Food and Agriculture Organization of the United Nations

COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

CGRFA-19/23/Report

Nineteenth Regular Session of the Commission on Genetic Resources for Food and Agriculture

Rome, 17–21 July 2023

CGRFA-19/23/Report

REPORT OF THE COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Nineteenth Regular Session

Rome, 17–21 July 2023

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, 2023

The documents of the Nineteenth Regular Session of the
Commission on Genetic Resources for Food and Agriculture
are to be found on the Internet at:
https://www.fao.org/cgrfa/meetings/detail/Nineteenth-Regular-Session/en

They may also be obtained from:

The Secretary
Commission on Genetic Resources for Food and Agriculture
Food and Agriculture Organization of the United Nations
Viale delle Terme di Caracalla
00153 Rome, Italy

E-mail: cgrfa@fao.org

CONTENTS

I. OPENING OF THE SESSION

1. The Nineteenth Regular Session of the Commission on Genetic Resources for Food and Agriculture (Commission) was held in Rome, Italy, from 17 to 21 July 2023. The list of delegates and observers is available on the Commission's website.[1]

2. In accordance with its Rules of Procedure, the Commission had elected its Chairperson, Vice-Chairpersons and *Rapporteur* for the Nineteenth Regular Session at its Eighteenth Regular Session in 2021. The Chair of the Nineteenth Regular Session was Ms Deidré A. Januarie (Namibia). Ms Mariana Marshall Parra (Brazil), Mr Benoît Girard (Canada), Mr Hongjie Yang (China), Mr William Wigmore (Cook Islands), Ms Neveen Abdel Fattah Hassan (Egypt) and Ms Kim van Seeters (Kingdom of the Netherlands) were Vice-Chairpersons. Ms van Seeters was elected *Rapporteur*. Mr Yang was replaced by Mr Yu Fuqing (China), Mr Wigmore was replaced by Mr Savenaca Cuquma (Fiji) and Ms Hassan was replaced by Ms Joelle Braidy (Lebanon).

3. Ms Januarie opened the session and welcomed delegates and observers.

4. Mr QU Dongyu, Director-General of FAO, opened the session and welcomed delegates and observers. He noted that the two years since the last session of the Commission, held in October 2021, had been pivotal in firmly planting biodiversity on the global agenda. He noted that the Framework for Action on Biodiversity for Food and Agriculture (FA BFA),[2] endorsed by the FAO Council in 2021, and the adoption of the Kunming-Montreal Global Biodiversity Framework (KM GBF)[3] in December 2022, provided cornerstones of a new international biodiversity policy agenda. He stressed that FAO is committed to supporting its Members in implementing both frameworks. He added that, through the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors and its Action Plan,[4] FAO coordinates its support across the whole Organization to Members in mainstreaming biodiversity and strengthening the conservation and sustainable use of genetic resources for food and agriculture (GRFA). Furthermore, he noted that in the four decades of its existence the Commission had become a key global forum and that in the future the Commission must work hard to ensure that all components of biodiversity for food and agriculture (BFA), including those that in the past may have been overlooked and neglected, are managed in a holistic and integrated way.

5. Mr David Cooper, Acting Executive Secretary of the Convention on Biological Diversity (CBD), welcomed delegates and observers and noted that, since its establishment in 1983, the Commission had been in the vanguard in highlighting the importance of genetic diversity for the future of food and agriculture, and in supporting efforts to conserve and sustainably use this critical dimension of biological diversity. He further noted that since the CBD was adopted in 1992 it had worked in close partnership with the Commission. He highlighted that 2023 marks the halfway point in implementing the 2030 Agenda for Sustainable Development and emphasized the need for all to take action to halt and reverse biodiversity loss. He summarized the KM GBF agreement and noted that the FA BFA is an important tool to support its implementation. He concluded by reiterating that nothing is more important for the future of biodiversity than the way food and agricultural systems are managed and that the future of food and agriculture depends on the conservation and sustainable use of biodiversity.

6. Mr Kent Nnadozie, Secretary of the International Treaty on Plant Genetic Resources for Food and Agriculture (International Treaty), noted that over the past four decades the Commission had played a pivotal role in addressing the challenges and opportunities associated with GRFA. He noted that through international cooperation, dialogue and knowledge exchange the Commission had advanced the appreciation of the value and importance of genetic resources and their role in

[1] https://www.fao.org/cgrfa/meetings/detail/Nineteenth-Regular-Session/en

[2] FAO. 2022. *Framework for Action on Biodiversity for Food and Agriculture*. FAO Commission on Genetic Resources for Food and Agriculture. Rome. https://doi.org/10.4060/cb8338en

[3] https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf

[4] FAO. 2020. *FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors*. Rome. https://doi.org/10.4060/ca7722en; FAO. 2021. *2021-23 Action Plan for the Implementation of the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors*. Rome. https://doi.org/10.4060/cb5515en

supporting resilient and sustainable agrifood systems. He highlighted that the International Treaty stands as a testament to the power of international cooperation and multilateralism. He encouraged all to engage in open and constructive dialogue and identify new avenues of collaboration, and thus build a more sustainable, resilient and inclusive future, where the conservation and sustainable use of genetic resources are at the heart of efforts to achieve the goals of the KM GBF.

7. The Chair reported on the intersessional activities of the Bureau and provided a summary of the outcomes of the Special Event on Connecting the Dots: Biodiversity, Food and Agriculture – Towards biodiversity-friendly agri-food systems,[5] held on 15 July 2023. The event marked the Commission's 40th anniversary and provided an opportunity for delegates and stakeholders to explore synergies and linkages between FAO's work on biodiversity mainstreaming, the Commission's policies on the conservation and sustainable use of GRFA and BFA, and the KM GBF. It underlined that there is no food without biodiversity and that achieving results in the future requires action now.

8. The Commission adopted the Agenda as given in *Appendix A*.

II. REVIEW OF WORK ON BIODIVERSITY, NUTRITION AND HUMAN HEALTH

9. The Commission considered the document *Review of work on biodiversity, nutrition and human health*[6] and took note of the document *FAO activities on biodiversity for food and agriculture for food security, nutrition and human health*.[7] It invited Members to raise awareness of, adopt and implement, the Voluntary Guidelines for Mainstreaming Biodiversity into Policies, Programmes and National and Regional Plans of Action on Nutrition,[8] including through capacity development.

10. It further invited Members to integrate GRFA into their food security and nutrition policies, including public research and extension programmes, public procurement and education policies, and market and value chain development, with the aim of arriving at policies that support healthy diets through sustainable food systems, food security, adequate nutrition, resilience to climate change and the conservation and sustainable use of GRFA.

11. The Commission invited Members and relevant stakeholders to undertake research and raise awareness on the nutrient composition of foods derived from different varieties of plants and breeds of animals as well as foods from wild, neglected and underutilized species among others, including for biofortification and taking into consideration knowledge from Indigenous Peoples.

12. Moreover, it invited Members and relevant stakeholders from multiple sectors and with multiple forms of expertise to consider sustainable use of BFA and GRFA across the various work areas of the One Health approach.

13. The Commission recommended that the FAO Council request FAO to continue collaborating with its partners to raise awareness and increase knowledge of Members on nutrition and healthy diets from sustainable food systems and their related metrics and indicators, and on the interconnection among plant, animal and human health, and raising awareness of the importance of genetic diversity and BFA.

14. It further recommended that the FAO Council request FAO to strengthen its support to Members in their efforts to promote food security, healthy diets from sustainable food systems, improved nutrition and the One Health approach through the conservation and sustainable use of BFA and GRFA.

[5] https://www.fao.org/cgrfa/meetings/special_event_2023/en
[6] CGRFA-19/23/2.
[7] CGRFA-19/23/2/Inf.1.
[8] FAO. 2016. *Voluntary Guidelines for Mainstreaming Biodiversity into Policies, Programmes and National and Regional Plans of Action on Nutrition.* Rome. https://www.fao.org/documents/card/en/c/68b200ba-928a-4db9-a6ac-6b8fdc3c464b/

III. THE ROLE OF GENETIC RESOURCES FOR FOOD AND AGRICULTURE IN MITIGATION OF AND ADAPTATION TO CLIMATE CHANGE

15. The Commission considered the document *Climate change and genetic resources for food and agriculture*[9] and took note of the document *FAO's work on climate change*.[10]

16. The Commission reviewed and simplified the voluntary draft questionnaires on GRFA and climate change[11] into one, as provided in *Appendix B* to this report, and requested the Secretariat to finalize it by September 2023 and subsequently circulate it to all National Focal Points to the Commission[12] to coordinate national consultations and subsequent submissions, with a view to establishing a baseline of national responses for all sectors. It further requested the Secretariat to prepare a summary of responses to the questionnaire for consideration by the Intergovernmental Technical Working Groups (Working Groups) and the Commission at their next sessions.

17. The Commission requested the Secretariat to convene, after the completion of the questionnaire, a global multistakeholder workshop on climate change and GRFA, subject to the availability of the necessary funds. The workshop should aim to exchange information and experiences, including on prebreeding and breeding programmes directed towards adaptation, resilience and mitigation traits, share views and priorities, taking into account the responses to the questionnaire, and discuss possible changes to the Voluntary Guidelines to Support the Integration of Genetic Diversity into National Climate Change Adaptation Planning[13] for consideration by the Commission at its Twenty-first Regular Session.

18. The Commission further stressed the importance of continuing to increase capacity-building and training programmes on climate change adaptation and mitigation, in collaboration with existing intergovernmental and international bodies, with regard to all GRFA and within the broad framework of relevant global policies and strategies, including the FAO Strategy on Climate Change 2022–2031.[14]

19. The Commission invited Members to make use of the FAO tools and guidance on climate change adaptation and mitigation when developing or updating their National Adaptation Plans (NAPs) and Nationally Determined Contributions (NDCs), as appropriate.

IV. ACCESS AND BENEFIT-SHARING FOR GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Report of the Sixth Session of the Team of Technical and Legal Experts on Access and Benefit-Sharing

20. The Commission considered the *Report of the Sixth Session of the Team of Technical and Legal Experts on Access and Benefit-sharing*.[15] Ms Marliese von den Driesch (Germany), Co-Chair of the Team of Technical and Legal Experts on Access and Benefit-sharing (ABS Expert Team), introduced the report. The Commission thanked the Members of the ABS Expert Team for their excellent work and endorsed the report.

---

[9] CGRFA-19/23/3.
[10] CGRFA-19/23/3/Inf.1.
[11] CGRFA-19/23/3, *Appendices I & II*.
[12] https://www.fao.org/3/ca9524en/ca9524en.pdf
[13] FAO. 2015. *Voluntary Guidelines to Support the Integration of Genetic Diversity into National Climate Change Adaptation Planning*. Rome. http://www.fao.org/documents/card/en/c/290cd085-98f3-43df-99a9-250cec270867
[14] FAO. 2022. *FAO Strategy on Climate Change 2022–2031*. Rome. https://www.fao.org/3/cc2274en/cc2274en.pdf
[15] CGRFA-19/23/4.1.

Access and benefit-sharing country measures

21. The Commission considered the document *Access and benefit-sharing for genetic resources for food and agriculture*[16] and took note of the information documents *Access and benefit-sharing and genetic* resources *for food and agriculture: Typology of country measures*[17] and *Draft online questionnaire on the implications of access and benefit-sharing measures for the use and exchange of genetic resources for food and agriculture and benefit-sharing*.[18]

22. The Commission took note of developments under other international agreements and instruments relevant to access and benefit-sharing (ABS) and emphasized the need to avoid duplication of the work of other agreements and instruments. It welcomed Goal C and Target 13 of the KM GBF and stressed their importance for the global exchange of GRFA. The Commission requested the Secretariat to continue monitoring developments regarding ABS in other fora, including the World Intellectual Property Organization (WIPO) and the International Union for the Protection of New Varieties of Plants (UPOV), with a view to considering their potential implications, including potential opportunities and challenges for the Commission and its Members.

23. The Commission took note of the typology of ABS country measures[19] and requested the Secretariat to finalize the document and make it available on the Commission's website, keeping in mind that this is a living document, which should be periodically updated, as needed. It further requested the Secretariat to document examples of entire ABS country measures that accommodate the distinctive features of GRFA, which could be presented as a stand-alone product or appended to the typology of country measures.

24. The Commission requested the Secretariat to further simplify and finalize the draft questionnaire[20] and to prepare, based on the responses received and other available sources of information, a report on the implications of the implementation of ABS country measures for the use and exchange of GRFA, associated traditional knowledge and the fair and equitable sharing of benefits, for review by the ABS Expert Team by electronic means.

25. Furthermore, it requested the Secretariat to contribute to the process of developing indicators for the KM GBF to monitor monetary and non-monetary benefit-sharing, aiming to ensure that the distinctive features of GRFA are taken into account.

26. The Commission requested the Secretariat to continue to raise awareness of, and enhance capacity to deal with, matters related to ABS to support the development and implementation of ABS arrangements that accommodate the distinctive features of GRFA.

V. DIGITAL SEQUENCE INFORMATION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

27. The Commission considered the document *Digital sequence information and genetic resources for food and agriculture*[21] and took note of the document *Draft study on the role of digital sequence information in* the *conservation and sustainable use of genetic resources for food and agriculture: Opportunities and challenges.*[22] It requested the Secretariat to finalize the study and bring it, through the respective Secretariats, to the attention of the CBD Ad Hoc Open-ended Working Group on Benefit-sharing from the Use of Digital Sequence Information on Genetic Resources and the Ad Hoc Working Group to Enhance the Functioning of the Multilateral System, re-established under the International Treaty.

[16] CGRFA-19/23/4.2.
[17] CGRFA-19/23/4.2/Inf.1.
[18] CGRFA-19/23/4.2/Inf.2.
[19] CGRFA-19/23/4.2/Inf.1.
[20] CGRFA-19/23/4.2/Inf.2.
[21] CGRFA-19/23/5.
[22] CGRFA-19/23/5/Inf.1.

28. The Commission noted that there is still no internationally agreed definition of digital sequence information (DSI) nor agreement on the term to be used. It took note of recent developments on DSI in other fora and welcomed Decision 15/9 of the Conference of the Parties to the CBD to establish, as part of the KM GBF, a multilateral mechanism for benefit-sharing from the use of DSI on genetic resources, including a global fund.

29. It recommended that the FAO Council request FAO to assist countries in building the necessary capacities to make use of DSI in research and development related to GRFA. Furthermore, it welcomed initiatives that support engagement at the international level on the work of DSI.

30. The Commission requested the Secretariat, building on previous work and avoiding duplication, to invite Members to submit information on domestic ABS measures applying to DSI and their actual or potential implications for the conservation and sustainable use of GRFA, including their exchange, access to them and the fair and equitable sharing of the benefits arising from their use, and to compile this information for the Commission.

31. It encouraged Members to coordinate future work on DSI, including ABS for DSI, among relevant sectors, with a view to ensuring consistency and mutual supportiveness of the ongoing processes in different fora.

32. The Commission further requested the Secretariat to continue monitoring developments regarding DSI in other fora, and participate where relevant, with a view to considering their implications, including potential opportunities and challenges for the Commission and its Members. It further requested the Secretariat to closely engage with the unfolding processes under the CBD, as well as in other bodies, to ensure that the distinctive features of GRFA requiring distinctive solutions for ABS are appropriately reflected in the development of relevant rules and mechanisms for the sharing of benefits from the use of DSI on genetic resources.

33. The Commission requested the Secretariat to continue to hold, subject to the availability of resources, in collaboration with the Secretariats of the CBD, the International Treaty and other relevant international organizations, virtual and/or in-person open-ended workshops on DSI, as appropriate, with a view to sharing information about gaps in knowledge and technical capacity-building needs and activities related to DSI on GRFA.

VI. FRAMEWORK FOR ACTION ON BIODIVERSITY FOR FOOD AND AGRICULTURE

34. The Commission considered the documents *Biodiversity for food and agriculture and the Kunming-Montreal Global Biodiversity Framework*[23] and *Progress report on the implementation of the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors and its 2021–23 Action Plan.*[24]

35. The Commission welcomed the adoption of the KM GBF and endorsed the draft Resolution contained in *Appendix C* to this report. It invited the Director-General to bring the draft Resolution to the attention of the Council with a view to its adoption.

36. The Commission further noted with satisfaction the high degree of mutual supportiveness of the KM GBF and the Commission's FA BFA[25] and Global Plans of Action (GPAs) and recommended considering, at this stage, no amendments to the FA BFA, while continuing to encourage Members and the Commission to continue to review the FA BFA. However, it invited Members to implement the FA BFA and the GPAs in harmony with the KM GBF, including by integrating the implementation of the FA BFA and the GPAs into national policies and actions plans on the conservation and sustainable use of biodiversity, including National Biodiversity Strategies and Action

[23] CGRFA-19/23/6.1.
[24] CGRFA-19/23/6.2.
[25] FAO. 2022. *Framework for Action on Biodiversity for Food and Agriculture*. FAO Commission on Genetic Resources for Food and Agriculture. Rome. https://doi.org/10.4060/cb8338en

Plans (NBSAPs), as appropriate, and requested the Secretariat to support countries in this regard, including by assisting in mobilizing the necessary resources.

37. The Commission recommended that the FAO Council request FAO to contribute to the development of tools and guidelines, as appropriate, facilitating the implementation of the FA BFA, the GPAs and the KM GBF in a mutually supportive, coherent, consistent and non-duplicative way, for consideration by relevant subsidiary bodies of the Commission and by the Commission itself. It further encouraged Members to make use of financial and other support available for the implementation of activities supporting the implementation of the two frameworks and the GPAs.

38. The Commission took note of the regional workshops the Commission Secretariat will hold in the near future to support the implementation of the FA BFA and called upon its Members to reconfirm or update information concerning their National Focal Points for BFA as soon as possible.

39. In addition, the Commission recommended that monitoring of the implementation of the FA BFA build on existing indicators, including those developed under the aegis of the Commission and those currently being developed for the KM GBF.

40. The Commission welcomed the progress made in the implementation of the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors (FAO Strategy)[26] and the 2021–23 Action Plan for the Implementation of the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors,[27] and stressed the important role of the FAO Strategy as a coordination mechanism for activities through which FAO supports countries in integrating biodiversity, including the conservation and sustainable use of GRFA and other components of biodiversity of relevance to food and agriculture, into relevant programmes, policies and legislation.

41. In addition, the Commission supported the inclusion of FAO activities that support countries in the implementation of the GPAs and the FA BFA in the 2024–27 Action Plan for the Implementation of the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors. It provided comments on and inputs to the draft 2024–27 Action Plan, noting the global multistakeholder workshop on climate change and GRFA as a good example of mainstreaming and requesting a reference to supporting activities related to Target 10[28] of the KM GBF, and a core action area on the provision of support to Members with the mobilization of resources for biodiversity conservation and sustainable use. It also noted the relevance of Programme Priority Areas (PPAs) under Better Environment 1 (Climate change mitigating and adapted agrifood systems) and Better Environment 2 (Bioeconomy for sustainable food and agriculture) as well as Better Environment 3 (Biodiversity and ecosystem services for food and agriculture) for the implementation of the FAO Strategy.

42. The Commission recommended that the FAO Council request FAO to take into account Commission decisions when developing budget allocations, particularly regarding additional resources supporting countries in their efforts to implement the GPAs and the FA BFA and call upon donors to make funds available.

VII. PLANT GENETIC RESOURCES

Report of the Eleventh Session of the Intergovernmental Technical Working Group on Plant Genetic Resources for Food and Agriculture

43. The Commission considered the *Report of the Eleventh Session of the Intergovernmental Technical Working Group on Plant Genetic Resources for Food and Agriculture*.[29] Ms Imke

[26] FAO. 2020. *FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors*. Rome. https://doi.org/10.4060/ca7722en
[27] FAO. 2021. *2021-23 Action Plan for the Implementation of the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors*. Rome. https://doi.org/10.4060/cb5515en
[28] Target 10. Areas under agriculture, aquaculture, fisheries and forestry are managed sustainably.
[29] CGRFA-19/23/7.1.

Thormann (Germany), Chairperson of the Working Group, introduced the report. The Commission thanked the Members of the Working Group for their excellent work and endorsed the report.

The Third Report on the State of the World's Plant Genetic Resources for Food and Agriculture

44. The Commission considered the document *Preparation of* The Third Report on the State of the World's Plant Genetic Resources for Food and Agriculture[30] and took note of the document *Draft Third Report on the State of the World's Plant Genetic Resources for Food and Agriculture.*[31]

45. With regard to *The Third Report on the State of the World's Plant Genetic Resources for Food and Agriculture* (Third Report), the Commission recommended that information on gaps in data from national reports on the implementation of the Second Global Plan of Action for Plant Genetic Resources for Food and Agriculture (Second GPA) be included in the report. It recommended that for the different topics discussed therein, the number of reporting countries be made explicit and general statements about changes be substantiated with quantitative data and references. It further recommended that a section on key findings be included in each chapter.

46. The Commission noted that Members and observers may provide inputs to and comments on the draft Third Report in writing by 30 November 2023. The draft Third Report should also be made available to the Tenth Session of the Governing Body of the International Treaty for its comments and inputs. In addition, the draft thematic background studies, once completed, should be made available for review by Members and observers. A revised draft Third Report, reflecting the findings of the thematic background studies and taking into account comments and inputs received from Members, observers and the Governing Body of the International Treaty, would be made available to Members during the first half of 2024 for further comments within a timeframe of 30 days.

47. The Commission recommended that the finalized Third Report, taking into account all comments received, be made available in due time for the Twelfth Session of the Intergovernmental Technical Working Group on Plant Genetic Resources for Food and Agriculture. It also recommended that an in-brief version be prepared and published in all the official languages of FAO. It recommended that the FAO Council request FAO to present the Third Report at relevant international meetings and actively disseminate its findings to inform global processes on the conservation and sustainable use of plant genetic resources for food and agriculture (PGRFA), climate change, forests and ecosystem restoration.

Implementation and review of the Second Global Plan of Action for Plant Genetic Resources for Food and Agriculture

48. The Commission considered the document *Implementation and review of the Second Global Plan of Action for Plant Genetic Resources for Food and Agriculture.*[32]

Conservation and on-farm management of plant genetic resources for food and agriculture

49. The Commission welcomed the publication of the proceedings of the First Multistakeholder Symposium on Plant Genetic Resources, held in March 2021,[33] and the organization of webinars on *in situ* and on-farm conservation. It recommended that the FAO Council request FAO, subject to the availability of the necessary funds, to continue to support countries in *in situ* conservation and on-farm management of PGRFA, including through support for community seedbanks, and to strengthen links and complementarity with *ex situ* conservation, including through the development of national action plans, considering the Commission's Voluntary Guidelines for the Conservation and Sustainable Use

[30] CGRFA-19/23/7.2.
[31] CGRFA-19/23/7.2/Inf.1.
[32] CGRFA-19/23/7.3.
[33] FAO. 2022. *Proceedings of the First International Multi-stakeholder Symposium on Plant Genetic Resources for Food and Agriculture: Technical consultation on* in situ *conservation and on-farm management of plant genetic resources for food and agriculture – 29–30 March 2021, Rome, Italy*. Rome. https://doi.org/10.4060/cc3716en

of Crop Wild Relatives and Wild Food Plants[34] and Voluntary Guidelines for the Conservation and Sustainable Use of Farmers' Varieties/Landraces,[35] and through *ex situ* backup of endangered PGRFA, as appropriate.

50. The Commission recommended that the FAO Council request FAO to compile examples and experiences of the use of both Voluntary Guidelines, with the aim of improving them and increasing their relevance, as appropriate. It further recommended that the FAO Council request FAO to address activities related to *in situ* conservation of wild PGRFA and those related to on-farm management of landraces and farmers' varieties in separate sections in future reports to the Commission.

51. The Commission welcomed the finalization and publication of the three practical guides[36] for the application of the Genebank Standards for Plant Genetic Resources for Food and Agriculture presented as drafts to the last session of the Commission, and recommended that the FAO Council request FAO to publish them in all the official languages of FAO, subject to funding availability, and disseminate them widely. It further recommended that the FAO Council request FAO to explore and report about possibilities to encourage and support countries in their efforts to follow the guidance provided by the voluntary Genebank Standards and the practical guides for the implementation of these standards.

52. Furthermore, it recommended that the FAO Council request FAO to convene a virtual expert consultation on the two new draft practical guides for conservation in genebanks of species producing recalcitrant seeds and for conservation through cryopreservation, and develop them further based on the feedback received, for review by the Working Group at its next session.

53. The Commission stressed the importance of safety duplications of *ex situ* collections and invited countries to safety duplicate their accessions, including at the Svalbard Global Seed Vault.

Sustainable use

54. The Commission recommended that the FAO Council request FAO to continue assisting countries in strengthening national seed systems to facilitate the delivery of quality seeds and planting materials, in particular to smallholder farmers, adapted to their local conditions, preferences and needs. It further recommended that the FAO Council request FAO to continue supporting countries, at their request, in the development, revision and implementation of national seed policies and legislation, considering the Commission's Voluntary Guide for National Seed Policy Formulation,[37] and call upon donors to support countries in this regard.

55. The Commission, in addition, recommended that the FAO Council request FAO to continue supporting countries, in close coordination with the International Treaty, in strengthening their crop breeding systems, including for underutilized crops, as well as their crop improvement capacity, including through the CGIAR Centres and other relevant partners. The Commission further recommended that the FAO Council request FAO to continue taking into account participatory approaches in supporting breeding efforts of locally adapted varieties to ensure sufficient availability of quality seeds for smallholder farmers.

---

[34] FAO. 2017. *Voluntary Guidelines for the Conservation and Sustainable Use of Crop Wild Relatives and Wild Food Plants.* Rome. https://www.fao.org/documents/card/en/c/8f366de9-08a8-42ad-aae1-4f8f6822420e/

[35] FAO. 2019. *Voluntary Guidelines for the Conservation and Sustainable Use of Farmers' Varieties/Landraces*. Rome. https://doi.org/10.4060/CA5601EN

[36] FAO. 2022. *Practical guide for the application of the Genebank Standards for Plant Genetic Resources for Food and Agriculture: Conservation of orthodox seeds in seed genebanks*. Commission on Genetic Resources for Food and Agriculture. Rome. https://doi.org/10.4060/cc0021en; FAO. 2022. *Practical guide for the application of the Genebank Standards for Plant Genetic Resources for Food and Agriculture: Conservation in field genebanks*. Commission on Genetic Resources for Food and Agriculture. Rome. https://doi.org/10.4060/cc0023en; FAO. 2022. *Practical guide for the application of the Genebank Standards for Plant Genetic Resources for Food and Agriculture: Conservation via* in vitro *culture*. Commission on Genetic Resources for Food and Agriculture. Rome. https://doi.org/10.4060/cc0025en

[37] FAO. 2015. *Voluntary Guide for National Seed Policy Formulation*. Rome. https://www.fao.org/3/i4916e/i4916e.pdf

Sustainable institutions and human capacities

56. The Commission recommended that the FAO Council request FAO to continue to strengthen human and institutional capacities for PGRFA research and development, and call upon donors to make funds available to support countries in the implementation of the Second GPA, including through the development and implementation of national strategies for PGRFA, in close coordination with the International Treaty and its Funding Strategy.

57. The Commission recommended that the FAO Council request FAO, subject to the availability of the necessary funds, to continue to report annually on the status of implementation of Sustainable Development Goal (SDG) Target 2.5, further develop the World Information and Early Warning System on Plant Genetic Resources (WIEWS), including through improved graphical features and reports, and strengthen cooperation with the International Treaty's Global Information System for PGRFA (GLIS)[38] and with Genesys,[39] with a view to avoiding duplication of efforts. It recommended that the FAO Council request FAO to revise and simplify the WIEWS Reporting Tool and indicators on which countries shall report, once the Second GPA has been reviewed, for the consideration of the Working Group and the Commission.

Review of the Second Global Plan of Action for Plant Genetic Resources for Food and Agriculture

58. The Commission recommended that the FAO Council request FAO to review and revise, as appropriate, the Second GPA, based on the findings of the Third Report and taking into account the gaps, needs and priorities identified through regional consultations, and invite the Governing Body of the International Treaty to participate in the updating process. The Commission recommended that sufficient time for discussion be allocated to PGRFA-related issues and, in particular, to the revision of the Second GPA at the next session of the Working Group.

59. Moreover, the Commission took note of the budget, as given in Table 2 of the document *Implementation and review of the Second Global Plan of Action for Plant Genetic Resources for Food and Agriculture*[40] and recommended that the FAO Council request FAO to invite governments and international organizations to make available the financial resources necessary for updating the Second GPA, including for the regional consultations.

Effects of seed policies, laws and regulations

60. The Commission considered the document *Further research on the impact of seed policies, laws and regulations*.[41] It reviewed and revised the draft concept note for further research, as given in *Appendix D* to this report, and recommended that the FAO Council request FAO, in collaboration with the International Treaty, to carry out further work on the effects of seed policies, laws and regulations, based on the concept note, as revised by the Commission, subject to the availability of resources.

61. The Commission highlighted that, with regard to further research on the impact of seed policies, laws and regulations, FAO and the International Treaty explore the possibility of having the scoping study conducted by appropriate external partners, who would involve stakeholders from different seed systems. The Commission recommended that the FAO Council request FAO to report, at the next session of the Commission, on how it followed up on a number of requests the Commission made at its last session, including on taking a bottom-up, demand-driven approach to seed security and promoting farmers participation in seed-related FAO activities.[42]

[38] https://glis.fao.org/glis/
[39] https://www.genesys-pgr.org/
[40] CGRFA-19/23/7.3.
[41] CGRFA-19/23/7.4.
[42] CGRFA-18/21/Report, paragraph 105.

VIII. FOREST GENETIC RESOURCES

Report of the Seventh Session of the Intergovernmental Technical Working Group on Forest Genetic Resources

62. The Commission considered the *Report of the Seventh Session of the Intergovernmental Technical Working Group on Forest Genetic Resources*.[43] Ms Mari Rusanen (Finland), Chairperson of the Working Group, introduced the report. The Commission thanked the Members of the Working Group for their excellent work and endorsed the report.

The Second Report on the State of the World's Forest Genetic Resources

63. The Commission considered the document *Preparation of* The Second Report on the State of the World's Forest Genetic Resources[44] and took note of the document *Draft Second Report on the State of the World's Forest Genetic Resources*.[45]

64. The Commission recommended that the FAO Council request FAO to prepare, by 1 October 2023, a revised draft of *The Second Report on the State of the World's Forest Genetic Resources* (Second Report), including a more profound analysis of the data provided by countries. It further recommended that the FAO Council request FAO to invite Members and observers to provide comments on the revised draft Second Report by 30 November 2023. The Commission recommended that the FAO Council request FAO to then finalize the Second Report, taking into account all comments received, and publish it by 30 June 2024, with an in-brief version in all the official languages of FAO.

65. Furthermore, the Commission recommended that the FAO Council request FAO to present the Second Report at relevant international meetings and actively disseminate its findings to inform global processes on biodiversity, climate change, forests and ecosystem restoration.

66. The Commission, in addition, invited Members to make full use of the findings of the Second Report in the development and implementation of relevant policies and actions, as appropriate, and keep their nominations for the National Focal Points and possible alternates up to date.

Implementation and review of the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources

67. The Commission considered the document *Implementation and review of the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources*[46] and took note of the document *Second Report on the Implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources* (Second Implementation Report).[47]

68. The Commission took note of 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 for the Conservation, Sustainable Use and Development of Forest Genetic Resources and recommended that the FAO Council request FAO to continue to support countries in this regard. It welcomed the development by FAO of the new global information system on forest genetic resources in line with the FAO Data Protection Policy.

69. Furthermore, the Commission invited countries to continue implementing the Global Plan of Action, taking into account the findings of the Second Implementation Report, as appropriate. It also invited countries to continue monitoring the status of forest genetic resources and the implementation of the Global Plan of Action.

---

[43] CGRFA-19/23/8.1.
[44] CGRFA-19/23/8.2.
[45] CGRFA-19/23/8.2/Inf.1.
[46] CGRFA-19/23/8.3.
[47] CGRFA-19/23/8.3/Inf.1.

70. The Commission requested the Secretariat, immediately after the publication of the Second Report, to consult Commission Members, National Focal Points and regional networks on forest genetic resources to collect views on the need to revise the Global Plan of Action and analyse their inputs. It recommended that the FAO Council request FAO to prepare, based on the outcome of the written consultation, a draft revised Global Plan of Action, or other document, as appropriate, for consideration by the Working Group at its Eighth Session and the Commission at its Twentieth Regular Session. Furthermore, it encouraged FAO to consider possibilities for revising the reporting requirements for the Third Report on the Implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources and *The Third Report on the State of the World's Forest Genetic Resources* in order to increase the number of countries reporting in the future. In addition, it encouraged donors to support the implementation of the Global Plan of Action and its Funding Strategy.

IX. MICROORGANISM AND INVERTEBRATE GENETIC RESOURCES

Bioremediation and nutrient cycling soil microorganisms and invertebrates

71. The Commission considered the document *Bioremediation and nutrient cycling soil microorganisms and invertebrates*[48] and took note of the document *Draft study on the sustainable use and conservation of soil microorganisms and invertebrates that contribute to bioremediation of agricultural pollutants and soil nutrient cycling*.[49]

72. The Commission welcomed the draft study and expressed its appreciation for the work of the expert authors who contributed to its preparation. It recommended that the study be finalized, published as a background study paper and brought to the attention of the Global Soil Partnership and the CBD.

73. The Commission recommended that the FAO Council request FAO to take the findings of the study into consideration in its work in fields relevant to management of soil microorganisms and invertebrates, as appropriate. It invited Members to promote the conservation and sustainable use of soil microorganisms and invertebrates and ensure they are given due consideration in local, national, regional and international policies and policy-development processes. It noted, in this regard, the need to give due regard to the roles of Indigenous Peoples and local communities.

74. The Commission invited Members to communicate research findings on the benefits of soil biodiversity and sustainable agricultural practices to relevant stakeholders, farmers in particular, and to raise awareness of how soil biodiversity contributes to climate change mitigation, adaptation and resilience.

75. It encouraged relevant stakeholders, including scientific institutions, to collaborate on the conservation and sustainable use of soil microorganisms and invertebrates, especially on capacity development in developing countries and countries with economies in transition, including capacity development on the characterization of soil microbial and invertebrate biodiversity and on the establishment of culture collections.

76. The Commission also invited Members and other stakeholders to intensify research on soil microorganisms and invertebrates, in particular on relationships between the properties of healthy soils and their microbial communities, and on the effects that agricultural practices have on soils, including their roles in climate change mitigation, adaptation and resilience, and to strengthen soil biodiversity assessment and monitoring programmes and conservation and cultivation methods for *ex situ* studies of soil microorganisms. It also noted the need for research on links between soil biodiversity and food security and on antimicrobial resistance in soil ecosystems.

[48] CGRFA-19/23/9.1.
[49] CGRFA-19/23/9.1/Inf.1.

77. Furthermore, the Commission requested the Secretariat to collaborate with relevant experts, and with relevant treaties and conventions, in the drafting of specific recommendations on soil microorganisms and invertebrates for consideration by the Commission at its next Session.

Microorganisms relevant to ruminant digestion

78. The Commission considered the document *Microorganisms relevant to ruminant digestion*[50] and took note of the document *Draft study on the sustainable use and conservation of microorganisms of relevance to ruminant digestion*.[51]

79. The Commission welcomed the draft study and expressed its appreciation for the work of the expert authors who contributed to its preparation. It invited the authors of the draft study to address the comments provided in response to the invitation of the Intergovernmental Technical Working Group on Animal Genetic Resources for Food and Agriculture.[52] It recommended that the study be finalized, emphasizing the research gaps that need to be filled in order to have more accurate information, and then published and disseminated as a background study paper. It noted that research on many of the topics covered in the draft study is ongoing and that various points of contention remain to be resolved in this regard.

80. It recommended that the FAO Council request FAO to take the findings of the study into consideration in its work relevant to the conservation and sustainable use of microorganisms of relevance to ruminant digestion, as appropriate.

81. The Commission invited Members to promote the conservation and sustainable use of microorganisms of relevance to ruminant digestion and ensure they are given due consideration in local, national and regional policies and policy-development processes. It recommended that the FAO Council request FAO to monitor policy-related developments in this field and report on them to the Commission. It further invited Members to manage and conserve the genetic diversity contained in local breeds, feeds and rumen microbes in an integrated manner at the national level.

82. The Commission encouraged relevant stakeholders, including scientific institutions, to collaborate on the conservation and sustainable use of microorganisms of relevance to ruminant digestion, especially on capacity development in developing countries and countries with economies in transition.

83. The Commission invited Members and stakeholders to intensify research on rumen microbiome management, in particular in relation to ruminant classification, breeding and husbandry, production efficiency, disease resistance and resilience to changing environmental conditions as well as on the potential effects of relevant microorganisms on animal and human health, but also on feed innovations for climate mitigation. It also noted the need for further study of the local diversity of rumen microorganisms.

84. It requested the Intergovernmental Technical Working Group on Microorganism and Invertebrate Genetic Resources for Food and Agriculture, at its first session, to draft specific recommendations on microorganisms of relevance to ruminant digestion for consideration by the Commission.

Pollinators and biological control agents and biostimulants: follow-up

Pollinators

85. The Commission considered the document *The need for and possible modalities of a global pollinator platform*[53] and took note of the document *Progress report on the implementation of the*

[50] CGRFA-19/23/9.2.
[51] CGRFA-19/23/9.2/Inf.1.
[52] CGRFA-19/23/9.2/Inf.2.
[53] CGRFA-19/23/9.3.1.

International Initiative for the Conservation and Sustainable Use of Pollinators[54] and Background Study Paper No. 72, *Sustainable use and conservation of invertebrate pollinators*.[55]

86. The Commission considered, in the light of the information provided, the needs and priorities to which a global pollinator platform could respond, and recommended that the FAO Council request FAO to explore the possible modalities of a global pollinator platform that could respond to the priorities and needs identified.

87. In addition, it recommended that the FAO Council request FAO to continue to develop tools and technical and guidance documents, including standardized monitoring protocols for pollinators, and environmental risk assessments for biological control agents, as appropriate.

88. The Commission invited countries to implement the International Initiative for the Conservation and Sustainable Use of Pollinators, establish or strengthen national monitoring programmes for invertebrate pollinators, promote research on drivers of change in pollinator demography and the impacts of managed bees on wild plants and wild invertebrate pollinators, and insert data on managed honey bees into the Domestic Animal Diversity Information System (DAD-IS).

Biological control agents

89. The Commission considered the document *Conservation and sustainable use of microbial and invertebrate biological control agents and microbial biostimulants*[56] and took note of the document *Progress report on the implementation of the International Initiative for the Conservation and Sustainable Use of Soil Biodiversity*[57] and Background Study Paper No. 71, *Sustainable use and conservation of microbial and invertebrate biological control agents and microbial biostimulants*.[58]

90. The Commission noted that biostimulant microorganisms are not covered in depth in the background study paper and that the definition of the term "biostimulant" remains controversial among the scientific community.

91. The Commission recommended that the FAO Council request FAO to hold, subject to the availability of the necessary funds, an open-ended workshop with the aim of: (i) raising awareness of the potential of biological control agents (BCAs) and biostimulants; (ii) reviewing the global regulatory situation regarding the import and export of BCAs and biostimulants, and ABS arrangements for relevant genetic resources; (iii) identifying possible regulatory gaps and unnecessary restrictions affecting the use of BCAs and biostimulants; and (iv) addressing environmental risk assessment for BCAs.

92. The Commission invited countries to promote the sustainable management of BCAs and biostimulants and to take action to promote cooperation and networking among stakeholders in the fields of biological control and the use of biostimulants, for example by supporting the establishment of networking platforms at regional or global levels.

93. Moreover, the Commission recommended that the FAO Council request FAO to explore, in collaboration with relevant partners, the need for the development of information systems related to

[54] CGRFA-19/23/9.3.1/Inf.1.

[55] Aizen, M.A., Basu, P. , Bienefeld, K., Biesmeijer, J.C., Garibaldi, L.A., Gemmill-Herren, B, Imperatriz-Fonseca, V.L., Klein, A-L., Potts, S.G., Seymour C.L. & Vanbergen, A.J. 2023. *Sustainable use and conservation of invertebrate pollinators*. Background Study Paper, No. 72. Commission on Genetic Resources for Food and Agriculture. Rome, FAO. https://doi.org/10.4060/cc6499en

[56] CGRFA-19/23/9.3.2.

[57] CGRFA-19/23/9.1/Inf.2.

[58] Buitenhuis, R., Cock, M.J.W., Colmenarez, Y.C., De Clercq, P., Edgington, S., Gadaleta, P., Gwynn, R., Heimpel, G., Hill, M., Hinz, H.L., Hoddle, M.S., Jäkel, T., Klapwijk, J.N., Leung, K., Mc Kay, F., Messelink, G.J., Silvestri, L., Smith, D., Sosa, A., Wäckers, F.L., Cabrera Walsh, G., Wyckhuys, K.A.G. & Zaviezo, T. 2023. *Sustainable use and conservation of microbial and invertebrate biological control agents and microbial biostimulants*. Background Study Paper No. 71. Commission on Genetic Resources for Food and Agriculture. Rome, FAO. https://doi.org/10.4060/cc3571en

the conservation and sustainable use of microbial and invertebrate BCAs and microbial biostimulants, for example inventories of organisms, impact metrics or relevant policies, and report on this to the Commission and other relevant bodies of FAO. It further recommended that the FAO Council request FAO to promote the development of capacity in the management of microbial and invertebrate BCAs and microbial biostimulants.

X. ANIMAL GENETIC RESOURCES

Report of the Twelfth Session of the Intergovernmental Technical Working Group on Animal Genetic Resources for Food and Agriculture

94. The Commission considered the *Report of the Twelfth Session of the Intergovernmental Technical Working Group on Animal Genetic Resources for Food and Agriculture*.[59] Mr Samuel Rezende Paiva (Brazil), Vice-Chairperson of the Working Group, introduced the report. The Commission thanked the Members of the Working Group for their excellent work and endorsed the report.

Implementation of the Global Plan of Action for Animal Genetic Resources

95. The Commission considered the document *Review of implementation of the Global Plan of Action for Animal Genetic Resources*[60] and took note of relevant information documents.[61]

96. The Commission reviewed the progress made in the implementation of the Global Plan of Action for Animal Genetic Resources and called upon countries to continue implementing the Global Plan of Action with a view to contributing to global food security, sustainable rural development and the achievement of SDGs 2 and 15.

97. The Commission recommended that the FAO Council request FAO to continue to support countries, upon their request, in the implementation of the Global Plan of Action, especially developing countries and countries with economies in transition, and to work closely with regional and subregional groups, as well as with National Coordinators for Animal Genetic Resources for Food and Agriculture. Furthermore, it recommended that the FAO Council request the Secretariat and FAO to increase fund-raising efforts and invite donors to contribute to the implementation of the Global Plan of Action.

98. Furthermore, the Commission invited technical agencies and donors to develop and implement national projects on animal genetic resources for food and agriculture (AnGR), with the wide inclusion of stakeholders and National Coordinators. It recommended that the FAO Council request FAO to support capacity building, including on topics, such as animal identification and recording, genetic improvement, sustainable breeding, *ex situ* conservation, agroecology and other innovative approaches, sustainable beekeeping and the development of livestock value chains for smallholders, and to continue to prepare technical guidelines, including on the quality management of animal genebanks according to international standards.

99. The Commission recommended that the FAO Council request FAO to continue raising awareness, and encourage relevant stakeholders to continue raising awareness, of the importance of AnGR and the roles of livestock keepers and of livestock species and breeds and their production systems in the provision of ecosystem services.

100. With respect to the monitoring of the diversity of AnGR, the Commission stressed the importance of FAO's DAD-IS as the international clearing-house mechanism for AnGR. In addition, it stressed the need for countries to regularly update their national data in DAD-IS, especially data pertaining to breed adaptation classifications and to bees managed for food and agriculture, to ensure

[59] CGRFA-19/23/10.1.
[60] CGRFA-19/23/10.2.
[61] CGRFA-19/23/10.2/Inf.1; CGRFA-19/23/10.2/Inf.2; CGRFA-19/23/10.2/Inf.3; CGRFA-19/23/10.2/Inf.4.

that decisions on the implementation of the Global Plan of Action and the achievement of SDG Targets 2.4 and 2.5 are informed by the most up-to-date data and information available.

101. The Commission recommended that the FAO Council request FAO, subject to the availability of funds, to continue to provide technical support to further maintain and develop DAD-IS and to continue to increase its user-friendliness, including tools that facilitate data entry, export and updating, and storage and visualization of geographic distributions of national breed populations, and to consider the inclusion of additional data fields, including for digital object identifier (DOI) or PubMed ID records, which would increase the visibility and use of DAD-IS.

102. It furthermore recommended that the FAO Council request FAO to explore cost-efficient approaches to addressing data collection for SDG Indicator 2.4.1 and encouraged FAO to explore with the Inter-agency and Expert Group on SDG Indicators the potential for broadening the scope of SDG Indicator 2.5.2 to include transboundary breeds.

103. The Commission also recommended that the FAO Council request FAO to continue developing and/or refining cost-efficient methodologies for estimating the sizes of national breed populations, and providing technical support to countries with the estimation of breed population sizes and other data relevant to monitoring the diversity of livestock breeds and managed bee populations.

104. The Commission recommended that the FAO Council request FAO to perform an analysis of the rate of reporting of breed performance data in DAD-IS for consideration by the Working Group at its next session and that countries and FAO continue working on the interoperability of DAD-IS with existing regional data information systems to avoid duplication of efforts.

105. Moreover, it recommended that the FAO Council request FAO to continue to study, develop and refine genomic, pedigree and/or demographic indicators of within-population genetic diversity, to explore the potential impact on risk classification of combining such indicators with current census population size data and to propose related data fields for DAD-IS, for consideration by the Working Group at its next session.

Preparation of *The Third Report on the State of the World's Animal Genetic Resources for Food and Agriculture*

106. The Commission considered the document *Preparation of* The Third Report on the State of the World's Animal Genetic Resources for Food and Agriculture [62] and took note of the document *Country report questionnaire supporting the preparation of* The Third Report on The State of the World's Animal Genetic Resources for Food and Agriculture.[63]

107. The Commission reviewed and endorsed the proposed outline, process, questionnaire and timeline for the preparation of *The Third Report on The State of the World's Animal Genetic Resources for Food and Agriculture* (Third Report), with the addition to the outline of a subsection specifically devoted to the involvement of women, youth, Indigenous Peoples and local communities, and non-governmental organizations (NGOs) in the management of AnGR. It invited countries to initiate the collection of information and data for the completion of their country report questionnaires. It requested the Secretariat to finalize the questionnaire and circulate it to countries by September 2023, subject to internal FAO clearances, and invited countries to submit their completed questionnaires for the preparation of the Third Report by 30 June 2024.

108. The Commission requested the Secretariat to invite regional networks on AnGR and relevant international organizations to contribute to the preparation of the Third Report. It recommended that the FAO Council request FAO to encourage all Members and relevant international organizations to support and contribute to the implementation of the Global Plan of Action and to provide in a timely manner the relevant information required for the preparation of the Third Report.

109. Furthermore, the Commission recommended that the FAO Council request FAO to encourage all Members and relevant international mechanisms, funds and bodies to give immediate and due

[62] CGRFA-19/23/10.3.
[63] CGRFA-19/23/10.3/Inf.1.

priority and attention to the effective allocation of predictable and agreed resources for the preparation of the Third Report.

XI. AQUATIC GENETIC RESOURCES

Report of the Fourth Session of the Intergovernmental Technical Working Group on Aquatic Genetic Resources for Food and Agriculture

110. The Commission considered the *Report of the Fourth Session of the Intergovernmental Technical Working Group on Aquatic Genetic Resources for Food and Agriculture*.[64] Ms Shauna Baillie (Canada), Chair of the Working Group, introduced the report. The Commission thanked the Members of the Working Group for their excellent work and endorsed the report.

Implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Aquatic Genetic Resources for Food and Agriculture

111. The Commission considered the documents *Implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Aquatic Genetic Resources for Food and Agriculture*[65] and *Monitoring the implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Aquatic Genetic Resources for Food and Agriculture*[66] and took note of the relevant information documents.[67]

112. The Commission welcomed the adoption and publication of the Global Plan of Action for the Conservation, Sustainable Use and Development of Aquatic Genetic Resources for Food and Agriculture[68] and expressed its appreciation for the activities undertaken by FAO in support of its implementation. It recommended that the FAO Council request FAO to continue supporting the implementation of the Global Plan of Action.

113. The Commission welcomed the development of AquaGRIS, FAO's global information system for aquatic genetic resources for food and agriculture (AqGR), and recommended that the FAO Council request FAO to finalize the development of the full version, taking into account the importance of the interoperability of AquaGRIS with other operational information systems related to AqGR in order to avoid duplication of efforts and to facilitate the smooth exchange of information.

114. The Commission noted that many National Focal Points and other stakeholders are not yet familiar with AquaGRIS and are concerned about the possible workload associated with data delivery. It therefore recommended that the FAO Council request FAO to provide specific support to the National Focal Points, including through training workshops, either virtual and/or in-person, to ensure that Members are able to provide reliable data to AquaGRIS.

115. The Commission recommended that the FAO Council request FAO to finalize the AqGR glossary and standardize AqGR-related definitions across FAO term directories and thesauri. It noted that further training and awareness raising will be needed before the new terminology is accepted and used.

---

[64] CGRFA-19/23/11.1.
[65] CGRFA-19/23/11.2.1.
[66] CGRFA-19/23/11.2.2.
[67] CGRFA-19/23/11.2.1/Inf.1 and CGRFA-19/23/11.2.1/Inf.2.
[68] FAO. 2022. *Global Plan of Action for the Conservation, Sustainable Use and Development of Aquatic Genetic Resources for Food and Agriculture*. Commission on Genetic Resources for Food and Agriculture. Rome. https://doi.org/10.4060/cb9905en

116. The Commission welcomed the publication of the three case studies,[69] the development of online training courses and the ongoing development of guidelines on genetic management in stocking programmes and *ex situ in vitro* gene banking of aquatic species, noting that these guidelines should be complementary to and avoid duplication of other FAO documents or databases. It requested the Working Group to review the final drafts of these guidelines.

117. The Commission invited countries to make every effort to implement the Global Plan of Action and recognized that the development of national inventories of AqGR through the use of AquaGRIS is critical to inform the implementation of the Global Plan of Action by countries.

118. Moreover, the Commission invited governments and donors to support the implementation of the Global Plan of Action and recommended that the FAO Council request FAO to continue mobilizing extra-budgetary resources to support this implementation.

119. The Commission also took note of the draft indicators and timeline proposed for monitoring the implementation of the Global Plan of Action. It recommended that the FAO Council request FAO to hold further consultations on these, including of the Committee on Fisheries Advisory Working Group on Aquatic Genetic Resources and Technologies, and of the National Focal Points for AqGR, and proposed testing by National Focal Points to address difficulties, inconsistencies and ambiguities, with a view to providing the revised indicators and timeline to the next sessions of the Working Group and the Commission, for their consideration.

120. The Commission recommended that the FAO Council request FAO to prepare a manual explaining in detail how data should be entered into AquaGRIS and how the questionnaire on process indicators should be completed. It further recommended that the FAO Council request FAO to take the steps necessary to allow reporting on all the resource indicators through AquaGRIS, as appropriate, taking into consideration the nature and sensitivity of the information to countries.

121. In addition, the Commission requested that the questionnaire on process indicators be integrated, to the extent feasible, with data collection for the preparation of *The Second Report on the State of the World's Aquatic Genetic Resources for Food and Agriculture* to avoid double-reporting and noted the desirability of making the AquaGRIS, process indicator and country reporting questionnaires available via a common platform. It further recommended that the FAO Council request FAO to report on its activities in support of the implementation of the Global Plan of Action to every session of the Working Group and the Commission.

122. The Commission also noted the critical importance of long-term support and resourcing of AquaGRIS to the implementation of the Global Plan of Action and recommended that the FAO Council request FAO to endeavour to secure long-term support for AquaGRIS.

XII. STRATEGIC PLAN FOR THE COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE: PROGRESS REPORT AND REVIEW

123. The Commission considered the document *Strategic Plan for the Commission on Genetic Resources for Food and Agriculture: review and update*.[70]

124. The Commission took note of the progress made in the implementation of the Multi-Year Programme of Work (MYPOW) since its Sixteenth Regular Session. It reviewed and revised the

[69] Lal, K.K., Kumar, A., Kumar, S., Charan, R., Mohindra, V., Lucente, D., Singh, R.K. *et al*. 2023. *Genetic management of Indian major carps – Genetics in aquaculture: a case study*. Rome, FAO. https://doi.org/10.4060/cc5193en; FAO. 2022. *Lessons from two decades of tilapia genetic improvement in Africa*. Rome. https://doi.org/10.4060/cc4618en; FAO. 2023. *Proactive approach proved key to survival for the Australian Pacific oyster industry – Genetics aquaculture. A case study*. Rome. https://doi.org/10.4060/cc4389en.

[70] CGRFA-19/23/12.

Strategic Plan for the Commission on Genetic Resources for Food and Agriculture and agreed on the changes indicated in the main body of *Appendix E* to this report and on the revised MYPOW given in *Annex I* to *Appendix E*.

125. The Commission requested the Secretariat to propose options for a procedure for the ad hoc identification of new and emerging issues for inclusion in the MYPOW, for review by the Working Groups and the Commission at their next sessions.

126. Furthermore, it requested the Secretariat to provide, in future progress reports on/reviews of the Strategic Plan, an overview of activities to be carried out in preparation for the forthcoming two sessions.[71] It also invited donors to contribute to the cross-sectoral multidonor trust fund for the MYPOW. The Commission recommended that the FAO Council request FAO to take into account Commission decisions with regard to the MYPOW when developing budget allocations.

XIII. FUTURE ORGANIZATION OF THE COMMISSION'S INTERSESSIONAL WORK

127. The Commission considered the document *The future organization of the Commission's intersessional work.*[72] It thanked the Bureau for conducting an informal open-ended consultation on the future organization of the Commission's intersessional work in November 2022.[73] The Commission encouraged the Secretariat to explore ways of enhancing collaboration and exchanges between the different Working Groups as well as relevant work streams and initiatives within FAO. It further requested the Secretariat to copy the National Focal Points for the Commission when communicating with the sectoral Focal Points.

Intergovernmental Technical Working Group on Microorganism and Invertebrate Genetic Resources for Food and Agriculture

128. In accordance with Section V of its Statutes, the Commission established an Intergovernmental Technical Working Group on Microorganism and Invertebrate Genetic Resources for Food and Agriculture and invited the FAO Council at its 174th Session in December 2023 to endorse the Working Group. It adopted the Statutes for the Working Group, as given in *Appendix F* to this report.

129. The Commission tasked the Working Group to review, at its first session, the Commission's work on microorganism and invertebrate genetic resources for food and agriculture (MIGR), including previously identified regional needs and priorities, and review the programme of work, including *inter alia,* to identify current needs and priorities and gaps in knowledge and policies, taking into account other relevant initiatives and issues and avoiding duplication with the work of the sectoral Working Groups.

Ad Hoc Expert Team on Biodiversity for Food and Agriculture

130. In accordance with Section V of its Statutes, the Commission established an Ad Hoc Expert Team on Biodiversity for Food and Agriculture and invited the FAO Council at its 174th Session in December 2023 to endorse the Ad Hoc Expert Team. The Commission adopted the Statutes for the Ad Hoc Expert Team, as given in *Appendix G* to this report.

131. The Commission should consider at its next session the intersessional work on BFA.

132. The Commission tasked the Ad Hoc Expert Team to: (i) review the FA BFA in light of the KM GBF to identify gaps and possible work on BFA, including the development of policy tools and guidance as needed and appropriate; (ii) advise and make recommendations to the Commission on these matters, avoiding duplication, in particular with the other Working Groups; and (iii) develop recommendations to implement the FA BFA in a mutually supportive way with the KM GBF, including in updating NBSAPs, as appropriate.

---

[71] CGRFA-19/23/12, *Appendix II.*
[72] CGRFA-19/23/13.
[73] CGRFA-19/23/13 *Appendix I.*

133. The Commission took note of the budgetary implications of holding sessions of Working Groups and expert teams[74] and recommended that the FAO Council request FAO, subject to the availability of extra-budgetary resources, to convene the Working Group and the Ad Hoc Expert Team before the Twentieth Regular Session of the Commission.

XIV. COOPERATION WITH INTERNATIONAL INSTRUMENTS AND ORGANIZATIONS

134. The Commission considered the documents *Cooperation with international instruments and organizations*[75] and *Cooperation with the International Treaty on Plant Genetic Resources for Food and Agriculture*.[76] It took note of the document *Submissions by international instruments and organizations*[77] and of the document *Report from the International Treaty on Plant Genetic Resources for Food and Agriculture*.[78]

135. The Commission thanked the international instruments and organizations for providing information on their policies, programmes and activities relevant to the prioritized themes of this session. It requested its Secretary to continue seeking inputs on prioritized themes of its regular sessions from international instruments and organizations and to make them available to the Commission for its information.

136. The Commission welcomed Resolution 11/2022 of the Governing Body of the International Treaty[79] and agreed to keep the functional division of tasks and activities between the Governing Body and the Commission in mind when recommending possible joint activities. In response to the invitation of the Governing Body and the recommendations of the Intergovernmental Technical Working Group on Plant Genetic Resources for Food and Agriculture,[80] the Commission requested the Secretary to continue strengthening collaboration and coordination with the Secretary of the International Treaty to promote coherence in the development and implementation of the respective programmes of work of the two bodies, and in particular with regard to:

(a) the preparation of the Third Report, including by sharing the draft Third Report with the Governing Body of the International Treaty for inputs and comments;

(b) the review of the Second GPA, including by enabling the participation of the Governing Body in the updating process, and the revision of the reporting system of WIEWS;

(c) the organization of symposia on *in situ* conservation and on-farm management of PGRFA;

(d) the effects of seed policies, laws and regulations;

(e) the implementation and monitoring of the Second GPA, including technical instruments that facilitate its implementation, such as the Genebank Standards, and work on sustainable use of PGRFA;

(f) assembling relevant information for measuring and monitoring monetary and non-monetary benefit-sharing, within their respective mandates and existing frameworks;

(g) ABS and DSI/genetic sequence data on PGRFA, including through participation by the Secretary of the Commission, as an observer, in meetings of the Ad Hoc Open-ended Working Group, to enhance the functioning of the Multilateral System of Access and Benefit-sharing;

(h) joint efforts to advocate for the consideration of the objectives and relevant work and policies of the Commission and the Governing Body of the International Treaty in global strategies and frameworks, such as the FAO Strategy and the KM GBF, as well as to update FAO

[74] CGRFA-19/23/13, Section V.
[75] CGRFA-19/23/14.1.
[76] CGRFA-19/23/14.2.
[77] CGRFA-19/23/14.1/Inf.1.
[78] CGRFA-19/23/14.2/Inf.1.
[79] CGRFA-19/23/14.2, *Appendix I*.
[80] CGRFA-19/23/7.1.

Members on progress in the implementation of their respective mandates and work programmes, for example through briefings for Permanent Representations;

(i) the Global Information System and WIEWS, and relevant targets and indicators; and

(j) the development and implementation of national strategies for PGRFA, in close collaboration with the International Treaty and its Funding Strategy.

XV. DATE AND PLACE OF THE COMMISSION'S TWENTIETH REGULAR SESSION

137. The Commission agreed that its Twentieth Regular Session would be convened in Rome, Italy. The Secretariat indicated 24–28 March 2025 as tentative dates for the next Session.

XVI. ELECTION OF CHAIRPERSON, VICE-CHAIRPERSONS AND *RAPPORTEUR* AND MEMBERS AND ALTERNATES OF THE INTERGOVERNMENTAL TECHNICAL WORKING GROUPS

138. The Commission elected the Chairperson and Vice-Chairpersons for its Twentieth Regular Session. Mr Benoît Girard (Canada) was elected as Chairperson. Ms Mariana Marshall Parra (Brazil), Mr William Wigmore (Cook Islands), Ms Neveen Abdel Fattah Hassan (Egypt), Mr Melesse Maryo (Ethiopia), Ms Kim van Seeters (Kingdom of the Netherlands) and Mr Byeong Yun HAN (Republic of Korea) were elected as Vice-Chairpersons. Ms Marshall Parra was elected *Rapporteur*.

139. The Commission elected the Members of its Working Groups, as given in *Appendix H* to this report, and requested the Working Groups to meet before the next regular session of the Commission.[81, 82]

XVII. CLOSING STATEMENTS

140. Regional representatives took the floor to thank the Chair, the Bureau, delegates, observers, the Secretariat and all the support staff, including those working behind the scenes, such as the translators and interpreters, and expressed their satisfaction with the outcomes of the meeting. Thanks were also expressed to governments that had provided financial assistance to the Commission's work.

141. Mr Leskien, Officer-in-Charge of the Commission Secretariat, thanked the Chair for her leadership and hard work during this session and for her support during the intersessional period. He thanked all delegates and observers for their valuable contributions to the success of the meeting. He noted that the meeting took place under severe human resource constraints and therefore expressed his gratitude to all the staff for their tireless efforts to ensure the success of the meeting. He echoed what the Director-General had said in his opening remarks, reiterating that biodiversity has never been as prominent on the global policy agenda as it is today. He expressed his hope that the outcomes of the meeting would be an indicator of the spirit of optimism that is needed to move forward and to make a difference. He further thanked Canada, Germany, the Kingdom of the Netherlands, Norway and Switzerland for their generous contributions to the Commission's work. In closing, he stressed the need to stay focused on GRFA and BFA while not losing touch with social, economic and policy developments.

142. Ms Januarie echoed others in thanking the FAO's technical departments and the Commission's Secretariat, along with the interpreters, translators and other support staff. She thanked the Vice-Chairpersons and the *Rapporteur* and extended best wishes to the incoming Chair and

[81] The delegations of Japan, the United Kingdom of Great Britain and Northern Ireland and the United States of America, in addition to Member Nations of FAO which are Member States of the European Union, chose to disassociate themselves from the election of the Russian Federation to the positions of second alternate for the intergovernmental technical working groups on plant and aquatic genetic resources for food and agriculture.
[82] The delegation of the Russian Federation chose to disassociate itself from the election of Japan, the United Kingdom of Great Britain and Northern Ireland, the United States of America and Member Nations of FAO that are Member States of the European Union to the Commission's intergovernmental technical working groups.

Bureau. Finally, she thanked delegates for their hard work, good spirit, clarity and willingness to compromise.

APPENDIX A

AGENDA OF THE NINETEENTH REGULAR SESSION OF THE COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

1. Adoption of the agenda and timetable

CROSS-SECTORAL MATTERS

2. Review of work on biodiversity, nutrition and human health

3. The role of genetic resources for food and agriculture in mitigation of and adaptation to climate change

4. Access and benefit-sharing for genetic resources for food and agriculture
   - 4.1 Report of the Sixth Session of the Team of Technical and Legal Experts on Access and Benefit-Sharing
   - 4.2 Access and benefit-sharing country measures

5. Digital sequence information and genetic resources for food and agriculture

BIODIVERSITY FOR FOOD AND AGRICULTURE

6. Framework for Action on Biodiversity for Food and Agriculture

GENETIC RESOURCES FOR FOOD AND AGRICULTURE

7. Plant genetic resources
   - 7.1 Report of the Eleventh Session of the Intergovernmental Technical Working Group on Plant Genetic Resources for Food and Agriculture
   - 7.2 *The Third Report on the State of the World's Plant Genetic Resources for Food and Agriculture*
   - 7.3 Implementation and review of the Second Global Plan of Action for Plant Genetic Resources for Food and Agriculture
   - 7.4 Effects of seed policies, laws and regulations

8. Forest genetic resources
   - 8.1 Report of the Seventh Session of the Intergovernmental Technical Working Group on Forest Genetic Resources
   - 8.2 *The Second Report on the State of the World's Forest Genetic Resources*
   - 8.3 Implementation and review of the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources

9. Microorganism and invertebrate genetic resources
   - 9.1 Bioremediation and nutrient cycling soil microorganisms and invertebrates
   - 9.2 Microorganisms relevant to ruminant digestion
   - 9.3 Pollinators and biological control agents and bio-stimulants: Follow-up

10. Animal genetic resources

    10.1 Report of the Twelfth Session of the Intergovernmental Technical Working Group on Animal Genetic Resources for Food and Agriculture

    10.2 Implementation of the Global Plan of Action for Animal Genetic Resources

    10.3 Preparation of *The Third Report on the State of the World's Animal Genetic Resources for Food and Agriculture*

11. Aquatic genetic resources

    11.1 Report of the Fourth Session of the Intergovernmental Technical Working Group on Aquatic Genetic Resources for Food and Agriculture

    11.2 Implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Aquatic Genetic Resources for Food and Agriculture

STRATEGIC PLAN FOR THE COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

12. Progress report and review

THE COMMISSION'S MODE OF OPERATION

13. Future organization of intersessional work

COOPERATION

14. Cooperation with international instruments and organizations

OTHER MATTERS

15. Any other matters

16. Date and place of the Commission's Twentieth Regular Session

17. Election of Chairperson, Vice-Chairpersons and *Rapporteur*

18. Adoption of the Report

APPENDIX B

QUESTIONNAIRE ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE AND CLIMATE CHANGE

Climate change poses new challenges to the management of the world's genetic resources for food and agriculture (GRFA), but it also underlines their importance. The study *The role of genetic resources for food and agriculture in climate change adaptation and mitigation*[83] noted that the specifics of climate change adaptation and mitigation differ by sector.

The present questionnaire, directed at national governments represented by their National Focal Points to the Commission on Genetic Resources for Food and Agriculture, aims to gather information at country level on activities related to the impacts of climate change on GRFA and to the role of GRFA in climate change adaptation and mitigation.

The information required may have to be gathered through consultations with sectoral National Focal Points/National Coordinators and relevant national stakeholders, as appropriate.

Country:	
Prepared by (name, agency/institution, function):	
Date:	
Please indicate any other people who contributed to the compilation of the questionnaire	

Climatic impacts on GRFA

Q1: Has your country, in the last five years, undertaken a climate risk and vulnerability assessment of GRFA, taking into account the concerns of different genetic resource sectors and socio-economic implications? If yes, please indicate who took the action – government, research, non-governmental organization/civil society organization (NGO/CSO).

	Yes	If yes, please provide further information and the reference to the report(s)	No	Unknown
GRFA in general				
Animal genetic resources for food and agriculture				
Aquatic genetic resources for food and agriculture				
Forest genetic resources				
Microorganism and invertebrate genetic resources for food and agriculture				
Plant genetic resources for food and agriculture				

[83] FAO. 2022. *The role of genetic resources for food and agriculture in adaptation to and mitigation of climate change*. FAO Commission on Genetic Resources for Food and Agriculture. Rome. https://doi.org/10.4060/cb9570en

Other (please provide details)				

Any additional information:

Integration of GRFA into the climate change planning processes

Q2: Does your country have a National Adaptation Plan (NAP) or a comparable document?

If your country has a NAP or comparable document, please provide the title of the document and a link

Does it include GRFA sustainable use and conservation for one or more sectors?

- ☐ Yes
  If yes, please indicate the sectors as applicable
- ☐ No
- ☐ Unknown

Any additional information:

Q3: Has your country developed a specific adaptation plan for GRFA for one or more sectors, included in wider sectoral or cross-sectoral adaptation plans?

- ☐ Yes
  If yes, please specify the sectoral or cross-sectoral plan
- ☐ No
- ☐ Unknown

Any additional information:

Q4: Does your country include GRFA sustainable use and conservation for one or more sectors in its Nationally Determined Contributions (NDC) or a comparable document?

- ☐ Yes, in the adaptation component
  If yes, please specify sectors as applicable
- ☐ Yes, in the mitigation component
  If yes, please specify sectors as applicable
- ☐ No
- ☐ Unknown

Any additional information:

Q5: In national planning related to the contributions of GRFA to climate change action, or in the preparation of policies or national plans on this subject, have the following been taken into account? Please provide additional information where requested.

	Adaptation			Mitigation		
	Yes	No	Unknown	Yes	No	Unknown
The existing global plans of action for animal, aquatic, forest and plant genetic resources and the Framework for Action on Biodiversity for Food						

and Agriculture (add new global plans of action when adopted) (please specify)						
The significance of an integrated approach across the different sectors of GRFA						
Other relevant instruments (please specify)						
The different institutions involved in the characterization, conservation and use of GRFA (please specify the sector)						
The collaborative arrangements developed to prepare country reports for *The State of the World* reports on plant, animal, forest and aquatic genetic resources (please specify the sector)						
The various institutional arrangements that link GRFA sectors to national agricultural, environmental, health and planning entities or agencies (please specify)						

Any additional information:

Q6: Which areas of GRFA management are highlighted as important for adaptation to and mitigation of climate change in your country's NAP, NDC and/or other climate-related national plans/strategies?

	GRFA Sector	Adaptation: yes/no/unknown	Adaptation: if yes, please specify	Mitigation: yes/no/unknown	Mitigation: if yes, please specify
Characterization					
Sustainable use and selection					
Conservation					
Access and benefit-sharing					

Any additional information:

Q7: Has your country identified, and included in an official national policy document, possible synergies, conflicts or trade-offs between national adaptation/mitigation policies/plans for one or more sectors of GRFA and other aspects of national adaptation/mitigation planning?

	No	Yes.	If yes, indicate the document (link, reference)	If yes, specify the policies/plans	If yes, what are the synergies, conflicts or trade-offs in question?	Unknown
GRFA in general						
Please specify GRFA sectors as applicable						

Any additional information:

Q8: Has your country prepared policy-relevant materials intended to increase policymakers' awareness of the value of GRFA?

- Yes

If yes, please provide further information

- No
- Unknown

Any additional information:

Q9: Which of the following areas has your country considered in its NAP, NDC and/or other climate-related national plans/strategies?

- □ Improving *in situ* and *ex situ* conservation of GRFA
- □ Improving characterization and evaluation of GRFA, including of conserved materials
- □ Improving methods for identifying and making available appropriate local GRFA for particular circumstances
- □ Introducing new species, populations, varieties and breeds likely to be better adapted to changed/changing conditions
- □ Strengthening production systems' adaptability and resilience through diversification
- □ Improving the quality of supporting and regulating ecosystem services such as pollination, pests and diseases regulation and water-quality regulation
- □ Developing improved methods of breeding better adapted plant, animal, tree and fish varieties, breeds and populations
- □ Developing ways of capacity building, extension and information dissemination
- □ Increasing awareness of the value of GRFA
- □ Other: please specify
- □ Unknown

Any additional information:

Implementation of climate change policies, programmes and projects

Q10: Has your country established the institutional arrangements, for example a country-level coordination mechanism, needed to strengthen the role of GRFA in national climate change adaptation and mitigation planning?

	Adaptation: yes/no/unknown	Adaptation: if yes, please specify	Mitigation: yes/no/unknown	Mitigation: if yes, please specify
Institutional arrangements for GRFA in general				
Institutional arrangements for the following components of GRFA as part of institutional arrangements set out in wider strategies/plans for the respective sector:				
Animal genetic resources for food and agriculture (as part of a livestock or agriculture sector plan, or similar)				
Aquatic genetic resources for food and agriculture (as part of an aquaculture or fisheries plan, or similar)				
Forest genetic resources (as part of a forestry or agroforestry plan, or similar)				
Microorganism and invertebrate genetic resources for food and agriculture (as part of a wider plan addressing microorganisms and invertebrates in the food and agriculture sector)				
Plant genetic resources for food and agriculture (as part of an agriculture, crop production or horticulture plan, or similar)				
Several sectors of GRFA (as part of an integrated plan covering several agriculture sectors)				
Several sectors of GRFA (as part of a land-use or rural development plan, or similar)				

Any additional information:

Q11: Has your country implemented the following types of projects related to GRFA and climate change adaptation and mitigation? Please include all projects, including those undertaken by the private sector or NGOs with a brief explanation or link.

	Yes/No/unknown	Please provide details
Capacity-development programmes for GRFA and climate change stakeholders		
Public-awareness campaigns		
Targeted selection and breeding		
Community-based testing programmes for new materials		
Research activities		
Conservation of GRFA		
Other		
No projects have been implemented		

Any additional information:

Q12: Which area(s) of management of GRFA does your country consider as important for adaptation to and mitigation of climate change?

	Adaptation: yes/no/unknown	Adaptation: if yes, please specify	Mitigation: yes/no/unknown	Mitigation: if yes, please specify
Characterization				
Sustainable use and selection				
Conservation				
Access and benefit-sharing				

Any additional information:

Q13: Has your country identified gaps and weaknesses in its institutional or technical capacity to undertake the various actions associated with the conservation and sustainable use of GRFA in the context of climate change adaptation and mitigation? If yes, which gaps and weaknesses were identified?

- Institutional gaps: yes/no/unknown

  If yes, please specify and provide details of gaps

- Technical gaps: yes/no/unknown

  If yes, please specify and provide details of gaps

Any additional information:

Impact of implementation on GRFA, adaptation and mitigation

Q14: Has your country assessed the impact of management practices on the conservation and sustainable use of GRFA and on the ecosystem services they deliver, and identified and validated those practices that are found to be most conducive to climate change adaptation and mitigation?

- ☐ Yes, comprehensive for the whole sector
- ☐ Yes, for certain management practices in certain circumstances

  If yes, specify practices that are conducive
- ☐ No
- ☐ Unknown

Any additional information:

Q15: Has your country undertaken monitoring and impact assessment of the implementation of policies, projects or programmes mentioned in the questions above?

- ☐ Yes

  If yes, please describe how the impact of the policies, projects or programmes was monitored and the results
- ☐ No
- ☐ Unknown

Any additional information:

Additional questions specifically for Animal Genetic Resources for Food and Agriculture

Q16: Please indicate, if known, the extent to which climatic changes have affected or are predicted to affect animal genetic resources and their management in your country and describe these effects.

Element impacted by climate change	Impact of climate change on animal genetic resources over last ten years (none, low, medium, high, unknown)	Future impact of climate change on animal genetic resources and their management (predicted for the next ten years) (none, low, medium, high, unknown)	Describe the effects of climate change on animal genetic resources and their management (text)
Productivity of animals			
Reproduction			
Health and survival of animals			
Costs of animal production			
Cessation of animal production activity			
Shift in species and/or breeds raised			

Any additional information:

Q17: Please indicate, if known, the extent to which breeding programmes in your country integrate in their breeding objectives aspects related to adaptation and resilience in the face of climate change and its effects (none, low, medium, high, unknown)[84]

Species	Integration of breeding objectives related to adaptation and resilience	Describe briefly the traits and underlying data available (text)
Cattle (specialized dairy)		
Cattle (specialized beef)		
Cattle (multipurpose)		
Sheep		
Goats		
Pigs		
Chickens		
Managed bees		
[species]		

Any additional information:

[84] Aspects related to adaptation and resilience in the face of climate change may correspond for instance to the inclusion of traits such as: heat tolerance; tolerance resistance or resilience to specific diseases or parasites, or selection for specific phenotypes.

APPENDIX C

THE KUNMING-MONTREAL GLOBAL BIODIVERSITY FRAMEWORK

DRAFT COUNCIL RESOLUTION

THE COUNCIL,

Recalling the three Global Goals of Members as included in the FAO Strategic Framework 2022-2031, especially Goal 3 on the sustainable management and utilization of natural resources, including land, water, air, climate and genetic resources for the benefit of present and future generations, and the FAO Strategic Framework 2022-2031 for the transformation to MORE efficient, inclusive, resilient and sustainable agrifood systems for better production, better nutrition, a better environment, and a better life, leaving no one behind;

Having noted the adoption, by the 15th Conference of the Parties to the Convention on Biological Diversity, of the Kunming-Montreal Global Biodiversity Framework with its vision of a world of living in harmony with nature where "by 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people";

Having considered the report of the Nineteenth Regular Session of the Commission on Genetic Resources for Food and Agriculture (Commission);

Recognizing the importance of the Commission's Global Plans of Action, its Framework for Action on Biodiversity for Food and Agriculture, and other policy tools as voluntary frameworks for action at local, national, regional and global levels;

Recalling the importance of the International Treaty on Plant Genetic Resources for Food and Agriculture (Treaty) and its support for the conservation and sustainable use of plant genetic resources for food and agriculture and equitable sharing of benefits derived from their use;

Recalling the importance of the International Plant Protection Convention and its support for the management of plant pests and diseases, including of invasive alien species;

Acknowledging the important work of the Commission, the Treaty and FAO in the development of targets and indicators for monitoring the implementation of their respective instruments and policies, as well as the achievement of the corresponding Sustainable Development Goals;

Noting the important role of the *FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors* and the *2024-27 Action Plan* in coordinating FAO's assistance to countries in mainstreaming biodiversity across agricultural sectors;

Recognizing the important contribution FAO, the Commission, the Treaty, the International Plant Protection Convention can offer to the achievement of the Kunming-Montreal Global Biodiversity Framework;

Stressing the mutual supportiveness of the Kunming-Montreal Global Biodiversity Framework and instruments and policies of FAO on the conservation and sustainable use of biodiversity for food and agriculture, and the fair and equitable sharing of benefits derived from genetic resources for food and agriculture;

1. ***Welcomes*** the Kunming-Montreal Global Biodiversity Framework;

2. ***Requests*** FAO and the Commission on Genetic Resources for Food and Agriculture and encourages the Governing Body of the Treaty and the Commission on Phytosanitary Measures to contribute to the implementation of the Kunming-Montreal Global Biodiversity Framework, within their mandate and subject to the availability of resources and, for this purpose, to support countries in the implementation of the Kunming-Montreal Global Biodiversity Framework and collaborate with relevant stakeholders with a view to avoiding duplications and to enhancing effectiveness;

3. ***Invites*** Members to:

   i. consider integration of the Commission on Genetic Resources for Food and Agriculture's sectoral Global Plans of Action, the Framework for Action on Biodiversity for Food and Agriculture and other FAO instruments and policies related to the conservation and sustainable use of biodiversity into relevant policies, programmes and national and regional plans of action, including National Biodiversity Strategies and Action Plans (NBSAPs), as appropriate;

   ii. actively engage, and collaborate closely with all relevant sectors at all levels, as appropriate and in accordance with national circumstances, priorities and capabilities, in the transformation to more efficient, inclusive, resilient and sustainable agrifood systems that promote the sustainable use, conservation and restoration of biodiversity for food and agriculture, leaving no one behind; and

   iii. consider the importance of the conservation and sustainable use of biodiversity for food and agriculture when seeking funding and support from various sources, including the Global Environment Facility, the Green Climate Fund and other relevant funding mechanisms.

APPENDIX D

CONCEPT NOTE ON FURTHER RESEARCH ON THE IMPACT OF SEED POLICIES, LAWS AND REGULATIONS ON FARMERS' ABILITY TO ACCESS SEEDS AND PLANTING MATERIALS OF DIVERSE, LOCALLY ADAPTED FARMERS' VARIETIES/LANDRACES

In recent years, a number of countries have adopted policies, laws or regulations that aim to support the registration or commercialization of farmers' varieties/landraces (FVLs) and to expand the range of varieties from which farmers may choose. The European Union, for example, allows FVLs to be registered as Conservation Varieties and their seed to be sold locally.[85] Some countries provide for the possibility of registering FVLs in the regular variety list or in a separate one.[86] Other countries recognize Quality Declared Seeds as a standard for quality assurance, so as to enhance farmers' access to the seeds and planting materials produced through this standard.

Through a review of recent literature, reports and case studies, and through targeted interviews with select stakeholder groups, the scoping study will address the question of whether seed policies, laws and regulations have enhanced access to diverse, locally adapted FVLs, and if so, how?

In exploring this question, the scoping study will take account of factors beyond seed policies, laws and regulations that may affect, positively or negatively, farmers' access to seeds and planting materials of FVLs. These factors may include, *inter alia,* the level of interest of farmers or other stakeholders in registering and commercializing FVLs, and how key aspects of seed value chains, such as varietal maintenance or quality assurance, are addressed. Why and how specific policy instruments are implemented in practice, and how farmers and other stakeholders understand and respond to these instruments, should also be noted. Finally, the study should recognize farmers' use of different seed systems (e.g. formal, informal, integrated) in relation to region, crop and context.[87]

Methodology

Recent literature will be gathered, including from published and unpublished reports from reliable sources as well as from a review of the Policy Resources in the International Treaty's Toolbox for Sustainable Use of PGRFA,[88] the Inventory of National Measures, Best Practices and Lessons Learned on the Realization of Farmers' Rights,[89] the International Treaty compliance reports[90] and the Background Study on *Bottlenecks and Challenges to the implementation of Articles 5 and 6 of the International Treaty*.[91] Based on this review, case studies will be developed that represent different legislative scenarios, geographical regions, crop types (e.g. cereals, pulses, vegetatively propagated crops, and vegetables) and marketing approaches. Targeted interviews will also be conducted with select stakeholder groups along the seed value chain, among others, farmers, farmer cooperatives, community seed banks and relevant seed businesses, as well as regulatory authorities and genebanks, who have direct knowledge of these case studies to supplement documentary evidence. The study should be inclusive regarding gender and age.

Process

[85] Commission Directive 2008/62/EC of 20 June 2008 providing for certain derogations for acceptance of agricultural landraces and varieties which are naturally adapted to the local and regional conditions and threatened by genetic erosion and for marketing of seed and seed potatoes of those landraces and varieties, OJ L 162, 21.6.2008, pp. 13–19.
[86] For example, Benin, Burundi, Malaysia, Niger, Thailand and Switzerland provide for separate lists to register varieties defined as "traditional", "niche", "conservation" or "local".
[87] CGRFA-18/21/12/3/Inf.1.
[88] https://www.fao.org/plant-treaty/tools/toolbox-for-sustainable-use/overview/en
[89] https://www.fao.org/plant-treaty/areas-of-work/farmers-rights/overview-inventory/en
[90] https://www.fao.org/plant-treaty/areas-of-work/compliance/en
[91] IT/GB-9/ACSU-6/22/4.

An entity or entities experienced in the organization and conduct of this type of research should be involved in the preparation of the study. Interviews should be conducted with different stakeholder groups. Preliminary results should be shared and discussed with an inclusive multistakeholder group to ensure that the research meets the stated purpose.

The expected output will be a literature review, a summary of case studies and a discussion of the results. Each case study should detail the legislative instruments, elaborate elements of success and challenges faced, and note key contextual factors. General lessons should be drawn regarding the possible impacts of seed policies, laws and regulations that aim to improve farmers' access to seeds and planting materials, particularly to FVLs. Questions for further research should also be framed, and methodologies proposed, based on review and analysis of the case studies.

Timeline

The report of the scoping study will be presented to the next Working Group meeting for its consideration.

APPENDIX E

STRATEGIC PLAN FOR THE COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE ~~(2019–2027)~~ (2023–2031)

VISION

Valuing and conserving biodiversity for food and agriculture and promoting its use in support of global food security and sustainable development, for present and future generations.

MISSION

Cognizant that genetic resources for food and agriculture **and other components of biodiversity of relevance to food and agriculture** are a common concern of all countries, in that all countries depend on genetic resources for food and agriculture that originated elsewhere, the Commission on Genetic Resources for Food and Agriculture (Commission) strives to halt the loss of genetic resources for food and agriculture **and other components of biodiversity of relevance to food and agriculture**, and to ensure world food security and sustainable development by promoting their conservation and sustainable use, including exchange, and the fair and equitable sharing of the benefits arising from their use.

GOALS

In line with its mission, the Commission's Goals are cross-sectoral and in support of the Sustainable Development Goals (SDGs). The cross-sector goals build on the global assessments prepared under its guidance, the strategic priority areas, long-term goals and targets of the Commission's **sectoral Global Plans of Action, the Framework for Action on Biodiversity for Food and Agriculture** ~~global action plans on plant, animal and forest genetic resources for food and agriculture~~ and other Commission activities taken in response to the global assessments.

Goal 1: Sustainable use: Promote the sustainable use and development of genetic resources for food and agriculture and, more generally, all biodiversity relevant to food and agriculture, to increase production for world food security and sustainable development.[92]

Goal 2: Conservation: Maintain the diversity of genetic resources for food and agriculture **and other components of biodiversity of relevance to food and agriculture**.[93]

Goal 3: Access and benefit-sharing: Promote appropriate access to genetic resources for food and agriculture and fair and equitable sharing of benefits arising from their utilization.[94]

---

[92] Goal 1 supports SGD 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality; SDG Target 14.4: By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics; and SDG Target 15.2: 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.

[93] Goal 2 supports SDG 2.5: By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed.

[94] Goal 3 supports SDG 2.5 and SDG 15.6: 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.

Goal 4: Participation: Facilitate the participation of relevant stakeholders in decision-making.[95]

OPERATIVE PRINCIPLES

No changes

I. RATIONALE FOR THE STRATEGIC PLAN ~~(2019–2027)~~ (2023–2031)

1. Biodiversity for food and agriculture is among the Earth's most important resources. Crops, livestock, aquatic organisms, forest trees, microorganisms and invertebrates – thousands of species and their genetic variability – make up the web of biodiversity upon which the world's food production depends. Biodiversity for food and agriculture contributes to food security and nutrition and sustainable livelihoods and, through the provision of regulating and supporting ecosystem services, underpins the natural potential for adaptation to ever-changing socio-economic and environmental dynamics, such as population growth, dietary preferences, nutritional needs and climate change.

2. Aware of the importance of each component of biodiversity for food and agriculture to global food security and nutrition, the Commission aims to ensure the conservation**,** ~~and~~ sustainable use **and development** of genetic resources for food and agriculture, access to these resources and the fair and equitable sharing of benefits derived from their use, for present and future generations.

3. Since 2007, the Commission has been operating under a Multi-Year Programme of Work (MYPOW).[96] The *Strategic Plan for the Commission on Genetic Resources for Food and Agriculture* ~~*2014-2023*~~ ***2023–2031*** embraces the MYPOW and contains the Commission's vision, mission and goals. The ~~Commission's~~ goals of the *Strategic Plan for the Commission on Genetic Resources for Food and Agriculture* ~~*2018–2027*~~ ***2023–2031*** build on the "State of the World" global assessment reports, and the strategic priority areas, long-term goals and targets of **the Commission's** global action plans and the **Framework for Action on Biodiversity for Food and Agriculture as well as other policy instruments, including the Kunming-Montreal Global Biodiversity Framework** and other policy responses to these assessments, as well as the established indicators and monitoring procedures for assessing the global action plans' and the implementation of other instruments agreed**, including within the implementation of the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors**.

4. This Strategic Plan supersedes and replaces all previous versions of the Multi-Year Programme of Work and of strategic plans. It includes in *Annex 1* the MYPOW's major outputs and milestone for the forthcoming five regular sessions of the Commission ~~and in *Annex 2* more detailed plans for the next two sessions of the Commission~~.

II. IMPLEMENTING, MONITORING AND REVIEWING

No changes

III. PARTNERSHIPS

No changes

[95] Goal 4 supports SDG 16.7: Ensure responsive, inclusive, participatory and representative decision-making at all levels.

[96] CGRFA-11/07/Report, *Appendix E.*

Annex 1. Multi-year Programme of Work: Major Outputs and Milestones (2023–2031)

	19th Session (2023)	20th Session (2025)	21st Session (2026/2027)	22nd Session (2028/2029)	23nd Session (2030/2031)
Animal genetic resources			Presentation of SoW AnGR-3 Review of GPA AnGR		
Aquatic genetic resources			Review of implementation of the GPA AqGR	Presentation of SoW AqGR 2	Review of GPA AqGR
Forest genetic resources	Presentation of SoW FGR-2	Review of GPA FGR		Review of implementation of GPA FGR	
Microorganisms and invertebrates		Dietary components of food/feed; food processing and agro-industrial processes		Review of work on MIGR	
Plant genetic resources	Presentation of SoW PGR-3	Review of Second GPA PGR	Review of WIEWS reporting tool		Review of implementation (Second) GPA PGR
Biodiversity for Food and Agriculture	Follow-up to the SoW BFA	Review and consider the work on BFA	Review of the FA BFA	Presentation of SoW BFA-2	Follow-up to the SoW BFA-2
Access and benefit-sharing		Effects of ABS measures on utilization and conservation of GRFA	Update of compilation of ABS country measures		Review of work on ABS
Biotechnologies				Review of the work on biotechnologies for conservation and sustainable use of GRFA	
Digital sequence information	Consider the use of DSI on GRFA and the potential implications for conservation, sustainable use and ABS of GRFA	Recent developments on DSI and their potential implications for conservation, sustainable use and ABS of GRFA	Recent developments on DSI and their potential implications for conservation, sustainable use and ABS of GRFA		Review of the work on DSI and the potential implications for conservation, sustainable use and ABS of GRFA
Climate change	Review of draft questions on climate change and GRFA	Summary of questionnaire responses	Review of revised Voluntary Guidelines	Review of work on climate change and GRFA	
Nutrition and Health	Review of work on GRFA and nutrition and health		Review of work on GRFA and nutrition and health		
New and emerging issues*)					
Management	Progress report/review of the Strategic Plan		Progress report on implementation of the Strategic Plan; SDGs		Progress report/review of the Strategic Plan

* A procedure for the ad hoc identification of new and emerging issues will be proposed for consideration by the intergovernmental technical working groups at their next sessions and by the Commission at its Twentieth Regular Session.

APPENDIX F

STATUTES OF THE INTERGOVERNMENTAL TECHNICAL WORKING GROUP ON MICROORGANISM AND INVERTEBRATE GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Article I – Terms of Reference

The Intergovernmental Technical Working Group on Microorganism and Invertebrate Genetic Resources for Food and Agriculture (the Working Group) shall:

- review the situation and issues related to microorganism and invertebrate genetic resources for food and agriculture (MIGR) and advise and make recommendations to the Commission on these matters;
- consider the progress made in implementing the Commission's programme of work on MIGR as well as any other matters referred to the Working Group by the Commission; and
- report to the Commission on its activities.

In order for the Working Group to carry out this mandate, the Commission may assign specific tasks to the Working Group.

Article II – Composition

The Working Group shall be composed of 28 Member Nations from the following regions:

5 from Africa

5 from Europe

5 from Asia

5 from Latin America and the Caribbean

4 from the Near East

2 from North America

2 from Southwest Pacific

Article III – Election and term of office of Members and Alternate Members

Election and term of office of Members and Alternate Members

1. The Members of the Working Group shall be elected at each regular session of the Commission and serve until the next regular session of the Commission. In addition, the Commission shall elect at each regular session a list of up to two Alternate Members for each region. Alternate Members will replace, in the order in which they appear on the list, any Member who has resigned and informed the Secretariat accordingly.
2. The elected Members and Alternate Members will be eligible for re-election.
3. Members are requested to confirm their participation in Working Group meeting. If a Member of the Working Group is not able to attend the meeting, and informs the Secretariat accordingly, the Member shall be replaced in a timely manner by one of the elected Alternates from the same region.
4. If a Member of the Working Group does not attend the meeting, the Working Group, in consultation with the region, may replace this Member, on an ad hoc basis, by a Member of the Commission from the same region that is present at the meeting.

Article IV – Officers

1. The Working Group shall elect its Chairperson and one or more Vice-Chairpersons from among the representatives of Members of the Working Group at the beginning of each session. These officers shall remain in office until the next session of the Working Group and be eligible for re-election.

2. The Chairperson, or a Vice-Chairperson in the absence of a Chairperson, shall preside over the meetings of the Working Group and exercise such other functions as may be required to facilitate its work.

Article V – Sessions

The Commission shall decide on the timing and duration of the sessions of the Working Group, when required. In any case, the Working Group shall hold no more than one regular session annually.

Article VI – Observers

1. Members of the Commission which are not Members of the Working Group may participate, upon request to the Commission Secretariat, in the work of the Working Group in an observer capacity.
2. The Working Group, or the bureau on behalf of the Working Group, may invite experts, as well as representatives of specialized international organizations, to attend its meetings.

Article VII – Application of the Rules of Procedure of the Commission on Genetic Resources for Food and Agriculture

The provisions of the Rules of Procedure of the Commission on Genetic Resources for Food and Agriculture shall apply *mutatis mutandis* to all matters not specifically dealt with under the present Statutes.

APPENDIX G

STATUTES OF THE AD HOC EXPERT TEAM ON BIODIVERSITY FOR FOOD AND AGRICULTURE

Article I – Terms of Reference

The Ad Hoc Expert Team on Biodiversity for Food and Agriculture (Ad Hoc Expert Team) shall:

- review the situation and issues related to biodiversity for food and agriculture (BFA) and advise and make recommendations to the Commission on these matters;
- consider the progress made in implementing the Commission's programme of work on BFA as well as any other matters regarding BFA referred to the Ad hoc Expert Team by the Commission; and
- report to the Commission on its activities.

Article II – Composition

Each region may appoint through its Bureau Member up to five representatives with broad knowledge of BFA as Members of the Ad Hoc Expert Team.

Article III – Officers

The Ad Hoc Expert Team shall elect two Co-Chairs from among the representatives of Members of the Expert Team at the beginning of each session. Both Co-Chairs shall preside over the meetings of the Ad Hoc Expert Team and exercise such other functions as may be required to facilitate its work.

Article IV – Observers

The Ad Hoc Expert Team or the Bureau on behalf of the Ad Hoc Expert Team may invite experts, as well as representatives of specialized international organizations, to attend its meeting as observers.

Article V – Application of the Rules of Procedure of the Commission on Genetic Resources for Food and- Agriculture

The provisions of the Rules of Procedure of the Commission on Genetic Resources for Food and Agriculture shall apply *mutatis mutandis* to all matters not specifically dealt with under the present Statutes.

APPENDIX H

MEMBERS AND ALTERNATES OF THE INTERGOVERNMENTAL TECHNICAL WORKING GROUPS, ELECTED AT THE NINETEENTH REGULAR SESSION OF THE COMMISSION

MEMBERS AND ALTERNATES OF THE INTERGOVERNMENTAL TECHNICAL WORKING GROUP ON ANIMAL GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Composition (no. of countries per region)	***Country***
Africa (5)	Ethiopia Gambia Mauritania Chad Zimbabwe *First Alternate*: Malawi *Second Alternate:* Namibia
Asia (5)	China India Republic of Korea Philippines Bhutan *First Alternate*: Bangladesh *Second Alternate:* Malaysia
Europe (5)	France Germany Poland Spain Switzerland *First Alternate:* Netherlands (Kingdom of the) *Second Alternate:* Norway
Latin America and the Caribbean (5)	Argentina Brazil Cuba Panama Uruguay *First Alternate:* Costa Rica *Second Alternate:* Peru
Near East (4)	Egypt Libya Qatar Sudan *First Alternate:* Kuwait *Second Alternate*: Oman
North America (2)	Canada United States of America
Southwest Pacific (2)	Samoa Tonga *First Alternate*: Vanuatu *Second Alternate*: Samoa

MEMBERS AND ALTERNATES OF THE INTERGOVERNMENTAL TECHNICAL WORKING GROUP ON AQUATIC GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Composition (no. of countries per region)	***Country***
Africa (5)	Cameroon Morocco Nigeria South Africa South Sudan *First Alternat*e: Mozambique *Second Alternate*: Côte d'Ivoire
Asia (5)	India Indonesia Malaysia Philippines Republic of Korea *First Alternat*e: Sri Lanka *Second Alternate*: Bangladesh
Europe (5)	Czechia Finland Italy Norway Spain *First Alternat*e: Germany *Second Alternate*: Russian Federation
Latin America and the Caribbean (5)	Argentina Brazil Costa Rica Cuba Ecuador *First Alternat*e: Jamaica *Second Alternate*: Colombia
Near East (4)	Kuwait Oman Saudi Arabia United Arab Emirates *First Alternat*e: Iraq *Second Alternate*: Libya
North America (2)	United States of America Canada
Southwest Pacific (2)	Fiji Palau *First Alternate*: Tonga *Second Alternate*: Marshall Islands

MEMBERS AND ALTERNATES OF THE INTERGOVERNMENTAL TECHNICAL WORKING GROUP ON FOREST GENETIC RESOURCES

Composition (no. of countries per region)	***Country***
Africa (5)	Cameroon Democratic Republic of the Congo Namibia Senegal Uganda *First Alternate:* Nigeria *Second Alternate*: Mali
Asia (5)	Bangladesh India Japan Malaysia Republic of Korea *First Alternate:* Indonesia *Second Alternate*: Bhutan
Europe (5)	Finland Germany Italy Netherlands (Kingdom of the) Poland *First Alternate:* Spain *Second Alternate*: Norway
Latin America and the Caribbean (5)	Argentina Brazil Cuba Ecuador Peru *First Alternate:* Costa Rica *Second Alternate*: Panama
Near East (4)	Jordan Iran (Islamic Republic of) Iraq Lebanon *First Alternate*: Syrian Arab Republic *Second Alternate*: Yemen
North America (2)	Canada United States of America
Southwest Pacific (2)	Papua New Guinea Vanuatu *First Alternate:* Solomon Islands *Second Alternate:* Samoa

MEMBERS AND ALTERNATES OF THE INTERGOVERNMENTAL TECHNICAL WORKING GROUP ON MICROORGANISM AND INVERTEBRATE GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Composition (no. of countries per region)	***Country***
Africa (5)	Cameroon Côte d'Ivoire Namibia Niger South Sudan *First Alternate*: Malawi *Second Alternate:* Mali
Asia (5)	Bangladesh Japan Philippines Republic of Korea Thailand *First Alternate*: Malaysia *Second Alternate:* Bhutan
Europe (5)	Czechia Finland Netherlands (Kingdom of the) Spain Sweden *First Alternate:* Belgium *Second Alternate:* United Kingdom of Great Britain and Northern Ireland
Latin America and the Caribbean (5)	Argentina Brazil Jamaica Mexico Panama *First Alternate:* Costa Rica *Second Alternate:* Chile
Near East (4)	Egypt Kuwait Saudi Arabia Qatar *First Alternate:* Sudan *Second Alternate*: Oman
North America (2)	United States of America Canada
Southwest Pacific (2)	Samoa Fiji *First Alternate*: Papua New Guinea *Second Alternate*: Vanuatu

MEMBERS AND ALTERNATES OF THE INTERGOVERNMENTAL TECHNICAL WORKING GROUP ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Composition (no. of countries per region)	***Country***
Africa	Democratic Republic of the Congo
(5)	Kenya
	Morocco
	Niger
	Zambia
	First Alternate: Uganda
	Second Alternate: South Africa
Asia	Bangladesh
(5)	Japan
	Indonesia
	Malaysia
	Philippines
	First Alternate: Bhutan
	Second Alternate: Republic of Korea
Europe	Italy
(5)	Netherlands (Kingdom of the)
	Norway
	Sweden
	Switzerland
	First Alternate: Czechia
	Second Alternate: Russian Federation
Latin America and the Caribbean	Chile
(5)	Costa Rica
	Mexico
	Jamaica
	Venezuela (Bolivarian Republic of)
	First Alternate: Cuba
	Second Alternate: Peru
Near East	Iran (Islamic Republic of)
(4)	Lebanon
	Syrian Arab Republic
	Yemen
	First Alternate: Jordan
	Second Alternate: Egypt
North America	United States of America
(2)	Canada
Southwest Pacific	Fiji
(2)	Cook Islands
	First Alternate: Tonga
	Second Alternate: Fiji

APPENDIX I

LIST OF DOCUMENTS

Working and information documents

Provisional agenda	**CGRFA-19/23/1**
Provisional annotated agenda and timetable	**CGRFA-19/23/1 Add.1 Rev.1**
Statutes of the Commission on Genetic Resources for Food and Agriculture	CGRFA-19/23/1/Inf.1
Rules of Procedure of the Commission on Genetic Resources for Food and Agriculture	CGRFA-19/23/1/Inf.2
Declaration of competences and voting rights submitted by the European Union and its 27 Member States	CGRFA-19/23/1/Inf.3
List of documents	CGRFA-19/23/1/Inf.4
Review of work on biodiversity for food and agriculture and nutrition and human health	**CGRFA-19/23/2**
FAO activities on biodiversity for food and agriculture for food security, nutrition and human health	CGRFA-19/23/2/Inf.1
Climate change and genetic resources for food and agriculture	**CGRFA-19/23/3**
FAO's work on climate change	CGRFA-19/23/3/Inf.1
Report of the Sixth Session of the Team of Technical and Legal Experts on Access and Benefit-sharing	**CGRFA-19/23/4.1**
Access and benefit-sharing for genetic resources for food and agriculture	**CGRFA-19/23/4.2**
Access and benefit-sharing for genetic resources for food and agriculture: Typology of country measures	CGRFA-19/23/4.2/Inf.1
Draft online questionnaire on the implications of access and benefit-sharing measures for the use and exchange of genetic resources for food and agriculture and for benefit-sharing	CGRFA-19/23/4.2/Inf.2
Digital sequence information and genetic resources for food and agriculture	**CGRFA-19/23/5**
The role of digital sequence information in the conservation and sustainable use of genetic resources for food and agriculture: Opportunities and challenges	CGRFA-19/23/5/Inf.1
Biodiversity for food and agriculture and the Kunming-Montreal Global Biodiversity Framework	**CGRFA-19/23/6.1**
Progress report on the implementation of the FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors and its 2021–23 Action Plan	**CGRFA-19/23/6.2**

Report of the Eleventh Session of the Intergovernmental Technical Working Group on Plant Genetic Resources for Food and Agriculture	**CGRFA-19/23/7.1**
Statutes of the Intergovernmental Technical Working Group on Plant Genetic Resources for Food and Agriculture, and Members and Alternates elected by the Commission at its Eighteenth Regular Session	CGRFA-19/23/7.1/Inf.1
Preparation of *The Third Report on the State of the World's Plant Genetic Resources for Food and Agriculture*	**CGRFA-19/23/7.2**
Draft Third Report on the State of the World's Plant Genetic Resources for Food and Agriculture	CGRFA-19/23/7.2/Inf.1
Implementation and review of the Second Global Plan of Action for Plant Genetic Resources for Food and Agriculture	**CGRFA-19/23/7.3**
Further research on the impact of seed policies, laws and regulations	**CGRFA-19/23/7.4**
Report of the Seventh Session of the Intergovernmental Technical Working Group on Forest Genetic Resources	**CGRFA-19/23/8.1**
Statutes of the Intergovernmental Technical Working Group on Forest Genetic Resources, and Members and Alternates elected by the Commission at its Eighteenth Regular Session	CGRFA-19/23/8.1/Inf.1
Preparation of *The Second Report on the State of the World's Forest Genetic Resources*	**CGRFA-19/23/8.2**
Draft Second Report on the State of the World's Forest Genetic Resources	CGRFA-19/23/8.2/Inf.1
Implementation and review of the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources	**CGRFA-19/23/8.3**
Second Report on the Implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources	CGRFA-19/23/8.3/Inf.1
Bioremediation and nutrient cycling soil microorganisms and invertebrates	**CGRFA-19/23/9.1**
Draft study on the sustainable use and conservation of soil microorganisms and invertebrates that contribute to bioremediation of agricultural pollutants and soil nutrient cycling	CGRFA-19/23/9.1/Inf.1
Progress report on the implementation of the International Initiative for the Conservation and Sustainable Use of Soil Biodiversity	CGRFA-19/23/9.1/Inf.2
Microorganisms relevant to ruminant digestion	**CGRFA-19/23/9.2**
Draft study on the sustainable use and conservation of microorganisms of relevant for ruminant digestion	CGRFA-19/23/9.2/Inf.1

Submissions by members on the draft study on the sustainable use and conservation of microorganisms of relevance to ruminant digestion	CGRFA-19/23/9.2/Inf.2
The need for and possible modalities of a global pollinator platform	**CGRFA-19/23/9.3.1**
Progress report on the implementation of the International Initiative for the Conservation and Sustainable Use of Pollinators	CGRFA-19/23/9.3.1/Inf.1
Conservation and sustainable use of microbial and invertebrate biological control agents and microbial biostimulants	**CGRFA-19/23/9.3.2**
Report of the Twelfth Session of the Intergovernmental Technical Working Group on Animal Genetic Resources for Food and Agriculture	**CGRFA-19/23/10.1**
Statutes of the Intergovernmental Technical Working Group on Animal Genetic Resources for Food and Agriculture, and Members and Alternates elected by the Commission at its Eighteenth Regular Session	CGRFA-19/23/10.1/Inf.1
Review of implementation of the Global Plan of Action for Animal Genetic Resources	**CGRFA-19/23/10.2**
Summary progress report on the implementation of the Global Plan of Action for Animal Genetic Resources	CGRFA-19/23/10.2/Inf.1
Status and trends of animal genetic resources – 2022	CGRFA-19/23/10.2/Inf.2
Detailed report on the development of the Domestic Animal Diversity Information System	CGRFA-19/23/10.2/Inf.3
Methods for estimation of within-population genetic variation	CGRFA-19/23/10.2/Inf.4
Preparation of *The Third Report on the State of the World's Animal Genetic Resources for Food and Agriculture*	**CGRFA-19/23/10.3**
Country report questionnaire supporting the preparation of the *Third Report on The State of the World's Animal Genetic Resources for Food and Agriculture*	CGRFA-19/23/10.3/Inf.1
Report of the Fourth Session of the Intergovernmental Technical Working Group on Aquatic Genetic Resources for Food and Agriculture	**CGRFA-19/23/11.1**
Statutes of the Intergovernmental Technical Working Group on Aquatic Genetic Resources for Food and Agriculture, and Members and Alternates elected by the Commission at its Eighteenth Regular Session	CGRFA-19/23/11.1/Inf.1
Implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Aquatic Genetic Resources for Food and Agriculture	**CGRFA-19/23/11.2.1**
Report of the Thirty-fifth Session of the Committee on Fisheries	CGRFA-19/23/11.2.1/Inf.1
Report of the Eleventh Session of the Committee on Fisheries Sub-Committee on Aquaculture	CGRFA-19/23/11.2.1/Inf.2

Monitoring the implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Aquatic Genetic Resources for Food and Agriculture	**CGRFA-19/23/11.2.2**
Strategic Plan for the Commission on Genetic Resources for Food and Agriculture: review and update	**CGRFA-19/23/12**
The future organization of the Commission's intersessional work	**CGRFA-19/23/13**
Cooperation with international instruments and organizations	**CGRFA-19/23/14.1**
Submissions by international instruments and organizations	CGRFA-19/23/14.1/Inf.1
Cooperation with the International Treaty on Plant Genetic Resources for Food and Agriculture	**CGRFA-19/23/14.2**
Report from the International Treaty on Plant Genetic Resources for Food and Agriculture	CGRFA-19/23/14.2/Inf.1

Other documents

FAO Strategy on Climate Change 2022-2031

The role of genetic resources for food and agriculture in adaptation to and mitigation of climate change

ABS Elements: Elements to facilitate domestic implementation of access and benefit-sharing for different subsectors of genetic resources for food and agriculture with explanatory notes

Framework for Action on Biodiversity for Food and Agriculture

FAO Strategy on Mainstreaming Biodiversity across Agricultural Sectors

2021-23 Action plan for the implementation of the FAO strategy on mainstreaming biodiversity across agricultural sectors

Proceedings of the First International Multi-Stakeholder Symposium on Plant Genetic Resources for Food and Agriculture: Technical consultation on in situ conservation and on-farm management of plant genetic resources for food and agriculture

Practical guide for the application of the Genebank Standards for Plant Genetic Resources for Food and Agriculture: Conservation of orthodox seeds in seed genebanks

Practical guide for the application of the Genebank Standards for Plant Genetic Resources for Food and Agriculture: Conservation in field genebanks

Practical guide for the application of the Genebank Standards for Plant Genetic Resources for Food and Agriculture: Conservation via *in vitro* culture

Genebank Standards for Plant Genetic Resources for Food and Agriculture

Innovations in cryoconservation of animal genetic resources: Practical guide

Genomic characterization of animal genetic resources: Practical guide

Report of the Expert Workshop on “Incorporating information on wild relatives of aquaculture species into an information system for aquatic genetic resources”
Global Plan of Action for the Conservation, Sustainable Use and Development of Aquatic Genetic Resources for Food and Agriculture

Background Study Papers

Sustainable use and conservation of microbial and invertebrate biological control agents and microbial biostimulants	Background Study Paper No. 71
Sustainable use and conservation of invertebrate pollinators	Background Study Paper No. 72

APPENDIX J

MEMBERS OF THE COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

AFRICA	ASIA	EUROPE	LATIN AMERICA AND THE CARIBBEAN
Algeria	Bangladesh	Albania	Antigua and Barbuda
Angola	Bhutan	Armenia	Argentina
Benin	Cambodia	Austria	Bahamas
Botswana	China	Azerbaijan	Barbados
Burkina Faso	Democratic People's Republic of Korea	Belarus	Belize
Burundi	India	Belgium	Bolivia (Plurinational State of)
Cameroon	Indonesia	Bosnia and Herzegovina	Brazil
Cabo Verde	Japan	Bulgaria	Chile
Central African Republic	Kazakhstan	Croatia	Colombia
Chad	Lao People's Democratic Republic	Cyprus	Costa Rica
Comoros	Malaysia	Czechia	Cuba
Congo	Maldives	Denmark	Dominica
Côte d'Ivoire	Mongolia	Estonia	Dominican Republic
Democratic Republic of the Congo	Myanmar	European Union	Ecuador
Equatorial Guinea	Nepal	Finland	El Salvador
Eritrea	Pakistan	France	Grenada
Eswatini	Philippines	Georgia	Guatemala
Ethiopia	Republic of Korea	Germany	Guyana
Gabon	Sri Lanka	Greece	Haiti
Gambia	Thailand	Hungary	Honduras
Ghana	Viet Nam	Iceland	Jamaica
Guinea	Bangladesh	Ireland	Mexico
Guinea-Bissau		Israel	Nicaragua
Kenya		Italy	Panama
Lesotho		Latvia	Paraguay
Liberia		Lithuania	Peru
Madagascar		Luxembourg	Saint Kitts and Nevis
Malawi		Malta	Saint Lucia
Mali	**NEAR EAST**	Montenegro	Saint Vincent and the Grenadines
Mauritania	Afghanistan	Netherlands (Kingdom of the)	Suriname
Mauritius	Egypt	Norway	Trinidad and Tobago
Morocco	Iran (Islamic Republic of)	Poland	Uruguay
Mozambique	Iraq	Portugal	Venezuela (Bolivarian Republic of)
Namibia	Jordan	Republic of Moldova	
Niger	Kuwait	Romania	**NORTH AMERICA**
Nigeria	Kyrgyzstan	Russian Federation	Canada
Rwanda	Lebanon	San Marino	United States of America
Sao Tome and Principe	Libya	Serbia	
Senegal	Oman	Slovakia	**SOUTH WEST PACIFIC**
Seychelles	Qatar	Slovenia	Australia
Sierra Leone	Saudi Arabia	Spain	Cook Islands
South Africa	Sudan	Sweden	Fiji
South Sudan	Syrian Arab Republic	Switzerland	Marshall Islands
Togo	Tajikistan	North Macedonia	New Zealand
Tunisia	United Arab Emirates	Türkiye	Palau
Uganda	Yemen	Ukraine	Papua New Guinea
United Republic of Tanzania		United Kingdom of Great Britain and Northern Ireland	Samoa
Zambia			Solomon Islands
Zimbabwe			Tonga
			Vanuatu