October 2005



منظمة الأغذسة



Agriculture
Agriculture
Organization
of
the
United
Nations

Organisation des Nations Unies pour l'alimentation l'agriculture

Organización de las Naciones Unidas para la Agricultura y la Alimentación

## Item 5 of the Draft Provisional Agenda

## **COMMISSION ON GENETIC RESOURCES** FOR FOOD AND AGRICULTURE

## WORKING GROUP ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

## Third Session

Rome, 26 – 28 October 2005

## PREPARATION OF THE SECOND REPORT ON THE STATE OF THE WORLD'S PLANT GENETIC RESOURCES FOR FOOD AND **AGRICULTURE**

## **GUIDELINES FOR COUNTRY REPORTS**

## **Table of contents**

		Paragraphs
1. INTRODU	CTION	1 - 10
2. THE PURP	OSE OF THESE GUIDELINES	11
3. RECOMME COUNTRY RI	ENDED STRUCTURE, CONTENTS AND SCOPE OF EPORTS	12 - 25
4. THE OVER	ALL PROCESS AND TIMELINE	26 - 32
ANNEX 1:	PREPARATION OF THE COUNTRY REPORT	
ANNEX 2:	PROVISIONAL STEPS AND TIMELINE FOR PRE REPORT ON THE STATE OF THE WORLD'S PLANT FOR FOOD AND AGRICULTURE	
ANNEX 3:	LIST OF THEMATIC STUDIES	

#### 1

## PREPARATION OF THE SECOND REPORT ON THE STATE OF THE WORLD'S PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

## GUIDELINES FOR COUNTRY REPORTS

## THE ESSENTIAL ROLE OF COUNTRY REPORTS

## A Strategic Assessment

Preparation of a Country Report is the most important step in the process for preparing the second *Report on the State of the World's Plant Genetic Resources for Food and Agriculture.* The preparatory process should be considered a **strategic planning exercise** and the report itself a strategic plan for the better management of plant genetic resources for food and agriculture in your country. Preparation of a Country Report provides an opportunity to engage or re-engage and stimulate the interests of a wide range of stakeholders to reflect on what has been accomplished and what remains to be done, and to see what adjustments are required to achieve the conservation, sustainable use and development of plant genetic resources for food and agriculture.

To ensure that their Country Report provides a basis for planning the conservation, sustainable use and development of plant genetic resources at the national level and contribute to regional and global efforts, countries should carefully and comprehensively assess:

- The current contribution of plant genetic resources to food and agriculture;
- The state of plant genetic resources for food and agriculture in the country and their role in production systems, including associated biodiversity and the factors driving change;
- Whether crop and agricultural production and productivity is increasing, decreasing or remaining the same;
- How the contribution of plant genetic resources to food and agriculture can be enhanced – identifying opportunities and obstacles – as well as strategies to realize the opportunities and overcome any obstacles;
- Unmet needs and priorities for capacity building to enable the conservation, sustainable use and development of plant genetic resources for food and agriculture.

#### 1. INTRODUCTION

- 1. Recognizing the importance of plant genetic resources for food agriculture, the Conference of the Food and Agriculture Organization of the United Nations (FAO), at its twenty-sixth Session in 1991, agreed that a first *Report on the State of the World's Plant Genetic Resources* (first *Report*) should be developed. The process for preparing the first *Report* was country-driven and guided by the Commission on Genetic Resources for Food and Agriculture (the Commission).
- 2. Countries agreed that the foundation of the first *Report* would be Country Reports. FAO was requested to prepare Country Report guidelines to provide a common framework for country level analysis and presentation of data and information. Participation in the preparation of the first *Report* was exceptional, with 154 Country Reports completed and submitted to FAO, providing the necessary basis for the first critical assessment of the status of plant genetic resources for food and agriculture and the capacity of countries to use, develop and conserve them.
- 3. In addition to the Country Reports, FAO gathered information as part of the process for preparing the first *Report* through two surveys, and obtained information from a number of international agricultural research centres of the Consultative Group on International Agricultural Research. Contributions were also received from about 200 individuals, largely through electronic conferences. FAO carefully compiled and synthesized the data and information producing the first *Report on the State of the World's Plant Genetic Resources*.
- 4. In 1996, the Fourth International Technical Conference on Plant Genetic Resources was convened in Leipzig, Germany. Representatives of 150 countries, along with numerous representatives of international organizations, gathered to consider the first *Report on the State of the World's Plant Genetic Resources*. Delegates welcomed the *Report* as the first comprehensive world-wide assessment of the state of plant genetic resources. They also adopted the *Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture (Global Plan of Action), to address many needs and priorities expressed in the first <i>Report*.
- 5. The outcome of the Fourth International Technical Conference was subsequently endorsed by FAO Conference, and welcomed by the Conference of the Parties to the Convention on Biological Diversity (CBD). A comprehensive version of first *Report*, was later peer-reviewed, edited and published by FAO in 1998. Both versions of the first *Report*, as well as the *Global Plan of Action*, are available on the FAO web site at http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPS/Pgrfa/wrlmap\_e.htm
- 6. In 1999, the Commission, at its Eighth Regular Session, reiterated the need to periodically assess the state of the world's plant genetic resources for food and agriculture to facilitate the analysis of changing needs and gaps, as well as to contribute to the adjustment of the rolling Global Plan of Action. It was agreed that the preparation of a second Report on the State of the World's Plant Genetic Resources for Food and Agriculture (second Report) and possible amendments to the Global Plan of Action, would be considered by the Commission, and that in the longer term, a report on the State of the World's Agricultural Biodiversity might be envisaged.
- 7. The International Treaty on Plant Genetic Resources for Food and Agriculture was adopted by FAO Conference on November 3, 2001, and came into force on June 29, 2004. The need for periodic reports on the state of the world's plant genetic resources is reaffirmed by the Treaty, which requires that "Contracting Parties shall cooperate with the Commission on Genetic Resources for Food and Agriculture of the FAO in its periodic reassessment of the state of the world's plant genetic resources for food and agriculture in order to facilitate the updating of the rolling *Global Plan of Action*" (Article 17.3).

- 8. In 2002, the Commission, at its Ninth Regular Session, considered a detailed proposal for the preparation of the second *Report on the State of the World's Plant Genetic Resources for Food and Agriculture*, which contained a proposed outline for the report. The Commission agreed that work should now progress on the development of the second *Report*, stressing that the preparatory process should be fully integrated with the process of monitoring the implementation of the *Global Plan of Action*. The Commission indicated that priority should be given to updating the first *Report*, focusing as far as possible on changes that had occurred.
- 9. The Commission requested its Inter-governmental Working Group on Plant Genetic Resources (Working Group) to guide the preparation of the second *Report*. The Working Group met in 2003 and considered a multi-level process for preparing the second *Report*. It emphasized that a key objective for preparing the second *Report* was to assist national, regional and global efforts to enhance the utilization of plant genetic resources in support of efforts to achieve food security, rural development and sustainable agriculture. The Working Group stressed that the process for preparing the second *Report* must provide for national, regional and global analysis and perspectives, and agreed that the process should include the preparation of Country Reports. To assist countries in this regard, the Working Group recommended that FAO prepare guidelines that would draw forth information on changes in national status that have occurred since the first *Report*.
- 10. The Working Group stressed that the process for monitoring implementation of the *Global Plan of Action* was an essential component of the process for preparing the second *Report*. It also considered thematic studies to complement information that would be provided in Country Reports. The Working Group agreed on a number of such thematic studies to be carried out as financial resources allowed, indicating their priorities as given in Annex III.

## 2. THE PURPOSE OF THESE GUIDELINES

- 11. As requested by the Commission and its Working Group on Plant Genetic Resources, these guidelines have been prepared by FAO to assist countries to undertake preparation of their Country Report on plant genetic resources for food and agriculture. The guidelines have been designed to serve three important interrelated functions. They are intended to:
  - Assist countries to undertake a strategic assessment of their plant genetic resources for food agriculture to provide a basis for national planning and management. This task goes beyond a description of the resources. It requires a strategic analysis to report on the state of the resources and capacities to manage them, drawing lessons from past experiences and identifying needs and priorities. Numerous questions have been provided in these guidelines to assist countries to examine past efforts and to look to the future, to predict needs, demands, trends and national capacity building requirements in all aspects of the management of plant genetic resources for food and agriculture.
  - Ensure integration of the preparation of the second Report on the State of the World's Plant Genetic Resources for Food and Agriculture with the new approach for monitoring the implementation of the Global Plan of Action. The new monitoring approach generates substantial data and information which should be captured in the second Report. The guidelines identify likely sources of information that should result from the questions and tables contained in various sections of the Indicators and Reporting Format for Monitoring the Implementation of the Global Plan of Action, and provide suggestions on how to present this information in the Country Report.
  - Provide a common framework for countries to report globally on the state of their plant genetic resources for food and agriculture and on management activities, need

and priorities. This common framework is crucial **to facilitate regional and global analysis and synthesis** in order to prepare the second *Report on the State of the World's Plant Genetic Resources for Food and Agriculture*, as well as to provide a foundation for **updating the rolling** *Global Plan of Action* in the future, ensuring that strategic investments in plant genetic resources for food and agriculture are directed towards national, regional and global priorities.

## 3. RECOMMENDED STRUCTURE, CONTENT AND SCOPE OF COUNTRY REPORTS

#### Structure

- 12. As a common framework for preparing Country Reports is essential to enable regional and global synthesis; it is therefore strongly recommended that countries follow as closely as possible the structure for Country Reports provided in these guidelines.
- 13. An Executive Summary is recommended, and an Introduction to the Country section, which would provide a description of the country and its agricultural sector. The recommended structure of the Main Body of the Country Report is as follows:
  - **Chapter 1:** The State of Diversity
  - Chapter 2: The State of *In situ* Management
  - Chapter 3: The State of Ex situ Management
  - **Chapter 4:** The State of Use
  - Chapter 5: The State of National Programmes, Training and Legislation
  - Chapter 6: The State of Regional and International Collaboration
  - Chapter 7: Access to Plant Genetic Resources for Food and Agriculture, Sharing of Benefits Arising out of their Use, and Farmers' Rights
  - Chapter 8: The Contribution of PGRFA Management to Food Security and Sustainable Development
- 14. Each country should **add any other sections** they believe essential to their nation, to identify the requirements for improved efforts to conserve, use and develop plant genetic resources for food and agriculture, as well as to identify needs and priorities, including regional and global collaboration.

## **The Content of Country Reports**

- 15. It is essential for the Country Report to look to the past, to the current situation, and to the future. Therefore, it is suggested that looking back about 10 years and forward 10 years would provide a perspective on where the country was, where it is now, and where it is going.
- 16. Where practical, countries are encouraged to use their previous Country Report on Plant Genetic Resources as a reference point to assess trends and progress made toward goals, and to provide a basis for improved policy development, planning and implementation of priority actions at all levels. Previous Country Reports are available on the FAO web site at http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPS/Pgrfa/wrlmap\_e.htm

- 17. While each country must decide the specific content and main issues to be addressed in its Country Report, in general, it is recommended that each **chapter as recommended above in the Country Report**:
  - Provide an analysis of trends and indicate changes over the past 10 years, where feasible.
  - Provide information to enable updating the information from the corresponding chapter of the first *Report on the State of the World's Plant Genetic Resources*.
  - Identify new and emerging issues and opportunities.
  - Provide a summary of highlights of progress in the implementation of the *Global Plan of Action* utilizing as much as possible the new monitoring approach.
  - Identify the main challenges and opportunities to achieving the sustainable use, development and conservation of plant genetic resources for food and agriculture.
  - Provide clearly stated strategic directions of needs and priorities to achieve the
    conservation, sustainable use and development of plant genetic resources for food
    and agriculture at the national, regional and global levels. This should include both
    immediate action and long-term planning needs.
  - Where available, provide information to assist in the development of thematic studies that are being undertaken as part of preparing the second *Report* (see Annex III).
- 18. To assist countries to develop the content of their Country Report, Annex I of these guidelines provides suggestions and a comprehensive set of questions for each major section of the Country Report. It must be stressed that it is not necessary to attempt to answer every question. Rather, the questions are provided to stimulate discussion and assist countries to undertake a strategic analysis of their activities related to plant genetic resources for food and agriculture, with a view to developing a path forward to meet each nation's goals for utilizing and conserving them in the context of food security and rural development.

#### Scope

- 19. In determining the scope of their Country Report, countries will focus on the plant genetic resources that are most important to their food and agriculture. In this context, countries are encouraged to consider the definitions of plant genetic resources for food and agriculture provided in the first Report on the State of the World's Plant Genetic Resources and in the International Treaty on Plant Genetic Resources for Food and Agriculture.
- 20. The following definition is contained in the first *Report* "Plant genetic resources for food and agriculture comprise the diversity of genetic material contained in traditional varieties and modern cultivars, as well as crop wild relatives and other wild plant species that can be used now or in the future for food and agriculture." The *Treaty* gives the following definition "Plant genetic resources for food and agriculture means any material of plant origin of actual or potential value for food and agriculture." Both definitions provide a broad and useful scope, as they include those resources currently contributing to food and agriculture as well as those that have the potential to do so.
- 21. It is strongly recommended that countries consider Chapter 1 of the first Report on the State of the World's Plant Genetic Resources The State of Diversity, to assist in determining the scope and focus of their Country Report. The main headings used in this chapter are: Major Crops; Minor Crops and Underutilized Species (species that are utilised at a local level, either through cultivation or harvesting; multi-purpose plants; and crops that contribute to agricultural diversification); Wild Species; and Crop Varieties (Modern Varieties and Landraces/Farmers' Varieties). As the second Report is intended to update the first Report as much as possible, it would be extremely helpful if Country Reports address the same genetic resources addressed in

Chapter 1 of the first *Report*, and in doing so, use the same subject headings. Countries are also encouraged to review Annex I of the *International Treaty*, the List of Crops Covered under the Multilateral System.

- 22. It is also recommended that countries, in assessing the state of their plant genetic resources for food and agriculture, and their roles and values, attempt to describe the related aspects of agricultural biodiversity, the production systems and the environments in which these resources are being used, the range of products and services which they provide, the consumption patterns and socio-cultural practices associated with them, the ecosystem functions which they sustain, and their roles in agricultural production and in achieving food security.
- 23. It is strongly recommended that in assessing progress and recommending future action, that the scope of activities include actions by the public, private and non-governmental sectors, and that in particular, actions, needs, priorities and involvement of indigenous and local communities and associations of farmers be fully taken into account.

## **Integration with the Global Plan of Action**

24. As stressed by the Commission, the preparatory process for the second *Report* is to be fully integrated with the process of monitoring the implementation of the *Global Plan of Action*. To achieve this, questions and tables contained in the *Indicators and Reporting Format for Monitoring the Implementation of the Global Plan of Action* document **are cross-referenced under each of the relevant chapters** recommended in Annex I of these guidelines. This will ensure that data and information generated in response to the new monitoring approach can be considered for inclusion in the Country Report, without duplication of effort.

## **Length of the Country Report**

25. It is recommended that the Country Report be as brief as possible while addressing all of the main issues. The Country Report should not exceed 60 pages. The main body of the report should be approximately 25-35 pages and should be strategic, with information provided to support the conclusions and strategic directions. No guidelines are proposed for the length of individual chapters, as the emphasis may vary from country to country. Tables and annexes should be prepared for data and descriptive information, where feasible.

## 4. THE OVERALL PROCESS AND TIMELINE

26. The overall process for preparing the second *Report on the State of the World's Plant Genetic Resources for Food and Agriculture* is shown in Annex II of these guidelines. During its Tenth Regular Session in November 2004, the Commission requested FAO to revise the time line, on the basis that the second *Report* would be completed in 2008. The revised time line establishes May 2008 as the deadline for completion of the first draft of the second *Report* in order that it can be considered by the Commission, at its Twelfth Regular Session.

## **Timeline for Completing Country Reports**

- 27. In order for the second *Report* to be completed by 2008, the deadline for completion of final Country Reports is 30 June 2007. Final Country Reports **submitted to FAO by national governments**, by 30 June 2007, will be used as the main source for preparing the second *Report*. If countries are **unable** to submit final Country Reports by this deadline, preliminary reports of findings should be provided to FAO to contribute to the identification of global priorities for inclusion in the second *Report*.
- 28. The final Country Report must be translated into one of the official languages of FAO (Arabic, Chinese, English, French and Spanish) and be submitted as an official government document.

## Recommended Steps for Preparing the Country Report

- 29. The following steps are recommended in undertaking preparation of the Country Report using a participative approach:
  - Each participating country should appoint one office for preparation of the Country Report as the focal point for contact between the country and FAO. Countries should, as soon as possible, provide to FAO the name and address of the focal point for the Country Report process.
  - Each country could establish a national committee or use their existing National PGRFA Committee to oversee preparation of the Country Report. It is highly recommended that the national committee consist of as many representative stakeholders as practical, and meet frequently to review progress and consult with key stakeholders.
  - The national committee may find it useful to establish a small working group to compile data and information for the Country Report, and to write assigned sections. Each member of the working group should review these guidelines and acquaint themselves with the country's previous Country Report, the first Report on the State of the World's Plant Genetic Resources, the Global Plan of Action and the new monitoring approach for the Global Plan of Action.
  - The national committee might request the working group to rapidly determine the scope, structure and content of the Country Report, indicating the approximate length of each section. The working group could prepare a draft outline. Once the national committee approves the outline, the working group could designate people to assemble information and prepare a first draft of each section. This work should start early in the process leaving sufficient time for reflection and analysis.
  - The national committee may wish to establish *ad hoc* working groups as required, to address specific issues as they arise and to provide expert advice on various matters.
  - The working group should assemble a **first draft of the entire Country Report.** The national committee should **review it**, and then could provide for broader stakeholder review.
  - The national committee should **finalize the Country Report** following the stakeholder review, and **submit it** to the national government so that it can be **officially endorsed** and submitted to FAO by 30 June 2007.
- 30. Subject to the availability of financial resources, FAO and other international organizations, in particular the International Plant Genetic Resources Institute (IPGRI) will provide technical assistance to monitor implementation of the GPA and prepare the Country Report, but only if invited by the government of country itself as a priority activity. FAO and IPGRI are prepared to review, on request, draft Country Reports and to provide advice on their style and content. Some financial resources may be available to assist the Country Report preparatory process and some on-site expert assistance may also be available.

31. The FAO contact point for preparation of Country Reports is:

Senior Officer, Seed and Plant Genetic Resources Policy Seed and Plant Genetic Resources Service, AGPS Plant Production and Protection Division, FAO Viale delle Terme di Caracalla 00100 Rome, Italy

Fax: (+3906-5705.6347) E-mail: <u>SOW-PGR@fao.org</u>

## **Regional Meetings**

32. Regional meetings are planned for the second half of 2007, subject to the availability of financial resources, to gather regional perspectives on gaps and needs as an important input to the second *Report*. Regional meetings will also provide an opportunity to consider priorities for adjusting the *Global Plan of Action*.

## PREPARATION OF THE SECOND REPORT ON THE STATE OF THE WORLD'S PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

## ANNEXES TO GUIDELINES FOR COUNTRY REPORTS

#### ANNEX 1: PREPARATION OF THE COUNTRY REPORT

#### A. INTRODUCTION

**Preparation of your Country Report** provides a key opportunity to both assess the management of plant genetic resources at the country level and contribute to global efforts to achieve the conservation, sustainable use and development of plant genetic resources for food and agriculture. To accomplish these mutually supportive goals, these guidelines have been developed so that your Country Report:

- Enables and encourages a comprehensive strategic analysis at the national level of the state of plant genetic resources and the capacity to conserve, use and develop these resources with a view to determine future needs and priorities;
- ➤ Enables analysis and facilitates regional and global synthesis of Country Reports from all regions as the basis for preparing the second *Report on the State of the World's Plant Genetic Resources*; and
- ➤ Identifies emerging issues and changing needs and priorities at all levels to provide the basis for considering updating of the *Global Plan of Action*.

To assist countries to achieve these desirable outcomes, Section B of this annex presents an overview of the main requirements for undertaking a strategic assessment, as part of the Country Report process. This includes general guidance in terms of the intended scope and content of the main body of the Country Report, as well as the suggested content for an introductory section of the Country Report and an executive summary.

Section C of this annex provides a detailed framework for undertaking the strategic analysis on a chapter-by-chapter basis. The framework outlines the key areas that need to be addressed to enable updating of the corresponding chapter of the first *Report on the State of the World's Plant Genetic Resources*, and provides questions to stimulate discussion and facilitate the analysis. Questions are also provided to update relevant Annexes of the comprehensive version of the first *Report*, in particular Annex I, which addresses the State of the Art. Questions and tables from the new monitoring approach for implementation of the *Global Plan of Action* and its Priority Activity Areas are cross-referenced.

## B. OVERALL GUIDANCE FOR PREPARING THE COUNTRY REPORT

The Country Report is intended to be a strategic document to guide the conservation, sustainable use and development of plant genetic resources. Each country should keep in mind that the Country Report should as far as possible:

- Provide an analysis of trends and changes over about the past 10 years, to enable updating of the information from the corresponding chapters of the first *Report on the State of the World's Plant Genetic Resources*.
- Describe the main driving forces affecting plant genetic resources for food and agriculture and their management in the country and describing the nature of the impacts – positive and negative.

- Identify new and emerging issues and the main challenges to achieving goals in relation to the use, development and conservation of plant genetic resources for food and agriculture, as well as opportunities, taking into account the context of the provisions of the *International Treaty*. Where possible, solutions to issues should be provided.
- Provide strategic directions and conclusions aimed at both the national level and at the regional/global levels that clearly articulate needs to ensure the conservation, sustainable use and development of plant genetic resources for food and agriculture, and that enable priority setting at the national, regional and global levels.

## **Section I: Executive Summary**

It is recommended that the Country Report contain an executive summary of 2-3 pages, which highlight the main findings of the analysis and provide an overview of key issues and challenges and existing capacity to address the issues and challenges. The summary should indicate trends, driving forces and present an overview of the proposed strategic directions for future action aimed at the national, regional and global levels.

## Section II: An Introduction to the Country and the Agricultural Sector

The main objective of this section is to present an overview to allow a person who is unfamiliar with the country to understand the conditions and help the reader appreciate the context for the Country Report. In preparing the introduction, countries should bear in mind that this section should only present an overview. Detailed information should be provided in the main body of the Country Report, and thus, countries may wish to consider developing their introductions after completing the main body of the Country Report.

Countries that previously prepared a Country Report on Plant Genetic Resources, or recently prepared a Country Report on Animal Genetic Resources, should be able to use much of the information contained in these reports to prepare their introductory section.

## It is recommended that the introduction provide:

- Basic information on the size and location of the country; its main physiographic and climatic features; the human population and trends; the main farming systems and crops/plant products and the degree of reliance of the country on these products for local use and for export.
- A description of the state of food security and trends.
- A brief profile of the agricultural sector in 2 or 3 paragraphs, including the size and nature
  of farm enterprises (commercial, subsistence, etc.), seed supply systems, and the role of
  national and foreign private companies.
- A description in 2 or 3 paragraphs, of recent trends in plant production and the main reasons for observed changes.
- A map of the country, marking the places and regions mentioned in the report if you think it necessary.
- Countries may also wish to provide a description of the process they followed in preparing the Country Report, providing the names of the participants in the Annex.

## The following questions are provided to assist countries to consider the content of their introductory section:

## **Describe the Agriculture Crop Sector:**

- What are the main farming systems, crops and animal products?
- How important is employment in the crop sector and what is the overall economic importance of the agriculture/crop sector?
- What is the relative importance of crop and crop products for domestic use and export?
- How is the crop sector organized? (private farmers, international corporations, cooperatives)
- What is the distribution of farm size?

## Describe the Human Population and Trends, and how this will affect the agriculture/crop sector:

- What is the current human population size and what are the trends in human population growth?
- How will human population trends in your country affect demand for agricultural production (remain about the same, increase significantly, decrease demand)?
- Is the distribution of people between rural and urban areas changing? If so, are these changes affecting food security and rural development? Is rural poverty decreasing, increasing, or staying about the same?

#### **Indicate the Level of Food Security:**

- Has your country achieved food security? If not, does the country occasionally or frequently encounter food shortages?
- How great is the risk of food shortages and what are the reasons for these shortages?
- Are some regions at greater risk of food shortages than others?

## Describe Changing Demands and Driving Forces in the Crop/Agriculture Sector:

- What trends in crop production were observed over the past 10 years?
- What changes are occurring in the demand for crop products in the country? Have there been significant changes in the types and diversity of products produced in the past 10 years? If so, what are the reasons for these changes **the main driving forces** (government policies, changes in demand, environmental pressures, population growth, etc.)?
- What changes in agricultural production systems will be required to meet changing demands over the next 10 years?

- What are the **limiting** factors and major constraints affecting productivity and
  efficiency? What are possible means to overcome these constraints (a brief overview
  of needs only)? Detailed information on how to respond to address the constraints
  should be provided in the main body of the Country Report.
- What roles will plant genetic resources play in meeting future demands for food and agriculture in your country over the next 10 years?

## C. CHAPTER SPECIFIC GUIDANCE FOR PREPARING THE COUNTRY REPORT

Suggestions for content and numerous questions are provided to assist countries to undertake their strategic analysis and develop the content for each chapter of their Country Report. **It is not necessary to attempt to answer every question.** They are provided to stimulate discussion and analysis and to ensure that the Country Report contains strategic directions that address priorities and needs. Each country must decide how best to address each section of their Country Report bearing in mind the need to update information contained in the first *Report on the State of the World's Plant Genetic Resources*.

## Section III: The Main Body of the Country Report

The following sections provide suggestions for chapter headings and the content of each chapter, for the main body of the Country Report. In each chapter, the most relevant questions and common tables from the *Indicators and Reporting Format for Monitoring the Implementation of the Global Plan of Action (IRF-GPA)* are indicated. Additional questions are provided to assist in undertaking the strategic analysis.

## **Chapter 1: The State of Diversity**

The main objective of this section is to describe the state of diversity of plant genetic resources that contribute most to food and agriculture in the country, and indicate future needs and priorities. The information in the Country Report should enable updating of Chapter 1: State of Diversity of the first *Report on the State of the World's Plant Genetic Resources*. Countries may also wish to take into account Annex I of the *International Treaty on Plant Genetic Resources* – the List of Crops Covered under the Multilateral System, in preparing this chapter of their Country Report.

In order to provide information to update Chapter 1 of the first *Report*, information in the following areas should be considered in developing the Country Report:

- The state of diversity and relative importance of all Major Crops for food security
- The state of diversity and relative importance of Minor Crops and Underutilized Species for food security and agriculture (species that are utilized at a local level, either through cultivation or harvesting; multi-purpose plants; and crops that contribute to agricultural diversification)
- The state of diversity of wild plants harvested for food production
- The state of diversity of crop varieties (modern varieties and landraces/farmers' varieties)
- The main factors affecting the state of diversity factors driving any change

# Strategic Directions – to improve understanding of the State of Diversity and Ways to Maintain Diversity:

The Country Report should indicate what are the needs and priorities for improving understanding of the state of diversity of plant genetic resources for food and agriculture and ways to maintain this diversity. Countries should attempt to identify the level of the intervention that is required – national, regional and/or global.

There are numerous questions contained in the *Indicators and Reporting Format for Monitoring the Implementation of the Global Plan of Action (IRF-GPA)* document that request data and information that should assist in preparing this Chapter of the Country Report. Its Project, Taxon, Area and Reference tables, if completed, would provide information to respond to several of them. The most relevant Activity Areas and questions contained in the *IRF-GPA* document are:

- Activity Area 1, Surveying and Inventorying Plant Genetic Resources for Food and Agriculture contains specific questions relating to the state of diversity of plant genetic resources, particularly questions 1.1 and 1.2 which are linked to the Project and Area tables. Responses to these questions should provide information on threatened and endangered species important to agriculture, and threats to plant genetic resources.
   Priorities for surveys should result from responses to question 1.2. Question 1.6 requests countries to identify constraints to undertaking surveying and inventory work and provides a number of possible reasons.
- Activity Area 4, *Promoting In situ Conservation of Wild Crop Relatives and Wild Plants for Food Production* requests information on the current status of these wild plants, in particular, question **4.1**. Other questions in Activity Area 4 should provide some relevant information to assist in assessing the diversity of wild crop relatives and wild plants for food production at the country level.
- Activity Area 5, Sustaining existing ex situ collections and Activity Area 6, Regenerating threatened ex situ accessions request information on the diversity of plant genetic resources conserved ex situ. Questions 5.1, 5.2 and 6.4 are particularly relevant.
- Activity Area 11, Promoting Sustainable Agriculture through Diversification of Crop Production and Broader Diversity in Crops, Activity Area 12, Promoting Development and Commercialization of Underutilized Crops and Species, and Activity Area 14, Developing New Markets for Local Varieties and "Diversity-Rich" Products contain questions that are aimed to provide some data and information on the state of diversity within crops (question 11.1), underutilized crops (question 12.1), and local varieties (question 14.2).
- Activity Area 13, Supporting Seed Production and Distribution should yield relevant data and information on the state of diversity of plant genetic resources grown in the field, particularly responses to questions 13.1, 13.2, 13.4, 13.5, 13.6 and 13.7. Responses to 13.6 and 13.7 should assist in determining changes in the use of varieties and proportion of modern or improved varieties versus traditional varieties, as well as the total percentage area devoted to each crop type.
- Activity Area 18, Developing Monitoring and Early Warning Systems for Loss of Plant Genetic Resources for Food and Agriculture contains several questions that should yield data and information on the state of diversity of plant genetic resources, the state of genetic erosion and genetic vulnerability, and the state of conservation efforts. Questions 18.1, 18.3, 18.4, 18.5 and 18.6 are most relevant.

## **Questions to assist the Strategic Analysis:**

The following questions are provided to assist countries to develop strategic directions for their Chapter on the State of Diversity. Where applicable, questions from the *IRF-GPA* document are noted.

## The main values of plant genetic resources:

- 1.1 What are the most important crops and products derived from them in your country? (*IRF-GPA* questions **1.1** and **1.2**).
- 1.2 What is the relative importance (food security, economic, social) of the different crops and their products? Are there differences in the importance of these products between different regions within the country?

## **Diversity Within and Between Crops:**

- 1.3 What is the state of diversity of in your country of **Major Crops?** (*IRF-GPA* questions **1.1**, **1.2**, **5.1**, **5.2**, **5.10**, **6.4**, **6.6**, **7.1**, **7.2**, **7.3** and **7.4**). Indicate if the diversity is increasing, decreasing, remaining the same, or is unknown for each major crop?
- 1.4 What is the state of diversity in your country of **Minor Crops and Underutilized Species** (species that are utilised at a local level, either through cultivation or harvesting; multi-purpose trees; and crops that contribute to agricultural diversification)? (*IRF-GPA* questions **1.1**, **1.2** and **12.1**). Indicate if the diversity is increasing, decreasing, remaining the same, or is unknown.
- 1.5 What is the state of diversity of in your country of **Wild Plants for Food Production?** Indicate if the status of each species is increasing, decreasing, remaining the same, or is unknown. If changes are being observed, indicate the main causes. (*IRF-GPA* question **1.1**, **1.2** and **4.1**. The Project, Taxon and Area tables are linked to question **4.2**)
- 1.6 Are you undertaking inventories and surveys of wild plants for food production and of crop-associated biodiversity? (*IRF-GPA* question **1.1**, **1.2** and **4.2**).
- 1.7 Is there a recognizable threat of genetic vulnerability (resulting from loss of diversity grown by farmers) in the country? (*IRF-GPA* questions **14.2** and **18.1**).
- 1.8 Is the diversity of *Modern Varieties* being used increasing, decreasing, remaining the same, or is it unknown? (*IRF-GPA* questions **1.1**, **1.2**, **3.7**, **11.1**, **13.6** and **13.7**). If changes are observed, indicate the main causes.
- 1.9 Is the diversity of *Landraces/Farmers' Varieties* being used increasing, decreasing, remaining the same, or is it unknown? (*IRF-GPA* questions **1.1**, **1.2**, **3.7**, **11.1** and **13.6**). If changes are observed, indicate the main causes.

## Factors influencing the state of plant genetic diversity in your Country:

1.10 Has the relative importance of various crops changed significantly over the past 10 years? If so, what forces are driving the change? (*IRF-GPA* questions **13.8**, **13.9** and **13.10** and the Cultivar table).

- 1.11 Is your country assessing genetic erosion of plant genetic resources? (*IRF-GPA* questions **1.1**, **1.2**, **18.1**, **18.2**, **18.3**, **18.4** and **18.7**). If so, what mechanisms or indicators are used to monitor genetic erosion?
- 1.12 If genetic erosion is occurring, what are the major factors for this?
  - Variety replacement;
  - ➤ Policy and legislative changes;
  - > Economic pressures;
  - > Overexploitation-overgrazing; land clearing and deforestation;
  - > Urbanization and human population growth;
  - Environmental effects recurrent droughts, invasive alien species pest and disease; etc.
  - War and strife;
  - ➤ Other factors (describe them in your Country Report)

#### **Future Needs and Priorities:**

- 1.13 What are your priorities for improving understanding of the state of diversity of plant genetic resources, including crops, forages crops, associated biodiversity and wild plants for food production? (*IRF-GPA* questions **1.6.** and **1.7**)
- 1.14 What are your capacity-building needs to enhance assessments of the state of diversity of plant genetic resources, including ways to better assess genetic erosion and understanding of the causes of erosion?
- 1.15 What are your priorities to better understand the roles and values of the diversity of plant genetic resources for food and agriculture (economic, social, culture, ecological values)?
- 1.16 What are your priorities to improve monitoring of genetic erosion and improve the response to observed erosion? (*IRF-GPA* questions **18.6** and **18.8**).
- 1.17 Provide any other strategic direction relevant to improving understanding of the state of diversity of plant genetic resources and maintaining this diversity (policy, research and management actions) at the national, regional and global levels).

**State of the Art:** Updating Annex 1-1 of the comprehensive version of the First *Report on the State of the World's Plant Genetic Resources*, which is entitled "The state of the art: Methods for analyzing and assessing genetic diversity, erosion and vulnerability".

- 1.18 What methods are being employed to analyze and assess plant genetic resources genetic diversity, erosion and vulnerability in your country?
- 1.19 What obstacles exist to your country obtaining and using available methods for analyzing and assessing genetic diversity, erosion and vulnerability? How can the obstacles be overcome?

## Chapter 2: The State of In situ Management

The main objective of this section is to describe the state of *in situ* management of plant genetic resources that contribute most to food and agriculture and to indicate future needs and priorities. The information in the Country Report should enable updating of Chapter 2 of the first *Report on the State of the World's Plant Genetic Resources*. In order to provide information to update

## Chapter 2, information in the following areas should be considered in developing the Country Report:

- Plant genetic resources inventories and surveys
- Conservation of wild plant genetic resources for food and agriculture in protected areas
- Ecosystem management for conservation of plant genetic resources for food and agriculture and crop-associated biodiversity outside protected areas
- On-farm management and improvement of plant genetic resources for food and agriculture
- Assessment of major needs for in situ management of plant genetic resources for food and agriculture

## Strategic Directions – to improve *In situ* Management of Plant Genetic Resources:

The Country Report should indicate the needs and priorities for improving the state of *in situ* management of plant genetic resources for food and agriculture. Countries should attempt to identify the level of the intervention that is required – national, regional and/or global. There are numerous questions contained in the *Indicators and Reporting Format for Monitoring the Implementation of the Global Plan of Action (IRF-GPA)* that request data and information that should assist in preparing this Chapter of the Country Report. Its Project, Area and Organization tables, if completed, will provide useful information. The most relevant activity areas and questions are:

- Activity Area 1, Surveying and Inventorying Plant Genetic Resources for Food and Agriculture contains specific questions that should yield data and information to update knowledge about the status of national inventories for plant genetic resources as well as information to describe indigenous knowledge that may have been used during the survey. All of the questions in Activity Area 1 should yield some relevant information.
- Activity Area 2, Supporting On-Farm Management and Improvement of Plant Genetic Resources all of the questions in this Activity Area are relevant to updating the state of in situ management. Reponses to question 2.3, 2.6 and 2.7 should generate strategic directions for enhancing in situ management capacity. Countries may also wish to locate some information regarding on-farm management in Chapter 5 of their Country Report: The State of National Programmes, Training and Legislation.
- Activity Area 3, Assisting Farmers in Disaster Situation to Restore Agricultural Systems should provide relevant information regarding on-farm management following disasters. Responses to all of the questions in Activity Area 3 should assist to update Chapter 2 of the first Report. Questions 3.9 and 3.10 should generate strategic directions aimed at enhancing capacity.
- Activity Area 4, *Promoting In Situ Conservation of Wild Crop Relatives and Wild Plants for Food Production* contains numerous questions on conservation efforts for known and potential plant genetic resources, within and outside protected areas, that should yield information to update the state of *in situ* management. Responses to all of the questions in

this Activity Area should help update the conservation section of this Chapter. Reponses to questions **4.4**, **4.6** and **4.7** should generate strategic directions aimed at enhancing capacity.

## Questions to assist the Strategic Analysis:

Questions have been provided under various headings to assist countries to develop strategic directions to address future needs and priorities. Where applicable, questions from the *IRF-GPA* are noted.

#### **Inventories and Surveys -- Assessments and Priorities:**

- 2.1 What actions have been taken to improve inventories and surveys of plant genetic resources, crop-associated biodiversity and wild plants for food production over the past 10 years? (*IRF-GPA* questions **1.1** and **1.3**)
- 2.2 What are the greatest constraints to improving inventories and surveys for plant genetic resources, crop-associated biodiversity and wild plants for food production? (*IRF-GPA* question **1.6**)
- 2.3 What ecological functions do the crops and crop-associated biodiversity play?
- 2.4 What are your priorities for future inventories and surveys of plant genetic resources, crop-associated biodiversity and wild plants for food production? (*IRF-GPA* questions **1.2** and **1.7**)
- 2.5 What are your capacity-building needs and priorities to support inventory and surveys for plant genetic resources, crop-associated biodiversity and wild plants for food production? (*IRF-GPA* questions **1.4** and **1.7**)

## On-farm management and improvement of plant genetic resources for food and agriculture:

- 2.6 To what extent is on-farm management of PGRFA addressed within the country? (*IRF-GPA* questions **2.1**, **2.2** and **2.5**)
- 2.7 What incentives are used to promote on-farm management of PGRFA in your country? (*IRF-GPA* question **2.3**)
- Has your country established any national/regional forum for stakeholders involved in on-farm conservation, recognized by the National Programme? (*IRF-GPA* question **2.4**)
- 2.9 Does your country support on-farm participatory plant breeding programmes or activities?
- 2.10 What support is provided in your country to develop local or small scale seed production?
- 2.11 What additional actions support on-farm management in your country?
  - Facilitation of access to a wider range of planting material
  - Development of markets for products originating from traditional and underutilized varieties and crops
  - Changes to national and international policy frameworks

## Restoring agricultural systems after disasters:

- 2.12 Has your country established mechanisms to replace plant genetic resources for food and agriculture following disasters? (*IRF-GPA* questions **3.1**, **3.2**, **3.3**, **3.4** and **3.7**. The Area and Cultivar tables are linked to question **3.7**)
- 2.13 What are the major constraints to establishing effective plant genetic resources disaster response mechanisms? (*IRF-GPA* question **3.9**)
- 2.14 What are your needs and priorities to improve your plant genetic resources disaster response mechanisms? (*IRF-GPA* question **3.10**)
- 2.15 What is required to improve regional and international disaster response mechanisms?

## In situ Conservation of wild crop relatives and wild plants for food production:

- 2.16 What actions have been taken to encourage and support *in situ* conservation of your plant genetic resources, crop-associated biodiversity and wild plants for food production? (*IRF-GPA* questions **4.1**, **4.2**, **4.3 4.5** and **4.7** see the activity list)
- 2.17 What are the greatest limitations to *in situ* conservation of plant genetic resources, crop-associated biodiversity and wild plants for food production in your country? (*IRF-GPA* questions **4.4** and **4.6**. The Reference table is linked to question **4.6**)
- 2.18 What are your country's priorities and needs to enhance *in situ* conservation? (*IRF-GPA* question **4.7**)

## **Other Questions:**

- 2.19 What are your research priorities to support improved plant genetic resources *in situ* management?
- 2.20 What are your priorities for policy development to support improved plant genetic resources *in situ* management?
- 2.21 Provide any other strategic directions relevant to improving the state of *in situ* management of plant genetic resources (policy, research and management actions) at the national, regional and global levels).

**State of the Art:** Updating Annex 1-2 the comprehensive version of the first *Report on the State of the World's Plant Genetic Resources*, which is entitled "State of the art: methods for conservation".

- 2.22 What methods are being employed to achieve *in situ* management of plant genetic resources in your country? (see Annex 1.2 of the first *Report*)
- 2.23 What obstacles exist to improving methods for *in situ* management of plant genetic resources in your country and how can the obstacles be overcome? (*IRF-GPA* question **2.6**)

## Chapter 3: The State of Ex situ Management

The main objective of this section is to describe the state of *ex situ* management of plant genetic resources that contribute most to food and agriculture and to indicate future needs and priorities. The information in the Country Report should enable updating of Chapter 3 of the first *Report on the State of the World's Plant Genetic Resources*. In order to provide information to update Chapter 3, information in the following areas should be considered in developing the Country Report:

- The state of collections
- Collecting
- Types of collections (major and minor crops)
- Storage facilities
- Security of stored material
- Documentation and characterization
- Germplasm movement
- Roles of botanical gardens
- An assessment of major *ex situ* needs

## Strategic Directions – to improve *Ex situ* Management of Plant Genetic Resources:

The Country Report should indicate what the needs and priorities for improving the state of *ex situ* management of plant genetic resources for food and agriculture. Countries should identify the appropriate level of intervention – national, regional and/or global activities. There are numerous questions contained in the *Indicators and Reporting Format for Monitoring the Implementation of the Global Plan of Action (IRF-GPA)* that request data and information that should assist in preparing the State of *ex situ* management Chapter of the Country Report. Its Project, Reference and Taxon tables, if completed, will provide useful information The most relevant Activity Areas and questions are:

- Activity Area 5, Sustaining Existing Ex Situ Collections contains several questions that should yield data and information to update the state of national ex situ collections, including the conditions of storage, security of stored material, and types of collections, particularly responses to questions 5.1, 5.2, 5.3, 5.4, 5.5 and 5.6.
- Activity Area 6, Regenerating Threatened Ex Situ Accessions contains questions that address regeneration of threatened ex situ accessions, to prevent the loss of viability, in particular questions 6.1, 6.3 and 6.4. These questions should yield additional data and information to update understanding of the state of collections, as well as assist in establishing priority needs at both the national and global levels.
- Activity Area 7, Supporting Planned and Targeted Collecting of Plant Genetic Resources provides questions that should assist in updating the state of germplasm collection activities. Questions **7.1**, **7.2** and **7.3** are most relevant. Questions **7.3** and **7.4** address the notion of gaps in collections, which will also provide valuable information to assess the state of collections.
- Activity Area 8, *Expanding Ex Situ Conservation Activities*, questions **8.1**, **8.2** and **8.3**, address conservation efforts for important species that cannot be conserved effectively as

- seed. This Activity Area should provide some relevant information on the state of security of plant genetic resources collections.
- Chapter 3 of the first *Report on the State of the World's Plant Genetic Resources* contains a specific section on germplasm movement. There is no corresponding section in the *IRF-GPA*. However, there are some questions on germplasm movement questions **3.1**, **3.3**, **3.4**, **3.7** and **5.8**.

## **Questions to assist the Strategic Analysis:**

Questions have been provided under various headings to assist countries to develop strategic directions to address future needs and priorities. Where applicable, questions from the *IRF-GPA* are noted.

## Sustaining and Expanding Ex situ Collections:

- 3.1 What actions have been taken to sustain *ex situ* plant genetic resources collections over the past 10 years? (*IRF-GPA* questions **5.1**, **5.2** and **8.1**)
- 3.2 What are the greatest constraints to **sustaining** *ex situ* plant genetic resources collections over the next 10 years? (*IRF-GPA* question **5.9** and responses to the list of constraints below):
  - ➤ Lack of funding
  - > Insufficient staff
  - ➤ Lack of training
  - > Insufficient equipment
  - Lack of facilities or irregular electrical supply
  - > Disaster prone environment
  - > Lack of focused approach
  - Occurrence of pest and disease
  - > Other (please specify)
- 3.3 Are botanical gardens involved in the conservation of plant genetic resources for food and agriculture in your country? (*IRF-GPA* question **8.3**) If so, what are their roles (e.g. conserving germplasm of cultivated species, conserving wild relatives, etc.)?
- 3.4 What are the greatest constraints to **expanding** plant genetic resources *ex situ* collections over the next 10 years? (*IRF-GPA* questions **5.10** and **8.3** and the list of constraints)
- 3.5 What are your priorities for **sustaining and expanding** *ex situ* plant genetic resources collections over the next 10 years, including major and minor crops and wild plant genetic resources for food and agriculture? (*IRF-GPA* question **5.10**)
- 3.6 Have you established safety duplications for unique accessions? If not, is this a priority? What constraints need to be overcome to establish safety duplication?
- 3.7 Have systems been established to better document *ex situ* plant genetic resources collections? If not, what are your priorities and needs to complete documentation?
- 3.8 What are your priorities for research to expand and improve *ex situ* plant genetic resources conservation over the next 10 years? (*IRF-GPA* question **8.2**)

- 3.9 What cooperative arrangements have been established (through regional and international networks and arrangements) to enhance *ex situ* plant genetic resources conservation? (*IRF-GPA* questions **5.8** and **5.10**)
- 3.10 What management practices are being employed to prevent genetic erosion in collections during regeneration? (*IRF-GPA* questions **6.1**, **6.2**, **6.3** and **6.4**)
- 3.11 What are your priorities for maintaining viability and preventing genetic erosion in your *ex situ* plant genetic resources collections over the next 10 years what constraints must be overcome? (*IRF-GPA* questions **6.4**, **6.5**, **6.6** and **8.2**)
- 3.12 What are your priorities for regional and international cooperation and assistance for maintaining viability and preventing genetic erosion in your *ex situ* plant genetic resources collections over the next 10 years? (*IRF-GPA* questions **5.10**, **6.6** and **8.3**)

## **Planned and Targeted Collecting:**

- 3.13 What collecting activities have been undertaken over the past 10 years to improve *ex situ* plant genetic resources coverage? (*IRF-GPA* questions **7.1 and 7.3** see the activity list)
- 3.14 Have major gaps in your *ex situ* plant genetic resources collections (major crops, minor crops, underutilized species, forages, wild plants for food production, and wild relatives) been identified and plans developed to fill the gaps? (*IRF-GPA* questions 7.2, 7.3 and 7.4)
- 3.15 What are the greatest constraints to undertaking collecting missions over the next 10 years to overcome gaps and address priority needs? (*IRF-GPA* question **7.5**)
- 3.16 What are your collecting priorities and needs for major and minor crops, underutilized species, forages, wild plants for food production, and wild relatives? (IIRF-GPA questions **7.3** and **7.5**)
- 3.17 What are your research needs and priorities in relation to enhancing collecting of plant genetic resources for food and agriculture?

## Assessment of Major Ex situ Needs:

- 3.18 Which of the following are priority needs and measures for your country:
  - Rationalizing collections through regional and international collaboration and sharing facilities
  - > Sharing the burden of the costs of conservation
  - > Improved germplasm management
  - > Filling gaps in collections
  - ➤ Low cost conservation technologies
  - ➤ Global regeneration efforts
  - > Complete safety duplication
  - Develop pathogen-tested collections
- 3.19 Provide any other strategic directions relevant to improving the state of *ex situ* management of plant genetic resources (policy, research and management actions) at the national, regional and global levels).

**State of the Art:** Updating Annex 1-2 of the comprehensive version of the First *Report on the State of the World's Plant Genetic Resources*, which is entitled "The state of the art: methods for conservation".

- 3.20 What methods are being employed for *ex situ* conservation of plant genetic resources in your country? (See examples in Annex 1-2 of the first *Report* The state of the art: methods for conservation). What new or innovative methods have been introduced? (*IRF-GPA* questions **8.1** and **8.2**)
- 3.21 What obstacles exist to your country obtaining and using available *ex situ* methods for conserving plant genetic resources and how can these obstacles be overcome?

## Chapter 4: The State of Use

The main objective of this section is to describe the state of use of plant genetic resources that contribute most to food and agriculture and to indicate future needs and priorities. The information in the Country Report should enable updating Chapter 4 of the first *Report on the State of the World's Plant Genetic Resources*. In order to provide information to update Chapter 4, information in the following areas should be considered in developing the Country Report:

- The importance of utilization
- Utilization of conserved plant genetic resources and major constraints to their use
- Utilization activities (characterization, evaluation, pre-breeding, genetic enhancement, seed supply) and deployment of genetic diversity (breeding for pest and disease resistance and other traits, crop diversification)
- Assessment of needs to improve utilization

# Strategic Directions – to improve the Use of Plant Genetic Resources for Food and Agriculture:

The Country Report should indicate the needs and priorities for improving the state of use of plant genetic resources for food and agriculture. **Countries should identify the level of appropriate intervention – national, regional and/or global.** There are numerous questions contained in the *Indicators and Reporting Format for Monitoring the Implementation of the Global Plan of Action* (*IRF-GPA*) that request data and information that should assist in preparing this Chapter. Its Project, Reference and Taxon tables, if completed, will provide useful information. The most relevant Activity Areas and questions are:

• Activity Area 9, Expanding the Characterization, Evaluation and Number of Core Collections to Facilitate Use contains questions that should provide information on efforts to facilitate better use of plant genetic resources, in particular through the establishment and use of core collections. This includes questions 9.1, 9.2, 9.3, 9.5, 9.6 and 9.7. Activity Area 9 also includes question 9.4 on the distribution of information to facilitate use of plant genetic resources. Core collections are defined there as "A subset selected to contain the maximum available variation in a small number of accessions".

- Activity Area 10, Increasing Genetic Enhancement and Base-broadening Efforts, and Activity Area 11, Promoting Agriculture through Diversification of Crop Production and Broader Diversity in Crops all of the questions in these Activity Areas should yield data and information to enable updating of the state of use of plant genetic resources, including information on genetic improvement, genetic enhancement, improving diversity, overcoming constraints to diversification, and establishing legal and market incentives to promote diversification.
- Activity Area 12, *Promoting Development and Commercialization of Underutilized Crops and Species* should yield information on the state of utilization, in particular, questions **12.1** and **12.2**.
- Activity Area 13 Supporting Seed Production and Distribution contains questions that should generate data and information to update the state of seed production and distribution, in particular questions 13.1, 13.2, 13.3, 13.4, 13.5, 13.6 and 13.7. This Activity Area should also generate information on seed distribution systems.
- Activity Area 14, Developing New Market for Local Varieties and "Diversity-Rich" Products provides questions that should assist in understanding the state of utilization, in particular questions 14.2, 14.3 and 14.4.

## Questions to assist the Strategic Analysis:

Questions are provided to assist countries to develop strategic directions for their Chapter on the State of Use. Where applicable, questions from the *IRF-GPA* document are noted.

#### Distribution of plant genetic resources:

4.1 Has your country established mechanisms to record the distribution of samples of conserved plant genetic resources to breeding programmes? If so, provide information on the contribution of accessions to national breeding programmes in your Country Report.

#### Utilization and enhancing the use of plant genetic resources:

- 4.2 Do you have examples of recent improvements in crop production through the use of particular varieties that demonstrate the contribution of plant genetic resources? (*IRF-GPA* question **12.2**) If so, provide examples in your Country Report.
- 4.3 What constraints does your country face in terms of improved use of plant genetic resources?
  - ➤ Lack of characterization and evaluation
  - Lack of core collections or access to samples from them
  - ➤ Lack of documentation useful information on the conserved germplasm
  - > Insufficient capacity for plant breeding
  - ➤ The long-term nature of pre-breeding activities required to broaden the base of breeding materials
  - ➤ Lack of capacity qualified personnel, funds, training, facilities
  - ➤ Weak policy development
  - ➤ Lack of integration between conservation and utilization programmes
  - Lack of coordination among researchers, breeders, genebank managers and farmers
  - ➤ Policy or legal obstacles
  - ➤ Other constraints (list them) (see also question 4.11 below)

- 4.4 Indicate in your Country Report if any of the following activities have been undertaken to enhance the use of plant genetic resources.
  - > Strengthened capacities and improved training in plant breeding (*IRF-GPA* questions **10.1**, **10.2**, **10.3**, **10.4** and **11.4**).
  - Increased collaboration among researchers, breeders, genebank managers and farmers to better integrate conservation and use of plant genetic resources.
  - ➤ Increased pre-breeding activities, particularly to enhance base-broadening programmes (*IRF-GPA* questions **10.3** and **10.4**).
  - ➤ Placed greater emphasis on using and developing underutilized species (*IRF-GPA* questions 12.1, 12.2 and 12.4).
  - Explored marketing opportunities for products of local varieties and diversity-rich products (*IRF-GPA* questions **14.1 14.6**).
  - Facilitated the direct use by farmers of landraces/farmers' varieties and other genetic material conserved in genebanks
  - > Implemented participatory approaches to plant breeding
  - ➤ Promoted the use of landraces/farmers' varieties in seed supply systems (*IRF-GPA* questions **13.8**, **13.9** and **13.10**).
  - Improved the regulatory and policy frameworks to facilitate greater use of plant genetic resources? (*IRF-GPA* questions **11.3**, **12.3**, **13.8** and **14.1**).
- 4.5 Indicate if any of the above activities are current priorities for your country and your needs to implement them.
- 4.6 Have your collections of plant genetic resources for food and agriculture been adequately characterized and evaluated? (*IRF-GPA* questions **9.1**, **9.2** and **9.3**). Have information systems been established on germplasm characterization? (*IRF-GPA* question **9.4**, linked to the Infosys table)
- 4.7 If characterization and evaluation is limiting utilization of the resources, what are the obstacles to be addressed, and what are your priorities for overcoming the obstacles? (*IRF-GPA* question **9.7**).
- 4.8 Have you established core collections? (*IRF-GPA* question **9.5**). What obstacles exist to establishing core collections in your country and what are your priorities for overcoming the obstacles? (*IRF-GPA* questions **9.6** and **9.7**).
- 4.9 What is your country's capacity in plant breeding? (Useful information may be available in FAO's *Assessment of National Plant Breeding and Biotechnology Capacity* survey, if you have completed it). Have you formulated plant breeding goals? If so, describe them in your Country Report
- 4.10 What are your future research priorities to enhance use of plant genetic resources for food and agriculture?

- 4.11 What are the main constraints to achieving diversification of crop production and broadening diversity in crops (see the list below)? (*IRF-GPA* questions **11.2** and **12.4**).
  - ➤ Policy/legal obstacles
  - ➤ Marketing/commercial obstacles
  - > Others (list them)
- 4.12 Has your country employed strategies to address genetic vulnerability in farming systems? If so, what is being done? What are your future needs and priorities to reduce genetic vulnerability? (see also *IRF-GPA* questions **18.1** and **18.3**)

## Seed supply systems and the role of markets:

- 4.13 Is seed production and distribution a public or private sector function in your country, or are both sectors involved?
- 4.14 Is current seed production and distribution a constraint to the availability of good quality seed of a wide range of plant varieties in your country? If so, has your country implemented measures to enhance seed production and improve the seed distribution system over the past 10 years (describe the action taken)? (*IRF-GPA* questions 13.1, 13.8, 13.9 and 13.10) What measures, if any, are in place to integrate plant genetic resources, plant breeding and seed systems?
- 4.15 What are your priorities to improve seed production and distribution over the next 10 years? (*IRF-GPA* question **13.11**)
- 4.16 What are the major constraints in your country in making seeds of new varieties available in the market place? (*IRF-GPA* question **13.5**)
- 4.17 Does the location of the market (domestic versus international) affect the use of plant genetic resources in your country?
- 4.18 What measures, if any, has your country undertaken to support development of new markets for local varieties and diversity rich products? (*IRF-GPA* questions **14.1**, **14.2**, **14.3** and **14.4**)
- 4.19 What constraints does your country face in attempting to increase markets for local varieties and diversity-rich products? Indicate your needs and priorities. (*IRF-GPA* questions **14.5** and **14.6**)
- 4.20 Has your country employed strategies to better link small-scale producers with markets local and export markets? If so, provide examples in your Country Report.
- 4.21 Provide any other strategic directions relevant to improving the state of use of plant genetic resources, including minor and major crops and underutilized species (legal/policy, research and management actions) at the national, regional and global levels).

## Crop improvement programmes and food security:

- 4.22 How would you best describe the state of your crop improvement programme?
  - ➤ No formal-sector crop improvement programme.
  - ➤ Basic formal-sector crop improvement programme in place, germplasm identification, and evaluation programmes.

- ➤ Well establish formal-sector crop improvement programme utilizing advanced methodologies and technologies.
- 4.23 What crops have benefited from improvement programmes in your country? (List them in your Country Report). (*IRF-GPA* question **11.1**)
- 4.24 How has crop improvement contributed to food security in your country? (Provide examples in your Country Report)
- 4.25 Have breeding programmes been developed to increase crop resistance to pests and diseases? If so, what crops?
- 4.26 Have you implemented participatory crop improvement programmes in your country? If so, for what crops?
- 4.27 Do you expect significant changes in the use of plant genetic resources in your country in the next 10 years? If so why?

**State of the Art:** Updating Annex 1-3 of the comprehensive version of the first *Report on the State of the World's Plant Genetic Resources*, which is entitled "The state of the art: methods for utilization of plant genetic resources for food and agriculture through plant breeding".

- 4.28 What methods are being employed for plant breeding in your country? Briefly describe them in your Country Report.
- 4.29 Describe any other state of art methods for utilization of plant genetic resources for food and agriculture through plant breeding being employed to achieve plant genetic resources goals.

# Chapter 5: The State of National Programmes, Training and Legislation

The main objective of this section is to describe the state of National Programmes, Training and Legislation for plant genetic resources that contribute most to food and agriculture and to indicate future needs and priorities. The information in the Country Report should enable updating of Chapter 5 of the first *Report on the State of the World's Plant Genetic Resources*. In order to provide information to update Chapter 5, information in the following areas should be considered in developing the Country Report:

- National programmes for plant genetic resources
- Training
- National legislation
- Assessment of major needs for national programme development, training and legislation

## Strategic Directions – to improve the State of National Programmes, Training and Legislation:

The Country Report should indicate the needs and priorities for improving the State of National Programmes, Training and Legislation for plant genetic resources for food and agriculture. **Countries should identify the level of the appropriate intervention – national, regional** 

and/or global needs and priorities. There are numerous questions contained in the *Indicators* and *Reporting Format for Monitoring the Implementation of the Global Plan of Action (IRF-GPA)* that request data and information that should assist in preparing this Chapter. As could be expected, its Organizations and Project tables would provide useful information. The most relevant Activity Areas and questions are:

- Activity Area 15, Building Strong National Programmes contains questions that should generate information on their governance structures and mandate; legal frameworks and legislation; identification of specific programmes initiated in response to the Global Plan of Action and other international agreements; and changes in capacity to implement plant genetic resources programmes. Questions 15.1, 15.2, 15.4, 15.5, 15.6 and 15.7 are most relevant.
- Activity Area 16, *Promoting Networks for Plant Genetic Resources for Food and Agriculture* all of the questions contained in this Activity Area should yield information on the state of national networks for plant genetic resources for food and agriculture. Participation in international networks is addressed in Chapter 6 below.
- Activity Area 17, Constructing Comprehensive Information Systems for Plant Genetic Resources for Food and Agriculture all of the questions contained in this Activity Area should yield information on the state of national information management.
- Activity Area 19, Expanding and Improving Education and Training contains questions aimed at providing an overview and understanding the state of and needs for national training.
- Activity Area 20, Promoting Public Awareness of the Value of Plant Genetic Resources for Food and Agriculture Conservation and Use all of the questions contained in this Activity Area should yield information on the state of awareness building in relation to the roles and values of plant genetic resources.
- The *IRF-GPA* addresses legislation and regulation throughout the document, and should contribute information to provide a good understanding of national status. The most relevant questions are: **4.6**, **11.2**, **12.3**, **13.2**, **13.8**, **14.1** and **15.4**.
- The *IRF-GPA* addresses needs and priorities throughout the document which should contribute information to provide an excellent global overview of priority needs in relation to your national programme for the conservation and sustainable use of plant genetic resources. The most relevant questions are: 1.7, 2.7, 3.10, 4.7, 5.10, 6.6, 7.5, 8.3, 9.7, 10.4, 11.4, 12.4, 13.11, 14.6, 15.8, 17.7, 18.8, 19.8 and 20.9

## Questions to assist the Strategic Analysis:

Questions are provided to assist countries to develop strategic directions for their Chapter on State of National Programmes, Training and Legislation. Where applicable, questions from the *IRF-GPA* document are noted.

## **National Programmes:**

5.1 Has your country established a National Programme for plant genetic resources? (*IRF-GPA* questions **15.1**, **15.2** and **15.3**) If so, describe its structure and main functions in your Country Report.

- 5.2 How are national stakeholders (public and private sector, educational and research institutions, civil society organizations, local communities, etc.) involved in planning and implementing national programmes?
- 5.3 Has your country established a legal framework for plant genetic resources strategies, plans and programmes? (*IRF-GPA* question **15.4**) If so, describe the framework in your Country Report.
- 5.4 Does your national programme work in cooperation with national programmes in related areas (e.g. other agriculture, biodiversity, development, environment programmes)? Is planning for your national programme in plant genetic resources integrated, or "mainstreamed", in planning for these areas? (*IRF-GPA* questions **1.3**, **4.5**, **15.1** and **20.6**)
- 5.5 Have the trends in support for your National Programme for plant genetic resources changed over the past 10 years become stronger, declined, remained about the same? Is programme funding increasing, decreasing or stable? (*IRF-GPA* question **15.6**)
- Have you determined any gaps in the current level of financial support necessary to achieve your country's plant genetic resources goals? If so, indicate the unmet needs and priorities in your Country Report. (The *IRF-GPA* requests information in several Activity Areas on gaps, incentives and international support for plant genetic resources that could contribute to assessing financial support and needs at both the national and international levels).
- 5.7 Indicate the main challenges, needs and priorities that your country faces to maintain or strengthen its National Programme for plant genetic resources over the next 10 years? (*IRF-GPA* question **15.8**).

#### **Networks:**

5.8 Has your country developed/enhanced <u>national</u> networks for plant genetic resources over the past 10 years? Indicate the participants in any networks and the main functions and benefits that are derived from the networks. (*IRF-GPA* questions **16.1**, **16.2 16.3** and **16.5**)

#### **Education and Training:**

- 5.9 What are your needs and priorities for education and training to support the sustainable use, development and conservation of plant genetic resources? (*IRF-GPA* questions **1.4**, **19.1**, **19.2**, **19.3**, **19.4**, **19.5** and **19.6**. The Project table is linked to question **19.1**).
- 5.10 What are the main obstacles to providing required education and training and what can be done to address the obstacle? (*IRF-GPA* question **19.7** see the list of options)
- 5.11 Has your country developed a strategy to address education and training needs for plant genetic resources? (*IRF-GPA* question **19.3**)
- 5.12 Has your country identified opportunities for education and training outside the country within or outside the region? If so, what are the obstacles to participating in identified education and training opportunities?

## **National Legislation:**

- 5.13 Has your country passed legislation or established regulations relevant to plant genetic resources over the past 10 years (phytosanitary, seed production, plant breeders rights, others)? (*IRF-GPA* questions **4.6**, **11.2**, **12.3**, **13.2**, **13.8**, **14.1** and **15.4** several of these are linked to the Reference table)
- 5.14 Has your country identified any obstacles to developing legislation and regulations relevant to plant genetic resources? If so, what are your needs and priorities to address the obstacles?

## **Information Systems:**

- 5.15 Has your country developed adequate national information management systems to support efforts to sustainably use, develop and conserve plant genetic resources? (*IRF-GPA* questions **17.1**, **17.2**, **17.3**, **17.4**, **17.5**, **17.6** and **17.7**. The Project and Infosys tables are linked to question **17.6**.)
- 5.16 Have your documentation systems been computerized with standard formats to facilitate data exchanges. If not, what are your priorities and needs? (*IRF-GPA* questions **17.1** and **17.7**)
- 5.17 What are your main challenges, need and priorities for developing or enhancing your information management systems for plant genetic resources and seeds? (*IRF-GPA* question 17.7)

#### Public Awareness:

- 5.18 How would you describe the level of awareness of the roles and values of plant genetic resources in your country (unaware, limited awareness, satisfactory awareness, excellent awareness)? (*IRF-GPA* question **20.1** see the list of options)
- 5.19 Has your country developed awareness programmes for plant genetic resources? (*IRF-GPA* question **20.2**, **20.3**, **20.4**, **20.5** and **20.7** see the lists of options. The Organization table is linked to question **20.7**). If so, describe them and any products produced in your Country Report. (*IRF-GPA* question **20.6** see the lists of options)
- 5.20 Has your country identified any constraints to developing public awareness programmes for plant genetic resources? If so, what are your needs and priorities to address the constraints? (*IRF-GPA* questions **20.5** and **20.9**)

**State of the Art:** Updating Annex 1 and Appendix 1 of the comprehensive version of the first *Report on the State of the World's Plant Genetic Resources*. In the second *Report*, Annex 1 will address the state of legal and economic methods relevant to plant genetic resources for food and agriculture, and Table 1 will summarize the status of relevant national legislation and regulatory frameworks.

- 5.21 What methods are being employed to assess the value of plant genetic resources in your country? What methods are used to assess the contribution of plant genetic resources to your country's economy? Describe them in your Country Report.
- 5.22 Has your country established financial incentives and other funding measures for the conservation and sustainable use of plant genetic resources? If so, describe them in your Country Report.

5.23 Describe any other state of art legal and economic methods being employed to achieve plant genetic resources goals.

## **Chapter 6: The State of Regional and International Collaboration:**

The main objective of this section is to describe the state of regional and international collaboration for plant genetic resources in your country, and to indicate future needs and priorities. The information in the Country Report should enable updating Chapter 6 of the first Report on the State of the World's Plant Genetic Resources. In order to provide information to update Chapter 6, information in the following areas should be considered in developing the Country Report:

- Regional and sub-regional networks, international crop-specific networks and sub-regional collaboration for maintaining *ex situ* collections
- International programmes
- International agreements
- The global system for the conservation and use of plant genetic resources
- Assessment of major needs to improve international collaboration

## Strategic Directions – to improve Regional and International Collaboration:

The Country Report should indicate needs and priorities for improving the state of regional and international collaboration in relation to plant genetic resources for food and agriculture.

Countries should identify the level of appropriate intervention – regional and/or global.

There are numerous questions contained in the *Indicators and Reporting Format for Monitoring the Implementation of the Global Plan of Action (IRF-GPA)* that request comments on needs and opportunities that should assist in preparing this Chapter of the Country Report. The most relevant questions are: 1.7, 2.7, 3.3, 3.10, 4.7, 5.10, 6.6, 7.5, 8.3, 9.7, 10.4, 11.4, 12.4, 13.11, 14.6, 15.8, 17.7, 18.8, 19.5 and 19.8. The Agreement, Project and Organization tables, if completed, will provide useful information. Other questions include:

- In Activity Area 3, Assisting Farmers in Disaster Situations, Question 3.3 requests information on agreements that may be in place for the acquisition of plant genetic resources from international sources following a disaster.
- Activity Area 5, Sustaining Existing Ex-situ Collections, in particular, Questions **5.1** and **5.2** should result in information on regional and sub-regional collaboration with respect to ex situ collection. Question **5.8** specifically requests information on cooperative arrangements through regional crop networks.
- In Activity Area 9, Expanding the Characterization, Evaluation and Number of Core Collections to Facilitate Use, Question 9.5 requests information on country-held crop collections that are important globally, which should provide valuable information on international collaboration in terms of ex situ collections.

- Activity Area 15, question **15.5** requests countries to indicate any relevant international conventions or other agreement they have ratified.
- In Activity Area 16, *Promoting Networks for Plant Genetic Resources for Food and Agriculture* all questions should generate information to update the state of international collaboration to enhance networks for plant genetic resources.
- Activity Area 17, Constructing Comprehensive Information Systems for Plant Genetic Resources for Food and Agriculture contains questions that should yield information on the state of international collaboration in relation to information management, in particular questions 17.3, 17.4 and 17.5.
- In Activity Area 20, *Promoting Public Awareness of the Value of Plant Genetic Resources for Food and Agriculture Conservation and Use*, Question **20.8** requests information on regional and international organizations that support public awareness.

## **Questions to assist the Strategic Analysis:**

Questions are provided to assist countries to develop strategic directions for their Chapter on the State of Regional and International Collaboration. Where applicable, questions from the *IRF-GPA* document are noted.

#### **International networks:**

- 6.1 What regional, sub-regional, crop-based or thematic networks for plant genetic resources does your country participate in, and what benefits result? (*IRF-GPA* questions **16.1**, **16.2**, **16.3** and **16.5** see the list of options)
- 6.2 What are your country's needs and priorities to develop or strengthen international networks for plant genetic resources? (*IRF-GPA* questions **16.4** and **16.7** see the list of options)

## **International Programmes:**

- 6.3 What international programmes for plant genetic resources have been most beneficial for your country, and why? List the agencies and the main results of the programmes. Has international financial support for plant genetic resources changed in your country over the past 10 years (increased, decreased or remained about the same)?
- 6.4 What are your country's needs and priorities for future international collaboration related to:
  - Understanding state of diversity (see Chapter 1 questions)
  - Enhancing *in situ* management (see Chapter 2 questions)
  - Enhancing *ex situ* management (see Chapter 3 questions)
  - Enhancing use of plant genetic resources (see Chapter 4 questions)
  - Enhancing training and legislation (see Chapter 5 questions)
  - ➤ Enhancing information management and early warning system for plant genetic resources (see Chapter 5 questions)
  - Enhancing pubic awareness (see Chapter 5 questions)
  - ➤ Any other priorities for international programmes (list them in your Country Report).

## **International Agreements:**

6.5 Has your country subscribed to any international agreements, treaties, conventions, or trade agreements over the past 10 years that are relevant to the sustainable use, development and conservation of plant genetic resources? (*IRF-GPA* question **15.5**) If so, briefly describe their impact on plant genetic resources in your country.

# Chapter 7: Access to Plant Genetic Resources and Sharing of Benefits Arising out of their Use, and Farmers' Rights

The main objective of this section is to describe the state of access to plant genetic resources and sharing of benefits arising out of their use and the state of Farmers' Rights, and to indicate future needs and priorities. The information in the Country Report should enable updating of information contained in Chapter 7 of the first *Report on the State of the World's Plant Genetic Resources*. In order to provide information to update Chapter 7, information in the following areas should be considered in developing the Country Report:

- Changes in the international legal and policy framework in relation to access and benefit sharing for genetic resources
- The state of access to genetic resources
- Benefits arising out of the utilization of plant genetic resources for food and agriculture
- Financing plant genetic resources activities
- Implementation of Farmers' Rights.

Strategic Directions – to Improve Access to Plant Genetic Resources and Sharing of Benefits Arising out of their Use, and Farmers' Rights:

The Country Report should indicate needs and priorities for improving the state of access to plant genetic resources and sharing benefits arising out of their use, and Farmers' Rights. **Countries should identify the level of appropriate intervention – national, regional and/or global.**Questions are provided to assist countries to develop strategic directions for this Chapter. The *Indicators and Reporting Format* document (*IRF-GPA*) does <u>not</u> contain a specific section that addresses the state of access to plant genetic resources and sharing of benefits arising out of their use, and Farmers' Rights. However, it does contain some relevant questions, which are noted below. Its Agreements and Reference tables, if completed, can provide useful information.

#### **Access to Plant Genetic Resources:**

7.1 Over the past 10 years, has your country subscribed to any international agreements relevant to access to plant genetic resources and sharing of benefits arising out of their use? If so, please list them in your Country Report. (International Treaty for Plant Genetic Resources for Food and Agriculture, Convention on Biological Diversity, etc.) (*IRF-GPA* questions **5.8** and **15.5**)

- 7.2 Over the past 10 years, has your country developed or modified national legislation and policies or taken other action in terms of providing access to plant genetic resources within the country and sharing of benefits arising out of their use? (*IRF-GPA* questions **4.6**, **12.3**, **13.8**, **14.1**, **14.4** and **15.4**) If so, describe the action taken and reasons for it in your Country Report.
- 7.3 Over the past 10 years, has your country undertaken any management action to maintain or enhance access to plant genetic resources located outside your country (e.g. established germplasm exchange agreements)? If so, describe the action taken in your Country Report. Indicate the number of accessions obtained if possible, the countries of origin and the purposes for accessing the germplasm. (*IRF-GPA* questions 3.3, 3.10, 7.1, and 16.3)
- 7.4 Is gaining access to plant genetic resources about the same, improving, or more difficult over the past 10 years?
- 7.5 Over the past 10 years, has your country encountered any difficulties in maintaining or enhancing access to plant genetic resources located outside your country? Is access to such plant genetic resources adequate to support your agriculture food security and development goals? If not, what should be done to improve the situation? (*IRF-GPA* questions 3.10, and 7.5) Has your country identified obstacles to accessing plant genetic resources? If so, describe the obstacles and ways to overcome them in your Country Report.
- 7.6 Does your country restrict access to certain types of plant genetic resources? If so, indicate the restrictions in your Country Report and the reasons for them.

## Fair and Equitable Sharing of the Benefits of the Use of Plant Genetic Resources:

- 7.7 What are the benefits arising from the use of plant genetic resources in your country (qualitative and quantitative if information is available)?
- 7.8 Who shares in the benefits arising from the use of plant genetic resources in your country?
- 7.9 Has your country established mechanisms for sharing benefits arising out of the use of plant genetic resources? If so, describe them in your Country Report.
- 7.10 Has your country identified obstacles to achieving or enhancing the fair and equitable sharing of the benefits of the use of genetic resources? If so, describe the obstacles and ways to overcome them in your Country Report.
- 7.11 Indicate in your Country Report the importance of maintaining or enhancing access to plant genetic resources and benefit sharing and provide any other strategic directions for maintaining or improving access and benefit sharing.

## **Implementation of Farmers' Rights:**

- 7.12 Over the past 10 years, has your country subscribed to any international agreements that are relevant to the implementation of Farmers' Rights? If so, list them in your Country Report.
- 7.13 Over the past 10 years, has your country developed or modified national legislation and policies to achieve or enhance the implementation of Farmers' Rights? If so, describe the action taken and reasons for it in your Country Report.

7.14 Has your country identified obstacles to achieving or enhancing the implementation of Farmers' Rights? If so, describe the obstacles and ways to overcome them in your Country Report.

# Chapter 8: The Contribution of PGRFA Management to Food Security and Sustainable Development

The main objective of this section is to provide ideas and information for the concluding chapter of the second *Report on the State of the World's Plant Genetic Resources*, which is intended to place PGRFA management in a wider societal context. There was no corresponding chapter in the first *Report*. The Country Report should indicate the status, needs and priorities to improve the contribution of plant genetic resources management to food security and sustainable development.

Countries should identify the level of appropriate intervention – national, regional and/or

Countries should identify the level of appropriate intervention – national, regional and/or global. Information in the following areas should be considered in developing the Country Report:

- Contribution to agricultural sustainability
- Contribution to food security
- Contribution to economic development
- Contribution to poverty alleviation

What are your priorities to better understand the roles and values of plant genetic resources for food and agriculture (economic, social, culture, ecological values)?

# ANNEX 2: PROVISIONAL STEPS AND TIMELINE FOR PREPARING THE SECOND REPORT ON THE STATE OF THE WORLD'S PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

During its Tenth Regular Session in November 2004, the Commission on Genetic Resources for Food and Agriculture requested FAO to revise the time line, on the basis that the second *Report* would be completed in 2008.

- March 2004: FAO to convene a Pilot Phase Evaluation meeting to evaluate the Global Plan of Action pilot monitoring phase, and to provide advice for refining the Reporting Format;
- June 2004: initiation of the implementation of the refined "new monitoring approach" of the *Global Plan of Action*, to be applied in all participating countries;
- June 2004: preparation of draft Guidelines for Country Reports;
- June 2004 to March 2005: convening of regional meetings, to discuss the proposed Country Report Guidelines and the refined Reporting Format for monitoring implementation of the *Global Plan of Action*;
- October 2004: Report to the Tenth Regular Session of the Commission on Genetic Resources on progress in the preparation of the second *Report* and in monitoring implementation of the *Global Plan of Action*;
- May 2005: finalization of the Guidelines for Country Reports;
- April 2007: completion of the implementation of the "new monitoring approach" of the *Global Plan of Action* in all participating countries;
- 30 June 2007: completion of Country Reports;
- Mid End 2007: regional meetings to provide regional perspectives on gaps and needs, as an input to the second *Report*, and possibly to consider priorities for the adjustment of the rolling *Global Plan of Action*;
- Early 2008: preparation of the first draft of the second *Report*;
- Mid 2008: review of the first draft of the second *Report* and preparation of the final draft;
- Late 2008: submission of the second Report for adoption by the Commission at its Twelfth Regular Session

	2005				2006						2007						2008							
	1 *	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
				•		•			•		•				•		•				•		•	
GPA Monitoring	•	•	•	•	•	•	•	•	•	0	0	0	0	0										
			•		•				•		•				•		•				•		•	
SOW Thematic Studies			•	•	•	•	•	•	•	•	•													
	* * * * * *										•													
SOW Country Reports				•	•	•	•	•	•	•	•	•	•	•	0									
		•		<b>*</b>	•	•				•						•		•		•		•		•
Regional Drafts															•	•	•							
				•		•				•		•				•		•				•		•
Regional Meetings																•	•	•						
				•		•				•		•				•		•				•		•
Final Regional Synthesis																			•					
•		•		<b>*</b>	•	•				•		•				<b>*</b>		•		•		•		•
Preparation of First Draft																			•	•				
				•		•				•		•				•		•			•	•		•
Review of First Draft																					•			
				<b>*</b>		•				•		•				•		•				•		•
Preparation of Final Draft																					•			

 $<sup>\</sup>ast$  Two months

- Process should have been initiated in all countries
- Deadline for preparation of documents to be submitted to the Working Group
- ♦ Working Group Meeting
- ♦ Deadline for preparation of documents to be submitted to the Commission
- Commission Meeting

#### **ANNEX 3: LIST OF THEMATIC STUDIES**

The following is a list of thematic studies that subject to available financial resources, will be undertaken to support preparation of the second *Report on the State of the World's Plant Genetic Resources*. (\* Prioritized by the Commission)

- A. Plant Genetic Resources of forage crops, pasture and rangelands\*
- B. The conservation of crop wild relatives\*
- C. Indicators of genetic diversity, genetic erosion and genetic vulnerability\*
- D. Methodologies and capacities for crop improvement; the use of Plant Genetic Resources for Food and Agriculture in base broadening and crop improvement including new approaches to plant breeding and new biotechnologies\*
- E. Seed security for food security: the management of plant genetic resources in seed systems\*
- F. The contribution of plant genetic resources to health and dietary diversity
- G. Managing plant genetic resources in agro-ecosystems; global change, crop associated biodiversity and ecosystem services
- H. Interactions between plant and animal genetic resources, and opportunities for synergy in their management\*
- I. The impact of national, regional and global agricultural policies and agreements on conservation and use of Plant Genetic Resources for Food and Agriculture\*
- J. Biosafety and biosecurity issues related to the conservation and utilization of Plant Genetic Resources for Food and Agriculture\*