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للأمم المتحدة

# COMMITTEE ON FORESTRY

## TWENTY-FOURTH SESSION

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### MAINSTREAMING BIODIVERSITY INTO AGRICULTURE, FORESTRY AND FISHERIES

#### I. Introduction

1. The 2016 UN Biodiversity Conference, held in Cancun, Mexico, called for the mainstreaming of biodiversity across all agricultural sectors as well as the tourism sector.<sup>1</sup> It invited FAO and its Governing and Statutory Bodies to consider and support the development and implementation of relevant measures, guidance and tools in this regard, and welcomed FAO's initiative to act as Biodiversity Mainstreaming Platform.<sup>2</sup>

2. The 40<sup>th</sup> Session of the FAO Conference<sup>3</sup> in 2017 endorsed the initiative and requested FAO to facilitate, in collaboration with its partners, the integration of biodiversity across agricultural sectors at national, regional and international levels.

3. "Mainstreaming" of biodiversity has been interpreted and defined in various ways. One useful definition is that by the Global Environmental Facility's (GEF) Scientific and Advisory Panel (STAP)<sup>4</sup>, which describes it as: *"the process of embedding biodiversity considerations into policies, strategies and practices of key public and private actors that impact or rely on biodiversity, so that it is conserved and sustainably and equitably used both locally and globally"*.

4. Mainstreaming biodiversity across relevant policies, plans and programs is recognized as essential for ensuring the effective implementation of the Convention on Biological Diversity, the Strategic Plan for Biodiversity 2011-2020 and its Aichi Biodiversity Targets, and, as applicable, the Cartagena and Nagoya Protocols. It is also considered essential for achieving relevant Sustainable Development Goals (SDGs) (especially SDG 2, 14 and 15).

<sup>1</sup> CBD/COP/13/24.

<sup>2</sup> CBD/COP/DEC/XIII/3

<sup>3</sup> C 2017/REP, paragraph 55; C 2017/33

<sup>4</sup> [https://www.thegef.org/sites/default/files/publications/Mainstreaming-Biodiversity-LowRes\\_1.pdf](https://www.thegef.org/sites/default/files/publications/Mainstreaming-Biodiversity-LowRes_1.pdf)

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5. This document recalls the background to forests and biodiversity, introduces FAO's initiative to act as Biodiversity Mainstreaming Platform (Platform), elaborates opportunities for biodiversity mainstreaming in the forest sector, and seeks guidance from the Committee as regards mainstreaming of biodiversity in the forest sector and the future work of the Platform.

## II. Forests and biodiversity

6. Forests cover 30 percent of the Earth's surface and are home to more than 80 percent of all terrestrial species of animals and plants. They provide people with a range of benefits that extend far beyond the provision of wood and non-wood forest products. These benefits include *supporting services* such as nutrient cycling, photosynthesis, and soil formation, *provisioning services* such as food, water, fiber and genetic resources, *regulating services* such as pest and disease control, pollination, carbon sequestration or water purification, and *cultural services* such as spiritual, aesthetic, and recreation values, and sense of place.

7. Although essential to life on earth and human well-being, natural forests – which present the majority of global forest cover and contain an important share of forest biodiversity – continue to be lost and degraded. According to the 2015 Global Forest Resource Assessment (FRA 2015), reported natural forest area decreased by a 6.5 million ha per year between 2010 and 2015. While this was offset partially by a combination of natural expansion and the expansion of planted forests, it is generally assumed that forest biodiversity in regrowth areas is lower than in natural forests. However, many of the ongoing restoration efforts are establishing planted forest by including biodiversity considerations or specifically for biodiversity and ecosystem services.

8. The main drivers of deforestation relate to demands for wood, food, fuel and fibre and often originate from outside the forest sector. The 2016 State of the World's Forests<sup>5</sup> attributes at least 70 percent of deforestation worldwide to agricultural expansion. Biodiversity is also affected by forest degradation caused by unsustainable or illegal harvesting of wood, unmanaged fires or pests and diseases, for example.

9. At the same time, biodiversity is a well-recognized element of forestry. The concept of sustainable forest management (SFM), which evolved over time, now guides the development and implementation of policies and practices to maintain and enhance the economic, social and environmental values of forests. According to FRA 2015, the conservation of biodiversity is the primary management objective for 13 percent of the world's forests and, since 1990, 150 million ha of forest have been added to the area primarily managed for conservation. Furthermore, management plans for production forests have to take into account biodiversity considerations if they are to meet the criteria for SFM and the requirements of forest certification schemes (e.g. FSC, PEFC). The role of forests in maintaining biodiversity is also explicitly recognized by the *UN Strategic Plan for Forests 2017-2030*<sup>6</sup>.

10. Furthermore, SFM is contributing significantly to both adaptation to, and mitigation of climate change. Several actions designed and implemented in the framework of the UN Climate Convention (UNFCCC), including REDD+<sup>7</sup> national strategies/action plans and Nationally Determined Contributions, contribute to SFM implementation. Moreover, there is international guidance requesting countries implementing REDD+ to consider a set of seven safeguards (Cancun Safeguards)<sup>8</sup> aimed at enhancing environmental and social benefits of REDD+ actions and avoiding the risk of negative impacts. Through this process, SFM / REDD+ actions would not only address

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<sup>5</sup> <http://www.fao.org/publications/sofo/2016/en/>.

<sup>6</sup> <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N17/184/62/PDF/N1718462.pdf?OpenElement>

<sup>7</sup> Reducing Emissions from Deforestation and forest Degradation, plus the sustainable management of forests, and the conservation and enhancement of forest carbon stocks (REDD+).

<sup>8</sup> <http://redd.unfccc.int/fact-sheets/safeguards.html>

drivers of deforestation and degradation but also have a key role to play in conserving and enriching biological diversity.

11. The importance of biodiversity and forest ecosystem services is also recognized by other sectors and processes. For example, the related discussion of the Committee on World Food Security (CFS) is presented in document COFO/2018/5.4. It should be noted that besides wild meat/bushmeat, fruits, nuts and medicinal organisms, forests provide important habitats for pollinators which are important for agricultural production, and consequently for food security and nutrition.

### III. FAO's initiative to serve as a Biodiversity Mainstreaming Platform

12. As announced at the 2016 UN Biodiversity Conference, FAO is currently establishing the Platform with a global scope, aiming to improve cross-sectoral coordination of policies and practices to mainstream biodiversity across agricultural sectors. The global process can be supported by regional and national activities. Addressing particularly SDGs 2, 14 and 15, the Platform has the following objectives to promote the mainstreaming of biodiversity:

- facilitate dialogue among governments, communities of practice and other stakeholders;
- facilitate the exchange of information and data on biodiversity and biodiversity-friendly agricultural practices and policies among stakeholders;
- translate knowledge on biodiversity into policy-making and for consideration by FAO's Governing and Statutory Bodies.

13. The ultimate purpose of the Platform is the promotion of good practices and policies across all agricultural sectors that will support the conservation and sustainable use of biodiversity and increase the productivity, stability and resilience of production systems in an integrated landscape/seascape approach. This will require better coordination among the different sectors as none of them may address biodiversity effectively in isolation. More details on the Platform and possible mid- to long term activities are provided in the document, *Outcome of the 13<sup>th</sup> Meeting of the Conference of the Parties to the Convention on Biological Diversity: Mainstreaming Biodiversity across Agricultural Sectors*<sup>9</sup>.

14. Following the request of the a 40<sup>th</sup> Session of the FAO Conference, the first activity of the Platform is the organization of an informal multi-stakeholder dialogue between the environment and agricultural sectors in Rome on 29-31 May 2018<sup>10</sup>. The dialogue is intended to contribute to the development of the Platform's work programme and partnerships, and to promote efforts by countries to strengthen biodiversity mainstreaming at national level.

15. The dialogue is one step in a process in which FAO technical committees, regional conferences and other relevant statutory bodies consider biodiversity and facilitate steps towards coordinated mainstreaming biodiversity across the agricultural sectors. The results of the dialogue and the recommendations of the committees and regional conferences will be reported back to the UN Biodiversity Conference (COP 14) in November 2018 and considered by the 41<sup>st</sup> Session of the FAO Conference in June 2019.

### IV. Mainstreaming biodiversity in forestry

16. In the case of the well-established concept of SFM, the question arises about the meaning and implications of mainstreaming biodiversity in forestry. In fact, at first glance, it can appear as if the low hanging fruit to mainstreaming biodiversity in forestry simply means promoting the *actual*

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<sup>9</sup> C 2017/33

<sup>10</sup> <http://www.fao.org/about/meetings/multi-stakeholder-dialogue-on-biodiversity/en/>

*implementation of SFM on the ground, possibly complemented by selected additional improvements of biodiversity management within SFM policies and practices.*

17. And yet, mainstreaming biodiversity in the agricultural sectors requests not only “to do more” within a given sector, but also emphasizes the interconnections between agriculture, forestry and fisheries. It thus stresses the importance of an integrated vision and approach. In this context, an integrated approach across the landscape appears a useful tool to conceptually analyze the conditions, threats and appropriate responses. Even though the SFM concept captures some of the cross-sectoral linkages (e.g. agriculture, and more recently aquaculture, being a key driver of deforestation), it needs to be more closely integrated with other sectors to fully recognize the contributions and possible impacts (e.g. that forests can provide important habitat for pollinators for nearby agricultural fields). Using an integrated approach has the potential to capture these inter-linkages and inform policy and strategy development undertaken in collaboration with relevant stakeholders across sectors.

18. To identify entry points for mainstreaming biodiversity in forestry, using a landscape perspective, it can be helpful to follow a systematic approach by first taking stock of the status quo, identifying threats (drivers of change) and subsequently appropriate responses to manage the threats:

1) **Scientific evidence about the state of biodiversity** and associated provision of ecosystem services (i.e. ecological functions and benefits for human well-being across types of land cover and land uses) is required to understand the value of biodiversity to human well-being at different spatial scales (local, national, regional). The assessment reports of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), the regular FRA and FAO’s State of the World’s reports on forests, biodiversity for food and agriculture, and forest genetic resources can be starting points to derive an understanding of the current implications for agricultural sectors in general, and forestry specifically.

2) **Clear understanding of the threats (drivers of change)** to biodiversity loss is essential to identify and prioritize appropriate responses to mitigate them. Context-dependent, this can require a nuanced analysis across various dimensions of biodiversity (e.g. wildlife/tree species versus ecosystems) as drivers may differ across these dimensions. Within the scope of REDD+ processes, numerous countries have undertaken analyses on the drivers of deforestation and forest degradation, which presents an entry point to understand the threats of biodiversity at (forest) ecosystem level. Again, the assessment reports of the IPBES, and FAO’s State of the World’s reports can be valuable sources of information, ideally complemented by more detailed analyses on the threats at species and genetic levels for both wildlife and tree species.

3) **Responses (policies and measures) to manage biodiversity need to be technically sound.** While the SFM concept already recognizes biodiversity values (e.g. by emphasizing forest benefits beyond timber production), key entry points for actions to mainstreaming biodiversity in forestry include:

- strengthening the *actual implementation* of relevant international agreements, and national policies and practices;
- exploring opportunities to *further promote biodiversity in forest management* (e.g. several studies indicate that biodiversity in logged over forests could be higher than previously assumed<sup>11</sup>); and
- identifying new opportunities on matters that only become obvious after an integrated, landscape-level assessment (e.g. the pollination services link of forest biodiversity for nearby agriculture).

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<sup>11</sup> [https://e360.yale.edu/features/biodiversity\\_in\\_logged\\_forests\\_far\\_higher\\_than\\_once\\_believed](https://e360.yale.edu/features/biodiversity_in_logged_forests_far_higher_than_once_believed)

19. One important consideration here is to not only focus on the “conservation” aspect of biodiversity (e.g. protection of ecosystems or wildlife species), yet also on the “sustainable use” dimension (e.g. use of selected tree species for promoting forest restoration or building up agroforestry systems). Another important consideration refers to the risk of trade-offs or undesired consequences of certain responses across dimensions of biodiversity (e.g. forest plantations for climate change mitigation using non-local species; or measures to protect the area extent of a certain ecosystem which may be inefficient in conserving the species and genetic diversity contained inside).

20. In summary, achieving the aim of mainstreaming biodiversity in forestry, i.e. that biodiversity is conserved and used both sustainably and equitably, will require solid technical knowledge of the biodiversity impacts and trade-offs from interventions, as well as strong political commitment and appropriate stakeholder involvement in cross-sectoral strategy formulation and implementation.

21. Countries could apply the above-outlined approach and mainstream biodiversity within the forest sector (i.e. by strengthening SFM implementation, and/or further strengthen biodiversity considerations in SFM policies and practices such as in logged over forests situation) or across sectors (at the interface between agriculture and fisheries/aquaculture<sup>12</sup> and forestry such as the case of forest and landscape restoration efforts, agroforestry, or human-wildlife conflicts). In both cases, appropriate stakeholder involvement is essential.

22. Knowledge management and learning – whether in the form of compiling good practices, lessons learned, testing alternative models, or sharing of experiences – support to improve and upscale initiatives for biodiversity mainstreaming. Relevant results could be derived, for example, from the work by the CGIAR research program on *Forests, Trees and Agroforestry (FTA)* or by the Collaborative Partnership on Forests (CPF) and the Collaborative Partnership on Sustainable Wildlife Management (CPW). FAO’s SFM Toolbox could be one vehicle for knowledge sharing. FAO could act as one intermediary between the research community, governments and other stakeholders, including Indigenous Peoples and Local Communities (IPLCs) and the private sector, committed to advancing mainstreaming biodiversity in their countries.

23. While scientific and technical information is increasingly becoming available, an integrated assessment of biodiversity and priority response actions across agricultural sectors is likely to reveal new gaps in data, information, knowledge and tools. FAO and partners can contribute to reducing such gaps by facilitating necessary development of policy and technical guidance material and tools for assessing forest biodiversity and developing relevant policies and practices.

## V. Points for consideration

24. The Committee may wish to:

- a) consider the report from the informal multi-stakeholder dialogue<sup>13</sup> of the Platform in May 2018 to provide recommendations on the work programme of the Biodiversity Mainstreaming Platform;
- b) advise FAO, in collaboration with relevant stakeholders, on strengthening the Biodiversity Mainstreaming Platform in relation to forestry beyond continued implementation of sustainable forest management, considering that the implementation

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<sup>12</sup> Costa-Pereira et al., 2017. Fishing-down within populations harms seed dispersal mutualism, <https://onlinelibrary.wiley.com/doi/full/10.1111/btp.12516>

<sup>13</sup> Multi-Stakeholder Dialogue on Biodiversity Mainstreaming across Agricultural Sectors - <http://www.fao.org/3/CA0461EN/ca0461en.pdf>

of sustainable forest management is an important starting point for mainstreaming biodiversity in forestry;

c) invite member countries to:

- engage in the Biodiversity Mainstreaming Platform to exchange on opportunities and constraints for biodiversity mainstreaming in forestry;
- strengthen the implementation of international agreements relevant to biodiversity and forests, as well as the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources.

d) request FAO to:

- contribute to an improved understanding of the implications of forest biodiversity loss for the agricultural sectors, and of responses addressing threats to forest biodiversity, through the development and dissemination of knowledge and tools, including the SFM Toolbox;
- continue coordinating and supporting the implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources, and regularly report progress made in its implementation to the Committee.