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

ZAMBIA

(23 April 2021)
Second Country Report on the implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)

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23rd April 2021
SECOND COUNTRY REPORT ON COMPLIANCE - ITPGRFA

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Introduction

1. Pursuant to Article 21 of the Treaty, the Governing Body has adopted a resolution that includes, amongst others, provisions on monitoring and reporting (Resolution 2/2011). Pursuant to this Resolution, 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 in one of the six languages of the United Nations (Section V.1).

2. The first report is to be submitted within three years from the approval of this standard format. The Governing Body approved this standard format at its Fifth Session.

3. This standard format has been developed to facilitate reporting and monitoring of the implementation of the Treaty. The use of this standard format is voluntary. A Contracting Party may use another reporting format if it so wishes.

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:

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:

Plant breeder’s Rights Act, 2007, it should include measures that will strengthen the informal seed systems as well as promote increased production of farmers’ seeds.

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:

Zambia has at least 12,505 different kinds of organisms (species) and of these 4 % are bacteria and microorganisms, 33% are plants and 63 % are animals (GRZ, 2015). The country is estimated to have 6,575 flowering plants and ferns. The species of flowering plants is

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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.
estimated at 3,543 (273 sedges, 2,660 herbaceous plants and 1,610 woody plants). There are at least 107 cultivated plant species, 567 crop wild relatives of these 30 are on the priority list for 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?

   Yes √
   No  

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:

Crop wild relatives and cultivated landraces

These species are under threat due to several factors such as climate change, changes in agricultural practices and land use, natural calamities-floods, landslides and soil erosion, introduction of exotic species, habitat conversion and unstable use of natural resources.

There are several policies, laws and programmes aimed at mitigating the threats posed on biodiversity in general. Such interventions by the country include but not limited to the following: National Agriculture Policy, National Seed Policy, National Policy on Protection of Indigenous Knowledge, National Strategic Action Plan for the Conservation and Sustainable Use of Crop Wild Relatives, National Environmental Management Policy and Second National Biodiversity Strategic Action Plan.

Zambia also through the support from Darwin Initiative project is implementing activities aimed at conservation and sustainable utilization of crop wild relatives. These efforts will try and help in minimizing threats to loss of these species.
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:

The NPGRC has been conducting rescue collection missions aimed at ex situ conservation of PGRFA under threat. The NPGRC has been also characterizing the accessions at phenotypic level and plans are under way to publish catalogues. Regeneration of threatened species like food legumes.

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:

There are a number of on-farm conservation activities being conducted by National Plant Genetic Resources Centre. These activities include restoration of landraces in particular communities, on-farm evaluation of landraces, participatory variety selection, conducting field days and seed diversity fairs. Many of these activities are aimed at promotional and awareness creation.

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:

There are efforts by the country to protect Crop Wild relatives and wild plants for food in protected area network. Crop Wild Relatives will be protected through National Strategic Action Plan for Conservation of Crop Wild relatives (NSAP-CWR). The NSAP-CWR was developed with help of the EU-ACP countries project. Currently the country is promoting conservation and sustainable utilization of crop wild relatives through the support of the Darwin Initiative project called “Bridging agriculture and environment: Southern Africa crop wild relatives regional network”. There are also policies and regulations that aim to protect biodiversity in general such as National Biodiversity Strategic Action Plan, National wildlife policy and forestry policy. Some surveys were conducted to designate sites for conservation, monitoring and management of crop wild relatives with support from EU-ACP countries project and Darwin Initiative project.

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:

NPGRC 6,653 accessions

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

- Yes   √
- 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 bank is within the ministry of Agriculture primarily being supported by national treasury. Zambia NPGRC belongs to a network of gene banks in the SADC region. These gene banks are coordinated by SADC Plant Genetic Resources Centre (SPGRC). The aim is to have coordinated approach to PGRFA conservation. SPGRC has developed a documentation and information system data base which aids gene banks in the management of ex situ collections. Gene bank standards have been developed which are followed by NPGRC. The information on national gene bank collection has been provided under the multilateral system.

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:

Periodically viability monitoring of ex situ collection is done in collaboration with Seed Control and Certification Institute and indications are that the food legumes and oil crop species tend to lose viability quicker than the cereals but tentatively we have put an interval of 5 years to regenerate such materials.

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:
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 \(\checkmark\)

No

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

- \(\checkmark\) 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;
- \(\checkmark\) Strengthening research that enhances and conserves biological diversity by maximizing intra- and inter-specific variation for the benefit of farmers;
- \(\checkmark\) 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;
- \(\checkmark\) Broadening the genetic base of crops and increasing the range of genetic diversity available to farmers;
- \(\checkmark\) Promoting the expanded use of local and locally adapted crops, varieties and underutilised species;
- \(\checkmark\) 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;
- \(\checkmark\) 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:


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\(^2\) 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 agriculture and rural development programmes and policies?

   Yes √
   No  

If your answer is 'yes', please provide details of the integration of such activities into the agriculture and rural development programmes and policies:

Revised National Agriculture Policy (2012-2030)

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:
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

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

Technical assistance in the conservation and management of genetic resources in the gene banks of Swaziland and Lesotho.

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

Yes √
No

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

Received support through Bioversity International for Conservation of Priority Crop wild relatives in the SADC region. Global crop diversity trust in the regeneration of certain species for purposes of duplication to International gene banks.

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:

The measures taken are protection of Indigenous Knowledge associated with plant genetic resources through the ACT of parliament, Protection of Traditional Knowledge, Genetic Resources and Expressions of Folklore Act (2016)

**Article 11: Coverage of the Multilateral System**

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

- All
- Partially
- None

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

None

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 provide details of the difficulties encountered in including Annex I PGRFA in the MLS:

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:

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:

2 SMTAs with CIMMYT covering 171 maize accessions, 1 SMTA with IITA covering 96 cowpea accessions, 1 SMTA with ICRISAT covering 400 accessions of sorghum and 1 SMTA with Norwegian University of life sciences 8 accessions of sorghum and 7 accessions of maize.

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


23. Has facilitated access been provided in your country to Annex I PGRFA pursuant to the standard material transfer agreement (SMTA)?

Yes √

No

If your answer is ‘yes’, please provide the number of SMTAs entered into:

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If your answer is ‘no’, please provide details of any difficulties encountered in providing facilitated access to Annex I PGRFA pursuant to the SMTA:
24. Has the SMTA been used voluntarily in your country to provide access to non-Annex I PGRFA?

Yes  ☐
No  √

If your answer is 'yes', please indicate the number of such SMTAs entered into:

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?

Yes  √
No  ☐

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

Biosafety Act (2007)

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:

Biosafety Act of 2007
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:

   

Article 13: Benefit-sharing in the Multilateral System

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 (e.g. catalogues and inventories, information on technologies, results of scientific and socio-economic research, including characterisation, evaluation and utilisation):

   The country provide electronic copies of Annex I crops.

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.

If access to technologies was provided, please provide details of the access provided:

☐

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

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;
- ☐ Carrying out scientific research and developing capacity for such research.

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

The country has received numerous capacity building programs in management of PGRFA, Global crop diversity trust supported the regeneration of threatened annex1 crops, NORDIC countries supported the SADC gene banks through SADC Plant Genetic Resources Centre (SPGRC) in staff training in PGR management, infrastructure development and technical support.

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?

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3 Please note that this question differs from question 15 as it only concerns Annex I PGRFA and is more specific.
If your answer is 'yes', please indicate whether the implementation of the plan was promoted through:

- National actions;
- International cooperation;

If the implementation of the plan was promoted, please provide details:

Through daily activities of regeneration, characterisation, gap filling collection, documentation of information.

**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:

A total of 4 SMTAs with IARCs, 2 CIMMYT, 1 IITA and 1 ICRISAT.

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:
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:

AVRDC 1

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:

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:

Exchange of germplasm, training of staff
**Article 18: Financial Resources**

35. Has your country provided and/or received financial resources for the implementation of the Treaty through bilateral, regional or multilateral channels?

Yes √
No

If your answer is 'yes', where possible, please provide details of such channels and the amount of the financial resources involved:

Not sure

36. 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 details of such national activities and the amount of the financial resources involved:

The Zambian government has been providing financial support for maintenance, regeneration, characterization and collection activities since its inception. The amount of financial resources is estimated at USD 20,000 annually.

**About this reporting format**

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

Yes
No √

If your answer is 'yes', please provide details on such difficulties:
If you have suggestions for improvement of this reporting format, please share them:

The reporting period should be provided

**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 need for stronger advocacy by civil society in order to foster domestication of the treaty. Sensitization activities should be promoted

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:

Challenges in implementing the Treaty especially on realisation of Farmers’ rights (FR) include the following: Lack of inter connected policy-making on conservation and sustainable use of plant genetic resources to recognise the role played by farmers and lack of adequate national Laws, policies, strategies, programs and other implementing measures relevant for realisation FR. There is need to sensitize policy makers on the need for realisation of FR

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: