



**Food and Agriculture
Organization of the
United Nations**



**International Treaty
on Plant Genetic Resources
for Food and Agriculture**

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

29/02/2024



ONLINE REPORTING SYSTEM

Second 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

>>> Carina Knorpp

Institution(s) of affiliation

>>> Ministry of Rural Affairs and Infrastructure

SE-103 33 Stockholm

SWEDEN

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:
>>> Regulation (2011:474) of simplified access to plant genetic resources

You have attached the following Web links/URLs to this answer.

Regulation (2011:474)

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:

>>> If EU regulation no 511/2014 is applicable for use of a plant genetic resource, Chapter 29, Sections 8 and 12 of the Swedish Environmental Code as well as the Swedish Government Ordinance SFS 2016:858 "Förordning om användning av genetiska resurser och traditionell kunskap om sådana resurser" are applicable.

Furthermore, specific sections under the following Government Ordinances are applicable (in Swedish):

Förordning om ändring i förordningen (1998:940) om avgifter för prövning och tillsyn enligt miljöbalken

Förordning om ändring i miljötillsynsförordningen (2011:13)

Förordning om ändring i förordningen (2012:259) om miljöstraffsavgifter

Sweden has no regulation on access to plant genetic resources that takes place under Swedish jurisdiction.

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:

>>>

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.

>>> Inventories have primarily targeted crops and crop groups that had not previously been in focus for joint Nordic genetic resources activities. This includes, in particular, seed & vegetatively propagated vegetables, fruit & berry crops, ornamental plants (trees, bushes, corms, bulbs, perennials, roses, indoor plants) and hops. Some efforts have been devoted to MAPs (medicinal & aromatic plants) and so-called 'relict plants', i.e. since-long introduced species that still today can be found as remnant populations at historic sites (e.g. monasteries, historical dwellings, etc. These latter taxa – often representing traditional herbs – include, among many others, *Aegopodium podagraria* L., *Ballota nigra* L., *Cichorium intybus* L., *Hyoscyamus niger* L., *Leonurus cardiaca* L., *Malva neglecta* Wallr., and *Papaver somniferum* L.

Plans for inventories of potato – in addition to those historically carried out by the Nordic Genetic Resource Centre, NordGen – have not yet been realised due to shortage of funding.

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 species, subspecies and/or varieties subject to such threats:

Threatened crop wild relatives (CWR), locally adapted forage grasses and legumes

*The sources (causes) of these threats:

Mainly changed land management regimes (lack of grazing, overgrowth, abandonment of traditional hay making, competition by other taxa that benefit from downfall of atmospheric nitrogen (N))

*Any steps taken to minimise or eliminate these threats:

A gap analysis of Swedish crop wild relatives has been carried out and published. Subsidies are available through the Rural Development Programme for restoration and management of natural and semi-natural meadows and pastures.

*Any difficulties encountered in implementing such steps:

The previously weak or non-existing sectorial interaction between government agencies sharing responsibility (Agriculture vs. Environment) has improved considerably since the previous report (2016).

You have attached the following Web links/URLs to this answer.

Weibull & Phillips (2020) - Swedish Crop Wild Relatives: towards a national strategy for in situ conservation of CWR

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:

>>> A consecutive series of joint Nordic projects since 2015, managed by the Nordic Genetic Resource Centre, NordGen has led to the collection, conservation and molecular characterisation of certain crop wild relatives and wild food plants.

You have attached the following Web links/URLs to this answer.

Nordic Crop Wild Relatives

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:

>>> The national system of conservation (gene banking) of vegetatively propagated crops includes so-called clonal archives, some of which are under the management of local communities or entities. Additionally, various networks and farmer groups are engaged in the regeneration and management of seeds of a number of crops, for sale as amateur or conservation varieties, or as commodities.

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:

>>> See Q6 and Q7

10. Are there any ex situ collections of PGRFA in your country?

Please select only one option

- ☒ Yes
☐ No

You have attached the following Web links/URLs to this answer.

The Nordic Genetic Resource Center, NordGen

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

>>> The genebank contains about 34.000 seed samples from 438 different plant species. Accessions represent varieties and breeder's lines, landraces and locally adapted material, genetic stocks, crop wild relatives.

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:

>>> Since 1979, Sweden has collaborated, within the framework of a joint Nordic regional gene bank, on the conservation and sustainable use of PGR. This includes the development and establishment of ex situ collections of seed, field gene banks (clonal archives), in vitro collections and laboratory facilities.

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?

Please select only one option

- ☒ Yes

☐ No

12A. If your answer is 'yes', please provide details of the main conclusions of these monitoring activities

>>> Conclusions from viability monitoring: much variation can be seen in the decline of viability over time, both among species and accessions within species. However, a large number of species generally survive a long time if dried to about 5% and stored at -18°C.

Studies on genetic diversity and integrity show that changes in diversity and composition occur between generations in some accessions of cross-pollinated species.

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:

>>> Sweden has, since 1979, and through the regional cooperation within the Nordic Genetic Resource Centre (previously the Nordic Gene Bank), collaborated with the other four Nordic countries on all aspects of PGRFA conservation and management. Similar activities, though not quite as extensive, have also been pursued over the last 25+ years with Estonia, Latvia and Lithuania.

Sweden has also, through NordGen and within the framework of ECPGR, collaborated proactively with other member countries of this network primarily on aspects of documentation and characterisation. Other essential, and long-term international collaborative efforts include the following:

- provision of support and programme management of a more than 20-year PGR project with countries within the SADC region (funded by the Swedish International Development Agency, Sida – COMPLETED)
- provision of funding in support of the EAPGREN (East African Plant Genetic Resources Network) programme (Sida – COMPLETED)

- provision of funding and programme management in support of the SEEDnet programme in SE Europe and former Yugoslavia (Sida – COMPLETED)

- provision of funding and programme management in support of the CAC programme in Central Asia (Sida – closed down prematurely)

- the advanced international training programme GRIP – Genetic Resources and Intellectual Property Rights 2003-2013 (Sida – COMPLETED)

- SwedBio: a Sida-funded programme (2021-2024) at Stockholm Resilience Centre which since 2023 is registered as observer under ITPGRFA supporting projects linked to conservation and sustainable use of PGRFA and Farmers rights including:

- The Seed and Knowledge Initiative a regional initiative in support of farmer-led seed systems in Zambia, Zimbabwe, Malawi and South Africa (supported by SwedBio during 2019-2024)

- The project “Improving seed security among smallholder farmers in Kenya through access to registered local crop varieties for woman seed enterprises” implemented by Seed Savers Network Kenya (supported by SwedBio during 2023-2024)

- The project “Rights-based and Agroecological Initiatives for Sustainability and Equity in Asia” implemented by Southeast Asia Regional Initiative for Community Empowerment (supported by SwedBio during 2021-2024)

Sida has an agreement with the World Bank as Trustee of the CGIAR Trust Fund which is a financial intermediary fund, FIF. During 2022, Sida provided support to CGIAR through undesignated, pooled funding (core support) of MSEK 115. During the past agreement phase (2019-2023) Sida has contributed 455 MSEK to undesignated, pooled funding. This type of funding goes to all research programs and other functions by approval of the System Council, consisting of donors and regional representatives.

Financing of CGIAR’s work to fulfil its obligations towards the International Treaty on Plant Genetic Resources for Food and Agriculture: Work Packages 1 and 2 of the Genebank Initiative, which support the essential operations of the CGIAR genebanks, germplasm health units and associated policy work, are assured their budget in each financial year. This practice has been in place since 2012. The annual request from the CGIAR Trust Fund pooled funding for these budgets is determined by the set of contributions to CGIAR Research Centers for Genebank management from the endowment fund that is managed by the Global Crop Diversity Trust (Crop Trust). The most recent communication from Crop Trust is USD 14 million between 2022 and 2024 and CGIAR from the pooled funding USD 17.7 million.

From the point of view of sustainable use of PGRFA Sweden, with NordGen serving as programme manager, actively collaborates since 2011 with the Nordic commercial plant breeding sector on a Public-Private Partnership (PPP) for Pre-breeding.

Finally, upon the invasion of Ukraine in February 2022, Sweden through ECPGR and NordGen took active part in the initial work of safeguarding the Ukrainian PGR seed collections. This work was subsequently successfully taken over by FAO (ITPGRFA) and the Crop Trust.

You have attached the following Web links/URLs to this answer.

[The SADC Plant Genetic Resources Network](#)

[The South East European Development Network on Plant Genetic Resources – SEEDNet](#)

[The Nordic Public-Private Partnership \(PPP\) for Pre-breeding](#)

[SwedBio](#) - A programme at Stockholm Resilience Centre

[SKI](#) - The Seed and Knowledge Initiative

[Seed Savers Network](#) - Kenya

[SEARICE](#)

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:

- >>> - Pursuing fair agricultural policies ... : through measures in the Rural Development Programme, RDP
- Strengthening research ... : no specific provisions have been made, but funding for projects in this have been granted as part of the normal research grant procedures, e.g research concerning different cultivation systems cultivation and increased diversification of crops, and the connection between climate and plant genetic diversity as a tool towards a more resilient agricultural system and adaptation to climate change.
- Broadening the genetic base ... : > through the joint Nordic PPP programme in Pre-breeding (see Q13); > through the reintroduction of heritage cultivars to hobby gardeners and other small-scale producers via the national Programme for the Diversity of Cultivated Plants; > through listing of conservation and amateur varieties in accordance with Commission Directives 2008/62/EC and 2009/145/EC
- Promoting the expanded use... : through the establishment of the Programme of Diversity of Cultivated Plants, POM
- Supporting the wider use... : through the various actions mentioned above (PPP, POM)

Moreover, apart from the comments made above, in Sweden, and also in the other Nordic countries, the concept of establishing so-called 'user genebanks' has been tabled, i.e. intermediaries between genebanks and traditional growers/farmers serving as multipliers of genebank seed. There is a great interest in growing heritage cultivars, but the legal context has yet to be clarified given current legislation of marketing and sales of seeds. The Commission's proposal for marketing of plant reproductive material (PRM) presented in July '23 may provide for options along these lines, but it is still premature to draw any conclusions in this regard.

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?

Please select only one option

- ☒ Yes
☐ No

15A. If your answer is 'yes', please provide details of the integration of such activities:

- ☒ Conservation
☒ Exploration
☒ Collection
☒ Characterization
☒ Evaluation
☒ Documentation
☒ Sustainable Use

Please indicate into which type of programmes and policies:

- ☒ Agriculture and rural development
☐ Food security
☒ Biodiversity conservation
☐ Climate change
☒ Other

Additional details:

>>> The activities listed under 15A have not explicitly been integrated into the mentioned policies and programmes. However, the Programme for Diversity of Cultivated Plants, POM resides within the context of national so-called Environmental Quality Objectives. Goal no. 13, A varied agricultural landscape, embraces the commitment of conserving and using sustainably domestic genetic resources. This policy framework has been instrumental in helping to realise the goals and objectives of the FAO Global Plans of Action (1 and 2).

You have attached the following Web links/URLs to this answer.

A Varied Agricultural Landscape - Sweden's 16 environmental goals are part of a larger system consisting of many different actors who work together to achieve the goals. The Environmental Objectives serve as a guide for the entire society's environmental work, both authorities and county administrative boards, municipalities and the business community and other actors.

<http://>

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:

>>> 16B - see reply under Q13

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
- ☐ Not applicable

17A. 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:

>>> Shared involvement in the training course WIPO-PRV Advanced Training Program on Intellectual Property and Genetic Resources in Support of Innovation (2019)

You have attached the following Web links/URLs to this answer.

[WIPO-PRV Advanced Training Program on Intellectual Property and Genetic Resources in Support of Innovation](#)

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

Please select only one option

- ☐ Yes
- ☐ No
- ☒ Not applicable

18 A. 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?

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:

>>> - 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;

- Please see answers on article 5 (question 13A) and article 14 (question 31 A).

- Traditional knowledge has been documented and made available through the programme of cultivated diversity <https://www.slu.se/centrumbildningar-och-projekt/programmet-for-odlad-mangfald-pom/publikationer/bocker/>

- The Swedish constitution includes "The right of Public access (Allemansrätten)" according to Swedish custom law. When the Nagoya protocol was implemented it was concluded that the genetic resources in Sweden should remain available to the public as long as they are collected in accordance to the appropriate rules of biological material and living organisms. The public right of access is a non-monetary benefit sharing for everyone.

>>> - New legislative proposals at both national and EU level are always referred to relevant farmer organisations, companies and NGOs

- Farmers' organisations are represented in the advisory committee of the national PGR programme and in other fora targeting agrobiodiversity

- The Farmers' Union collaborates actively in the collection of royalties emerging from the production and use of farm-saved seed (FSS), given that Sweden is Party to UPOV 1991. Swedish farmers are authorized according to Article 14 of Council Regulation (EC) 2100/94 on Community plant variety rights to use part of their harvest for propagation on their own holdings. Article 8 of Council Regulation (EEC) No 1765/9, which establishes a support system for producers of certain arable crops sets, however, limitations to this exemption. A farmer may keep enough planting material to sow an area equivalent to the annual production of not more than 92 tonnes of cereals, or 185 tonnes of potato. The Federation of Swedish Farmers is active through the Swedish Seed Trade Association in collecting royalties from those farmers whose productions units (farms) are larger than specified by the derogation (see above). The percentage of farm-saved varies with crop and ranges from 0,6 % (Brassica oil crops) to 22 % (spring wheat; figures from 2016). There is broad and common understanding among Swedish farmers that their businesses will profit from re-investing royalties into further plant breeding. The Federation of Swedish Farmers is active through the Swedish Seed Trade Association in collecting royalties from those farmers whose productions units (farms) are larger than specified by the derogation (see above). The percentage of farm-saved varies with crop and ranges from 0,6 % (Brassica oil crops) to 22 % (spring wheat; figures from 2016). There is broad and common understanding among Swedish farmers that their businesses will profit from re-investing royalties into further plant breeding. Sweden welcomes and supports the on-going discussions between UPOV and the Treaty concerning possible interrelations between the two global instruments. Sweden wishes to underline the fact however that, while both conventions are mutually supportive regarding sustainable agriculture and food security, they fill two very different purposes."

Article 11: Coverage of the Multilateral System

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

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:

>>> No difficulties

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:

- ☐ Lack of guidelines for the identification and inclusion of material;
☐ There is no national genebank;
☐ Lack of catalogue of PGRFA in the country;
☐ Lack of specialised human resources;
☐ Limited economic resources and the need for capacity building;

Other, please explain:

>>>

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:

>>> Since more than 40 years, the Swedish commercial plant breeding sector continuously delivers genetic material (crop cultivars, breeding lines as appropriate) to the joint Nordic genebank, NordGen. Under a special agreement, modern cultivars that are still on the market are also transferred to the genebank and conserved as "Material in transition". The agreement guarantees that no newly developed cultivars are lost. Seeds from these accessions are not to be distributed until the day when the cultivars are being removed from the variety list, or their PVR expires.

All PGRFA stored at NordGen – of both Annex 1 and non-Annex 1 taxa – are being distributed under the conditions of the SMTA (see Q22A).

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:

>>>

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:

>>> All PGR stored at NordGen – of both Annex 1 and non-Annex 1 taxa – are being distributed under the conditions of the SMTA, on the basis of the joint Nordic Ministerial 'Kalmar Declaration' of 2004. The recently completed project "Access and Rights to Genetic Resources – A Nordic Approach (II)" has reviewed and updated previous recommendations concerning access to PGR.

You have attached the following Web links/URLs to this answer.

Access and Rights to Genetic Resources – A Nordic Approach (II) - The report is an update of the previous report from 2003 "Access and Rights to Genetic Resources: A Nordic Approach". It includes a set of new recommendations on access to and benefit sharing on the use of genetic resources for agricultural and horticultural plants, farm animals, domesticated and wild fish species, wild animals and plants, forest and microbials

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 using the Standard Material Transfer Agreement (SMTA)?

Please select only one option

- ☒ Yes
☐ No

23B. If your answer is 'no', please provide details of any difficulties encountered in providing facilitated access to Annex 1 PGRFA using 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
☐ No, but the issue is under consideration

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:

>>> Parties that disagree on a contract have several options to find a solution/settlement. One option is that the party that claims to have a legitimate claim against the other party turns to the courts, usually a district court, to get a trial of the matter. A dispute concerning a contract in the District Court is handled under the Code of Judicial Procedure (1942:740) and the rules for civil cases. During the proceedings in the court, there is the opportunity to meet a voluntary agreement, either on their own, with the assistance of the court or with the help of a special mediator. In cases where an agreement is not reached, the court will adjudicate. The judgment can be appealed to a Court of Appeal and then to the Supreme Court. It requires leave to appeal in a civil case to be admissible in the courts. Once the judgment is no longer possible to appeal, i.e. becomes legally binding, the winning party can request the Swedish Enforcement Agency to enforce the judgment. Rules concerning the execution of the sentence can be found in the Enforcement Code (1981:774).

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:

>>> Another important form of alternative dispute resolution is arbitration. The Arbitration Institute of the Stockholm Chamber of Commerce is one of the world's leading actors in the field. Arbitrations are recognized and can often be enforced to a much greater extent outside the country where the judgment was given than is the case with other decisions. Rules on arbitration are given in Arbitration Act (1999:116).

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?

Please select only one option

- ☒ Yes
☐ No

28A. If your answer is 'yes', please provide details of any information made available regarding Annex 1 PGRFA:

- ☒ Catalogues and inventories
☐ Information on technologies
☒ Results of scientific and socio-economic research, including characterisation, evaluation and utilisation
☐ Other

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

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.

Please provide details:

>>> - genotypic and phenotypic evaluation of subsets of e.g. oat and emmer wheat in joint projects between NordGen, Lantmännen Lantbruk and Oatly
- the Nordic Public-Private Partnership (PPP) for Pre-breeding (administered by NordGen)
- crop thematic collaboration within ECPGR (the European Cooperative Programme for Plant Genetic Resources)

You have attached the following Web links/URLs to this answer.

Nordic PPP - The Nordic Public-Private Partnership

ECPGR - European Cooperative Programme for Plant Genetic Resources

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

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

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:

>>> Training of undergraduate and graduate students (Swedish University of Agricultural Sciences)

You have attached the following documents to this answer.

Sweden - 30B Measures provided.JPG - Table of measures provided

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 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
☐ Other actions

Please provide details:

>>> National actions comprise the national programme for PGR – the Programme for Diversity of Cultivated Plants, POM, which began in 2000 and still, in its fourth and up-dated version, covers the thematic areas Conservation, Sustainable use, R&D, Training and information, International collaboration, and Policy. International actions comprise collaboration within the context of ECPGR. In addition, Sweden has over the years provided substantial funding to the Global Crop Diversity Trust and the Benefit-Sharing Fund of the International Treaty. Moreover, during the period 2019-2022, Sweden's support to CGIAR amounted to 531 Million SEK, a large part of which was used for crop development.

Sida is supporting Oxfam Novib since 2014 for the implementation of "SeedsGROW" Sowing Diversity = Harvesting Security - Seeds Programme | SD=HS (sdhsprogram.org) which is a global programme that contributes to 1) Resilient indigenous and farming communities with better access to seeds; Indigenous peoples and smallholder farmers with increased market access to quality seeds; 3) Strengthened coping strategies of communities through the use of local food plants resulting in more diverse and healthy diets; and 4) improved policies, laws and regulations in support of farmer seed systems and farmers' rights.

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:

>>> Please note that the following information refers to the period from the year of entry into force of the Treaty until 2023.

Facilitated access is always provided for all (IARCs and other international institutions), and these are the institutions that NordGen has expedited seed orders to:

- International Maize & Wheat Improvement Center, CIMMYT, Mexico: 5 SMTAs
- Horticulture Research International, HRI, United Kingdom: 3 SMTAs
- Nature's Crops International Limited, United Kingdom: 1 SMTA
- PBI CAMBRIDGE, Plant Breeding International, United Kingdom: 1 SMTA
- Plant Research International B.V., Netherlands: 3 SMTAs
- International Center for Agricultural Research in the Dry Areas (ICARDA), Morocco: 2 SMTAs

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:

>>> >>> As with 32A, please note that the following information refers to the period from the year of entry into force of the Treaty until 2023.

Facilitated access is always provided for all (IARCs and other international institutions), and these are the institutions that NordGen has expedited seed orders to:

- Horticulture Research International, HRI, United Kingdom: 1 SMTA
- Plant Research International B.V., Netherlands: 6 SMTAs

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:

>>>

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:

>>> The joint Nordic regional genebank, NordGen, has since long been involved in international activities as part of their mandate.

Swedish members of the ECPGR working groups represent a wide range of stakeholders incl. universities, the breeding community, genebanks, local crop networks, etc. Membership is granted based upon expressed interest and competence.

Sweden has, however, not taken any specific measures to encourage either the research or breeding communities in that direction, as it is considered their own specific responsibility.

Article 18: Financial Resources

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

Please select only one option

- ☒ Yes
☐ No

35A. If your answer is 'yes', please provide the estimated amount of funds provided during the last five years, including government resources:

>>> Altogether 42,5 Million SEK during 2019-2023, mainly directed towards (1) programme coordination and (2) management and activities of the National Genebank for Vegetatively Propagated Horticultural Crops.

35B. 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:

>>> No particular strategy

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

Please select only one option

- ☒ Yes
☐ No

36A. 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::

>>> Financial support channeled through the Swedish International Development Agency, Sida

36B Channel:

- ☐ Bilateral
☐ Regional
☒ Multilateral

36C. Please provide details:

>>> 2018-2019: Core Administrative Budget 34,681 USD + Special Fund for Agreed Purposes 75,621 USD
From 2020, annually 1 Million SEK to cover for Sweden's contribution as Party, where excess amounts are to be channeled to the Special Fund for Agreed Purposes. From 2023, annually 2 MSEK to cover for Sweden's contribution as Party, where excess amounts are to be channelled to the Special Fund for Agreed Purposes.

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

Please select only one option

- ☐ Yes
☒ No

37A. 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:

>>>

37B. Channel:

- ☐ Bilateral
☐ Regional
☐ Multilateral

37C. Please provide details:

>>>

General remarks on the implementation of the ITPGRFA

38. You may use this box to share any advice you may have arising from your country's experience with implementation of the Treaty:

>>>

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:

>>>

About this reporting

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

Please select only one option

☒ Yes

☐ No

41A. If your answer is 'yes', please provide details on such difficulties:

>>> Despite completion, the section under Article 15 still states "Some questions unanswered".

41B. If you have suggestions for improvement of this reporting format, please share them:

>>> Remaining/unanswered questions could be highlighted; otherwise they are quite difficult to spot.