



COMMITTEE ON FORESTRY

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Streamlining reporting on restoration through Global Forest Resources Assessments

I. Background

1. On 1 March 2019, under Resolution 73/284, the United Nations General Assembly (UNGA) proclaimed 2021–2030 to be the United Nations Decade on Ecosystem Restoration (hereafter ‘the UN Decade’), with the primary aim being to prevent, halt and reverse the degradation of ecosystems worldwide. Resolution 73/284 highlights that ecosystem restoration can play a major role in achieving the objectives of the 2030 Agenda for Sustainable Development: ending poverty, conserving biodiversity, combating climate change, and improving livelihoods for everyone, everywhere.

2. Effective monitoring and reporting on progress of restoration as well as on the implementation of the UN Decade is essential. In March 2020, the UN Decade Task Force on Monitoring (hereafter the Monitoring Task Force) was launched¹. It brings together hundreds of technical experts from over 100 organizations tasked with collaboratively developing a monitoring framework for the UN Decade (2021–2030). The framework, named the Framework for Ecosystem Restoration Monitoring (FERM), will also contribute to the UN Secretary-General’s reporting on progress of the Implementation of the UN Decade to the UNGA at its eighty-first Session.

3. To avoid extra reporting burdens, FERM was developed with the view to employ and build upon existing data reporting systems and processes within relevant international commitments, conventions and plans, rather than establish additional formal reporting burdens for countries. Based on the geospatial architecture of FAO’s Hand-In-Hand Geospatial Platform, FAO has worked across its technical divisions and the Task Force to create the FERM geospatial dissemination platform to enable transparent monitoring of progress and to provide indicators and data to help practitioners to monitor ecosystem restoration². Additionally, the FERM registry has been developed to harmonise and collect area-based data on ecosystem restoration projects and programmes³.

4. An existing data reporting process is the Global Forest Resources Assessment (FRA). It is a well-established country-driven process of collection and compilation of data and metadata and reporting on global forest resources, their management and uses. FRA reporting supports all main forest-related processes, including the Convention on Biological Diversity (CBD), the UN Framework

¹ <https://www.fao.org/national-forest-monitoring/areas-of-work/restoration-monitoring/en/>

² <https://data.apps.fao.org/ferm/>

³ <https://ferm.fao.org/>

Convention on Climate Change (UNFCCC), the UN Forum on Forests (UNFF) and the Sustainable Development Goals (SDGs).

5. The 25th Session of the Committee on Forestry (COFO25) requested FAO to “in cooperation with members of the Collaborative Partnership on Forests and other restoration initiatives, prepare an information note for the 26th Session of COFO that analyses if and how reporting on restoration-related indicators to future FRAs can streamline reporting for countries between multiple restoration initiatives”⁴. This information note responds to that request.

II. Monitoring and reporting on restoration-related indicators

A. FAO’s contribution to the monitoring of the UN Decade

6. From 2020 to 2022, the Monitoring Task Force coordinated expert technical consultations and desk-based analysis to identify restoration-related indicators for monitoring and reporting restoration at the global level. Cumulatively, these processes identified 82 global indicators⁵ covering important conventions highlighted in Resolution 73/284, namely, UNFCCC, CBD and the United Nations Convention to Combat Desertification (UNCCD).

7. Among these global indicators, a set of 20 SDG indicators were prioritized as UN Decade indicators (see Annex) in consultation with the Monitoring Task Force, and have been integrated into the FERM geospatial platform and the FERM registry⁶. These indicators cover both biophysical and socio-economic aspects of restoration and provide good coverage of ecosystems. In terms of reporting frequency, all indicators will have at least three data points during the span of the UN Decade (2021–2030).

8. The indicators use existing country statistical data collected through SDG reporting processes, where custodian agencies play an important role in compiling and validating data. Currently, FAO is the UN custodian agency of 21 SDG indicators. FAO FRA compiles data for and reports on SDG indicators 15.1.1 (forest area) and 15.2.1 (sustainable forest management) and leads the data production and reporting for SDG indicator 15.4.2 (mountain green cover).

9. The Monitoring Task Force will provide annual reporting of restoration progress through live reports and an online dashboard commencing in December 2023. As a visual, online and interactive report, this will aim to inform and engage the broad target audience of the UN Decade including governments, private sector, civil society organizations and academia. Annual reporting will form the basis of the UNSG’s reporting to the UNGA on the status of the UN Decade implementation (to be made at its 81st Session in 2026–27). Currently, the full FRA reporting cycle is five years, but following a request from COFO25, FAO is currently developing a more flexible reporting process that would allow countries to provide more frequent voluntary updates on the key indicators as new information allows. With more frequently updated data, future FRAs can play an important role in the UN Decade and be a valuable source of data for ecosystem restoration monitoring in particular for forest ecosystems.

10. Since 2018, the data for the FRA have been reported through an online platform⁷, which serves also as an open dissemination tool for all data and metadata reported to FRA 2020. The platform is an open and user-friendly tool, where users can visualize FRA data using dashboards and interact with the complete dataset from the most recent FRA reporting cycle. Also the forthcoming more flexible reporting process will build on the functionalities of the platform.

⁴ See para 13.e. of COFO/2020/REP: <https://www.fao.org/3/ne205en/ne205en.pdf>

⁵ <https://www.fao.org/documents/card/es/c/cb9982en/>

⁶ FERM registry provides a harmonized data collection mechanism to aggregate data from existing restoration platforms.

⁷ <https://fra-data.fao.org>

B. The Global Forest Resources Assessment as existing reporting process of the Convention on Biological Diversity Target 2 on restoration

11. The first half of the Fifteenth meeting of the Conference of the Parties (COP15) to the CBD took place on 1-24 October 2021, in Kunming, Yunnan Province, China. At the second half of COP15, scheduled for 5-17 December 2022 in Montreal, Canada, CBD Parties are expected to adopt a post-2020 global biodiversity framework (GBF) as a roadmap towards the 2050 Vision of “Living in harmony with nature”.

12. Target 2 of the post-2020 GBF is related to restoration and is still under negotiation. It is expected that at the COP15 in Montreal, Parties will adopt the final formulation. As per outcomes of the fourth meeting of the Open-ended Working Group, held from 21-26 June 2022, the current wording of Target 2 is focused on ensuring that degraded terrestrial, inland waters, freshwater, coastal, marine areas/ecosystems are under effective restoration, taking into account their natural state as a baseline and ensuring integrity, connectivity and functioning among them.⁸. To align the reporting process, and remove duplication of efforts, FAO and the Monitoring Task Force have been requested by the Secretariat of CBD to provide methodological guidance for monitoring Target 2, based on selected headline SDG indicators closely related to restoration.

13. Following a call for voluntary contributions from the UN Decade Monitoring Task Force, a Working Group was created in May 2022 comprising of experts from FAO, CBD, UNCCD, the United Nations Environment Programme World Conservation Monitoring Centre/Biodiversity Indicators Partnership (UNEP-WCMC/BIP), the Ramsar Convention on Wetlands, the International Union for Conservation of Nature (IUCN) and the Society for Ecological Restoration/Global Restoration Observatory (SER/GRO). The Working Group has prepared an information note with monitoring and reporting suggestions for Target 2. Corresponding workflow for reporting on Target 2 is being developed. This draft zero document is available [here](#). The draft has been circulated in the 4th Meeting of the Open Ended Working Group (OEWG) on the Post-2020 GBF in Nairobi, held from 21 to 26 June 2022.

14. To the extent possible, restoration monitoring workflows should build on existing and well-established SDG reporting processes leveraging related restoration platforms and initiatives such as FRA, FERM, Data Reporting Tool (DaRT) for Multilateral Environmental Agreements (MEAs) and Performance Review and Implementation System (PRAIS). The reporting should be country-driven and based on best available data. The indicators should have reasonably good global and regional coverage and they should be reported using standard quality flags of the SDG reporting process.

15. Through all the previous FRA assessments, FAO has established systematic, standardized data collection, compilation and validation methodologies. It has also built a global network of officially nominated FRA National Correspondents who lead the preparation of country reports.

16. The latest FRA 2020 examined the status and trends, management and uses of forest resources over the period 1990–2020 focusing on 60 broad variables. For the first time, it requested countries to indicate whether they monitored forest degradation, and, if so, to provide the definition of degraded forest they used and a brief description of the monitoring process and results. The data revealed that the countries use various definitions for forest degradation. Most of them were based on the presence of disturbances but references were made also to changes in forest structure, loss of productivity and forest goods. In summary, the responses reflected both, the lack of data and commonly agreed definition and methods for monitoring forest degradation.

17. With clear definitions and an operational workflow, forest area and other restoration-related attributes collected through FRA could in the future be used to produce data for monitoring the extent

⁸ <https://www.cbd.int/doc/c/c949/b2cc/a311c0c411d3a81134e2c7f3/wg2020-03-1-02-en.pdf>

of forest restoration for land-based ecosystems. This will be an important step to enhance the reporting process and to improve consistency, including the information potentially collected by future FRAs on forest degradation.

C. Potential restoration-related indicators

18. Over the years, the scope of FRA has changed regularly since the first assessment published in 1948. The assessments make an interesting history of global forest interests, both in terms of their substantive content, but also in their changing scope. In the context of the UN Decade and beyond, future FRA has the potential to make use of its global National Correspondent network and official status to collect data on new variables at national level to support monitoring restoration.

19. As a first step towards inclusion of forest restoration indicators in FRA, the following proposal for restoration reporting for the FRA 2025 data collection has been developed by the FRA Secretariat:

1. Has your country forest restoration commitments (yes/no)
2. If yes
 - a. Is there a forest law in support of forest restoration
 - b. What areas in need of restoration have been identified and how they have been identified
 - c. What are the targets set for the restoration (e.g. xx hectares by year yyyy)

The proposal will be further discussed during and finalized after a FRA 2025 Expert Consultation, planned for September 2022.

20. In addition, other variables related to forest restoration can be developed and documented in metadata files for transparency purposes, including a justification why these indicators are selected. Such variables include but are not limited to:

- Existing forest restoration commitments (Boolean)
- Existence of national legal framework for forest restoration (Boolean)
- Forest restoration potential (1000 ha) [with option of spatially explicit reporting]
- Time-bounded forest restoration target (1000 ha) [with option of spatially explicit reporting]
- Forest restoration implementation in the current reporting period (1000 ha) [with option of spatially explicit reporting]
- Other area-related data for calculating connectivity indices – in case reporting is spatially explicit⁹

21. Countries can provide their own national definitions to report on forest restoration variables, until agreed-upon definitions become available, and consistent and accurate methodologies emerge. However, this information note will not go into details of specific indicators.

III. Streamlining between multiple restoration initiatives

22. FAO recommends to streamline and coordinate efforts developed by various restoration monitoring initiatives and platforms to report on forest-related ecosystem restoration monitoring through the processes mentioned above. If COFO requests that, FAO including through FRA stand ready to initiate collection and validation of data on indicators related to forest restoration, as well as reporting on and disseminating them in due course. Other initiatives and platforms, when aggregating

⁹ Indicators and methodologies for measuring the connectivity component in CBD Target 2 are still under discussion.

national restoration data of different ecosystems, can directly make use of forest restoration data collected through FRA. These data can also be used to derive other indicators as needed.

23. The FERM platform and the FERM registry can contribute to aligning data from different platforms. Efforts will be made to enable data interoperability across different platforms and avoid duplication of effort and double accounting. The FERM can also support restoration actors from local to global in accessing best data available and technology to monitor restoration projects, and to identify and inform on data and reporting gaps and needs to the Monitoring Task Force.

ANNEX

UN Decade headline indicators¹⁰

Indicator code	Indicator name	Ecosystem type ¹¹	Update frequency ¹²	Institution
SDG 1.2.1	Proportion of population living below the national poverty line, by sex and age	All types	Twice a year	World Bank
SDG 2.1.1	Prevalence of undernourishment	All types	Annually	FAO
SDG 2.4.1	Proportion of agricultural area under productive and sustainable agriculture	Farmlands	Every 3 years	FAO
SDG 6.1.1	Proportion of population using safely managed drinking water services	All types	Every 2 years	UNICEF; WHO
SDG 6.3.2	Proportion of bodies of water with good ambient water quality	Freshwater	Every 3 years	UNEP
SDG 6.4.2	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	Freshwater	Annually	FAO
SDG 6.5.1	Degree of integrated water resources management	Freshwater	Every 3-4 years	UNEP
SDG 6.6.1 (Ramsar 8.6)	Change in the extent of water-related ecosystems over time	Freshwater	Annually	UNEP; Ramsar Convention?
SDG 7.2.1	Renewable energy share in the total final energy consumption	All types	Annually	IEA; UNSD; IRENA
SDG 12.b.1	Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability	All types	Annually	UNWTO
SDG 13.2.2 (UNFCCC)	“Total greenhouse gas emissions per year” as reported to UNFCCC as part of the enhanced transparency	All types	Annually (Annex I Parties);	UNFCCC

¹⁰ Source: <https://www.fao.org/documents/card/es/c/cb9982en/>

¹¹ UN Decade on Ecosystem Restoration focal ecosystems include: Farmlands; Forests; Freshwater; Grasslands, Shrublands, Savannahs; Mountains; Oceans and coasts; Peatlands; and Urban areas. For further information, see [here](#).

¹² Update frequency of SDG indicators obtained from <https://unstats.un.org/sdgs/metadata/>

	framework (ETF) mechanism		Every 2 years (Non-Annex I Parties)	
SDG 14.4.1	Proportion of fish stocks within biologically sustainable levels	Oceans and coasts	Every 2 years	FAO
SDG 14.5.1	Coverage of protected areas in relation to marine areas	Oceans and coasts	Annually	UNEP-WCMC; BLI; IUCN
SDG 14.b.1	Degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries	Oceans and coasts	Every 2 years from 2018	FAO
SDG 15.1.1	Forest area as a proportion of total land area	Forests	Annually from 2015	FAO
SDG 15.1.2	Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type	Forests; Freshwater; Grasslands, Shrublands and Savannas; Mountains; Peatlands	Annually	UNEP-WCMC; BLI; IUCN
SDG 15.2.1	Progress towards sustainable forest management	Forests	Annually from 2015	FAO
SDG 15.3.1 (UNCCD)	Proportion of land that is degraded over total land area	Farmland; Forests; Grasslands, Shrublands and Savannas	Every 4 years from 2018	UNCCD; FAO; CBD; UNSD; UNEP; UNFCCC
SDG 15.4.2	Mountain Green Cover Index	Mountains	Every 3 years	FAO
SDG 15.5.1	Red List Index	All types	Annually	IUCN; BLI