

REVIEW ARTICLE

ITPGRFA: an Appraisal as a Prelude to the Ninth Session of the Governing Body 2022, New Delhi

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The International Treaty on Plant Genetic Resources for Food and Agriculture is a comprehensive legally binding agreement adopted during the 31st session of FAO in November 2001 at Rome. The present article is a collation of information related to key area of work of the Treaty, Committees and Working Groups of the Treaty, agenda and action taken by intergovernmental technical committees/expert groups and current scenario and prospects of the Treaty. The Governing Body (GB) is an apex body comprising of all contracting parties. The GB is responsible for policy guidance and all the decisions related to objectives and working of the Treaty. During GB meetings intersessional work of the past two years is reviewed. To date, eight sessions of GB have been convened and important decisions of the meetings are summarized here. The Ninth Session of the GB is scheduled to be held in New Delhi, India in 2022, the provisional Agenda for the Ninth Session is also elaborated in this appraisal.

Key Words: ITPGRFA, Governing Body, MLS, Intergovernmental technical committees, Expert groups

Introduction

The International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) is a comprehensive legally binding agreement adopted during the 31st session of FAO in November 2001 at Rome. The Treaty came into force on 29 June 2004. Currently, the Treaty has 148 Contracting Parties including European Union (Nnadozie, 2021).

The Treaty is historic, and for the first time, the enormous contribution made by the farmers to the development and conservation of crop diversity was recognised in the Treaty. The objectives of the Treaty are:

- Conservation of plant genetic resources for food and agriculture (PGRFA)
- Sustainable use of PGRFA
- The sharing of the benefits arising from the use of PGRFA in a fair and equitable way

The text of the Treaty is organised in various Articles in ten Parts. Overall objectives and directions of the Treaty are contained in Article 1 (Moore and Tymowaski, 2005); Article 2 provides the use of terms and definitions. Article 3 is related to the scope of the treaty. General provisions contained in Part II (Article 4-8), relating to conservation and sustainable utilization

of plant genetic resources for food and agriculture. Farmer's Rights are (FRs) contained in Part III (Article 9), the Multilateral System (MLS) of Access and Benefit-Sharing (MLS) contained in part IV (Article 10-13), financial provisions contained in Part V (Article 18) and supporting components contained in part VI (Article 19-35) of the Treaty (Fig. 1). The key area of work of the Treaty are represented by six different themes viz. benefit-sharing fund, global information system, sustainable use, farmer's rights, MLS and compliance. Article 4-8 of the Treaty indicates policies and measures for the national government about the conservation and sustainable use of PGRFA. Sustainable utilization is not defined in the Treaty, however, it implies making use of crop diversity to meet the food security needs of present generations, without compromising its availability, as the basis of food security for future generations (FAO, 2013). General provisions of the Treaty apply to all PGRFA, not just Annex I crops (Annex 1 crops are available for exchange under a MLS). Article 9 of the Treaty provides internationally agreed common ground for FRs, and provides measures for contracting parties to take at the national level for the protection and promotion of FRs. The Treaty provides protection of traditional knowledge, rights to participate in sharing of benefits arising out of the use of PGRFA and the right to participate in decision making related to PGRFA (FAO,

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2013). The Treaty promotes *in-situ* conservation through on-farm management of crops and *ex situ* conservation by establishing a network of gene banks. *In-situ* farm management allows crops to continuously evolve and adapt to the changing environmental conditions. *Ex-situ* conservation facilitates enhanced access and utilization, in addition to serving as a safety backup. The Treaty established a unique mechanism of the MLS as contained in Article 10-13 of the treaty. It covers 64 crops and forages listed in Annex I of the Treaty (Article 11). MLS provides farmers and breeders access to the available plant genetic resources and facilitates research and breeding for new varieties required to feed the galloping population (Article 12). The contracting parties have agreed on the creation of a benefit-sharing fund arising out of the use of PGRFA under Article 13. The benefit-sharing fund supports on-farm management projects in developing countries. The Treaty has given due importance to the

Global Plan of Action for conservation and sustainable use of plant genetic resources for food and agriculture (Article 14) and contracting parties should develop a coherent framework for technology transfer and exchange of information. The contracting parties recognized the importance of the *ex-situ* collections held by Consultative Groups on International Agriculture Research (CGIAR) and crops held in gene banks should be available as per the provisions MLS (Article 15). The Treaty indicated the need to encourage contracting parties to participate in international networks (Article 16) and develop a global information system to facilitate the exchange of PGRFA between contracting parties (Article 17). The Governing Body (GB), composed of all the contracting parties of the ITPGRFA, was established under Article 19. The GB is responsible for policy guidance and all the decisions of the Treaty (Fig. 1).

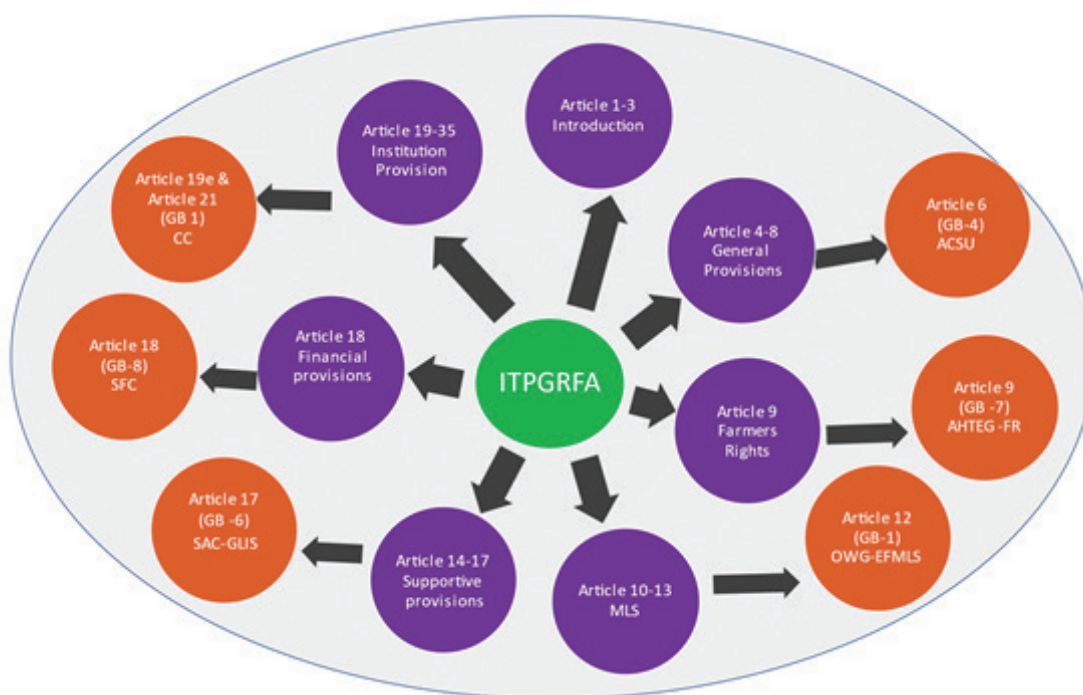


Fig. 1. Provisions and committees of ITPGRFA

GB: the Governing Body

ITPGRFA: International Treaty on Plant Genetic Resources for Food and Agriculture

ACSU: Ad Hoc technical committee on sustainable use of plant genetic resources for food and agriculture

AHTEG-FR: Ad Hoc technical expert group on farmers' rights

OWG-EFMLS: Ad Hoc open-ended working group to enhance the functioning of the multilateral system

SAC-GLIS: Scientific advisory committee on global information system

SFC: Ad Hoc Committee on funding strategy and resource mobilization

CC: Ad Hoc working group on procedures and operational mechanisms to promote compliance and address the issue of non-compliance (compliance committee).

Governing Body Sessions

The GB, convenes a meeting in alternate years to discuss various policies and plans of common interest and decisions are taken by adopting resolutions. These decisions are adopted by consensus (and not by voting), that means all contracting parties must agree to the resolution being adapted. During GB meetings work of the past two years is also reviewed; however, the consensus is always required for incorporating amendments in the Treaty (Article 23) and Annexes (Article 24). Annexes are related to the list of crops covered under the MLS and Arbitration and Conciliation. To date, eight sessions of GB have been convened and important decisions of the meetings are summarized in Table 1.

Committees and Working Groups of the Treaty

The GB has established intergovernmental technical committees/expert groups to advise the secretary on

these matters (Fig. 1). These committees work between different sessions of the GB to deal with the technical and operational matters and report to the GB.

Ad Hoc technical committee on sustainable use of Plant Genetic Resources for food and agriculture (ACSU)

The GB established ACSU by Resolution 7/2011 and reconvened by subsequently with renewed terms of reference (ITPGRFA, 2022). The ACSU committee was formed to report to the secretary on the following aspects-

- Review the compilation and summaries provided by the secretary on the conservation and sustainable use of PGRFA.
- Based on this review, identify examples and opportunities to support and assist Contracting Parties and stakeholders in promoting, enhancing and

Table 1. Sessions and important decisions of the GB of ITPGRFA

GB Sessions	Important decisions/resolutions
GB Session 1 June, 12-16 2006 Madrid, Spain	A total of three resolutions were adopted 1/2006 on funding strategy 2/2006 on the SMTA 3/2006 on the compliance
GB Session 2 29 Oct.- 02 Nov 2007 Rome, Italy	A total of three resolutions were adopted 1/2007 on compliance 2/2007 on Farmer's Rights 3/2007 programme of work and budget 2008-09
GB Session 3 Tunis, Tunisia	Of the total 8 resolutions adopted, important resolutions were- 4/2009 The MLS of access and benefit-sharing 5/2009 Procedures for third party beneficiary 6/2009 Implementation of Article 9 on farmer's rights 7/2009 Cooperation with the Commission on Genetic Resources for Food and Agriculture
GB Session 4 March 14-18, 2011 Bali, Indonesia	Of the total 9 resolutions adopted, important resolutions were- 01/2011 Financial rules of the GB 02/2011 Procedures and operational mechanisms to promote compliance and address issues of non-compliance 04/2011 Implementation of the MLS 05/2011 Operation of the Third Party Beneficiary 7/2011 Implementation of Article 6, Sustainable use of plant genetic resources
GB Session 5 Sept. 24-28, 2013 Muscat, Oman	Several resolutions and reports were discussed and the following important resolutions were adopted IT/GB-5/13/07 Add. 4 Arrangements for the Ad Hoc Open-Ended Working Group to Expand Benefit-Sharing and the Scope of the MLS IT/GB-5/13/09 Implementation of the Article 6 Sustainable Use of Plant Genetic Resources for Food and Agriculture IT/GB-5/13/10 Implementation of Article 9, Farmers' Rights
GB Session 6 Oct. 5-9, 2015 Rome, Italy	Several resolutions and reports were discussed and the following important resolutions were adopted IT/GB-6/15/07 Adopted vision paper on the development of the Global Information System IT/GB-6/15/09 Reviews and Assessments under the MLS and of the Implementation and Operation of the SMTA was presented and discussed
GB Session 7 30 Oct -3 Nov. 2017 Kigali, Rwanda	Several resolutions and reports were discussed and the following important resolutions were adopted IT/GB-7/17/07 Report of the Ad Hoc Open-ended Working Group to Enhance the Functioning of the MLS (Proposed for extending the mandate of Ad hoc working group on MLS and draft third revised draft of SMTA was presented and discussed

(ITPGRFA, 2006; 2007; 2009; 2011; 2013; 2015; 2017; 2019)

further developing the conservation and sustainable use of PGRFA as set out in Articles 5 and 6 of the International Treaty.

- Review the information provided by the secretary on the Toolbox for Sustainable Use of PGRFA.
- Based on this review, assess the relevance and effectiveness of the Toolbox and prepare concrete recommendations on how it can be monitored, evaluated and improved to guide better Contracting Parties and stakeholders for the sustainable use of PGRFA.
- Provide advice about the possibility of a future Joint Programme on Biodiversity in Agriculture for Sustainable Use of PGRFA based on the documentation prepared by the secretariat.

The committee has convened five meetings and has reported to the GB for consideration in the GB sessions (Table 2).

Ad Hoc Open-ended Working Group to Enhance the Functioning of the MLS (OWG-EFMLS)

The most important provision of the Treaty is a MLS and it covers 64 crops (called annexe 1 crops). These crops account for 80 per cent of all human consumption

from plants. Under the MLS, the exchange of germplasm is facilitated through the standard material transfer agreement (SMTA) which is a standard bilateral contract for the transfer of PGRFA (Agrawal et al, 2013). In the GB8 session, the CGIAR consortium informed that 60,000 SMTA had been signed to exchange germplasm. SMTA was adopted by the GB, through resolution 2/2006. The GB created a committee (resolution 2/2013) “OWG-EFMLS to advise secretary on issues related to –

- Increasing user-based payments and contributions to the Benefit-sharing Fund in a sustainable and predictable long-term manner.
- Enhancing the functioning of the MLS by additional measures.

The committee provided valuable technical input to the GB for improving the functioning of MLS (Table 3).

Governing Body extended the mandate of the working groups through various resolutions (resolution 1/2015 and resolution 2/2017). MLS is the largest pool of genetic resources available for exchange worldwide. It has enabled 6 million global transfers at an average

Table 2. Meetings and agenda items of ACSU

Meeting	Agenda items
The first meeting of the ACSU Rome, Italy, 8-9 Nov. 2012	<ul style="list-style-type: none"> • The stakeholders' consultation • Elements for the definition of the programme of work on sustainable use of PGRFA (POW-SU) • Development of a toolbox on sustainable use of PGRFA • Farmers' rights: compilation of submissions received and report of the regional workshops
The second meeting of the ACSU 2-3 March 2015, Rome, Italy	<ul style="list-style-type: none"> • Implementation of article 6, “programme of work on sustainable use.” • National and stakeholders' experiences regarding breeding strategies and regulations concerning variety release and seed distribution • Identification of interrelations between the international Treaty, especially article 9, and relevant instruments of UPOV and WIPO
The third meeting of the ACSU 24–25 October 2016, Vienna, Austria	<ul style="list-style-type: none"> • Resolution 4/2015, implementation of the programme of work on sustainable use of PGRFA • Identification of interrelations between the international Treaty, especially its article 9, and relevant instruments of UPOV and WIPO
The fourth meeting of the ACSU 8 April–5 May 2019	<ul style="list-style-type: none"> • The electronic consultation using the d-group online platform • Outcomes and preparation for the eighth session of the GB • Report of the electronic consultation
Expert meeting on the toolbox for sustainable use of plant genetic resources for food and agriculture 19–21 July 2016, Volterra, Italy	<ul style="list-style-type: none"> • Toolbox functions, toolbox content, toolbox online portal. (Toolbox will provide Contracting Parties and all interested stakeholders with a comprehensive set of resources, including technical information, policy options, regulatory guidelines, training opportunities, decision tools, and other materials to enhance the effectiveness of activities promoting the sustainable use of PGRFA).
Fifth meeting of the ACSU 4 – 7 October 2021 (online)	<ul style="list-style-type: none"> • Toolbox on sustainable use of PGRFA • Possible joint programme on biodiversity in agriculture for sustainable use of PGRFA • Examples and opportunities to support and assist contracting parties and stakeholders in implementing articles 5 and 6 of the International Treaty • Recommendations for further steps to assist contracting parties in advancing the implementation of articles 5 and 6 of the International Treaty

Table 3. Meetings and agenda items of (OWG-EFMLS)

Meeting	Agenda items
The first meeting of OWG-EFMLS Geneva, Switzerland 14-16 May 2014	Enhancing the functioning of the MLS of access and benefit-sharing: background on the work undertaken by the ad hoc committee on the funding strategy, and its further development Timing and preparations for future meetings of the working group
The second meeting of the OWG-EFMLS Geneva, Switzerland 9-11 Dec. 2014	Enhancing the functioning of the MLS of access and benefit-sharing Development of a range of measures to increase user-based payments and contributions to the benefit-sharing fund
The third meeting of the OWG-EFMLS Brasília, Brazil 2-5 June 2015	Measures to enhance the MLS to be considered and eventually approved by the GB, at its sixth session Interim measures to maintain the operations of the benefit-sharing fund, pending final adoption of the package of measures to enhance the functioning of the MLS of access and benefit-sharing Recommendation for 6 th sessions for GB
The fourth meeting of the OWG-EFMLS Rome, Italy 5-9 October 2015	Draft revised SMTA, which is contained in Appendix 1 of this Report; Commentary on Structural Elements for the Development of a Subscription Model/System, which is contained in Appendix 2 of this Report; Possible objectives and elements of a Protocol to the International Treaty, which is contained in Appendix 3 of this Report; Exploring a proposal to develop a mechanism of contributions by Contracting Parties to the Benefit-Sharing Fund, which is contained in Appendix 4 of this Report; Submissions Received by the Working Group during the biennium, in preparation for the Subscription System and the draft revised SMTA.
The fifth meeting of the OWG-EFMLS Geneva, Switzerland 12-14 July 2016	Elaboration of a complete draft revised SMTA focusing primarily on the development of a subscription system Enhancing the functioning of the MLS: measures beyond the elaboration of the complete draft revised SMTA
The sixth meeting of the OWG-EFMLS Rome, Italy 14-17 March 2017	Revised SMTA with a focus on the subscription system Launch mechanism for an enhanced MLS Genetic information associated with material accessed from the MLS
The seventh meeting the OWG-EFMLS Rome, Italy 5-7 September 2017	Preparations for the seventh session of the GB, including discussion of the draft resolution
The eighth meeting of the OWG-EFMLS Rome, Italy 10-12 October 2018	Revision of the SMTA of the MLS of access and benefit-sharing Elaboration of criteria and options for possible adaption of the coverage of the MLS Development of a proposal for a growth plan to attain the enhanced multilateral system
The ninth meeting of the OWG-EFMLS Rome, Italy 17-21 June 2019 and 24-26 October 2019	Revision of the SMTA of the MLS of access and benefit-sharing Adoption of the report of the working group and the report to the 8 th session of the GB, including elements of a draft resolution

rate of 1000 transfers a day (Nnadozie, 2021), thus highlighting its role in ensuring equitable access and in prospective sharing of benefit. The Treaty has launched a call for proposals under benefit-sharing funds since 2009 to support vulnerable farmers (ITPGRFA, 2022). Already about 1 million people from 67 developing countries have benefited by implementing 81 projects using benefit-sharing funds generated through germplasm exchange (Nnadozie, 2021).

These projects have helped to establish local community seed banks in developing countries and strengthen the collections in gene banks for global exchange.

Scientific Advisory Committee on Global Information System (SAC-GLIS)

The enhanced benefits of germplasm exchange which is envisaged under the Treaty is possible only if the information of the stored germplasm is available to the user. The Treaty facilitated the creation of GLIS having information required to utilise stored germplasm (Article 17). The GLIS is a web portal that serves as a global entry point integrating the entire existing gene bank data related to PGRFA. Governing Body created a scientific advisory committee in 2015 (resolution 3/2015). The scope of the committee was further extended by resolutions 5/2017 and 4/2019. The committee has convened four meetings and has advised the secretary on various matters referred to the committee as below and also detailed in Table 4.

Table 4. Meetings and agenda items of SAC-GLIS

Meeting	Agenda items
The first meeting of the SAC-GLIS San Diego, USA 7-8 January 2015	<ul style="list-style-type: none"> • Core PGRFA data domains and information systems • The Permanent Unique Identifiers for PGRFA • The draft Vision Paper and the elements of the Vision • Advice on the development of the Programme of Work
The second meeting of the SAC-GLIS Rome, Italy 13 – 14 June 2017	<ul style="list-style-type: none"> • Operations and implementation of the programme of work • Review of the guidelines for digital object identifiers • Reporting on partnerships, collaborations and capacity development
The third meeting of the SAC-GLIS Rome, Italy 21 – 22 June 2018	<ul style="list-style-type: none"> • Experiences and Refining Guidelines in the Application and Use of Digital Object Identifiers • Development and Promotion of Standards as Outlined in Objective 3 of the Programme of Work on the Global Information System • Master plan for the GLIS Portal • Genetic Sequence Data concerning PGRFA • Development of partnerships, collaboration and capacity building
The fourth meeting of the SAC-GLIS (virtual mode) 20–21 April 2021	<ul style="list-style-type: none"> • Update on the implementation of the GLIS portal • Development and promotion of digital object identifiers • Access and use of PGFRA information through the global information system and other relevant developments • Reporting on partnerships and collaboration

- General recommendations on the development and deployment of the GLIS and its components as adopted by the Governing Body
- The discovery of new areas of work with potential impact on the System
- The selection of pilot activities for the Global Information System and, upon request of the Secretary, other initiatives and actions to sustain the operation of the GLIS , and the further update of the Programme of Work
- To review, as may be required, the Programme of Work on GLIS for the consideration of the Governing Body at its Ninth Session
- To continue considering scientific and technical issues of relevance to DSI/GSD, and considering national legislation, as appropriate

Ad Hoc Technical Expert Group on Farmers' Rights (AHTEG-FR)

The Treaty recognized the enormous contribution of farmers that feed the world and provisions were made in the Treaty to safeguard their interests. AHTEG-FR was created in the 7th session of Governing Body (Resolution 7/2017). The mandate of the Expert Group was safeguarding and promoting the realization of Farmers' Rights, and the committee advise the secretary on -

- (i) Produce an inventory of national measures that may be adopted, best practices and lessons learned from the realization of Farmers' Rights, as set out in Article 9 of the International Treaty
- (ii) Based on the inventory, develop options for encouraging, guiding, and promoting Farmers'

Table 5. Meetings and agenda items of AHTEG-FR

Meeting	Agenda items
The first meeting of AHTEG-FR, Rome, Italy, 11-14 Sept. 2018	<ul style="list-style-type: none"> • Inventory of national measures that may be adopted, best practices and lessons learned from the realization of farmers' rights, as set out in article 9 of the International Treaty • Options for encouraging, guiding and promoting the realization of farmers' rights as set out in article 9 of the International Treaty
The second meeting of AHTEG-FR, Rome, Italy, 20-23 May 2019	<ul style="list-style-type: none"> • Inventory of national measures, best practices and lessons learned from the realization of farmers' rights, as set out in article 9 of the international Treaty.
Third meeting of the AHTEG-FR, 25–28 August 2020 (Online)	<ul style="list-style-type: none"> • Options for encouraging, guiding and promoting the realization of farmers' rights as set out in article 9 of the international Treaty.
The fourth meeting of AHTEG-FR (Part I) (virtual mode), 4-7 May 2021	<ul style="list-style-type: none"> • Options for encouraging, guiding and promoting the realization of farmers' rights as set out in article 9 of the international Treaty.
The fourth meeting of AHTEF-FR (part II) (virtual mode), 23-27 August 2021	<ul style="list-style-type: none"> • Options for encouraging, guiding and promoting the realization of farmers' rights as set out in article 9 of the International Treaty (the options) and the information document.

Rights as set out in Article 9 of the International Treaty.

Since its inception, AHTEG-FR has convened four meetings (Table 5). The international Treaty offers a variety of capacity development material and an inventory on Farmer's Rights with national measures, best practices, lessons learnt, with a digital version recently published on the website (Nnadozie, 2021). The expert group is currently developing options to encourage, guide, and promote farmers' rights.

Ad Hoc working group on procedures and operational mechanisms to promote compliance and address the issue of non-compliance (Compliance Committee: CC)

Governing Body established Compliance Committee to promote compliance and address issues of non-compliance" in the first session of Governing Body (Resolution 3/2006). The Rules of Procedure of the Compliance Committee were adopted by the Governing Body in its 5th session through Resolution 9/2013. The committee has the following functions.

- Consider information submitted to it regarding matters relating to compliance and issues of non-compliance.
- Offer advice and facilitate assistance, as appropriate, to any Contracting Party, on matters relating to compliance to assist it in complying with its obligations under the International Treaty.
- Assist the Governing Body in its monitoring of the implementation by Contracting Parties of their obligations under the International Treaty based on reports of the Contracting Parties following Section V of the Procedures.
- Address issues of non-compliance and identify the

specific circumstances of the issue referred to it, under Sections VI to VIII of the Procedures.

- Promote compliance by addressing statements and questions concerning the implementation of obligations under the International Treaty, under Section IX of the Procedures.
- Carry out any other functions as may be assigned to it by the Governing Body according to Article 21 of the International Treaty.

The committee has convened four meetings to promote compliance to the Treaty and address issues relating to non-compliance (Table 6).

Ad Hoc Committee on funding Strategy and Resource Mobilization (SFC)

The financial resources of the Treaty are managed by adopting an appropriate funding strategy. The provision of financial resources to implement activities under the Treaty is contained in part VI (Article 18) of the Treaty. The Funding Strategy prioritises the implementation of agreed plans and programmes for farmers in developing countries who conserve and sustainably utilize PGRFA. In the Eighth Session of the GB of the Treaty, a new Funding Strategy was adopted from 2020 to 2025. The aim was to ensure that sufficient financial resources are mobilized through a range of channels to implement the International Treaty in a long-term, coordinated and effective way. The target of the Funding Strategy is to generate approximately 1 billion per year (FAO, 2022). The GB in its 8th session created SFC as a standing committee (Resolution 3/2019). The committee has conducted five meetings to draft various plans to mobilize, implement and monitor resource generation, which will be discussed in the GB 9th Session (Table 7).

Table 6. Meetings and agenda items of Compliance Committee

Meeting	Agenda items
First Meeting of Compliance Committee, Rome, Italy, 20-22 April 2013	<ul style="list-style-type: none"> • Draft rules of procedure of the compliance committee • Standard reporting format by contracting parties
The second meeting of the Compliance Committee, Rome, Italy, 21-22 February 2017	<ul style="list-style-type: none"> • Synthesis of reports received from Contracting Parties on measures taken to implement the provisions of the International Treaty, • Analysed reports received from Contracting Parties on measures taken to implement the Treaty.
Third meeting of Compliance Committee, Rome, Italy, 31 January-1 February 2019	<ul style="list-style-type: none"> • Consideration of reports from Contracting Parties on measures taken to implement the International Treaty • The committee reviewed the Standard Reporting Format of its Report to the GB.
Fourth Meeting of Compliance Committee, 3-4 February 2021	<ul style="list-style-type: none"> • Review of the outcomes of the Eighth Session of the Governing Body of relevance to Compliance. • Review under the mandate of the Compliance Committee

Table 7. Meetings and agenda items of the SFC

Meeting	Agenda items
The first meeting of the SFC, 21-23 July 2020 (Virtual)	<ul style="list-style-type: none"> • New funding strategy was presented • Discussed priorities for resource mobilization
The second meeting of the SFC, 17-19, Nov. 2020 (Virtual)	<ul style="list-style-type: none"> • The first Draft of the Operational Plan 2020-2025 was discussed • Future work for 2020-21 was presented
The Third meeting of the SFC, 23-26 February 2021 (Virtual)	<ul style="list-style-type: none"> • The First draft of the private Sector Food Industry Engagement Strategy 2021-25 was presented • Discussed 8th funding cycle of the Global Environment Facility (GEF-8) • Draft skeleton outline of the strategy to mobilize resources from the food processing industries was discussed • Draft Monitoring, Evaluation and Learning (MEL) Framework of the Benefit-sharing Fund was discussed
The fourth meeting of the SFC, 20-22 September 2021 (Virtual)	<ul style="list-style-type: none"> • The second draft of the Food Industry Engagement Strategy was discussed • The third Draft of the Monitoring, Evaluation and Learning (MEL) Framework of the Benefit-sharing Fund was discussed

Current scenario

In the eighth session of the GB, the measures to enhance the coverage of MLS of Access and Benefit-sharing and revision required in SMTA presently in use were attempted. Sh Narender Singh Tomar, Minister of Agriculture and Farmers Welfare, India, highlighted the contribution of India and informed that about 10 percent of germplasm in gene bank is of Indian origin. He reiterated the importance of plant genetic resources for research and sustainable use, however, the benefit arising from the user must be shared equitably for conservation of genetic resources. He called for an operational, pragmatic, future-ready and flexible, benefit-sharing framework, considering Digital Sequence Information (DSI) and bridging the divide between north and south (FAO 2019). The Agenda for the Ninth Session provisionally includes the following items:

1. Proposal for an Amendment of the International Treaty.
2. The MLS of Access and Benefit-sharing.
 - (a) Implementation and Operations of the MLS, Implementation of Article 12.3 of the International Treaty 2 IT/GB-9/22/1.
 - (b) Updates on Any Informal Consultations on the Enhancement of the MLS.
3. The Funding Strategy of the International Treaty.
4. The Global Information System.
5. Conservation and Sustainable Use of PGRFA.
6. Farmers' Rights.
7. Compliance.

The present concern and bone of contention in the Treaty is revising the coverage of crops and the inclusion of DSI. Several crops such as soybeans, groundnuts, sugar cane, the wild relatives of cassava, several fruits, tomatoes etc. have not been included in the list (David, 2002). Recent technological advancements have enabled researchers mining the freely accessible sequence data. The DSI at the international level could have extensive consequences for the future of agriculture and food security (Aubry, 2019). The DSI concept is relatively new and all concerned parties agreed upon the need for a clear definition. However, a major concern is over benefit sharing. Several attempts have been made to Tract, DSI and improve transparency on DSI (Scott and Berry, 2016; WIPO, 2018). However, with present available technologies, it is difficult to establish the genetic distinctness of any given trait, variant, or metabolite in comparison to another PGRFA (Aubry, 2019). The divide between developed and developing countries surfaced in the GB8 on these issues. Lebanon, representing the Near East countries, stressed that an enhanced MLS should prioritize a subscription system, including an increased payment rate to meet expectations of reaping benefit sharing and integrate DSI. Rwanda, representing Africa, added that expansion of MLS will depend on effective operationalization of benefit sharing. To bridge the divide between developed and developing countries is the biggest challenge in the coming session of the GB9. The world has to produce more food to feed the expanding population, using fewer resources and under more challenging climatic conditions. The Treaty will play a crucial role in increasing productivity and meeting the first two Sustainable Development Goals (SDG) of the United Nations viz. no poverty (SDG 1) and zero hunger (SDG 2).

Divergent positions on benefit-sharing hold up MLS enhancement

The benefit-sharing component of the MLS has not been considered successful. No money from users accessing PGR from the MLS was forthcoming into the system to support projects on conservation and sustainable use in developing countries. It was proposed to revise the SMTA to enhance payments into the system, particularly from commercial users. In addition, many of the crops that attract significant research and development efforts, which potentially result in commercially successful varieties, were not included in the current MLS (Annex 1). Soybean and tomato are usually mentioned as notable examples. Expanding Annex I was proposed as the solution to enhance use of PGR as well as the flow of benefits.

By June 2019, in its 9th meeting, the Ad Hoc Open-ended Working Group to Enhance the Functioning of the MLS made significant advances, including tentative agreement to expand Annex I of the Treaty (list of crops in the MLS), and tangible progress on revising the SMTA. However, two issues viz. rates for benefit-sharing payments and digital sequence information (DSI) remained outstanding. The meeting was suspended to allow for additional time to finalize negotiations. However, in the resumed 9th session in October 2019, the developed and developing countries could not achieve a compromise on benefit sharing rates and DSI issues. This led to a serious fracture in the consensus that had been previously attained and resulted in a significant number of revisions of the draft texts. As a result, the proposals of GB5 of the Treaty to increase user-based payments to the Benefit-sharing Fund and to expand the MLS got dead-locked.

During the GB8, G-77 reiterated the stand on expansion of coverage, user based payments including subscription, Art 18.4(c) and DSI that was reflected in the Working Group. The Plenary sessions witnessed clear divide between developed countries (public sharing of information including DSI, and capacity building for its use; SMTA to focus exclusively on material, not information) and developing countries (definition of genetic resources should include genetic information; DSI, alone or in combination with material, must be part of access and benefit sharing; not addressing DSI may lead to privatization through patents of farmers' material in the MLS). CGIAR Consortium noted that the Treaty provisions on benefit-sharing from commercialization

could apply to both material and information arising from such material. The CGIAR Consortium celebrated the 60,000 successful SMTAs under the MLS to date, and expressed support for a subscription-based MLS that addresses DSI. Serious concerns were expressed by African Union (making PGRFA openly available as digital sequences in exchange for a paltry portion of the enormous benefits derived by seed sector) and Civil Society (Treaty's inability to address DSI is injustice to farmers and conservers).

Unfortunately, GB8 could not debate on the Working Group report and any kind of inter-sessional negotiations and deliberations were suspended. Hence, in future, this issue requires to be taken ahead through informal consultations between parties and also needs to be addressed effectively, during GB9. The GB meeting proposed in Delhi in 2022 will be a watershed moment regarding the future of ITPGRFA.

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