**FAO INPUTS ON POST-2020 GLOBAL BIODIVERSITY FRAMEWORK DISCUSSION PAPER (CBD/POST2020/PREP/1/1)**

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1. **Background**

**The agricultural sectors and biodiversity**

Biodiversity is indispensable to food security and nutrition, sustainable development and the supply of many vital ecosystem services. It is vital to efforts to meet humanity’s growing need for food, feed, fibre and fuel while protecting the planet for future generations. Biodiversity makes production systems and livelihoods more resilient to shocks and stresses, including to the effects of climate change. It is a key resource in efforts to sustainably increase food production while limiting negative impacts on the environment.

Biodiversity includes the sub-category of biodiversity for food and agriculture. An understanding of the importance of biodiversity for food and agriculture is essential for the design of an effective post-2020 global biodiversity framework. One of the most important factors for the future of biodiversity is the way our food and agriculture systems evolve. The agricultural sectors, i.e. crop, livestock, forestry, fisheries and aquaculture, are major users of biodiversity and have a considerable potential to contribute to its conservation and sustainable use. Together they manage the largest terrestrial, freshwater and marine areas on earth. When managed sustainably, agricultural sectors contribute to ecosystem functions essential for sustainable production.

There are many well-established approaches for improving the sustainability of agriculture sectors. In fisheries and aquaculture, the ecosystem approach has proven to be key for the conservation and sustainable use of marine and aquatic biodiversity. In forestry, sustainable forest management brings together a number of approaches, including agroforestry and community-based forestry, to maintain and enhance multiple forest values. Examples from crop production approaches include crop diversification, poly-cultures, increasing soil organic matter, integrated management of pests and diseases, minimum soil disturbance, permanent soil cover, and appropriate mechanisation services. Securing ecosystem services requires enhancing biodiversity at the landscape and seascape level, for instance through agroecology, agroforestry and the Ecosystem Approach to Fisheries.

**Recent developments in FAO**

FAO promotes sustainable development in the agriculture sectors[[1]](#footnote-2) (including crop and livestock production, forestry, fisheries and aquaculture) as a means to alleviate poverty and end hunger and malnutrition.

In 2016, FAO announced the establishment of the Biodiversity Mainstreaming Platform, and established the Climate, Biodiversity, Land and Water Department. The Multi-stakeholder Dialogue on Biodiversity Mainstreaming across the Agricultural Sectors was one of the first activities of the Biodiversity Mainstreaming Platform and was co-organized with the CBD in May 2018 in Rome.[[2]](#footnote-3)

FAO’s Commission on Genetic Resources for Food and Agriculture launched, in February 2019, the first report on *The State of the World’s Biodiversity for Food and Agricultur*e,[[3]](#footnote-4) an essential step in creating a comprehensive picture of the state and use of this biodiversity. The report provides a strong foundation for the design of effective interventions towards more sustainable, resilient food systems. The Commission called for a timely and clear cross-sectoral follow-up document and agreed on an intersessional process with the motivation to have the document adopted as a Global Plan of Action by the FAO Conference at its 42nd session in 2021.[[4]](#footnote-5)

FAO governing bodies in 2018 discussed biodiversity mainstreaming across the agricultural sectors and requested FAO to develop a strategy on biodiversity mainstreaming across the agricultural sectors.[[5]](#footnote-6)

The FAO Council is expected to endorse the FAO Strategy on Biodiversity Mainstreaming across Agricultural Sectors in December 2019.

1. **FAO inputs to the discussion paper**

*FAO will strengthen its work on biodiversity mainstreaming over the coming months as it prepares its own strategy on biodiversity mainstreaming across the agriculture sectors. FAO looks forward to providing more in-depth responses to future notifications from the CBD on the post-2020 global biodiversity framework.*

**2050 Vision for Biodiversity and Mission of the post-2020 global biodiversity framework** (Section C – Paragraph 13 and Section D – Paragraph 14)

The 2050 Vision for Biodiversity recognises that biodiversity delivers benefits essential for all people. Biodiversity provides a wide range of benefits including the provision of food, water, timber, and fibre; climate adaptation, and cultural benefits. Sustainable agricultural production, which depends on biodiversity, provides food security and nutrition, as well as sustainable livelihoods, poverty eradication and dietary diversity, which are central to human well-being and social order.

It is therefore proposed that the recognition of the direct and indirect contribution of biodiversity mainstreaming to food security and nutrition, sustainable livelihoods and poverty eradication be highlighted in the post-2020 global biodiversity framework. This would support building a bridge between the agricultural (including crop, livestock, fisheries and forestry) and environmental sectors, which is necessary to support the essential task of mainstreaming biodiversity across the agricultural sectors. Contributing to food security and nutrition should therefore be included in the Mission of the post-2020 global biodiversity framework.

**Biodiversity Targets** (Section E – Paragraph 15)

Biodiversity targets should be fully aligned with the 2030 Agenda for Sustainable Development. The SDGs offer the main framework to guide national development processes and the international community should promote a coherent approach. FAO proposes to start with an assessment of existing biodiversity-related SDG targets and indicators. Based on such an assessment, the post-2020 global biodiversity framework should aim to strategically fill in the most essential gaps by proposing a limited number of targets and indicators (possibly drawing from the Aichi Biodiversity Targets) to complement the SDGs. The proposed overarching goals of the *FAO Strategy on Biodiversity Mainstreaming across Agricultural Sectors* (which will be presented to the FAO Council for endorsement in December 2019) may be relevant for this exercise.

To facilitate communication with stakeholders from the agricultural sectors, it may be useful to group all targets related to the agricultural sectors together to highlight their importance.

**Relationship between the post-2020 global biodiversity framework and other relevant processes** (Section G – Paragraph 17)

According to FAO, sustainable food and agriculture requires responsible and effective governance mechanisms.[[6]](#footnote-7) This requires enabling policy, legal and institutional environments that strike the right balance between private and public sector initiatives, and ensure accountability, equity, transparency and the rule of law.

FAO plays an important role in facilitating dialogue on, and governance of, biodiversity for food and agriculture. Acting as Biodiversity Mainstreaming Platform, FAO is ready to facilitate dialogue, common understanding and the exchange of information between governments and other stakeholders and foster ownership and commitment for mainstreaming biodiversity across the agricultural sectors.

Various FAO bodies have a specific role in the governance of biodiversity for food and agriculture, and should be considered as processes that are relevant to the post-2020 global biodiversity framework. These include the Commission on Genetic Resources for Food and Agriculture, the International Treaty on Plant Genetic Resources for Food and Agriculture, and the International Plant Protection Convention.[[7]](#footnote-8) The instruments and guidance that FAO develops through its inter-governmental bodies[[8]](#footnote-9) influence governance of biodiversity for food and agriculture at national, regional and global levels.

**Mainstreaming** (Section H – Paragraph 18)

In recent years, the importance of biodiversity mainstreaming across sectors has been gaining greater global attention. The agricultural sectors are among the sectors that are reliant on, and have significant impact on, biodiversity. FAO supports the proposal, as mentioned in the CBD discussion paper, for the post-2020 global biodiversity framework to incorporate or support the mainstreaming of biodiversity across society and economies at large. This means actively reaching out beyond the conservation community for the development (and later for the implementation) of the post-2020 global biodiversity framework. This requires recognition of the aims and incentives of the other sectors. Experience shows that when sustainability processes are dominated by abstract environmental concerns, without adequate attention to social and economic dimensions, they are unlikely to be implemented. [[9]](#footnote-10) As mentioned above, the starting point for involving other sectors should be the 2030 Agenda, which provides an internationally agreed set of goals, as well as a vision for transformational change that leaves no one behind.

More than any other economic sector, the agricultural sectors have an interest in conserving biodiversity because they rely on it for future production. There is growing evidence and awareness of the fact that biodiversity is essential for food and agriculture, that biodiversity for food and agriculture is declining, and that enabling frameworks for the sustainable use and conservation of biodiversity for food and agriculture remain insufficient.[[10]](#footnote-11) This awareness is reflected, in FAO, in the establishment of the Climate, Biodiversity, Land and Water Department and the launch of the Biodiversity Mainstreaming Platform in 2016, and the development of the FAO Strategy on Biodiversity Mainstreaming across Agricultural Sectors (to be presented to the FAO Council for endorsement in December 2019). In addition, it is proposed that a global plan of action on biodiversity for food and agriculture should be presented to the FAO Commission on Genetic Resources for Food and Agriculture for adoption in 2021.

Success in transforming agriculture will depend on mobilizing support from diverse social actors. The interlinkages of modern agricultural and food production systems make it largely impossible for any single sector or public agency to effectively influence the many actors who ultimately need to change their actions to enable adoption of more sustainable practices. Key players include line government institutions at national and lower levels; civil society actors, including in particular producers’ organizations, specific interest groups, cooperatives, etc.; the private sector, including agribusiness representatives; academia and research institutions; in addition to development partners and the media. The process should be gender sensitive and include the voices of women and men of all ages, in particular youth.[[11]](#footnote-12)

**Indicators** (Section K – Paragraph 20)

As mentioned in the section on targets, above, the starting point of any discussion on indicators should be the SDGs. The SDG indicators that are relevant to biodiversity should be reviewed and any additional indicators should be proposed where there are important gaps. Any additional reporting burden to countries needs to be minimized. In order to facilitate such an exercise for the agricultural sectors, a comparison between SDG and Aichi indicators for which FAO is responsible is presented below.

**Table 1: SDG indicators for which FAO is custodian or contributing agency and related specific indicators of the Aichi Biodiversity Targets**

|  |  |
| --- | --- |
| SDG indicators | **Aichi Biodiversity Targets and specific indicators for which FAO is the data source** |
| *SDG indicators under FAO custodianship* |  |
| 2.1.2 Severity of food insecurity | Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES) (Target 14) |
| 2.4.1 Agricultural sustainability | Proportion of agricultural area under productive and sustainable agriculture (indicator for SDG target 2.4) (Target 7) |
| 2.5.1 Conservation of genetic resources for food and agriculture | Number of plant and animal genetic resources for food and agriculture secured in either medium- or long-term conservation facilities (indicator for SDG target 2.5) (Target 13) |
| 2.5.2 Risk status of livestock breeds | Proportion of local breeds, classified as being at risk, not-at-risk or unknown level of risk of extinction (indicator for SDG target 2.5) (Target 13) |
| 5.a.1 [Women’s ownership of agricultural land](http://www.fao.org/sustainable-development-goals/indicators/5a1/en/) | (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure(indicator for SDG target 5.a) (Target 18) |
| 6.4.1 Water use efficiency | Change in water use efficiency over time (indicator for SDG target 6.4) (Target 4) |
| [6.4.2 Water stress](http://www.fao.org/sustainable-development-goals/indicators/642/en/) | Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (indicator for SDG target 6.4) (Target 4) |
| 14.4.1 Fish stocks sustainability | Proportion of fish stocks within biologically sustainable levels (Target 6) |
| 14.6.1 Illegal, unreported unregulated fishing | Progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing (Target 6) |
| 14.b.1 Access rights for small-scale fisheries | Progress by countries in the degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries (Target 6) |
| 15.1.1 Forest area | Forest area as a percentage of total land area (Target 5) |
| 15.2.1 Sustainable forest management | Progress towards sustainable forest management (Target 5) |
| 15.4.2 Mountain Green Cover | Mountain Green Cover Index (Target 14) |
| *SDG indicators for which FAO is a contributing agency* |  |
| 15.3.1 Land degradation | Proportion of land that is degraded over total land area (Target 5) |
| 15.6.1 Frameworks for fair and equitable sharing of genetic resources’ benefits | Number of countries that have adopted legislative, administrative and policy frameworks for the implementation of the Nagoya Protocol (Target 16) |

**Table 2: Biodiversity related SDG indicators with no corresponding specific indicators for Aichi Biodiversity Targets**

|  |  |
| --- | --- |
| 14.7.1 Value added of sustainable fisheries  (FAO is custodian agency) | Relevant to Target 6, but no such indicator |
| 14.c.1 Frameworks for conservation and sustainable use of oceans’ resources  (FAO is contributing agency) | Relevant to Target 6, but no such indicator |

In terms of the way forward on indicators for the post-2020 global biodiversity framework:

1. FAO’s recently published *State of the World’s Biodiversity for Food and Agriculture*,[[12]](#footnote-13) provides an important source of data on biodiversity for food and agriculture. Ninety-one countries prepared and submitted reports on the state of their biodiversity for food and agriculture and its management, focusing particularly on associated biodiversity and its role in the supply of supporting and regulating ecosystem services and on wild species that are sources of food.
2. Given the important impacts of crop production on biodiversity, FAO would like to draw the attention of the CBD to the newly approved methodological guidance for the indicator on SDG 2.4.1 (proportion of agricultural area under productive and sustainable agriculture) provides clear guidance on monitoring sustainable agriculture.[[13]](#footnote-14) The methodology includes biodiversity as one 11 core sustainability themes across the three dimensions of sustainability.[[14]](#footnote-15) The biodiversity theme is measured through a sub-indicator on use of biodiversity-friendly practices. Other themes are relevant to biodiversity, including management of fertilizers and pesticides and prevalence of soil degradation.
3. As mentioned above, biodiversity mainstreaming across the agricultural sectors is an essential part of achieving the 2050 Vision. To support the 2030 Agenda for Sustainable Development, FAO stands ready to develop indicators on biodiversity mainstreaming across the agricultural sectors.

**Implementation and NBSAPs** (Section L – Paragraph 21)

Given the important role of agriculture sectors for the future of biodiversity, biodiversity mainstreaming across the agricultural sectors, and their integrations into the NBSAPs, would greatly enhance the effectiveness of NBSAPs. For example, it would be highly relevant to engage National Plant Protection Organizations in their development and implementation. The process of developing and implementing the NBSAPs should be inclusive of a variety of partners and related country initiatives beyond conservation actors. Valuable experiences from integrating agriculture sectors into the National Adaptation Plans (NAPs) to address climate change can be capitalized upon.[[15]](#footnote-16)

**Resource mobilization** (Section M – Paragraph 22)

The post-2020 global biodiversity framework could address resource mobilization by promoting the role of the private sector and innovative financial models, such as blended finance.

**Integrating diverse perspectives** (Section Q – Paragraphs 27 (a) and (b))

FAO supports the “whole of society approach” mentioned in the discussion paper. As mentioned above, it is important to be inclusive of a variety of partners beyond conservation actors. Many important actors have been mentioned in the discussion paper and in addition to those mentioned, it is worth highlighting that the essential role of smallholders, including farmers, pastoralists, fisher-folk, forest dwellers and indigenous peoples, who are the custodians of biodiversity for food and agriculture. Their meaningful participation is essential for ensuring the development of a post-2020 global biodiversity framework that has positive outcomes regarding food security and nutrition, and livelihoods, for present and future generations. In most societies, women and men producers have differentiated knowledge and roles with respect to biodiversity. Consequently, the participation of women producers is also essential to develop and implement effective plans for the conservation and sustainable use of biodiversity.

1. Throughout this document, the term ‘agriculture sectors’ refers to crop and livestock production, forestry, fisheries and aquaculture. [↑](#footnote-ref-2)
2. <http://www.fao.org/about/meetings/multi-stakeholder-dialogue-on-biodiversity/en/> [↑](#footnote-ref-3)
3. <http://www.fao.org/3/CA3129EN/CA3129EN.pdf> [↑](#footnote-ref-4)
4. CGRFA-17/19/Report, paragraph 47. [↑](#footnote-ref-5)
5. CL 160/REP (<http://www.fao.org/fileadmin/user_upload/bodies/CL_160/CL160_Report/MY722_CL_160_REP_en.pdf>), C 2019/23 (<http://www.fao.org/fileadmin/user_upload/bodies/Conference_2019/MX970_23/MX970_C_2019_23_en.pdf>), C 2019/24 (<http://www.fao.org/fileadmin/user_upload/bodies/Conference_2019/MX775_24/MX775_C_2019_24_en.pdf>), and C 2019/21 Rev.1 (<http://www.fao.org/fileadmin/user_upload/bodies/Conference_2019/MY349_21/MY349_C_2019_21_en.pdf>) [↑](#footnote-ref-6)
6. FAO. 2014. *Building a common vision for sustainable food and agriculture: principles and approaches*. Rome. http://www.fao.org/3/a-i3940e.pdf [↑](#footnote-ref-7)
7. It is worth noting that the International Plant Protection Convention is directly involved in environmental protection as it is established to protect all plant life, both cultivated and wild. [↑](#footnote-ref-8)
8. These include the Committee of Fisheries, the Committee on Forestry, the Committee on Agriculture, the Committee on Commodity Problems, the Regional Conferences and the Regional commissions (see http://www.fao.org/unfao/govbodies/gsbhome/gsb-home/en/). [↑](#footnote-ref-9)
9. FAO. 2014. *Building a common vision for sustainable food and agriculture: principles and approaches*. Rome. http://www.fao.org/3/a-i3940e.pdf [↑](#footnote-ref-10)
10. FAO. 2019. *The State of the World’s Biodiversity for Food and Agriculture*. Rome. http://www.fao.org/3/CA3229EN/CA3229EN.pdf [↑](#footnote-ref-11)
11. FAO. 2018. Transforming Food and Agriculture to Achieve the SDGs: 20 interconnected actions to guide decision-makers. Technical Reference Document. Rome. 132 pp. http://www.fao.org/3/CA1647EN/ca1647en.pdf [↑](#footnote-ref-12)
12. <http://www.fao.org/3/CA3129EN/CA3129EN.pdf> [↑](#footnote-ref-13)
13. The indicator for SDG 2.4.1 was re-classified as a Tier II indicator by the Eighth Meeting of the Inter-Agency and Expert Group on the Sustainable Development Goal Indicators <https://unstats.un.org/sdgs/files/Tier%20Classification%20of%20SDG%20Indicators_4%20April%202019_web.pdf> [↑](#footnote-ref-14)
14. <http://www.fao.org/3/CA2639EN/ca2639en.pdf> [↑](#footnote-ref-15)
15. <http://www.fao.org/3/a-i6714e.pdf> [↑](#footnote-ref-16)