

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

BRAZIL

12/07/2019

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.

Additional Reporting Information

Name and contact of the reporting officer

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Institution(s) of affiliation

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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?

Please select only one option

Yes

No

1A. If your answer is 'yes', please provide details of such laws, regulations, procedures or policies:

> o Tratado Internacional sobre Recursos Fitogenéticos para a Alimentação e Agricultura – TIRFAA (Decree 6,476/08 – ITPGRFA – International Treaty on Plant Genetic Resources for Food and Agriculture);
o Lei da Biodiversidade (Law 13,123/15 and Decree 8,772/16 - Access and Benefit Sharing Law and regulatory decree);
o Política Nacional de Agroecologia e Produção Orgânica – Pnapo (Decree 7,7794/12);
o Plano Nacional de Agroecologia e Produção Orgânica – Planapo;
o Comissão Nacional de Agroecologia e Produção Orgânica – Cnapo;
o Programa de Desenvolvimento da Agricultura Orgânica;
o Programa Bolsa Verde (Lei nº 12.512, de 14 de outubro de 2011 – Institui o Programa de Apoio à Conservação Ambiental e o Programa de Fomento às Atividades Produtivas Rurais);
o Programa Nacional para Promoção das Cadeias de Produtos da Sociobiodiversidade – PNPSB (Portaria Interministerial nº 239/2009);
o Conselho Nacional de Segurança Alimentar e Nutricional (Consea);
o Conselho Nacional de Desenvolvimento Rural Sustentável (Condraf);
o Comissão Interministerial de Educação em Agroecologia
o Programa Nacional de Conservação, Manejo e Uso Sustentável da Agrobiodiversidade;
o Programa Nacional de Combate à Desertificação;
o Programas Nacionais de Assistência Técnica e Extensão Rural, de Fortalecimento da Agricultura Familiar, de Agroindústria e de Reforma Agrária;

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:

> o Convention on Biological Diversity (Decree 2.519/98);
o Política Nacional de Biodiversidade (Decree 4.339/02);
o Plano de Ação Nacional de Biodiversidade – PAN-Bio;
o Estratégia e Plano de Ação Nacionais para a Biodiversidade – EPANB;
o Código Florestal (Lei nº 12.651, de 25 de maio de 2012);
o Programas de compras institucionais, como o Programa de Aquisição de Alimentos – PAA e o Programa Nacional de Alimentação Escolar – Pnae;
o Política Geral de Preços Mínimos – PGPM;
o Plano de Organização Produtiva de Mulheres Rurais – POPMR;
o Política Nacional de Educação Ambiental e Programa de Educação Ambiental e Agricultura Familiar;

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.

> o Plants for the Future Initiative: the initiative is a set of actions aimed at identifying, prioritizing and disseminating information on native plant species of current or potential economic importance. The initiative involves the participation of more than 500 researchers from public and private institutions, as well as representatives from different spheres of federal, state and municipal governments, farmers and industry, in the identification of species that can be economically exploited in a sustainable way and respecting the peculiarities and the culture of each region of the country (North, Northeast, Central West, Southeast and South). Until July 2017, more than 700 native species have been prioritized throughout the country. Information on potential species in each region has been systematized and is being published in a series of five books, one for each geoeconomic region of the country, two already published (South and Center-West) and three to be published in 2018 (Northeast, North and Southeast). The main objective of this initiative is to list species in different use groups (food, medicinal, aromatic, timber, oilseed, fibrous, etc.) that can diversify the portfolio of family farming products and ensure food and nutritional security, especially in poorest regions in Brazil. It is observed that in the last 10 years, considering the performance of researchers involved in the Plants for the Future Initiative in the different regions, the use of native species in food has been growing significantly, facilitating the population's access to a more diversified diet, with a greater appreciation of native biodiversity.

o Strategic Management of Genetic Resources for Food, Agriculture, and Bioindustry - Regen: this portfolio aims to ensure that Embrapa's Germplasm Collections are orderly maintained, in all their forms and kingdoms, with the highest genetic variability possible. It includes all the actions that are required for the maintenance, enrichment, and characterization of the Core Groups for Animal Conservation, the Biological Collections of Microorganisms, the Plant Germplasm Banks, the medium and long-term germplasm collections (Gene Banks), and the reference collections, in addition to the activities related to the in situ conservation of genetic resources. For that purpose, this project portfolio comprises three lines: Animal Genetic Resources, Microbial Genetic Resources, and Plant Genetic Resources. It also includes documentation activities (Portal Alelo), exchange, quarantine, quality systems and legislation related to the area of Genetic Resources.

o Alelo - Portal for services and management of data and information on Genetic Resources in Brazil. Contains passport data, statistics, characterization and evaluation of materials kept in germplasm banks. (<http://alelobag.cenargen.embrapa.br/AleloConsultas/Conservacao/capacidade.do>).

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;

> Food security in Brazil is provided by many exotic species which have been developed to suit the tropical environment. Many other native species are entering the market and when any threat is identified, research institutions help in the development of conservation protocols and sustainable use (Eg.: açai and palmito).

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:

> Maintenance of ex situ germplasm banks and research on characterization and sustainable use.

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:

> Communities and local seed storage promoted by government and NGOs.

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:

> Cassava wild relatives in Conservations Units / ex situ (in vitro) conservation
Rice wild relatives in the Amazon basin

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:

> o Information available in WIEWS and Alelo Information System
(<http://alelobag.cenargen.embrapa.br/AleloConsultas/Conservacao/capacidade.do>)

o Embrapa's complete survey (2014):

- i. 120.000 accessions (Base Collection)
- ii. 128.846 accessions (147 Active Collections);
- iii. 700 species;
- iv. 300 genera.
- v. Largest collections by crop (number of accessions):
 1. Rice: 27.050;
 2. Soybean: 18.126;
 3. Bean: 16.447;
 4. Wheat: 15.118;
 5. Sorghum: 7.215.

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:

> The Genetic Bank of Embrapa has the capacity to store about 800,000 seed samples (520 thousand currently), in addition to 10 thousand in vitro samples and 120 thousand cryopreserved samples. The total capacity of the new genetic bank, built in Brasilia, is more than 1 million samples under different preservation methods. The new structure has four cold chambers (-20 °C) for long-term storage, a room for receiving and documenting samples, drying chambers (15% RH, 15 °C) and standby (30% RH; 10 °C and 20 °C), growth room (25 °C) and cryogenic tanks for the storage of samples of animals, plants and microorganisms.

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

> In general, the plant germplasm banks only maintain the viability of the germplasm, either through the evaluation using germination tests, the appropriate maintenance of plants in the field (perennial case). At EMBRAPA's Colbase - approximately every 10 years, germination tests are conducted to evaluate the viability of the conserved germplasm. The accessions that presented high physiological quality (germination superior to 85%) practically did not present significant reduction of germination.

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:

> o Sustainable Rural Project - A cooperation project to promote sustainable rural development, aimed at the broad adoption by rural producers of low-carbon agricultural technologies that will restore the productive potential of degraded agricultural areas and allow restoration of legal maintenance areas of native vegetation.

This Technical Cooperation Programme is executed by the Inter-American Development Bank (IDB). It has been funded by the International Climate Fund (ICF) of the British Department for Environmental, Food and Rural Affairs (DEFRA). The Ministry of Agriculture, Livestock and Food Supply (MAPA) in Brazil is the beneficiary of the contribution and it has appointed the Social Mobility, Rural Producer and Cooperatives Secretary to act as the technical and institutional coordinator within the MAPA.

o PROCITROPICOS (Programa Cooperativo de Investigación y Transferencia. de Tecnología para los Trópicos Suramericanos) is a network including the National Research institutions from Brasil (EMBRAPA), Bolivia (INIAF), Colombia (CORPOICA), Ecuador (INIAP), Perú (INIA), Surinam (CELOS) and Venezuela (INIA). The mission of PROCITROPICOS is to promote and to implement cooperation activities in the field of research, development and innovation for the sustainable tropical agriculture.

o FORAGRO (The Forum for the Americas on Agricultural Research and Technology Development) is a space for discussion of and agreement on the most important issues facing agriculture in the Americas and, along with other actors, it forms part of the Hemispheric Agrifood Technology and Innovation System. The Inter-American Institute for Cooperation on Agriculture (IICA) serves as the Technical Secretariat of FORAGRO.

o ACTO (Amazon Cooperation Treaty Organization) is an international organization founded to promote the preservation of the Amazon basin and regulate Amazonian development through international cooperation. The Amazon Cooperation Treaty was drafted and signed on July 3, 1978, by Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela.

o The Cooperative Program for Agrifood and Agroindustrial Development of the Southern Cone (PROCISUR), created in 1980 with the support of the Inter-American Development Bank (IDB), is a joint initiative of the National Agricultural Research Institutes of the Southern Cone and the Inter-American Cooperation for Agriculture.

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:

> o The new legal framework of Brazilian genetic heritage and associated traditional knowledge management (Law No. 13,123/2015 and Decree No. 8772/2016) reduces the financial and regulatory costs of Brazilian biodiversity research activities and technological development. This new regulation contemplates several improvements in the government's management agenda. Management was facilitated by the creation of two electronic systems designed to oversee and trace activities resulting from access.

o The series Notebooks from Family Farming (<http://www.mda.gov.br/sitemda/publica%C3%A7%C3%B5es-s%C3%A9rie-cadernos-da-agricultura-familiar>) aimed at promoting the sustainable use of biodiversity in agroecological production.

o Booklets on best practices for the collection of wild foods with guidelines for the improved use of biodiversity. The booklets have the potential of promoting organic certification for wild foods that are sustainably collected. They present practical tools and information for collectors, associations, cooperatives and capacity building professionals. The series is being expanded in 2017 for 21 new species.

o The GEF Pollinators Project, during its execution, contributed to disseminate the following pollinator friendly practices include: a) to recover Areas of Permanent Preservation and Legal Reserve with attractive plants to pollinators; b) to keep attractive plants in the vicinity of plantations as well as trap-nests for nesting bees (landscape design and enrichment); c) do not apply pesticide during the flowering season, neither immediately before the flourishing or when pollinators are visiting the crop; d) do not destroy nests and sites for nesting/reproduction of pollinators; e) distribute rational bee nests in the vicinity of plantations; f) to keep attractive plants at gardens, zoos and public squares; f) to keep attractive plants at lanes parallel to highways.

o Investments in policies and actions aiming at improvements in productivity, reducing the conversion of natural habitats to areas of agriculture or pasture: Between 1990/1991 and 2009/2011, the total area planted with grains grew 30%, while production increased by 150%. Advances were also obtained in cattle ranching, where a study concluded that the pasture area needed for a single head was on average 1.96 hectares in 1970, having reduced to 0.93 hectares per animal in 2006, although this may reflect measures of optimization of soil use, instead of indicating better productivity resulting from genetic improvement. There is an increase in the adoption of techniques for the recovery of degraded pastures, crop rotation, soil fertility restoration, pasture composition and efficient management of herds. These practices may result in increases in livestock production within existing pastures, especially if they are associated with existing techniques of genetic improvement of the herd.

o Preventing and fighting fires: In order to strengthen the prevention and control of forest fires in Brazil, the revision of the former Forest Code (now replaced by Law 12.651 / 2012) requires that landowners request permission from state environmental agencies to use fire in their areas. In addition, it establishes that all environmental agencies (federal, state and municipal) that make up the National Environmental System - SISNAMA must update and implement contingency plans to control forest fires, and that the federal government should establish a national policy of management, prevention and control of forest fires. Another measure was the creation of the Integrated Multi-Agency Center for Operational Cooperation - CIMAN began its activities in June 2014, with the objective of coordinating efforts among the federal agencies that work in the direct fight against forest fires.

o Difficulties are generally related to lack of funding to set up the current Brazilian regulation and to implement international compromises, taking into consideration extension of the country and the different conditions of each biome.

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:

- > o The National Program for Strengthening of Family Agriculture (PRONAF) established in 1996 provide financing to family farmers for agricultural production. PRONAF is an important tool to promote a greater political visibility of family farming in the country and has facilitated access to credits to 781,000 farmers. Although the number is low compared to the total number of farms in the country, the program has nevertheless supported a significant increase in the volume of food produced by family farming and improvement of the socioeconomic conditions of many families, It has also had important impacts on Municipalities, increasing job opportunities, revenues and rising the municipal sector GDP. Disbursements of credits under the program increased from US\$0.72 billion in 2001 to US\$ 11 billion in 2013.
- o The Food Acquisition Program (PAA) was established in 2003 with the objectives of promoting access to food by people in a situation of food insecurity and promoting social and economic inclusion in the rural areas by strengthening family agriculture. Under the program, the federal government purchases family farmers' products, paying a limited amount to each farmer, stores the products and freely distributes them in areas where social vulnerability is higher. The PAA is part of the PGPMBio, but it is not restricted to products that have a minimum price; it also purchases NTFPs and AFS products that are not supported by the PGPMBio. Between 2003-2010 the PPA invested a total of US\$ 1,6 billion purchasing farm products from an average of about 112,000 farmers annually (2.6% of Brazilian family farmers).
- o The National School Lunch Program (PNAE), was established in 1955 and aims to partially meet the nutritional needs of students through the provision of at least one meal a day in all public schools registered in the school census, seeking to fulfill the nutritional requirements during the school year. Since 2009 the PNAE ensures that at least 30% of the funds transferred from the National Fund for the Development of Education (FNAE) to the Municipalities (which are in charge of purchasing and distributing products to schools) are invested in procuring family agriculture products. In 2014, US\$ 1,6 billion will be allocated to school lunches, and 30% would represent an injection of US\$ 480 million to family farming, including NTFP food products.
- o The National Policy for Sustainable Development of Traditional Peoples and Communities (PNPCT) was launched in 2007 with the main objective of promoting the sustainable development of traditional peoples and communities, emphasizing in the recognition, strengthening and guaranteeing of their territorial, social, environmental, economic and cultural rights, with respect and appreciation to their identity, their organization and their institutions. A board composed of 15 federal governmental institutions, plus 15 representatives of non-governmental institutions, coordinates and works to reach the policy's objectives.
- o The General Policy of Minimum Prices for Sociobiodiversity (PGPMBio) was established through Decree-Law No. 79 (1996), which defined criteria for the establishment of minimum prices and procurement of agricultural products. More recently, Law No. 11775 (2008) established a direct subsidy to producers, including for biodiversity products. Under this policy, a subsidy is paid to those agroextractivists that could not market their product at the minimum price established by the Federal Government. The subsidy is the difference between the minimum price and the value of the sale. The Brazilian Government has selected 30 NTFP species for priority intervention aimed to promote their sustainable use. Of these, 13 species have minimum prices established under the PGPMBio. Additionally, eight new species are being considered for inclusion in the PGPMBio policy, namely: buriti (*Mauritia flexuosa*); murumuru (*Astrocaryum murumuru*), macaúba (*Acrocomia aculeata*), fava d'anta (*Dimorphandra mollis*), licuri (*Syagrus coronata*), maracujá do mato (*Passiflora cincinnata*), erva mate (*Ilex paraguariensis*) and processed piaçava (*Attalea funifera*).
- o For the Federal Government Multi-Year Plan 2016-2019, the Ministry of Agriculture's Division of Genetic Resources is working with 3 main components:
 - Component 1. National Plan of Germplasm Plant Collections for food and agriculture
 - Component 2. Participatory characterization and enhancement of plant genetic resources for food and agriculture
 - Component 3. National Platform for Plant Genetic Resources for Food and AgricultureActions include to hire trainees to support the feeding of the genetic resource Alelo system, characterization and organization of germplasm banks.
- o The National Policy of Technical Assistance and Rural Extension (PNATER) was established in 2003 and its objective is to promote and facilitate the processes that contribute to the construction and implementation of strategies for sustainable rural development, focusing on the expansion and strengthening of family farming and their organizations, through educational and participatory methodologies integrated to the local dynamics, seeking to create viable conditions for the exercise of citizenship and improving the quality of life of society.

o Several Brazilian ministries and civil society representatives are committed to the implementation of the National Plan for Organic Production and Agro-ecology which can be found on the website (http://www.mda.gov.br/portalmda/sites/default/files/ceazinepdf/cartilhalt_PLANO_NACIONAL_DE_AGR-379811.pdf)

o Genetic Heritage Management Council (CGen) includes representatives from National Council for the Sustainable Development of Traditional Peoples and Communities (CNPCT), from Indigenous People National Council (CNPI), and from National Council for Sustainable Rural Development (Condraf), those representations were an important step, although other equally complex challenges remain, such as building reliable processes and sufficient capacity to meet the commitment of informed consultation, informed consent and fair and equitable sharing of benefits.

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:

> o The GEF "Mainstreaming Biodiversity Conservation and Sustainable Use into NTFP and AFS production practices in Multiple-Use Forest Landscapes of High Conservation Value" Project has contributed to ensure that the biodiversity of Brazilian multiple-use forest landscapes of high conservation value is conserved through a strengthened sustainable use management framework for non-timber forest products (NTFP) and agroforestry systems (AFS).

o Research Network on Pollination and Sustainable Management of Pollinators - POLINFRUT, as part of the research, teaching and extension activities developed by the Network in the municipalities of Ibicoara and Mucugê, Bahia, within the scope of the project "Conservation and Management of Pollinators for Sustainable Agriculture through the Ecosystem Approach "(FAO/GEF/UNEP/FUNBIO). This project is supported by the Global Environment Facility (GEF) and is implemented in seven countries: Brazil, South Africa, India, Pakistan, Nepal, Ghana and Kenya. The project is coordinated at the global level by the United Nations Food and Agriculture Organization (FAO), with support from the United Nations Environment Program (UNEP).

o Brazil has undertaken work in situ conservation of plants (especially fruit trees) native to different biomes, identifying best practices for biodiversity conservation. In 2014, the project "Integrating the Conservation and Sustainable Use of Biodiversity in Production Practices with Management of Non-Timber Forest Products and Agroforestry Systems in Forest Landscapes for Multiple Uses High Value Conservation" was approved by the Global Environment Fund (GEF).

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

>

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:

- > o National Plan for Promotion of Socio-Biodiversity Productive Chains, with the objective of promoting the sustainable use of biodiversity by traditional peoples and communities, which allowed the identification of 30 plant species traditionally used or with economic potential, as well as training 12 local organizations of traditional peoples and communities (cooperatives and associations). The plan also aims to strengthen Local Productive Arrangements (APL) focusing on priority production chains, facilitating access to markets and establishing fairer relation with other economic agents;
- o National Policy on Minimum Price Guarantee for Socio-Biodiversity Products and the National Food Acquisition Program (PAA): these programs facilitate the marketing of food produce by small farmer from traditional communities, quilombolas and indigenous peoples who sell açaí, nuts, babassu and rubber. This subsidy increases production and contributes to the formalization of trade in these products, with the creation of price lists and structured production chains, with greater financial returns to small producers;
- o National Policy for Sustainable Development of Traditional Peoples and Communities (PNPCT): aims to promote the sustainable development of these communities, with emphasis on the recognition, strengthen and guarantee of their territorial, social, environmental, economic and cultural rights, respecting their identities, organizational patterns and institutions. It is also important to mention the Plan for the Sustainable Development of Traditional African Peoples and Communities, with the main objective of safeguarding the African traditions preserved in Brazil. The plan includes a set of public policies to secure rights, protect cultural heritage and combat extreme poverty through the implementation of emergency actions and the promotion of economic and productive inclusion.
- o Knowledge and cultural diversity meetings: aiming to create means of protection, valorization and promotion of traditional knowledge. Various initiatives to promote and disseminate traditional knowledge and practices has been carrying out. An example is The "Meeting of Knowledge and Cultural Diversity" project has a partnership with public universities and aims to involve instructors from traditional communities in the discussion of themes such as reforestation, nature, culture, medicinal plants, dance, mythology and music.
- o Meeting of traditional peoples and communities: several regional events that promote the encounter between traditional peoples and communities to exchange knowledge and experiences have been supported. An example is the Meeting of Traditional Cultures of the Chapada dos Veadeiros, in Goiás. In June 2017, the XVII annual event was held, consisting of debates and conferences to train, promote, value and protect the ways of life of Brazilian traditional populations, as well as a fair for the exchange of seeds and products of biodiversity. The meeting also includes workshops on national policies for traditional knowledge associated with biodiversity, rights and benefit sharing.
- o Environmental management of indigenous lands: the National Policy for the Territorial and Environmental Management of Indigenous Lands, has the following objectives: (i) protection of indigenous territories and natural resources; (ii) indigenous governance and participation; (iii) conservation units and indigenous lands; (iv) prevention and recovery of environmental damage; (v) sustainable use of natural resources and indigenous production initiatives; (vi) intellectual property and genetic heritage; and (vii) capacitation, training, information exchange and environmental education.
- o Measures and policies for access and sharing of benefits: stimulates the development of Community Protocols that prepare the community to become directly involved in contracts for access to traditional knowledge and biodiversity, in addition to the prior establishment of conditions and terms that are acceptable to the community. This also facilitates access procedures for interested businesses, reducing initial costs and streamlining the process of obtaining valid contracts.

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:

>

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:

> • The crops that have been included in the MLS:

- Cassava;
- Rice;
- Potato;
- Citrus;
- Beans;
- Sunflower;
- Finger Millet;
- Maize;
- Triticale;
- Banana;

More information can be found on FAO WIEWS.

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

Documentation, IT compatibility of information systems, curatorship of accessions regarding traditional knowledge

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:

> A lot of work has been developed with State public institutions and Universities but not yet with private companies or local communities.

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:

> Development of a state of the art information system with data that allows interested parties to request accessions of their interest – ALELO (<https://www.embrapa.br/alelo>)

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:

> 2018: 3;
 2017: 4;
 2016: 6;
 2015: 6.

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:

>

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:

> Constituição da República Federativa do Brasil de 1988
 Lei nº 10.406, de 16 de março de 2002 (Código Civil)
 Lei nº 13.105, de 16 de março de 2015 (Código de Processo Civil)

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:

> Lei nº 9.307, de 23 de setembro de 1996 (Lei da Arbitragem)
 Lei nº 13.105, de 16 de março de 2015 (Código de Processo Civil)
 Lei nº 13.140, de 26 de junho de 2015 (Lei de Mediação Brasileira)

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

Please select only one option

Yes

No

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

>

Article 13: Benefit-sharing in the Multilateral System

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

- 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):

- > <https://www.embrapa.br/biblioteca>
 ALELO (<https://www.embrapa.br/alelo>)

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:

- > Many conservation and technological development of new plant cultivars through genetic improvement or participative selection have been developed since the 80s.

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:

- > Capacity building and funding for the development of a national information system which is been connected with Genesys (<https://www.genesys-pgr.org/pt/welcome>) . There are also export of data to the FAO WIEWS (<http://www.fao.org/wiews/en/>) .

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:

- > Details of implementation can be found on WIEWS.

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:

> PRODUCT - IARC - COUNTRY

Soybean - CIAT - Bolivia

Sorghum- ICRISAT - India

Corn - CIMMYT - Mexico

Rice - IRRI - Philippines

Rice - CIAT - Colombia

Sweet potato - CIP - Kenya

Corn - CIMMYT - India

Sorghum - ICRISAT - India

Banana - IITA - Nigeria

Banana - IITA - Uganda

Banana - IITA - Uganda

Corn - IITA - Nigeria

Rice - CIAT-COLOMBIA - Colombia

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

>

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:

> After 2000, with the implementation of a national legislation on Access and Benefit Sharing, the exchange of genetic material with the IARCS has been done occasionally with the use of specific MTAs.

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:

>

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:

> o For the Federal Government Multi-Year Plan 2016-2019, the Ministry of Agriculture's Division of Genetic Resources foreseen a budget of R\$ 1.895.000,00 (US\$ 473.750,00) to work with 3 main components:

- Component 1. National Plan of Germplasm Plant Collections for food and agriculture
- Component 2. Participatory characterization and enhancement of plant genetic resources for food and agriculture
- Component 3. National Platform for Plant Genetic Resources for Food and Agriculture
 - o Actions include to hire trainees to support the feeding of the genetic resource Alelo system, characterization and organization of germplasm banks, publications, support for meetings, etc. Approximately 25% of the budget was used until now due the financial constricts of the Brazilian Government.
 - o Embrapa's Genetic Resources Portfolio - Annual budget: US\$ 4 millions.

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:

> It is very difficult to list all the details about species and specific activities.

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

>

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:

>

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:

>

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:

>