



The International Treaty

ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE



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Item 10 of the Provisional Agenda

FIFTH SESSION OF THE GOVERNING BODY

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COMPILATION AND ANALYSIS OF SUBMISSIONS SENT BY CONTRACTING PARTIES, OTHER GOVERNMENTS, AND RELEVANT INSTITUTIONS AND ORGANIZATIONS ON THE IMPLEMENTATION OF ARTICLE 6

EXECUTIVE SUMMARY

1. This document compiles the submissions received from Contracting Parties, other governments and relevant institutions and organizations on how to improve sustainable use of plant genetic resources for food and agriculture, including on sectoral policies and best practices for sustainable agriculture. All submissions included in this document were received by the Secretary before 15 March 2013.
2. Four submissions are reproduced in this compilation in the language in which they were received. Minor editorial changes include the full rendering of acronyms and the correction of spelling.

I. INTRODUCTION

1. This document compiles the submissions received in response to the request made by the Governing Body at its Fourth Session, for the Secretary “*to invite submissions from Contracting Parties, other governments and relevant institutions and organizations on how to improve sustainable use of plant genetic resources for food and agriculture, including on sectoral policies and best practices for sustainable agriculture*”. All submissions included in this document were received by the Secretary before 15 March 2013.
2. The submissions of two Contracting Parties and two submissions of other relevant institutions and organizations are reproduced in this compilation in the language in which they were received¹. Minor editorial changes include the full rendering of acronyms and the correction of spelling. For reasons of economy, submissions longer than five pages were not included in their entirety, however all submissions were fully taken into consideration for the analysis under paragraph 5, and Internet links to the full versions are provided.
3. Several of the submissions received dealt with both sustainable use of PGRFA (Article 6) and Farmers’ Rights (Article 9), indicating that several stakeholders perceive these two components of the International Treaty and their implementation as inherently interlinked.
4. Submissions on the implementation of Article 6 have already been compiled and presented to the Governing Body at its Second and Third Sessions.² The analysis below also takes into account the main elements of these earlier submissions.

II. ANALYSIS OF THE SUBMISSIONS

5. In summary, the submissions:
 - a) emphasized the linkages between sustainable use of PGRFA and Farmers’ Rights, stressed the need to further reinforce and capitalize on these linkages, and illustrated how the implementation of one of these components of the International Treaty contributes towards strengthening the other, and *vice versa*.
 - b) conveyed that while countries have begun adopting laws and policies of relevance to the sustainable use of PGRFA and reviewing existing ones, more information may need to be gathered for a proper assessment of such laws and policies. Often, a variety of interrelated laws and policies relevant to the sustainable use of PGRFA are in place and different government agencies and other stakeholder groups have a role in promoting sustainable use. This requires well-defined distribution of responsibilities and effective coordination.
 - c) presented an example of guidelines for PGRFA conservation aimed at the different stakeholders involved in the management of PGRFA, focussing in particular on on-farm conservation and management of traditional crop varieties.
 - d) put forward a number of best practices and measures to improve sustainable use of PGRFA. In general, these had a focus on traditional varieties and related knowledge, and underlined the importance of capacity development and increased stakeholder participation. More specifically, the following best practices and measures were presented:
 - i. Increasing the information on PGRFA, by documenting characterization and

¹ They can be also download from: <http://www.planttreaty.org/content/sustainable-use-submissions>

² The Governing Body, at its First Session, “*invited Contracting Parties, other governments, and relevant institutions and organizations to submit to the Secretary information on policy and legal measures relevant to Article 6.1 of the Treaty, as well as other relevant information, for example on workshops or studies.*” At its Second Session, the Governing Body invited submissions from Contracting Parties, other governments, and relevant institutions and organizations, on policy and legal measures used to achieve the objectives of Article 6.

evaluation data of both traditional and improved varieties, as well as related traditional knowledge, and making the information available through web-based databases and catalogues. This will facilitate the use of PGRFA for breeding purposes, including for pre-breeding activities.

ii. Linking agricultural research institutes and gene banks with farmers. Participatory plant breeding can play an important role in developing locally adapted planting material that responds to farmers' needs. Fruitful collaborations have further been reported in areas including seed multiplication and testing, and participatory characterization and evaluation of traditional varieties.

iii. Ensuring an adequate supply of seed and planting materials to farmers. Strengthening public-private partnerships in the breeding sector can be a valuable approach to ensure seed supply. In developing countries, informal seed distribution networks play an important role for numerous farmers. Measures proposed to strengthen informal seed supply include community seed banks, community intellectual property rights on PGRFA, and encouraging stakeholder participation in the creation and review of laws and policies of relevance to the sustainable use of PGRFA.

iv. Linking conservation, use and valorisation of PGRFA. This could be done by supporting small scale farmers, in particular in developing value added products based on traditional and locally adapted crop varieties, and by strengthening their capacities to access markets. Geographic indications and organic labels can be suitable instruments for farmers to achieve higher benefits from the use of PGRFA;

v. Promoting sustainable agricultural practices and training on cultivation techniques of traditional, locally adapted and underutilized varieties, including on seed multiplication and selection techniques, can be an important risk management strategy for farmers, especially in the context of climate change.

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I. CONTRACTING PARTIES

(a) FINLAND

Reply for the request:

“By Resolution 7/2011, Implementation of Article 6, Sustainable Use of Plant Genetic Resources, adopted at its Fourth Session, the Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture requested, *inter alia*, the Secretary to invite submissions from Contracting Parties, other governments and relevant institutions and organizations on **how to improve sustainable use of plant genetic resources for food and agriculture, including on sectoral policies and best practices for sustainable agriculture.**”

Our suggestions:

- 1) Increased use of plant genetic resources for pre-breeding needs
 - good genotypic and phenotypic evaluation of the existing landraces and varieties, including crop wild relatives, to find the interesting traits and alleles
 - support needs to be aimed also for cultivar breeders to cope with the longer breeding programmes while using pre-breeding material
- 2) Improved development of the new landrace-based products by:
 - finding suitable genotypes for making attractive products
 - collecting and utilizing farmer-based indigenous knowledge and evaluation data
 - building easy access to the existing information, as a base for planning process for those who have interest to develop special niche products
 - developing user-friendly bureaucracy and not too complicated legislation
- 3) Support aimed for starting small-scale production and other infrastructure needed (like small mills etc.)
- 4) Sustainable raw material production for enabling landrace-based product making
 - EU support for the farmers maintaining landraces and local varieties
- 5) Contribution aimed also for marketing (raw material, products) and value
 - producing and using diverse foods
 - socio-economical view
 - proudness of the local landraces and traditional food making practices
 - niche markets, multifunctional farmers

(b) ITALY

Chapter 1

SUMMARY OF THE GUIDELINES FOR CONSERVATION OF PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE**1.1 Outline of the guidelines for conservation of plant genetic resources of agricultural interest**

This manual contains the guidelines for the conservation of **Plant Genetic Resources for Food and Agriculture (PGRFA)**. As for the ones on livestock and microbial genetic resources, this manual is scientifically sound and provides a streamlined and schematic structure for the easy consultation of useful operational tools by all involved at various levels in PGRFA management.

In order to respond to the requests of the Standing Committee on Genetic Resources, the Working Group on Agricultural Biodiversity (WGAB) has produced a volume in two parts divided into six chapters, and a series of appendixes designed to provide an in depth analysis on the various topics.

The first part provides general information ranging from the definition of biodiversity and PGRFA (Chapter 1) to the assessment of the risks of extinction and genetic erosion (Chapter 2), and concludes with the regulatory and operational framework for the conservation and valorisation of PGRFA in Italy (Chapter 3). The second part offers detailed operational procedures, which provide standard guidelines for the protection of PGRFA. Practical case studies on conservation are included, which have been adopted by some regions (Chapter 4 and related Appendix). Thereafter, the methods characterising both morpho-physiological and molecular resources are discussed (Chapter 5). In conclusion, a series of case studies covering the widest possible contexts are outlined (Chapter 6).

Despite the multitude of situations relating to biodiversity of agricultural interest in Italy and the difficulties relating to schematization, the WGAB has attempted to "typify" the various possible contexts as well as to describe the implementation of the various interventions adopted. This is achieved by referring to issues that were previously addressed and were positively concluded. Various "typologies" have been proposed, each highlighting the respective strengths and opportunities, as well as their weaknesses and potential threats. Some of the known actions for each "typology" are reported and specific case studies are then explained in detail and outlined as examples.

The Appendixes have the dual purpose of streamlining the various chapters, thereby allowing easy reading even by non-specialist users and providing a more in depth analysis of certain topics, in particular with regard to methods, laws and other specific competences of experts in the field. The following Appendixes are integrated: a detailed glossary of the many technical terms in the manual, which are widely debated and shared (Appendix 1); the translation of the Standard Material Transfer Agreement for plant genetic resources for food and agriculture (Appendix 2); the proposal of a simplified agreement for the transfer of vegetal material of plant species not belonging to the list of crops under the Treaty, and their direct use in the field (Appendix 3); a series of methodological details of techniques to be applied (Appendix 4); a framework of EU and Italian legislation for the marketing of seed material (Appendix 5); different guiding principles used for the description of material (Appendix 6); a plan for the reproduction and multiplication of seeds (Appendix 7) and finally, a case study for the genetic characterization of specific resources in the Region of Lazio (Appendix 8).

All topics discussed are supported by an extensive bibliography (both cited and referenced), which includes the most recent publications from links to network connections and numerous references relating to case studies and initiatives present throughout Italy.

[..]

1.7 Concluding remarks

The present Guidelines aim to make operating tools available to all stakeholders in order to provide effective and coordinated actions in the territory, with emphasis on a systematic approach. Various reasons reflected the need of standardised operating tools. In Italy there is no centralized coordination entity acting as a reference point for PGRFA. Moreover, there are numerous public and private initiatives, all dedicated to safeguarding PGRFA.

So the first step is to circulate this instrument over the entire national territory. The Manual wishes to provide all operators with the basic regulations relating to PGRFA, as well as common methodologies for PGRFA description and management. Additionally it provides, through case studies, experiences that can serve as examples towards either investigation or towards ascertaining the value of PGRFA.

The next immediate step will involve the activation of a **National Register** for local varieties and breeds, among other things, provided for by phase C of the National Plan for Agricultural Biodiversity. This represents an effective action to improve knowledge of biodiversity heritage of interest to Italian agriculture, in order to fully protect and enhance it. This Register may provide various levels of detail, necessary in defining the specific morpho-physiological and genetic profile of each local variety under conservation. This will facilitate the comparison among material originating from different areas or regions (identifying synonyms, distinguishing homonyms). Hence, the Register will serve as a precision tool for the identification, the correct denomination and knowledge of PGRFA. In addition, the Register would serve to improve relations with other European and non-European countries for the exchange and development of materials, as well as to provide the tools to create *ex situ* core collections with less financial resources.

Strengthening national coordination that can play as reference is important. This would permit a more widespread circulation of knowledge, experiences and resources. It would also facilitate relations at international level through cooperation within the wealth of our scientific and administrative bodies, in particular with the view to full implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture.

Note by the Secretary:

For reasons of economy, only the introduction and the conclusion of the submission of Italy were included in this compilation. The full submission in the form it was received is available here:

http://www.planttreaty.org/sites/default/files/Submission_Italy.pdf

The entire guidelines (in Italian) are available here:

<http://www.reterurale.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/9580>

II. OTHER GOVERNMENTS, AND RELEVANT INSTITUTIONS AND ORGANIZATIONS

(a) COOPERAZIONE RURALE IN AFRICA E AMERICA LATINA (ACRA) AND CONSORTIUM PARTNERS

FARMERS' rights in practice

Synthesis of the case studies on sustainable use of agrobiodiversity in Europe

[..]

EXECUTIVE SUMMARY

The aim of the project *Good Practices in Sustainable Agriculture and Food Sovereignty: Developing an Inclusive Approach in the Fight against Poverty* is to mobilize an operational multi-stakeholder network for a proper implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) of the UN Food and Agricultural Organization (FAO) through promoting small scale and agro-ecological models of agriculture both for EU agro-food sector strategies and for development cooperation in Africa.

The project is implemented by a partnership of non-governmental organizations that work with organizations of small farmers in five European countries - France, Italy, Hungary, Romania and Scotland - and two African – Senegal and Tunisia. The project is coordinated by ACRA from Milan (Italy).

The project provides a collection of case studies of good practices on the sustainable use of PGRFA. This collection is based on the action-research method and was done in 2010 – 2011 in all the countries of the project plus Spain. The focus of the action-research is on agricultural diversity and its relationships with the different functions (e.g. environmental and socio-economic) involved in farm management. The examples of biodiversity and good practices, which are the core and common elements of each case, aim at showing linkages with the measures for the sustainable use of plant genetic resources for food and agriculture as expressed in Article 6 of the ITPGRFA.

The action-research identified 25 case studies in six European countries: four in France, four in Italy, seven in Hungary, four in Romania, four in Scotland and two in Spain. The two Spanish cases have been realized thanks to the external partnership of Red de Semillas. Two case studies identified the actions of local farmers' organizations on PGRFA in Senegal and Tunisia.

This report presents the synthesis of case studies analysed by the action-research activity. The aim is to give a description of the practices carried out by farmers, individually or collectively, which can be considered as sustainable ways to use plant genetic resources, with the purpose that these practices be spread and exchanged among farmer organizations of Europe and Africa. We consider it critical to bear in mind that the institutionalization of these practices is fundamental to reach an effective food sovereignty and dynamic management of cultivated biodiversity.

To make a strong connection with the FAO Global Plan of Action for Plant Genetic Resources for Food and Agriculture (GPA), the case studies are presented according to the activities foreseen in the GPA under the framework of the sustainable use:

1. Expanding the Characterization, Evaluation and Further Development of Specific Subsets of Collections to Facilitate Use;
2. Supporting Plant Breeding, Genetic Enhancement and Base-broadening Efforts;
3. Promoting Diversification of Crop Production and Broadening Crop Diversity for Sustainable Agriculture;

4. Promoting Development and Commercialization of All Varieties, Primarily Farmers' Varieties/Landraces and Under-utilized Species;
5. Supporting Seed Production and Distribution;

Each bullet will be explained in the report with specific case studies so as to point out how farmers' practices are innovative and in agreement with international policies³. A brief description of the situation in the countries involved in the project will be presented in order to better understand case studies and their social context.

INTRODUCTION

Seeds, biodiversity, farmers' rights and sustainable use: the report herein wants to clarify these terms and underline how local realities produce innovation describing some best practices that define these concepts in different and original ways. We are not talking about a mere conservation of agricultural diversity; instead we argue that crop diversity is the key to rebuild local realities and re-think the concept of modernity and progress in agriculture.

The other pillar on which rests the above mentioned best practices is the collective action that emphasizes how circulating and networking knowledge and seeds are essential to produce innovation. In these contexts, tradition is not seen as a glorious past but as a way of constructing a collective identity from local resources.

Making this innovation emerge has not only a symbolic value. It is neither about giving awards to someone nor about proposing a model applicable to everybody and in every social, cultural and environmental context. The challenge is to represent and describe the social and crop richness that is present in local territories and that is largely invisible to policy makers and politicians.

The ambition is to outline new policies and regulations that take into account all facets of the real, instead of reducing reality to a monoculture. Unfortunately, agricultural policies have been and continue to be a way to change reality by imposing a single model of modernity and progress named industrial agriculture.

This choice to follow this single model is based on a narrow economic ideology, masked behind the veil of an alleged technicality, scientism and neutrality that animates national and European legislators and which, in fact, tends to reinforce the commercial and political monopolies that control the food chain.

Actually, as written by Lang *et al.* (2009) «Food policy is made, not given. It is a social construct, not ordained by a pre-programmed, perpetual or externally affirmed human order.» Therefore, public policies concerning agriculture can be successfully reformulated on the basis of national / regional needs and their creation is the result of the negotiation of multiple and diverse actors and interests and their relative balance of power.

The report herein explicitly wants to give voice and strength to a different modernity in the countryside in order to redefine, build and program the public space.

[..]

Note by the Secretary:

For reasons of economy, only the executive summary and the introduction of the submission of ACRA et al. were included in this compilation. The full submission in the form it was received is available here: http://www.planttreaty.org/sites/default/files/Submission_ACRA.pdf

³ For a complete description of all the case studies please go to Action-Research Report *Good practices in sustainable agriculture and Food Sovereignty: developing an inclusive approach in fighting against poverty*.

(b) GREEN FOUNDATION**Farmers' Rights: a top-down or bottom-up approach?**

Plant genetic diversity is crucial to the future of food security and the diverse genetic resources that provide the insurance against pest and diseases and the changing climatic conditions. Such diversity plays an important role for the millions of small and marginal farmers who depend upon small scale farming for their livelihoods.

The diversity of domesticated land races is disappearing at an alarming rate all over the world. This apart, the interest in the commercial use of genetic resources has increased in line with the new interest in biotechnology, along with intellectual property rights (IPRs) and new seed regulations initiated at the national level. Ever since the negotiations of the World Trade Organization (WTO) and trade-related IPRs were agreed upon by the contracting parties, a situation of an anti-commons with multiple actors excluding each other from the right of access to plant genetic resources has emerged. Unfortunately, this is not seen as a threat to conservation and sustainable use of this resource seriously impacting food security and the outlook for combating poverty in the world.

In order to stall this negative trend, the FAO International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) was initiated in the year 2001. The realization of Farmers' Rights is the corner stone of the Plant Treaty. Farmers' Rights are basically about enabling farmers to maintain and develop crop genetic resources as they have done since the dawn of agriculture. [...] The two articles of the Treaty that have an important bearing on Farmers' Rights are Article 9 and Article 6.

[..]

Various alternatives have been contemplated to protect the plant genetic resources and examples have been drawn from the open source software to biology and other initiatives such as the community intellectual Rights. [...] Open source can be seen in the broader context as an alternative paradigm for innovation and a new way to approach the intellectual property issue. A number of nations, including Brazil, India, and the Philippines have passed or are considering laws that purport to provide a framework for "collective IPRs", but farmers and indigenous peoples have so far lacked the political power to make them substantially functional. Although over the past fifteen years a wide variety of proposals have been made for legal recognition of "traditional resources rights" and "community-based" or "informal" innovation, the proposed rights regime in defense of indigenous people's local knowledge systems is yet to be realized.

Other alternatives include elaborating the work done hitherto on community intellectual rights drawn from the acts drafted by Philippines and India. Community seed banks (CSB) have been considered a viable way of farmers accessing their seeds. It is learnt from various experiences that support mechanisms need to be put in place to protect the CSB that were seen as a need-based solution and this system which was adopted to broaden the genetic base and revive an informal seed supply system to the farming community (Krystyna Swiderska 2006).

The establishment of community seed banks has spread on-farm conservation and encouraged the formation of farmers' networks, thereby creating a farmers forum for exchange of crop varieties (Development fund Norway 2011). Community seed banks are the only solution to securing bio-resources, providing food and seed security to the larger section of the poor and marginal farmers. Mechanisms for legal protection to the farmer-saved seeds are not yet in place and there is scope for exploring the same.

Note by the Secretary:

For reasons of economy, only an excerpt of the submission of GREEN Foundation was included in this compilation. The full submission in the form it was received is available here:

http://www.planttreaty.org/sites/default/files/Submission_GREEN%20Foundation.pdf

III. PREVIOUS COMPILATIONS

(a) SUSTAINABLE USE SUBMISSIONS COMPILED FOR THE THIRD SESSION OF THE GOVERNING BODY

Ecuador, Germany, Kenya, Mali, Niger, Syria, Zambia (IT/GB-3/09/Inf.5)

This compilation is available here: <http://www.planttreaty.org/sites/default/files/gb3i05e.pdf>

Australia, Canada, Italy, CGIAR Consortium, SEARICE (IT/GB-3/09/Inf.5 Add.1)

This compilation is available here: <ftp://ftp.fao.org/ag/agp/planttreaty/gb3/gb3i05a1e.pdf>

(b) SUSTAINABLE USE SUBMISSIONS COMPILED FOR THE SECOND SESSION OF THE GOVERNING BODY

Australia, Ecuador, Egypt, El Salvador, Germany, Lesotho, Madagascar, Niger, Pakistan, Seychelles, Syria, Sweden, Tanzania, Uruguay (IT/GB-2/07/15)

This compilation is available here: <http://www.planttreaty.org/sites/default/files/gb2w15e.pdf>

Food and Agriculture Organization of the United Nations (IT/GB-2/07/Inf.8.1)

This submission is available here: <http://www.planttreaty.org/sites/default/files/gb2i8e1.pdf>

CGIAR Consortium (IT/GB-2/07/Inf.8)

This submission is available here: <ftp://ftp.fao.org/ag/agp/planttreaty/gb2/gb2i8e.pdf>