indicator 2	*Percentage of total detainees who have been held in detention for more than 12 months while awaiting sentencing or a final disposition of their case.*
Rationale	This indicator can be used to assess the overall functioning and effectiveness of the justice system in any given country. It is measurable using sound methodology, and easy to communicate and understand. At the international level, extensive data on prisons is collected by UNODC and data on persons in pre-trial detention is available in 118 countries and territories (while data on the length of pre-trial detention is not currently collected this could be added). Extensive data is also commonly available at a national level from law enforcement authorities. Other organizations collecting data on prisons include the Council of Europe and the OAS. It will be important to use a uniform measure for the final disposition of a case across jurisdictions.
16.4 By 2030 significantly reduce illicit financial and arms flows, strengthen recovery and return of	

stolen assets, and combat all forms of organized crime	
Indicator 1	*Total volume of inward and outward illicit financial flows.*
Rationale	Illicit financial flows are commonly defined as the transferred monies that is earned, transferred or spent through illicit means, into or out of a country. They include legally earned value, money and monetized instruments that are transferred illicitly or value, money and monetized instruments that are acquired through illegal activities, such as the proceeds of crimes, including corruption and tax evasion. They can also capture tax avoidance and trade misinvoicing. The indicator measures an important aspect of target 16.5. The indicator also covers other aspects of this target, such as revenues emanating from illicit arms sales and organized crime. Although the UN Economic Commission for Africa, UNDP, Global Financial Integrity and others have produced global country-by-country estimates for illicit financial flows, more work on methodologies would be required.
16.5 Substantially reduce corruption and bribery in all its forms	
Indicator 1	*Percentage of population who paid a bribe to a public official, or were asked for a bribe by these public officials, during the last 12 months.*
Rationale	This indicator speaks directly to an individual's experience of corruption and bribery in everyday life, including while accessing basic public services or avoid a ticket or harassment by the police. This indicator captures obligations agreed upon by 173 States Parties to the UN Convention Against Corruption. The Convention requires countries to establish criminal and other offences to cover a wide range of acts of corruption, including bribery. The indicator is measurable using sound methodology, and easy to communicate and understand. The indicator can be measured through population surveys, increasingly being used to measure the experience of corruption. It has been used by UNODC and SHaSA. These surveys usually ask if the respondent gave money or offer a gift in excess of normal fees to a public official (by government department), or were asked by these public officials to do so, to avoid directly asking whether the respondent committed a crime by paying a bribe. A bribe is understood as defined in the United Nations Convention Against Corruption (UNCAC) as the promise, offering or giving, to a public official, directly or indirectly of an undue advantage for the official himself or herself or another person or entity, in order that the official act or refrain from acting in the exercise of his or her official duties and the solicitation or acceptance by a public official, directly or indirectly of an undue advantage for the official himself or herself or another person or entity, in order that the official act or refrain from acting in the exercise of his or her official duties. This indicator also contributes to measuring target 16.6.

Indicator 2	*Percentage of businesses that paid a bribe to a public official, or were asked for a bribe by these public officials, during the last 12 months.*
Rationale	This indicator speaks directly to businesses' experience of corruption and bribery, which can have a profound financial impact on the economy and government expenditures and speaks to the accountability of institutions. It is measurable using sound methodology, and easy to communicate and understand. The indicator can measured through business surveys. A bribe is understood as defined in the United Nations Convention Against Corruption (UNCAC) as: the promise, offering or giving, to a public official, directly or indirectly of an undue advantage for the official himself or herself or another person or entity, in order that the official act or refrain from acting in the exercise of his or her official duties and the solicitation or acceptance by a public official, directly or indirectly of an undue advantage for the official himself or herself or another person or entity, in order that the official act or refrain from acting in the exercise of his or her official duties. This indicator also contributes to measuring target 16.6.
16.6 Develop effective, accountable and transparent institutions at all levels	
Indicator 1	*Actual primary expenditures per sector and revenues as a percentage of the original approved budget of the government*
Rationale	This indicator is a relevant indicator of state effectiveness, measuring the capacity of the state to plan, budget and spend on key priorities to the maximum of its available resources. This indicator also gives an indication of transparency and accountability regarding government expenditures and revenues. Disaggregation by sector (e.g. health, social services, justice, military) and user by sex is recommended. Data is readily available through existing national budget processes.
Indicator 2	*Proportion of population satisfied with the quality of public services, disaggregated by service.*
Rationale	In addition to administrative data, this indicator is an example of a perception-based measure that addresses satisfaction with public services. In order to be effective and accountable, intuitions must be responsive to the perceived needs of the population. This indicator will require the use of perception-based population surveys and will collect relevant data on the lived experience of individuals seeking access to and obtaining basic public services, such as health care, education, water and sanitation, as well as services provided by the police and judicial system. The indicator could distinguish among various public services. It is measurable using sound methodology, and easy to communicate and understand. Currently, SHaSA governance survey modules address this issue by asking respondents to rate the accessibility and their trust on various public services, including hospitals, public schools, and national security institutions.

	This indicator also contributes to measuring target 16.3.
16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels	
Indicator 1	*Diversity in representation in key decision-making bodies (legislature, executive, and judiciary).*
Rationale	In order to be responsive, inclusive, participatory and representative, it is important to ensure diversity in representation at all levels of state institutions (central, regional and local). Diversity should also measure representation in the leadership of institutions. The indicator should be disaggregated by sex, language, ethnicity, religion, race, region or caste, disabilities and populations whose livelihoods or common natural resources are affected by decisions concerning large-scale investments or public infrastructure.
Indicator 2	*Percentage of population who believe decision-making at all levels is inclusive and responsive.*
Rationale	This indicator is a way of measuring the perception of people of their government, focusing on inclusiveness and responsiveness to the population. It is both easy to understand and communicate. It will require scaling up of household surveys that collect perception based data. Citizens' participation mechanisms at all levels of government are, for example, parliamentary fora for citizens' input, the use of referenda, participatory budget preparation at local levels, etc., and speak to the participatory nature of decision-making.
16.8 Broaden and strengthen the participation of developing countries in the institutions of global governance	
Indicator 1	*Percentage of voting rights in international organizations of developing countries.*
Rationale	Representation and participation of developing countries in international organizations, including international financial institutions, is often below their relative weight in the world, and fails to take into account the interests of LDCs and SIDS. This indicator would measure the representativeness of developing countries in international organizations. This indicator would be easily measurable by way of data collected by international organizations. This indicator also contributes to measuring target 16.3.
16.9 By 2030 provide legal identity for all, including birth registration	
Indicator 1	*Percentage of children under 5 whose births have been registered with civil authority.*
Rationale	The registration of births is a reasonable proxy for – although not identical to – legal

	identity. It is relatively easy to measure with well-established methodologies and is easy to communicate. Data for this indicator is currently collected at the international level by UNICEF though the Multiple Indicator Cluster Survey (MICS), as well as through Demographic and Health Surveys (DHS) and national civil registry systems. Disaggregation by age is recommended. Caution needs to be taken to ensure that access to public services is not dependent on birth registration. This target is thus also linked to the indicator under 16.6 measuring satisfaction with the quality of public services.
16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements	
Indicator 1	*Percentage of actual government budget, procurement, revenues and natural resource concessions that are publicly available and easily accessible.*
Rationale	The indicator gives a broad measure of the extent that information on the operations of government is publicly available, focusing on the critical areas of expenditures and revenues, public procurement and concessions for natural resources. The data generated from this indicator will facilitate transparency and access to relevant government information and will require, where lacking, legislation on access to information.
Indicator 2	*Number of journalists, associated media personnel and human rights advocates killed, kidnapped, disappeared, detained or tortured in the last 12 months.*
Rationale	This indicator is a proxy for the freedom of expression and freedom of the media. Data for this indicator is currently collected by way of the UNESCO Media Development Indicators, the Universal Periodic Review, OHCHR reports on violations of media freedom, UNESCO Journalist Safety Indicators, the World Report on Freedom of Expression and Media Development, and the annual reports of the Human Rights Council mandated Working Group on Enforced or Involuntary Disappearances.
16.a Strengthen relevant national institutions, including through international cooperation, for building capacities at all levels, in particular in developing countries, for preventing violence and combating terrorism and crime	
Indicator 1	Percentage of requests for international cooperation (law enforcement cooperation, mutual legal assistance and extraditions) that were met during the reporting year.
	The indicator measures the support that national institutions receive from other countries in the form of law enforcement cooperation, extraditions and mutual legal assistance. The indicator focuses on the requests which were met by external partners as percentage of total requests made. Information relevant to the indicator is collected in relation to law enforcement cooperation on fighting drug trafficking (UNODC Annual Report Questionnaire) and a pilot data collection on extraditions and mutual legal assistance was made by UNODC in 2013.

Indicator 2	*Existence of independent national human rights institutions (NHRIs) in compliance with the Paris Principles*
Rationale	A NHRI is an independent national institution set up by a State to promote and protect human rights. Existence of a NHRI in compliance with the Paris Principles adopted by the United Nations (A/RES/48/134) vest the institution with a broad mandate, competence and power to investigate, report on the national human rights situation. The focus of this indicator is on the operational nature of the NHRIs. Specifically the Paris Principles oblige an NHRI to be considered compliant to embody the following: - Have a broad mandate, based on universal human rights norms and standards; - Enjoy autonomy from the Government; i.e. are independent, as guaranteed by statute or Constitution; - Have adequate resources to operate; and Have adequate powers of investigation.
Indicator 3	*Percentage of Official Development Assistance devoted to institution-building*
Rationale	This is a general indicator measuring support from the international community to strengthen national institutions, focusing e.g. on health systems, rule of law institutions and institutions that deliver social services, , which requires sustained support over the long-term.
Indicator 4	*Percentage of the population who believe that national security and justice institutions are able to effectively prevent violence, combat terrorism and organized crime*
16.b Promote and enforce non-discriminatory laws and policies for sustainable development	
Indicator 1	*Proportion of the population reporting and perceiving to be discriminated against directly and/or indirectly, and hate crimes.*
Rationale	The data is collected through population surveys and administrative data. An ILO survey on discrimination and hate crimes at work is available. In some countries National Human Rights Institutions and National Women's Machineries or other similar institutions (including civil society, including INGOs) also collect related data. Direct discrimination occurs when one person is treated less favourably than another for a reason related to one of the prohibited grounds and with no reasonable and objective justification. Indirect discrimination occurs when a priori neutral laws, procedures, policies or programmes treat certain population groups less favourably with no reasonable justification.
Indicator 2	*Proportion of the population satisfied with the quality of public services,*

	disaggregated by service.
Indicator 3	*Percentage of the population who believe that state institutions are treating people of all groups fairly, equitably and without discrimination.*
Indicator 4	*Fulfilment of Multilateral Environmental Agreement implementation plans.*
Rationale	Multilateral Environmental Agreements (MEA) protect environmental global public goods. The vulnerable groups suffer disproportionately of the deterioration of these global public goods. MEAs are existing agreements and the parties have an obligation to implement them.

Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development		
17.1 strengthen domestic resource mobilization, including through international support to developing countries to improve domestic capacity for tax and other revenue collection	**UNCTAD:** 17.1.1 Total Tax/GDP 17.1.2 Total Tax Per Capita ($ value) 17.1.3 Composition of Tax Revenues (sources) 17.1.4 Country-by-country tax payments reported by MNEs 17.1.5 Number of tax/customs reforms implemented by countries. **UNCDF:** 17.1.6 Change from baseline in value of total national budget (only government budget and including direct budget support) allocated to local governments (including investment and operation budget) 17.1.7 Change from baseline in value in resources mobilized by local governments 17.1.8 Percentage of payments that are made electronically, by payment value 17.1.9 Percentage of payments that are made electronically, by number of payments	**UNCTAD:** 17.1.1 – 17.1.5: Compiled at the national level. Agreed measures of tax leakage, either owing to activities in the informal economy or owing to globalization and MNE activities would be useful supplementary indicators. **UNCDF:** 17.16Measured by national budget allocation to local governments in US$, through official data. 17.17Measured by revenues mobilized by local governments in US$ through official data: local governments' budget. 17.1.8 Represents total payments made electronically whether to or from government, business, or persons by value relative to total value of payments (cash and electronic) 17.1.9 Represents total payments made electronically whether to or from government, business, or persons by number of payments made relative to total number payments (cash and electronic) Rationale: when payments are made electronically, costs are reduced and leakages minimized, resulting in greater resources available for government investment in priority areas. In Mexico for example, paying salaries electronically has resulted in annual savings of 3.3% of its total expenditure on wages, pensions and social transfers (representing $1.27 billion per annum). Additionally, the

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
	UNEP: 17.1.10 Value of ecosystem services derived from domestic resources as share of a nation's GDP+ {or alternatively as share of IWI - Inclusive Wealth Index}	shift to electronic payments contributes to formalization which enhances the tax base and domestic resource mobilization. **UNEP** 17.1.8 **-** We consider "domestic resources" as being more than just tax revenue collection. National accounting of natural capital and ecosystem services (and their health and improvement) will be a transformational indicator that will achieve sustainable growth as well as provide domestic (rural and urban) resources to achieve the SDGs such as poverty or universal services (water, energy).
17.2 developed countries to implement fully their ODA commitments, including to provide 0.7% of GNI in ODA to developing countries of which 0.15-0.20% to least-developed countries	**UNCTAD:** 17.2.1 Net ODA, total and to LDCs, as percentage of OECD/Development Assistance Committee (DAC) donors' gross national income (GNI)(OECD) 17.2.2 Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation) (OECD) 17.2.3 Proportion of bilateral ODA of OECD/DAC donors that is untied (OECD) 36. ODA received in landlocked developing countries as a proportion of their GNIs (OECD)	**UNCTAD**: These are 7 indicators regarding ODA from the MDG process Additional indicators could also be considered: 1. ODA+Private Grants/GDP 2. Proportion of total bilateral, sector-allocatable ODA of OECD/DAC donors to economic infrastructure and services 3. ODA received in least developed countries as a proportion of their GNIs (OECD) 4. Country programmable aid (including humanitarian aid, debt relief etc.)

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
	17.2.4 ODA received in small island developing States as proportion of their GNIs (OECD) 17.2.5 Agricultural support estimate for OECD countries as percentage of their GDP (OECD) 17.2.6 Proportion of ODA provided to help build trade capacity (OECD, WTO)	
17.3 mobilize additional financial resources for developing countries from multiple sources	**IOM:** 17.3.1 *Cost of remittances* (WB monitoring) 17.3.2 *Cost of remittances in the top tier of high-cost corridors* (Ibid.) 17.3.3 *Financial literacy of migrants and their families (OECD/WB monitoring)* 17.3.4 *Prevalence of technologies facilitating remittances (ITU to develop monitoring)* **UNCDF** 17.3.5 Accounts used to receive remittances **UNCTAD:** 17.3.6 Domestic Public sector investment/GDP 17.3.7 Domestic Private sector investment/GDP 17.3.8 Foreign Direct Investment/GDP 17.3.9 Foreign Portfolio Investment/GDP 17.3.10 Imports of capital goods/GDP 17.3.11 International Bank Loans/GDP 17.3.12 ODA/GDP 17.3.13 International Remittances/GDP 17.3.14 GCFC/GDP	Preparatory process on FfD includes remittances in elements paper; basis found in Monterey and G20 commitments G20 commitment on financial inclusion ITU leading on standard setting for mobile money IOM field work on high-cost corridors and development of alternative low-cost platform for remittances *Nb. OWG SDG target 10.c* ***UNCTAD:*** Indicators 17.3.5-17.13.13 Compiled at the national level Good sources: UNCTAD, Coordinated Direct Investment and Portfolio Surveys (IMF). These indicators could be applied to developing countries at aggregate or sub-aggregate level, as well as individual country level. In each case indicative targets could be set. When applied overall, a target for each group (including LDCs, African countries, SIDS and LLDCs) might make sense inasmuch as the needs of each developing country groups are not the same. The target **mix** of different **types** of external financial flows

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
		(compared to each other), including by developing country groups, is useful. For example, ODA, bank loans and FDI may be (differentially) suitable for different purposes/group of country. Other indicators might include: 1. Sovereign Wealth Funds 2. Specialised Funds 3. Capital Markets (Bonds etc.)
17.4 assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries (HIPC) to reduce debt distress	**UNCTAD:** 17.4.1 Total number of countries that have reached their Heavily Indebted Poor Countries Initiative (HIPC) decision points and number that have reached their HIPC completion points (cumulative) (IMF - World Bank) 17.4.2 Debt relief committed under HIPC initiative (IMF-World Bank) 17.4.3 Debt service as a percentage of exports of goods and services (IMF-World Bank) 17.4.4 Debt/GDP 17.4.5 Debt Service/Total Exports 17.4.6 Reserves/Short Term Debt 17.4.7 Number of countries assessed by the IMF as being: In/at high risk/moderate risk of debt distress **WTO:** 17.4.8 External sustainability: (i) Medium-term evolution of the import coverage ratio (% of total imports financed by exports of goods and services); (ii) International reserves (net of annual interest payments on the debt)	**UNCTAD:** **17.4.1-3:** These are In addition to the existing MDG indicators on debt sustainability The indicators proposed could be supplemented by a new indicator or index on debt sustainability. We do not have any immediate technical proposals on what would be included in this index. Measures, for LDCs and low income vulnerable economy: (i) their capacity to avoid balance of payments restrictions in their growth pattern; (ii) the capacity to finance internally short-term fluctuations and export disruptions (due, for example, to natural calamity). 17.4.4-17.4.6 - compiled at national level

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
	in months of imports	
17.5 adopt and implement investment promotion regimes for LDCs	**UNCTAD:** 17.5.1 Adoption/Implementation of sustainable development orientated targets by new or existing investment promotion agencies 17.5.2 Number of policy changes in investment regimes incorporating sustainable development objectives 17.5.3 Change in the frequency that investment promotion agencies are consulted by investors 17.5.4 Changes in the extent to which investors take up incentives available/incentives related to sustainable development goals. **UNEP:** 17.5.5 Number of national policy reforms in investment regimes incorporating sustainable development objectives {alternatively: incorporating sustainable development safeguards] 17.5.6 Number of businesses [value of investments] reporting sustainable investments in LDCs	**UNCTAD** has a number of potential data sources - UNCTAD Investment Policy Reviews and databases on investment promotion regimes. **UNEP** 17.5.5 The data source would be from national government reports to HLPF 17.5.6 The data source would be through Corporate Sustainability Reporting
17.6 enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation, and enhance knowledge sharing on mutually agreed terms, including through	**UNCTAD:** 17.6.1 Access to existing patent information (creation of a patent database) 17.6.2 Number of exchanges - Exchange of scientists and technological staff 17.6.3 Indicator on technology sharing and diffusion (based on trade data, composition of manufacturing exports and the technology portion of exports/Imports)	**UNCTAD:** The UN Commission on Science and Technology for Development (CSTD) provides the General Assembly and ECOSOC with high-level advice on relevant science and technology issues. It has 43 member states, representing all regions. CSTD should be consulted for possible indicators. Some trade statistics could be used as proxy for the degree of technology transfer to developing countries e.g. a change in the

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
improved coordination among existing mechanisms, particularly at UN level, and through a global technology facilitation mechanism when agreed	**WIPO:** 17.6.4 %percentage of jointly filed patents from North-South and south-south collaboration. 17.6.5 use of technology and knowledge transfer platforms **ITU:** 17.6.6 Fixed broadband subscriptions, broken down by broadband speed 17.6.7 Individuals using the Internet **UNEP:** 17.6.8 Percentage of instances of south-south cooperation that can be traced to local innovations 17.6.9 Number and dollar value of requests for Technical Assistance made by developing countries to the Climate Technology Centre and Network (CTCN) that are responded to and officially reported to the UNFCCC secretariat.	factor contents of a developing country's exports, using the UNCTAD Revealed Factor Intensity Index of products (calculated at the HS 6-degit level of product classification). **WIPO:** 17.6.4 WIPO Patentscope and other patent information databases 17.6.5 e.g. WIPO GREEN, WIPO Re:Search, WIPO ARDI, WIPO ASPI and link to the technology transfer facilitation mechanism work **ITU:** 17.6.6 Partnership on Measuring ICT for Development core indicator, endorsed by UNSC and collected by ITU 17.6.7 Partnership on Measuring ICT for Development core indicator, endorsed by UNSC and collected by IT **UNEP:** 17.6.8 (UNEP) One of the key transformational indicators should be to see how far innovation can be "home-grown". We tentatively propose this indicators, but would seek more time to check with colleagues working on south-south and triangular cooperation
17.7 promote development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and	**UNCTAD:** 17.7.1 Total STEM Investment/GDP 17.7.2 Total STEM per capita ($ value) 17.7.3 Number of developing countries receiving concessional and preferential terms 17.7.4 Market value ($) of concessions and preference 17.7.5 Technology licensing 17.7.6 Collaboration agreements.	**UNCTAD:** 17.7.1-17.7.6 could be supplemented by other indicators such as: 1. Number of enterprises involved in innovation 2. Number of patents filed 3. STEM investment x Public/Private

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
preferential terms, as mutually agreed	**WTO:** 17.7.7 Market access treatment (preferential tariffs) provided to imports of products that directly and positively contribute to sustainable development objectives **WIPO:** 17.7.8 Relevant metrics chosen from the WIPO-Cornell-INSEAD Global Innovation Index (GII) **UNEP:** 17.7.9 Foreign Direct Investment to developing countries. Sources would include statistics gathered by UNCTAD, augmented by those collected by the OECD, Eurostat, the European Central Bank (ECB), and the IMF; ODA/OOF as measured by the OECD DAC and World Bank; grants made by the Global Environment Facility and the Multilateral Fund for Protection of the Ozone Layer	**WTO:** 17.7.7 Products identified on the basis of multilateral/national initiatives **WIPO:** 17.7.8 The Global Innovation Index (GII) ranks the innovation performance of 143 countries and economies around the world, based on 81 indicators. The GII is co-published by WIPO, Cornell University and INSEAD. For the 2014 edition please see: http://www.wipo.int/econ_stat/en/economics/gii/ The GII enables countries to compare overall innovation performance year on year, against other countries and across the different metrics used as input. **UNEP:** 17.7.9 ODA statistics can be disaggregated to obtain information on flows in relevant sectors (e.g., communications, sanitation, infrastructure, energy)
17.8 fully operationalize the Technology Bank and STI (Science, Technology and Innovation) capacity building mechanism for	**UNCTAD:** 17.8.1 Internet penetration 17.8.2 Quality of internet access (bandwidth) 17.8.3 Internet literacy	**UNCTAD:** This target constitutes two separate issues: (1) the technology bank and (2) enabling technologies like ICT.

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
LDCs by 2017, and enhance the use of enabling technologies in particular ICT	17.8.4 Competition/concentration in ICT sector 17.8.5 Proportion of enterprises (or establishments) generating sales via the web/internet. 17.8.6 Number of mobile phones per 1000 population. **ITU:** 17.8.7 Proportion of businesses using the Internet 17.8.8 Proportion of businesses receiving orders over the Internet 17.8.9 Proportion of businesses placing orders over the Internet 17.8.10 Individuals using the Internet 17.8.11 Individuals owning a mobile phone **WIPO:** 17.8.12 Relevant metrics chosen from the WIPO-Cornell-INSEAD Global Innovation Index (GII)	Some possible sources: 1. UNCTAD 2. Broadband Commission 3. ITU **ITU:** 17.8.7 Partnership on Measuring ICT for Development core indicator, endorsed by UNSC and collected by UNCTAD 17.8.8 Partnership on Measuring ICT for Development core indicator, endorsed by UNSC and collected by UNCTAD 17.8.9 Partnership on Measuring ICT for Development core indicator, endorsed by UNSC and collected by UNCTAD 17.8.10 Partnership on Measuring ICT for Development core indicator, endorsed by UNSC and collected by ITU 17.8.11 Existing but new at the international level; data to be collected by ITU from 2015 **WIPO:** 17.8.12- The Global Innovation Index (GII) ranks the innovation performance of 143 countries and economies around the world, based on 81 indicators. The GII is co-published by WIPO, Cornell University and INSEAD. For the 2014 edition please see: http://www.wipo.int/econ_stat/en/economics/gii/ The GII enables countries to compare overall innovation performance year on year, against other countries and across the different metrics used as input.
17.9 enhance international support for implementing effective and targeted	**UNEP:**	**UNEP:** 17.9.1 We assume that the GA will recommend a process for developing national plans – and that this will be fast-tracked

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
capacity building in developing countries to support national plans to implement all sustainable development goals, including through North-South, South-South, and triangular cooperation	17.9.1 Number (share) of national plans to implement SDGs approved by governments by end of 2016 compared to by 2020. 17.9.2 Substantial increase in capacity built through south-south cooperation **UNCDF:** 17.9.3 Number of initiatives to strengthen capacities of national and local actors for local economic development **?:** 17.9.4 Number of public-private partnerships to promote the implementation of sound chemical management policies and strategies as a contribution to economic development plans and processes 17.9.5 Number of countries that integrated chemicals and waste into their national development plans or strategies 17.9.6 Percentage of national budgets allocated to sound management of chemicals and waste **CBD:** 17.9.7 Funds committed to environmental education and research 17.9.8 Knowledge transfer (number of biodiversity papers in Web) 17.9.9 Number of Global Biodiversity Information Facility (GBIF) records over time 17.9.10 Official Development Assistance provided in support of the CBD 17.9.11 Funding provided by the Global Environment Facility	so that the implementation of the SDGs can commence sooner than later. 17.9.2 Capacity should be measured through indicators developed by the UN system, such as UNDP's indicators, or other. Aspects, such as transport may also be considered. For example, the number of countries/regions that have benefitted from technical assistance projects in the field of transport and trade facilitation and which aim to develop transport/trade facilitation national plans geared towards sustainable development and resilience building. Partnerships with and among transport industry stakeholders that seek to build/enhance industry capacity in the field of sustainable transport. **CBD:** Source for all indicators: GBO4 (Global biodiversity outlook 4) **UNCTAD:** Possible indicators might be: 1. Number of experts exchanged between countries 2. Number of bilateral/multilateral knowledge sharing initiatives

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
	17.9.12 Global funds committed towards environmental policy, laws, regulations and economic instruments	
17.10 promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the WTO including through the conclusion of negotiations within its Doha Development Agenda	**WTO/ITC:** 17.10.1 Stock of potentially trade-restrictive measures in WTO members 17.10.2 Worldwide weighted tariff-average: a. MFN applied and preferential b. Applied to Devd/Dvg/LDCs c. Applied by Devd/Dvg/LDCs d. By main sectors 17.10.3 Prevalence and incidence of non-tariff measures: by type (trade defence, technical, other), by sector and by level of development. 17.10.4 Number of countries for which NTM data are fully and freely available as a global public good 17.10.5 Trade facilitation performance and supply chain connectivity (for example, as measured by cost and time of clearing goods through customs [World Bank Trading Across Borders], logistics performance indicators [World Bank Logistics Performance Index], and enabling trade index [World Economic Forum]) 17.10.6 Number of multilateral trade agreements signed or in negotiation **UNCTAD:** 17.10.7 Import restrictiveness x region 17.10.8 Export restrictiveness x region 17.10.9 Multilateral Tariff liberalization 17.10.10 Preferential Tariff liberalization 17.10.11 Tariff Peaks x Commodity	**WTO/ITC:** 17.10.1.: WTO produces bi-annual reports on trade-related developments in WTO members. Data from these reports would help identify trends in the implementation of trade liberalizing and trade restricting measures at the global, regional, and national levels. 17.10.2.:Current MDG indicator applied to developed, developing and least developed countries, sourced from WTO-UNCTAD-ITC databases. The updating of this indicator will be, at least initially, biennial. 1710.3. WTO notifications through I-TIP system. 17.10.4: -Data is available for the leading importers 17.10.5. Reflects the reality that lack of competitiveness and limited diversification of low-income economies is also a result of domestic policies, including import policies. 17.10.6 Data is available for the leading importers **UNCTAD:** 17.10.7-17.10.14 - Published in UNCTAD's 'Key Statistics and Trends in Trade Policy' In order to ensure that the conclusion of the WTO DDA enhances trade-led economic development of (developing) countries, additional indicators measuring the impact of trade on

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
	17.10.12 Tariff Escalation x Sector 17.10.13 Prevalence of non-tariff measures 17.10.14 Number of trade defense investigations **World Bank:** 17.10.15 **Trade restrictiveness indicators.** The overall trade restrictiveness indicators (OTRI) summarizes the trade policy stance of a country by calculating the equivalent uniform tariff that will keep its overall imports at the current level when the country in fact has different tariffs and non-tariff barriers for different goods. OTRI and some other related indices, such as the Trade Restrictiveness Index (TRI) and the Market Access Overall Trade Restrictiveness Index (MAOTRI). The rigorous analytical method can be used to update the indicators on an annual basis. The website of trade restrictiveness with more information 17.10.16 **Non-tariff measures (NTMs) data collection (joint World Bank/UNCTAD):** UNCTAD and the World Bank, in very close cooperation with the other MAST group members (multi-institutional team consisting of FAO, IMF, ITC, UNCTAD, UNIDO, World Bank and the WTO),developed a classification of non-tariff measures (UNCTAD-MAST NTM Classification) which is now widely accepted as a standard. The NTM classification is designed to facilitate the collection, analysis and dissemination of data, with the final objective of increasing transparency and understanding of trade restrictions. Systematic and comparable data about the use and incidence of NTMs are generally unavailable. The Transparency in Trade initiative (TNT), involving the African Development Bank, the International Trade	inclusive/sustainable economic development may be useful. **World Bank:** The SDG should include the word "transparent", near the work "open" to make the link to Non-tariff measures (NTMs) and trade facilitation more explicit. It should also incorporate indicators related of service-trade restrictiveness. Benefiting from global market opening opportunities is becoming increasingly dependent on reforming the use of NTMs to minimize or remove their trade restrictive impacts. Due to their non-transparency, often encompassing 'behind-the-border' measures embedded in domestic legislation to serve a mixture of protective and legitimate aims, a major problem with NTMs is the significant transparency gap that exists. b) Under the WTO Trade Facilitation Agreement (TFA), known as the Bali Agreement, there are commitments that would need to be implemented, such as time releases studies, and they will give rise to indicators to monitor these commitments. c) The services sector has become a key driver of growth and development in developing countries and leveraging trade in the services sector not only assists in unlocking further growth potential, but also can help address poverty and enhance the quality of life through greater access to available services.

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
	Centre, UNCTAD and the World Bank, is aiming inter alia to close the transparency gap on NTMs. Data collection projects are currently being undertaken in Africa, Asia and Latin America, and UNCTAD and the World Bank have a project targeting coverage of the 25 largest trading countries in particular. 17.10.17**Logistics Performance Indicators (LPI)** The LPI allows for comparisons across 160 countries and is based on a worldwide survey of operators on the ground (global freight forwarders and express carriers). It combines in-depth knowledge of the countries in which they operate with informed qualitative assessments of other countries where they trade and experience of global logistics environment. The LPI measures performance along the logistics supply chain within a country and offers two different perspectives: international and domestic. The international LPI ranks 160 countries on six dimensions of trade that have increasingly been recognized as important to development : • The efficiency of customs and border management clearance ("Customs"). • The quality of trade and transport infrastructure (Infrastructure"). • The ease of arranging competitively priced shipments (Ease of arranging shipments"). • The competence and quality of logistics services—trucking, forwarding, and customs brokerage ("Quality of logistics services"). • The ability to track and trace consignments ("Tracking and tracing"). • The frequency with which shipments reach consignees within scheduled or expected delivery times ("Timeliness"). The LPI uses standard statistical techniques to aggregate the data into a single indicator that can be used for cross-country comparisons.	

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
	http://lpi.worldbank.org/ 17.10.18 **Trade Costs Dataset** The Trade Costs Dataset provides estimates of bilateral trade costs in agriculture and manufactured goods for the 1995-2010 period. It is built on trade and production data collected in 178 countries. Symmetric bilateral trade costs are computed using the Inverse Gravity Framework (Novy 2009), which estimates trade costs for each country pair using bilateral trade and gross national output. Trade costs are available for two sectors: trade in manufactured goods, and agriculture. http://data.worldbank.org/data-catalog/trade-costs-dataset 17.10.19 **Doing Business: Trading Across Borders indicators.** Doing Business measures the time and cost (excluding tariffs) associated with exporting and importing a standardized cargo of goods by sea transport. The time and cost necessary to complete 4 predefined stages (document preparation; customs clearance and inspections; inland transport and handling; and port and terminal handling) for exporting and importing the goods are recorded; however, the time and cost for sea transport are not included. All documents needed by the trader to export or import the goods across the border are also recorded. The most recent round of data collection for the project was completed in June 2014;http://www.doingbusiness.org/data/exploretopics/trading-across-borders 17.10.20 **Services Trade Restrictions Database** The database covers 103 countries that represent all regions and income groups of the world. For each country, five major services	

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
	sectors are covered that encompass a total of 19 subsectors: • Financial services: retail banking (lending and deposit acceptance) and insurance (automobile, life and reinsurance) • Telecommunications: fixed-line and mobile • Retail distribution • Transportation: air passenger (international and domestic), maritime shipping, maritime auxiliary, road trucking and railway freight • Professional services: accounting, auditing, and legal services (advice on foreign/international law, advice on domestic law, and court representation) Each subsector in turn covers the most relevant modes of supplying the respective services, yielding overall 34 country-subsector-mode combinations: Mode 1: financial services, transportation and professional services Mode 3: all subsectors Mode 4: professional services http://iresearch.worldbank.org/servicetrade/aboutData.htm 17.10.21 Number of multilateral and bilateral trade agreements containing provisions on protection of labour rights	
17.11 increase significantly the exports of developing countries, in particular with a view to doubling the LDC share of global exports by 2020	**ITC/WTO:** 17.11.1 Monitoring the evolution of developing countries export by partner group and key sectors. Such as - Exports of high technological content as proportion of total exports - Labour-intensive exports as proportion of total exports (pro-poor exports) - Export diversification (by product; by market	**ITC/WTO:** 17.11.1 ITC was already calculating a similar indicator (MDG Indicator 8.6) and can continue to do so. Sources for 17.11.1. and 17.11.2.: WTO-IDB trade and tariffs database complemented with Comtrade data and classified by technological content (high technology as in current MDG complementary indicators as indicator of up-grading; low technology/low skill but labour intensive products being source of

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
	destination) **UNEP:** 17.11.2 Value of non-oil exports from LDCs that are derived from sustainable management of natural resources **UNCTAD:** If this goal is taken literally then 2 simple indicators are required: 17.11.3 % change in Developing Country Exports 17.11.4 LDC Exports/Global Exports However, it is not clear that these provide particularly useful metrics. Therefore a number of additional concentration and diversification indicators are proposed: 17.11.5 Non-oil Exports from LDCs/Total LDC Exports 17.11.6 Sectoral share of primary, intermediate, and final goods in total export and import; 17.11.7 UNCTAD Index of Export Concentration; 17.11.8 Changes in the terms of trade facing LDCs; Stats on market access conditions impacting LDCs' exports (including NTMs) **World Bank:**	job opportunities). WTO-IDB trade and tariffs database complemented with Comtrade data; multi-HS-level indicator of export diversification. **UNEP:** One of the drivers of unsustainability is that increasing exports from developing countries become incentives for greater exploitation of scarce natural resources. We therefore believe that an indicator on sustainability needs to be added. **UNCTAD:** Increase in export values alone does not automatically mean that: (i) LDC's economy-wide participation in international trade has increased (e.g. could be due simply to massive rise in the exported commodity price), nor (ii) the trade increased results in positive developmental outcome (e.g. equitable distribution of monetary gains from trade across the population). **World Bank:** *1. If the trend of growth in goods exports from LDCs recorded in recent years continues, this goal can be met. Yet, growth in exports from developing countries increased mainly due to increased demand for commodities from emerging economies, notably China.* *2. The Eight WTO Ministerial Conference in 2011 adopted a waiver, enabling WTO members to provide preferential treatment to services and service suppliers of LDCs. The services sector has become a key driver of growth and development, accounting for 47 percent of all LDCs' overall GDP in 2011. However compared with the value of world services trade, LDC services trade is still marginal. Hence, over the coming years, the*

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
	17.11.9 ***Services Trade Restrictions Database (description in 17.10)*** *- See also comment 2.*	*waiver can provide significant opportunities to further enhance the growth of service sectors in LDCs.* *3. It would be desirable to also make a reference to "reducing trade costs for firms in low-income countries" See for instance: Hoekman (2014): http://www.copenhagenconsensus.com/publication/post-2015-consensus-trade-perspective-hoekman*
17.12 realize timely implementation of duty-free, quota-free market access on a lasting basis for all least developed countries consistent with WTO decisions, including through ensuring that preferential rules of origin applicable to imports from LDCs are transparent and simple, and contribute to facilitating market access	**WTO/ITC:** 17.12.1 Average tariffs faced by developing countries and LDCs by key sectors 17.12.2 Preferences utilization by developing and least developed countries on their export to developed countries 17.12.3 N° of countries for which NTM data are fully and freely available as a global public **good** **UNCTAD:** 17.12.4 Utilization rate of preferences, to be presented by preference-granting countries at the national tariff line bases 17.12.5 Number of countries offering 100% duty and quota free market access to LDCs.	**WTO/ITC:** **17.12.1** - ITC was already calculating it and can continue to do so (MDG Indicator 8.7) **17.12.2** - Data is available for the leading importers **17.12.3** -Data is available for the leading importers **UNCTAD:** The rate of utilization of preferences can be a good proxy to measure the impact of obstacles (e.g. the rules of origin) over effective use of such preferences (e.g. DFQF for LDCs) that will increase LDCs' exports. A utilization rate of preferences already exists, or calculated by each preference-giving country.
17.13 enhance global macroeconomic stability including through policy coordination and policy	**UNCTAD:** A suite or dashboard of indicators are proposed that attempt to capture the levels of key economic indicators, and by extension,	**UNCTAD:** As there is no clear agreement on what 'global macro-economic stability' means, we propose the establishment of a Macro-Economic Scoreboard (to use the European term) which is a dashboard of relevant economic indicators.

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
coherence	their volatility (these are not exhaustive and could be further supplemented): 17.13.1 GDP 17.13.2 Current account surplus and deficit/GDP 17.13.3 Capital flows, inwards and outwards 17.13.4 Net international investment position/GDP 17.13.5 Current account surplus and deficit/GDP 17.13.6 Terms of trade 17.13.7 Export market shares ($) 17.13.8 Nominal unit labour cost 17.13.9 Functional distribution of labour and capital/GDP 17.13.10 Minimum wage, average wage and wage dispersion 17.13.11 Inequality measure (this should be the measure as defined in Goal 16, failing that 'Total Household' income inequality as measured by the GINI coefficient. 17.13.12 Real effective exchange rates based on CPI deflators 17.13.13 Interest rates (including spread) 17.13.14 Private sector debt level and change 17.13.15 Short term and long-term debt level of official reserves and reserves in banks. 17.13.16 Private sector credit/GDP 17.13.17 Prices of food and energy 17.13.18 General government revenues, expenditure and debt/GDP 17.13.19 Employment and unemployment (%, composition, length of term) 17.13.20 General price changes (CPI).	Any measure of stability would need to focus on the volatility of these indices. Tabulation of index levels would also be useful. These indices could be compiled at least annually, but ideally quarterly.

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
	UNEP: 17.13.21 A measure beyond GDP , for example Inclusive Wealth Index	**UNEP:** 17.13.21 Any measure of economic stability must look to the sustainability of natural resources being exploited for growth. We strongly recommend to replace "GDP" with other measures beyond GDP.
17.14 enhance policy coherence for sustainable development	17.14.1 Number of countries that have ratified and implemented relevant international instruments under the IMO (safety, security, environmental protection, civil liability and compensation and insurance). 17.14.2 Number of countries with multi-sectoral and multi-stakeholder coordination mechanisms in place for a coordinated implementation of chemicals and wastes conventions and frameworks **UNCTAD:** 17.14.3 Some indicators based on a sectoral approach could be adopted, for example: Number of countries with institutional, legal, and regulatory frameworks for the sound management of chemicals and waste, including enforcement of national legislation and prevention of illegal traffic **UNEP:**	17.14.1 : An example of an indicator based on a sectoral approach could be adopted. **UNCTAD:** One suggestion is that countries conduct an internal evaluation exercise once a year, seeing to what extent policy outcomes have matched intention, and how this is on track or not for the SDGs. UNCTAD hosts these kinds of debates at its conferences and this could be done more regularly. There is also an issue of matching national policy coherence with global policy coherence, which is similarly challenging. It is what UNCTAD does regularly in the TDR but to propose a single indicator to measure this does not seem feasible.

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
	17.14.4 Number of countries having conducted transparent budgetary exercises that integrate the workplans of different sectors **UNHCR:** 17.14.5 # of states that include refugees in their national and local development plans compared with the baseline in 2015. **ILO:** 17.14.6 1Number of countries that have ratified all ILO Fundamental Conventions **OCHA:** 17.14.7 Number of CCA/UNDAFs that take into account humanitarian risks and are aligned with multi-year humanitarian Strategic Response Plans to inform coordinated and interoperable programming.	**UNEP:** 17.14.4- Policy coherence at national level on SD would depend on how the many sectors have worked hand in hand towards an integrated approach. **OCHA:** The alignment of risk-informed CCA/UNDAFs and multi-year humanitarian Strategic Response Plans is crucial in fragile/conflict-affected countries and in countries with protracted/recurring crises and chronic vulnerability in order to ensure resilience is built, development gains are protected and risks of humanitarian crises are managed in an integrated manner.
17.15 respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development	**UNCTAD:** 17.15.1 Number of countries signing on for sharing of fiscal information 17.15.2 Automatic transfer of financial information 17.15.3 Number of enterprises availing of tax havens and tax avoidance 17.15.4 Number of disputes brought against countries through dispute settlement processes (by companies, other countries, other) in areas such as trade, investment, technology etc.	**UNCTAD:** The ICDST findings may reveal other relevant indicators

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
	17.15.5 Numbers of constraints that are embodied in ODA or loan agreements, IIAs. RTAs etc. **UNEP:** 17.15.6 Number of instances where country decisions have led to policy change that integrates poverty eradication with sustainable development **CBD:** 17.15.7 Number and list of national policies and strategies incorporating biodiversity and ecosystem services 17.15.8 % of state budget allocated to biodiversity and ecosystem services sustainable management	**UNEP:** 17.15.6 This target can either have a simple indicator (e.g. that reflects inclusive decision making for ODA), or more indirect. We propose the latter, but only tentatively as such indicators do not exist yet; we assume the need for capacities to be built in order to measure them. **CBD:** 17.15.7 NBSAPs National biodiversity strategy and action plan 17.15.8 National Budgets
17.16 enhance the global partnership for sustainable development complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technologies and financial resources to support the achievement of sustainable development goals in all countries, particularly developing countries	**UNCTAD:** 17.16.1 Changes in the number of multi-stakeholder partnerships participants active in developing countries 17.16.2 Classification and trajectory of the above in terms of: - Nature of partnership - Region: Global, regional, - Objectives: Sharing technology, expertise etc. - Country type (where partnership is active) **CBD:** 17.16.3 National multi-stakeholder partnership programme (or policy) targeted at SDGs achievement including a biodiversity component. 17.16.4 Institutional arrangement and budget allocated to the achievement of SDGs and biodiversity related targets	**UNCTAD:** UNCTAD has developed examples and typologies of such partnerships e.g. in areas of skills sharing (see World Investment Report 2014). **CBD:** NBSAPs National biodiversity strategy and action plan

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
17.17 encourage and promote effective public, public-private, and civil society partnerships, building on the experience and resourcing strategies of partnerships	**UNCTAD:** 17.17.1 Number of PPP projects 17.17.2 Number of PPP projects implemented by developing countries 17.17.3 $ value of PPP projects x Public/Private partner 17.17.4 $ value of PPP projects implemented in developing countries 17.17.5 Quantified assessment of the degree to which contracts, loan conditions, agreements or terms of association by public, public-private and civil society partnerships include: 1. Sustainable development objectives 2. Clauses specifying which party assumes the risk 3. Link the assumption of risk to the return.	**UNCTAD:** It is recognized that the proposed indicators do not address the "effective" aspect of this target. More complex indicators would make measurability considerably more complex and expensive but might better capture important issues, such as, who bears the risk and who gains. Other metrics around transparency and accountability, if they can be designed, would be useful e.g Impact of PPP (cost-benefit to each partner, cost-benefit to final users). Other indicators might look at the longevity of PPPs and number of PPPs than have been successfully scaled regionally/globally. In the medium term, the indicators related to the content of contracts etc. could be used to evaluate the actual implementation (e.g. a periodic assessment looking at the content of clauses versus outcomes). 17.17.1-4: Compiled at National Level
17.18 by 2020, enhance capacity building support to developing countries, including for LDCs and SIDS, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race,	17.18.1 Number of countries that have national statistical legislation (that [a] enshrine statistical independence; [b]mandate data collection; and [c] secure access to national administrative data). 17.18.2 Number of countries that have formal institutional arrangements for the coordination of the compilation of official statistics (at international, national and regional level). 17.18.3 Number of countries that have a national data	**17.18.1-4** In order to help countries meet the demands for more data and more complex indicators, UNCTAD believes that a coordinated international effort should be dedicated to the promotion and improvement of coordinated national statistical systems. Furthermore, UNCTAD believes this effort should focus initially on three fundamental aspects, namely: a sound legal framework, a functioning and coordinated institutional environment and a national data infrastructure in support.

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts	infrastructure in place (this would include, registration systems for persons, people and places). 17.18.4 Number of national reports on the implementation of relevant multilateral environmental agreements on hazardous chemicals and waste **UNFPA:** 17.18.5 percentage of population covered by registration systems that record birth, death and civil status. 17.18.6 percentage of countries that undertake a census every ten years 17.18.7 percentage of countries that undertake DHS and Living Standard Surveys every five years 17.18.8 Percentage of UN Common Country Assessments that include a demographic assessment. -- easy to track 17.18.9 Percentage of countries that undertake demographic assessments for national development strategies, poverty reduction strategies and climate change mitigation and adaptation strategies. 17.18.10 Percentage of cities larger than 1,000,000 that undertake demographic assessments for their urban development strategies. 17.18.11 Percentage of pertinent post-2015 targets that report data by age, sex and location to track inequalities in progress -- easy to track **UNEP:** 17.18.12 Terrabite of data available from developing	17.18.5-7 concept: by 2030 significantly increase the collection of vital population data, and the preparation of population projections 17.18.8-10 concept: by 2030 ensure the systematic use of population data and projections for planning 17.18.11 concept: by 2015 begin to systematically disaggregate relevant development goals and targets by sex, age, location, and by 2030 ensure that progress towards all relevant development goals and targets is separately reported by sex, age, location to show inequalities in achievement. **UNEP:** The second indicator would be measured through an assessment conducted by UNEPLive and other similar platforms. *(Capacity*

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
	countries that are high quality, timely and reliable disaggregated by …. **ILO:** 17.18.13 Number of countries undertake that undertake regular labour surveys	*building is difficult to measure, and we offer two proxy indicators)* **UNHCR:** This target should include data disaggregation by displacement status and statelessness status.
17.19 by 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement GDP, and support statistical capacity building in developing countries	**UNCTAD:** No new indicators are proposed, as there are already a wealth of similar indicators in this space: 17.19.1 Index of Sustainable Economic Welfare (Nordhaus/Tobin) 17.19.2 Gross National Happiness (Bhutan) 17.19.3 Beyond GDP (EU) 17.19.4 Key National Indicators System (USA) 17.19.5 Better life Index (OECD) 17.19.6 Human Development Index (UN)	**UNCTAD:** UN Secretary-General Ban Ki-Moon noted in 'Happiness and Well-being: Defining a New Economic Paradigm' the importance of establishing 'a Sustainable Development Index, or a set of indicators to measure progress towards sustainable development'. Consequently, we recommend a review of existing composite and dashboard indices in order to select one as the definitive sustainable development index for SDG purposes. As a supplementary comment, to improve the availability of good quality statistics at national level, the UN should promote and support the implementation of the 'Fundamental pillars of official statistics', namely, a sound legal framework, an institutional environment that facilitates coordination supported by a national data infrastructure where national administrative data are properly organized and open. Developments arising from the 'Making the World Count' report may facilitate the compilation of new metrics.

PROPOSED SDGS AND TARGETS	WHAT **RELEVANT INDICATORS** WOULD YOU PROPOSE FOR THESE GOALS/TARGETS? (PLEASE PROVIDE DETAILS ABOUT DATA SOURCE)	COMMENTS
	UNEP: 17.19.7 Number of countries able to report annually on progress on SD using measures that complement GDP **CBD:** 17.19.8 Implementation of a National multi-year action plan for the development of the System of Environmental-Economic Accounting - Ecosystem Accounting (SEEA-EEA) pilot framework. Decision Cop XI/3, indicator for Target 2)	**UNEP:** We agree with UNCTAD that it would be best to have a process where a review of existing composite and dashboard indices is done in order to select one as the definitive sustainable development index for SDG purposes. However, in the meantime, we propose this proxy indicator for now. **CBD:** UN-DESA + NSO and/or National Environmental Agencies/MoE