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COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Item 9.2 of the Provisional Agenda

Eighteenth Regular Session

27 September – 1 October 2021

STATUS OF IMPLEMENTATION OF THE GLOBAL PLAN OF ACTION FOR THE CONSERVATION, SUSTAINABLE USE AND DEVELOPMENT OF FOREST GENETIC RESOURCES

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I. INTRODUCTION

1. At its Seventeenth Regular Session in February 2019, the Commission on Genetic Resources for Food and Agriculture (Commission) considered the implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources[1] (Global Plan of Action). The Commission requested FAO to continue coordinating and supporting the implementation of the Global Plan of Action, in collaboration with regional networks on forest genetic resources (FGR) and relevant international organizations. It also encouraged FAO to continue pursuing extra-budgetary resources to support developing countries in the implementation of the Global Plan of Action.[2]

2. The Commission also requested FAO to initiate the development of a new global information system on FGR, subject to the availability of extra-budgetary resources. It noted that FAO should, while developing the information system on FGR, avoid duplicating efforts with the existing global information systems on plant genetic resources for food and agriculture. It also encouraged FAO to seek synergies with the existing regional information systems on FGR to avoid increasing countries' reporting burden. The Commission further encouraged FAO to consider ways to strengthen national and regional information systems on FGR, including by offering technical and financial support.[3]

3. This document summarizes the activities FAO has undertaken since the Commission's last session to support, in collaboration with its partners, the implementation of the Global Plan of Action. These activities are grouped according to the four Priority Areas of the Global Plan of Action, for consideration by the Commission.

II. SUPPORT TO THE IMPLEMENTATION OF THE GLOBAL PLAN OF ACTION FOR THE CONSERVATION, SUSTAINABLE USE AND DEVELOPMENT OF FOREST GENETIC RESOURCES

(a) Improving the availability of, and access to information on forest genetic resources (Priority Area 1)

4. The conservation, sustainable use and development of FGR require reliable information and knowledge on forest trees and other woody plant species, as well on the ecosystems in which these species are naturally growing or planted by people. One of the key findings of the *State of the World's Forest Genetic Resources* was that the availability of information on FGR varies from country to country, and that more accurate information on FGR is also needed at regional and global levels. The Global Plan of Action therefore calls for improving the availability of, and access to information on these resources.

Monitoring the implementation of the Global Plan of Action

5. The Commission, at its Seventeenth Regular Session, took note of the *First Report on the Implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources* (First Implementation Report).[4]

6. The Commission invited countries to continue implementing the Global Plan of Action and encouraged them to address the findings of the First Implementation Report.[5] It also encouraged all Members to nominate a National Focal Point on forest genetic resources and to report on their efforts to implement the Global Plan of Action in the future.

7. A second report on the implementation of the Global Plan of Action is scheduled for the Nineteenth Regular Session of the Commission in 2023. It will be prepared based on the country reports that are currently being finalized for *The Second Report on the State of the World's Forest Genetic Resources* (Second Report). The document *Development of a new global information system*

[1] FAO. 2014. *Global plan of action for the conservation, sustainable use and development of forest genetic resources*. Rome. (also available at http://www.fao.org/3/i3849e/i3849e.pdf).
[2] CGRFA-17/19/Report, paragraph 76.
[3] CGRFA-17/19/Report, paragraph 79.
[4] CGRFA-17/19/10.2/Inf.1.
[5] CGRFA-17/19/Report, paragraph 74.

on forest genetic resources[6] provides information on the ongoing activities aimed at creating a new tool for monitoring the implementation of the Global Plan of Action. The document *Status of preparation of The Second Report on the State of the World's Forest Genetic Resources*[7] provides an update on the preparation of the Second Report.

Global information system on forest genetic resources

8. FAO mobilized extra-budgetary resources (approximately USD 1 million) for launching two global projects on FGR in 2020. These projects, both financed by the Government of Germany, support the preparation of the Second Report and the development of a new global information system on FGR.[8] The projects contribute directly to the implementation of the Global Plan of Action and in particular its Priority Area 1.

9. FAO presented the planned activities for developing a new global information system on forest genetic resources to the Sixth Session of the Intergovernmental Technical Working Group on Forest Genetic Resources (Working Group) in April 2021.[9] The Working Group took note of the reported activities on the development of the new global information system and recommended that it provide a user-friendly tool for reporting and an easily accessible web-based platform for sharing data on forest genetic resources.[10]

10. The Working Group welcomed the involvement of National Focal Points in the needs assessment and the testing of the information system at the different stages of its development, and recommended that it contribute to the harmonization of national and regional forest genetic resource reporting and thereby reduce the reporting burden for countries and facilitate access to information on forest genetic resources.[11] It also encouraged FAO to keep the National Focal Points abreast of any new developments of the information system.

11. The Working Group further recommended that the Commission invite countries and their National Focal Points to continue contributing to the development and testing of the new global information system on FGR, and to continue providing data on FGR based on the targets, indicators and verifiers[12] adopted by the Commission at its Sixteenth Regular Session.[13] The Working Group also recommended that the Commission request FAO to continue its efforts in developing the new user-friendly global information system and stressed the importance of avoiding duplication and of distinguishing this information system from pre-existing ones.

(b) *In situ* and *ex situ* conservation of forest genetic resource (Priority Area 2)

12. *In situ* conservation is the preferred means of conserving FGR as it allows forest trees and other woody plants species to continue their evolutionary processes and adaptation to changes. *Ex situ* conservation of FGR is a necessary complement to *in situ* conservation, especially when population size is critically low in the wild. The Global Plan of Action recognizes the important roles of protected areas, managed forests and trees on farms in the conservation of FGR and, under its Priority Area 2, calls for action to maintain genetic diversity and the evolutionary processes of these species by better implementing and harmonizing measures to conserve FGR, both *in situ* and *ex situ*.

13. FAO has supported many countries in developing large national projects that aim at strengthening the conservation and sustainable management of forests, including forest and landscape restoration. These projects contribute, directly or indirectly, to the implementation of the Global Plan of Action and while they are more relevant to Priority Area 3 (sustainable use, development and management of FGR), several of them also include activities which enhance *in situ* conservation of

[6] CGRFA-18/21/9.2/Inf.1.
[7] CGRFA-18/21/9.3.
[8] See CGRFA-18/21/9.2/Inf.1.
[9] CGRFA/WG-FGR-6/21/4.
[10] CGRFA/WG-FGR-6/21/Report, paragraph 18.
[11] CGRFA/WG-FGR-6/21/Report, paragraph 19.
[12] CGRFA-16/17/Report, paragraph 74; CGRFA-16/17/20, *Appendix C*.
[13] CGRFA/WG-FGR-6/21/Report, paragraph 20.

FGR. Funding for such large national projects has been predominantly provided by the Global Environment Facility (GEF) and the Green Climate Fund (GCF). The details of the projects are provided below under Priority Area 3 (see II.(c)). Currently, there is no FAO-coordinated project specifically on *ex situ* conservation of FGR.

(c) Sustainable use, development and management of forest genetic resources (Priority Area 3)

14. Sustainable forest management aims at using forests and trees in such a way that their capacity to provide wood and non-wood products, socio-economic benefits and environmental services do not diminish over time. Paying due attention to FGR and genetic considerations is therefore crucial for achieving truly sustainable management of forests, as well as for ensuring long-term conservation of forest biodiversity. Under its Priority Area 3, the Global Plan of Action aims at enhancing the sustainable use, development and management of FGR as a key contribution to environmental sustainability, food security and poverty alleviation.

15. The FAO portfolio of GEF projects focusing on forests and trees has increased significantly.[14] It includes the Sustainable Forest Management Impact Programme on Dryland Sustainable Landscapes (DSL) to support efforts to avoid, reduce and reverse deforestation, degradation and desertification in 11 countries in Africa and Asia (Angola, Botswana, Burkina Faso, Kazakhstan, Kenya, Malawi, Mongolia, Mozambique, Namibia, United Republic of Tanzania and Zimbabwe). The DSL Impact Programme became operational in June 2021 and is led by FAO in partnership with the World Bank, the International Union for Conservation of Nature and the World Wide Fund for Nature. The GEF funding for this programme is about USD 104 million. Most programme partner countries are planning to strengthen their tree seed systems as part of the national projects. Furthermore, FAO is currently supporting several other countries[15] to implement GEF-funded projects that aim to enhance sustainable forest management or forest and landscape restoration.

16. FAO's portfolio of GCF projects has also grown rapidly and now includes ongoing projects and approved full proposals with special emphasis on forests and trees in 12 countries (Argentina, Armenia, Chile, Colombia, Congo, Côte d'Ivoire, Cuba, Guatemala, Kyrgyzstan, Nepal, Paraguay and Sudan).[16] These GCF projects aim at combating deforestation and mitigating climate change with tree planting efforts and by enhancing the management of existing forests. They often also include other forest-related activities to improve the livelihoods of local people and to conserve forest biodiversity.

17. Other FAO projects and programmes have also continued to contribute to the implementation of the Global Plan of Action. Under the framework of the Action Against Desertification (AAD) initiative,[17] FAO and its partners are reinforcing tree seed systems in Burkina Faso, Ethiopia, Fiji, The Gambia, Haiti, Mali, Mauritania, Niger, Nigeria, Senegal and Sudan as part of the efforts to restore forests and trees. Furthermore, the Forest and Landscape Restoration Mechanism (FLRM) [18] has

[14] Further information on FAO-led GEF projects is available at http://www.fao.org/gef/en/

[15] Forest Resources Assessment and Monitoring to Strengthen Forestry Policy and Knowledge Framework in Azerbaijan (2017–2021); Forest and Landscape Restoration supporting Landscape and Livelihoods Resilience in the Central African Republic (2018–2022); Sustainable Forest Management to Enhance the Resilience of Forests in China to Climate Change (2016–2022); Sustainable Management of Wooded Production Landscapes for Biodiversity Conservation in Haiti (2019–2023); Payment for Ecosystem Services to Support Forest Conservation and Sustainable Livelihoods in Mozambique (2017–2022); Reversing Deforestation and Degradation in High Conservation Value Chilgoza Pine Forests in Pakistan (2018–2021); Enhancing Biodiversity, Ecosystem Flows, Carbon Stocks through Sustainable Forest Management and Restoration of Degraded Forestlands in the Philippines (2018–2022); Landscape Restoration for Ecosystem Functionality and Climate Change Mitigation in the Republic of São Tomé e Príncipe (2018–2023); Promoting Sustainable Forest Management and Improving Livelihoods through Integrated Land Use Planning and Forest Landscape Restoration in Sri Lanka (2018–2022); Sustainable Management of Forests in Mountain and Valley Areas in Uzbekistan (2018–2023).

[16] Further information on FAO-led GCF projects is available at http://www.fao.org/climate-change/international-finance/green-climate-fund/en/

[17] http://www.fao.org/in-action/action-against-desertification/en/

[18] http://www.fao.org/in-action/forest-landscape-restoration-mechanism/en/

expanded its activities and is currently supporting large-scale restoration initiatives with different donors and partners in 19 countries.[19] These projects are increasingly exploring ways to also enhance the management of FGR and to restore genetically diverse forests.

(d) Policies, institutions and capacity-building (Priority Area 4)

18. In many cases, national policies and regulatory frameworks for FGR are partial, ineffective or non-existent. This situation results from the fact that FGR are not well understood or properly managed in many countries. The Global Plan of Action calls for the development of national strategies for FGR and stresses the importance of awareness raising and capacity building at all levels. Furthermore, the Global Plan of Action recognizes the need to reinforce regional and international collaboration, and to mobilize the necessary resources, including financing, for the conservation, sustainable use and development of FGR.

Voluntary Guidelines for Preparing a National Strategy for Forest Genetic Resources

19. At its Seventeenth Regular Session, the Commission endorsed the *Voluntary Guidelines for Preparing a National Strategy for Forest Genetic Resources*[20] and noted the importance of countries having a national or subnational strategy for FGR in place in view of climate change.[21] The publication of the Voluntary Guidelines is imminent.

Coordination of and collaboration for the implementation of the Global Plan of Action

20. At its Seventeenth Regular Session, the Commission requested FAO to continue coordinating the implementation of the Global Plan of Action in collaboration with regional networks on FGR and relevant international organizations.[22] FAO has thus continued its collaboration with the regional networks, and also plans to strengthen their role in the implementation of the Global Plan of Action, subject to the availability of financial resources.

21. In March 2019, FAO briefed, through a webinar, the Steering Committee of the European Forest Genetic Resources Programme (EUFORGEN) on the findings of the First Report on the implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources (First Implementation Report)[23] and on the preparatory process for the Second Report. In April 2019, the Steering Committee finalized the strategic objectives and the implementation plan for EUFORGEN Phase VI (2020–2024), including contributions to the implementation of the Global Plan of Action.

22. In April 2019, Bioversity International and FAO organized a regional workshop in Kumasi, Ghana, for the National Coordinators of the Sub-Saharan Africa Forest Genetic Resources Programme (SAFORGEN) to review the progress made in implementing the regional strategy the network had developed in 2016 based on the Global Plan of Action. The workshop was organized in collaboration with the Forestry Research Institute of Ghana and was attended by national experts from 20 countries,[24] as well as representatives of Botanic Gardens Conservation International (BGCI), the International Union for Conservation of Nature (IUCN) and World Agroforestry(ICRAF). The workshop also discussed the findings of the First Implementation Report.

23. In June 2019, the Asia Pacific Forest Genetic Resources Programme (APFORGEN) updated the Twenty-eight Session of the FAO Asia-Pacific Forestry Commission, held in Incheon, Republic of Korea, on the implementation of its regional strategy, which is based on the Global Plan of Action. In

[19] Burkina Faso, Cambodia, Central African Republic, Democratic Republic of the Congo, Fiji, Guatemala, Kenya, Lebanon, Malawi, Morocco, Niger, Pakistan, Peru, the Philippines, Guinea, Rwanda, Sao Tome and Príncipe, Uganda and Vanuatu.
[20] CGRFA-17/19/10.2/Inf.3.
[21] CGRFA-17/19/Report, paragraph 75.
[22] CGRFA-17/19/Report, paragraph 76.
[23] CGRFA-17/19/10.2/Inf.1.
[24] Benin, Burkina Faso, Cameroon, Congo, Côte d'Ivoire, Ethiopia, Gambia, Ghana, Guinea, Kenya, Madagascar, Mali, Namibia, Niger, Nigeria, Senegal, South Africa, United Republic of Tanzania, Togo and Uganda.

June 2021, FAO also contributed to a one-day virtual workshop during which the APFORGEN members took stock of the progress made in implementing the regional strategy.

Awareness-raising and information-sharing

24. In adopting the *Strategy for the Implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources*,[25] the Commission encouraged FAO to share information related to the conservation, sustainable use and development of FGR. In response, FAO has continued efforts, in collaboration with its partners, to increase international awareness of the Global Plan of Action and the importance of FGR.

25. In 2019 and 2020, FAO briefed its Regional Forestry Commissions in Africa, Asia-Pacific, Europe, Latin America and the Caribbean, Near East and North America on the forestry-relevant outcomes of the Seventeenth Regular Session of the Commission on Genetic Resources for Food and Agriculture. Furthermore, FAO provided a similar briefing to the Twenty-fifth Session of the FAO Committee on Forestry in October 2020. The Committee emphasized the importance of the conservation and sustainable use of genetic resources for food and agriculture, including access to genetic resources and the fair and equitable sharing of benefits arising from their utilization.[26]

26. In October 2019, FAO presented an update on the status of monitoring the implementation of the Global Plan of Action and the preparation of the Second Report to the Annual Meeting of the OECD Scheme on Forest Seed and Plant, held in Vienna, Austria. In December 2019, FAO launched a new website on FGR.[27]

27. In 2020, the International Day of Forests (21 March) was celebrated with the theme "forests and biodiversity"[28] and one of the key messages stressed the importance of forest genetic diversity.

28. *The State of the World's Forests 2020*,[29] published by FAO and the United Nations Environment Programme (UNEP), focuses on forests, biodiversity and people. The report includes a summary of the findings of *The State of the World's Forest Genetic Resources*[30] and the First Implementation Report, as well as case studies on FGR.

29. In 2020, FAO also released several other publications that aimed at increasing awareness on the management of FGR. These included two thematic studies; one on indicators of the genetic diversity of trees,[31] and another on tree genetic diversity and the livelihoods of rural communities in the tropics.[32] In addition, FAO prepared an overview paper on the global status of genetic resources for food and agriculture and challenges in their management for the first issue of the newly launched *Genetic Resources* journal.[33]

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[25] CGRFA-15/15/Report, *Appendix E*.
[26] COFO/2020/REP, paragraph 16.
[27] http://www.fao.org/forest-genetic-resources/en/
[28] http://www.fao.org/international-day-of-forests/previous-years/2020-biodiversity/en/
[29] FAO & UNEP. 2020. *The State of the World's Forests 2020. Forests, biodiversity and people.* Rome. (also available at http://www.fao.org/3/ca8642en/CA8642EN.pdf).
[30] FAO. 2014. *The State of the World's Forest Genetic Resources.* Rome. (also available at http://www.fao.org/3/i3825e/i3825e.pdf).
[31] Graudal, L., Loo, J., Fady, B., Vendramin, G., Aravanopoulos, F.A., Baldinelli, G., Bennadji, Z., Ramamonjisoa, L., Changtragoon, S. & Kjær, E.D. 2020. *Indicators of the genetic diversity of trees – State, Pressure, benefit and response.* State of the World's Forest Genetic Resources – Thematic study. Rome, FAO. (also available at http://www.fao.org/3/cb2492en/cb2492en.pdf).
[32] Dawson, I.K., Leakey, R., Place, F., Clement, C.R., Weber, J.C., Cornelius, J.P., Roshetko, J.M., Tchoundjeu, Z., Kalinganire, A., Masters, E., Orwa, C., McMullin, S., Kindt, R., Graudal, L. & Jamnadass, R. 2020. *Trees, tree genetic resources and the livelihoods of rural communities in the tropics.* State of the World's Forest Genetic Resources – Thematic study. Rome, FAO. (also available at http://www.fao.org/3/cb2488en/cb2488en.pdf).
[33] Pilling, D., Bélanger, J., Diulgheroff, S., Koskela, J., Leroy, G., Mair, G. & Hoffmann, I. 2020. Global status of genetic resources for food and agriculture: challenges and research needs: Global status of genetic resources for food and agriculture. *Genetic Resources*, 1(1): 4–16. (also available at https://www.genresj.org/index.php/grj/article/view/genresj.2020.1.4-16).

30. In the context of the AAD work, a manual was prepared for large-scale restoration, including practical guidance for collecting, handling and storing tree seeds.[34] Building on the activities of the FLRM, FAO's journal of forestry and forest industries, *Unasylva*, released an issue dedicated to forest and landscape restoration[35] with an article on the priorities, challenges and opportunities for supplying tree germplasm. In 2020, the FLRM also organized several webinars on FGR in collaboration with Bioversity International.

Mobilizing financial resources

31. The Commission adopted, at its last session, the *Funding Strategy for the Implementation of the Global Plan of Action for the Conservation, Sustainable use and Development of Forest Genetic Resources* (Funding Strategy).[36] It encouraged countries to actively mainstream FGR into larger and holistic actions on sustainable forest management, including agroforestry and forest strategies, and forest-based climate change adaptation and mitigation measures.[37] It also encouraged countries to identify needs for specific and strategic actions on FGR. Furthermore, the Commission encouraged donors to support the implementation of the Global Plan of Action and its Funding Strategy.[38]

32. As part of its efforts to mobilize financial resources, FAO supported many countries in developing large national projects that aim at enhancing sustainable forest management, including forest and landscape restoration (see above II.(c)).

III. FUTURE WORK

33. While progress has been made in the implementation of the Global Plan of Action, as acknowledged by the Working Group[39], there is an urgent need for countries to strengthen their efforts to implement the Global Plan of Action. New and additional financial resources need to be raised to support countries in the implementation of the Global Plan of Action and in mainstreaming forest genetic resources into larger and holistic actions on sustainable forest management and forest-based climate change adaptation and mitigation measures.

34. The Working Group recommended that the Commission request FAO to continue coordinating and supporting the implementation of the Global Plan of Action, in collaboration with regional networks on FGR and relevant international organizations, as appropriate.[40] It further recommended that the Commission request FAO to continue its efforts to increase international awareness of the Global Plan of Action and the importance of FGR. The Working Group also recommended that the Commission encourage donors to support the implementation of the Global Plan of Action.

IV. GUIDANCE SOUGHT

35. The Commission may wish to:

i. invite countries to strengthen their efforts to implement the Global Plan of Action;

ii. invite countries and their National Focal Points to contribute to the development and testing of the new global information system on FGR, and to continue providing data on FGR;

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[34] Sacande M., Parfondry M. & Cicatiello C. 2019. *Restoration in Action Against Desertification. A manual for large-scale restoration to support rural communities' resilience in Africa's Great Green Wall*. Rome, FAO. (also available at http://www.fao.org/3/ca6932en/CA6932EN.pdf).

[35] FAO. 2020. *Restoring the Earth - The next decade*. Unasylva No. 252 - Vol. 71 2020/1. Rome. (also available at http://www.fao.org/3/cb1600en/cb1600en.pdf).

[36] CGRFA-17/19/Report, *Appendix D*.

[37] CGRFA-17/19/Report, paragraph 75.

[38] CGRFA-17/19/Report, paragraph 76.

[39] CGRFA-18/21/9.1, paragraph 11.

[40] CGRFA-18/21/9.1, paragraph 12.

iii. encourage countries to continue mainstreaming FGR into larger and holistic actions on sustainable forest management and forest-based adaptation and mitigation measures, as well as to identify needs for specific and strategic actions on FGR;

iv. request FAO to continue coordinating and supporting the implementation of the Global Plan of Action, in collaboration with regional networks on FGR and relevant international organizations;

v. request FAO to continue its efforts in developing the new user-friendly global information system on FGR;

vi. request FAO to continue its efforts to increase international awareness of the Global Plan of Action and the importance of FGR, and make the *Voluntary Guidelines for Preparing a National Strategy for Forest Genetic Resources* available in all official UN languages; and

vii. encourage donors to support the implementation of the Global Plan of Action and its Funding Strategy.