

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

**ITALY**

30/04/2019

## **First Report on Compliance of ITPGRFA**

### **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 Reporting System facilitates the submission of such information.

Should you need any additional information regarding the reporting on compliance or the Reporting 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**

Petra Engel

### **Institution(s) of affiliation**

Council for Research in Agriculture and Economics  
Office for Institutional and International Cooperation

Via Po, 14

00198 Rome, Italy

<http://www.crea.gov.it>

<http://www.entecra.it>

email: [petra.engel@crea.gov.it](mailto:petra.engel@crea.gov.it)

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**International Treaty on Plant Genetic Resources for Food and Agriculture**  
**Standard Voluntary Reporting Format**

**Article 4: General obligations**

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

YES

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

- Italy ratified the Treaty on 29 April 2004, under Law n. 101/2004. The responsibility for implementation of the Treaty's provisions is given to the 21 Regions and Autonomous Provinces which act under respective implementation plans on which they report annually to the Ministry of Agriculture, Alimentation, Forestry and Tourism (MiPAAFT). The MiPAAFT is the National Focal Point for the Treaty to which it reports on activities undertaken and progress made at national level.
- In December 2015, a national law (Law n. 194 of 1 December 2015) on the safeguard and sustainable use of genetic resources for food and agriculture was released which makes explicitly reference to the Treaty as well as to the Convention on Biological Diversity. This Law provides instruments both for the safeguard and for the utilization of Italy's rich agricultural patrimony and specifically recognizes the role of small farmers in their efforts to maintain and develop plant and animal GRFA. The Law establishes, *inter alia*, a national Network for Biodiversity for Food and Agriculture, composed of *ex situ*, *in situ* and on farm stakeholders.
- Furthermore, a specific open-ended Project for the implementation of the Treaty's provisions was put in place by the MiPAAFT in 2004 which involves several national research institutions and local farmers ("*Plant Genetic Resources-Implementation of the FAO International Treaty*", "RGV/FAO"), specifically addressing Articles 5, 6, 9, 11, 12 and 17 of the Treaty.

**2. Are there any other laws, regulations, procedures or policies in place in your country that apply to plant genetic resources?**

YES

***2A. If your answer is 'yes', please provide details of such laws, regulations, procedures or policies:***

Further to Law 101/2004 (see Q1), different laws, plans and guidelines are in place which address specific aspects of GRFA, their management and utilization:

- National Plan on Biodiversity of interest for Agriculture (PNBA), adopted on 14 February 2008 ([http://planta-res.politicheagricole.it/docs\\_pdf/Piano\\_nazionale\\_biodiversita\\_di\\_interesse\\_agricolo.pdf](http://planta-res.politicheagricole.it/docs_pdf/Piano_nazionale_biodiversita_di_interesse_agricolo.pdf)):

The PNBA aims at coordinating the many and diverse initiatives and activities in place at national and regional level on the safeguard of plant, animal and microorganisms GR for Food and Agriculture, as well as enhancing relationships with the respective involved national and international organisms. Furthermore, the purpose of the PNBA is to assist Regions and Autonomous Provinces in the implementation of the Treaty, by developing a national system of GRFA safeguard, sustainable agriculture and rural development. Target genetic resources are those which are autochthonous and/or at risk of extinction/genetic erosion.

- The PNBA was integrated, in 2012, by specific Guidelines (“Linee Guida per la Conservazione *in situ*, *on farm* ed *ex situ* della Biodiversità vegetale, animale e microbica di interesse per l’agricoltura”) to assist stakeholders at national, regional and local level in the characterization and conservation of GRFA. The “Guidelines” represent a standardized instrument, elaborated and agreed by all involved stakeholders at national level and therefore allow for harmonized approaches and activities towards the implementation of the PNBA.  
(<https://www.reterurale.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/9580>).
- Furthermore, several regional laws are in place addressing the safeguard and sustainable use of PGRFA of local origin (these laws are available in Italian language at <http://planta-res.politicheagricole.it/pages/documents.php?t=3>).
- In 2010, the Ministry for the Environment, Land and Sea published a “National Strategy for Biodiversity” which dedicates a section to PGRFA and their conservation and sustainable use within the framework of international regimes (Treaty, CBD).  
([http://planta-res.politicheagricole.it/docs\\_pdf/Strategia%20Nazionale%20Biodiversit\\_italiano.pdf](http://planta-res.politicheagricole.it/docs_pdf/Strategia%20Nazionale%20Biodiversit_italiano.pdf)).
- Concerning introduction, registration, management, distribution and marketing of commercial plant material, the following National Laws are in place:
  - Presidential Decree n. 1164 of 24 December 1969 (and subsequent amendments) implementing Council Regulation n. 68/193/EEC on the marketing of material for the vegetative propagation of the vine
  - Council Regulation (EC) No 870/2004 of 24 April 2004 on the conservation, characterisation, collection and utilisation of genetic resources in agriculture (repealing Regulation (EC) No 1467/94)
  - Law n. 110 of 23 March 1998: Ratification of the UPOV Convention
  - Law n. 1096 of 25 November 1971 (and subsequent amendments): Marketing and control of seed, implementing
    - Council Directive 2001/64/EC of 31 August 2001 amending Directive 66/401/EEC on the marketing of fodder plant seed and Directive 66/402/EEC on the marketing of cereal seed
    - Council Directive 2002/53/EC of 13 June 2002 on the common catalogue of varieties of agricultural plant species
    - Council Directive 2002/54/EC of 13 June 2002 on the marketing of beet seed
    - Council Directive 2002/55/EC of 13 June 2002 on the marketing of vegetable seed
    - Council Directive 2002/56/EC of 13 June 2002 on the marketing of seed potatoes
    - Council Directive 2002/57/EC of 13 June 2002 on the marketing of seed of oil and fibre plants, and

- National Law n. 194 of 1 December 2015 (see Q1): modification of Art 19-bis, point 6 – allowing farmers to exchange and sell certain amounts of their seeds on local markets within the Network of Biodiversity for Food and Agriculture)
- Legislative Decree n. 124/2010, implementing Council Directive 2008/90/EC of 29 September 2008 on the marketing of fruit plant propagating material and fruit plants intended for fruit production, and related Implementing Directives
- Legislative Decree n. 230 of 15 December 2017 implementing Regulation EU n. 1143/2014 on the prevention and management of the introduction and spread of invasive alien species
- Organic Seeds: EU Regulation n. 2018/848

**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 by the Treaty?**

YES

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

The Law on the safeguard of Biodiversity for Food and Agriculture (Law n. 194 of 1 December 2015) in Article 3.5 states that the GRFA or any part thereof subject to the Law may not be incorporated in any new product which is going to be protected by any kind of Intellectual Property. This is in clear contrast to Treaty Artt. 11.2 and 13.2. Therefore, this part of the Law will need to be adjusted accordingly.

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

### **4. Has an integrated approach to the exploration, conservation and sustainable use of PGRFA been promoted in your country?**

YES

- The RGV/FAO Project (see Q1) aims at the identification, collection, conservation, utilization and documentation of PGRFA, especially of those which are of national origin. Collected accessions are included in the *ex situ* collections of the participating research institutions and subsequently characterized agro-morphologically, genetically and from a biochemical point of view, with the aim to promote their sustainable utilization, through cultivation at local level or through their inclusion in breeding programmes for different purposes.

Small farmers are specifically recognized under the Project and part of the activities are dedicated to informal seed systems and local products.

Involved partners operate on the whole national territory, representing 29 crop-specific research institutions operating under the framework of 9 Research Centers of the Council for Research in Agriculture and Economics (CREA), further 5 institutions of the National Research Council (CNR) as well as the Non-Governmental Organization "Rete Semi Rurali" which represents 33 partners.

The Project does not only focus on those crops which are currently included in Annex I of the Treaty, but relates to all crop species considered of economic and strategic importance for Italy. Species covered are cereals, vegetables, fruit species (including citrus, olive and grape), forage crops, industrial plants, medicinal and aromatic plants, forest and ornamental species.

- At regional level, laws are in place to assure the safeguard of local/regional varieties, their reintroduction into cultivation and their conservation both *ex situ* and on farm.
- Several other stakeholders are also involved in PGRFA collection, conservation and characterization, often in the framework of academic/national/international projects.

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

YES

#### ***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***

- Inventorying PGRFA present *ex situ* in Italy is one of the priority work areas of the RGV/FAO Project. A web page has been set up serving as the national entry point to PGRFA and related documents and activities (<http://planta-res.politicheagricole.it>).

The PGRFA inventory which is available on this website does not only include the accessions managed in the context of the project, but is open to all collections. It currently includes the 29 collections held by the RGV/FAO Project Partners, and 12

collections managed under other administrations (7 universities, 2 regional, 1 private and 2 local). The database currently provides passport information on 49.018 accessions belonging to 241 genera and 863 species. This National Inventory is periodically shared, at international level, with the European Catalogue EURISCO and with WIEWS of FAO, as part of the ongoing updating of the implementation of the Global Plan of Action on PGRFA.

- However, in Italy there are still many more collections held, with different objectives and priorities and by different other stakeholders, and the long term aim is to identify, invite and include these in the National Inventory.
- Furthermore, *in situ* and on farm inventories of PGRFA were compiled in 2014 in the framework of the EU funded Project PGRSecure (see Q 13) and are available at <http://vnr.unipg.it/PGRSecure/html/project.html>. These inventories list 2.365 landraces belonging to 329 species and 2.093 taxa of CWR. Both inventories comprise cereals, vegetables, legumes, fruit and fodder crops.

#### **6. Has any threat to PGRFA in your country been identified?**

YES

**6A. If your answer is 'yes', please indicate:**

- **The species, subspecies and/or varieties subject to such threats;**
- **The sources (causes) to these threats;**
- **Any steps to minimize or eliminate these threats;**
- **Any difficulties encountered in implementing such steps**

#### **Crops:**

- Many activities of recovery of PGRFA are targeted at those PGRFA (mainly local varieties of cereals, vegetables and fruit species) which are at risk of extinction or genetic erosion due to abandonment and/or underutilization. These PGRFA have been transferred to *ex situ* collections maintained by the different actors involved in PGRFA management at national level, with the aim not only of safeguarding the genetic material, but also of promoting the reintroduction of these varieties into cultivation. This is especially true for vegetable varieties (for example tomato, onion, lettuce, pumpkin) rediscovered and reintroduced to local markets in the course of the RGV/FAO Project.
- A list of Red List species of Italy was published in 2013 by the Ministry of Environment, Land and Sea (available, in Italian language, at the following link: <http://www.iucn.it/liste-rosse-italiane.php>). Of the 297 vascular plants listed in this "Red List of Italian Flora", 59% are CWR present in Italy, according to the work conducted in the context of the PGRSecure Project (see Q 5).

#### **Sources of threats:**

- Main environmental threats to species have been identified in habitat fragmentation, uncontrolled urbanization and infrastructure development.
- From an agricultural point of view, intensive plant and animal production systems are reported to pose risks to plant genetic diversity. Problems are also related to the uncontrolled exploitation of wild populations (especially aromatic and medicinal plants).

- Among pests and diseases threatening PGRFA, the bacterium *Xylella fastidiosa* is a serious problem to both old local and cultivated olive trees, while the red palm weevil (*Rhynchophorus ferrugineus*) attacks different species of palms all over the country.
- Concerning field collections, several biotic stresses can cause threats to the conserved accessions, such as the Mediterranean fruit fly (*Ceratitis capitata*) attacking stone fruits, the fungus *Taphrina deformans* (causing leaf curl in peach and almond), the fire blight bacterium (*Erwinia amylovora*) threatening pome fruits, the PSA bacterium destroying *Actinidia* plantings, the Plum pox virus (PPV) in stone fruits, Ca. *Phytoplasma vitis* in grapevine, or the Citrus Tristeza virus and, most recently, Huanglongbing (greening disease) in citrus.
- Seed collections can be exposed to the risk of low germination rate or viability of samples.

Measures to minimize threats:

- Concerning PGRFA, on farm conservation is being promoted, to be carried out by farmers which have been selected for this purpose (“Caring Cultivators”), mainly under regional laws.
- In *ex situ* collections,
  - phytosanitary controls need to be carried out both before introduction of the accessions into the collections might be necessary all around the year. as well as during the whole year. Timely sanitation/multiplication actions can be necessary all year around.
  - an assessment of duplications of accessions among the different collections present at national level will be needed in order to elaborate a programme for the sustainable conservation of material; this might also include the allocation of specific funding for genebank operations targeted at specific regeneration and maintenance activities.
- *In situ* conservation of PGR including CWR currently falls to a large extent under the management activities of Protected Areas, as prescribed in the Technical Report annexed to the Law on Implementation of the Treaty.

**7. Has the collection of PGRFA and relevant associated information on those PGR that are under threat or are of potential use been promoted in your country?**

YES

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

See Q. 5

- The collection of PGRFA at risk has been an important workstream of the RGV/FAO Project over the last 15 years. Several hundreds of accessions have been collected, accompanied by associated information given by local people, where possible.
- Also at regional level, PGRFA which are under threat are being identified and collected, under the single regional administrative frameworks. Accessions are conserved *ex situ*, and local farmers are identified which conserve them on farm as well, on behalf of the respective region.



- In addition, other stakeholders like Universities, Botanic Gardens etc have also collected PGRFA for different purposes.

**8. Have farmers and local communities' efforts to manage and conserve PGRFA on-farm promoted or supported in your country?**

YES

**8A. If your answer is 'yes', please provide details of such measures taken:**

The legal and operational background is given in Q1 and Q2.

- Both the national Law on Biodiversity for Food and Agriculture and the existing Regional Laws promote the involvement of farmers in on farm conservation of local varieties and breeds. Farmers are chosen according to their experience in the management of the specific species and related farm management. They are registered in specific registers of maintainers ("Caring Cultivators") and receive regular payment for their services.
- The National Plan on Biodiversity for Food and Agriculture (PNBA) provides a conceptual framework for a rural development which creates the economic, social and cultural conditions in which farmers' families can continue to conduct their agricultural activities, while maintaining traditional knowledge, integrated into new contexts of conservation, utilization and commercialization.

In the framework of the national RGV/FAO Project, the Farmers' Association "Rete Semi Rurali" is conducting work on supporting and recognizing the role of seed networks and farmers' organisation on sustainable use and conservation of PGRFA. In this way, it also contributes to the protection and re-creation of traditional knowledge and to the involvement of farmers and farmers' networks in policy decision-making. Recently, also approaches of participatory breeding have been introduced in the work programme. In addition, farmers and other stakeholders are involved through the Italian Seed Network in specific activities. Thanks to the RGV/FAO Project, each year around 5.000 people participate in on farm trials and activities, including consumers and technicians.

- Also Italy's participation in the ECPGR "On Farm" Working Group and different EU funded Projects promote the work of local farmers and farmers' communities (see QQ 13, 35).

**9. Has in situ conservation of crop wild relatives and wild plants for food production been promoted in your country?**

YES

**9A. If your answer is "yes", please indicate whether any measures have been taken to:**

- Yes     - *Promote in situ conservation in protected areas;*  
 No       - *Support of efforts of indigenous and local communities*

**9B. If such measures have been taken, please provide details on those measures taken:**

The “Second Italian Country Report to the FAO on the State of the World’s Plant Genetic Resources for Food and Agriculture”, reports on a survey on the flora growing in the 156 most significant Protected Areas in Italy, carried out in 2008. This assessment revealed the presence of about 4,000 different taxa belonging to 953 genera. In this context, and based on the European CWR Checklist elaborated in the course of the EU financed project “European Crop Wild Relative Diversity Assessment and Conservation Forum” (PGR Forum), the presence of 3,267 taxa of CWR belonging to 620 genera in Italian Protected Areas was revealed. The list of species is available at <http://www.fao.org/3/i1500e/Italy.pdf>.

However, apart from inventorying, so far no specific coordinated measures targeted at *in situ* conservation of CWR have been put in place at national level.

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

YES

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

As indicated in Q5, several *ex situ* collections of PGRFA are co-existing in Italy, held by different stakeholders and for different purposes. Their exact number is unknown, as it is difficult to access information on these.

Nearly all national research centers and institutions have their own thematic collections according to the priorities of their research. Also most University faculties maintain PGRFA collections which are often well developed.

Many Regions have established collections of local germplasm found on their territory, often integrating these accessions in already existing *ex situ* collections managed by one or more of the above-mentioned facilities. Furthermore, many Botanic Gardens, Agricultural Schools as well as locally established germplasm collections are existing.

Undoubtedly all these collections hold a very high number of accessions, but related problems concern the unknown state of duplications, health state of accessions, as well as related duplication of maintenance efforts. A more concerted action in the management of these collections and resources is definitely needed, bringing together the different financing institutions (Ministry of Agriculture, Ministry of Research, Regions,) and developing a rational and effective conservation system at national level.

**11. Has the development of an efficient and sustainable system of ex situ conservation of PGRFA been promoted in your country?**

YES

***11A. If your answer is “yes”, please indicate the measures taken to promote ex situ conservations, in particular any measures to promote the development and transfer of technologies for this purpose:***

As indicated above, many collections are co-existing, under different administrations and with different objectives and different levels of financial resources. Duplications are not monitored and gap analysis has not been carried out at national level.

An effort was made in 2001 to assess all *ex situ* collections of PGRFA held by the Experimental Institutes for Agriculture working under the Ministry of Agriculture (now CREA). This work laid the conceptual base for the development of the RGV/FAO Project.

A similar assessment was made in 2003 to collect information on all fruit genetic resources present in Italian collections. This survey included 18 entities (CREA, CNR, Universities, regional collections, private/commercial sector collections).

So far, an important systematic follow-up has been undertaken by the establishment of a National Fruit Tree Germplasm Collection, located at the premises of the Experimental Institute for Fruit Trees (now CREA-Research Centre for Olive, Fruit and Citrus – Rome branch). This collection currently holds about 5.000 accessions of old and modern varieties of more than 20 species of temperate and subtropical fruits, both of national and foreign origin. It is foreseen that this collection will host the most 12.000 strategically important fruit accessions of national and global interest.

It is auspicious that a similar approach of rationalization of collections will be pursued also for other crop groups.

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

YES

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

Collection holders are careful not to lose any material. Material at risk is timely being reproduced. However, lack of sufficient stable financial resources is more and more hindering continuation in these activities and some public collections are at risk of being reduced or even abandoned.

**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?**

YES

***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 other Treaty mechanisms) and, where possible, details of any relevant projects:***

- In the context of the International Treaty, Italy has promoted the conservation, exploration, collection, characterization, evaluation or documentation of PGRFA through contributions to the Benefit Sharing Fund in the years 2008-2018, (see Q. 35).

- Italy is Member Country in the European Collaborative Programme on Crop Genetic Resources (ECPGR) and is represented by experts in nearly all thematic and cross-cutting Working Groups. Therefore, Italian experts collaborate with experts and colleagues from the European Region on a wide range of issues, contributing to the long-term conservation of crop genetic resources in Europe on a cooperative basis, and facilitating their increased utilization.
- In the context of ECPGR, Italy is member to AEGIS, “A European Integrated Genebank System”, an initiative aiming to implementing at regional level the ITPGRFA by efficiently conserving and providing access to material under the sMTA to unique germplasm in Europe, through the establishment of a European Collection. So far, 8605 accessions have been included in AEGIS.
- Through its annual payments to ECPGR, Italy has contributed to the realization of a total of 31 Grant Scheme Activities carried out since 2014, enabling also the participation of Italian experts in 15 of these (see list of projects in Q35).
- Also within the context of ECPGR, Italy shares information on PGRFA thus providing facilitated access to accessions conserved *ex situ*, through the European Catalogue, EURISCO.
- Italian partners are also involved in the new ECPGR “EVA” initiative (European Evaluation Network), which aims specifically at bringing together public and private entities in research and breeding of new crop varieties able to cope with future challenges at European level. The Initiative started with cereals and vegetables but is laid down to cover all crops for PGRFA purposes.
- In the context of Research Projects funded by the European Commission under different research frameworks, a wide range of stakeholders from Italy (representing the public and the private sector, research, academia, farmers associations) were or are partners in a number of Projects aimed at the conservation, exploration, collection, characterization, evaluation and documentation of PGRFA, such as (list not exhaustive):
  - G2P-SOL (2017-2019) “*Linking genetic resources, genomes and phenotypes of Solanaceous crops*”
  - Farmers’ Pride (2017-2019): “*Conservation actions to safeguard the wealth of Europe’s in situ plant genetic resources and integration of the user community to maximize sustainable use of these in situ PGR*”
  - DYNAVERSITY: (2017-2019) “*Conserving diversity in situ in agriculture and in the food chain*”
  - TomRES (2017-2020) “*A novel and integrated approach to increase multiple and combined stress tolerance in plants using tomato as a model*”
  - TomGEM (2016-2019) “*Improving tomato yield and quality in the face of climate change*”
  - DIVERSIFOOD (2015-2019) “*Embedding crop diversity and networking for local high quality food systems*”.
  - TRADITOM (2015-2018) “*Traditional tomato varieties and cultural practices*”.
  - WHEALBI (2014-2018): “*Wheat and Barley Legacy for Breeding Improvement*”
  - PGRSEcure (2011-2014): “*Novel characterization of crop wild relative and landrace resources as a basis for improved crop breeding*”
  - SOLIBAM (2010-2014): “*Strategies for organic and low-input breeding and management*”
  - GenResIS – AEGRO (2007-2010): “*Genetic Reserve Information System*”
  - GrapeGen06 (2007-2010): “*Management & Conservation of Grapevine Genetic Resources*”

- *“Leafy vegetables germplasm, stimulating use”* (2007-2010)
- AVEQ (2004-2007): *“Avena genetic resources for quality in human consumption”*
- EURALLIVEG (2007-2011)- *“Vegetative Allium, Europe’s Core Collection, Safe and Sound”*
- HiDRAS (2003-2007): *“High Quality Disease Resistant Apples for a sustainable Agriculture”*
- PGRForum (2003-2005): *“European Crop Wild Relative Diversity Assessment and Conservation Forum”*
- Still at European regional level, Italy is Partner in several bilateral European Neighbourhood Policy And Enlargement Programmes “Twinning” and “TAIEX”, targeting at the establishment of National variety catalogues, variety registration and characterization, and strengthening of the seed sector, according to the relative regulations of the European Community.  
Collaborations are currently ongoing with Serbia, Georgia and Kosovo.
- At global level, Italian experts are involved in the “Wheat Initiative” (Coordinating global research for wheat), established in 2011 following endorsement from the G20 Agriculture Ministries, which aims to encourage and support the development of a global public-private research community sharing resources, capabilities, data and ideas to improve wheat productivity, quality and sustainable production around the world.

## 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?

YES

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

- |     |   |
|-----|---|
| Yes | - 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;          |
| Yes | - Strengthening research that enhances and conserves biological diversity by maximizing intra-and inter-specific variation for the benefit of farmers;  |
| Yes | - 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; |
| Yes | - Broadening the genetic base of crops and increasing the range of genetic diversity available to farmers;  |
| Yes | - Promoting the expanded use of local and locally adapted crops, varieties and underutilised species;   |
| Yes | - 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;               |
| No  | - Reviewing and adjusting breeding strategies and regulations concerning variety release and seed distribution  |

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

- The Law on Biodiversity for Food and Agriculture promotes the development of agricultural policies and/or the implementation of existing measures to enhance biological diversity in agricultural production systems, raising awareness on the importance and roles of diversified agro-ecosystems and local foods.
- During the 15 years of the RGV/FAO project,
  - the reintroduction into cultivation of local varieties was realized through recovery and genetic cleaning of local varieties, mainly vegetables. Examples are tomato, peppers, artichoke, potato in the Campania region, tomato, potato and bean in the Marche region, and radicchio, onion, pumpkin in Lombardy.
  - Partners are continuously carrying out research targeted at the identification of use of PRGFA in sustainable agricultural production. Main targets are reduction of irrigation (rice), phyto-farmaceutical interventions (disease resistance in cereals, fruit species,...), adaptation and mitigation of the effects of climate change (forest

species, fodder crops), requalification of landscapes (industrial species), as well as broadening the genetic base of cultivated species for sustainable agriculture (cereals, fruit species).

- an activity on participatory breeding was initiated on cereals, based on reintroduction of local maize varieties held *ex situ* into the areas of origin, in collaboration with local farmers.

## **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?**

YES

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

**16. Has your country cooperated with other Contracting Parties, through bilateral or regional channels, in the conservation and sustainable use of PGRFA?**

YES

***16A. If your answer is "yes", please indicate whether the aim of such cooperation is to:***

- |     |   |
|-----|---|
| Yes | - Strengthen the capability of developing countries and countries with economies in transition with respect to conservation and sustainable use of PGRFA;   |
| Yes | - 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:***

see Q 13

## 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 to facilitate the implementation of the Treaty?**

YES

***If your answer is “yes”, please provide details of the measures taken:***

Within the funding contributions to the BFS activities targeted at Treaty implementation were financed (see Q35); these activities comprised also technical assistance as identified in the course of the respective projects.

**18. Has your country received technical assistance with the objective to facilitate the implementation of the Treaty?**

NO



## 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?**

YES

**19A. If your answer is "yes", please indicate whether such measures were related to:**

- |     |   |
|-----|---|
| Yes | <b><i>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;</i></b> |
| Yes | <b><i>The protection of traditional knowledge relevant to PGRFA;</i></b>  |
| Yes | <b><i>The right to equitably participate in making decisions, at the national level, on matters related to the conservation and sustainable use of PGRFA</i></b>  |
| Yes | <b><i>Any rights that farmers have to save, use, exchange and sell farm-saved seed/propagating material.</i></b>  |

**19B. If such measures were taken, please provide details on these measures taken and any difficulties encountered in implementing them:**

- Farmers and Farmers' Associations are explicitly recognized in the National Law on the safeguard of Biodiversity for Food and Agriculture. They are active part in the on farm conservation processes initiated under regional laws. Also the preservation and active application of traditional knowledge on PGRFA is part of the law.
- In the context of the RGV/FAO Project, seed networks and farmers' organizations are recognized for their role in sustainable use and conservation of PGRFA.
- They are furthermore present in the national Table on PGRFA and Treaty implementation as well as in the Treaty's WGs on Farmers' Rights and on Sustainable use, and are therefore involved in policy decision-making both at national and international level.

## 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 I to the Treaty that are under the management and control of your Government and in the public domain?**

- All
- Yes - Partially
- None

**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

So far only part of Annex I accessions which are conserved *ex situ* in Italy have been notified to the Treaty, but efforts are ongoing to include them all in the MLS. Within the ECPGR Programme, Italy is further stimulating also the inclusion of non Annex I material in the MLS through AEGIS. So far, 8.605 accessions have been flagged through AEGIS (see Q. 13). Interested curators are also those of non-Project RGV/FAO partners.

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

YES

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

- The nature or legal persons within your jurisdiction that included Annex I PGRFA in the MLS;
- The crops that have been included in the MLS by these persons;
- Any difficulties these persons encountered in Annex I PGRFA in the MLS

Material has been included in the MLS by the Council for Research in Agriculture and Economics (CREA) and the National Research Council (CNR). Also some Universities and other public collections included some material. Information on the included material is available from PlantA-Res, EURISCO and WIEWS.

## **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 I PGRFA, in accordance with the conditions set out in Article 12.4 of the Treaty?**

YES

***22A. If your answer is 'yes', please provide details of such measures:***

- Access to information on all materials included in the databases of PlantA-Res, EURISCO and WIEWS is facilitated: passport data of these accessions are searchable in these inventories, as well as contact details of the collection holders.
- The sMTA for exchange of material has been made available on the website of PlantA-Res ([http://planta-res.politicheagricole.it/docs\\_pdf/SMTA\\_english.pdf](http://planta-res.politicheagricole.it/docs_pdf/SMTA_english.pdf)), to promote its use in the exchange of material.

**23. Has facilitated access been provided in your country to Annex I PGRFA pursuant to the standard Material Transfer Agreement (sMTA)?**

YES

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

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

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

YES

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

In the context of the P2B Project (see Q13), all material involved (*Solanaceae*) was exchanged through the MLS (Annex I materials of potato and eggplant, but also non-Annex I materials (tomato and pepper), both with Treaty Parties and non-Parties.

**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?**

**25A. If your answer is 'yes', please provide details of the relevant laws, regulations or procedures:**

**26. Does the legal system of your country provide for the enforcement of arbitral decisions related to disputes arising under the SMTA?**

**26A. If your answer is 'yes', please provide details of the relevant laws, regulations or procedures:**

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

NO

## Article 13: Benefit-Sharing in the Multilateral System

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

YES

***28A. If your answer is “yes”, please provide details on any information made available regarding Annex I PGRFA (e.g. catalogues and inventories, information on technologies, results of scientific and socio-economic research, including characterization, evaluation and utilization):***

- The National Inventory on PGRFA, available from the PlantA-Res website shares passport data on all 16.943 accessions which are currently notified to be available under the SMTA.  
This information is also available in the European Search Catalogue EURISCO, as well as in WIEWS. Specific information concerning characterization and evaluation on this material is being made available upon request to the relative collection managers whose contact details are available from the PlantA-Res website. (see Q. 5)
- In addition to the above-mentioned National Inventory, further 29.845 accessions (*Triticum* and *Hordeum*) are made available by the National Research Council. Information on the availability of this material is contained in the relative notification published on the Treaty website.

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

YES

***29A. If your answer is ‘yes’, please indicate whether your country:***

Yes ***Has established or participated in crop-based thematic groups on utilization of PGRFA***

Yes ***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 commerce development and effective access to research facilities.***

***29B. If access to technologies is provided, please provide details on the access provided:***

- Italian experts chair different crop-specific and/or cross-sectorial Working Groups operating under ECPGR. Work carried out by these groups is also based on the use of technologies as defined and chosen for the specific purposes.

- In the context of the G2B-SOL Project (see Q13), technologies are shared with a wide range of countries (Treaty members and non-members) for the molecular and phenological characterization of Solanaceae accessions, and the sharing of this information through a dedicated web tool (<http://www.g2p-sol.eu/G2P-SOL-gateway.html>)

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

YES

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

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

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

Capacity building is/was part of the projects and activities listed under Q13.

## 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 PGRFA?**

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

YES

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

Yes - *National actions;*

Yes - *International cooperation.*

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

- Priority Areas II (*ex situ* conservation) and III (sustainable use) of the GPA are core elements of the national RGV/FAO Project and are therefore extensively implemented at national level.(see above).

Since this project is not limited to Annex I crops, a wide range of PGRFA species including landraces and wild relatives benefit from the activities.

- Priority Area I of the GPA (*in situ* conservation) has not been systematically approached yet, but surveys on CWR including their threat assessment have been carried out, which lays the base for future elaboration of an *in situ* conservation strategy.

On farm management, on the other hand, is quite well implemented at national level, both through the RGV/FAO Project and within regional measures and action plans on the conservation of local PGRFA.

- Concerning Priority Area IV (Institutional and Human Capacities), these aspects are in part covered under different activities, for example through the work carried out within ECPGR and other collaborations.

**Article 15: *Ex situ* Collections of PGRFA held by 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 (IARCs) or other international institutions that have signed agreements with the Governing Body of the Treaty?**

YES

**32A. If your answer is 'yes', please indicate:**

***To which IARCS of other international institutions facilitated access was provided;  
The number of sMTAs entered into with each IARC or other international institution***

Access is facilitated to any interested stakeholder, through the websites of PlantA-Res, EURISCO and WIEWS.

**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?**

YES

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

***To which IARCs or other international institutions access was provided;  
The number of sMTAs entered into with each IARC or other international bodies***

Non-Annex I material has been included in the MLS through AEGIS and is available from the EURISCO website.

All available information is made available to any interested stakeholder, including the IARCs.

Information about sMTAs exchanged with the IARCs are known to the Secretariat of the Treaty.



## Article 16: International Plant Genetic Resources Networks

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

YES

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

National stakeholders of different character have been (in part successfully) invited to participate in ECPGR and AEGIS related activities, as well as to join the National Inventory published on the PlantA-Res website.

## 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?**

YES

**35A. If your answer is 'yes', where possible, please provide details of such channels and the amount of the financial resources involved:**

- Italy is one of the major contributors to the International Treaty at global level, having so far contributed with a total of 10.597.260 US\$, divided as follows:
  - Core Administrative Budget (1.126.735 US\$)
  - Fund to support the Participation of Developing Countries (26.678 US\$)
  - Fund for Agreed Purposes between the Treaty Secretariat and Contracting Parties (3.174.362 US\$)
  - Benefit Sharing Fund (6.269.485 US\$).
- ECPGR – WG activities and Grant Scheme Projects. These Projects are short term activities (12-24 months), funded by a maximum of 15.000 € each (extra contributions excluded):
  - COCHEVA Bras - *Collection, Characterization and Evaluation of wild and cultivated Brassicas* (2015-2016)
  - EURISCO Training Workshop (2015, 2016, 2017)
  - ECoHisPy - *Building and promoting a European Pyrus collection - a case study* (2015-2016)
  - PRUNDOC - *Identification of a representative set of Prunus domestica accessions of European origin, well documented and characterized, to be included into the AEGIS system* (2015-2016)
  - TRAIID - *Triticum in AEGIS: Identification and Documentation* (2015-2016)
  - EU.CHERRY - *Collaborative action for updating, documenting and communicating the cherry patrimonial richness in EU* (2016-2017)
  - Barley C&E Data - *Integration of barley characterization and evaluation into EURISCO, and development of specifications for a barley crop portal, with a focus to improve the AEGIS collection* (2016-2017)
  - SMARTLEG - *Efficient management of resources for smart legumes Utilization* (2016-2017)
  - Grape On Farm - *On-farm inventory of minor grape varieties in the European Vitis Database* - (2017-2018)
  - TRISECA - *Identification and updating data of eligible AEGIS accessions in both wheat and rye species (TRIticum and SEcale in Aegis = TRISECA)* (2017-2018)

- LINKAGES - *Assessing linkages between genebanks and direct users* (2017-2018)
- Pomefruit C&E - *Common ECPGR protocols and tools available for Characterization & Evaluation of Malus/Pyrus genetic resources*
- BETA NET - *Improving a cooperation network between actors involved in conservation and utilization of Beta genetic resources* (2018-2019)
- Prunus Alignment - *Testing, Use and Alignment of genetic data to distinguish unique and characterized accessions in Prunus* (2018-2019)
- Training in *Triticum* Species (TTS) – *Training on Identification of Botanical Varieties in Triticum Species* (2018-2019).

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

YES

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

The Technical Report to the Law on the implementation of the Treaty identifies three actors who receive funds for the development and implementation of activities targeting at the conservation and sustainable use:

- Research institutions operating under the auspices of the Ministry of Agriculture, through the RGV/FAO Project. Between 2004 and 2019, a total of 16 million € has so far been invested. Target activities are mainly related to *ex situ* conservation and associated operations, as explained above (Q5).
- The 20 Regions are called to promote the conservation and sustainable use of PGRFA at local level, with financial resources being provided through the European Agricultural Fund for Rural Development, set up by European Union Council Regulation (EC) No 1290/2005 of 21 June 2005 on the financing of the Common Agricultural Policy (CAP).

In this context, for the 2014-2020 period, the 20 Italian Regions received around 80 million € for the implementation of Measure 10.2 ("conservation and sustainable use of PGRFA"). Related activities are mainly targeted at the recovery of autochthonous and local varieties, their characterization, documentation and conservation, as well as maintenance of regional networks of local farmers conserving those varieties on farm (QQ 6 and 8).

- The Ministry of Environment receives about 100.000 € per year for measures targeted at *in situ* conservation of CWR in Protected Areas.