

Second Reporting Cycle

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

CZECH REPUBLIC

13/09/2024



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

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Institution(s) of affiliation

>>> The Ministry of Agriculture of the Czech Republic, Crop Research Institute

Article 4: General Obligations

 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: >>> The Czech Republic fulfils the objectives of the Treaty through the National Programme on Conservation and Utilization of Plant Genetic Resources and Agrobiodiversity, the current strategy valid for 2023-2027 (see https://mze.gov.cz/public/portal/-q385869lwTxw8LY/narodni-program-konzervace-a-vyuzivani?_linka=a294055 (CZ version), https://mze.gov.cz/public/portal/-q385879psV1x388/the-national-programme-on-conservation?_linka=a559578 (ENG ver). In 1993, the National Programme for the Conservation and Utilisation of Plant Genetic Resources (as 'NPGZR') was initiated as a project to secure work with plant genetic resources in the Czech Republic. This programme was designed from the outset to be compatible with similar initiatives in other European countries. International cooperation, especially through the European Cooperative Programme for Plant Genetic Resources (ECPGR), which the Czech Republic joined in 1983, played an important role in the development of this programme. In 2003, the NPGZR received significant legislative support through the adoption of Act No. 148/2003 Coll. In 2023, a new five-year phase of the 'National Programme for the Conservation and Utilisation of Genetic Resources of Plants, Animals and Microorganisms Important for Food and Agriculture' was introduced for the period 2023-2027, in which the NPGZR is integrated as subprogramme. The entire programme is financed from the budget of the Ministry of Agriculture of the Czech Republic. The text of this programme is available here. Within the NPGZR, sixteen workplaces (locally based specific crop genebanks) now work together, belonging to twelve different legal entities including public institutes, universities, private companies, etc. These participants of the NPGZR are responsible for the managing of specific ex situ crop and field collections involving gathering, characterization, evaluation (C&E) and documentation of PGRFA acc
2. Are there any other laws, regulations, procedures or policies in place in your country that apply to plan 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: >>> This section provides a comprehensive overview of the legal framework adopted in the Czech Republic to ensure the conservation and sustainable use of PGRFA. 1) The most important act regulating the conservation and utilisation of plant genetic resources is Act No. 148/2003 Coll. on the Conservation and Utilisation of Plant Genetic Resources and Microorganisms Important for Food and Agriculture and on the Amendment to Act No. 368/1992 Coll. on Administrative Fees as amended (Act on Plant Genetic Resources and Microorganisms). This Act regulates the rules, obligations and requirements of individual participants in the National Programme for the Conservation and Utilisation of Genetic Resources and Agrobiodiversity in the Czech Republic. 2) Act No. 93/2018 Coll. on the Conditions for the Utilisation of Genetic Resources under the Nagoya Protocol. This Act regulates, in connection with the directly applicable regulations of the European Union (Regulation (EU) No. 511/2014of the European Parliament and of the Council of 16 April 2014 on compliance measures for users from the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation in the Union; Commission Implementing Regulation (EU) 2015/1866 laying down detailed rules for the implementation of Regulation (EU) No 511/2014 of the European Parliament and of the Council as regards the register of collections, monitoring user compliance and best practices) and supporting document related to the implementation of the legislative rules (Guidance document on the scope of application and core obligations of Regulation (EU) No 511/2014 of the European Parliament and of the Council on the compliance measures for users from the Nagoya Protocol on Access to Genetic Resources and

the Fair and Equitable Sharing of Benefits Arising from their Utilisation in the Union 2021/C 13/01), the rights and obligations of persons and the competence of administrative authorities in the field of compliance with the conditions for access to genetic resources and sharing of benefits arising from the utilisation of genetic resources and traditional knowledge associated with genetic resources.

- 3) Act No. 219/2003 Coll. on the Marketing of Seed and Propagating Material of Cultivated Plants and amending certain acts. This law primarily deals with the commercialisation of seed and seedlings but also regulates the use of genetic resources such as the production and commercialisation of seed and propagating material of conservation varieties and the use of CWR in the approval of seed mixtures for restoring habitats disturbed by human activities.
- 4) Decree No. 458/2003 Coll., implementing the Act on Genetic Resources of Plants and Microorganisms, as amended by Decree No. 213/2017 Coll.
- 5) In the Czech Republic, there is a strong tradition of growing introduced (allochthonous) plant species (especially from the group of fruits, vegetables, flowers, or ornamental plants). Gardening is part of the lifestyle and has an undeniable social significance. Collections of such plants can be considered cultural values created by private sources and NGOs on the territory of the Czech Republic Act No. 221/2021 Coll. on the Promotion of Horticultural Activities (Garden Act) gives a more detailed regulatory framework to these activities.

3. Is there any law, regulation, procedure or policy in place in your country that needs to be adjusted $ ho$
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

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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. >>> PGRFA, original to the Czech Republic and Czechoslovakia were inventoried for the period from the beginning of breeding to the year 2000. Information from all lists of registered varieties from 1941 to 2000 was compared to the accessible material in the former national documentation system EVIGEZ and current GRIN Czech (since 2015, see https://grinczech.vurv.cz/gringlobal/search.aspx). The resulting publication (Holubec ed. 2017) reviews all saved and lost accessions of nearly all collections (except fruits and grapes that are in process). Fruit landraces and obsolete varieties were continuously surveyed in the countryside of the Czech Republic and GIS maps were elaborated for each fruit crop. Over 1000 trees of landraces were localized, determined
and recorded. Threatened CWR of mainly leguminous fodder plants, grasses and hops were surveyed and have been monitored in the Czech Republic since 2008. Several surveys of in situ and on-farm were conducted within the NPGZR, which were funded either by a subsidy programme or by other research agencies e.g. the Ministry of Culture (NAKI III).
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 main threats identified were global climate change (long-term drought periods, spring frost, and natural succession of vegetation on poorly managed sites), but also financial and human capacity, especially for evaluation and regeneration activities. In the case of CWR, the main threatened species were selected, especially among crop groups: Forage legumes, grasses, vegetables, medicinal and aromatic plants and hops; these wild populations were surveyed and are monitored in the Czech Republic. Concerning ex-situ collections, all PGRFA in the documentation system are monitored for the minimum supply of seeds in the central gene bank and level of germination. If the regenerative capacity is insufficient, a threat is identified automatically.
Taylor et al. (2017) proposed conservation Strategy of CWR in the Czech Republic (see https://doi.org/10.1111/ddi.12539). They selected food and fodder crops from the finding database of the Czech Flora and filtered them on economic importance and occurrence in less than 20 sites. Finally, 204

species were prioritized for collection and conservation. Hotspots with the highest occurrence of CWR in the Czech Republic were determined. The next collecting activity was focused mainly on the area of hot spots.

The sources (causes) of these threats.

The biggest threat to working with genetic resources in the Czech Republic is the changing conditions due to climate change, such as long-term drought periods, high temperatures, changes in land use and management, etc. In natural conditions, natural succession in habitats due to global climate change and missing site management is a serious problem too.

Any steps taken to minimise or eliminate these threats;

In situ and on-farm:

The Guidelines document on on-farm conservation was published in 2021; guidelines on in situ conservation are being prepared in collaboration with responsible departments of the Ministry of the Environment of the Czech Republic. Both guidelines provide basic steps to establish either on-farm or in situ conservation as well as include the model agreement between the landowner and curator of the involved collection. It is important to keep the proposed methodology for the conservation of PGRFA, mainly focused on CWR and landraces. Ex situ:

For ex situ conserved samples, a bilateral agreement on mutual storage of seed samples is in force with the main Gene Bank in Slovakia based within the National Agricultural and Food Center. A second safety duplication for PGRFA seed samples is deposited at the Global Seed Vault (GSV) in Svalbard, Norway. Cryopreservation is managed in the cryobank for selected most important vegetatively propagated species (521 accessions in cryo in 2023),

All entering seeds are tested for germination ability in the Gene Bank. Further germination is verified after 5 or 10 years within the regulator inventory activities. The results of testing are recorded in the documentation system GRIN Czech. It automatically sends a warning to curators when germination drops below standard thresholds.

Any difficulties encountered in implementing such steps:

The practical aspects of in situ and on-farm conservation are in the initial stage; it is necessary to advance in negotiation and sign agreements with landowners and set up custodians. The most serious problem is the lack of financial support for such conservation activities.

7. Has the collection of PGRFA and rele	evant associated information on	n those plant genetic resources that
are under threat or are of potential use	e been promoted in your countr	ry?

Please select o	only on	e option
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□ No

7A. If your answer is 'yes', please provide details of the measures taken:

>>> After the Second World War, Czechoslovakia recognised the threat to plant genetic resources and in 1951 the Department of Genetic Resources was established in the newly founded Research Institute of Crop Production. Throughout the 20th century, efforts of conserving genetic resources, and in particular conserving endangered genetic resources, led to the establishment of the National Programme for the Conservation and Use of Plant Genetic Resources and Agrobiodiversity in the newly established Czech Republic in 1993, which was supported by law in 2003. A central Gene Bank of Seed for all collections was established in 1988 and put into operation a year later.

Prioritizing the promotion of the PGRFA (primarily species propagated vegetatively and CWR) native to the Czech Republic is a key objective for both the current and forthcoming phases of the National Programme. A comprehensive assessment of endangered CWR has been carried out, and a strategy for their conservation within the Czech Republic has been developed (Taylor et al 2017). Ongoing monitoring is being conducted for selected vulnerable populations. Significant CWR at risk in natural environments is being gathered for ex situ conservation, particularly from areas of high biodiversity. In the case of protected plant species, such measures were not possible for a long time due to specific provisions of Act No. 114/1992 on the protection of nature and landscape. The Nature Protection Act is now under revision, which will enable better safeguarding the natural habitats with CWR. These include proposals for collecting samples from populations for storage in the Gene Bank or for regular ex situ collection, representing a holistic approach to conservation. On-farm conservation:

Monitoring fruit trees in the Czech Republic uncovered the need for on-farm conservation of valuable historical landraces and local bred varieties. Several areas have been identified where trees suitable for conservation on-farm can be found. Selected farmers, amateur pomologists, NGOs, and the National Parks and Protected Landscape Regions Administrations have been negotiated for on-farm conservation of fruit trees. After pomological evaluation, variety identification and verification, the selected accessions were included in the National Programme and IS GRIN Czech. In addition, new orchards were established in several locations, in which representative original fruit varieties and landraces were planted for on-farm conservation. This activity continues with other types of plant genetic resources. Curators of fruit trees from the National Programme have been negotiating with farmers and amateur pomologists about the inclusion of their trees in on-farm conservation. The identification and search for a suitable farmer/gardener is carried out in cooperation with the Czech Union for Nature Conservation. The methodology for on-farm conservation of crop genetic resources is available at https://www.gzr.cz/wp-content/uploads/2020/12/Metodika_on_farm_final.pdf. In situ conservation:

The cooperation with the Agency for Nature and Landscape Protection (AOPK) and the Ministry of the

Environment has been ongoing with the aim of selecting protected areas with occurrence of important CWR.

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 Czech Union for Nature Conservation supports individual pomologists and gardeners to keep historical fruit landraces. The Union developed a documentation system of pomologists and their orchards and declared the orchards as registered germplasm plots. The documentation system describes the plots in detail including GPS positions of individual trees and their characterisation. This documentation is linked with the national germplasm documentation system GRIN Czech in the case of selected landraces. The Union is methodically supported by AOPK. More detailed information is available at https://www.stareodrudy.cz/.
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: >>>
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: >>> In the Czech Republic, the conservation of the PGRFA is mainly ensured in ex situ collection. Accessions of species propagated by seeds are stored in the main gene bank, while vegetatively propagated species are conserved in field collections or in vitro. Central Gene Bank in Crop Research Institute (CRI) stores more than 43,000 seed accessions PGRFA (cereals, vegetables, aromatic and medicinal plants, fodder crops, flax, oil plants, etc.). These collections are curated in the following institutes: Cereals: Crop Research Institute (workplace Prague); Agricultural Research Institute Ltd., Kromeriz Legumes and flax: AGRITEC, Ltd. Sumperk
Oil plants: OSEVA PRO Ltd. Research Institute for Oilseed Crops, Opava Grasses: OSEVA PRO Ltd. Grassland Research Institute, Zubří Fodder crops: Research Institute for Fodder Plants, Ltd. Troubsko
Vegetables and aromatic and medicinal plants: Crop Research Institute, workplace Olomouc, Mendel University in Brno, Faculty of Horticulture,
Ornamental plants: Institute of Botany CAS, The Silva Tarouca Research Institute for Landscape and Ornamental Gardening, Mendel University in Brno, Faculty of Horticulture, There are more than 10,000 vegetatively propagated PGRFA maintained in the field or in vitro collections held in respective gene banks:
Gene banks for Fruit Crops - Mendel University in Brno, Faculty of Horticulture, Research and Breeding Institute of Pomology Holovousy, Ltd. (2,709 accessions)
Gene banks for Grapevine - AMPELOS a.s., Viticulture Research Station, Crop Research Institute Viticulture Research Station Karlstejn (214 accessions) Gene bank for Hops - Hop Research Institute Co., Ltd. (386 accessions)
Gene bank for Potatoes - Potato Research Institute Havlíčkův Brod, Ltd. (2,709 accessions) Gene banks for Ornamentals - The Silva Tarouca Research Institute for Landscape and Ornamental Gardening, Institute of Botany CAS (generatively and vegetatively propagated 1970 accessions). All accessible data and information on PGRFA are recorded in the information system GRIN Czech and available at In the Czech Republic, the conservation of the PGRFA is mainly ensured in ex situ collection.
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Legumes and flax: AGRITEC, Ltd. Šumperk Oil plants: OSEVA PRO Ltd. Research Institute for Oilseed Crops, Opava Grasses: OSEVA PRO Ltd. Grassland Research Institute. Zubří Fodder crops: Research Institute for Fodder Plants, Ltd. Troubsko Vegetables and aromatic and medicinal plants: Crop Research Institute, workplace Olomouc, Mendel University in Brno, Faculty of Horticulture, Ornamental plants: Institute of Botany CAS, The Silva Tarouca Research Institute for Landscape and Ornamental Gardening, Mendel University in Brno, Faculty of Horticulture, There are more than 10,000 vegetatively propagated PGRFA maintained in the field or in vitro collections held in respective gene banks: Gene banks for Fruit Crops - Mendel University in Brno, Faculty of Horticulture, Research and Breeding Institute of Pomology Holovousy, Ltd. (2,709 accessions) Gene banks for Grapevine - AMPELOS a.s., Viticulture Research Station, Crop Research Institute Viticulture Research Station Karlstein (214 accessions) Gene bank for Hops - Hop Research Institute Co., Ltd. (386 accessions) Gene bank for Potatoes - Potato Research Institute Havlíčkův Brod, Ltd. (2,709 accessions) Gene banks for Ornamentals - The Silva Tarouca Research Institute for Landscape and Ornamental Gardening, Institute of Botany CAS (generatively and vegetatively propagated 1970 accessions). All accessible data and information on PGRFA are recorded in the information system GRIN Czech and available at https://grinczech.vurv.cz/gringlobal/search.aspx. Passport and C&E data are regularly reported to EURISCO. 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 □ 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: >>> In the last 30 years, since the Czech Republic launched the National Programme on Conservation and Utilization of Plant Genetic Resources and Agrobiodiversity, a very successful decentralised network of twelve legal entities (public and private research institutes, university) was created and it has been cooperating in the conservation of PGRFA since then. The Ministry of Agriculture performs the role of state administration within the National Programme. The institutions are responsible for the management of specific plant collections and ensure that they do not overlap or duplicate within the National Programme. All partners of the networks have signed a cooperation agreement to maintain the national inventory of PGRFA and to make this material available for use in breeding, education and research. The Crop Research Institute (CRI) serves as the authorised person (under Act No. 148/2003 Coll.) and coordinates the National Programme for PGRFA. The CRI provides services to all participants, namely the provision and management of the national information system GRIN Czech and the facilities for long-term conservation (central gene bank for seed samples and cryobank). The cryobank does not provide regular services to users of PGRFA within the meaning of the applicable legal norms. It is an internal service within the Programme framework and international cooperation. It also serves as a safety duplication tool. 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 >>> To maintain the quality and viability of the seeds included in the Central Gene Bank, the degree of germination is assessed during the initial inspection. Only samples that comply with the approved methodology will be stored continuously in the gene bank. A lower germination percentage is permitted for material from collection expeditions and some CWRs. Even during conservation, germination is periodically assessed based on ISO 9001:2016 and the methodology of the National Programme. Plants of selected species (mainly from collection expeditions) are kept in herbaria and, in the case of cereals, spikes are kept controlling possible mixing or purity of genetic resources and maintain the degree of variability. For cross-

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

pollinated species, technical or spatial isolation is maintained depending on the needs of the species. The ISO quality management system by ČSN EN ISO 9001:2016 was introduced in September 2011 to advance the

activities of the seed gene bank.

\checkmark	Yes
\Box	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:

>>> The Czech Republic participates in collection expeditions with neighbouring countries, mainly Slovakia and Poland, but also Serbia, and historically with Slovenia and Austria. A bilateral agreement on mutual storage of seed samples is in force with the National Agricultural and Food Center (NPPC) gene bank in Slovakia. There is also an agreement for the conservation of safety duplication between the Polish, German and Czech cryobanks (international cryopreservation of European garlic originated from the EURALLIVEG project). Within bilateral projects, the Czech Republic participates in the evaluation and characterization of some accessions; this also applies to the participation in the European research framework programmes of the EU. The Czech Republic is a member of the European Cooperative Programme for Plant Genetic Resources (ECPGR) with the participants of the National Programme representing in all working groups, two of which are chaired or co-chaired. The Czech Republic is also an associated member of AEGIS which provides information on its unique genetic resources through the EURISCO database. To facilitate the provision and use of plant genetic resources, all accessions included in the National Programme are included in the MLS and provided only based on the SMTA.

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:

>>> As mentioned in question 2, several laws in the Czech Republic regulate the use and conservation of plant genetic resources. In addition, according to the modification of the Organic Production Act (Act No. 242/2000 Coll., Act on Organic Agriculture and on the amendment of Act No. 368/1992 Coll. on Administrative Fees, as amended), which follows European legislation, namely Regulation 848/2018 of the European Parliament and of the Council, the cultivation of so-called organic heterogeneous material is allowed, which expands the use of farmer breeding.

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: >>> In the Czech Republic, the main policy supporting the conservation, utilization and agrobiodiversity is the Act. No. 148/2003 Coll. On the Conservation and Utilisation of Plant Genetic Resources and Microorganisms Important for Food and Agriculture and on the Amendment to Act. No. 368/1992 Coll. On Administrative Fees as amended (Act on Plant Genetic Resources and Microorganisms). In 1993, the National Programme on Conservation and utilization of Plant Genetic Resources and Agrobiodiversity was launched as mentioned in question 2.
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:
>>> As mentioned in the answer to question 13, the Czech Republic is an active partner in all ECPGR working groups, two of which are chaired or co-chaired by Czech experts. There is a mutual agreement on seed safety duplication between Slovakia and the Czech Republic. Seed samples are also stored in the GSV Svalbard. There is also an agreement on the storage of safety duplication of garlic between the Polish, German and Czech cryobanks. In addition, the Czech Republic also collaborate in the Horizon 2020 European research projects with other contracting parties, namely in: H2020 AGENT project with Germany, Slovakia, France, the Netherlands, Morocco, the United Kingdom and others (see https://www.agent-project.eu/);
H2020 ECOBREED project with Slovenia, Germany, Austria, the United Kingdom, Slovakia, Serbia and others (see https://ecobreed.eu/); H2020 EUCLEG project with Denmark, Sweden, France, Spain, Serbia, Belgium and others (see
http://www.eucleg.eu/).

Article 8: Techical 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: >>> CRI Prague hosted the workshop GRIN-Global for specialists involved in Plant Genetic Resources Documentation from 8 to 12 February 2016, in August 2017, and in November 2022. The first workshop GRIN- Global was organized by the Global Crop Diversity Trust, the second by the ECPGR with deputies from Crop Trust attending, and the third workoshop was organized by ECPGR.
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: >>> In the Czech Republic, the Plant Genetic Resources Board, which is an advisory body of the National Programme for the Conservation and Utilisation of Plant Genetic Resources and Agrobiodiversity, includes farmer organisations such as the Agricultural Association of the Czech Republic, Agrarian Chamber of Czech Republic, Association of Private Farming of the CR, as well as breeding companies and their associations. All of these organisations can participate in the decision-making process on the direction and use of plant genetic resources.

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: >>> Czech Republic doesn't have any difficulties in these regards.
20B. If your answer is 'partially', please provide details of:
The extend 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: >>> In the Czech Republic, there is an agreement that all accessions included in the National Programme will also be included in the MLS and will only be provided with SMTA, notwithstanding Annex I. This means that all physical and natural persons who have participated in the National Programme have been encouraged and have agreed to have all accessions in the MLS. Concerning natural and legal persons that have not taken part in the National Programme, they have been regularly attending the meetings of the Plant Genetic Resources Board and have all the information about MLS available. However, these natural and legal persons have not yet decided to include their material in the MLS system.
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 accessions included in the National Programme are provided with SMTA.
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: >>> Paragraph 19 of Act No. 148/2003 Coll. on the Conservation and Utilisation of Plant Genetic Resources and Microorganisms Important for Food and Agriculture stipulates that: 1) The authorized person and the participant of the National Program provide samples of genetic resources, if a) they have a sufficient supply of samples of genetic resources, b) by providing a sample of the genetic resource, the genetic resource will not be threatened or damaged, which could result in the physical extinction of the genetic resource. 2) If payment is requested for the provision of a sample of genetic resources, it must not exceed the minimum costs incurred. 3) The authorized person and participant of the National Program provides samples of genetic resources to foreign legal entities or foreign natural persons only based on international treaties concerning genetic resources to which the Czech Republic is bound, or based on compliance with the principle of mutual provision of the same or similar benefits. Concerning the provision of genetic resources, there is a direct connection established between the Czech law and the ITPGRFA. All samples publicly available through the GRIN Czech Information System are provided to users through the SMTA. It is thus possible to seek recourse in case of contractual disputes arising possibly from the signed SMTA between the providers and users of plant genetic resources. However, we do not count such a case in the history of the National Programme.
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: >>> In the Czech Republic, the basic rules of arbitration are governed by Act No. 216/1994 Coll., on arbitration

and enforcement of arbitration awards. In addition to proceedings where both sides are persons from the Czech Republic, in some cases it may also apply to proceedings with an international element. Within the framework of the arbitration procedure, it is not possible to decide disputes of public non-profit institutional healthcare facilities, disputes arising in connection with the implementation of insolvency or execution, or disputes in which it is not possible to reach a settlement regarding the subject of the dispute according to the Code of Civil Procedure.

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:
30. Has your country provided for and/or benefitted from capacity building measures in respect of Annex 3 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:

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	
□ No B1A. If your answer is 'yes', please indicate whether the implementation of the ☑ National actions □ International cooperation □ Other actions	e plan was promoted through:

Please provide details:

>>> The overall progress in the implementation of the Second Global Plan of Action for Plant Genetic Resources for Food and Agriculture (Second Global Plan of Action) is monitored and guided by FAO through the Commission on Genetic Resources for Food and Agriculture.

The monitoring framework includes three targets for plant genetic resources for food and agriculture (Conservation; Sustainable use; Institutional and human capacities) and is evaluated through three Higher-order Composite Indices; and 18 Priority Activities evaluated through 63 indicators in 2014 and 58 indicators in 2019.

The Czech Republic responded to both monitoring reports. The graph below shows the progress towards the Priority Activities and the three Targets. It is based on a qualitative expert judgement on the level of achievement for each of the indicators. Ratings range from 1 to 8, with 1 representing the lowest and 8 representing the highest level of achievement.

Higher-order Composite Indices for Plant Genetic Resources for Food and Agriculture in the Czech Republic (Source: FAO Commission on Genetic Resources for Food and Agriculture):

You have attached the following documents to this answer.

<u>Priority Activities of the Second Global Plan of Action for PGRFA.jpg</u> - Priority Activities of the Second Global Plan of Action for PGRFA

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: >>>
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: >>> All accessions included in the National Programme are involved in MLS regardless of Annex I. All samples are provided with SMTA.
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:

Page 19 of 23

Article 16: International Plant Genetic Resources Networks

Please select only one option

Yes

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?

□ No
34A. If your answer is 'yes', please provide details of such activities:
>>> Paragraph 26 of Act No. 148/2003 Coll. deals with international cooperation in the field of conservation and
use of genetic resources. It states that the authorized person and participants of the National Programme
ensure cooperation with foreign genebanks, or other foreign persons for the purpose of obtaining or
exchanging samples of genetic resources, information about genetic resources and exchanging scientific and

programs, projects and agreements resulting from international obligations. The Czech Republic is also a member of the ECPGR and participates in the work of the working groups, two of which chairs or co-chairs. The new National Programme approved for the 2023-2027 period also includes activities developed based on the second Global Plan of Action FAO. The Czech Republic is a contracting party to the ITPGRFA and a member of the FAO Commission on Genetic Resources for Food and Agriculture.

technical information. International cooperation also includes their participation in the implementation of

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: >>> Funding to support the National Programme is provided from the state budget through the Ministry of Agriculture, in the form of year-to-year subsidies. The total budget for the Ministry of Agriculture is approved by the Government of the Czech Republic and the Chamber of Deputies of the Parliament of the Czech Republic. The budget contains chapters related to national funding schemes and programmes related to agriculture. One of the programmes is the National Programme for the Conservation and Sustainable Use of Plant, Animal and Microbial Genetic Resources for Food and Agriculture. In 2023, the annual budget for the PGRFA National Programme was approx. 1,700,000 EUR. In 2018 - 2022, the subsidy for all the National Programme participants amounted to 7,843,000 EUR (1,569,000 EUR/year). 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: >>> 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:: 36B Channel: ☐ Bilateral □ Regional □ Multilateral 36C. Please provide details: 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:
- >>> Mutual visits of selected genebanks are taking place under the framework of the AGENT Activated GEnebank NeTwork project. The genebank in the Crop Research Institute in Praha Ruzyně was also peerreviewed and the full evaluation report including recommendations can be found at https://www.ecpgr.org/fileadmin/templates/ecpgr.org/upload/AEGIS/PEER_REVIEWS/AGENT_Project_Genebank_Review CRI May2022.pdf.

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