



Food and Agriculture
Organization of the
United Nations



The International Treaty

ON PLANT GENETIC RESOURCES
FOR FOOD AND AGRICULTURE

Second Reporting Cycle

Report on the implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)

LESOTHO

(09 November 2022)



ONLINE REPORTING SYSTEM

Second Report on Compliance of ITPGRFA

Online Reporting System on Compliance of the International Treaty on Plant Genetic Resources for Food and Agriculture

Pursuant to Article 21 of the Treaty, the Governing Body approved, at its Fourth Session, the Compliance Procedures that include, among others, provisions on monitoring and reporting: Resolution 2/2011.

According to the Compliance Procedures, each Contracting Party is to submit to the Compliance Committee, through the Secretary, a report on the measures it has taken to implement its obligations under the Treaty. This Online Reporting System facilitates the submission of such information in electronic format.

Should you need any additional information regarding the reporting on compliance or the use of the online system, please visit the Treaty's Website or contact the Secretariat at PGRFA-Treaty@fao.org.

Additional Reporting Information

Name and contact of the reporting officer

>>> Lefulesele Lebesa, National ITPGRFA Focal Point

Institution(s) of affiliation

>>> Department of Agricultural Research

Article 4: General Obligations

1. Are there any laws, regulations procedures or policies in place in your country that implement the Treaty?

Please select only one option

- Yes
 No

1A. If your answer is 'yes', please provide details of such laws, regulations, procedures or policies:
>>> Draft National Strategy and Action Plan for Plant Genetic Resources for Food and Agriculture is in place

2. Are there any other laws, regulations, procedures or policies in place in your country that apply to plant genetic resources?

Please select only one option

- Yes
 No

2A. If your answer is 'yes', please provide details of such laws, regulations, procedures or policies:
>>> Implementation of ITPGRFA in Lesotho is in compliance and contributes directly to Lesotho's national plans and policies relevant to PGRFA. These include national plans and policies addressing issues of unemployment, food and nutrition insecurity, biodiversity loss and climate change. The foremost PGRFA-related national plans and policies include National Strategic Development Plan II (2019 - 2023), Comprehensive National Agriculture Policy (2022) and Ministry of Agriculture and Food Security Strategic Plan (2019 - 2023) promoting job creation, Sustainable Commercial Agriculture, Food Security and poverty alleviation in the country, the Seed Policy (2016) supports variety development, maintenance and seed production programmes; Lesotho Food and Nutrition Policy (2016 - 2025) intended to curb effects of stunting and malnutrition; The National Environment Policy (1998), National Forestry Policy (2008), National Biosafety Policy (2005) addressing issues of biodiversity loss, genetic erosion and environmental protection; Soil and water conservation Policy (2021), National Conservation Agriculture Strategy Framework, and National Climate Change Policy (2017), both are intended to lessen the potential hardships that climate change impacts may pose to the sustainable development and agricultural productivity.

3. Is there any law, regulation, procedure or policy in place in your country that needs to be adjusted / harmonized to ensure conformity with the obligations as provided in the Treaty?

Please select only one option

- Yes
 No

3A. If your answer is 'yes', please provide details of such adjustments and any plans to make those adjustments:

>>> The National Seed Policy needs to be revised to integrate PGRFA issues; Instructions for the Seed Bill have been amended to include provisions of the Treaty, with more emphasis on protection of farmers' rights. The Country is in the process of finalizing a 10-year National Strategy and Action Plan for PGRFA. This strategy sets out key action plans for the conservation and sustainable use of plant genetic resources in the country. It also seeks to institutionalize the continuum approach to the management of PGRFA whereby seamless linkages are fostered between conservation, sustainable use of PGRFA and seed delivery.

Article 5: Conservation, Exploration, Collection, Characterisation, Evaluation and Documentation of Plant Genetic Resources for Food and Agriculture

4. Has an integrated approach to the exploration, conservation and sustainable use of plant genetic resources for food and agriculture (PGRFA) been promoted in your country?

Please select only one option

Yes

No

5. Have PGRFA been surveyed and inventoried in your country?

Please select only one option

Yes

No

5A. If your answer is 'yes', please provide details of your findings, specifying species, sub-species and /or varieties, including those that are of potential use.

>>> The National Plant Genetic Resources Center (NPGRC) undertook an assessment of plant genetic resources and status of on-farm conservation in the country. The overall objective of this study was two-fold: to generate information on the status of plant genetic resources for food and agriculture in the country and to assess the status of on-farm conservation of PGRFA. The findings of the study indicated that 14 different crops (comprising cereals, legumes, cucurbits, and fodder crops) were grown across the study areas. Among all the crops grown in the country, maize (*Zea mays*) had high diversity compared to other crops. Given the vulnerability of genetic material conserved on-farm as evidenced by the findings of the study; a status quo that is exacerbated by the challenges of climate change, there is an urgent need for more sustainable practices and strategies to minimize the potential of total extinction. The NPGRC also made an inventory and collection of peach fruits and indigenous leafy vegetables germplasm with financial support from Agricultural Productivity Programme for Southern Africa (APPSA) Project. The sub-project is still under implementation.

5B. If your answer is 'no', please indicate:

Any difficulties encountered in surveying or inventorying PGRFA;

Any action plans to survey and inventory PGRFA;

The most important PGRFA that should be surveyed and inventoried

>>>

6. Has any threat to PGRFA in your country been identified?

Please select only one option

Yes

No

6A. If your answer is 'yes', please indicate:

The species, subspecies and/or varieties subject to such threats;

The sources (causes) of these threats;

Any steps taken to minimise or eliminate these threats;

Any difficulties encountered in implementing such steps;

>>> Genetic erosion is the major threat of PGRFA in the country. Much genetic erosion has occurred to crops such as maize and wheat as many varieties were lost completely in other areas while others were on the verge of extinction. The most underlying cause of genetic erosion as mentioned by many farmers was introduction of new improved varieties which are high-yielding. Other threats to PGRFA include changing climate, storage weevils, and unavailable markets. Cooking quality of majority of crop species is also a determinant factor of whether a certain crop species is maintained on-farm or not.

7. Has the collection of PGRFA and relevant associated information on those plant genetic resources that are under threat or are of potential use been promoted in your country?

Please select only one option

Yes

No

7A. If your answer is 'yes', please provide details of the measures taken:

>>> The NPGRC frequently undertakes germplasm collection mission of different types; these include targeted collections, gap-filling and rescue collection missions.

8. Have farmers and local communities' efforts to manage and conserve PGRFA on-farm been promoted or supported in your country?

Please select only one option

- Yes
 No

8A. If your answer is 'yes', please provide details of the measures taken:

>>> Farmer-managed seeds and associated traditional knowledge are incorporated in scientific research. Where possible, the farmers' varieties are purchased, this is a form of income generation to them. Farmer-farmer exchange of germplasm within their own social networks is also promoted.

9. Has in situ conservation of wild crop relatives and wild plants for food production been promoted in your country?

Please select only one option

- Yes
 No

9A. If your answer is 'yes', please indicate whether any measures have been taken to:

- Promote in situ conservation in protected areas
 Support the efforts of indigenous and local communities

9B. If such measures have been taken, please provide details of the measures taken:

>>> The NPGRC participated in a crop wild relatives (CWRs) regional project through the SADC Plant Genetic Resources Center (SPGRC). This project was bridging the gap between agriculture and environment, considering that most CWRs are used for crop improvement in agriculture but they are found in protected areas, under the jurisdiction of environment personnel. Modalities of access to these resources have to be communicated. Observation/occurrence sites were marked for incorporation in the regional map of CWRs.

10. Are there any ex situ collections of PGRFA in your country?

Please select only one option

- Yes
 No

10 A. If your answer is 'yes', please provide information on the holder and content of such collections:

>>> The NPGRC or National Genebank is holding about 4,000 accessions of PGRFA. Majority of the collections include cultivated Species (cereals, legumes, oilseed crops, vegetables, and medicinal plant species. The Center will also maintain a collection of clonally propagated crop species (Peaches) through APPSA project in the form of on-station and community field genebanks.

11. Has the development of an efficient and sustainable system of ex situ conservation of PGRFA been promoted in your country?

Please select only one option

- Yes
 No

11A. If your answer is 'yes', please indicate the measures taken to promote ex situ conservation, in particular any measures to promote the development and transfer of technologies for this purpose:

>>> PGRFA conserved at the National Genebank are distributed to users upon request, and the users are expected to share the results as a way of technology transfer. Conservation strategies are also shared with other holders of PGRFA within the country such as the community seedbanks for conformity to genebank standards.

12. Has the maintenance of the viability, degree of variation, and the genetic integrity of ex situ collections of PGRFA been monitoring in your country?

Please select only one option

- Yes
 No

12A. If your answer is 'yes', please provide details of the main conclusions of these monitoring activities

>>> If the results of viability tests are below expected level, such PGRFA are set aside for regeneration in the next cropping season. Characterization trials are conducted to assess the level of genetic diversity, if the degree of variation is low, more collection expeditions are recommended. A portion of the original sample is

not distributed, it remains in the genebank to maintain the genetic integrity.

13. Has your country cooperated with other Contracting Parties, through bilateral or regional channels, in the conservation, exploration, collection, characterization, evaluation or documentation of PGRFA?

Please select only one option

Yes

No

13A. If your answer is 'yes', please indicate the other Contracting Parties with whom the cooperation was undertaken (where additional to cooperation through the Governing Body or Treaty mechanisms) and, where possible, details of any relevant projects:

>>> The NPGRC is one among similar centers in the SADC region forming the NPGRCs/SPGRC Network. The activities of the NPGRCs are coordinated by the SPGRC.

Article 6: Sustainable Use of Plant Genetic Resources for Food and Agriculture

14. Are there any policy and legal measures in place in your country that promote the sustainable use of PGRFA

Please select only one option

- Yes
 No

14A. If your answer is 'yes', please indicate whether such policy and legal measures include:

- Pursuing fair agricultural policies that promote the development and maintenance of diverse farming systems that enhance the sustainable use of agricultural biological diversity and other natural resources;
 Strengthening research that enhances and conserves biological diversity by maximizing intra- and inter-specific variation for the benefit of farmers;
 Promoting plant breeding efforts, with the participation of farmers, that strengthen the capacity to develop varieties particularly adapted to social, economic and ecological conditions, including in marginal areas;
 Broadening the genetic base of crops and increasing the range of genetic diversity available to farmers
 Promoting the expanded use of local and locally adapted crops, varieties and underutilised species
 Supporting the wider use of diversity of varieties and species in on-farm management, conservation and sustainable use of crops and creating strong links to plant breeding and agricultural development
 Reviewing and adjusting breeding strategies and regulations concerning variety release and seed distribution

14B. If such policy and legal measures are in place, please provide details of the measures taken and any difficulties encountered in implementing them:

- >>> -Showcasing the work of the NPGRC and displaying PGRFA material in different events to promote their use
-Awareness campaigns through various channels on the value of PGRFA
-Public education on the conservation and sustainable use of PGRFA; including issues of overharvesting and legally protected species

Article 7: National Commitments and international Cooperation

15. Has the conservation, exploration, collection, characterization, evaluation, documentation and sustainable use of PGRFA been integrated into your country's programmes and policies?

Please select only one option

- Yes
 No

15A. If your answer is 'yes', please provide details of the integration of such activities:

- Conservation
 Exploration
 Collection
 Characterization
 Evaluation
 Documentation
 Sustainable Use

Please indicate into which type of programmes and policies:

- Agriculture and rural development
 Food security
 Biodiversity conservation
 Climate change
 Other

Additional details:

>>> Some PGRFA sold for income generation
Others are good for nutrition security

16. Has your country cooperated with other Contracting Parties, through bilateral or regional channels, in the conservation and sustainable use of PGRFA?

Please select only one option

- Yes
 No

16A. If your answer is 'yes', please indicate whether the aim of such cooperation is to:

- Strengthen the capability of developing countries and countries with economies in transition with respect to conservation and sustainable use of PGRFA
 Enhance international activities to promote conservation, evaluation, documentation, genetic enhancement, plant breeding, seed multiplication, and sharing, providing access to and exchanging PGRFA and appropriate information and technology, in conformity with the Multilateral System of Access and Benefit-Sharing under the Treaty

16B. If, in addition to cooperation through the Governing Body or other Treaty mechanisms, your country has cooperated with other Contracting Parties directly or through FAO and other relevant international organizations, please indicate such other Contracting Parties and, where possible, details of any relevant projects:

>>> PGRFA distributed to universities locally and in South Africa for research purposes

Article 8: Technical Assistance

17. Has your country promoted the provision of technical assistance to developing countries and countries with economies in transition, with the objective of facilitating the implementation of the Treaty?

Please select only one option

- Yes
- No
- Not applicable

17A. If your answer is 'yes', please provide details of the measures taken

- Exchange of information
- Access to and transfer of technology
- Capacity building

Please explain:

>>>

18. Has your country received technical assistance with the objective of facilitating the implementation of the Treaty?

Please select only one option

- Yes
- No
- Not applicable

18 A. If your answer is 'yes', please provide details of such technical assistance:

- Exchange of information
- Access to and transfer of technology
- Capacity building

Please explain:

>>> Financial resources for national workshops to domesticate the ITPGRFA.

Article 9: Farmers' Rights

19. Subject to national law, as appropriate, have any measures been taken to protect and promote farmers' rights in your country?

Please select only one option

- Yes
 No

19 A. If your answer is 'yes', please indicate whether such measures were related to:

- Recognition of the enormous contribution that local and indigenous communities and farmers of all regions of the world have made and will continue to make for the conservation and development of plant genetic resources;
 The protection of traditional knowledge relevant to PGRFA
 The right to equitably participate in sharing benefit arising from the utilisation of PGRFA
 The right to participate in making decisions, at the national level, on matters related to the conservation and sustainable use of PGRFA
 Any rights that farmers have to save, use, exchange, and sell farm-saved seed/propagating material

19B. If such measures were taken, please provide details of the measures taken and any difficulties encountered in implementing them:

>>> Farmers are engaged in all decisions affecting them, even though this is just not enough. Lack of funds to develop policies specific to recognition and protection of Farmers' Rights. The Seed Bill was also amended to include protection of farmers' rights.

Article 11: Coverage of the Multilateral System

20. Has your country notified all PGRFA listed in Annex I to the Treaty that are under the management and control of your Government and in the public domain as included in the Multilateral System of Access and Benefit-Sharing (MLS)?

Please select only one option

- All
- Partially
- None

20A. If your answer is 'all', please provide details of any difficulties encountered in including Annex 1 PGRFA in the MLS:

>>>

20B. If your answer is 'partially', please provide details of:

The extent to which Annex 1 PGRFA have been included in the MLS

The crops that have been included in the MLS; and

The difficulties encountered in including Annex 1 PGRFA in the MLS:

>>>

20C. If your answer is 'none', please provide details of the difficulties encountered in including Annex 1 PGRFA in the MLS:

- Lack of guidelines for the identification and inclusion of material;
- There is no national genebank;
- Lack of catalogue of PGRFA in the country;
- Lack of specialised human resources;
- Limited economic resources and the need for capacity building;

Other, please explain:

>>> The NPGRC needs financial resources to fully characterize and evaluate the accessions so that they will be included in the multilateral system.

21. Has your country taken measures to encourage natural and legal persons within your jurisdiction who hold Annex 1 PGRFA to include those resources in the MLS?

Please select only one option

- Yes
- No

21A. If your answer is 'yes', please provide details of:

The natural or legal persons within your jurisdiction that included Annex 1 PGRFA in the MLS;

The crops that have been included in the MLS by these persons; and

Any difficulties these persons encountered in including Annex 1 PGRFA in the MLS:

>>>

21B. If your answer is 'no', please provide details, in particular details of any difficulties encountered in encouraging these persons to include Annex 1 PGRFA in the MLS:

>>> PGRFA not fully characterized to promote their wider use. Community seedbanks are important holders of Annex 1 PGRFA, but they still need to be sensitized about ITPGRFA and its provisions

Article 12: Facilitated access to plant genetic resources for food and agriculture within the Multilateral System

22. Has your country taken measures to provide facilitated access to Annex 1 PGRFA, in accordance with the conditions set out in Article 12.4 of the Treaty?

Please select only one option

- Yes
 No

22A. If your answer is 'yes', please provide details of such measures:

>>> Germplasm of wheat, maize and sorghum was distributed upon request to immediate users of the materials.

22B. If your answer is 'no', please provide details of any difficulties encountered in providing facilitated access to Annex 1 PGRFA:

>>>

23. Has facilitated access been provided in your country to Annex 1 PGRFA using the Standard Material Transfer Agreement (SMTA)?

Please select only one option

- Yes
 No

23B. If your answer is 'no', please provide details of any difficulties encountered in providing facilitated access to Annex 1 PGRFA using the SMTA:

>>> There is currently no breeding programme in Lesotho, hence the requests for germplasm from the genebank are very minimal. In future all the distributed materials for various purposes will be upon signing of the SMTA.

24. Has the SMTA been used voluntarily in your country to provide access to non-Annex 1 PGRFA?

Please select only one option

- Yes
 No
 No, but the issue is under consideration

25. Does the legal system of your country provide an opportunity for parties to material transfer agreements (MTAs) to seek recourse in case of contractual disputes arising under such agreements?

Please select only one option

- Yes
 No

25A. If your answer is 'yes', please provide details of the relevant laws, regulations or procedures:

>>> This issue is covered by Biodiversity Resources Management Act 2022

26. Does the legal system of your country provide for the enforcement of arbitral decisions related to disputes arising under the SMTA?

Please select only one option

- Yes
 No

26A. If your answer is 'yes', please provide details of the relevant laws, regulations or procedures:

>>> Addressed by Biodiversity Resources Management Act 2022

27. Have there been any emergency disaster situations in respect of which your country has provided facilitated access to Annex 1 PGRFA for the purpose of contributing to the re-establishment of agricultural systems?

Please select only one option

- Yes
 No

27A. If your answer is 'yes', please provide details of such emergency disaster situations and the Annex 1 PGRFA to which access was provided:

>>>

Article 13: Benefit-sharing in the Multilateral System

28. Has your country made any information available regarding Annex I PGRFA?

Please select only one option

- Yes
 No

28A. If your answer is 'yes', please provide details of any information made available regarding Annex 1 PGRFA:

- Catalogues and inventories
 Information on technologies
 Results of scientific and socio-economic research, including characterisation, evaluation and utilisation
 Other

29. Has your country provided or facilitated access to technologies for the conservation, characterisation, evaluation and use of Annex I PGRFA?

Please select only one option

- Yes
 No

29A. If your answer is 'yes', please indicate whether your country:

- Has established or participated in crop-based thematic groups on utilisation of PGRFA
 Is aware of any partnerships in your country in research and development and in commercial joint ventures relating to the material received through the MLS, human resource development and effective access to research facilities.

Please provide details:

>>> PGRFA distributed for screening of disease resistant crop varieties

30. Has your country provided for and/or benefitted from capacity building measures in respect of Annex 1 PGRFA?

Please note that this question differs from question 15 as it only concerns Annex I PGRFA and is more specific.

Please select only one option

- Yes
 No

30A. If your answer is 'yes', please indicate whether such measures were related to:

- Establishing and/or strengthening programmes for scientific and technical education and training in conservation and sustainable use of PGRFA;
 Developing and strengthening facilities for conservation and sustainable use of PGRFA;
 Carrying out scientific research and developing capacity for such research.

30B. If your country provided for and/or benefitted from such measures, please provide details:

>>> The NPGRC distributed germplasm to students for research purposes

Article 14: Global Plan of Action

31. Has your country promoted the implementation of the Global Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture?

Please select only one option

- Yes
- No

31A. If your answer is 'yes', please indicate whether the implementation of the plan was promoted through:

- National actions
- International cooperation
- Other actions

Please provide details:

>>> The NPGRC also acts as the National Programme for the Implementation of the Global Plan of Action (GPA) for the Conservation and Sustainable Use of PGRFA, through conducting activities such as germplasm exploration, collection, characterization, distribution, documentation, regeneration

Article 15: Ex Situ Collections of Plant Genetic Resources for Food and Agriculture held by the International Agricultural Research Centres of the Consultative Group on International Agricultural Research and other International Institutions

32. Has facilitated access to Annex I PGRFA been provided in your country to the International Agricultural Research Centres of the Consultative Group on International Agricultural Research (IARCs) or other international institutions that have signed agreements with the Governing Body of the Treaty?

Please select only one option

- Yes
 No

32A. If your answer is 'yes', please indicate:

To which IARCs or other international institutions facilitated access was provided;
The number of SMTAs entered into with each IARC or other international institution:
>>>

32B. If your answer is 'no', please provide details of any difficulties encountered in providing facilitated access to Annex 1 PGRFA to IARCs and other international institutions that have signed agreements with the Governing Body of the Treaty

>>> There has never been a request of Annex 1 PGRFA by the IARCs, but my country receives germplasm from the IARCs upon request. Exchange of germplasm has been done with ICRISAT, CIMMYT and CIAT (now ABC)

33. Has access to non-Annex I PGRFA been provided in your country to IARCs or other international institutions that have signed agreements with the Governing Body of the Treaty?

Please select only one option

- Yes
 No

33A. If your answer is 'yes', please indicate:

To which IARCs or other international institutions access was provided;
The number of MTAs entered into with each IARC or other international institution:
>>>

33B. If your answer is 'no', please provide details of any difficulties encountered in providing access to non-Annex 1 PGRFA to IARCs and other international institutions that have signed agreements with the Governing Body of the Treaty:

>>> There has never been a request of Annex 1 PGRFA by the IARCs

Article 16: International Plant Genetic Resources Networks

34. Has your country undertaken any activities to encourage government, private, non- governmental, research, breeding and other institutions to participate in the international plant genetic resources networks?

Please select only one option

Yes

No

34A. If your answer is 'yes', please provide details of such activities:

>>> The NPGRC is already in the NPGRCs/SPGRC regional network. The Department of Agricultural Research is part of the Southern African Bean Research Network (SABRN) and Pan-Africa Bean Research Alliance (PABRA)

Article 18: Financial Resources

35. Has your country provided financial resources for national activities for the conservation and sustainable use of PGRFA?

Please select only one option

- Yes
 No

35A. If your answer is 'yes', please provide the estimated amount of funds provided during the last five years, including government resources:

>>> USD50,000.00

35B. Please indicate if your country has developed a strategy or other measures to enhance the availability, transparency, efficiency and effectiveness of the provision of financial resources to implement the International Treaty:

>>> Mobilization of financial resources is detailed in the draft National Strategy and Action Plan for PGRFA

36. Has your country provided financial resources for the implementation of the International Treaty?

Please select only one option

- Yes
 No

36A. If your answer is 'yes', where possible, please provide details of such channels and the amount of the financial resources involved during the last 5 years::

>>>

36B Channel:

- Bilateral
 Regional
 Multilateral

36C. Please provide details:

>>> Lesotho Government provides financial resources for the implementation of the Treaty even though information for exact amounts not available. It is also contributing locally to the day-to-day operations of the national genebank for maintenance of the genebank collections

37. Has your country received financial resources for the implementation of the International Treaty?

Please select only one option

- Yes
 No

37A. If your answer is 'yes', where possible, please provide details of such channels and the amount of the financial resources involved during the last 5 years:

>>> Information for exact amounts not available

37B. Channel:

- Bilateral
 Regional
 Multilateral

37C. Please provide details:

>>>

General remarks on the implementation of the ITPGRFA

38. You may use this box to share any advice you may have arising from your country's experience with implementation of the Treaty:

>>> My country has never benefited from the Benefit Sharing Fund of the Treaty. It is hoped that for the first time this enormous contribution will also be accessed by Lesotho, either by the Government Institutions or NGOs.

39. You may use this box to share any additional information that may be useful to provide a broader perspective of difficulties in implementation of the Treaty:

>>> There is need for technical guidance on the implementation of the Treaty, especially on the realization of Farmers' Rights. Also in declaring Annex 1 PGRFA under the Multilateral System of Access and Benefit Sharing.

40. You may use this box to share any additional information that may be useful to provide a broader perspective of measures that could help to promote compliance:

>>> It is important to comply with the provisions of the Treaty in the form of reporting implementation of various articles, however, for the Least Developed Countries compliance in the form of financial contributions to the Benefit Sharing Fund will be very difficult

About this reporting

41. Have you encountered any difficulties in completing this reporting format?

Please select only one option

Yes

No

41A. If your answer is 'yes', please provide details on such difficulties:

>>>

41B. If you have suggestions for improvement of this reporting format, please share them:

>>>