

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

**CANADA**

05/09/2017

# First 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 Systems 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](mailto:PGRFA-Treaty@fao.org).

## Additional Reporting Information

Name and contact of the reporting officer

Example of formatting not being retained.

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Institution(s) of affiliation

> Agriculture and Agri-food Canada

## 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:

> In Canada, the Department of Agriculture and Agri-Food Canada is the lead government department for the Treaty on Plant Genetic Resources for Food and Agriculture. The Department maintains plant genetic resources in gene bank collections at the Plant Gene Resources of Canada in Saskatoon, The Canadian Clonal Genebank at Harrow and the Canadian Potato Gene Resources at Fredericton. Material is distributed from these collections using Standard Material Transfer Agreements.

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:

> There are various policies and legislations that relate to sustainable use and conservation of plant genetic resources for agriculturesuch as well as those related to plant breeding, plant protection and seeds.

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:

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## 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.

> Ex situ holdings of PGRFA were reported to the FAO Commission on PGR in March 2016 in the frame of reporting for the Second Global Plan of Action for PGRFA. The website of the Canadian national genebank, Plant Gene Resources of Canada, offers more detailed information: <http://pgrc.agr.gc.ca/>.

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;

> The ongoing need to pay attention to the effects of urbanization, climate change on crop wild relatives is realized in Canada. The Department of Agriculture and Agri-Food Canada has formulated a Sector Strategy for Biodiversity and Bioresources to coordinate efforts in its Science and Technology Branch regarding the conservation and utilization of PGR (<http://www.agr.gc.ca/eng/about-us/planning-and-reporting/overview-of-science-and-technology-branch-sector-science-strategies/?id=1405554689843>).

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:

> Sporadic collections of native Canadian species that are plant genetic resources for food and agriculture have been conducted by Agriculture and Agri-Food Canada. This included germplasm of forages, rangeland species, crucifers and crop wild relatives of flax and sunflower.

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:

> AAFC collaborates with NGOs that promote on-farm conservation of PGRFA. A Memorandum of Understanding exists with one Canadian NGO and the Canadian genebank, Plant Gene Resources of Canada (PGRC). PGRC stores security back-up samples of germplasm for this NGO. PGRC has also cooperated in projects that involve another Canadian NGO and a local community in germplasm regeneration. Information and germplasm exchange with NGOs occurs on an ongoing base.

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:

> Conducted Workshops with participation of Canadian indigenous people and local Communities to support their efforts in developing viable economic models involving indigenous plant genetic resources.

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:

> Agriculture and Agri\_Food Canada (<http://pgrc.agr.gc.ca/>).

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:

> Ongoing communication with general public nationally and internationally through workshops, publications and other contacts with stakeholders

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

> According to FAO Genebank Standards, on an ongoing basis, the quality of recent regenerations of ex situ germplasm is assessed and decisions regarding future regeneration needs are made at the Canadian national genebank.

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:

> With North American Region close cooperation occurs. The Inter American Institute for Agriculture hosts the PROCINORTE (Cooperative Program in Agricultural Research and Technology)/NORGEN Taskforce on Genetic Resources, which is a forum for Mexico, Canada and the US to cooperate on genetic resources issues (<http://www.procinorte.net/Pages/Genetic%20Resources%20Task%20Force.aspx>). Canada also participates in the regular meetings of the Plant Germplasm Operating Committee of the National



## 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:

> Canada promotes the measures above but not under specific legislation for PGRFA

## 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?

*Please select only one option*

- Yes  
 No

15A. If your answer is 'yes', please provide details of the integration of such activities into the agriculture and rural development programmes and policies:

> For example under the Agriculture Policy Frameworks that guide the Department of Agriculture in its activities.

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:

> Internationally, Canada supports our developing country partners in this objective through initiatives such as:

- The Consultative Group for International Agricultural Research (CGIAR); Canada contributes to the Consultative Group on International Agricultural Research, which is implementing a 5-year research program for managing and sustaining crop collections. In October 2009, with the unveiling of its food security strategy, Canada announced it would contribute CAN \$32.5 million over three years in new funds to support two CGIAR programs that focus on micronutrient deficiencies and climate change using knowledge, technology and resources to solve related problems. This funding, in part, fulfills Canada's 2009 G-8 commitment under the L'Aquila Initiative on Global Food Security.
- Canada provided CAN \$10 million from 2003 to 2013 for the initial operational resources to establish the Global Crop Biodiversity Trust and to leverage funds from other donors.
- USC "Seeds of Survival" – Global Affairs Canada contributes CAN \$14.9 million (2015-2020) to the scale-up of USC Canada's "Seeds of Survival" program in Central America and Africa. The program works with smallholder farmers (women, men and youth) in Africa, Central America, Asia and Canada, to strengthen their knowledge and their food and seed systems through participatory plant breeding, community seed banks and agro-ecological practices. This project reached an estimated 293 communities and over 44,000 beneficiaries, improving their food security and climate resilience, with particularly strong results in Ethiopia.
- PABRA: Canada contributed CAN \$15 million (2009 – 2015) to the Pan-Africa Bean Research Alliance which work towards supporting improved nutrition, health, gender equality and food security in several African countries through the development and dissemination of bean varieties that are resistant to drought, disease and pests. Since 1996, PABRA has released over 550 new bean varieties.



## 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

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

> Not directly; however, Canada trains a lot of students in Universities, and in government agencies such as Agriculture and Agri-Food Canada from developing countries and contributes to capacity building in this area.

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

*Please select only one option*

Yes

No

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

>

## 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:

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## 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 1 to the Treaty that are under the management and control of your Government and in the public domain?

*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:

> None. Canada uses the SMTA for all shipments of PGRFA from its national collections to genebank clients nationally and internationally.

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:

>

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:

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## 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:

> Canada uses the SMTA for all shipments of PGRFA from its national collections to genebank clients nationally and internationally.

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 pursuant to the standard material transfer agreement (SMTA)?

*Please select only one option*

- Yes  
 No

23A. If your answer is 'yes', please provide the number of SMTAs entered into:

> PGRC enters as provider about 100 SMTAs annually

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

24A. If your answer is 'yes', please indicate the number of such SMTAs entered into:

> Included in number above

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:

>

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:

>

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:

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## Article 13: Benefit-sharing in the Multilateral System

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

- Yes  
 No

28A. If your answer is 'yes', please provide details of any information made available regarding Annex 1 PGRFA (e.g. catalogues and inventories, information on technologies, results of scientific and socio-economic research, including characterisation, evaluation and utilisation):

> The Canadian national genebank, Plant Gene Resources of Canada, provides information on passport, characterization and evaluation data on its website using the GRIN-CA genebank information system. Canada is in the process of switching to GRIN-Global (<http://pgrc.agr.gc.ca/>).

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

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

*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.

29B. If access to technologies was provided, please provide details of the access provided:

> Various collaborations and training initiatives

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

*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:

> Canada participated/organized two training sessions for GRIN-Global, the genebank information system that will be implemented at PGRC.

2010: <http://www.procinorte.net/Pages/GRIN-GLOBALTrain-the-Trainersession.aspx>

2014: [http://www.ars-grin.gov/npgs/gringlobal/webpages/procinorte\\_2014sept.html](http://www.ars-grin.gov/npgs/gringlobal/webpages/procinorte_2014sept.html)

## 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 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

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

National actions

International cooperation

31B. If the implementation of the plan was promoted, please provide details:

> Interactions with national and international stakeholders in plant genetic resources for agriculture related activities

## **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:

> The SMTA was implemented by PGRC in July 2008. Since then, the SMTAs with IARCs were the following:

2015 World Agroforestry Centre (Kenya): one SMTA

2014: ICARDA (Morocco): one SMTA

2016: ICRISAT (India): one SMTA

2013: ICRISAT (India): one SMTA

2012: CYMMIT (Mexico): one SMTA

Beyond that, PGRC sent since 2002 material to more than 60 countries world-wide.

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

> Sending material to some countries requires a lot of paperwork. It has happened that shipments were confiscated or returned to PGRC despite having met all import requirements for sending seed material to the country.

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:

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## 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:

> For example in barley, oat, wheat, and pennisetum millet

## 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?

*Please select only one option*

Yes

No

35A. If your answer is 'yes', where possible, please provide details of such channels and the amount of the financial resources involved:

>

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

*Please select only one option*

Yes

No

36A. If your answer is 'yes', please provide details of such national activities and the amount of the financial resources involved:

> For example in AAFC national plant genetic resources for agriculture activities

## About this reporting format

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

*Please select only one option*

Yes

>

No

37A. If your answer is 'yes', please provide details on such difficulties:

>

37B. If you have suggestions for improvement of this reporting format, please share them:

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## **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:

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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:

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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:

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