



منظمة الأغذية  
والزراعة  
للأمم المتحدة

联合国  
粮食及  
农业组织

Food  
and  
Agriculture  
Organization  
of  
the  
United  
Nations

Organisation  
des  
Nations  
Unies  
pour  
l'alimentation  
et  
l'agriculture

Продовольственная и  
сельскохозяйственная  
организация  
Объединенных  
Наций

Organización  
de las  
Naciones  
Unidas  
para la  
Agricultura  
y la  
Alimentación

## Item 6.1 of the Provisional Agenda

### COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

#### Twelfth Regular Session

Rome, 19 – 23 October 2009

### PREPARATION OF THE FIRST REPORT ON *THE STATE OF THE WORLD'S FOREST GENETIC RESOURCES*: KEY ISSUES

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## I. INTRODUCTION

1. Genetic diversity provides the fundamental basis for the evolution of forest tree species and for their adaptation to ever changing conditions. FAO has for many decades acknowledged the importance forest genetic resources, and activities on these resources are an integral part of the FAO Forestry Programme. This includes: sustainable forest management, tree breeding and plantation development, and protected areas management, national forest programmes, the global forest resources assessment (FRA).
2. The Commission on Genetic Resources for Food and Agriculture (the Commission), at its Eleventh Regular Session, emphasized the importance of forest genetic resources for food security, poverty alleviation and environmental sustainability; and underscored the comparative advantages and importance of FAO's work in this area.<sup>1</sup> The Commission stressed the urgency for addressing the conservation and sustainable use of forest genetic resources through sustainable forest management, especially those resources that are under threat at the global level. It recognized that the lack of information is limiting the capacity of decision-makers in determining the action needed on forest genetic resources at the international, regional and local levels.
3. The Commission recommended that existing information systems, in particular, REFORGEN (the FAO global information system on forest genetic resources) be reviewed and strengthened where needed.<sup>2</sup> In adopting its Multi-Year Programme of Work (MYPOW), the Commission approved the inclusion of forest genetic resources, and adopted as a major milestone for its Fourteenth Regular Session, the presentation of first report on *The State of the World's Forest Genetic Resources*.<sup>3</sup>
4. To assist the Commission address forest genetic resources at the current session, three documents have been prepared. This document contains a proposal for the process for preparing *The State of the World's Forest Genetic Resources*, and includes in Annex 1, an indicative outline for this first report. The proposed main inputs would be Country Reports on Forest Genetic Resources, complemented by thematic studies and reports from organizations. An indicative list of thematic studies for consideration by the Commission is provided in Annex 2. The document also provides an indicative timetable for undertaking *The State of the World's Forest Genetic Resources* in Annex 3 and extra-budgetary resource requirements in Annex 4.
5. In considering this agenda item, the Commission may wish to take note of documents, *Follow-Up to the Recommendations Regarding Forest Genetic Resources*,<sup>4</sup> which describes the progress made on forest genetic resources since the last Session of the Commission; and *Establishment of an Intergovernmental Technical Working Group on Forest Genetic Resources*.<sup>5</sup> Intergovernmental Working Groups played important roles in the preparation of the first report on the *State of the World's Animal Genetic Resources for Food and Agriculture* and the second report on the *State of the World's Plant Genetic Resources for Food and Agriculture*.

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<sup>1</sup> CGRFA-11/07/Report para. 54.

<sup>2</sup> CGRFA-11/07/Report para. 55.

<sup>3</sup> *ibid.*

<sup>4</sup> CGRFA-12/09/13.

<sup>5</sup> CGRFA-12/09/14.

## II. THE RATIONALE AND SCOPE FOR THE STATE OF THE WORLD'S FOREST GENETIC RESOURCES

### Key issues in forest genetic resources

6. Nearly 1.6 billion people – more than 25 percent of the world's population – rely on forest resources for their livelihoods. Most of them use trees on farms to generate food and cash with a direct contribution to poverty alleviation and food security. For millions of people living in poverty, forest and tree resources provide food, fuel for cooking and heating, medicines, shelter and raw materials for clothing, as well as function as a safety net in food crises or other emergencies. Traditional knowledge plays a central role in the use and conservation of forest species, and indigenous and local communities are key stakeholders as direct beneficiaries and custodians of forest genetic resources.

7. Genetic diversity provides the fundamental basis for evolution of forest tree species that has enabled forests and trees to adapt to changing conditions for thousands of years. Adaption has resulted in a unique and irreplaceable portfolio of forest tree genetic resources. Fires, deforestation, new pests and diseases, and other factors are increasingly threatening forest genetic resources. The vast majority of forest genetic resources remain unknown and underutilized, although the sustainable use of forest genetic diversity has a great potential to contribute in addressing new challenges and in maintaining economic, social and cultural values, and environmental services and benefits.

8. There is however, increasing awareness of the critical values that forest genetic diversity provide, and of the need to conserve these resources, especially in light of global challenges, such as climate change. Increased global awareness of the roles and values of biodiversity, including ecosystem services crucial for human well-being, is also resulting in improved understanding of the need to better manage forest genetic resources and maintain forest ecological conditions and processes. The implementation of sustainable forest management creates opportunities to improve the management of forests and forest genetic resources as well as provides opportunities to enhance the participation of indigenous and local communities as well as smallholders and large-scale forest operators, in the preparation and implementation of public forest policies, strategies and programmes.

9. The field of forest genetic resources is undergoing significant changes, as the sector has been traditionally concerned with technical issues of genetic conservation, tree improvement and seed supply, for wood production. The scope of genetic management is now expanding as product demand from forest species is increasing and diversifying (timber, fibre, fruits, resins and other non-wood products). Emerging uses of forest genetic resources must be assessed to achieve sustainable use of these resources. Advances in biotechnology are rapidly enabling improved use of genetic resources, and potentially greater economic and social contributions resulting from forest genetic resources. Biotechnology developments will also provide improved tools to enhance the effectiveness of conservation measures. Technological advancements, new applications and uses of forest genetic resources all require regular reviews of their impacts. The impact on forest genetic resources of new regulations and policies also needs routine assessments. Particular areas of relevance include *inter alia*; phytosanitary measures, intellectual property and access and benefit-sharing frameworks.

10. In summary, the status and trends of the use and conservation of forest genetic resources are inadequately understood to support policy and planning and overall management of these essential resources. In light of forest loss and degradation, changing environmental and economic conditions, advancing technologies and on-going policy and legislative change, the country-driven preparation of *The State of the World's Forest Genetic Resources* would provide an excellent opportunity to assess the status and trends of forest genetic resources at both the

country, regional and global levels. Opportunities to enhance the contribution of forest genetic resources to food security and rural development are likely to emerge with greater understanding of their current and potential uses. Moreover, preparation of the first report on *The State of the World's Forest Genetic Resources* would assist in determining conservation needs and priorities.

### **Proposed Scope of *The State of the World's Forest Genetic Resources***

11. As the main input to preparing *The State of the World's Forest Genetic Resources* would be Country Reports on Forest Genetic Resources, it is proposed that scope of the report be broad, covering forest genetic resources of species used for different purposes and managed or contained in the broad range of management systems. In this way, the Country Reports will provide the overall scope for the report.

12. The Panel of Experts on Forest Gene Resources, with inputs from regional consultations, has proposed an outline of the main chapters of *The State of the World's Forest Genetic Resources*, which are indicated in Annex 1 of the current document.

13. According to the proposed outline, *The State of the World's Forest Genetic Resources* would address forest genetic resources of economic, environmental, social and cultural values. There would be a significant focus on those resources which are important for sustainable forest management, food security, poverty alleviation, and environmental sustainability. Country Reports would identify forest genetic resource use patterns and those resources under threat. The data and information analysis will provide insight on current management practices regarding forest genetic resources, *in situ* and *ex situ* genetic conservation activities, improvement and breeding methodologies, infrastructures, implementation and international cooperation and collaboration, and current knowledge of the resources and management capacity needs.

14. The Panel of Experts on Forest Gene Resources also highlighted the importance of examining a number of key issues in assessing the status and trends of forest genetic resources management, including: climate change, bioenergy, poverty reduction, forestry products supply enhancement, and new and traditional methods and technologies in genetic conservation and tree breeding. As much as feasible, the impact of these issues on forest genetic resources will be examined in preparation of *The State of the World's Forest Genetic Resources*. It is proposed that consideration of several of these issues will be addressed through thematic studies.

15. In summary, a broad scope and approach is recommended in undertaking preparation of *The State of the World's Forest Genetic Resources* to enable documentation of country and regional specificities and the diversity of needs of user groups, which will lead to better understanding of status and trends pattern of forest genetic resources globally. A broad based country-driven approach will provide a basis to define priorities for action in the short-term, medium-term and long-term, and at global, regional and local levels. While the proposed scope of *The State of the World's Forest Genetic Resources* is broad to consider the wide range of uses of forest genetic resources, and to accommodate regional differences and specificities, the scope will also be determined or limited in practical way by the availability of financial resources and the need to complete the preparatory process in time to make the *Report* available to the Commission for its Fourteenth Regular Session.

### III. THE PROPOSED PROCESS, TIMELINE AND FINANCIAL NEEDS FOR PREPARING THE STATE OF THE WORLD'S FOREST GENETIC RESOURCES

#### The Planning Process

16. As was the case with the preparation of the first report on *The State of the World's Animal Genetic Resources* and the second report on *The State of the World's Plant Genetic Resources*, the primary source of data and information for the preparation of *The State of the World's Forest Genetic Resources* will be **Country Reports on Forest Genetic Resources**. The Country Report preparatory process will focus on the review of existing data and information and the identification of gaps and needs.

17. Detailed **guidelines for Country Reports** are being prepared to assist countries to prepare for their Country Reports,<sup>6</sup> as strategic assessments of the status and trends of forest genetic resources, as well as the state of management capacities and needs. In this way, Country Reports will both serve as strategic tool for national efforts to enhance the use, development and conservation of forest genetic resources, as well as provide the basis for preparing the global report on *The State of the World's Forest Genetic Resources*. FAO will emphasize the importance of preparing the Country Report as national strategic tool for forest genetic resources, and need to establish national mechanisms to ensure opportunities for the participation of national stakeholders in the preparation of the Country Report. Countries will be encouraged to hold national workshops and/or other means for consultations with indigenous and local communities and stakeholders in elaborating their Country Reports.

18. FAO will formally request the preparation of Country Reports and the establishment of a **National Focal Point** on forest genetic resources to serve as the main contact point for FAO during the preparatory process. Subject to the availability of extra-budgetary resources, limited financial assistance will be made available to support developing countries to prepare their Country Reports, including to assist them to conduct workshops and consultations. As well, FAO and partners will provide technical assistance for preparation of the Country Report, upon request. Regional meetings will be held to review Country Reports and discuss common issues, if financial resources are available.

19. The guidelines for Country Reports will provide flexibility to enable countries to identify their specific differences and highlight their priority needs, while providing a common basis from which to enable FAO to prepare the global assessment. The work will build upon past efforts. Over the past 10 years, FAO and international partners have supported workshops in seven sub-regions aimed to elaborate a flexible framework for national action which is valid at the regional level, and which is as consistent among regions as possible. This was facilitated by agreed-upon national and regional reporting formats, concepts and terms, and common mechanisms for species priority setting for action.

20. To complement data and information contained in Country Reports, and to address specific issues, a number of **thematic studies** on important issues related to the conservation and management of forest genetic resources will be undertaken under the direction of FAO, depending on the availability of financial resources. As shown in Annex 2, 12 thematic studies are currently proposed.

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<sup>6</sup> CGRFA-12/09/Inf.14, *Preparation of The State of the World's Forest Genetic Resources: draft guidelines for country reports*.

21. The third important input to the preparation of *The State of the World's Forest Genetic Resources* will be **reports from international and regional organizations** that are engaged in management efforts related to forest genetic resources. Relevant international and regional organizations will be invited by FAO to submit reports on their activities and to indicate priorities for future action in relation to the use, development and conservation of forest genetic resources, and in particular, to enhance the contribution of these resources to food and agriculture, rural development and poverty alleviation.

22. FAO will provide the **technical coordination** in the preparation of *The State of the World's Forest Genetic Resources* through the Forestry Department, and in particular its Forest Management Division. The Forestry Department is well positioned to coordinate preparation of *The State of the World's Forest Genetic Resources* and to ensure the cooperation with other FAO and UN forestry bodies for which the Department provides the Secretariat or liaison function. A senior officer of the Forest Management Division will be assigned the responsibility to coordinate the preparation of *The State of the World's Forest Genetic Resources* and will be supported by other staff and consultants as required.

23. Since the adoption of the Multi-Year Programme of Work of the Commission, the Forestry Department has been strengthening its capacity to deal with forest genetic resources. The Committee on Forestry requested a specific reference to forest genetic resources in the FAO Forestry Strategy. The preparation of *The State of the World's Forest Genetic Resources* has been included in the Medium Term Plan and Programme of Work and Budget under the Organizational Result (E06) "Environmental values of forests, trees outside forests and forestry are better realized; strategies for conservation of forest biodiversity and genetic resources, climate change mitigation and adaptation, rehabilitation of degraded lands, and water and wildlife management are effectively implemented" of the Strategic Framework. Other activities under Strategic Objective E "Sustainable Management of Forests and Trees" will contribute indirectly to the preparation of *The State of the World's Forest Genetic Resources*, such as: National Forest Monitoring and Assessment and the Global Forest Resources Assessment (FRA); adoption of sustainable management of forests and trees measures; and *Silva Mediterranea*.

24. The Commission will provide **intergovernmental oversight** throughout the preparation of *The State of the World's Forest Genetic Resources*. The Commission will receive a progress report on the preparation of *The State of the World's Forest Genetic Resources* at its Thirteenth Session to provide further guidance on the preparatory process and the finalization of the report. Provision has been made in the new Strategic Framework to enable the Commission to undertake this task, through the Organization Result (F3) "Policies and programmes are strengthened at national, regional and international levels to ensure the conservation and sustainable use of biological diversity for food and agriculture and the equitable benefit-sharing from the use of genetic resources."

25. Preparation of *The State of the World's Forest Genetic Resources* will be undertaken in **synergy with other related activities**. Preparation of the report will be integrated with the further development of REFORGEN. The Committee on Forestry (COFO) and the FAO Regional Forestry Commissions will be engaged in the preparation of *The State of the World's Forest Genetic Resources*. COFO's participation is scheduled as shown in the indicative timetable, and FAO Regional Forestry Commissions will consider the report preparation process at their next sessions, and will be informed of the results at later stages.

26. FAO will seek cooperation and synergy with global programmes and instruments in the preparation of *The State of the World's Forest Genetic Resources*, such as the Convention on

Biological Diversity (CBD), the UN Environment Programme (UNEP), the UN Forum of Forest (UNFF), the Convention on International Trade in Endangered Species (CITES), the UN Framework Convention on Climate Change (UNCCC), and the International Tropical Timber Organization (ITTO). **Linkages with other reporting mechanisms** under the Convention on Biological Diversity and the FRA and other processes, will be ensured to build complementarity and avoid duplication of efforts to reduce the reporting burden for Member Countries.

27. FAO will set up **technical cooperation mechanisms** with relevant organizations that will focus on: finalizing the guidelines for Country Report preparation and for supporting countries in the preparation of their reports. Cooperation will also be sought in the identification of experts; preparation of thematic studies; reporting on activities and participation of representatives from relevant organizations in technical and consultation workshops. Long standing and fruitful cooperation will be continued and developed with Bioversity International, ICRAF, IUFRO, IUCN and WWF. FAO will also continue to strengthen exchange and **collaboration with the regional and sub-regional networks or working groups**, including, APFORGEN in Asia-Pacific, LAFORGEN in Latin-America, SAFORGEN in sub-Saharan Africa, EUFORGEN in Europe and the Working Group on Forest Genetic Resources of the North American Forestry Commission.

28. The draft chapters of the first draft of *The State of the World's Forest Genetic Resources* will be synthesized from the main inputs by qualified experts, and a **review mechanism** will be put in place once the draft is prepared. Opportunities for review at the country level will be through the National Focal Points. Regional consultations will be conducted as appropriate and subject to the availability of financial resources. Thematic studies will be peer reviewed.

29. A consolidated first draft of *The State of the World's Forest Genetic Resources* will be made available for review through National Focal Points. As well, should the Commission decide to establish an Intergovernmental Technical Working Group on Forest Genetic Resources, the Working Group could be requested by the Commission to undertake a detailed review of the first consolidated draft. If the Working Group is not established, the Panel of Experts on Forest Gene Resources and other mechanisms, such as a technical consultation, will be considered for a detailed review.

30. FAO will ensure opportunities for stakeholders to review the first draft, including reviews by relevant international organizations and non-government organizations. Based on the inputs received during the review and consultation period, FAO will prepare a revised draft of *The State of the World's Forest Genetic Resources* for consideration by the Commission at its Fourteenth Session.

### **The Timeline**

31. An indicative timeline for completing the preparatory process for *The State of the World's Forest Genetic Resources* is contained in Annex 3 of the current document. Following agreement by the Commission on the preparatory process in 2009, the guidelines for Country Reports will be finalized based on any comments received by members of the Commission. The preparatory process will then be initiated early in 2010, with FAO formally inviting countries to participate by preparing a Country Report, and establishing a National Focal Point for the preparatory process. International and other organizations will be informed of the process and invited to prepare reports on their activities in relation to forest genetic resources. Preparation of thematic studies will also be initiated in 2010, subject to the availability of financial resources. The Panel of Experts on Forest Gene Resources or the Intergovernmental Technical Working Group on Forest Genetic Resources will be informed of progress made and their advice sought on any possible issues or matters of concern.

32. Preparation of Country Reports will continue in 2011, with the anticipated convening of national workshops by countries, and regional FAO convened workshops, to review progress made, and to assist countries to complete preparation of their Country Reports. The Commission would receive a progress report at its Thirteenth Regular Session, as well as receive a refined table of contents for *The State of the World's Forest Genetic Resources* and an updated list of thematic studies. The Committee on Forestry will also receive a progress report, refined table of contents and an updated list of thematic studies.

33. The deadline for submission of finalized Country Reports is March 2012. Thematic studies will also be completed by then and all reports from organizations would also be expected to be received by FAO, in order for them to be considered in preparing the first draft of *The State of the World's Forest Genetic Resources*. FAO would then begin the process of preparing a first draft of *The State of the World's Forest Genetic Resources* based on the received Country Reports, submissions of international organizations and others, and the completed thematic studies. The Committee on Forestry will receive a progress report on the status of preparation of the first draft during its session in 2012.

34. Chapters of the first draft will be reviewed by experts as they are produced in 2012. A consolidated report on *The State of the World's Forest Genetic Resources* will be prepared by FAO in early 2013, in order for the draft to be reviewed by governments, the Panel of Experts on Forest Gene Resources or the Intergovernmental Technical Working Group on Forest Genetic Resources, and stakeholders, prior to presentation of the report to the Commission. Based on the advice received, FAO will prepare a revised draft of *The State of the World's Forest Genetic Resources* for consideration of the Commission during its Fourteenth Regular Session. The finalized *The State of the World's Forest Genetic Resources* will then be presented to the Committee on Forestry, The United Nations Forum on Forests, and the Conference of Parties to the Convention on Biological Diversity, and possibly other relevant bodies.

#### **Extra-budgetary Resource Requirements**

35. An indicative estimation of extra-budgetary resource requirements for the overall process to prepare *The State of the World's Forest Genetic Resources* is provided in Annex 4 of the current document, with the extra-budgetary resource requirements shown as US\$2 423 850. This amount is required to support the full participation of developing countries in the process, including assistance for the preparation of Country Reports, the convening of national consultations and workshops, and participation in regional meetings. FAO also requires extra-budgetary resources to hire consultants, conduct expert meetings, prepare thematic studies, organize regional meetings, and to undertake reviews of the first draft of *The State of the World's Forest Genetic Resources*.

#### **IV. GUIDANCE SOUGHT**

36. The Commission may wish to:
- (i) Request FAO to prepare *The State of the World's Forest Genetic Resources* for consideration of the Commission during its Fourteenth Regular Session, as the first authoritative assessment of forest genetic resources of importance to sustainable forest management, food security, poverty alleviation and environmental sustainability;
  - (ii) Agree that the process for preparing *The State of the World's Forest Genetic Resources* will be country-driven, based primarily on Country Reports on Forest Genetic Resources,

as well as thematic studies and reports from international organizations and inputs from relevant stakeholders;

- (iii) Request FAO to finalize the draft guidelines for Country Reports for Forest Genetic Resource by March 2010, taking into account comments received from Members of the Commission by February 2010;
- (iv) Request countries to officially identify to FAO their National Focal Points for the preparation of Country Reports by May 2010;
- (v) Endorse the proposed outline of *The State of the World's Forest Genetic Resources* provided in *Annex 1*;
- (vi) Agree that FAO will initiate preparation of *The State of the World's Forest Genetic Resources* according to the indicative timeline provided in *Annex 3*, bearing in mind that the Commission will receive a progress report on the preparation of *The State of the World's Forest Genetic Resources* at its Thirteenth Session to provide further guidance on the preparatory process of the report;
- (vii) Request relevant international and regional organizations to participate in the process for preparing the first report on *The State of the World's Forest Genetic Resources*, including providing reports to FAO; and,
- (viii) Appeal to FAO and donors to provide the required financial resources, taking note of the extra-budgetary resource requirements indicated in *Annex 4*, to enable the preparation of *The State of the World's Forest Genetic Resources*.

**Annex 1: The State of the World's Forest Genetic Resources - Outline by chapter**

<i>Chapter Title</i>	<i>Scope of Chapter</i>	<i>Issues and elements</i>
<b>1 Overview of Forest Genetic Resources</b>	Definition of FGR - their value and importance – Between and within species diversity - Threats, opportunities and challenges	Characteristics of FGR, differences and similarities between trees and other organisms – Context of FGR management - Main forest management systems (including agroforestry systems) – Concept of SFM - Economic, environmental, social and cultural values of FGR – Role of forest genetic diversity in ecosystem resistance, resilience, and vulnerability - Threats and risk status – causes of genetic erosion
<b>2 The State of Forest Genetic Resources Management</b>	FGR conservation and management – Strategies - Programmes - Implementation	Characterisation of genetic diversity - Conservation <i>in situ</i> and <i>ex situ</i> , genetic improvement programmes and their implementation – Delivery/deployment systems – Role of public and private sectors – Social and economic value of conservation and breeding activities
<b>3 Trends Affecting the Forest Sector and their Implications on Forest Genetic Resources</b>	Assessment of impact of global trends in FGR and their management	Internal and external drivers – Environmental, economic, social, political trends and outlook - Positive and negative implications - Threats and opportunities
<b>4 The State of Capacities</b>	Capacities of stakeholders and institutions involved in FGR management and conservation	Infrastructures, institutional and human capacities – Public and private sectors, including at local level – Capacities in: development and implementation of FGR conservation and management strategies, tree genetic improvement, information sharing and networking, mainstreaming FGR management into forest management and broader international, regional and national policies and programmes – Training capacity
<b>5 Institutional and Policy Framework</b>	Institutional, policy and legal framework for FGR management at national, regional and global level	Institutions responsible for FGR management, including coordination mechanisms – Legal framework and traditional use rights in FGR management - FGR in national forest programmes and other national strategies and policies (poverty reduction, biodiversity, land degradation and desertification, climate change, etc) – International and regional agreements/treaties – Frameworks for transfer of forest reproductive material
<b>6 Status of Knowledge – Current and Emerging Technologies</b>	Current knowledge and gaps in characterisation and improvement – Current and emerging methodologies and technologies	Characterisation – Technologies for conservation – Marker-assisted selection – Propagation and dissemination technology and methods - Participatory tree domestication – Applications of biotechnologies – Challenge of combining biotechnology tools and traditional tree improvement
<b>7 Needs, Challenges and Required Responses for the Future</b>	Synthesis and recommendation for action	Syntheses of needs and challenges identified in previous chapters – Priorities for future action

**Annex 2: The State of the World's Forest Genetic Resources - indicative list of thematic background studies**

<i>Subject</i>	<i>Rationale</i>	<i>Scope</i>
<b>1 Indicators of forest genetic diversity, erosion and vulnerability</b>	Lack of indicators at global and national levels that are scientifically sound, realistic and policy relevant, for defining baseline and for monitoring	Review of existing knowledge, experience and efforts to suggest the way forward to develop appropriate indicators
<b>2 Understanding genetic diversity of tropical species in natural forests</b>	Knowledge on life-history traits and genetic diversity is lacking or inadequate for most species to define and implement conservation strategies	Review and syntheses of available knowledge and experience. Proposal of research programmes to improve knowledge on genetic diversity of priority species.
<b>3 New technologies to support conservation of FGR</b>	Many forest species are difficult to conserve <i>in situ</i> and/or <i>ex situ</i> , because of their biological characteristics ( <i>i.a.</i> recalcitrant-intermediate seeds) and management context	Review of knowledge and experience. Assessment of technologies available and their effectiveness for conservation <i>in situ</i> and <i>ex situ</i> of genetic resources of priority species, and suggest the way forward
<b>4 Use and transfer of FGR</b>	Transfer and exchange are regulated under international agreements, which, in some cases, can result in constraints for programmes to improve knowledge on, and to develop FGR	Review of legal and phytosanitary frameworks, schemes for the transfer of reproductive material, their implementation and impact on transfer of FGR. Recommendations to facilitate safe movement of FGR
<b>5 FGR role in adaptation to biotic and abiotic factors, with a focus on climate change</b>	The role of FGR is generally acknowledged, but needs to be better characterised	FGR and vulnerability of species to biotic and abiotic events and process. Resilience and resistance. FGR in mitigation and adaptation to climate change
<b>6 FGR in relation to bio-energy</b>	Development of bio-energies brings to FGR management both threats and opportunities, which need to be reviewed and assessed	With focus on FGR, different types of bio-energy – current situation and opportunities offered by new technologies. Use/improvement of new species. Role of private sector; public-private partnerships
<b>7 Use of FGR in decentralised development for poverty alleviation and livelihood improvement</b>	Decentralised/local management of forest resources is gaining importance, involving new approaches and technologies in management of FGR. The experience gained in this new area is useful to synthesise	Experience and results in local, participatory conservation and improvement of species for different uses. Analyses of successes and failures. Role and capacity of stakeholders (public and private sectors, communities, etc). Identification of needs and gaps.
<b>8 Biotechnologies</b>	Biotechnologies are a quickly evolving field. Their application and potential contribution to FGR conservation and management should be regularly reviewed/updated.	Review of current and future developments and trends in biotechnologies and their application to conservation, management and improvement of FGR (include, but not limited to genetic engineering – threats and opportunities)

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<b>9 Effects of silvicultural practices on genetic structure</b>	It is generally acknowledged that silvicultural practices influence the genetic structure of the species. Knowledge available on some species and silvicultural systems should be synthesised and efforts expanded to cover a broader array of key species and situations.	Review and synthesise available experience and knowledge. Identification of gaps. Proposals for action concerning key species and management systems.
<b>10 Use of native species</b>	There is a renewed interest for the use of native species in <i>i.a.</i> ecosystem and landscape restoration, agroforestry systems and spatial combination with high yielding planted forests for maintenance of overall biodiversity. The experience gained is useful to review and synthesize for further development.	Review and syntheses of experience and results. Analysis of successes and failures in the different systems. Definition of best practices. Identification of needs and gaps.
<b>11 History of use and management of forest resources and impact on FGR</b>	There are many cases, where geographical distribution and genetic patterns of forest species were influenced by human activities and policies, which are interesting to present to illustrate the historical dimension of FGR management (contribution to Chapter 1).	Case studies on <i>i.a.</i> human pressures on Mediterranean forests and their impact on FGR, African agroforestry parklands, <i>Pinus pinea</i> , etc.
<b>12 Trends in management of FGR by the private/corporate sector</b>	The role of the private sector (from local communities and smallholders to corporate companies) in management of FGR is increasing. Current and potential impact of this trend should be analysed to define actions needed.	Corporate priorities and policies and their consequences: <i>i.a.</i> short term vs. long term, productivity vs. diversity, short life span, volatility of corporate investment and potential threats due to discontinuity. Management of FGR by local communities. Capacity. Role of public sector. Recommendations.

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**Annex 3: *The State of the World's Forest Genetic Resources* - Indicative timetable for the preparatory process**

Time Frame	Processes
<b>CGRFA-12 / 2009</b>	<p><b><i>ANALYSIS OF KEY ISSUES IN FOREST GENETIC RESOURCES, FOR THE STATE OF THE WORLD'S FOREST GENETIC RESOURCES</i></b>, including:</p> <ul style="list-style-type: none"> <li>• matters in forest genetic resources</li> <li>• a proposal for the structure and contents of <i>The State of the World's Forest Genetic Resources</i>, including an indicative list of thematic studies</li> <li>• a proposal for the preparatory process leading to <i>The State of the World's Forest Genetic Resources</i>, including an indicative timetable and cost estimates for extra-budgetary resources required in support of the preparatory process</li> <li>• a list of potential partners FAO would seek to cooperate with in preparing <i>The State of the World's Forest Genetic Resources</i>.</li> </ul>
<b>2010</b>	<p><b><i>PREPARATION OF THE STATE OF THE WORLD'S FOREST GENETIC RESOURCES</i></b></p> <ul style="list-style-type: none"> <li>• Invitation of countries to nominate National Focal Points for the preparation of country reports for <i>The State of the World's Forest Genetic Resources</i></li> <li>• Initiation of preparation of Country Reports through National Focal Points</li> <li>• FAO to assist countries to prepare their Country Reports, in collaboration with regional networks, including through Global and Regional workshops for National Focal Points</li> <li>• Strengthening and further development of the FAO global information system on forest genetic resources (REFORGEN)</li> <li>• Preparation of thematic studies</li> <li>• Request to International Organizations to submit reports on their activities, data and possible areas of cooperation in relation to <i>The State of the World's Forest Genetic Resources</i></li> <li>• Panel of Experts on Forest Gene Resources or Intergovernmental Technical Working Group on Forest Genetic Resources (if established): Review progress in preparation of <i>State of the World's Forest Genetic Resources</i></li> </ul>
<b>CGRFA-13 / 2011</b>	<p><b><i>PREPARATION OF THE STATE OF THE WORLD'S FOREST GENETIC RESOURCES</i></b></p> <ul style="list-style-type: none"> <li>• Review progress in preparation of <i>State of the World's Forest Genetic Resources</i></li> </ul>
<b>2012</b>	<p><b><i>PREPARATION OF THE STATE OF THE WORLD'S FOREST GENETIC RESOURCES</i></b></p> <ul style="list-style-type: none"> <li>• Compilation and analysis of Country Reports, thematic studies and reports from International Organizations</li> <li>• Preparation of the Draft of <i>The State of the World's Forest Genetic Resources</i></li> <li>• Committee on Forestry (COFO): Consider progress of the preparation of <i>The State of the World's Forest Genetic Resources</i></li> </ul>
<b>2013</b>	<p><b><i>PREPARATION OF THE STATE OF THE WORLD'S FOREST GENETIC RESOURCES</i></b></p> <p>Panel of Experts on Forest Gene Resources or Intergovernmental Technical Working Group on Forest Genetic Resources (if established):</p> <ul style="list-style-type: none"> <li>• Review the Draft <i>The State of the World's Forest Genetic Resources</i></li> <li>• Review possible follow-up to <i>The State of the World's Forest Genetic Resources</i></li> </ul>
<b>CGRFA-14</b>	<p><b><i>PRESENTATION OF THE STATE OF THE WORLD'S FOREST GENETIC RESOURCES</i></b></p>

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**/ 2013**

***RESOURCES***

- Consider follow-up to *The State of the World's Forest Genetic Resources*, including holding regional consultations to identify priority areas for action
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**2014**

***THE STATE OF THE WORLD'S FOREST GENETIC RESOURCES***

- Presentation of *The State of the World's Forest Genetic Resources* to COFO, the United Nations Forum on Forests (UNFF) and the Conference of the Parties (COP) to the Convention on Biological Diversity (CBD)
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**Annex 4: The State of the World's Forest Genetic Resources - Cost estimates for extra-budgetary resources  
required in support of the preparatory process**

<i>Item</i>	<i>Cost (US\$)</i>	<i>Calculation</i>	<i>Purpose and notes</i>
<b>Staff costs</b>	<b>240 000</b>	12 months General Service; plus 12 months P2/P3	General Service and Professional staff to assist secretariat in providing and coordinating assistance to countries
<b>Regional and subregional consultants</b>	<b>280 000</b>	8 consultants @ 35 000/consultant; each 2 – 3 months honorarium, plus travel	To provide advice and assistance to countries in the preparation of Country reports, including involvement of stakeholders
<b>Support to preparation of Country Reports, including stakeholder consultations</b>	<b>700 000</b>	c. 70 countries @ 10 000/country	To provide support to the preparation of Country Reports, including national workshops and consultations
<b>Experts meetings and workshops</b>	<b>300.000</b>	Six meetings @ 50 000/meeting	To support development of thematic studies and other background material for the Report
<b>Regional meetings</b>	<b>625 000</b>	Five meetings (Africa, Asia, NE, AP, LAC) @ 125 000/meeting	To review Country Reports, discuss regional issues related to the SoW- FoGR and identify common needs and priorities for action.
<i>Sub total</i>	2 145 000		
<i>Project Servicing Costs</i>	278 850	@ 13%	
<b>Grand Total</b>	<b>2 423 850</b>		