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# COMMITTEE ON FORESTRY

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### FOREST-RELATED INDICATORS, MONITORING AND REPORTING PROGRESS RELATED TO THE ACHIEVEMENT OF THE SUSTAINABLE DEVELOPMENT GOALS

#### I. Background

1. The Sustainable Development Goals (SDGs) agreed by the UN General Assembly in September 2015 build on lessons learned from the Millennium Development Goals (MDGs) process and introduce 17 goals, 169 targets and 231 indicators formulated through a cross-sectoral approach. The goals, targets and indicators are aimed at guiding and measuring progress towards sustainable development until 2030. They are designed in an integrated fashion, taking into account multi-causality and interdependence of the three pillars of sustainable development.

2. As described in document COFO/2016/5.1, forests are relevant for most of the SDGs through the provision of a range of social, economic and environmental benefits that contribute to sustainable livelihoods, income and employment generation, food production, more resilient and sustainable production and consumption systems and climate change. Quantification of these contributions is not always possible at global level due to data gaps and challenges in collection of globally comparable socio-economic information on forests. Albeit these challenges, the SDGs acknowledge the broad forest role through 12 forest-related targets, including those associated to SDG 15 “protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss”, which explicitly include sustainable forest management in the 2030 Agenda.

#### II. Global SDG Indicator Framework

3. Country ownership is the foundation of SDGs and the focus of monitoring progress should be at national level. The 2030 Agenda introduces progress review based on a set of global indicators complemented by indicators at the regional and national levels, which will be developed by member states. While National Statistical Offices are key for the reporting process and efforts should be made to strengthen their capacity, public private cooperation as well as the use of wide range of data, including earth observation and geo-spatial information is encouraged to increase data availability at national, regional and global level.

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4. The global SDG indicator framework agreed by the Interagency and Expert Group on SDG-Indicators (IAEG-SDGs) provides for global monitoring of the SDG targets. The global indicators are critical for ensuring comparability of country results. Hence they need to fulfil requirements of relevance, methodological soundness, measurability and transparency. While the 2030 Agenda recommends data and information from existing reporting mechanisms to be used where possible, the process recognizes data gaps and quality issues, calling for efforts to address timeliness, reliability and comparability of national data as well as national reporting capacity. In line with the 2030 Agenda's main principle of leaving no one behind, the SDG progress review will be based on data disaggregated by income, sex, age, race, ethnicity, migration status, disability and geographic location to the extent possible.

5. The need to improve national statistics and national statistical capacity has ample recognition in the 2030 Agenda, which does commit to intensify efforts aimed at strengthening statistical capacities in developing countries, particularly African countries, least developed countries, landlocked developing countries, small island developing states and middle-income countries.

6. The global reporting of progress on the 2030 Agenda will be based on global and regional aggregates of data on indicators as compiled by international organizations based on their respective existing mandates and/or expertise. Quality standards and best practices, including for the estimation of data and the provision of metadata should be defined and followed, and estimates should always be developed in full consultation with concerned countries and through transparent methodologies. International organizations are called upon to standardize indicators in accordance with international guidelines and assure compliance, making every effort to reconcile data provided at the global level with the data published by the national statistical authorities. Regional mechanisms, with the support of the regional commissions and other regional organizations and offices, will also play a significant role in facilitating this process, taking into account regional priorities and strengthening the link between the national and the global level.

7. Countries will build on the global framework to produce their own system for monitoring progress. Each country may choose additional indicators to track progress towards specific goals based on national priorities and needs. Countries can carry out up to two voluntary national reviews at the High-Level Political Forum on Sustainable Development (HLPF) between 2016 and 2030. Regional reviews will also play a pivotal role, not only in disseminating and following up on conclusions from the HLPF, but also in promoting exchange of experiences and refinement of national and regional monitoring and review systems.

### **III. Forests and Forest-Related Targets and Indicators**

8. Forest data will directly contribute to monitoring progress of 12 SDG targets and 13 forest-related indicators, as per list in Annex I. These indicators mention forest or forest products or refer to clean technologies, cleaner and more sustainable supply chains, or reduced CO<sub>2</sub> emission per unit of value added, where forest products can be part of the set of outcomes to be accounted for. In addition, forests contribute to most of the SDGs through the improvement of rural livelihoods and socio-economic conditions of forest dependent communities as well as more sustainable consumption patterns and options to reduce carbon footprint. The collection of forest socioeconomic data can improve overall quality of indicators, including in-kind income and increase of forest products use in value chains.

9. As of April 2016, following the report of the IAEG-SDGs to the 47<sup>th</sup> session of the UN Statistical Commission and the 3<sup>rd</sup> meeting of the IAEG-SDGs, FAO has been assigned custodianship for twenty indicators, including responsibility to monitor three of the forest related indicators (15.1.1, 15.2.1, 15.4.2) and to provide relevant data for the others, including on wood energy and harvested wood products (see Annex I).

10. The SDG indicator 15.1.1 (Forest area in proportion of land area), which was also an MDG indicator monitored by FAO, will continue to have its data collection and global report through the Global Forest Resources Assessment (FRA). This indicator has complete geographical coverage – information is available for 234 countries and territories since 1990 – and information quality has gradually improved as more and more countries have recent information on their forest area based on forest inventories.

11. The indicator 15.2.1 (Progress towards sustainable forest management) is more complex in terms of data collection, monitoring and reporting, as no single variable can fully reflect progress towards sustainable forest management. The indicator will be monitored through a set of four sub-indicators related to changes in forest area and carbon stocks, area designated to biodiversity conservation and area under sustainable forest management certified by independent forest management certification schemes.

12. The Mountain Green Cover Index has been developed to monitor progress towards target 15.4 on conservation of mountain ecosystems but will be relevant also for target 6.6 on protecting water-related ecosystems and target 15.1, which are mountain related.

13. The “Mountain Green Cover Index” is a proxy to monitor the health of mountain ecosystems. It is designed to measure the changes of the green vegetation in mountain areas (i.e., forest, shrubs and cropland). The scientific community, in fact, 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.

14. Challenges remain related to obtaining data from as many countries as possible, further improving the quality of the data provided by countries and ensuring that the time series are consistent. Improving data collection, reporting and dissemination of forest data will contribute not only to forest related indicators but also to enhance quality of other indicators, by bringing up information on forest socioeconomic dynamics and their impact on sustainable development. The reporting frequency is also a challenge. For instance, FRA, the main reporting instrument on forests, collects data every five years, but more frequent reporting on key variables could be done and this possibility will be considered in the design of FRA 2020. Aligning FRA to the SDGs’ reporting needs means not only enhancing the data collection, but also to report annually.

15. The work on indicators for sustainable forest management can be instrumental for production of national and regional forest socioeconomic information. Indicators defined within Criteria and Indicators (C&I) processes can inform data collection processes, such as FRA, providing for enhanced forest socioeconomic statistics at global level. SOFO 2014 assessed data/information gaps in the existing international statistics framework for socioeconomic C&Is and emphasized the need for increased efforts to improve data availability and quality for existing indicators. Equally important, though, is to support C&I processes to produce robust country-driven information aligned but not restricted to the SDG global indicator system and to existing global assessments and statistics, creating reliable and time-consistent sources of national socioeconomic information.

16. FAO’s project on strengthening C&I for SFM in policy and practice has provided valuable analysis and input to the monitoring of the forest-related SDGs. The proposal for indicator 15.2.1 is the result of a collaboration with key partners working on C&I, and it is expected that this collaboration will continue in order to evaluate the effectiveness of the indicator and discuss options for further methodological improvements. Apart from the work on SDGs, the C&I project has provided many valuable suggestions to be considered in the design of FRA 2020. Particular attention is given to the need of streamlining and strengthening coherence in the global reporting framework on forestry. An assessment of the different frameworks’ indicators will allow for identification of data gaps, data collection and dissemination needs to support the demonstration of forest’s contribution to the SDGs. FAO will work with the secretariats of CBD (Convention of Biological Diversity), UNFCCC (United Nations Framework Convention on Climate Change), UNFF (United Nations

Forum on Forests), other members of the Collaborative Partnership on Forests (CPF), as well as other international processes to achieve progress towards a global indicator framework that can reveal forest physical, environmental and socioeconomical dimensions, changes and trends, while reducing reporting burden to countries.

#### **IV. Enhancing Data Collection, Monitoring and Reporting for Forest-Related SDGs**

17. Support to national implementation of the SDGs as well as to monitoring progress is critical to ensure cost-effective solutions building on natural synergies and feedback across policies. Enhanced data availability and quality provide a basis for informed decision making on policies towards the SDGs, and other international processes on forests, while supporting national cross-sectoral governance for achievement of the goals. In this regard, data collection on forest resources and management, forest products and forest socioeconomic contributions at national level, should be enhanced by not only focusing on the production of statistics but also aiming at timely and consistent collection of reliable information on different forest aspects that provide for clarification of socioeconomic dynamics hidden in aggregated data but relevant to country priorities and needs.

18. Understanding the role of forests beyond ecosystem services, such as in providing nutrition, protection against disasters, low carbon products and fuels, and generating jobs and income will increase the range of policy options and the benefits generated. The assessment of these contributions, however, depends on adequate design and measurement of national indicators, as well as reliable data collection, analysis and dissemination. FAO efforts to strengthen country capacity can improve accounting of production, trade and income generated by wood and non-wood forest products, and other socio-economic benefits contributing to empowerment and improved livelihoods.

19. FAO has been collecting data and information on some aspects of socioeconomic benefits from forests via regular statistical activities, such as FRA, Joint Forest Sector Questionnaire, socioeconomic monitoring as part of National Forest Monitoring and Assessment (NFMA) and some thematic economic studies. For instance, FRA reports the condition of the socioeconomic benefits from the global forests based on its data on wood removals, non-wood forest products production, employment, ownership of forests, access to forests and forests-related public expenditure and revenue collection. Data availability and quality vary greatly by data ownership, collection scheme, domain, item, element, region and country. FRA 2010 and 2015 explicitly state that availability and quality of the data on socioeconomic benefits from forests are not sufficient to make a conclusive assessment of the general global situation and trend. Building capacity at country level for improving reporting and supporting national data collection and design of national indicators will improve quality of monitoring, review and policy formulation at all levels.

20. Over the last 25 years, the countries' capacity to monitor their forests has improved significantly. According to FRA 2015, 81 countries representing 77 percent of the global forest area, reported that they have either finalized or initiated their national assessment after 2010. However, reporting progress towards the SDGs poses new challenges to the inventories as it will require continuous and consistent monitoring over time. To meet these challenges it is necessary to institutionalize, sustain and further improve the existing capacity and inventory and monitoring systems, as well as to engage in new capacity development activities in countries, which are currently unable to adequately report on their forest resources and their changes.

21. The FRA collects and compiles official national statistics, and reports on status and trends of forest resources at country, regional and global levels. The UN-REDD Programme and National Forest Monitoring and Assessment (NFMA) activities focus on supporting countries' efforts to develop REDD+ compatible long-term national forest monitoring systems which collect, analyse, report and disseminate forest resource and related socioeconomic and governance data and information. The Forest Products Statistics Programme (FPS) collects, analyses, and disseminates annual global data on forest products production and trade.

22. The FRA conducts regional and national capacity development exercises to support countries in improving the consistency of the national reports and to help them in using remote sensing for assessing forest area and its changes. UN-REDD and NFMA have a wider scope, and cover the capacity development needs of the whole national forest inventory process from the inventory design to data collection, analysis, reporting and dissemination of the results. The FPS enhances national and regional statistical capacity on forest products by conducting training workshops and technical assistance projects on a regular basis. The FPS has conducted more than 25 capacity building workshops on forest products statistics around the world since 1984.

23. Meeting the requirements of SDG progress monitoring requires development of transparent and continuous inventory and monitoring models which can produce frequently updated and consistent data with known accuracy. FAO will continue supporting the development of national forest monitoring systems and related capacity through its normative and operational support. The Voluntary Guidelines on National Forest Monitoring, aiming at providing a sound basis for further operational support which is currently ongoing in more than 20 countries will be presented for endorsement by the current session of COFO.

24. FAO is also actively seeking new and innovative techniques to further improve the efficiency of its support. In COP21, Paris, FAO and Google signed a Memorandum of Understanding which will facilitate countries' access to most recent remote sensing data sets as well as to powerful processing and analysis tools. Within its Open Foris Initiative, FAO has also worked on a set of free and open source software tools, which help countries to collect, analyse and report data on forest and related aspects. These tools and technologies are neither discipline nor scale specific, and can be used to meet various information needs at different levels. In addition to national level analysis, they can contribute to the development of global assessments, such as the FRA, as well as to meeting the information needs of smallholders or family farmers. Hence, they can contribute also to some of the FAO's Regional Initiatives.

## **V. Points for Consideration by the Committee**

25. The Committee may wish to invite countries to:

- Strengthen forest data collection to meet the needs of monitoring progress towards SDG targets at global, regional and national levels;
- Design national level forest related SDG indicators, including by building on information and data generated by the national statistics system and through national and regional C&I processes.

26. The Committee may wish to request FAO to:

- review FRA strategy, in consultation with Member States and other international agencies and organizations, and align it as necessary towards the needs of SDGs monitoring, as well as to the reporting needs of other global forests processes, aiming at production and dissemination of robust forest physical and socioeconomic information, including by using remote sensing;
- support countries in strengthening collection, analysis and dissemination of forest data with a view to support the national SDG indicator framework and country reports to regional and global review processes;
- continue to explore new and innovative tools and techniques to further improve support to Members in collecting, analysing and reporting data on forest and related aspects
- pilot new methodologies for assessing regional and global trends in forest cover;
- promote global and regional knowledge sharing on best practices and lessons learned for enhancement of data collection and analysis of forest statistics and information; and
- continue working with the secretariats of CBD, UNFCCC, UNFF, other members of the CPF, as well as other international processes to improve and streamline global reporting on forests.

## Annex I

## Major Forest-Related Targets and Indicators (not exhaustive)

<p><b>Target 2.3</b> 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 nonfarm employment.</p>	<p><b>Indicator 2.3.1</b> Volume of production per labour unit by classes of farming/pastoral/ forestry enterprise size</p>
<p><b>Target 6.6</b> By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.</p>	<p><b>Indicator 6.6.1</b> Change in the extent of water-related ecosystems over time</p>
<p><b>Target 7.1</b> By 2030, ensure universal access to affordable, reliable and modern energy services.</p>	<p><b>Indicator 7.1.2</b> Proportion of population with primary reliance on clean fuels and technology</p>
<p><b>Target 7.2</b> By 2030, increase substantially the share of renewable energy in the global energy mix.</p>	<p><b>Indicator 7.2.1</b> Renewable energy share in the total final energy consumption</p>
<p><b>Target 9.4</b> 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.</p>	<p><b>Indicator 9.4.1</b> CO<sub>2</sub> emission per unit of value added</p>
<p><b>Target 11.c</b> Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials.</p>	<p><b>Indicator 11.c.1</b> Proportion of financial support to the least developed countries that is allocated to the construction and retrofitting of sustainable, resilient and resource-efficient buildings utilizing local materials</p>
<p><b>Target 15.1</b> 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.</p>	<p><b>Indicator 15.1.1</b> Forest area as a proportion of total land area</p>
<p><b>Target 15.2</b> 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.</p>	<p><b>Indicator 15.2.1</b> Progress towards sustainable forest management</p>

<p><b>Target 15.3</b> By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.</p>	<p><b>Indicator 15.3.1</b> Proportion of land that is degraded over total land area</p>
<p><b>Target 15.4</b> By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development</p>	<p><b>Indicator 15.4.1</b> Coverage by protected areas of important sites for mountain biodiversity <b>Indicator 15.4.2</b> Mountain Green Cover Index</p>
<p><b>Target 15.6</b> Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed.</p>	<p><b>Indicator 15.6.1</b> Number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits</p>
<p><b>Target 15.9</b> By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts.</p>	<p><b>Indicator 15.9.1</b> Progress towards national targets established in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011-2020</p>