

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

POLAND

27/04/2017

First Report on Compliance of ITPGRFA

Online Reporting System on Compliance of the International Treaty on Plant Genetic Resources for Food and Agriculture

Pursuant to Article 21 of the Treaty, the Governing Body approved, at its Fourth Session, the Compliance Procedures that include, among others, provisions on monitoring and reporting: Resolution 2/2011.

According to the Compliance Procedures, each Contracting Party is to submit to the Compliance Committee, through the Secretary, a report on the measures it has taken to implement its obligations under the Treaty. This Online Reporting Systems facilitates the submission of such information in electronic format.

Should you need any additional information regarding the reporting on compliance or the use of the online system, please visit the Treaty's Website or contact the Secretariat at PGRFA-Treaty@fao.org.

Additional Reporting Information

Name and contact of the reporting officer

Example of formatting not being retained.

>

Institution(s) of affiliation

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Article 4: General Obligations

1. Are there any laws, regulations procedures or policies in place in your country that implement the Treaty?

Please select only one option

- Yes
 No

1A. If your answer is 'yes', please provide details of such laws, regulations, procedures or policies:
> not applicable

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:
> Resolution No. 104/2015 of the Council of Ministers of 14 July 2015 on establishing the multiyear program "Creating a scientific basis of the biological progress and conservation of plant genetic resources as a source of innovation and support for sustainable agriculture and food security of the country".

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:
> not applicable

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.

> All species, sub-species and /or varieties are stored in plant genebank collections and are listed in data base:

<http://egiset.ihar.edu.pl/index.aspx?lang=en-US>

Above mentioned list includes 82 138 accessions of PGRFA.

The National Centre for Plant Genetic Resources – NCPGR operates within the structure of the Plant Breeding and Acclimatization Institute – National Research Institute. It maintains the national genebank for plant genetic resources under a mandate of the Polish government and serves as the National Coordination centre for National Plant Genetic Resources Programme. The objective of the Programme is to ensure long term preservation of genetic variability of crop plants, their wild relatives and endangered weedy species occurring in Poland.

Implementation of Programme involves cooperation of several institutions. Cooperating institutions are entrusted with the task of curating specific ex situ crop collections which involves collecting, characterizing, evaluating and documenting information on PGR accessions. Long term conservation facilities and central data base are located and managed in NCPGR.

The NCPGR seed genebank holds above 82 000 accessions of which over 60 % belong to cereals and grasses. PGR of hop, fruit, potato, some vegetable, medicinal and ornamental species are maintained in field, in vitro and/or in crio - collections.

Structure of long term seed collection maintained in NCPGR seed genebank.

NCPGR with cooperating institutions conducts numerous collecting missions, with the aim to inventory in situ and collect precious, rare plant genetic resource.

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

> not applicable

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 of crop plants subject to threats of extinction in Poland are, between others:

emmer wheat (*Triticum diccicum* Schrank)

Einkorn wheat (*Triticum monococcum* L.)

Perennial rye (*Secale cereale* var. *multicale* Metzg. ex Alef.)

Camelina (*Camelina sativa* (L.) Crantz)

white Sweet Clover (*Melilotus albus* Medik.)

grass pea (*Lathyrus sativus* L.)

lentils (*Lens culinaris* Medik.)
parsnip (*Pastinaca sativa* L.)
Buckwheat (*Fagopyrum esculentum* Moench.)
common kidneyvetch (*Anthyllis vulneraria* L.)

The main cause of genetic erosion are changes in the ways of farming and the introduction of new varieties. The modernization of Polish agriculture, resignation of using of poor soil on the large areas and common availability of modern varieties threaten local populations and old varieties of all crops.

With the aim of minimising or elimination these threats, abovementioned species were included into special form of on-farm conservation. The way of support for their cultivation is described in Regulation of the Minister of Agriculture and Rural Development dated 18 March 2015 on detailed conditions and procedures for granting financial assistance under the measure "Measure agri-environment-climate" under the Rural Development Programme 2014-2020 (Polish O. J. from 2015., pos. 415).

The most important difficulties encountered in implementing this steps are problems with availability of seeds of this species, especially perennial rye, as well on local market as in genebank.

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:

> The collection of PGRFA and relevant associated information on those plant genetic resources that are under threat or are of potential use are being promoted by the genebank staff during different conferences, workshops, trainings for farmers and fairs. Leaflets and brochures on this topic are being launched. Besides, special web site of genebank dedicated to this group of plants is under construction.

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:

> Regulation of the Minister of Agriculture and Rural Development dated 18 March 2015 on detailed conditions and procedures for granting financial assistance under the measure "Measure agri-environment-climate" under the Rural Development Programme 2014-2020 (Polish O. J. from 2015., pos. 415).

3 Package 3. Preservation of orchards of traditional varieties of fruit trees

Purpose: Preservation of the areas of orchards with traditional varieties of fruit trees, a habitat for many organisms, traditional method of cultivation and characteristic element of the rural landscape.

The Package is addressed to the beneficiaries who participate in the protection of old varieties of fruit trees, which cultivation was abandoned and which are set forth in national regulations.

Traditional orchards are a special type of refugium for rare, endangered species of animals, including birds and pollinating insects, constituting their feeding area, which contributes to maintaining biodiversity.

Requirements to be fulfilled under the Package 3. Preservation of traditional varieties of fruit trees:

1. The obligation to have an agri-environmental plan;
2. The obligation to maintain all the permanent grasslands and landscape elements not used for agricultural purposes, being wildlife refuges;
3. The obligation to maintain the traditional orchards with varieties of fruit trees which contains at least 12 trees, reproduced on strongly growing plantings and kept as high-growing trees, aged from 15 years, representing at least four varieties or species, in spacing no smaller than 4 x 6 m and not greater than 10 x 10 m, and at the same time, the quantity of these trees per 1 ha of the orchard area is not less than 90 [1];
4. The minimum height of trunk should be 1.20 m;
5. Ban on using herbicides;
6. The obligation to perform basic treatments in orchard, i.e.:
 - forming and sanitary cutting of trees and thinning of dense treetops;
 - removal of suckers and seedlings;
 - bleaching old tree trunks and protecting of young trunks against rodents and lagomorphs;
7. Mowing and removal of grass or grazing.

If the above-mentioned conditions are met, there is a possibility to supply an orchard's stand after receiving the first payment within its declared area in places where no continuity of planting is ensured, in order to plant 40 % of stand with varieties of trees specified in the regulation. This supplement requires an increase in the number of varieties/species by at least three varieties/species for an orchard in which three or more trees are added. In the case of adding one or two trees, it is enough to add adequately one or two varieties/species. The supplement is made with trees reproduced on strongly growing plantings and kept as high-growing trees. Type of support

Payments under the Package are granted on the annual basis, throughout the 5 years of commitment, to the beneficiaries who voluntarily undertake the agri-environment-climate commitment under this package.

Payments compensate beneficiaries for all or part of the additional costs and income foregone.

Payment is granted only for orchards.

Beneficiaries: Farmer, group of farmers, group of farmers and other land-managers

Conditions of eligibility: Payment under this package is granted to the beneficiary, if:

- he/she has a farm located on the territory of the Republic of Poland, with an agricultural area no less than 1 ha.

Amounts and rates of support

The rate of payment: PLN 1,964/ha. Agri-environment-climate payment is granted in the full amount, regardless of the area covered by the commitment.

The payment rate is determined on the basis of balance of costs and benefits of a farm undertaking a commitment under the Package 3. Incurred costs include costs incurred as a result of the reduced value of crops, tree pruning and whitening of trunks.

Package 6. Preservation of endangered plant genetic resources in agriculture

Purpose: preservation of endangered and valuable varieties, species, ecotypes of cultivated plants, diversification of cultivations in rural areas, producing seed material of species endangered by genetic erosion, meeting the minimum quality requirements, as well as production of seed material of regional and amateur varieties registered in the National List.

The package is addressed to the beneficiaries who participate in the protection of abandoned cultivations of crops as well as crops currently endangered with genetic erosion. The package gives the possibility to preserve existing genetic resources of cultivated plants in situ, and its effect will be: (i) preservation of endangered and rare species, varieties, ecotypes, (ii) diversification of cultivations in rural areas (iii) enrichment of the farmer's offer for consumers, (iv) extending the availability of the material of regional and/or amateur varieties entered in the National List of propagating materials and seed material of arable plant species endangered with genetic erosion and their popularisation. The results of the package will contribute to preservation of biodiversity.

Implementation of the package consists in cultivation or production of propagating seed material:

- of regional and/or amateur varieties registered in the National List and
 - other plant species and varieties endangered with genetic erosion, i.e.: (i) emmer wheat (*Triticum dicoccum*); (ii) einkorn wheat (*Triticum monococcum*); (iii) rye (*Secale cereale* var. *multicereale*); (iv) camelina (*Camelina sativa*); (v) white melilot (*Melilotus albus*); (vi) grasspea (*Lathyrus dativus*); (vii) lentil (*Lens culinaris*); (viii) parsnip (*Pastinaca sativa*); (ix) common kidneyvetch (*Anthyllis vulneraria*); (x) buckwheat (*Fagopyrum esculentum*).
- Bearing in mind the special character of the Package, in the future years of the commitment, it shall be acceptable to increase or decrease the area covered by the commitment with regard to the size of the area covered by the commitment in the first year, while preserving the limit of 5 ha for a given plant species/variety.

At the same time, cultivation may be carried out on different areas in the following years of the commitment. On the basis of the Act on seed production of 9 November 2012 (Journal of Laws item 1512 and of 2013 item 865), the minister competent for agriculture has defined, by way of regulation, the institutions responsible for the genetic resources of plants, taking into account their experience and knowledge with regard to the protection of genetic resources in the Republic of Poland and ensuring the correct implementation of activities with regard to the turnover of seed material of regional and amateur varieties, as well as the protection of genetic diversity.

According to what was stated above, the entities responsible for the genetic resources plants are:

- The Plant Breeding and Acclimatisation Institute National Research Institute in Radzików,
- The Research Institute of Horticulture in Skierniewice.

The above institutes confirmed the species/varieties of plants supported under Package 6. Preservation of endangered genetic plant resources in agriculture which are particularly endangered by genetic erosion and require preservation and restoration in agricultural farms due to the threat of extinction.

The requirements to be met under Package 6. Preservation of endangered genetic plant resources in agriculture:

1. The obligation to have an agri-environmental plan;
2. The obligation to maintain all the permanent grasslands and landscape elements not used for agricultural purposes, being a wildlife refuges;
3. The obligation to cultivate regional and/or amateur varieties registered in the National List from the qualified seed in the first and the fourth year of cultivation of a given variety. In the second, third and fifth year of cultivation of this variety - the obligation to cultivate seed material obtained from cultivation in the previous year and/or;
4. The obligation to produce the seed of the regional and/or amateur varieties registered in the National List of regional and/or amateur varieties in accordance with the regulations on seed production, while preserving purity and identity of variety, keeping the records of plantation and performed treatments, as well as obtaining the laboratory testing certificate and/or;
5. The obligation to produce seeds of plant species endangered by genetic erosion indicated in the Programme, meeting the minimum quality requirements (specified in national regulations) and having results of laboratory tests in this respect.

Type of support

Payments under Package are granted on the annual basis, throughout the 5 years of commitment, to the beneficiaries who voluntarily undertake the agri-environment-climate commitment under this package. Payments compensate beneficiaries for all or part of the additional costs and income foregone. Payment is granted only for arable areas.

Beneficiaries: Farmer, group of farmers, group of farmers and other land-managers

Payment under this package is granted to the beneficiary, if:

- he/she has a farm located on the territory of the Republic of Poland, with an agricultural area no less than 1 ha.

Amounts and rates of support (applicable)

The rate of payment: PLN 750/ha (in the case of cultivation), PLN 1,000/ha (in the case of producing seeds/propagating material).

Agri-environment-climate payment is granted in the amount of:

- 100% of basic rate - for the area of 0.1 - 50 ha;
- 75% of basic rate - for the area exceeding 50 - 100 ha;
- 60% of basic rate - for the area exceeding 100 ha.

Payment shall be granted for particular species/varieties of plants cultivated on the area not exceeding 5 ha. The rate of payment established on the basis of the balance of costs and benefits of a farm starting its measures under Package 6. Incurred costs includes the costs under: lost gross margin in relation to standard cultivation, cost of qualified seed material, costs labour and keeping documentation, and additionally, in the case of production of propagating material, the benefits include greater revenue under production of seed material.

Transaction costs:

Payment shall be increased by the compensation of transaction costs covering costs of certificate of production qualified seed material in official or accredited laboratories (applies to production of seed material). Transaction costs depend on the number of cultivated plant species. This amount shall not be higher than 20% of the annual rates of payment.

The amount of transaction costs will be reimbursed along with payment of the agri-environment-climate measure for every year of implementation of this package, in which certification of seed material production is made.

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:

> not applicable

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:

> Crop plants collections (ex situ conservation) are financed under the multiannual program of Minister of Agriculture and Rural Development for the years 2015-2020 Creation of scientific base of biological progress and conservation of plant genetic resources as a source of innovation and support for sustainable agriculture and food security of the country. Conservation of Plant Genetic Resources aims to protect the genetic material of the most important crop plants and their wild relatives for the needs of breeding, research and diversification of crop plants in rural areas.

2 major gene banks conducting the conservation of genetic resources of crop plants are the Institute of Plant Breeding and Acclimatization - National Research Institute in Radzików and the Institute of Horticulture in Skierniewice. With the institutes several national entities collaborate, mainly research units that carry collections by storing the collected material under appropriate conditions, evaluating, describing it and transferring to interested users. These are: Arboretum and Institute of Physiography in Bolestraszyce; Polish Academy of Sciences Botanical Garden - Centre for Biological Biodiversity Conservation in Powsin; Warsaw University of Life Sciences; Poznań University of Life Sciences; Society of Friends of Lower Vistula in Grucznó; Poznań Plant Breeding in Tulce; Institute of Natural Fibres and Medicinal Plants in Poznań; Institute of Soil Science and Plant Cultivation - National Research Institute in Pulawy.

Object database is available in IHAR-PIB at: <http://egiset.ihar.edu.pl/index.aspx?lang=pl-PL>

The database includes resources stored in gene bank collections, in various forms, located in IHAR Radzików (central storage of seeds) and a number of other institutions. Plant collections maintained in the gene bank include plants: agricultural (cereals, root crops, special herb, fodder, land reclamation and energy, smallseed legumes, marginal coarse-grained legumes), vegetables, fruit (including washers pome, washers stone fruit trees, rare species fruit plants, berry plants), melliferous and ornamental plants.

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:

> There are special tasks in the Multiannual Programme established by Polish Ministry of Agriculture and Rural Development devoted to promotion of ex situ conservation. Their main goal is a broadening the diversity of species and varieties of crops in rural areas and raising public awareness of the importance of plant genetic resources. Different activities to achieve this goal are taken, among others participation in fairs and organization of workshop for farmers.

Research Institute of Horticulture and all partners involved in conservation of vegetable, fruit, ornamental and melliferous plants are working together to manage genetic resources more efficiently. The first priority is a careful evaluation of existing accessions. For this purpose specific for each crop minimum characterization descriptors are entered in the database. The next step will be the find distinct accessions, elaboration list of duplicated clones and synonymus, and in result remove duplicates. The final step will be the take under consideration to create a core collection of important species for Polish growing conditions.

The promotion of ex situ conservation activities is carried out by:

- running a website
- conducting demonstration plots
- training, lectures, workshops at agricultural advisory centers, agricultural schools or local rural education centers
- information stands and exhibitions at national events, as well as organized by the Horticulture Institute and the Institute of Plant Breeding and Acclimatization (IHAR)
- publication of brochures, leaflets.

An example of transfer of technologies for this purpose is unique web site of the multiannual program of work, presenting information from every partner of the program, and common for every curator of the collection data base.

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

> Conservation of plant genetic resources in Poland is carried out by governmental organizations mainly. The most collections are located in experimental stations of research institutes. In practice the key is use that curators of collections have been working with any crop for a long time. This guarantee continuation of scientific works, use of the best method of conservation and strategy for maintenance and professionalism of observations.

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:

> The cooperation in the conservation, exploration, collecting, characterization, evaluation and documentation with many governmental and non-governmental organizations was undertaken. The main partners among governmental institutions involved in this process are Universities of Agriculture, Agriculture Consultative Centres located in every voivodeship, Botanical Gardens and Research Centre for Cultivar Testing. Among non-governmental organizations in local and national conservation of horticulture plants play significant role different associations (for example: Polish Society for Horticultural Science, groups of producers).

Cooperation in the frame of Tripartite Agreement on Cryopreservation Genebank between Czech Republic, Germany and Poland. Actually in cryobank there is collected and stored 167 garlic (*Allium sativum* L.) accessions from different European countries collections mainly of Czech Republic, Germany, Poland, Italy and France. The consignment agreement was signed by the three partners in March 28-th, 2011 for a period of twenty years.

In the years 2003-2017, the Inhort participated in several projects involving the genetic resources of apple and pear trees. Below is a list of these activities:

EU Project:

HiDRAS (2003-2007) "High-quality Disease Resistant Apples for a Sustainable Agriculture".

ECPGR Projects:

ECoHisPy "European Collection of Historical Pyrus - Building and promoting a European Pyrus collection" (2015-2016)

Pomefruit - C&E "Common ECPGR protocols and tools available for Characterisation & Evaluation of Malus/Pyrus genetic resources" (2017-2019)

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:

> 1) Rural Development Program for 2014-2020 (RDP 2014-2020) - Agri-environment-climate measure.

The essence of the measure is to promote practices contributing to sustainable land management (in order to protect the soil, water, climate), conservation of valuable natural habitats and endangered bird species, landscape diversity and conservation of endangered genetic resources of crops and farm animals, as well as conservation of landscape diversity.

Support under this measure includes the following submeasures:

(10.1) Payment for agri-environment-climate commitments

(10.2) Support for conservation and sustainable use and development of genetic resources in agriculture.

Under the sub-measure (10.1) Payment for agri-environment-climate commitments, support will be granted for: (i) agri-technical practices that promote the sustainable farming system, including rational fertilisation and protection of water against pollution, appropriate use of soil in order to prevent the loss of organic matter in it, and (ii) activities aimed at protecting biodiversity of rural areas, including the protection of valuable natural habitats in and outside the Natura 2000 areas and (iii) preservation of traditional varieties and species of fruit trees.

Under the sub-measure (10.1) Payment for agri-environment-climate commitments, support will be granted for the following types of operations (packages):

1. Sustainable farming.
2. Protection of soil and water.
3. Preservation of orchards of traditional varieties of fruit trees.
4. Valuable habitats and endangered birds species in the Natura 2000 areas.
5. Valuable habitats outside the Natura 2000 areas.

Under the Sub-measure (10.2) Support for conservation and sustainable use and development of genetic resources in agriculture, support will be granted for preservation of local varieties of crops and protection of particularly valuable breeds of farm animals, in the case of which the low or declining number poses a risk of their extinction.

Under the Sub-measure (10.2) Support for conservation and sustainable use and development of genetic resources in agriculture, support will be granted for the following types of operations (packages):

6. Preservation of endangered plant genetic resources in agriculture.
7. Preservation of endangered animal genetic resources in agriculture.

The commitment under the measure shall be undertaken for a period of 5 years.

Details of these measures are provided under question 8 A

2) Resolution No. 104/2015 of the Council of Ministers of 14 July 2015 on establishing the multiannual program "Creating a scientific basis of the biological progress and conservation of plant genetic resources as a source of innovation and support for sustainable agriculture and food security of the country".

Area 2. Increasing plant usability by extending their genetic pool and implementing biological progress for different purposes.

Aim - To develop and transfer to the farming and breeding practices the genetic pool of breeding materials and varieties with new characteristics for the diversification of plant material used by modern agriculture and the economy.

The end result of the work will be the introduction of new quality varieties (cereals, potatoes, legumes, sugar beet, corn), strategic crops for food and feed production, environmental sanitation and energy production.

Pre-breeding and breeding work directly contributes to the production of good quality plant material for agri-food processing. In addition, it is envisaged to expand and raise the public's knowledge about the beneficial and positive effects of food on human health and life.

Difficulties encountered in implementing Agri-environment-climate measure:

- 1) Lack of intermediary entity between gene bank and farmers, engaged with seed multiplication, taken in small amount from gene bank - to adequate quantity for field cultivation.
- 2) Not efficient number of old, traditional varieties and rare species in gene bank, available for farmers.
- 3) Not efficient number of food processor, specialised in old varieties processing, e.g. millers, ensuring an operation of food chain - "from seed to table".
- 4) Problems with organisation farmers into groups of action.
- 5) Not efficient financing of gene bank dedicated to cooperation with farmers.
- 6) Not efficient number of well-trained gene bank staff.
- 7) Lack of law implementing the ITPGRFA

Article 7: National Commitments and international Cooperation

15. Has the conservation, exploration, collection, characterization, evaluation, documentation and sustainable use of PGRFA been integrated into your country's agriculture and rural development programmes and policies?

Please select only one option

- Yes
 No

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

> Resolution No. 104/2015 of the Council of Ministers of 14 July 2015 on establishing the multiannual program "Creating a scientific basis of the biological progress and conservation of plant genetic resources as a source of innovation and support for sustainable agriculture and food security of the country"

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:

> Cooperation in the frame of Tripartite Agreement on Cryopreservation Genebank between Czech Republic, Germany and Poland. Actually in cryobank there is collected and stored 167 garlic (*Allium sativum* L.) accessions from different European countries collections mainly of Czech Republic, Germany, Poland, Italy and France. The consignment agreement was signed by the three partners in March 28-th, 2011 for a period of twenty years.

In the years 2003-2017, the Inhort participated in several projects involving the genetic resources of apple and pear trees. Below is a list of these activities:

EU Project:

HiDRAS (2003-2007) "High-quality Disease Resistant Apples for a Sustainable Agriculture".

ECPGR Projects:

ECoHisPy "European Collection of Historical Pyrus - Building and promoting a European Pyrus collection" (2015-2016)

Pomefruit - C&E "Common ECPGR protocols and tools available for Characterisation & Evaluation of Malus/Pyrus genetic resources" (2017-2019)

Article 8: Technical Assistance

17. Has your country promoted the provision of technical assistance to developing countries and countries with economies in transition, with the objective of facilitating the implementation of the Treaty?

Please select only one option

Yes

No

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

> not applicable

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

Please select only one option

Yes

No

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

> not applicable

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:

> Implementation of Farmers' Rights in Poland, described in Article 9 of the International Treaty on Plant Genetic Resources for Food and Agriculture, results mainly from enforcing EU law and from national legislation.

Poland up to now doesn't have any act of law concerning strictly genetic resources and related to them farmers' rights.

Nevertheless, farmers' rights are being partially implemented in Poland through other act, i.e. Seed Act, the Law on the Legal Protection of Plant Varieties and Programs, i.e. Agri - Environmental Plan of RDP 2007-2013, agri-environment-climate measure of RDP 2014-2020.

Article 9.2 b) of the International Treaty, referring to the right to equitably participate in sharing benefits arising from the utilization of plant genetic resources for food and agriculture, is implemented on the way of Seed Act of 9 November 2012 (O.J. of 2017.633). This act implements commission directive 2008/62/EC of 20 June 2008 providing for certain derogations for acceptance of agricultural landraces and varieties which are naturally adapted to the local and regional conditions and threatened by genetic erosion and for marketing of seed and seed potatoes of those landraces and varieties and commission directive 2009/145/EC of 26 November 2009 providing for certain derogations, for acceptance of vegetable landraces and varieties which have been traditionally grown in particular localities and regions and are threatened by genetic erosion and of vegetable varieties with no intrinsic value for commercial crop production but developed for growing under particular conditions and for marketing of seed of those landraces and varieties.

Above mentioned provisions make farmers eligible to be maintainers of the varieties and to benefit from these activities.

The second formal legal basis is Agri-environment-climate measure as a part of Rural Development Program for 2014-2020 (RDP 2014-2020) and finishing Agri-Environmental Plan as a part of Rural Development Plan for 2007-2013, which gives possibility for farmers to received financial support for cultivation of landraces and relict species of crop plants.

Article 9.2 c) of the International Treaty referring to the right to participate in making decisions, at the national level, on matters related to the conservation and sustainable use of plant genetic resources for food and agriculture is implemented by formal conveying to the farmer's organizations projects of acts of law regarding agricultural sector, as a public consultations.

Article 9.3. of the International Treaty, referring to the rights that farmers have to save, use, exchange and sell farm-saved seed/propagating material, is implemented through The Law of June 26th, 2003 on the Legal Protection of Plant Varieties (O.J.2016.843).

According to article 23 of the Law on the Legal Protection of Plant Varieties, farmers (holders of agriculture lands) have following rights:

1. A holder of agricultural land may, against payment for the breeder, use the harvested material as propagating material of the variety protected by the exclusive right, notwithstanding paragraph 3.

2. The right to use the harvested material as material referred to in paragraph 1:

1) shall apply to variety propagating material of the following plants:

- a) horse bean,
- b) pea,
- c) barley,
- d) maize,
- e) flax seed (oily),
- f) alfalfa,
- g) narrow lupine,
- h) yellow lupine,
- i) oats,
- j) hard wheat,

- k) common wheat,
- l) triticale,
- m) rape,
- n) turnip rape,
- o) vetch,
- p) rye,
- q) potato;

2) shall not apply to hybrid varieties and varieties bred from free crossing of specified lines of allogamous species (synthetic varieties).

3. A holder of agricultural land of up to 10 ha may use the harvested material of variety protected by the exclusive right, being a plant variety of potato as propagating material, without the necessity to pay the remuneration to the breeder, and a holder of agricultural land of up to 25 ha – for a variety plant mentioned above from a) to q).

The protection of traditional knowledge relevant to PGRFA is partially implemented through System of traditional specialities guaranteed within the meaning of the Council Regulation (EEC) No 509/2006 of 20 March 2006 on agricultural products and foodstuffs as traditional specialities guaranteed.

Article 11: Coverage of the Multilateral System

20. Has your country included in the Multilateral System of Access and Benefit-Sharing (MLS) all PGRFA listed in Annex 1 to the Treaty that are under the management and control of your Government and in the public domain?

Please select only one option

- All
 Partially
 None

20A. If your answer is 'all', please provide details of any difficulties encountered in including Annex 1 PGRFA in the MLS:

> not applicable

20B. If your answer is 'partially', please provide details of:

The extent to which Annex 1 PGRFA have been included in the MLS

The crops that have been included in the MLS; and

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

> The following plant genetic resources for food and agriculture listed in Annex I and maintained in Poland have been included in the Multilateral System (total number – 39 753 accessions).

1. The collections held by the Plant Breeding and Acclimatization Institute (IHAR), located in Radzików (38 621 accessions).

Triticum 8779 Vicia 962 Agrostis 88 Phalaris 7
Dactylis 6080 Daucus 449 Lens 78 Lepidium 6
Hordeum 4501 Beta 429 Raphanus 51 Coronilla 5
Festuca 3332 Lupinus 341 Ornithopus 48 Camelina 4
Phleum 2199 Brassica 313 Arrhenatherum 34 Sorghum 4
Phaseolus 2073 Lolium 226 Medicago 27 Elymus 3
Avena 1929 Zea 226 Sinapis 22 Agropyron 2
Pisum 1841 Trifolium 152 Onobrychis 14 Eruca 2
Secale 1646 Lathyrus 124 Alopecurus 11 Astragalus 1
Poa 1215 Solanum 117 Melilotus 10 Crambe 1
xTriticosecale 1145 Helianthus 114 Cicer 9 Papaver 1

2. The collections of Solanum held by the Plant Breeding and Acclimatization Institute (IHAR), Research Division in Młochów (98 accessions).

3. The collections of Solanum held by the Plant Breeding and Acclimatization Institute (IHAR), Department of Potato Protection and seed Science at Bonin (245 accessions).

4. The collections of Malus held by Arboretum and Institute of Physiography in Bolestraszyce (531 accessions).

5. The collections of Malus held by the Association of the Chełmiński and Nadwiślański Landscape Park, located in Świecie (87 accessions).

6. The collections of Malus held by Polish Academy of Sciences Botanical Garden - Center for Biological Diversity Conservation in Powsin (142 accessions).

7. The collections of Lolium held by the Botanical Garden of the Plant Breeding and Acclimatization Institute (IHAR) in Bydgoszcz (13 accessions).

8. The collections of Armoracia held by the Warsaw University of Life Sciences – SGGW (16 accessions).

Through the website of the National Centre for Plant Genetic Resources in Poland

(<http://egiset.ihar.edu.pl/>) detailed data on the composition of the collections and user procedures to order samples are readily available.

Germplasm held in the collections listed above will be made available to users under the conditions of the Standard Material Transfer Agreement of the International Treaty on Plant Genetic Resources for Food and Agriculture.

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

1. Lack of sufficient number of alive seeds of given accession
2. Lack of confirmation of legal status of the object (lack of third party rights information)

20C. If your answer is 'none', please provide details of the difficulties encountered in including Annex 1 PGRFA in the MLS:

> not applicable

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:

> Poland, in the framework of the multiannual program for the years 2015-2020 Creation of scientific base of biological progress and conservation of plant genetic resources as a source of innovation and support for sustainable agriculture and food security of the country has been encouraging gene bank institution to include their resources in the MLS.

These institutions are two major gene banks conducting the conservation of genetic resources of crop plants - the Institute of Plant Breeding and Acclimatization - National Research Institute in Radzików (IHAR) and the Institute of Horticulture in Skierniewice. Moreover, Arboretum and Institute of Physiography in Bolestraszyce; Polish Academy of Sciences Botanical Garden - Centre for Biological Biodiversity Conservation in Powsin; Warsaw University of Life Sciences; Poznań University of Life Sciences; Society of Friends of Lower Vistula in Gruczno; Poznan Plant Breeding in Tulce; Institute of Natural Fibres and Medicinal Plants in Poznan; Institute of Soil Science and Plant Cultivation - National Research Institute in Pulawy

The crops that have been included in the MLS by these institutions and difficulties are listed in point 20 B.

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:

> not applicable

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:

> Facilitated access to Annex 1 PGRFA in accordance with the conditions set out in Article 12.4 of the Treaty is assured through website of gene bank:
<http://egiset.ihar.edu.pl/index.aspx?lang=en-US>

22B. If your answer is 'no', please provide details of any difficulties encountered in providing facilitated access to Annex 1 PGRFA:

> not applicable

23. Has facilitated access been provided in your country to Annex 1 PGRFA pursuant to the standard material transfer agreement (SMTA)?

Please select only one option

- Yes
 No

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

> 305

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

> not applicable

24. Has the SMTA been used voluntarily in your country to provide access to non-Annex 1 PGRFA?

Please select only one option

- Yes
 No

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

> 145

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:

> not applicable

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:

> not applicable

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:

> not applicable

Article 13: Benefit-sharing in the Multilateral System

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

- Yes
 No

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

> Information on web site of gene bank about Program of PGRFA conservation and data base.
<http://bankgenow.edu.pl/en/baza-danych/bazy-kcrzg/>

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

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

Please select only one option

Yes

> not applicable

No

29A. If your answer is 'yes', please indicate whether your country:

Has established or participated in crop-based thematic groups on utilisation of PGRFA

Is aware of any partnerships in your country in research and development and in commercial joint ventures relating to the material received through the MLS, human resource development and effective access to research facilities.

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

> not applicable

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

Please select only one option

Yes

No

30A. If your answer is 'yes', please indicate whether such measures were related to:

Establishing and/or strengthening programmes for scientific and technical education and training in conservation and sustainable use of PGRFA;

Developing and strengthening facilities for conservation and sustainable use of PGRFA;

Carrying out scientific research and developing capacity for such research.

30B. If your country provided for and/or benefitted from such measures, please provide details:

> not applicable

Article 14: Global Plan of Action

31. Has your country promoted the implementation of the Global Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture?

Please note that this question differs from question 15 as it only concerns Annex I PGRFA and is more specific.

Please select only one option

- Yes
- No

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

- National actions
- International cooperation

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

> 2 GPA was presented in Poland during the 5th National Conference on Plant Genetic Resources "Plant genetic resources biological basis for agricultural development" Rogów 12-14 September 2012. 2 GPA has been translated into Polish and published. His copies were distributed to the conference participants.

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:
> not applicable

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

> IARCs and other international institutions were not interested in having access to Polish Annex 1 PGRFA

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:
> not applicable

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:

> IARCs and other international institutions were not interested in having access to Polish non - Annex 1 PGRFA

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:

> National Focal Point of the International Treaty on Plant Genetic Resources for Food and Agriculture, Division of Genetic Resources & Genetically Modified Plants, Department of Plant Breeding and Plant Protection, Ministry of Agriculture and Rural Development always forward to gene banks and Polish Seed Trade Association relevant information regarding international plant genetic resources networks, encouraging them to take a part in proposed activities.

Article 18: Financial Resources

35. Has your country provided and/or received financial resources for the implementation of the Treaty through bilateral, regional or multilateral channels?

Please select only one option

- Yes
 No

35A. If your answer is 'yes', where possible, please provide details of such channels and the amount of the financial resources involved:
> not applicable

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

Please select only one option

- Yes
 No

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

> Since 2008, the collections of PGRFA have been financed under two multi-annual programs - "Improving Plants for Sustainable AgroEkoSystems, High Quality Food and Non-Food Production for Plants" by the Institute of Plant Breeding and Acclimatization in collaboration with 13 contractors and " To provide high quality biological and nutritional products for gardening and to preserve the biodiversity of the environment and protect its resources "implemented by the Institute of Pomology and Floriculture and the Institute of Vegetable.

Between 2015 and 2020, the collection of PGRFA have been financed under a multi-annual program, "Creating a scientific basis of the biological progress and conservation of plant genetic resources as a source of innovation and support for sustainable agriculture and food security of the country".

The annual cost of financing the collection under the above mentioned programs were about 5 million PLN, which is 1 182 144.88 EUR for the first program and for second one - 7 865,66 mln PLN per year, which is 1 859 EUR.

Unfortunately, between first and second program was 1,5 year of gap in financing, what was very difficult for genebank staff and for collections.

About this reporting format

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

Please select only one option

Yes

>

No

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

> in question nr 29 there is no possibility to answer "no". That's why section "Article 13" is signed as not completed

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

> need to improve part "Article 13"

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:

> Implementation of the Treaty would be more efficient, if the UE issued a regulation implementing ITPGRFA on the UE.

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:

>