WWF welcomes the IAEG-SDG’s indicator proposal (August 11, 2015) as a constructive basis for further improvement. However, we highlight three core observations:

* **The environmental dimensions of many targets are being lost**. In addition, the August 11 list of proposed indicators is weighted more heavily towards coverage of social measures of development. The IAEG’s refined list must improve the balance across social, economic and environmental dimensions.
* **There is an opportunity to improve measures of certain environmental targets and more fully measure biodiversity-related targets** while restricting the total number of indicators needed across the full framework.
* **For proposed indicators that are considered currently difficult to measure** but which are important to a balanced measure of progress against the SDGs, **WWF calls for the IAEG to clearly indicate how those indicators will be rapidly developed within the Agenda2030 timeframe**.

WWF’s full position has been submitted through the CSO compilation document and is available at [http://panda.org/post2015](http://wwf.panda.org/what_we_do/how_we_work/policy/post_2015/).

Strengthening coverage of the environmental dimensions of targets

**Target 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**

A multidimensional approach to poverty better reflects the intent of this target than the proposed indicator. Because people in lower income brackets disproportionately experience the burden of poor environmental quality, *poverty in living standards*, including “poverty in environment of good quality” should be included alongside more standard MPI component. See “Monitoring multidimensional poverty in the regions of the European Union” (<https://ec.europa.eu/jrc/sites/default/files/mpi_report_online.pdf>).

**Target 1.4: By 2030, ensure that all men and women, in particular 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**

Indicator 1.4.2 “Proportion of adult population with tenure that is legally recognised and documented or perceived as secure, by sex and age group” is important and preferable to the proposed indicator “Share of women among agricultural land owners by age and location (U/R)”. Tenure should be defined to include tenure/use rights over natural resources, including access to wild capture marine fisheries. This indicator should be disaggregated by sex, age and for indigenous/ethnic peoples, as per the proposal by UNEP: “Percentage of women, men, indigenous peoples and local communities with secure tenure rights to individually or communally held land, property and natural resources”.

**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**

WWF supports the suggested indicator amended to include Fisheries in the classes of enterprise: “Value of production per labour unit (measured in constant USD), by classes of farming/pastoral/forestry/fisheries enterprise size”. Fisheries are included in the Agriculture Orientation Index and should be explicitly mentioned. The indicator should be disaggregated by size, gender and ethnic/indigenous groups. We suggest an additional indicator “% credibly certified sustainable production (as defined by ISEAL<http://www.isealalliance.org/our-members>) of overall production”, with data from FAO and ISEAL/Credible certification schemes. An increasing body of literature shows the positive impacts of credible schemes, e.g. farmer outreach and increased yields/reduced inputs compared to conventional production, protection of areas of High Conservation values from conversion. This indicator would also inform 2.3, 2.5, 6a, 8.4, 12a, 14.1 & 14.2.

**Target 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination**

WWF would support a broader coverage of issues beyond only air pollution to better capture the intent of this target, for example as proposed by UNEP: Alternative: Death and disability (disaggregated by sex and age) from indoor and outdoor air quality, water/sanitation, and contaminated sites.

**Target 4.7: By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development**

The suggested indicator is too narrow, with a limited view of ESD while suggested tools such as PISA need to be revised. WWF suggests replacing it with “Percentage of 10 and 15-year old students enrolled in education for sustainable development demonstrating at least a fixed level of knowledge and skills to argue, take a stand, and take action for sustainable development across a selection of topics.” (Source: UNESCO country reports/ ICCS reports next to be updated 2016). An additional indicator could include: “Number of countries with ESD integrated in national curricula (including efforts for entrepreneurial skills for sustainable development and active participation in other programmes for SDGs) (Same source).

**Target 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**

WWF supports the 2nd, rights-based indicator (proposed by FAO/IFAD/UN Women): "The legal framework includes special measures to guarantee women's equal rights to land ownership and control". We encourage as broad an interpretation of “land” as feasible to include natural resources.

**Target 6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity**

WWF supports the following indicator: “Freshwater withdrawal as a percentage of available, sustainable freshwater supply.” The concept of sustainability is central to this target and should be reflected in the indicator to ensure that environmental requirements are accounted for. Additionally, basin-level and temporal information will both be important in measuring the sustainability of water withdrawals. WWF’s suggests disaggregation to basins, with country-level data to then be developed using proportional averages within country boundaries. To address the need to include temporal water withdrawal information, WWF suggests that a third metric around spatio-temporal monitoring of supply and demand would be highly useful.

**Target 6.5: By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate**

WWF supports the inclusion of both an IWRM and a transboundary indicator as priority indicators in order to accurately capture the full intention of target 6.5. We support the following indicator: “Percentage of international watercourses with a formal operational arrangement between all riparians for water cooperation disaggregated by inclusiveness of gender-specific arrangements, objectives and commitments.” This language uses terminology which is consistent with the UN Watercourses Convention, a global treaty adopted by the UN General Assembly in 1997. It is also in line with suggestions for gender-sensitive indicators by World Water Assessment Program/UNESCO.

**Target 7.a: By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology**

WWF would propose alternative or additional indicators on “Percentage of Renewable Energy investments of all energy investments” and “Percentage of energy efficiency investments of all energy investments”.

**Target 8.9: By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products**

WWF strongly supports the UNWTO proposal under 8.9.2 to replace the indicator ‘Tourism consumption” with “Environmental pressure indicator; residual flows and natural inputs...derived from a SEEA for Tourism” which would better reflect the intent of this target.

**Target 9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.**

The proposed indicator does not capture sustainability dimensions of this target.WWF proposes an additional indicator to measure application of protective safeguards, without which infrastructure projects risk damaging the environment, climate, and communities—and actually hindering growth: "Number of infrastructure projects that meet best practice international standards for social and environmental safeguards." Source information (World Bank, regional development banks).

**Target 9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.**

The proposed indicator does not capture sustainability dimensions of this target.WWF proposes an additional indicator to measure application of protective safeguards, without which infrastructure projects risk damaging the environment, climate, and communities—and actually hindering growth: "Number of infrastructure projects that meet best practice international standards for environmental and social safeguards." Source information (World Bank, regional development banks)

**Target 12.a: Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production**

WWF would propose an additional/alternative indicator: “Percentage of credibly certified sustainable production (as defined by ISEAL http://www.isealalliance.org/our-members) of overall production” as proxy for ‘sustainable production”.

Improving measurement of environmental targets

**Target 13.a: Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly $100 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**

The suggested indicator does not reflect the intent of the target. WWF proposes to amend the indicator to read “Mobilized amount of USD per year by 2020 accountable towards the developed country parties commitment to address the needs of developing countries for mitigation and adaptation action.”

**Target 14.1: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution**

The suggested indicator “Nitrogen use efficiency” does not adequately reflect the intent of the target. WWF suggests to replace it with the suite of HELCOM (Baltic Marine Environment Protection Commission) indicators in order to capture a more comprehensive set of pollution indicators. Data are collected by regional seas organisations and national coastal management organisations. WWF supports proposed indicator 14.1.2 on the understanding that “all sources” includes non-land based sources. Vessel based garbage into sea could be measured via proxy: MARPOL Annex V ratified and implemented by all flag states. Indicators for 14.1 can also be used to inform targets 6.3 and 6.6. The Red List Index and Living Planet Index of species threatened by pollution would also be of use and bring interlinkages with other targets.

**Target 14.b: Provide access for small-scale artisanal fishers to marine resources and markets**

WWF suggests moving the suggested indicator to 14.4 and replacing it with “Improved capacity (number/proportion of trained staff) within key stakeholders to manage small scale fisheries and enhance coordination and collaboration between fisheries and policy management institutions.” Source FAO voluntary guidelines for small scale fisheries.

**Target 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**

WWF suggests amending the suggested indicator “Forest area as a percentage of total land area” to harmonize with the BIP definition: “Percentage of change in forest extent over time”. This would work in tandem with the similar wetlands indicator under target 6.6. The data could be obtained through digitization of aerial or satellite images where available and otherwise rely on FAO resource assessments. The data could be disaggregated by forest type, and should distinguish natural forests from plantations. Regional and global datasets are already available from 1990 to the present. It could also be supplemented with additional BIP indicators to provide a larger picture of the extent of conservation or restoration (e.g. The Living Planet Index, Red List Index, PA cover and PA management effectiveness)

**Target 15.2: By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally**

WWF suggests the indicator “Area of forest under Sustainable Management Certification”. Certification is geographically precise and is a strong verifier of better levels of management. PEFC and FSC schemes currently cover 400 million ha -- a decent proportion of the world's production forests, and this portion should grow if forest management improves in line with the SDG target. While this is only around 10% of total forests, it could be as much as 40% of forests under active management. This indicator could be complemented by FAO’s proposed index which would ensure that no areas are excluded, i.e. production systems where certification is not feasible due to high transaction costs. It could also be supplemented with additional BIP indicators to provide a larger picture of the extent of sustainable management and the reduction in forest loss (e.g. The Living Planet Index, Red List Index, PA cover and PA management effectiveness).

**Target 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**

WWF supports the inclusion of 15.7.1 Red List Index for species in trade, especially if used with the Living Planet Index for species in trade. Both are established BIP indicators. We also support 15.7.2 as an established indicator managed by CITES that more directly measures the Target. It could be the primary indicator if supported by the RLI and Living PIanet Index; it’s linked to targets 16.4 and 16.5. Clarity is needed on use of the term “protected”. For 15.7.2, data concern species protected within a defined framework (CITES) but overlook non-CITES-listed species regulated under forestry/fisheries management regimes and trafficked illegally. Combined with data collection challenges, it would underestimate illegal wildlife trade. The RLI and LPI include a broad range of species and provide a basis to assess species status but do not always distinguish between legal and illegal trade: their utility for trafficked species is limited unless linked to trade systems through 15.7.2.

Using a suite of indicators to better inform biodiversity-related targets while restricting the total number of indicators required across the framework

Many of the targets with relevance to the environment (6.6, 14.2, 14.4, 14.5, 15.1, 15.2, 15.4, 15.5, 15.7, 15.8) can be measured by a small cluster of well-established indicators developed scientifically by the Biodiversity Indicator Partnership (BIP). The primary indicators are: (a) The Living Planet Index (LPI), Database available and managed by WWF/ZSL; (b) The Red List Index (RLI), Database available and managed by IUCN; (c) Coverage of Protected Areas (PA cover), World Database on Protected Areas managed by UNEP-WCMC and IUCN WCPA; (d) PA management effectiveness (PAME), Global Database on PA Management Effectiveness managed by UNEP-WCMC, IUCN WCPA, Universities of Queensland and Oxford; and (e) Habitat cover, several remote sensing databases exist for this purpose - e.g. NASA, ESA, Google Earth, University of Maryland. We also actively encourage the use of other BIP indicators where they enhance the overall picture for any given target (e.g. area of forest under certification, River Connectivity Index, an improved Ocean Health Index, etc.).

In these cases, countries could be provided with time series data from existing databases at no or minimal cost. Although several indicators would be used to monitor one target, using the same indicators for multiple targets would ultimately reduce the overall number of indicators employed. The interlinkages across goals and targets can be made with the following cluster of indicators:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Target | Multiple use BIP indicators | | | | |
| Living Panet Index | Red List  Index | Protected Area cover | Protected Area Management  Effectiveness | Habitat cover |
| 6.6 | X |  | X | X | X |
| 14.2 | X | X | X | X | X |
| 14.4 | X | X |  |  |  |
| 14.5 | X |  | X | X |  |
| 15.1 | X |  | X | X | X |
| 15.2 | X | X | X | X |  |
| 15.4 | X | X | X | X | X |
| 15.5 | X | X | X | X | X |
| 15.7 | X | X |  |  |  |
| 15.8 | X | X |  |  |  |

For a fuller discussion, please see WWF’s response to Topics 18-22 and specific proposals for targets 6.6, 14.2, 14.4, 14.5, 15.1, 15.2, 15.4, 15.5, 15.7 and 15.8 in the Stakeholder Compilation document or at [http://panda.org/](http://wwf.panda.org/what_we_do/how_we_work/policy/post_2015/)post2015.