



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

SEYCHELLES

12/07/2021

STANDARD REPORTING FORMAT COUNTRY REPORT ON COMPLIANCE – ITPGRFA

Name and contact details of the reporting officer: Dr. Nelson Charles

Chief Agricultural Scientist

Seychelles Agricultural Agency

Mahe

Seychelles

<u>Tel:+248</u> 2822416

Institution: Seychelles Agricultural Agency

Country: Seychelles

Date of submission: May 2021

Article 4: General Obligations 1. Are there any laws, regulations procedures or policies in place in your country that implement the Treaty? Yes X

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

The Access and Benefit Sharing (Research and Commercialisation) Regulations 2019 has already been drafted under the guidance of the Ministry of Agriculture Environment and Climate Change but is pending for state approval and posteriorly by the National Assembly of Seychelles.

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

Yes x No

No

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

- 1. Benefit and sharing policy
- 2. Agro forestry policy statement (draft form)
- 3. Forestry policy (draft form)

3. Is there any law, regulation, procedure or policy in place in your country that needs to be adjusted / harmonized¹ to ensure conformity with the obligations as provided in the Treaty?

Yes x

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

The existing law has already been harmonized and translated into legislation. ABS legislation and review of the existing Breadfruit trees and other trees Protection Act.

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

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 x
5. Have PGRFA been surveyed and inventoried in your country?
Yes x
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:
PGRFA has been surveyed partially not fully. Under the Germination 2 project, a survey was done and an inventory on fruit trees was obtained.
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:
Difficulties facing are: lack of human resources with the expertise in PGR Lack of financial resources
C II
6. Has any threat to PGRFA in your country been identified?
Yes x
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:

Fruit trees are being affected by hairy caterpillars. People tend to cut their fruit trees. High incidence of pest and diseases affecting vegetables such pest are:

- Tomato leaf Miner (Tuta absoluta) Tomato
- Fall Armyworm (Spodoptera frugiperda) Maize
- Mediterranean Fruit Fly (Ceratitis capitata) Citrus, Chilli, Tomato, Carambola, Guava etc.
- Melon Fly (Bactrocera cucurbitae) Pumpkin, Cucumber, bitter gourd, snake gourd, melon, wax gourd, chayotte

Established pest and diseases, which are more commonly encountered from sample collection:

- * Spiralling whitefly (Aleurodicus dispersus) -Many hosts (chilli, banana, cassava, eggplant etc)
- * Papaya mealybug (Parococcus marginatus) Papaya, cassava
- * Broad Mite (Polyphagotarsonemus latus) Many hosts eps. Of the Solanaceae family
- * Indian Cotton Leafhopper (Amrasca biguttula biguttula) Eggplant, okra
- * Bacterial Wilt (Ralstonia solanacearum)- Solanacea family
- * Early Blight (Alternaria solani) Tomato, eggplant, capsicum

High attack by invasive alien species affecting fruit trees.

For invasive alien species different projects are being implemented and the main one is the Ecosystem Based Adaptation Fund. It addresses issues of invasive species in catchment protecting forest. National Removal Campaign against invasive alien creepers: Miremia Peltata.

For Pest and disease infestation, the National biosecurity agency in collaboration with the Seychelles Agricultural Agency is implementing different projects aimed at the control and eradication at certain level.

Main difficulties have been lack of financial resources and labour also. Some pest showing resistant to certain pesticides.

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 X
No \[\]
If your answer is 'yes', please provide details of the measures taken:
The Seychelles Agricultural Agency has set up at the Anse Boileau Research station fruit and vegetable nurseries responsible for the reproduction of the different species of PGR and are being sold to the general public. Continuing efforts are being provided for the donations of such species to schools and different associations aiming at conservation of such species.
The setting up of a field gene bank at Barbarons, Mahe Seychelles under a PP Agreement between a farmer and the Ministry of Agriculture.
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:
Continuing effort made in the annual research programme to include conservation of starchy crops and through on farm trials in collaboration with farmers and the Ministry of Agriculture. SPGRC
UNDP grant under Australian government
The Ministry of Agriculture promoting the Agroforestry concept by allocating farmers with land for agroforestry activities.
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?
No

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

This genebank is under a Private Partnership agreement and Mr. Jean Paul Jeffroy is the farmer that has been given the responsibility for the management of the genebank. The following species can be found there: Jamalac (Syzygium samarangense), orange (Citrus sinensis), lemon (Citrus limon), pomelo (citrus maxima), mango (Mangifera indica), banana (Musa acuminata), mandarin (Citrus reticulata), cocoyam (Colocasia esculenta), dragon fruit (Selenicereus undatus)aq, star fruit (Averrhoa carambola).

11. Has the development of an efficient and sustainable system of ex situ conservation of PGRFA been promoted in your country?
Yes
No x
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:
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 x If your answer is 'yes', please provide details of the main conclusions of these monitoring activities:
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 x 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:
Regional project with CIRAD La Reunion and SPGRC in Zambia.

Article 6: Sustainable Use of Plant Genetic Resources for Food and Agriculture 14. Are there any policy and legal measures² 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 intraand 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; X 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 x
No
If your answer is 'yes', please provide details of the integration of such activities:
X Conservation
x Exploration
X Collection
x Characterization
x Evaluation
x Documentation
Sustainable use
Please indicate into which type of programmes and policies:
X Agriculture and rural development
x Food security
x Biodiversity conservation
Climate change
Other
Additional details:
Certain issues encountered on characterization due to lack of expertise.
16. Has your country cooperated with other Contracting Parties, through bilateral or regional channels, in the conservation and sustainable use of PGRFA?
V V
Yes X
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:
Germination 2 sponsored by European Union (EU) managed by Centre International du Recherche Agronomique et Développement (CIRAD) LA Reunion. FoodSec sponsored by EU. Managed by CIRAD La Reunion.
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
Not applicable x
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 x

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:
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 X
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 utilization 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:
There is no law on seed harmonization. There is the Animal and Plant Protection Act. There is no specific law on farmer's right.

Article 11: Coverage of the Multilateral System

Has your country notified all PGRFA listed in Annex I to the Treaty that are under the anagement and control of your Government and in the public domain as included in the Multilater stem of Access and Benefit-Sharing (MLS)?	
All	
Partially	
None x	
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	
X Lack of specialised human resources;	
x Limited economic resources and the need for capacity building;	
Other, please explain	
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 x	
If your oneswer is 'yes' places provide details of:	

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:
Not applicable.
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 x
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:
N/A
23. Has facilitated access been provided in your country to Annex I PGRFA using the Standard Material Transfer Agreement (SMTA)? Yes No x

If your answer is 'no', please provide details of any difficulties encountered in providing facilitated access to Annex I PGRFA using the SMTA:
Theres existing collaboration between Nagoya and ITPGRFA.
24. Has the SMTA been used voluntarily in your country to provide access to non-Annex I PGRFA?
Yes x
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 x
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 x
If your answer is 'yes', please provide details of the relevant laws, regulations or procedures:
No law to SMTA. But there are other laws that can accomodate any dispute.
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 x
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 X 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 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: No request obtained. 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:

training in conservation and sustainable use of PGRFA;

Establishing and/or strengthening programmes for scientific and technical education and

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:
Capacity building has obtained in the form of theory but no practical.
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 x 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:
Has addressed certain components related to conservation of our biodiversity.
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 X
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:
SADC PLANT GENETIC RESOURCE CENTRE

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:
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:
To CIRAD.

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 X
No 🔲
If your answer is 'yes', please provide details of such activities:
Private Partnership Agreement With the Val DÉndor farmers association With CIRAD.
Article 18: Financial Resources
35. Has your country provided financial resources for national activities for the conservation and sustainable use of PGRFA?
Yes x
No 🗆
If your answer is 'yes', please provide the estimated amount of funds provided during the last five years, including government resources:
Through Government Budget.
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:
36. Has your country provided financial resources for the implementation of the International Treaty?
Yes x
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:
During the past 5 years Seychelles has contributed 49.89 USD per year in terms of contribution.
37. Has your country received financial resources for the implementation of the International Treaty?
Yes No x
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:
Attending meeting, training from the Treaty. No cash in hand.
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:
Seychelles will require assistance in all form to implement the treaty.
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:
Lack of financial and human resources. No expertise.
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:

There should be communications between member states and ITPGRFA. Incorporation of new variety of Annex 1 crop.