



**Food and Agriculture
Organization of the
United Nations**



The International Treaty
ON PLANT GENETIC RESOURCES
FOR FOOD AND AGRICULTURE

Item 9.1 of the Provisional Agenda

NINTH SESSION OF THE GOVERNING BODY

New Delhi (India), 19–24 September 2022

Report on Implementation and Operations of the Multilateral System

Executive summary

This document provides an overview of developments in the implementation and operations of the Multilateral System of Access and Benefit-sharing since the Eighth Session of the Governing Body. It contains updates on material available in the Multilateral System, as communicated to the Secretary, and an analysis of germplasm transfers within the Multilateral System. Despite the limitations imposed by the COVID-19 pandemic on training and capacity-building activities, the document also reports some advances in the development of new training and support materials. The document further highlights collaboration with national focal points and partner organizations in the preparation of reports and analysis, and in the provision of support for the implementation of the Multilateral System at both regional and national levels.

Guidance sought

The Governing Body is invited to take note of this report on implementation and operation of the Multilateral System, and provide guidance for the further implementation of the Multilateral System, taking into account the elements for a Resolution as contained in *Appendix 3*.

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

I. Introduction

1. This document reports on the implementation and operations of the Multilateral System of Access and Benefit-sharing (MLS or Multilateral System) from August 2019 to June 2022, unless otherwise indicated. It provides information on the material available in the Multilateral System and on support activities undertaken to assist users with the Standard Material Transfer Agreement (SMTA) and its related reporting obligations.
2. At its Eighth Session, the Governing Body decided to postpone several reviews and assessments foreseen under the Multilateral System and requested the Secretariat to prepare a report for the consideration of the Governing Body. This document contains some preliminary information received in response to an invitation for submissions issued by the Secretary.
3. The reports on the reviews and assessments under Article 11.4 of the International Treaty and on possible measures to encourage natural and legal persons to include material in the Multilateral System, and the report on the reviews in Article 13.2d(ii) of the International Treaty regarding payment rates and mandatory payments are contained in the document, IT/GB-9/22/9.1.2, *Report on Possible Measures to Encourage Natural and Legal Persons to Include Material in the Multilateral System and other Reviews and Assessments under the MLS*.¹
4. The report also summarises the major elements of the Report on the Status of Implementation of the CGIAR Principles on the Management of Intellectual Assets that the CGIAR System.
5. Issues related to the informal consultations on the enhancement of the Multilateral System are considered separately, under Agenda Item 9.2.²
6. Since the Eighth Session of the Governing Body, the Secretariat continued carrying out its tasks based on the existing consolidated advice and recommendations on the Multilateral System by the Governing Body to stakeholders, in order to facilitate the reporting process under the SMTA by Contracting Parties and other users through electronic means.
7. The Secretariat also continued to develop and make available online aggregate statistics on the transfer of materials, as well as managing the Data Store operations. Section V, *Analysis of the Germplasm Flow under the Multilateral System*, presents an overview of current trends in the distribution of plant genetic material for food and agriculture (PGRFA), while *Appendix 1* contains some additional key datasets and regional disaggregated data. *Appendix 2* presents data on materials available in the Multilateral System by national collections and international organizations.
8. Elements for a possible Resolution on the implementation and operations of the Multilateral System are given in *Appendix 3*. The draft also compiles other draft decision elements proposed in the documents listed under agenda item 9.1.

II. Availability of material in the Multilateral System

9. At each Session, the Governing Body has invited Contracting Parties to report on the PGRFA under their management and control, and in the public domain, that are in the Multilateral System, in accordance with Article 11.2 of the International Treaty. The Governing Body reiterated the invitation at its Ninth Session by Resolution 2/2019.³
10. In November 2021, the Secretary issued a notification inviting Contracting Parties and relevant stakeholders to share updated information on the germplasm they hold, and that is available in the Multilateral System.⁴

¹ IT/GB-9/22/9.1.2

² See document, IT/GB-8/19/8.2 Rev.1, *Report of the Ad Hoc Open-ended Working Group to Enhance the Functioning of the Multilateral System*.

³ Resolution 2/2019, www.fao.org/3/nb779en/nb779en.pdf

⁴ NCP GB9-014 – MLS, www.fao.org/3/cb7572en/cb7572en.pdf

11. At the same session, the Governing Body invited Contracting Parties and other holders of material to use, on a voluntary basis, the Digital Object Identifiers (DOIs) of the Global Information System for the identification of material available in the Multilateral System.

12. For the current reporting period 2019-2022, the data used for the analysis come from the following sources:

- notifications and communications sent to the Secretary;
- online catalogues, databases and information systems of partner institutions;
- material transferred under the SMTA as reported in national reports.

13. The notifications and communications received by the Secretary up to June 2022 on material available in the Multilateral System are posted online:⁵

- The Ministry of Agriculture, Nature and Food Quality of the Netherlands notified the Secretary of the availability in the MLS of three collections with up to 15 218 accessions (15/10/2020);
- The Federal Ministry of Agriculture, Regions and Tourism of Austria informed of the availability collections with more than 11 433 materials held by Austrian Genebanks and listed in their website (03/06/2022);⁶
- The National Botanic Garden of Belgium sent three annual communications, announcing the inclusion of 75 new materials of the apple collection located in Vliermaal, raising the total number of materials available to 174 accessions (15/12/2021);⁷

A. DIFFICULTIES ENCOUNTERED BY CONTRACTING PARTIES

14. In response to the request from the Eighth Session of the Governing Body, the Secretary issued a notification inviting Contracting Parties and stakeholders to share information about the operations of the Multilateral System, including on the difficulties encountered or the needs for capacity building for placing material in the Multilateral System. The number of responses received does not provide a consistent basis for a systematic analysis of all the problems. What follows is a summary of some of the issues raised.⁸

15. In general, the respondents reported that the lack of germplasm was the main limitation for notifying the Secretary that PGRFA were available in the MLS. Some countries have reported that there is a significant backlog of accessions in need of regeneration and multiplication due to budgetary constraints. Some respondents indicated that their institution benefited from foreign funding and projects supporting regeneration. Some respondents reported limitations related to the restrictions of staff access to fields and laboratories during the COVID-19 pandemic. In addition, some curators reported technical difficulties for *in vivo* maintenance conditions during the lockdowns.

16. Some Contracting Parties indicated that training and capacity building at the national level is needed to notify material available in the Multilateral System and for its actual distribution.

17. While some Contracting Parties reported that internal legal and administrative procedures were still a burden, others reported that they had revised and simplified the exchange process for material available in the MLS, reducing the entire shipment process by several weeks.

18. Some Contracting Parties reported that they were gradually assigning Digital Object Identifiers (DOIs) to the material in their collections to indicate the availability of PGRFA in the MLS, prioritising unique materials collected in the country, which were well characterised.

19. Some respondents reported that issues with the availability and functioning of quarantine facilities are a significant limitation for the distribution of materials. At the same time, some other

⁵ See www.fao.org/plant-treaty/areas-of-work/the-multilateral-system/collections/en/

⁶ See www.genbank.at

⁷ Additional information on the collection is available at www.boomgaardenstichting.be

⁸ NCP GB9-014 MLS– availability/transfers, available at www.fao.org/plant-treaty/notifications/detail-events/en/c/1454844/

countries reported progress in the collaboration between various government departments involved in the quarantine clearances, in the setting up of new physical facilities and new electronic information systems to exchange quarantine certificates. Specific issues raised by natural and legal persons and possible measures to encourage them to include material in the MLS are outlined in document IT/GB-9/22/9.1.2 Rev.1.⁹

B. DATA SOURCES

20. Most of the holders mentioned above have also provided detailed information on the material in the Multilateral System through the Global Information System, through Genesys or through the World Information and Early Warning System on PGRFA (WIEWS).

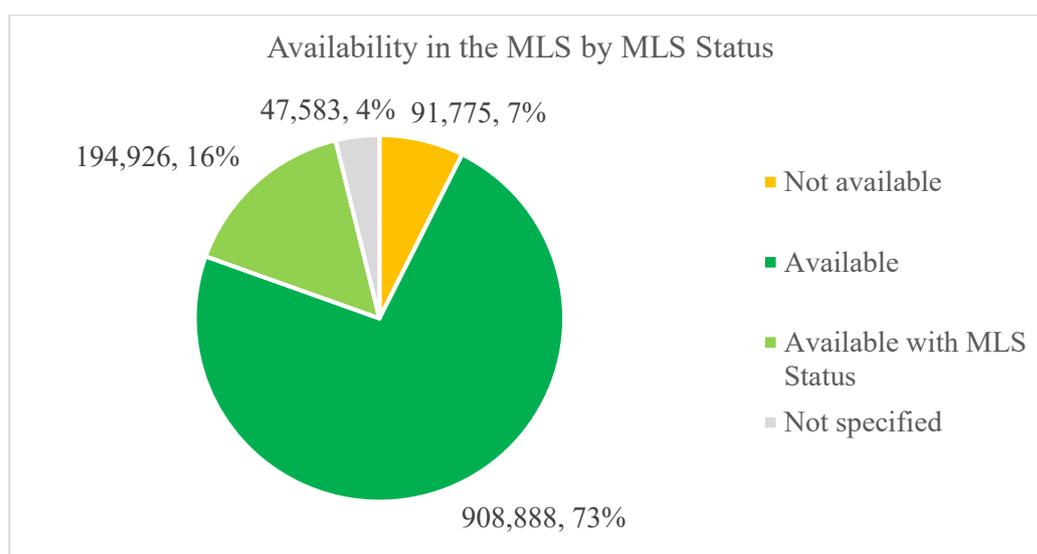
21. Additional figures and details for material held by the CGIAR and other organizations that signed Article 15 Agreements can be found in document IT/GB-9/22/16.4.2.¹⁰

22. As of 20 July 2022, PGRFA holders have reported the availability of 1 103 814 accessions in the MLS through the Global Information System. In total, 89 percent of the materials with records published in the Global Information System are materials available in the Multilateral System, as shown in Figure 1.

23. For 16 percent of those materials, the descriptor MLS Status registered with the Digital Object identifier provides additional information on the origin of the material. Figure 2 shows the reason the material has been made available in the MLS. Although the figure is not yet representative of the entire dataset, it shows the ability to obtain additional information without any additional reporting burden on the PGRFA holders.¹¹

24. Additionally, the GLIS Portal publishes accession-level information for more than 45 000 PGRFA made available in the MLS by various partners of the Benefit-sharing Fund and other projects. For each project, the Portal displays the list of PGRFA studied. Users can select the project symbol to go to the project details page or the number of PGRFA to see a detailed list of the corresponding DOIs. At the time of preparation of this report, additional materials are being registered by projects under the fourth project cycle of the BSF, with the support of the help-desk.

Figure 1. The Global Information System (GLIS) published information at accession-level for 1 103 814 PGRFA available in the MLS.



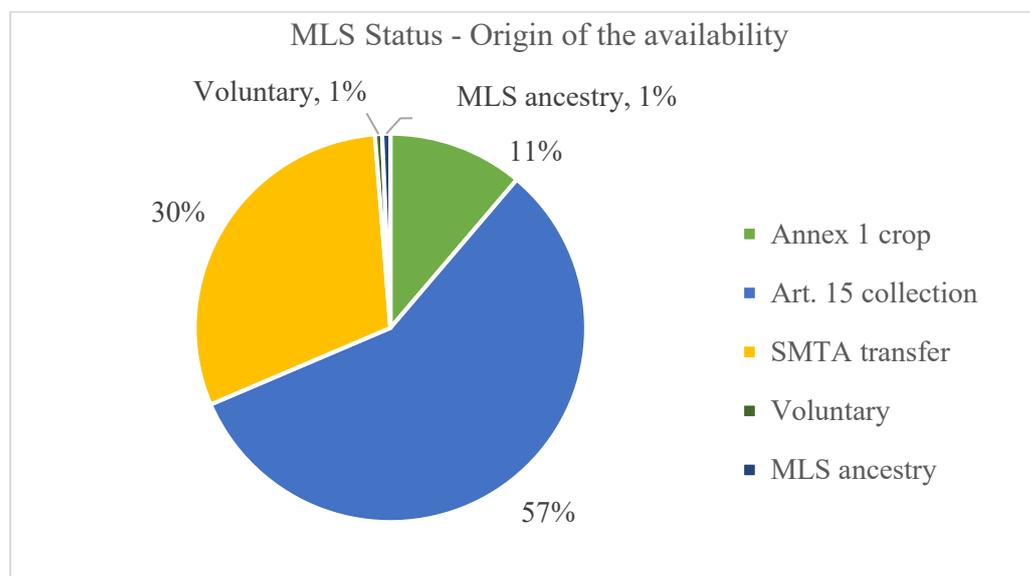
Source: GLIS Portal, as of 20 July 2022

⁹ Available at www.fao.org/3/ni826en/ni826en.pdf

¹⁰ Available at www.fao.org/3/ni851en/ni851en.pdf

¹¹ The statistics are generated with the DOI descriptor R07, "MLS Status": The status of the PGRFA with regard to the Multilateral System of Access and Benefit-Sharing (MLS). See www.fao.org/3/a-bt113e.pdf

Figure 2. The status of the PGRFA with regard to the Multilateral System of Access and Benefit-Sharing (MLS), additional information on the origin of the availability is displayed for 16 percent of the records published through the Global Information Portal (GLIS).



Source: GLIS Portal, as of 20 July 2022

C. ANALYSIS OF DATA

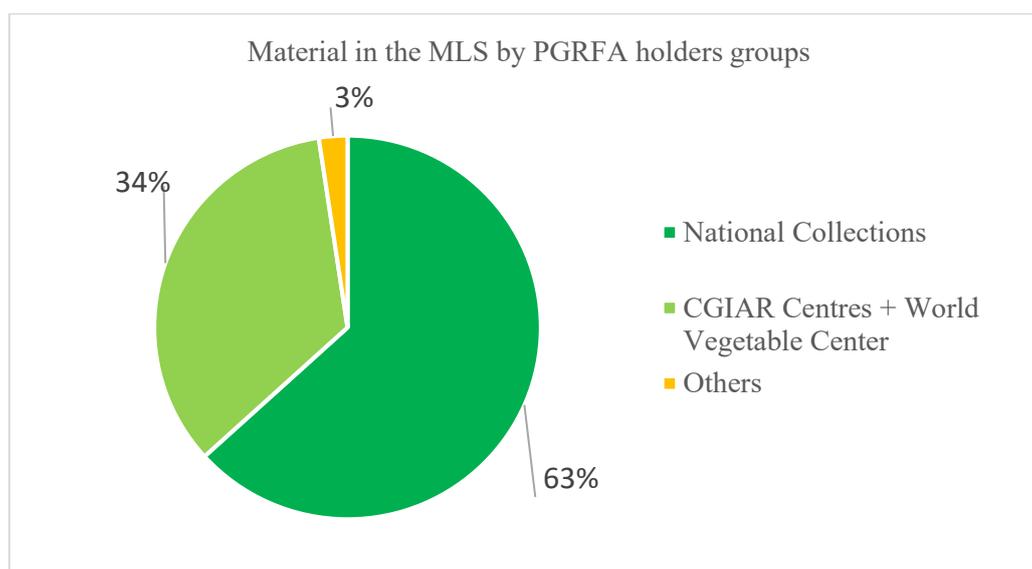
25. Based on the analysis of the information contained in various databases and information systems, communications to the Secretary, national reports on implementation and other information sources, the Secretary has updated the list of materials available in the Multilateral System per country and CGIAR Center, as contained in *Appendix 2*.

26. Given the dispersal of data sources, for the elaboration of the report on germplasm availability in the Multilateral System provided in *Appendix 2*, the Secretariat has collaborated with various partners and put together datasets from GLIS, WIEWS, EURISCO and Genesys, as well as direct communications to the Secretary.

27. The analysis of the data in *Appendix 2* shows a five percent increase in the PGRFA available in the Multilateral System by Contracting Parties compared to the report provided in 2019, with 1 482 503 materials available.

28. Taking into consideration the international collections of the CGIAR and the materials made available by other Article 15 institutions, the total amount of materials available in the Multilateral System rose up to 2 343 549, representing a 2.5 percent increase compared to the 2019 report. *Figure 3* shows the distribution of the materials available by the relevant category of PGRFA holder (National/International).

Figure 3. PGRFA available in Multilateral System of Access and Benefit-Sharing (MLS), showing the proportion between national and international holdings.



Source: Various sources, Secretariat of the International Treaty. July 2022.

III. Support to the users of the Multilateral System

29. During the 2019–2022 period, users continued receiving assistance through the Multilateral System Help-desk, by email and videoconference, online training sessions, and webinars organized in collaboration with other units of FAO, and in partnership with other organizations.

30. The regional webinars on the implementation of the Multilateral System, organized remotely due to the COVID-19 pandemic, helped increase support on the use of the SMTA and on reporting.¹² In the context of the 2022 webinars, the Secretariat noted that, due to changes in staff in many national organizations, knowledge on the operations of the Multilateral System needs to be constantly refreshed and maintained.

31. At its Eighth Session, the Governing Body requested the Secretary to finalise the Educational Module on the Multilateral System. The Module was published in February 2022.¹³ The Module provides an overview of the legal perspectives and historical background that led to the development of the Multilateral System and the list of Annex I crops. It also illustrates the core concepts and articles of Section IV of the International Treaty. The finalisation of this Module was generously funded through the FAO's Flexible Multi-Partner Mechanism (FMM).

32. The first two lessons of the Module are aimed at a broad learner group, especially new comers to the Multilateral System. Lessons three and four contain practical elements related to the day-to-day operations and might be of interest to those exchanging material or involved in the planning and implementation of the Multilateral System at the national level. All the lessons provide an extensive list of resources and references for further reading and learning. The Module has been designed to contribute to supporting the implementation of the International Treaty, as well as the Post-2020 Global Biodiversity Framework, when adopted.

33. At the webinars organised in May 2022, the participants welcomed the Educational Module. At the same time, they made three suggestions to the Secretariat: its translation into other languages to facilitate its application, the conversion of the booklet into a short interactive training course and the further documentation and compilation of national experiences on the implementation of the Multilateral System. In this context, national focal points for the International Treaty and other

¹² Four webinars were organized on 5, 10 and 11 May 2022.

¹³ FAO. 2021. The Multilateral System of Access and Benefit-sharing – Module IV. Rome, in www.fao.org/documents/card/en/c/cb7984en

participants suggested the organization of regional workshops to facilitate the exchange of views, experiences and relevant initiatives on the implementation of the Multilateral System.

34. The Secretariat published a new section on Frequently Asked Questions (FAQs) about the Multilateral System and the Standard Material Transfer Agreement online, in all the official languages of the International Treaty.¹⁴ These questions are mainly based on the opinions and advice provided by the *Ad Hoc Technical Advisory Committee on the Multilateral System and the Standard Material Transfer Agreement*.

35. The Secretariat also reviewed all the information available about the MLS and the SMTA on different online pages and published a new website section for the Multilateral System in June 2022. The new section improved the way in which information and resources are presented. All the texts previously published, were reviewed, updated and supplemented as needed.

36. The support for the national implementation of the Multilateral System would not be possible without the extensive network of collaborations and partnerships established over the years at the national, regional and international levels.

37. The Secretariat also collaborates with a wide range of research groups that analyse data provided by the Secretariat through various information systems, including data on the availability of material and transfers of materials. Some collaborations during this period included the Commission on Genetic Resources for Food and Agriculture and the CGIAR for the preparation of a background study that incorporates that from the MLS Data Store.

A. IMPACT OF MEASURES AND RESPONSE TO THE COVID-19 PANDEMIC

38. The impact of the COVID-19 pandemic on the operations of the Multilateral System was the object of two surveys conducted by the Secretariat, followed by an online International Panel organised with the support of the Kingdom of Morocco and in collaboration with the Global Crop Diversity Trust.¹⁵

39. Since the beginning of April 2020, the Secretariat has received several communications on how the measures instituted in response to the COVID-19 pandemic affected the operation of genebanks, e.g., the closure of facilities due to lockdowns and community quarantine or the designation of skeleton staff to ensure the functioning of cold rooms and field infrastructure to conserve and duplicate materials. The communications conveyed that conservation was the priority while distribution was paused in some cases. More detailed information on the impacts of the COVID-19 pandemic can be found in the document, IT/GB-9/22/6.2, *Report on the Impacts of the COVID-19 Pandemic on the Implementation of the International Treaty*.¹⁶

40. At the international level, the annual report of the CGIAR for 2020 also showed how the pandemic necessitated the reassignment of staff within most genebanks and germplasm health units and to allow some activities to be undertaken remotely. The priority was to maintain the collections in safe conditions, but also to support staff in the laboratories, screenhouses and fields to carry out critical operations to avoid the loss of accessions. Some of the critical activities reported included the monitoring of cold rooms, subculturing in vitro accessions and processing seed from harvest to cold room. Unfortunately, in a small number of cases, harvests were lost. In general terms, most genebanks continued to respond to requests for germplasm and phytosanitary testing as a priority. Germplasm

¹⁴ At its Fifth Session, the Governing Body took note of the opinions and advice provided by the Committee as helpful guidance for Contracting Parties in implementing their obligations under the International Treaty, and requested the Secretariat to make those opinions and advice easily available, including through its website, so that all users could benefit from the guidance.

¹⁵ The survey was announced through a notification www.fao.org/plant-treaty/notifications/detail-events/en/c/1301123/

¹⁶ Available at www.fao.org/3/ni821en/ni821en.pdf

distributions declined by around 50 percent compared to a normal year. However, more than 90 percent of requests received were fulfilled after the lockdowns were lifted.¹⁷

B. INSTITUTIONS THAT SIGNED AGREEMENTS UNDER ARTICLE 15 OF THE INTERNATIONAL TREATY

41. The activities of institutions that signed agreements under Article 15 of the International Treaty in relation to the Multilateral System are described in the document, IT/GB-9/22/16.4.2, *Reports from Institutions that have Concluded Agreements with the Governing Body under Article 15 of the International Treaty*.¹⁸ These reports provide valuable information on the management of the collections, including availability and distribution of germplasm.

42. The report from the International Centre for Biosaline Agriculture (ICBA) contains a summary of the 790 accessions belonging to 11 crops obtained during the period 2020–21, information on the seed viability tests conducted on 1 880 cultivars, more than 2 300 accessions regenerated, and about 1 500 accessions of five important crops characterised (Amaranth, Barnyard grass, Mung bean, Teff and Triticale). The report also refers to the 650 seed samples of 18 different crops distributed to eleven countries around the world.¹⁹

43. Up to 95 percent of the 15 452 materials in the ICBA’s collection have been assigned a Digital Object Identifier, and the Centre has communicated its plans to complete the full assignment by the end of 2022.²⁰

44. CGIAR Centers’ report provides updates on the number of accessions that comprise the germplasm collections held by the eleven Centres within the Multilateral System with 722 525 materials up to 31 December 2021, according to Table 1 of the CGIAR Report. The number of samples distributed since 2007 by each Center is contained in Table 2, and the regional proportions of such distribution are in Figure 2 of the same document.

C. PRACTICE OF THE CGIAR CENTRES ON THE MANAGEMENT OF INTELLECTUAL ASSETS RELATED TO PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

45. Following a first request made to CGIAR in 2017 and the report on the Status of Implementation of the CGIAR Principles on the Management of Intellectual Assets that the CGIAR System submitted in 2019, the Governing Body, at its Eighth Session:

“Invit[ed] the CGIAR System to continue reporting on the application of the CGIAR Principles on the Management of Intellectual Assets to germplasm managed under the framework of the International Treaty, parts thereof, or information generated from the use of this germplasm.”²¹

46. In response to the invitation, CGIAR submitted a new report to the Governing Body in June 2022. The report is available in the document, IT/GB-9/22/9.1/Inf.2, *The status of implementation of the CGIAR Principles on the Management of Intellectual Assets: a submission from CGIAR to the Ninth Session of the Plant Treaty’s Governing Body*.²²

¹⁷ The 2020 Annual Report of the CGIAR Genebank Platform is available at www.genebanks.org/wp-content/uploads/2021/06/2020-Genebank-Platform-Annual-Report.pdf

¹⁸ The overview of all the reports received, is contained in document, available at www.fao.org/3/ni851en/ni851en.pdf.

¹⁹ Namely: Bahrain, Botswana, Gambia, India, Liberia, Morocco, Mozambique, Oman, Togo, United Arab Emirates, and Uzbekistan.

²⁰ The list of ICBA materials with a DOI assigned is available in the GLIS Portal and at [biosaline-my.sharepoint.com/:x/g/personal/s_thushar_biosaline_org_ae/EZkvfjCh7vNNgA64Ed0j-KgBMAbB6fIUNaNDKwd-zWh5pg?e=OgggmS](https://my.sharepoint.com/:x/g/personal/s_thushar_biosaline_org_ae/EZkvfjCh7vNNgA64Ed0j-KgBMAbB6fIUNaNDKwd-zWh5pg?e=OgggmS)

²¹ Resolution 2/2019, paragraph n. 10.

²² Available at www.fao.org/3/cc1205en/cc1205en.pdf

47. In its submission to the Ninth Session, the CGIAR refers to the publication of the CGIAR Intellectual Assets Management Reports for 2019 and 2020. The report for 2021 was finalised in July 2022 and is also available online.²³

48. The report to the Governing Body refers to the annual CGIAR Intellectual Assets Management Reports and the public disclosures on the websites of CGIAR Centers concerning Limited Exclusivity Agreements (LEAs) and/or Restricted Use Agreements (RUAs) they enter into, and/or intellectual property (IP) applications they make, or allow third parties to make, with respect to their intellectual assets (IA). In addition, the report also reviews content of the CGIAR IA Principles as well as the annual reporting and compliance monitoring cycle that has been adopted across the CGIAR System.

49. As the request by the Governing Body in 2019 referred to germplasm managed under the framework of the International Treaty, the report clarifies that all plant germplasm or information generated from the use of such germplasm that is the subject of a Restricted Use Agreement, Limited Exclusivity Agreement or IP Application as reported in the annual CGIAR Intellectual Assets Management Reports, were developed, at least in part, through the use of PGRFA held in trust by the Centers, or from PGRFA acquired by the Centers under an SMTA.

50. The report also informs that the requests made by the Governing Body in 2017 and 2019 led CGIAR Centers and the System Organization, with guidance from the highest level of CGIAR governance structure and support from the Genebank Platform Policy Module, to share additional information on all LEAs, RUAs, IP applications in the annual CGIAR Intellectual Asset Management Reports, and in the form of independent disclosures published by the Centers.

51. As further explained in the report, internal guidance and training contributed to increasing transparency in Centers' communications when entering into restrictive arrangements. In particular, the standard template used by Centers to report to the System Organization was amended in 2019 to include additional questions concerning whether or not the genetic resources used by the Center to develop the IAs that are the subject of the patent or plant variety protection applications, RUAs or LEAs were acquired under the SMTA or subject to other access and benefit-sharing laws, and also the due diligence that the Centers exercised to ascertain whether or not such laws apply. The template also requires Centers to explain, in the context of each specific patent or plant variety protection application, RUA or LEA reported, if (and how) a downstream entity commercializing the IAs (or derivatives) will be bound by benefit sharing requirements in circumstances in which such requirements are applicable.

52. As PGRFA held in trust or acquired under an SMTA by the Centers continue to be essential resources for the development of plant germplasm or information generated from the use of such germplasm that is subject to restrictive agreements or IP applications, and considering that those agreements and applications are of actual or potential relevance to benefit-sharing requirements under the International Treaty in case of commercialization by a downstream entity of IAs or derivatives, the Governing Body may wish to:

- thank the CGIAR for the report and the increased transparency in Centers' communications when entering into restrictive agreements concerning plant germplasm or information generated from the use of such germplasm;
- invite CGIAR to continue reporting on the application of the CGIAR Principles on the Management of Intellectual Assets to germplasm managed under the framework of the International Treaty, parts thereof, or information generated from the use of this germplasm.

²³ The 2019 Report is available at cgispace.cgiar.org/handle/10568/110046, the 2020 Report at cgispace.cgiar.org/handle/10568/116131, and the 2021 Report at cgispace.cgiar.org/handle/10568/120060

IV. The Third Party Beneficiary

53. In accordance with Article 9 of the *Third Party Beneficiary Procedures*, the Third Party Beneficiary shall submit to the Governing Body, at each of its Regular Sessions, a report setting forth certain information regarding the fulfilment of its roles and responsibilities.²⁴

54. In the biennium 2020–21, the Third Party Beneficiary received a letter from a civil society organization referring to a patent application by an international institution and licensing practices of another international institution. In the letter, it was claimed that the patent and the licensing scheme in question appear to contravene obligations related to the implementation of the Multilateral System, in particular with regard to intellectual property restrictions limiting access to germplasm, the SMTA and monetary benefit-sharing.

55. The Third Party Beneficiary addressed a communication to the two institutions, and upon review of the information and explanations provided by them, determined that there was no reason to believe that the obligations under the SMTA had not been complied with.

V. Analysis of Germplasm Flows under the Multilateral System

56. The detailed figures of germplasm flows under the Multilateral System are contained in *Appendix 1*. It is to be noted that the statistics differentiate between Contracting Parties, Article 15 institutions and non-Contracting Parties. Additionally, the statistics on transfers within the CGIAR Centers are also provided for ease of reference.

A. USE OF THE SMTA AND TRANSFERS OF PGRFA

57. As of 10 June 2022, the Data Store has recorded 90 690 SMTAs (an increase of 20 percent since the last report) from providers located in 56 countries, distributing material to recipients based in 181 countries. Out of those SMTAs, 65 225 were sent to recipients in Contracting Parties to the International Treaty, while 25 465 SMTAs were sent to recipients not located in Contracting Parties. The statistical module indicates an average of 16 SMTAs reported per day since August 2017.

58. If we take into account the other notifications of material transferred received directly by the Secretariat since the last Session, but not yet reported to the Data Store, the total amount of material transferred is 6 396 485 with 91 124 SMTAs.

59. The data accumulated in the Data Store consolidates the positive trend in the reporting. Figure 4 below has been generated taking into account the actual total number of SMTAs reported every year since 2007. It is to be noted that the reporting for the last three years of the graph will continue to change before the reporting period will come to an end.

60. As of mid-June 2022, more than 6.3 million PGRFA had been transferred and reported. From the total amount of material transferred, 10.6 percent was distributed by Contracting Parties, 89.4 percent by Article 15 institutions. Almost 25 500 materials were distributed by other providers in non-Contracting Parties.

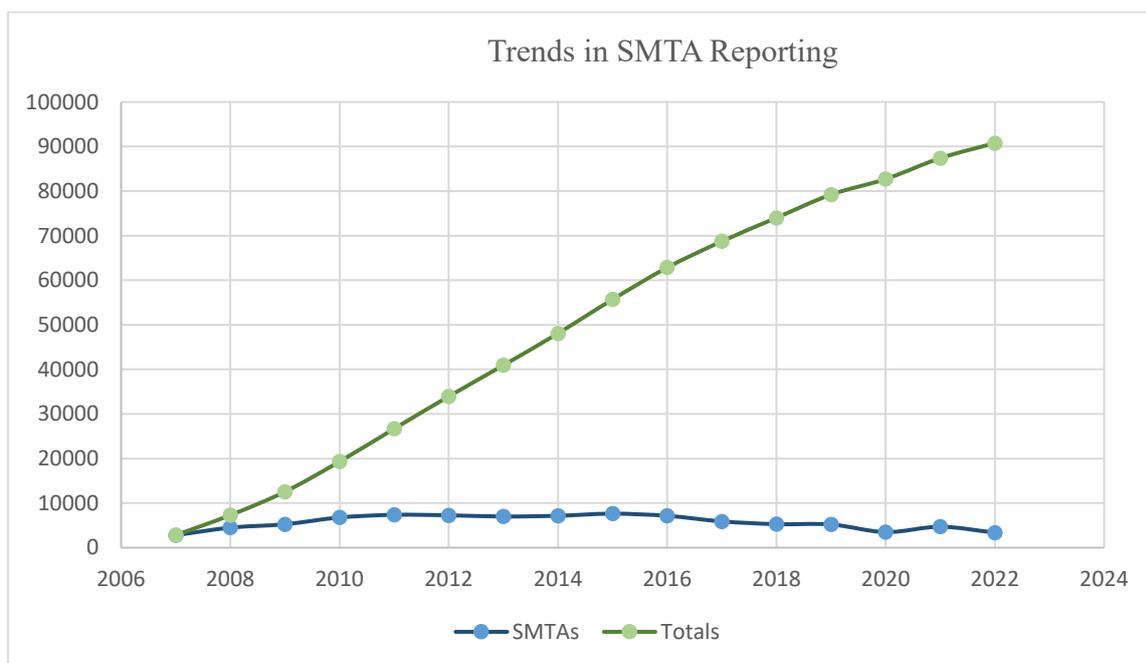
61. Additionally, 0.5 percent of the materials transferred with the SMTA belong to crops not listed in Annex I of the International Treaty. Further analysis of the data from 2007 up to June 2022 reveals that 4 205 agreements transferred non-*Annex I* material to recipients in developing countries, 716 more than three years ago. The number of non-*Annex I* materials distributed to developing countries amounted to 128 230 accessions and 188 109 accessions to developed countries with increases of about 40 and 20 percent respectively, over the past biennium. It is to be noted that a significant proportion of those is domestic transfers.

²⁴ The full Report of the Third Party Beneficiary, including the financial and technical aspects, is contained in document, IT/GB-9/22/9.1.3, *Report on the Operations of the Third Party Beneficiary*. www.fao.org/3/ni827en/ni827en.pdf

62. From August 2019, about 760 000 materials were transferred and reported. Reaching six million materials transferred during the present biennium represented a major milestone in the operations of the Multilateral System.

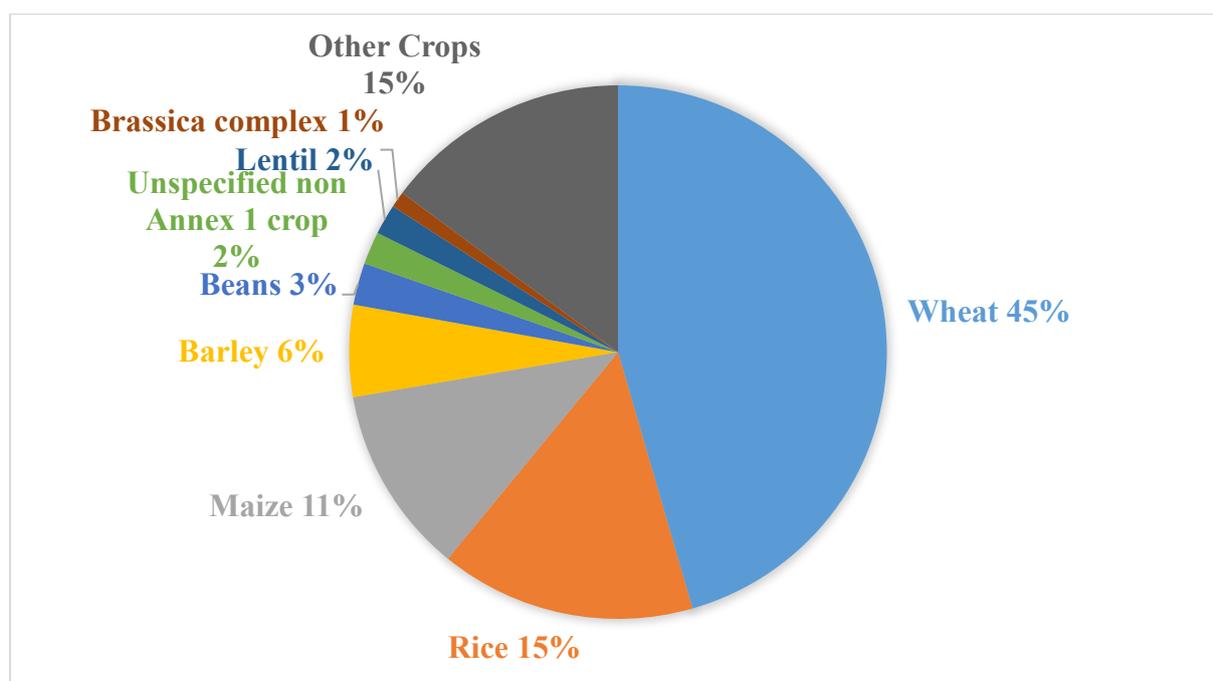
63. The statistics at crop level show that 45 percent of the germplasm reported belong to wheat, 15 percent to rice, 11 percent to maize, 6 percent to barley, 3 percent to beans. In general terms, we can consider the trends displayed in Figure 5 very similar to those generated in 2017 and in line with those presented in 2015.

Figure 4. Trends in the reporting of SMTAs for the period 2007-2020, based on the total number of SMTAs reported per year.



Source: MLS Data Store, Secretariat of the International Treaty. 20 July 2022.

Figure 5. Percentages of materials of top crops.



Source: MLS Data Store, Secretariat of the International Treaty. Data as of 10 June 2022.

64. During the 15 years of their operation under the Multilateral System, from January 2007 to December 2021 inclusive, CGIAR Centers' genebanks and breeding programs distributed over six million PGRFA samples under 61 000 SMTAs. Twenty nine percent of those samples were sent to recipients in Asia, 19 percent to recipients in Africa, 19 percent to recipients in Europe, 14 percent to Latin America and the Caribbean, 11 percent to the Near East, and 7 percent and 1 percent to North America and Southwest Pacific respectively.²⁵

65. The number of users of Easy-SMTA has reached 9 627, up from the 2 360 users registered three years ago. During the first semester of 2022, an additional 3 378 users registered. The sizable addition of user accounts is mostly due to the two rounds of the Citizen Science experiment carried out under the INCREASE project in 2021 and 2022. About 16 percent of the users registered since 2011 are organizations, while the other users registered individually. In total, the System indicates that there are around 13 147 unique recipients.

B. PGRFA UNDER DEVELOPMENT

66. As of 18 July 2019, 19 738 SMTAs out of 90 688 reported the transfer of PGRFA under Development, which represents 22 percent. Figure 6 shows the list of PGRFA under Development by crop as reported to the MLS Data Store.

67. Most of the SMTAs reported for the transfer of PGRFA under Development since 2007 had an Article 15 institution as the provider. In total, about one million and a half materials under Development have been transferred and reported. Table 1 below provides information on the distribution of PGRFA under Development by crop.

Figure 6. List of PGRFA under Development by Crop.

PGRFA Under Development	
Rice	492,716
Wheat	330,166
Barley	227,814
Chickpea	184,916
Lentil	106,225
Faba bean/vetch	41,487
Pearl millet	24,057
Cassava	11,883
Sorghum	10,725
Potato	9,377
Groundnuts	8,905
Grasspea	8,855
Beans	5,012

Source: MLS Data Store, Secretariat of the International Treaty. Data as of 10 June 2022.

²⁵ See document, IT/GB-9/22/16.4.2, Appendix 3, available at www.fao.org/3/ni851en/ni851en.pdf

VI. Guidance Sought

68. The Governing Body is invited to take note of the information provided in this document and provide guidance for the further implementation of the Multilateral System. In particular, the Governing Body is invited to provide guidance on the availability of material in the Multilateral System, on the modalities for assistance to Contracting Parties and other users of the Multilateral System, and on any other aspects related to the operations of the Multilateral System that the Governing Body may consider necessary. Elements for a possible Resolution are provided in *Appendix 3* for its consideration.

Appendix 1**Data reported through the Data Store²⁶****Table 1:** Number of SMTAs reported through the MLS Data Store.

	CPs	Art.15	Non-CPs	Total
Total Number of SMTAs reported by	28 858	61 076	754	90 688
With PGRFA under development	97	19 639	2	19 738
Number of providers in countries per category	39	20	5	64
Total number of recipient countries				181
With recipients in Contracting Parties	28 320	48 457	447	77 224
With recipients in non-Contracting Parties	538	12 619	307	13 464
Average SMTAs per day since January 2007				16

Table 2A: Number of PGRFA reported through the MLS Data Store.

	CPs	Art.15	Non-CPs	Total
Total Number of PGRFA distributed by	646 020	5 714 732	33 563	6 394 315
Annex I crops	428 497	5 632 559	16 920	6 077 976
Non-Annex I crops	217 523	82 173	16 643	316 339
Non-Annex I material distributed to developing countries	38 299	75 223	14 708	128 230
Non-Annex I crops distributed to recipients in developed countries	179 224	6 950	1 935	188 109
PGRFA under development (PGRFAuD)	3 744	1 474 388	2	1 478 134
Non-Annex I material that is PGRFAuD	976	14 260	1	15 237

²⁶ Data source for all the tables: MLS Data Store as of 10 June 2022. Contracting Parties (CPs), Non-Contracting Parties (Non-CPs), Article 15 Institutions (Ar.15).

Table 2B: Number of PGRFA reported through the MLS Data Store. Cont'd

	CPs	Art.15	Non-CPs	Total
Distributed to recipients in Contracting Parties by	613 705	4 746 102	16 418	5 376 225
Distributed to recipients in non-Contracting Parties by	32 264	968 424	16 958	1 017 646
Average PGRFA distributed per day since 2007				1 134

Table 3: Registered users of Easy-SMTA.

Total	9 627
Number of Recipients	13 147

Table 4: Number of SMTAs by source region of the provider, reported by Contracting Parties, Article 15 Institutions and by non-Contracting Parties

	By CPs	By Art.15	By non-CPs	Total
Africa	71	15 496	9	15 576
Asia	710	15 596	743	17 049
Europe	25 987	3 437	0	29 424
Latin America and the Caribbean	109	24 294	2	24 405
Near East	68	2 219	0	2 287
North America	1 683	0	0	1 683
Southwest Pacific	230	34	0	264

Table 5: Number of SMTAs by region of the recipient.

SMTA received by destination region	Total
Africa	12 219
Asia	23 009
Europe	32 703
Latin America and the Caribbean	10 124
Near East	7 017
North America	4 736
Southwest Pacific	880

Table 6: Number of PGRFA by source region of the provider.

	By CPs	By Art.15	By non-CPs	Total
Africa	2 916	939 017	123	942 056
Asia	7 534	1 154 656	33 405	1 195 595
Europe	524 698	258 175	0	782 873
Latin America and the Caribbean	3 810	2 962 046	35	2 965 891
Near East	2 797	400 031	0	402 828
North America	97 373	0	0	97 373
Southwest Pacific	6 892	807	0	7 699

Table 7: Number of PGRFA by region of the recipient.

	By CPs	By Art.15	By non-CPs	Total
Africa	1 078 093	324	128 614	1 207 031
Asia	1 503 454	15	369 915	1 873 475
Europe	1 124 104	0	99 559	1 223 663
Latin America and the Caribbean	507 457	7	387 638	895 102
Near East	672 003	0	28 537	700 540
North America	418 404	0	0	418 404
Southwest Pacific	72 619	98	3 383	76 100

Table 8: Top 10 destination countries as indicated in the SMTA by number of PGRFA.

India	904 459
Kenya	335 255
Mexico	302 494
Republic of Türkiye	266 009
United States of America	250 563
China	214 565
Germany	211 483
Islamic Republic of Iran	198 819
Pakistan	174 367
Canada	167 841

Table 9: Top 10 crops distributed by number of PGRFA.

Wheat	2 911 264
Rice	983 009
Maize	728 311
Barley	355 706
Chickpea	278 810
Beans	162 325
Unspecified non-Annex 1 crop	126 472
Lentil	117 181
Brassica complex	62 126
Sorghum	59 269

Table 10: Distribution of SMTAs, PGRFA, PGRFAuD by CGIAR Centers and as of 10 June 2022, with indication of the reporting period to the MLS Data Store for each Center.

Center	SMTAs	Samples	PUD	From	To
AfricaRice	598	53 351	30 714	2007-03-05	2022-01-29
Bioversity	554	8 595	831	2007-01-24	2021-11-18
CIAT	3 077	298 291	36 646	2007-01-05	2022-02-24
CIMMYT	26 644	3 211 789	0	2007-03-16	2021-12-21
CIP	790	22 513	12 228	2007-01-19	2022-05-12
ICARDA	11 531	992 246	873 178	2007-02-13	2021-12-21
ICRAF	361	1 738	0	2011-09-03	2022-06-08
ICRISAT	6 048	297 367	78 543	2006-12-07	2021-11-26
IITA	1 172	48 891	0	2007-03-07	2022-02-09
ILRI	944	13 712	0	2007-02-22	2022-02-14
IRRI	9 323	765 432	442 220	2007-01-04	2022-02-09

Appendix 2**Availability of Materials in the Multilateral System²⁷**

Name	Number of accessions under medium- or long-term storage	Available under the MLS
Afghanistan	953	953
Albania	4,570	2,343
Armenia	6,458	2,777
Australia	249,056	109,526
Austria	11,964	11 433
Azerbaijan	13,430	8,386
Bangladesh	34,467	9,917
Belarus	27,494	6
Belgium	9,311	10,674
Bhutan	1,162	58
Bosnia and Herzegovina	971	6
Brazil	203,302	11,232
Bulgaria	69,767	67
Burkina Faso	n.a	16,479
Burundi	n.a	188
Canada	115,185	115,185
Chile	45,115	6
Costa Rica	3,057	164
Croatia	4,394	442
Cyprus	2,541	504
Czechia	56,269	56,716
Denmark	1,043	442
Ecuador	29,149	13,546
Egypt	14,610	10,998
Eritrea	4,676	1,205
Estonia	3,336	2,948
Ethiopia	73,164	52,657
Finland	728	184
France	37,482	4,237
Germany	183,493	117,564
Ghana	418	163
Guinea	96	96
Guyana	1,294	81
Honduras	64	64
Hungary	49,393	2,617
India	420,324	26,523

²⁷ The data in the first column have been generated from WIEWS "Number of accessions under medium- or long-term storage". Some rows have been added for countries that have reported directly to the Secretary on material available. The data in the second column takes into account the submissions to WIEWS, EURISCO/Genesys, GLIS and the notifications and communications to the Secretary at the time of preparation of this document. The CGIAR Centres provide additional disaggregated data on the MLS availability in its report to the Governing Body.

Indonesia	4,902	332
Ireland	1,620	1,601
Italy	53,845	29,915
Japan	227,052	38,952
Jordan	4,835	2,387
Kenya	51,405	25,054
Kyrgyzstan	2,638	1,382
Lao People's Democratic Republic	n.a	440
Latvia	2,608	1,751
Lebanon	2,340	491
Lithuania	2,246	1,326
Luxembourg	n.a	12
Madagascar	7,825	7,563
Malawi	3,253	2,702
Malaysia	13,074	9,998
Mali	2,473	2,204
Mongolia	19,593	1,197
Montenegro	388	35
Morocco	71,783	351
Myanmar	12,050	47
Netherlands	23,369	15,759
Niger	4,795	3,876
Norway	2,059	2,059
Pakistan	41,422	30,345
Panama	824	391
Papua New Guinea	2,506	2,110
Peru	16,216	5,258
Philippines	9,912	4,271
Poland	87,367	56,515
Portugal	68,342	38,005
Romania	44,184	7,026
Senegal	1,890	898
Serbia	5,588	117
Slovakia	17,164	12,629
Slovenia	3,008	1,332
Spain	78,782	24,878
Sri Lanka	12,392	3,281
Sudan	17,168	9,002
Sweden	448	479
Switzerland	40,037	33,965
Tajikistan	4,775	3,782
Togo	845	845
Tunisia	24,485	13,780
Türkiye	38,961	156
Uganda	5,600	2,236
United Kingdom of Great Britain and Northern Ireland	846,289	17,655

United States of America	603,833	469,844
Uzbekistan	68,169	189
Viet Nam	26,373	10,880
Zambia	7,583	4,246
SUBTOTAL	4,267,052	1,482,503

Name	Number of accessions under medium- or long-term storage	Available under the MLS
CGIAR + World Vegetable Center	884,765	805,124

Name	Number of accessions under medium- or long-term storage	Available under the MLS
CATIE	10,950	9,275
SPC- CePaCT	2,232	954
ICBA	15,142	15,141
Nordic Genebank (NGB)	33,344	30,552
SUBTOTAL	72,994	55,922

Group	Available under the MLS
National Collections	1,482,503
CGIAR Centres + World Veg. Center	805,124
Others	55,922
Grand Total	2,343,549

Appendix 3

DRAFT RESOLUTION **/2022
IMPLEMENTATION AND OPERATIONS OF THE MULTILATERAL
SYSTEM OF ACCESS AND BENEFIT-SHARING

THE GOVERNING BODY,

Recalling previous Resolutions on the operations and implementation of the Multilateral System, in particular, Resolutions 1/2015, 4/2017 and 2/2019;

Recalling the need to provide regular guidance to Contracting Parties and institutions that have concluded agreements under Article 15 of the International Treaty for the effective and efficient operations of the Multilateral System;

Recalling the provisions of Article 15.1 (a) of the International Treaty;

Recalling further the provisions of Articles 6.5 and 6.6 of the Standard Material Transfer Agreement;

Noting the continuing relevance of the CGIAR Principles on the Management of Intellectual Assets to the implementation of the obligations of CGIAR Centers pursuant to the agreements concluded with the Governing Body under Article 15 of the International Treaty, including on the CGIAR Centers management and distribution of plant genetic resources for food and agriculture under development;

Noting further that those Intellectual Assets Principles explicitly require Centres to comply with their obligations under the framework of the International Treaty, and serve as a mechanism for monitoring and compliance.

PART I: AVAILABILITY AND TRANSFER OF MATERIAL IN THE MULTILATERAL SYSTEM

1. *Welcomes* the information provided on the availability of material in the Multilateral System, *thanks* the Contracting Parties that have identified, at the accession level, the material that is available in the Multilateral System and *urges* them to continue updating this information regularly, and *further urges* the Contracting Parties that have not yet done so, to identify, at accession level, the material that forms part of the Multilateral System;

2. *Emphasizes* the importance of collections that are fully characterised and evaluated, and *appeals* to both Contracting Parties, and natural and legal persons to make them available in the Multilateral System together with the relevant non-confidential characterisation and evaluation data, and *further appeals* to donors to support characterisation of collections conserved in national genebanks of developing countries and countries with economies in transition;

3. *Invites* Contracting Parties and other holders of material to use, on a voluntary basis, the Digital Object Identifiers (DOIs) of the Global Information System for the identification of material available in the Multilateral System;

4. *Requests* the Secretary to update the report on the global availability of material in the Multilateral System and transfer of germplasm, including the identification of gaps and lessons learnt for the national implementation, for the consideration of the Eleventh Session of the Governing Body, and *decides* to include it in the MYPOW.

PART II: OPERATIONS OF THE MULTILATERAL SYSTEM

5. *Takes note* of the progress made since the Eighth Session with Easy-SMTA and the Data Store and *requests* the Secretary to continue maintaining the help-desk function on the operations of the Multilateral System;

6. **Welcomes** the publication of the Educational Module on the Multilateral System of Access and Benefit-sharing and **requests** the Secretary, subject to the availability of financial resources, to translate into other official languages and convert it into an online training module;
7. **Takes note** of the online training events and webinars organized to facilitate the implementation of the Multilateral System and **requests** the Secretary to organise regional implementation workshops to support Contracting Parties in strengthening the operations of the Multilateral System, including for the identification and notification of material available in the Multilateral System, and the operations of the Standard Material Transfer Agreement, including the reporting of transfers;
8. **Further requests** the Secretary to support Contracting Parties in the documentation and exchange of national experiences on the implementation of the Multilateral System and publish them on the website of the International Treaty;
9. **Invites** Contracting Parties and relevant international organizations to make available resources for, and collaborate with the Secretary in, organizing training programmes and workshops on the Multilateral System and in the documentation of national experiences and use cases;
10. **Requests** the Secretary to continue to work with the Article 15 Institutions to build capacity among a broader range of providers, including natural and legal persons, to implement the Multilateral System and to report on the use of the Standard Material Transfer Agreement.

PART III: PRACTICE OF THE CGIAR CENTRES ON THE MANAGEMENT OF INTELLECTUAL ASSETS RELATED TO PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

11. **Thanks** the CGIAR System for the submission of the report on the Status of Implementation of the CGIAR Principles on the Management of Intellectual Assets and the increased transparency in Centers' communications when entering into restrictive agreements concerning plant germplasm or information generated from the use of such germplasm;
12. **Invites** the CGIAR System to continue reporting on the application of the CGIAR Principles on the Management of Intellectual Assets to germplasm managed under the framework of the International Treaty, parts thereof, or information generated from the use of this germplasm.

PART IV: OPERATION OF THE THIRD PARTY BENEFICIARY

[The elements in this section are provided in the Appendix to the document, IT/GB-9/22/9.1.3, Report on the Operations of the Third Party Beneficiary.]

Recalling that the Governing Body, at its Third Session, had approved the Procedures for the Operation of the Third Party Beneficiary (Third Party Beneficiary Procedures)²⁸ for the carrying out of the roles and responsibilities of Third Party Beneficiary as identified and prescribed in the Standard Material Transfer Agreement under the direction of the Governing Body;

Recalling further that, in accordance with Article 4.2 of the Third Party Beneficiary Procedures, the Third Party Beneficiary may receive information on possible non-compliance with the obligations of the provider and recipient under a Standard Material Transfer Agreement from any natural or legal persons;

Recognizing that the Third Party Beneficiary will require adequate financial and other resources and that FAO, acting as Third Party Beneficiary, shall not incur any liabilities in excess of the funds available in the Third Party Beneficiary Operational Reserve;

13. **Takes note** of the Report on the Operation of the Third Party Beneficiary and **further requests** the Secretary and FAO to continue providing, at each Session of the Governing Body, such a report;

14. **Stresses the importance** for the effective functioning of the Third Party Beneficiary, of Article 4.2 of the Third Party Beneficiary Procedures, according to which the Third Party Beneficiary

²⁸ Annex to Resolution 5/2009.

may receive information on possible non-compliance with the obligations of the provider and recipient under a Standard Material Transfer Agreement from the parties under the Standard Material Transfer Agreement or any other natural or legal persons;

15. **Decides** to maintain the Third Party Beneficiary Operational Reserve for the 2022–2023 biennium at the current level of USD 283 280 and to review the same at its Tenth Session, and **calls** upon Contracting Parties that have not yet done so, intergovernmental organizations, non-governmental organizations and other entities to contribute to the Reserve;

16. **Authorizes** the Secretary to draw upon the Third Party Beneficiary Operational Reserve as may be needed for the implementation of the functions of the Third Party Beneficiary;

17. **Welcomes** the functional and cost-effective information technology tools and infrastructure that the Secretary has developed to facilitate the submission, collection and storage of information in the implementation of Article 4.1 of the Third Party Beneficiary Procedures and **requests** the Secretary to continue to apply adequate measures to ensure the integrity and, where required, the confidentiality of information.

PART V: REVIEWS AND ASSESSMENTS UNDER THE MULTILATERAL SYSTEM AND OF THE IMPLEMENTATION AND OPERATION OF THE STANDARD MATERIAL TRANSFER AGREEMENT

[The elements in this section are provided in the Appendix to the document, IT/GB-9/22/9.1.2 Rev.1, Report on Possible Measures to Encourage Natural and Legal Persons to Include Material in the Multilateral System and other Reviews and Assessments under the Multilateral System.]

18. **Thanks** Contracting Parties and stakeholders who provided information about measures taken to encourage natural and legal persons to include PGRFA in the Multilateral System;

19. **Requests** the Secretary to continue capacity development activities and awareness-raising efforts on the voluntary inclusion of plant genetic resources for food and agriculture in the Multilateral System by natural and legal persons, with the participation of National Focal Points and relevant stakeholders, subject to the availability of financial resources; and to prepare a briefing note to support natural and legal persons who are interested in including their plant genetic resources for food and agriculture in the Multilateral System;

20. **Invites** Contracting Parties to capitalize on the measures already taken to encourage and support natural and legal persons to make material available in the Multilateral System and to adopt additional ones;

21. **Requests** the Secretary to monitor progress on the voluntary inclusion of material in the Multilateral System by natural and legal persons and to report to the Governing Body at its [Eleventh] Session so that it could undertake the assessments and make the decisions foreseen under Article 11.4 of the International Treaty;

22. **Decides** to further postpone the reviews and assessments foreseen under Article 13.2d(ii) of the International Treaty, to its [Tenth] Session.