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

REPUBLIC OF MAURITIUS

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STANDARD REPORTING FORMAT

COUNTRY REPORT ON COMPLIANCE – ITPGRFA

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Article 4: General Obligations

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

   Yes  ☐

   No  ✓

   If your answer is 'yes', please provide details of such laws, regulations, procedures or policies:

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

   Yes  ✓

   No  ☐

   If your answer is 'yes', please provide details of such laws, regulations, procedures or policies:

1. The National Biodiversity Strategy and Action Plan 2017-2025 sets out clear goals and objectives which the country targets to achieve in terms of biodiversity conservation.
2. The Native Terrestrial Biodiversity and National Parks Act 2015 lays down the law for the conservation of native plant genetic resources.
3. The Forest and Reserves Act 41 of 1983 governs the protection of native forest genetic resources.
4. The Plant Protection Act 2006 (amended in 2020) makes provision for the protection of plants and planting material from pests and diseases and for this purpose establishes within the Ministry of Agriculture a National Plant Protection Office (NPPO) which shall be the authority responsible for the enforcement of this Act in Mauritius. It also deals with the control and movement of plants in and out of the country.
5. The Environment Protection Act 2002 provides the legal framework and the mechanism to protect the natural environment, to plan for environmental management and to coordinate the inter-relations of environmental issues, and to ensure the proper implementation of governmental policies and enforcement provisions necessary for the protection of human health and the environment of Mauritius.
6. The Mauritius Strategic Plan (2016-2020) for the Food Crops, Livestock and Forestry Sectors set out the goals and objectives to be attained over five year period to improve the level of food security and food safety and promote a more sustainable agriculture.

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1 For the purpose of this report, a Contracting Party may choose whichever term (adjusted or harmonized) is appropriate in relation to their legal systems.
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?

   Yes   ☐
   No    ☑

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


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?

   Yes    ☑
   No     ☐

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

   Yes    ☑
   No     ☐

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:

A study* was carried out to explore crop wild relatives (CWR) as potential genetic resources for crop improvement with the main objectives to create a comprehensive inventory of the native wild relatives for Mauritius and Rodrigues and prioritize them for crop improvement and sustainable use.

A comprehensive list of the native species was collated from The Mauritius Herbarium and published literature. Each species was assessed for the economic value of its related crop, utilization potential for crop improvement, relative distribution, occurrence status and Red List conservation status, using a standard scoring method for prioritization. The occurrence data of the priority species were collected, verified, geo-referenced and mapped. A total of 43 crop-related species were identified for both islands and 21 species were prioritized for active conservation.


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?
According to the study (Bissessur et al., 2019), CWR, like other wild species, are susceptible to several threats, including invasive climate change, alien species, urbanization, tourism development, habitat degradation and fragmentation, unsustainable farming practices and genetic pollution. To minimise or eliminate these threats, a CWR checklist was produced, which will be used to plan and implement an effective in situ and ex situ conservation strategy for these genetic resources.

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?

Yes  ☑
No  ☐

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

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

Yes  ☐
No  ☑

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

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

Yes  ☑
No  ☐

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.

If such measures have been taken, please provide details of the measures taken:
10. Are there any ex situ collections of PGRFA in your country?

   Yes  ✔

   No  

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

   The NPGRU holds the country’s *ex situ* collection of PGRFA (464 seed accessions and 178 field accessions). A National Seed Gene Bank (NSGB) is responsible for the conservation of local orthodox seed accessions and a National Field Gene Bank (NFGC) is responsible for the conservation of local recalcitrant crops and vegetatively-propagated accessions.

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

   Yee  ✔

   No  

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:

   The National Gene Banks are under the Ministry of Agro-Industry and Food Security (MAIFS) and have been supported by the Government. The NPGRU forms part of the network of gene banks in the SADC region and is thus a member of SADC Plant Genetic Resources Centre (SPGRC).

   The SADC Plant Genetic Resources Centre (SPGRC) has also since 1990s developed an SPGRC Documentation and Information System (SDIS) at SPGRC and installed it at all the National Plant Genetic Resource Centres (NPGRCs) in each of the 15 SADC Member States including Mauritius. The system was developed as a source of information and to assist in planning and operating genebank activities.

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

   Yes  ✔

   No  

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

   Viability of seeds is being periodically monitored by the NSGB to ensure timely regeneration of accessions. Accessions will low viability are regenerated. Local seed and field accessions are being monitored to determine the degree of phenotypic variation among the accessions.
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?

Yes ☑

No ☐

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 other Treaty mechanisms) and, where possible, details of any relevant projects:

Mauritius is a Member State of SADC. The National Plant Genetic Resources Unit works in coordination with the SADC Plant Genetic Resource Centre (SPGRC) under the SADC PGR network to conserve and preserve the genetic diversity and viability of local plant germplasm. SPGRC and the NPGRU in each country also perform important roles in research, documentation, training, and education.
Article 6: Sustainable Use of Plant Genetic Resources for Food and Agriculture

14. Are there any policy and legal measures\(^2\) in place in your country that promote the sustainable use of PGRFA?

Yes ☐
No ☑

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.

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

\(^2\) For the purpose of this report, legal measures may include regulations.
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?

Yes ✔

No

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:

Yes, partly as the NPGRU started the collection of local germplasm for food and agriculture in the country. The Strategic Plan for Food Crop, Livestock and Forestry Sectors 2016-2020 gave way for the NPGRU to maintain its technical activities and also included proposals to strengthen the unit over the five year period. This will be renewed in the new Strategic Plan for the next five years (2021-2025).
16. Has your country cooperated with other Contracting Parties, through bilateral or regional channels, in the conservation and sustainable use of PGRFA?

Yes  

No

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.

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:

Through the regional programme of PGRFA conservation in SADC countries, local seed accessions are sent to SPGRC as safety base duplicate for conservation in the regional seed gene bank at SPGRC.

The regional cooperation comprising of SADC countries aims to promote conservation and sustainable use of PGRFA including accession multiplication and regeneration, characterization and cataloguing, documentation information through the online SPGRC Documentation Information System (SDIS).

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?

Yes

No  ✔

Not applicable

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?

Yes ☐
No ☑
Not applicable ☐

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:

[Blank space for explanation]

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?

Yes ☐
No ☑

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 benefits 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.

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

[Blank space for details]
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)?

- All
- Partially
- None ✗

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

If your answer is 'partially', please provide details of:
- The extent to which Annex I PGRFA have been included in the MLS;
- The crops that have been included in the MLS; and
- The difficulties encountered in including Annex I PGRFA in the MLS:

If your answer is 'none', please indicate the difficulties encountered in including Annex I 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

In the absence of a PGRFA Bill, the domestication of ITPGRFA is regarded as the main constraint.

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

- Yes
- No ✗

If your answer is 'yes', please provide details of:
- The natural or legal persons within your jurisdiction that included Annex I 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 I PGRFA in the MLS:

If your answer is ‘no’ please provide details, in particular details of any difficulties encountered in encouraging these persons to include Annex I PGRFA in the MLS:

In the absence of a PGRFA Bill, the domestication of ITPGRFA is regarded as the main constraint.

**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 I PGRFA, in accordance with the conditions set out in Article 12.4 of the Treaty?

Yes ☐
No ✗

If your answer is ‘yes’, please provide details of such measures:

If your answer is ‘no’, please provide details of any difficulties encountered in providing facilitated access to Annex I PGRFA:

Difficulties are still encountered due to non-existence of a PGRFA Bill and National Policy.

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

Yes ☐
No ✗

If your answer is ‘no’, please provide details of any difficulties encountered in providing facilitated access to Annex I PGRFA using the SMTA:

Facilitated access has not been provided in Mauritius to Annex I PGRFA pursuant to SMTA because there has been no request for material transfer from another country so far.
24. Has the SMTA been used voluntarily in your country to provide access to non-Annex I PGRFA?
   
   Yes ☐
   
   No ☑
   
   No, but the issue is under consideration ☐

25. Does the legal system of your country provide an opportunity for parties to the material transfer agreements (MTAs) to seek recourse in case of contractual disputes arising under such agreements?
   
   Yes ☐
   
   No ☑
   
   If your answer is 'yes', please provide details of the relevant laws, regulations or procedures:

   

26. Does the legal system of your country provide for the enforcement of arbitral decisions related to disputes arising under the SMTA?
   
   Yes ☐
   
   No ☑
   
   If your answer is 'yes', please provide details of the relevant laws, regulations or procedures:

   

27. Have there been any emergency disaster situations in respect of which your country has provided facilitated access to Annex I PGRFA for the purpose of contributing to the re-establishment of agricultural systems?
   
   Yes ☐
   
   No ☑
   
   If your answer is 'yes', please provide details of such emergency disaster situations and the Annex I PGRFA to which access was provided:

   

28. Has your country made any information available regarding Annex I PGRFA?
   
   Yes ☐
   
   No ☑

   If your answer is 'yes', please provide details of any information made available regarding Annex I PGRFA:
   
   - Catalogues and inventories
   - Information on technologies
   - Results of scientific and socio-economic research, including characterisation, evaluation and utilisation
   - Other

   Annual reports on PGRFA activities of the NSGB and NFGB are submitted to the Ministry and SPGRC.

29. Has your country provided or facilitated access to technologies for the conservation, characterisation, evaluation and use of Annex I PGRFA?
   
   Yes ☐
   
   No ☑

   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:

30. Has your country provided for and/or benefitted from capacity building measures in respect of Annex I PGRFA?3

   Yes ☐
   
   No ☑

   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;

   3 Please note that this question differs from question 15 as it only concerns Annex I PGRFA and is more specific
Carrying out scientific research and developing capacity for such research. If your country provided for and/or benefitted from such measures, please provide details:

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?

- Yes
- No

If your answer is 'yes', please indicate whether the implementation of the plan was done through:

- National actions;
- International cooperation;
- Other actions

Please provide details:

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?

- Yes
- No

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:
If your answer is ‘no’, please provide details of any difficulties encountered in providing facilitated access to Annex I PGRFA to IARCs and other international institutions that have signed agreements with the Governing Body of the Treaty:

| Difficulties are still encountered due to non-existence of a PGRFA Bill and National Policy. |

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?

Yes ☐

No ✗

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:

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

| Difficulties are still encountered due to non-existence of a PGRFA Bill and National Policy. |

**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?

   Yes  
   No  ✔

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

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**Article 18: Financial Resources**

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

   Yes  ✔
   No  

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

An annual budget is made available to the NPGRU for national activities for the conservation and sustainable use of PGRFA.

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:

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

   Yes  
   No  ✔

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:

   Total amount:
   Channel:
   Bilateral  
   Regional  

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

Yes ☐

No ☑

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:

Total amount:

Channel:

Bilateral ☐

Regional ☐

Multilateral ☐

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:

There is a need for the domestication of the treaty at the National Level. An awareness campaign and sensitisation of the treaty’s activities is commendable.

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:

The lack of a PGR legislation and regulation makes it difficult for policy makers to take decision in implementing the treaty. Hence, such legislation is needed in order to address different issues amongst others, the farmer’s rights.

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:

Inclusion of policy maker as participant in governing bodies’ meetings will help in providing support for domestication of the treaty.
41. Have you encountered any difficulties in completing this reporting format?

   Yes ☐
   No  ☑

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

   [Blank space for text input]

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

   [Blank space for text input]