Food and Agriculture Organization of the United Nations

The International Treaty ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Item 7 of the Provisional Agenda

NINTH SESSION OF THE GOVERNING BODY

New Delhi, India, 19–24 September 2022

Celebrating the Guardians of Crop Diversity: Towards an Inclusive Post-2020 Global Biodiversity Framework

Executive Summary

The Bureau of the Ninth Session of the Governing Body agreed that the theme of the Ninth Session of the Governing Body will be: *"Celebrating the Guardians of Crop Diversity: Towards an Inclusive Post-2020 Global Biodiversity Framework"*. This is to recognize and acknowledge the contributions of guardians of crop biodiversity, especially farmers, around the world to the effective management of plant genetic resources for food and agriculture (PGRFA). The theme also offers an opportunity to consider how the International Treaty and the guardians of crop diversity will contribute to implementation of the Post-2020 Global Biodiversity Framework, when adopted.

Guidance Sought

The Governing Body is invited to take note of this document and adopt a Resolution, taking into account the elements contained in the Annex to this document, to recognize the contribution of the guardians of crop biodiversity to the management of PGRFA and the Post-2020 Global Biodiversity Framework, when adopted.

FAO-ITPGRFA documents can be consulted at: www.fao.org/plant-treaty/meetings/meetings-detail/en/c/1259571/

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I. INTRODUCTION

1. Crop diversity is an important foundation for food security and sustainable agricultural production as it supports productivity and resilience, as well as contributes to the mitigation of and adaptation to climate change. It is valued not only as an agricultural resource to be exploited, but also for its ecological importance and societal significance.

2. The management of crop diversity is supported by a variety of actors, such as farmers, genebank managers and researchers, working in collaboration. These custodians of agricultural biodiversity have been conserving – and continue to conserve – plant genetic resources through their interventions, to ensure the global food security of present and future generations.

3. The Post-2020 Global Biodiversity Framework has been under negotiation by the Parties of the Convention on Biological Diversity (CBD). It is expected that the connection between biodiversity management and agricultural production will be addressed more prominently, since the food system is one of the key drivers for biodiversity change. Shifting toward more sustainable agriculture and food production is a cornerstone for mainstreaming biodiversity, as sustainable agricultural production contributes to improved biodiversity conservation and management.

4. It is in this important context that the Bureau of the Ninth Session of the Governing Body agreed on the theme: *"Celebrating the Guardians of Crop Diversity: Towards an Inclusive Post-2020 Global Biodiversity Framework"*. It recognizes the contribution of the world's smallholder farmers and other custodians of crop biodiversity to the effective management of plant genetic resources for food and agriculture, while providing a unique opportunity to consider options on how the International Treaty and its community will contribute to implementation of the new Global Biodiversity Framework, when adopted.

5. This document was prepared based on guidance provided by the Bureau in preparing the agenda for this session. Section II describes how different guardians of crop diversity have been celebrated and empowered under the International Treaty and in different parts of the world. Section III provides insights on how the conservation and sustainable use of PGRFA and the inclusive approach of all stakeholders' involvement have been addressed under the ongoing Post-2020 GBF discussions. In conclusion, the document summarizes the contributions of the guardians of crop diversity and the International Treaty to the successful implementation of the Post-2020 GBF, when adopted.

II. GUARDIANS OF CROP DIVERSITY

A. Actors involved in the conservation of crop diversity

6. Many actors contribute to the conservation of crop diversity around the world. It is important to highlight that in the case of PGRFA, conservation is ensured through use, so the dividing line between curators and users of diversity is more dynamic than for other components of biological diversity.

7. In order to identify and list various actors involved in PGRFA conservation, a non-exhaustive mapping of actors was undertaken by analysing the *Second Global Plan of Action for Plant Genetic Resources for Food and Agriculture* (GPA-2). Reference was provided to those actors who participate in implementation of the seven priority activities dedicated to *in situ* conservation and management and *ex situ* conservation.

8. The GPA-2 notes that many farmers in the developing world, and also increasingly in developed countries, continue to maintain significant crop genetic diversity in their fields. Special attention is paid to small-scale farmers in developing countries – and especially in centres of origin, centres of diversity and biodiversity hotspots – and their farming communities, as well as to

indigenous and local communities. The efforts of farmers and of local and indigenous communities are highlighted throughout the GPA-2 priorities for *in situ* conservation and management, which also recognize the unique role that women play in conservation and management.

9. The role of genebank curators and other researchers is also emphasized throughout the GPA-2, in terms of their contribution to the conservation of PGRFA. The research community is especially highlighted when it comes to *ex situ* conservation, including its contribution to advancing conservation strategies for vegetatively propagated and non-orthodox seeded plants, as well as for species and genetic and genomic stocks that have been neglected by current conservation activities. They have an important role to play in linking such *ex situ* conservation with on-farm and *in situ* conservation efforts, while PGRFA curators work together through crop and regional networks.

10. Breeders play important roles in adapting agriculture to environmental changes and in meeting the demands of farmers and farming communities. Their contributions not only support plant breeding, genetic enhancement and base-broadening efforts, but they also help to advance on-farm PGRFA evaluation programmes, the development of underutilized crops and other priorities. Seed and nursery trade actors play roles in the implementation of many GPA-2 priorities.

11. Other plant curators highlighted in the GPA-2 include specialists in botanic gardens, who are encouraged to make closer connections with actors responsible for PGRFA conservation. The research community on herbaria and other institutes with taxonomic expertise are also active allies when it comes to supporting the targeted collection of PGRFA. National protected area network managers and other organizations involved in the environment sector are important conservation actors for the *in situ* conservation and management of crop wild relatives and wild food plants.

12. The GPA-2 also notes many actors who have important supporting roles, such as agricultural extension and research services promoting on-farm management. Non-governmental and other organizations working on relief and rehabilitation efforts can also make changes by promoting the use of adapted PGRFA, while assisting farmers in disaster situations to restore crop systems. Strong links are needed with the users of PGRFA, such as breeders, researchers and farmers, in order to inform, direct and prioritize the entire conservation process.

13. For the past decade, there has been a strong emphasis on the need to develop a food system approach and transformation to resolve the challenges faced in achieving global food security and sustainable agriculture. New actors have been emerging who can also support the conservation of crop genetic diversity. At this session, the Governing Body will consider a strategy to engage the food processing industries in implementation of the Treaty. Chefs and others in the gastronomy sector are participating more actively in promoting the use of underutilized species, farmers' varieties, or those for niche markets. In many parts of the world, consumers are increasingly becoming actively involved in determining which plant varieties they favour, and there are growing numbers of initiatives where consumers are involved alongside farmers and breeders in identifying new plant varieties through participatory plant breeding.

B. Farmers as guardians of crop diversity

14. Plant genetic diversity is important for sustainable agriculture, because it enables adaptation to changing environmental conditions, such as those caused by climate change, helping to ensure global food security. Smallholder farmers and indigenous communities, particularly those in centres of origin and diversity, have been guardians of the world's plant genetic resources for millennia, and they continue to play a crucial role in maintaining the biodiversity of our food crops.

15. Since farmers are custodians and developers of crop genetic diversity in the field, their rights in this regard are critical if they are to be able to maintain this pivotal role for food security. The innovations of farmers are considered to be the foundation of modern plant breeding, since agriculture

was founded on the artificial selection of desirable traits, which resulted in domestication. The variety of foods available to humanity today is due, in large part, to farmers' continuous efforts in this regard.

16. The International Treaty was the first legally binding instrument to formally acknowledge the immense contribution made by farmers and local and indigenous communities in developing and conserving crop diversity. In Article 9, Farmers' Rights, the Contracting Parties of the International Treaty recognize the enormous contribution that farmers of all regions of the world have made, and will continue to make, for the conservation and development of plant genetic resources as the basis of food and agricultural production throughout the world. Realizing Farmers' Rights enables farmers to continue to maintain, develop and manage crop genetic resources, and recognizes and rewards them for their indispensable contribution to the global pool of genetic resources.

17. Other mechanisms of the International Treaty also highlight the role of farmers as the custodians of crop diversity. The main aim of the updated Funding Strategy centres around farmers and their contributions to the conservation and use of biodiversity: "Farmers around the world use and conserve adapted varieties leading to increased productivity and on-farm incomes, increased availability of diverse nutrient-rich food, reduced adverse impacts to the environment & enhanced resilience to production shocks." The primary beneficiaries of the Benefit-sharing Fund (BSF) are farmers, especially in developing countries and countries with economies in transition, who conserve and sustainably utilize PGRFA, as stated in Article 13.3 of the International Treaty. All projects funded by the BSF have to contribute to one main outcome: "Livelihoods improved for small-scale farmers in developing countries, and food security and sustainable agriculture promoted through the conservation and sustainable use of plant genetic resources for food and agriculture."

C. Celebrating farmers as guardians of crop diversity

18. At its Eighth Session, the Governing Body welcomed the Inventory of national measures, best practices and lessons learned from the realization of Farmers' Rights, as developed by the Ad Hoc Technical Expert Group on Farmers' Rights. The Inventory contains a wide range of measures and practices for the promotion and realization of Farmers' Rights. These rights will enable farmers and local and indigenous communities to continue to perform their role as developers and custodians of crop diversity. Based on the Inventory, a set of options for encouraging, guiding and promoting the realization of Farmers' Rights has been developed and presented to the Governing Body at this session for endorsement. Below are some examples from the Inventory.

19. India, the host country of the Ninth Session of the Governing Body, has more than 126 million farmers, of whom an estimated 82 percent are marginal and small-scale. In 2001, the Government of India passed the Protection of Plant Varieties and Farmers' Rights Act (PPV&FR Act of 2001). Its main objectives include providing an effective system for the protection of new plant varieties, as well as for the rights of farmers and plant breeders; and recognizing and protecting the rights of farmers in respect of their contribution, made at any time, to conserving, improving and making available plant genetic resources for the development of new plant varieties. The PPV&FR Act of 2001 explicitly recognizes the role of farmers as guardians of crop genetic resources and defines the privileges and the rights of farmers with regard to the protection of varieties that are developed or conserved by them.

20. The Protection of Plant Varieties and Farmers' Rights Authority, established under section 45 of the PPV&FR Act of 2001, Rule 70 (2) (a), has instituted "Recognition and Rewards" from the National Gene Fund. This provision recognizes the efforts of farmers and farming communities engaged in the conservation of PGRFA, in such a way that they are encouraged to continue their

activities and their genetic resources can be explored for further use and contributions to food security.[1]

21. These awards have created awareness and enhanced understanding of the role of farmers and farming communities in conserving, improving and making available PGRFA. Moreover, the awards highlight the importance of the conservation and sustainable use of crop genetic resources and their value for society. After receiving the award, farmers and their communities also received national and international recognition of their conservation efforts, resulting in opportunities for attracting additional funds to support their activities.

22. In Sweden, the Golden Pea award recognizes those individuals – often spanning generations – who have contributed to the conservation of plant genetic resources. The award can be bestowed on farmers, gardeners, private persons and relevant organizations. Since the first Golden Pea was awarded in 2002, close to 50 caretakers of the green heritage have been lauded.

23. The award involves collaboration between the Swedish University of Agricultural Sciences, coordinator of the national PGR Programme, and County Administrations around the country. The purpose is to draw attention to the people who, through their diligent work, preserve and keep alive the diversity of Sweden's green cultural heritage. It also aims to encourage interest in Sweden's old local plant varieties which, in addition to their valuable plant characteristics, are the bearers of a rich cultural history.

24. The award consists of a full-scale copy of a Gotland blue pea (one of the oldest forms of food pea preserved in Sweden) in gold, attached to a pin or pendant, made by Swedish silversmith Bengt Liljedahl, and a diploma painted by artist Ulrika Wolff. Lessons learned include the importance of having a proactive coordinator who can communicate the value of conserving plant genetic resources and identify good case studies, together with County Administrations. For the farmers, the monetary value of the award is much less important than the symbolic significance. The Golden Pea award helps to raise public awareness, especially at local and regional level, thereby also supporting local processing and marketing activities based on the crops being conserved.

D. Celebrating the contributions of other curators of crop diversity

25. Several Contracting Parties and international institutions have undertaken initiatives to celebrate the contributions made by curators of crop diversity other than farmers. Some initiatives recognize curators' contributions for their outstanding record of service over a long period of time through a prize or an award, such as a medal. Others take the form of fellowships to promote young researchers starting their professional endeavours in the PGRFA sector. Most of these initiatives celebrate the achievements, innovative research or academic record of experts, and their significance goes beyond simple recognition of the individuals concerned. Their inspirational stories contribute to building awareness in society about the importance of conserving crop diversity and help to stimulate a new generation to become involved. The following examples are non-exhaustive and intended to be illustrative.

26. In the United States of America, the Frank N. Meyer Medal for Plant Genetic Resources is for distinctive service to the National Plant Germplasm System. The award is made as a tribute to Frank N. Meyer, who served for a long period as Agricultural Explorer of the Office of Foreign Seed and Plant Introduction. This award is presented in recognition of his contributions to the plant germplasm

[1] The recognition and rewards are conferred annually to the farmers who are engaged in the conservation of genetic resources of the landraces and wild relatives of economics plants and their improvement through selection and preservation, as follows:
a) Plant Genome Savior Community Award. Five Plant Genome Saviour Awards of Rs 10 Lakh with citation and memento
b) Plant Genome Savior Farmer Reward. Ten Plant Genome Savior Farmer Rewards of Rs 1.5 Lakh each with citation and memento
c) Plant Genome Savior Farmer Recognition. Twenty Plant Genome Savior Farmer Recognitions of Rs 1 Lakh each with citation and memento

collection and use in the United States of America and his dedication and service to humanity through collecting, evaluating or conserving Earth's genetic resources. In Austria, since 2002, the Gregor Mendel Foundation has set itself the goal of drawing attention to the social importance of plant research and plant breeding by awarding the Gregor Mendel Innovation Prize for outstanding findings in the field of plant sciences. India has several awards for recognition of the outstanding services provided by plant genetic resources experts, in the form of prizes, memorial or academic awards, a young scientist award, special lectures and ministerial recognition.

27. As part of the tenth anniversary of the Svalbard Global Seed Vault, the Global Crop Diversity Trust recognized seven of the world's 'gatekeepers' of crop diversity by presenting them with a Legacy Award. Several of the award recipients were retired managers of CGIAR gene banks. Starting in 1994, Bioversity International has promoted the Vavilov-Frankel Fellowship to encourage the conservation and use of plant genetic resources by enabling outstanding young scientists to carry out relevant innovative research at an advanced research institute outside their countries. Several BSF projects have supported fellowships for young scientists in the developing world who are actively involved in crop diversity management.

III. POST-2020 GLOBAL BIODIVERSITY FRAMEWORK

28. During the past biennium, the Open-ended Intersessional Working Group has conducted intensive negotiations for the development of the Post-2020 GBF. The new GBF is expected to be adopted at the UN Biodiversity Conference (CBD COP 15), due to be held in Montreal, Canada, from 7 to 19 December 2022.

29. The discussions, as reflected in the current text of the Post-2020 GBF, have recognized the importance of the food and agriculture sector in supporting implementation of the new GBF.[2] The Post-2020 GBF should recognize the direct and indirect contribution of biodiversity to food security and nutrition, sustainable livelihoods and poverty eradication and include targets that link agricultural biodiversity to food security and sustainable agriculture.

30. In this regard, it is emphasized that implementation of the new GBF will be undertaken through a fully inclusive process. Collaborations and partnerships among relevant organizations at global, national and local levels will be sought to leverage ways of building momentum for success. Discussions so far have confirmed that, although the framework is negotiated under the CBD, implementation of the new GBF and the effective achievement of its goals and targets will be supported by relevant mechanisms and inputs from other conventions and international processes. In this regard, the current text of the framework contains references to FAO and the International Treaty in relation to the achievement of relevant targets and goals for agricultural biodiversity.

31. For the Post-2020 GBF to be truly successful, transformative actions to mainstream biodiversity into productive sectors will be required, particularly at national level. Implementation will be enabled through a whole-of-government approach that includes the ministries and agencies with a mandate for food and agriculture. In addition, it will take a whole-of-society approach and should ensure greater gender equality and more empowerment of women and girls. In this context, opportunities will arise to promote the involvement of International Treaty stakeholders, in particular the guardians of crop diversity.

[2] For further details, see document IT/GB-9/22/16.3 *Cooperation with the Convention on Biological Diversity and its Nagoya Protocol*

IV. CONCLUSION

32. Crop diversity is an important foundation for food security and sustainable agricultural production and the management of this important resource has been supported by a variety of actors, such as farmers, local and indigenous communities, genebank managers and researchers, working in collaboration. These guardians of agricultural biodiversity have been conserving – and continue to conserve – plant genetic resources through their interventions, to ensure the global food security of present and future generations.

33. Under ongoing discussions on the Post-2020 GBF, it is clearly indicated that the link between biodiversity management and agricultural production will be addressed more prominently. Shifting towards sustainable agriculture and food production is a cornerstone for mainstreaming biodiversity, as sustainable agricultural production contributes to improved biodiversity conservation and management.

34. For the Post-2020 GBF to be truly successful, it is critical that its implementation be undertaken through an inclusive approach, involving all stakeholders and recognizing their contributions, including those of the International Treaty community and the guardians of crop diversity.

V. GUIDANCE SOUGHT

35. The Governing Body is invited to take note of this document and adopt a Resolution, taking into account the elements contained in the Annex to this document, to recognize the contribution of the guardians of crop biodiversity to the management of PGRFA and the Post-2020 Global Biodiversity Framework, when adopted.

Annex

DRAFT RESOLUTION ***/2022

CELEBRATING THE GUARDIANS OF CROP DIVERSITY: TOWARDS AN INCLUSIVE POST-2020 GLOBAL BIODIVERSITY FRAMEWORK

THE GOVERNING BODY,

Recalling that crop diversity is an important foundation for sustainable agricultural production;

Recognizing that management of crop diversity is supported by a variety of actors, such as farmers, local and indigenous communities, gene bank managers and researchers, working in collaboration;

Noting that sustainable agricultural production contributes to biodiversity conservation and improved management by mainstreaming biodiversity;

Noting that the connection between biodiversity management and agricultural production is expected to be emphasized in the Post-2020 Global Biodiversity Framework (Post-2020 GBF), which is currently under negotiations for possible adoption by the fifteenth meeting of the Conference Parties to the Convention on Biological Diversity scheduled to be held in December 2022;

1. ***Acknowledges and celebrates*** the contributions of all guardians and curators of crop diversity to ensure that crop diversity is conserved and sustainably used for the global food security of today and the future;

2. ***Recognises*** the past, present and future contributions of farmers in all regions of the world, particularly those in centres of origin and diversity, in conserving, improving and making available crop diversity and, in this regard, ***invites*** Contracting Parties to fully engage farmers in matters related to the conservation and sustainable use of plant genetic resources for food and agriculture (PGRFA);

3. ***Thanks*** Contracting Parties, including the Host Government India, that have developed initiatives to celebrate the contributions of guardians and curators of crop diversity, and ***invites*** others to do so, taking into account, as appropriate, the valuable experiences and lessons learned included in the Inventory of national measures, best practices and lessons learned for the realization of Farmers' Rights;

4. ***Notes*** that a number of international organisations, such as Bioversity International and the Global Crop Diversity Trust, have in the past taken initiatives to celebrate the contributions of guardians and curators of crop diversity, and ***requests*** the Secretary to liaise with such organisations, as appropriate, to explore opportunities to celebrate such contributions on a regular basis and in a collaborative manner;

5. ***Emphasizes*** the importance of an inclusive approach to implementation of the Post-2020 GBF, when adopted, involving all relevant stakeholders and recognizing their contributions, including the International Treaty community of actors, in particular farmers and other guardians of crop diversity;

6. ***Further emphasizes*** the importance of an inclusive approach to the implementation of the International Treaty, and ***recognizes*** the valuable opportunities that lie ahead if new stakeholders with an interest in food, agriculture or biodiversity are actively engaged in Treaty implementation.