



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



**The International Treaty**

**ON PLANT GENETIC RESOURCES  
FOR FOOD AND AGRICULTURE**

## **Second Reporting Cycle**

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

# **TÜRKIYE**

**(25 January 2023)**



## **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 System facilitates the submission of such information in electronic format.

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

## **Additional Reporting Information**

Name and contact of the reporting officer

>>> Ms Aysun ÖRÇÜN

Institution(s) of affiliation

>>> GENERAL DIRECTORATE OF AGRICULTURAL RESEARCH AND POLICIES (TAGEM)

## 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:  
>>>

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:  
>>> Since 1960s the conservation of plant diversity has become extensively government policy. Access to genetic resources is controlled by regulations or national law on species or habitat protection. In addition a legislation on "Collection and Utilization of Plant Genetic Resources" which published in 1992 regulates the principles of conservation of plant diversity exist in Türkiye, and organize the responsibilities and activities of conservation and utilization of plant diversity.

The laws and regulations for species and habitat protection in Türkiye:

- Decree-Law Establishing the Special Environmental Protection Agency (383, 19.10.1989)
  - The Regulation for the Protection of Wetlands
  - The Regulation on the Collection, Production and Exportation of Natural Flower Bulbs (1995)
  - The Regulation for Implementing the Convention on International Trade in Endangered Species of Wild Fauna and Flora
  - The Apiculture Regulation
  - The Law on National Mobilization for Afforestation and Erosion Control (4122-23.07.1995) and the Regulation on Afforestation
  - The Regulation on Good Agricultural Practices
  - The Regulation Concerning the Protection and Use of Agricultural Land
  - The Forest Law (6831-31.08.1956)
  - Law on Aquatic Products (1380, 04.04.1971)
  - The Environmental Law (2872, 09.08.1983) aiming at the protection of the environment, determines and provides for the basic principles related to protecting and improving the environment and preventing its pollution. Law 5491 of 26.04.2006 amending the Environment Law states the importance of protecting biological diversity in Article 6
  - Law on National Parks (2873, 09.08.1983)
  - The Pastures Law (4342-25.02.1998) and the Pastures Regulation The Coastal Law (3621/3830-04.04.1990)
  - Terrestrial Hunting Law (4915, 01.07.2003)
  - Anti-Smuggling Law 5607 of 19.07.2003, in force since 1932 and updated in 2003, and Customs Law 4458 of 27.10.1999 regulate border controls
  - The Law for the Protection of Animals (5199- 24.06.2004)
  - The Organic Farming Law (5262-01.12.2004) and Regulation
  - The Soil Protection and Land Use Law (5403-03.07.2005)
  - Agricultural Control and Agricultural Quarantine Law 6968 of 15.05.1957 and Animal Health and Surveillance Law 3285 of 08.05.1986 rank first among the legislation to ensure the border control, for both health and protection purposes, of living species that will enter or leave Türkiye
  - Law for the Protection of Cultural and Natural Assets (2863, 23.07.1983)
  - The Regulation Concerning the Collection, Conservation and Utilization of Plant Genetic Resources (1992, The Turkish Official Gazette 21316)
  - The Regulation Concerning the Protection of Animal Gene Resources
  - The Animal Improvement Law (4631-28.02.2001)
  - The Law for the Protection of Breeder's Rights Concerning New Plant Varieties (5042-08.01.2004)
  - The Seed-Raising Law (5553-31.10.2006): It replaced Law 308 of 21.08.1963.
- The national strategies and programmes for future conservation in Türkiye:
- National Biological diversity Strategy and Action Plan (2001 and revised version, 2007; <http://www.cevreorman.gov.tr/belgeler6/NBSAP.pdf> )
  - National Agenda 21 Programme (2001)
  - National Wetland Strategy (2003)
  - Turkish National Forestry Programme (2004)
  - National Science and Technology Policies 2003-2023 Strategy Document (2004)
  - Turkish National Action Programme Against Desertification (2005)

- National Environmental Strategy (2006)
- National Rural Development Strategy (2006)
- National Plant Genetic Resources/Plant Diversity Program (1976)

3. Is there any law, regulation, procedure or policy in place in your country that needs to be adjusted / harmonized to ensure conformity with the obligations as provided in the Treaty?

*Please select only one option*

- Yes  
 No

3A. If your answer is 'yes', please provide details of such adjustments and any plans to make those adjustments:

>>>

## Article 5: Conservation, Exploration, Collection, Characterisation, Evaluation and Documentation of Plant Genetic Resources for Food and Agriculture

4. Has an integrated approach to the exploration, conservation and sustainable use of plant genetic resources for food and agriculture (PGRFA) been promoted in your country?

*Please select only one option*

Yes

No

5. Have PGRFA been surveyed and inventoried in your country?

*Please select only one option*

Yes

No

5A. If your answer is 'yes', please provide details of your findings, specifying species, sub-species and /or varieties, including those that are of potential use.

>>> Inventory of plant species for food and agriculture began in the 60s. Since 1964, plant genetic resources are in Türkiye systematically collected, stored and maintained within the frame work of national program. For the smaller part of the Turkish collections basic characterization of accessions has been made.

National Seed Gene Bank Collection: 5673 accessions. Divided by crops:

Cereals : 12561

Industrial crops : 7700

Vegetables : 10772

Ornamental plants : 1699

Forages and fodder plants : 8731

Food legumes : 9775

Medicinal and aromatic plants : 2279

Endemic species : 1853

Other species (including species utilized as vegetables) :1365

Turkish Seed Gene Bank Collection: 60476 accessions. Divided by crops:

Cereals : 49928

Industrial crops :1546

Vegetables : 2475

Forages and fodder plants : 2483

Food legumes : 2338

Endemic species : 793

Fruit: 37

Ornamental plants : 74

Medicinal and aromatic plants :336

Other species : 466

General Directorate of Agricultural Research and Policies Field Gene Bank Collections: 9731 accessions.

Divided by crops:

Grape: 2824

Apple: 824

Pear: 725

Citrus: 515

Hazelnut: 440

Fig: 653

Cherry: 344

Pomegranate: 459

Apricot: 291

Almond: 431

Olive: 221

Plum: 331

Other: 1673

The main users of the material are the plant breeders and researchers. Active participation of users in the evaluation of germplasm is encouraged by the National program. Türkiye has active national breeding programs that are extensively using national plant genetic resources collections to improve the resistance to major diseases and insects and tolerance to drought, salinity and extreme temperatures.

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;

>>> • A number of landraces have almost disappeared in the past few decades including cereals, industrial crops, vegetables, forages and fodder plants, food legumes, fruit. Crop wild relatives (CWR) and endemic species are also subject to threats.

• It is important to prevent and/or reduce the negative impacts of changed land-use, changed variety choice of farmers, habitat loss, over grazing and climate change which threaten the land, soil, water, flora, fauna and other natural resources of Türkiye.

• The Turkish National Forestry Program has been completed in 2004. The protection of the forests depends on, first of all, delineation of the borders, marking them on the fields and documenting them legally.

Completion of forest cadastre is necessary for safety of forest areas in the future and sustainability of forestry activities. For this reason, working with qualified personnel and new technology in the Cadastre Commissions is unavoidable.

• Türkiye's First National Communication on Climate Change prepared in 2007 indicates the impacts of climate change in Türkiye as; increasing summer temperatures, decreasing winter precipitation in western provinces, loss of surface water, increased frequency of droughts, land degradation, coastal erosion and floods.

• National Climate Change Adaptation Strategy and Action Plan focused on five important fields (water resources management; agricultural sector and food security; ecosystem services, biodiversity and forestry; natural disaster risk management; public health ) which are supported by technical and scientific studies and participatory processes, was prepared in 2012.

• Plans for ex situ safety backup of landraces and CWR are under development genebank are active in conserving other material.

• Funding

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:

>>> In Türkiye, General Directorate of Agricultural Research and Policies promote the production and use of old local varieties threatened by genetic erosion within The National Plant Genetic Resources and Plant Diversity Program. The seed gene banks increase knowledge about and access to this material.

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:

>>> geared towards maintaining or restoring soil fertility, like mixed cropping and agroforestry. Neglected and underutilized species (NUS) are an important component of Turkish plant diversity. Therefore, various projects are ongoing on inventory of local species and reintroduction to farmers and consumers and also recultivation for the sustainable utilization and conservation on-farm. Such project:

Türkiye was involved in to develop a project for the in situ conservation of agrobiodiversity. In 1995, IPGRI together with National Programs in 9 countries formulated a global project to strengthen the scientific basis of in situ conservation of agricultural biodiversity. Nine countries involved in the project are: Burkino Faso, Ethiopia, Nepal, Vietnam, Peru, Mexico, Morocco, Türkiye and Hungary.

Within the framework of this program, "In situ Conservation of Agricultural Biodiversity" project (case study)

was initiated in Türkiye by Aegean Agricultural Research Institute (AARI) in cooperation with Local institutions of study site, universities and farmers associations by the support of national budgeted. The main objectives of the project have been:

1. to support the development of framework of knowledge on-farmer decision-making processes that influences insituconservation of agricultural biodiversity,
2. strengthen links among the formal, informal sectors and farmers for the planning a new implementation ofconservation for agricultural biodiversity,
3. to broaden the use of agricultural biodiversity and participation in its conservation by farming communities and other groups.

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:

>>> Protected areas are valuable reservoirs for crop wild relatives, medicinal and herbal plants as well as all other components of the ecosystem. This importance was considered conservation of the natural environment in the early years of republic. The designation of the first National Park in 1958, when environmental problems were not yet intensive in Türkiye, reflects a well-established approach to nature conservation. In early 1970s, environmental conservation policies started to become institutional in Türkiye. In early 1980 and 1990 legal bounding of the environmental protection were achieved and included in national programs. The fact that Türkiye is party to international conventions aimed at the protection of biological diversity is a reflection of its nature conservation policy. The subsequent Development Plans and Annual Programs have included issues of biological diversity in the environmental and agricultural sectors, set forth policies for the protection and sustainable development of biological diversity and for the augmentation of its economic value, and specified the necessary measures. The Ninth Development Plan, covering the years 2007 to 2013, determines it as a priority to carry out activities for the protection and development of and the addition of economic value to the biological diversity that Türkiye has.

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:

>>> Ex situ conservation activities in Türkiye has been undertaken since 1964. It is still on process within the framework of the "National Program on Conservation of Plant Genetic Resources/Diversity". The ex situ conservation is implemented both for generative and vegetative collections which are preserved in National Gene bank and field gene banks respectively. Currently, about 120.000 materials over about 3000 species are kept in the TAGEM Gene Banks under short term and long term conditions.

About 10.000 vegetatively propagated genetic resources material, mainly fruit genetic resources are kept in national field gene banks at 18 institutes (including AARI). Outside the Ministry of Agriculture and Forestry, the Gene Bank of Osman Tosun within the Field Plants Department the Faculty of Agriculture, the University of Ankara, has been active since 1936 and has short-term preservation facilities. This organization keeps about 5860 seed accessions, mostly consist of the working collections. Atatürk and Cukurova Universities and other universities with a Faculty of Agriculture are also engaged in similar activities for mostly fruit field collections and working seed collections in short-term conservation.

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:

>>> Türkiye is one of the pioneering countries started to maintain the genetic resources and has considerable experiences on ex situ conservation since 1960s. The facilities of gene banks for seed collection have been designed and well equipped for the needs of long -term and medium-term storage for both base and active collections. The conservation task is fully supported by the Turkish government. Ex situ collections are under



development in collaboration with other stakeholders.

12. Has the maintenance of the viability, degree of variation, and the genetic integrity of ex situ collections of PGRFA been monitoring in your country?

*Please select only one option*

Yes

No

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

>>> AARI and FCCRI apply the international gene banks standards. The viability are tested for all the material and stored. Viability of the stored material are monitored in 5-10 years intervals for active and base collection. The research is conducted on the germination test methods for some species which has no information on the viability test methods and dormancy mechanism. Regeneration and multiplication activities are planned according to the monitoring the samples for viability and quantity. Most regeneration activities are carried out by AARI itself, although some are conducted in cooperation with other institutes who should follow similar regeneration procedures to AARI. During the regeneration and multiplication seed samples are renewed by taking a random sample of seeds, sowing and growing the resulting plants under conditions so that the seeds harvested will possess the same characteristics as the original population. Regeneration of seeds is required when the germination percentage has fallen below acceptable levels or shortage of seed occurs. As a rule, the germination percentage should be above 75-80%. But for some of the wild species and endemic species, this rate is less since most of that dormancy mechanism unknown. Samples are marked for regeneration when seed is no longer available for distribution. All seed accessions are monitored for these criteria.

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:

>>> Türkiye collaborates with number of international, regional and other foreign gene banks since 1960s on the collection and conservation of PGRFA. Türkiye is member of the international organizations, which are either funding sources or actively involved to advocate or to carry out the conservation of world natural resources. Türkiye joined the CGIAR in 2005 and Türkiye is collaborating with many of the International Agricultural Centers and in particular Bioversity International on various aspect of PGR. The collaborative activities have been conducted with International Center of Arid Land Development for Agriculture (ICARDA), International Center for Maize and Wheat Breeding (CIMMYT), International Potato Centre (CIP), etc. Project staff received the short courses from those Centers. Bilateral agreements with some countries in the region like Azerbaijan or centers like Centre for Legumes in Mediterranean Agriculture (CLIMA) have also been developed. Türkiye is member of The European Cooperative Program for Plant Genetic Resources (ECPGR) since 1980 and European Forest Genetic Resources Program (EUFORGEN) since its establishment. Türkiye was also member of the West Asia and North Africa Network (WANANET) established in 1992 which actually not operational. Through the membership of ECPGR, Türkiye collaborates and cooperates with most of European countries on conservation of plant genetic resources, exchanges the material and data and conducts the joint project. Türkiye's participation to Crop and Thematic Working Groups depends on expertise and experience for the active participation. The National PGR Program staff of Türkiye is the member of various crop and thematic working group and task forces. National Program staff is also member of AEGIS (A European Gene bank Integrated System) advisory Committee and EURISCO Advisory Group. The other way of collaboration in national, regional and international level is the exchange of material and information. Turkish National Program focuses on availability of national collection as part of its goal of maximizing the utilization of breeding resulting from its breeding and research activities, facilitating the access and ensures the continued free exchange of genetic materials. So the national collections are available worldwide for the scientist. These valuable collections preserve the vast genetic diversity of these crops and serve as a source of characteristics that can improve crop production throughout the world. The feedback of results is documented for the information exchange. Additionally many samples of Turkish species are conserved in the regional CG Centers and countries gene banks mostly the material collected within the framework of joint project, for example, ICARDA holds around 14.000 accessions of Turkish origin.

## Article 6: Sustainable Use of Plant Genetic Resources for Food and Agriculture

14. Are there any policy and legal measures in place in your country that promote the sustainable use of PGRFA

*Please select only one option*

- Yes  
 No

14A. If your answer is 'yes', please indicate whether such policy and legal measures include:

- Pursuing fair agricultural policies that promote the development and maintenance of diverse farming systems that enhance the sustainable use of agricultural biological diversity and other natural resources;
- Strengthening research that enhances and conserves biological diversity by maximizing intra- and inter-specific variation for the benefit of farmers;
- Promoting plant breeding efforts, with the participation of farmers, that strengthen the capacity to develop varieties particularly adapted to social, economic and ecological conditions, including in marginal areas;
- Broadening the genetic base of crops and increasing the range of genetic diversity available to farmers
- Promoting the expanded use of local and locally adapted crops, varieties and underutilised species
- Supporting the wider use of diversity of varieties and species in on-farm management, conservation and sustainable use of crops and creating strong links to plant breeding and agricultural development
- Reviewing and adjusting breeding strategies and regulations concerning variety release and seed distribution

14B. If such policy and legal measures are in place, please provide details of the measures taken and any difficulties encountered in implementing them:

>>> Pursuing fair agricultural policies that promote the development and maintenance of diverse farming systems that enhance the sustainable use of agricultural biological diversity and other natural resources through measures in the Rural Development Programme,

Strengthening research that enhances and conserves biological diversity by maximizing intra- and inter-specific variation for the benefit of farmers,- >No specific provision has been made but funding for projects in this general area has been granted as part of the normal research grant procedures.

Broadening the genetic base of crops and increasing the range of genetic diversity available to farmers; Türkiye actively promotes in situ/on-farm conservation of agrobiodiversity as well as various protection activities of nature. The MFAL has support to enhance activities on biodiversity conservation which were able to assess the status and threats to plant species and crops in selected eco-systems.

Promoting the expanded use of local and locally adapted crops, varieties and underutilised species; Cultural and traditional demands and preferences for diversity cause farmers to maintain land races. Marginal agronomic conditions especially steep slopes and heterogeneous soils of mountainous lands make landraces competitive with improved varieties Farmers keep local races in fields that are relatively margined and poorer soils, steeper slopes and higher altitudes. Economic isolation in the mountain part creates market imperfections and lessens the competitive commercial advantage of improve varieties.

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;

The land races are utilized to improve the varieties. The wild crop relatives which are in the first gene pool of crops are also used easy in variety improvements. Many registered varieties are release from those plant genetic collections of Türkiye. Especially most of the vegetables, industrial crops, fruits, and forage varieties have been released from the land race collections of Türkiye

However, due to social, economic and environmental problems, natural resources including biological resources in Türkiye like in many other parts of world have been threatened and required to be conserved and managed for sustainability. Factors such as environmental destruction, over exploitation, replacement of traditional cultivars, and modernization of agriculture result the erosion of the genetic diversity. In some regions of Türkiye are now undergoing some degree of changes in terms of trade, exports, urbanization and market driven farming. Despite the positive aspect of such changes, these have greatly contributed to decrease, even loss of the agrobiodiversity. Biodiversity conservation, ex situ and in situ, of plant diversity is conducted within the framework of "National Program on Conservation of Genetic Resource/Diversity" since 1960s. The Turkish Constitution, Laws and Regulations and international conventions in the field of nature conservation provide the legal framework for seeking the strategy for continuity of biodiversity/genetic diversity in Türkiye.

## Article 7: National Commitments and international Cooperation

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

*Please select only one option*

- Yes  
 No

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

- Conservation  
 Exploration  
 Collection  
 Characterization  
 Evaluation  
 Documentation  
 Sustainable Use

Please indicate into which type of programmes and policies:

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

Additional details:

>>> The main responsibility for the implementation of agricultural and rural development policies belongs to the Ministry of Agriculture and Forestry (MAF). MAF has responsibility for the overall running of the agricultural sector and its activities include: formulating policies to develop rural areas and agriculture, animal husbandry and aquaculture; providing infrastructure for the development of agriculture sector and rural areas; coordinating and carrying out training, research and extension services for farmers; and assisting agricultural co-operatives. Agriculture and rural development programmes and policies that integrated PGRFA conservation are;

National Rural Development Strategy (2007-2013)

Long Term Strategy (2001-2023)

The Tenth Development Plan (2014-2018)

Preliminary National Development Plan (2004-2006)

Medium Term Programme (2006-2008)

Agriculture Policy Strategy (2006-2010)

The main goal of National Rural Development Strategy (NRDS) is to develop and ensure that the sustainability of the living and working conditions of the rural community, on their territory, is compatible with that of urban areas, on the basis of utilising local resources and potential, and protecting the rural environment and the natural and cultural heritage. One of four strategic objectives identified in order to reach this target is identified as the protection and improvement of the rural environment, by improving environmentally friendly agricultural practices, protecting forest ecosystem, promoting the sustainable utilization of forest resources and the management and improvement of protected areas. As part of the amended (2005) ARIP programme The Environmentally Based Agricultural Land Protection Programme (ÇATAK) came into effect in 2005. It was implemented in four pilot provinces in 2006-2008. The objectives of the programme were to protect the quality of soil and water resources in agricultural lands, to ensure the sustainability of renewable natural resources, and to decrease the adverse effects of intensive agricultural activities. The Tenth Development Plan has indicated that as a consequence of population growth, rapid urbanization and instability in rainfall regimes due to climate change access to safe water resources and protection of farmlands have gained increased importance.

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 explained earlier (question number 13)

European Cooperative Programme for Plant Genetic Resources (ECPGR) is a collaborative Programme among most European countries, aiming at ensuring the long-term conservation and facilitating the utilization of plant genetic resources in Europe. Türkiye is member of ECPGR and structured into networks of 18 Crop Working Groups and 3 thematic groups, in which Türkiye's participation to Crop and Thematic Working Groups depends on expertise and experience for the active participation. The National PGR Program staff of Türkiye is the member of various crop and thematic working group and task forces. National Program staff is also member of AEGIS (A European Gene bank Integrated System, ([http://www.ecpgr.cgiar.org/AEGIS/AEGIS\\_home.htm](http://www.ecpgr.cgiar.org/AEGIS/AEGIS_home.htm)) advisory Committee and EURISCO Advisory Group. Aims of ECPGR: National, Sub-regional and Regional Programmes in Europe collaboratively, rationally and and effectively conserve ex situ and in situ PGRFA, provide access and increase utilization (Long term goal) and further aims are;

1. AEGIS is operational. Accessions in AEGIS are characterized and evaluated.
2. Quantity and quality of data in EURISCO, including in situ and on-farm data, have been increased. Functionality of EURISCO meets users' expectations.
3. In situ and on-farm conservation and management of priority crop wild relative (CWR) and landrace (LR) populations are implemented throughout Europe. Mechanisms are in place for more effective utilization of the conserved germplasm.
4. Commitment and regular resources of national governments are sustained or increased, and commitments and resources of the European Commission (EC), as well as of other potential donors towards ECPGR are increased.
5. Relations with users of germplasm are strengthened.
6. Organizational structure and secretarial support are adequate to effectively sustain the operations of ECPGR (<http://www.ecpgr.cgiar.org/about-ecpgr/goals-and-objectives/>).

## Article 8: Technical Assistance

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

*Please select only one option*

- Yes  
 No  
 Not applicable

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

- Exchange of information  
 Access to and transfer of technology  
 Capacity building

Please explain:

>>> Türkiye is collaborating with many of the International Agricultural Centres and in particular Bioversity International on various aspect of PGR. The collaborative activities have been conducted with International Centre of Arid Land Development for Agriculture (ICARDA), International Centre for Maize and Wheat Breeding (CIMMYT), International Potato Centre (CIP), etc. Project staff received the short courses from those Centres. Bilateral agreements with some countries in the region like Azerbaijan or centres like Centre for Legumes in Mediterranean Agriculture (CLIMA) have also been developed. Türkiye is member of The European Cooperative Program for Plant Genetic Resources (ECPGR) since 1980 and European Forest Genetic Resources Program (EUFORGEN) since its establishment. Türkiye was also member of the West Asia and North Africa Network (WANANET) established in 1992 which actually not operational. Through the membership of ECPGR, Türkiye collaborates and cooperates with most of European countries on conservation of plant genetic resources, exchanges the material and data and conducts the joint project.

Also by supporting to the organisation of meetings or capacity building activities; some of which are; As part of the activities of the ECPGR Inter-regional Cooperation Network, a joint workshop between ECPGR and the Near East and North Africa Plant Genetic Resources Network (NENA PGRN) was organized on 28-29 September 2011 in Menemen, Türkiye, with the local support of the Aegean Agricultural Research Institute. This workshop was dedicated to exchange views, information and experiences related to the implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture. Adapting Agriculture to Climate Change, Collecting, and Protecting and Preparing Crop Wild Relatives project meeting was held in Izmir, Türkiye jointly managed by The Global Crop Diversity Trust and The Royal Botanic Gardens.

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:

>>>

## 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:

>>>

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

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

The crops that have been included in the MLS; and

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

>>>

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

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

Other, please explain:

>>> Database and inventory studies are still in progress.

21. Has your country taken measures to encourage natural and legal persons within your jurisdiction who hold Annex 1 PGRFA to include those resources in the MLS?

*Please select only one option*

- Yes
- No

21A. If your answer is 'yes', please provide details of:

The natural or legal persons within your jurisdiction that included Annex 1 PGRFA in the MLS;

The crops that have been included in the MLS by these persons; and

Any difficulties these persons encountered in including Annex 1 PGRFA in the MLS:

>>>

21B. If your answer is 'no', please provide details, in particular details of any difficulties encountered in encouraging these persons to include Annex 1 PGRFA in the MLS:

>>> Lack of information about this subject.

## 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:

>>> Material requirements are assessed by TAGEM gene banks and distributed according to SMTA requirements. Works in progress to create a database that will facilitate access to all the genetic resources for food and agriculture in Türkiye.

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:

>>> Not yet finalized national database and legislative studies

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:

>>> Any disputes can be settled by the General Principles of Law of Republic of Türkiye.

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:

>>> Any disputes can be settled by the General Principles of Law of Republic of Türkiye

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:

>>> Access to technologies for the conservation, characterisation, evaluation and use of Annex I PGRFA is provided through technical assistant reported in answer to 17.

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

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

*Please select only one option*

- Yes  
 No

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

- Establishing and/or strengthening programmes for scientific and technical education and training in conservation and sustainable use of PGRFA;  
 Developing and strengthening facilities for conservation and sustainable use of PGRFA;  
 Carrying out scientific research and developing capacity for such research.

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

>>> To increase the number of centers for the conservation of PGRFA, to strengthen their infrastructure, to support projects aiming to use of PGRFA.

## Article 14: Global Plan of Action

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

*Please select only one option*

- Yes
- No

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

- National actions
- International cooperation
- Other actions

Please provide details:

>>> Implementation of the Global Action Plan has been promoted for ex situ conservation through the establishment of seed gene banks for crops in Annex I, field gene banks for fruits. Use of genetic resources in gene bank by breeders has increased over the recent years. Projects and studies for promoting public awareness about PGRFA have been conducted by research institutions. Workshops have been performed for develop national plans and strategies for implementation of the Global Plan of Action for Food and Agriculture.

## **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

>>> Lack of institutional cooperation.

33. Has access to non-Annex I PGRFA been provided in your country to IARCs or other international institutions that have signed agreements with the Governing Body of the Treaty?

*Please select only one option*

- Yes  
 No

33A. If your answer is 'yes', please indicate:

To which IARCs or other international institutions access was provided;  
The number of MTAs entered into with each IARC or other international institution:  
>>>

33B. If your answer is 'no', please provide details of any difficulties encountered in providing access to non-Annex 1 PGRFA to IARCs and other international institutions that have signed agreements with the Governing Body of the Treaty:

>>> There is no national legislation or activity plans on non-Annex 1 PGRFA compatible to national strategies.

## Article 16: International Plant Genetic Resources Networks

34. Has your country undertaken any activities to encourage government, private, non- governmental, research, breeding and other institutions to participate in the international plant genetic resources networks?

*Please select only one option*

Yes

No

34A. If your answer is 'yes', please provide details of such activities:

>>>

## Article 18: Financial Resources

35. Has your country provided 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:

>>> Project Name: Addressing The Challenges of Climate Change for Sustainable Food Security in Türkiye, Iran and Morocco, Through the Creation and Dissemination of an International Database to Promote the Use of Wheat Genetic Resources and Increase Genetic Gains. (FAO, 500,000 USD)

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:

>>> There is no a strategy or other measures.

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:

>>>

## 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:

>>> There are questions and articles with similar answers, and some questions are not clear. Some of the requested explanations were so comprehensive that only were answered with titles. It was appropriate to develop the report with options, but there should be an option in more questions.

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

>>> More questions can be made optional.