# **European Forest Genetic Resources Programme (EUFORGEN)**

Technical report for 2009 and financial report for Phase III (2005-2009)

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#### 1. Introduction

The European Forest Genetic Resources Programme (EUFORGEN) is a collaborative programme between European countries to promote conservation and sustainable use of forest genetic resources. It was established in October 1994 as an implementation mechanism for Resolution S2 (Conservation of forest genetic resources) of the first Ministerial Conference on the Protection of Forests in Europe (MCPFE), held in Strasbourg in 1990. EUFORGEN is financed by its member countries and coordinated by Bioversity International in technical collaboration with the UN Food and Agriculture Organization (FAO). The EUFORGEN activities are mainly carried out by experts from the member countries. The EUFORGEN Steering Committee is composed of National Coordinators from all member countries and it has the overall responsibility of the Programme.

During Phase III, EUFORGEN has also contributed to the implementation of Resolution V4 (Conserving and enhancing forest biological diversity in Europe) (2003) and the Warsaw Declaration (2007). The MCPFE Work Programme (2008) includes two specific actions on forest genetic resources that support the follow-up of the Warsaw Conference, 1) promotion of conservation and use of forest genetic resources through EUFORGEN to contribute to the implementation of sustainable forest management in Europe, and 2) establishment of a European information system on forest genetic resources (EUFGIS).

This document provides a summary of the EUFORGEN activities in 2009. It also includes a report on expenditures and financial contributions during Phase III. The technical report for 2007-2008 and the financial report for 2005-2008 were presented to and adopted by the Steering Committee at its sixth meeting in Thessaloniki, Greece on 9-12 June 2009.

# 2. Progress made in 2009

#### 2.1. Activities of the EUFORGEN Steering Committee

In March 2009, a survey was carried out among National Coordinators to collect feedback on the achievements of Phase III and the future role of EUFORGEN. The survey also identified needs for further action on forest genetic resources at pan-European level. A small working group<sup>2</sup> of National Coordinators was then established to review the feedback and to discuss the future of EUFORGEN.

<sup>&</sup>lt;sup>1</sup> With effect from 1 December 2006, IPGRI and INIBAP operate under the name "Bioversity International", Bioversity for short.

<sup>&</sup>lt;sup>2</sup> Phase IV Working Group members: Davorin Kajba (Croatia), Bjerne Ditlevsen (Denmark), Bernd Degen (Germany), Ricardo Alía (Spain), Hasan Özer (Turkey) and Jason Hubert (United Kingdom).

The working group met in Maccarese near Rome on 28-29 April 2009 and developed a proposal for Phase IV (2010-2014) for further discussion by the Steering Committee.

The Steering Committee held its sixth meeting in Thessaloniki, Greece on 9-12 June 2009. It reviewed the progress made during Phase III and endorsed the continuation of the Programme into Phase IV. The Steering Committee also discussed a number of technical and policy issues related to the conservation and use of forest genetic resources in Europe. The following chapters provide further information on selected topics of the meeting and follow-up actions. The full report of the Steering Committee meeting is available on the EUFORGEN website (<a href="https://www.euforgen.org">www.euforgen.org</a>).

# 2.1.1. Development of methods for genetic monitoring of gene conservation units

A working group of the Scattered Broadleaves Network developed a background document, which proposed an approach for genetic monitoring of dynamic gene conservation units. The proposed monitor method is based on three indicators: 1) natural selection; 2) genetic drift; and 3) gene flow), and six verifiers: 1) age class distribution, percentage of filled seeds, percentage of germination and regeneration; 2) effective population size; and 3) outcrossing/inbreeding rate, respectively. This method requires a much lower number of verifiers as compared to earlier presented schemes (12-21 verifiers). It is also applicable to any tree species and sampling within the units should be easy and straightforward.

The Steering Committee recommended that EUFORGEN should further elaborate on this approach for genetic monitoring of the gene conservation units. It also stressed that additional financial resources are needed for testing the final monitoring approach before large-scale data collection. It was also noted that a genetic monitoring system is needed as an early warning system and to ease communication to policy-makers who want to know if the status of gene conservation is getting better or not. It was further suggested that the genetic monitoring system should include climate change considerations and take into account adaptive traits.

# 2.1.2. State of the World's Forest Genetic Resources Report

FAO presented its plans for the development of the State of the World's Forest Genetic Resources (SoW-FGR) report and invited the Steering Committee to comment the planned process and the outline of the report. The report will be prepared during 2010-2013 and all countries will be asked to provide relevant data and information (i.e. a country report and inputs to thematic studies). The SoW-FGR report will be presented to the FAO Commission on Genetic Resources for Food and Agriculture in 2013 and it will be an important milestone for future work on forest genetic resources at a global level.

The Steering Committee welcomed the efforts made by FAO to initiate the development of the SoW-FGR report. It suggested that the report should give more emphasis on climate change and its impacts on conservation and use of forest genetic resources. The Steering Committee also stressed that data standards and harmonization are crucial for this global effort. The report will establish a baseline for future actions so the data needs to be comparable across different countries and regions. Several National Coordinators expressed their concerns about increasing reporting requirements at

national level and asked FAO to present the reporting guidelines for SoW-FGR as soon as they have been developed. The Steering Committee concluded that it is important that EUFORGEN and all European countries contribute to the development of the SoW-FGR report.

# 2.1.3. Access to forest genetic resources and benefit sharing

The Steering Committee was briefed on a new project on "Searching for appropriate legislation regulating access and exclusive rights to forest genetic resources in the Nordic countries". The project is funded by the Nordic Council of Ministers (June 2009-May 2010) and it will review international legislation and issues that are relevant to access to forest genetic resources as well as the specific situation and legislation in each of the Nordic countries.

The Steering Committee expressed its interest in the Nordic initiative and noted that access and benefit sharing issues are also increasingly being discussed in other European countries. The Steering Committee agreed to continue the discussion on the access and benefit sharing issues when the results of the Nordic project are available. It was also noted that these issues are being negotiated at a global level as part of the Convention on Biological Diversity (CBD). The tenth Conference of Parties to the CBD is expected to adopt a new international protocol on access to genetic resources and benefit sharing in Nagoya, Japan in October 2010.

## 2.1.4. Collaboration with the European Union

During the meeting in Thessaloniki, the Steering Committee also discussed a potential strategy for collaboration between EUFORGEN and the European Union. It was noted that issues related to forest genetic resources are handled in a rather fragmented way within the European Commission. Several National Coordinators stressed that it would be important for the Steering Committee to approach the Standing Forestry Committee to highlight the importance of the conservation and use of forest genetic resources as part of sustainable forest management. The need to develop guidelines for transferring forest reproductive material under climate change was also mentioned as an important issue to be communicated to the Standing Forestry Commission. The Steering Committee recognized that the Working Party on Forestry of the Council of the European Union is another important body to collaborate with.

The Steering Committee encouraged the National Coordinators in the EU Member States to keep their country's representative in the Standing Forestry Committee informed about the EUFORGEN activities. The Steering Committee also decided to establish a small task force<sup>3</sup> to continue developing ideas for collaboration with the EU.

As a follow-up, the task force organized, in collaboration with the Polish Science Contact Agency (PolSCA), a round-table meeting on forest genetic resources in Brussels on 8 February 2010. The purpose of the meeting was to discuss European collaboration in this area and opportunities for better incorporation of forest genetic resources into research, environment, agricultural and rural

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<sup>&</sup>lt;sup>3</sup> Frank Wolter (Luxemburg), Thomas Geburek (Austria), Andreas Drouzas (Greece), Francois Lefèvre (France), Jozef Turok and Jarkko Koskela (Bioversity)

development policies of the EC. The meeting was attended by several officers from different EC units and other stakeholders. The list of participants and presentations are available on the PoISCA website (<a href="www.polsca.eu">www.polsca.eu</a>, see 'Passed events').

### 2.1.5. Review of the Phase IV proposal

In June 2009, the Steering Committee reviewed in detail the proposal for EUFORGEN Phase IV (2010-2014) before adopting the document. Regarding the scope of Phase IV, the Steering Committee agreed that climate change and its implications for forest management (in particular for the use of forest reproductive material) and conservation of forest genetic resources should be the main issues to be addressed in the future work. The importance of integrating conservation and use of forest genetic resources into relevant national policies and strategies was also stressed.

The Steering Committee maintained the overall goal of the Programme, i.e. to promote conservation and sustainable use of forest genetic resources in Europe, and to serve as a platform for pan-European collaboration in this area. The objectives of the Programme were slightly revised for Phase IV as follows;

- 1. Promote appropriate use of forest genetic resources as part of sustainable forest management to facilitate adaptation of forests and forest management to climate change;
- 2. Develop and promote pan-European gene conservation strategies and improve guidelines for management of gene conservation units and protected areas;
- 3. Collate, maintain and disseminate reliable information on forest genetic resources in Europe.

Furthermore, the Steering Committee identified areas of work under each objective and agreed to develop a detailed work plan with specific activities, timeframes and outputs at its seventh meeting in 2010. It also agreed a major change in the mode of operation. During Phase IV, the EUFORGEN activities will be carried out through small working groups (consisting of approximately 10 experts) and workshops instead of the Networks. The working groups will be established by the Steering Committee for specific activities included in the work plan. The full Phase IV document is available from the EUFORGEN website as part of the report of the sixth Steering Committee meeting.

#### 2.2. Participation in EUFORGEN

During 2009, EUFORGEN had a total of 31 member countries (Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom).

In November 2009, the EUFORGEN Secretariat contacted the member countries and invited them to join Phase IV of the Programme. Several potential new member countries were also contacted in this regard. As of 31 March 2010, 17 countries have officially joined Phase IV and returned a signed copy of the Letter of Agreement to the Secretariat. These countries are Bulgaria, Croatia, Estonia, Finland, Germany, Greece, Ireland, Lithuania, Netherlands, Norway, Poland, Romania, Serbia, Slovakia, Spain, Sweden and United Kingdom.

#### 2.3. Network activities

Following the decision of the Steering Committee to change the mode of operation for Phase IV, the EUFORGEN Networks (Forest Management, Conifers, Scattered Broadleaves and Stand-forming Broadleaves) have focused on finalizing their work. A total of 101 experts from the member countries contributed to the Network activities during Phase III. The contributions made by the following persons are gratefully acknowledged; Jason Hubert (United Kingdom) and Bjerne Ditlevsen (Denmark), Chair and Vice-Chair of the Forest Management Network; Bruno Fady (France), Chair of the Conifers Network; Bart De Cuyper (Belgium) and Berthold Heinze (Austria), Chair and Vice-Chair of the Scattered Broadleaves Network; and Georg von Wühlisch (Germany) and Alexis Ducousso (France), Chair and Vice-Chair of the Stand-forming Broadleaves Network.

During Phase III, the Forest Management Network focused on analyzing relevant policies and practices related to gene conservation and forest management, and tools to promote the use of high-quality forest reproductive material. The results of this work will be presented in a publication which is being prepared with inputs from the other Networks as well. The Forest Management Network also discussed climate change and its implications to the use of forest reproductive material. Several countries have already analysed various options for the future use of forest reproductive material and identified key issues for further considerations in this regard. The Forest Management Network is now preparing an overview of these options and issues for the benefit of other countries. The Network is also finalizing another brief publication on genetics aspects of forest management for policy makers and managers.

The Conifers Network is preparing a chapter on genetic consequences of seed harvesting in conifers for the cross-Network publication on forest management and forest genetic resources. Furthermore, the Conifers Network prepared Technical Guidelines for Macedonian pine (*Pinus peuce*), Mediterranean firs (*Abies* spp.) and English yew (*Taxus baccata*). These guidelines will be printed in 2010.

The Scattered Broadleaves Network finalized a background document on genetic monitoring of gene conservation units and presented it to the Steering Committee for further discussion in Thessaloniki in June 2009. The Network is also preparing a paper on the use of genetic resources of scattered broadleaves in forest restoration efforts in Europe. These two papers will be included in the cross-Network publication. The Network also prepared Technical Guidelines for Italian alder (*Alnus cordata*), European white poplar (*Populus alba*) and walnut (*Juglans regia*).

In 2009, the Stand-forming Broadleaves Network finalized Technical Guidelines for birch (*Betula pendula*), oriental beech (*Fagus orientalis*) and aspen (*Populus tremula*). Furthermore, it prepared draft Technical Guidelines for several oak species (*Quercus cerris*, *Q. crenata Q. frainetto* and *Q. pubescens*). The Network is also developing two case studies on the use of provenances and genetic consequences of silvicultural practices for the cross-Network publication, which is expected to be finalized by the end of 2010.

#### 2.4. Activities of the EUFORGEN Secretariat

# 2.4.1. Inputs to the MCPFE process

The EUFORGEN Coordinator attended the third meeting of the MCPFE Working Group on exploring the potential added value of and possible options for a legally binding agreement on forests in the pan-European region in Rome (1-2 September 2009) and a Expert Level meeting in Oslo (24-25 November 2009). The final report of the Working Group was presented to the Expert Level meeting in Oslo as a basis for further discussion on the future direction and role of the MCPFE process. The Expert Level meeting agreed that there is a need to clarify the aim of a possible future legally binding agreement on forests in Europe and to start preparing concrete options on the future of the MCPFE process for ministers to decide at the Oslo Conference in June 2011. For this purpose, a new Working Group was established to prepare the options by the end of 2010.

The Expert Level meeting also discussed potential topics for the Oslo Conference. In addition to the possible legally binding agreement, topics such as climate change, forests and health, social and cultural aspects of sustainable forest management, governance, and the use of forest genetic resources were suggested. The Expert Level meeting also adopted "FOREST EUROPE" as the new brand name for the MCPFE process. The EUFORGEN Coordinator provided the meeting with a brief update on the activities of EUFORGEN and EUFGIS. The minutes of the Expert Level meeting and other documents are available on the FOREST EUROPE website (<a href="https://www.foresteurope.org">www.foresteurope.org</a>).

In 2009, the EUFORGEN Secretariat also contributed to preparations of the next report on the State of Europe's Forests, which will be released during the Oslo Conference in June 2011. The process is lead by the UNECE/FAO Timber Section (Geneva) and the Liaison Unit Oslo with inputs from a broad range of experts and organisations. Large part of the data for the report will be collected through the national correspondents of the FAO Global Forest Resources Assessment. Similarly to the previous report published in 2007, EUFORGEN is again expected to collect the data for Indicator 4.6 (forest genetic resources). The EUFORGEN Coordinator was invited to participate in the second meeting of the UNECE/FAO Team of Specialists on monitoring of sustainable forest management in Ispra, Italy on 26-28 January 2010 and to present the work of EUFORGEN and EUFGIS. Further information on the meeting of the UNECE/FAO Team Specialists is available on the website of the UN Economic Commission for Europe (<a href="http://timber.unece.org/index.php?id=260">http://timber.unece.org/index.php?id=260</a>).

## 2.4.2. European information system on forest genetic resources

The EUFORGEN Secretariat continued coordinating the implementation of the EUFGIS project ('Establishment of a European Information System on Forest Genetic Resources'). In addition to Bioversity International, the project partners include the Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW) (Austria), the State Forest Tree Improvement Station (SNS) (Denmark), Institut National de la Recherche Agronomique (INRA) (France), the National Forest Centre (NLC) (Slovakia), the Slovenian Forestry Institute (SFI) (Slovenia) and Forest Research (UK). The project was launched on 1 April 2007 for a period of 3.5 years and it is co-funded by the European Commission (€553,860, 50% of the total budget) under the Council Regulation No 870/2004 on genetic resources in agriculture (DG Agriculture).

All EUFORGEN member countries and several associated countries were invited to participate in the project. As of March 2010, a total of 35 countries have nominated their national focal points to EUFGIS (Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Former Yugoslav Republic of Macedonia, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Turkey, Ukraine and United Kingdom).

In 2009, the EUFGIS partners organized four sub-regional training workshops for the national focal points to help them compile data on gene conservation units of forest trees sets and to upload the data, via intranet, to the information system. These workshops were held in Vienna (24-26 March), Ljubljana (21-23 April), Avignon (5-7 May) and Copenhagen (12-14 May). During these workshops, the national focal points received training on the use of the EUFGIS intranet, including the pan-European minimum requirements and data standards for dynamic gene conservation units which were developed as part of the project. After the workshops, the national focal points have continued compiling and uploading the data. In April 2010, the information system contained data on 1345 units, which are managed for gene conservation of 115 species.

The final project meeting will be held in Vienna, Austria on 13-15 September 2010. The EUFGIS Portal will be launched during this event and the national focal points and other participants will discuss how to continue improving the documentation work on forest genetic resources in Europe. Further information on EUFGIS is available on the project website (<a href="www.eufgis.org">www.eufgis.org</a>).

### 2.4.3. Publications and public awareness efforts

The EUFORGEN Networks finalized four new Technical Guidelines (*Alnus cordata, Betula pendula, Fagus orientalis* and *Populus tremula*) and developed draft Technical Guidelines are for nine other tree species. A list of the Technical Guidelines and other related publications in 2009 is presented in Annex 1. In addition to managing the publication process of the Technical Guidelines, the Secretariat has also helped countries to translate selected guidelines into national languages by developing a template and notes for the production process at national level. In 2009, Italy translated the Technical Guidelines for 18 species or groups of species (*Abies alba, Acer campestre, Acer pseudoplatanus, Alnus glutinosa, Castanea sativa, Fraxinus excelsior, Malus sylvestris, Picea abies, Pinus halepensis/P. brutia, P. nigra, P. pinaster, P. pinea, Populus nigra, Prunus avium, Quercus robur/Q. petraea, <i>Sorbus domestica, S. torminalis, Tilia* spp.), Slovenia for two species (*Fagus sylvatica* and *Picea abies*) and Spain for three species (*Abies alba, Pinus nigra* and *Quercus robur/Q. petraea*).

In December 2009, the Secretariat launched a new EUFORGEN website. It provides access to all EUFORGEN publications and meeting reports in electronic format since 1994. Furthermore, the National Coordinators were asked to develop content for country pages, which provide a brief overview of how forest genetic resources are managed in a given country. Publications and other relevant national information can also be displayed on the country pages.

In 2009, the EUFORGEN activities were reported in several articles of Bioversity's Regional Newsletter for Europe. This Newsletter, published twice a year, serves as an informal forum for the exchange of news and views within the genetic resources community in Europe. Other public

awareness efforts in 2009 include an exhibition booth during the World Forest Week, which was organized in conjunction of the 19th Session of the FAO Committee on Forestry (COFO) in Rome on 16-20 March 2009.

#### 2.4.4. Other contributions

The EUFORGEN Coordinator attended as an observer the COFO meeting in Rome in March 2009. Sustainable forest management and climate change were major issues in the agenda but the delegates were also asked to comment the development of the State of the World's Forest Genetic Resources (SoW-FGR) Report. The EU statement on forest genetic resources specifically highlighted the role of EUFORGEN and EUFGIS in providing European inputs to the SoW-FGR report. During the COFO meeting, the EUFORGEN Coordinator had an opportunity to discuss with delegates from potential new member countries about their interest to join EUFORGEN.

On 19–23 October 2009, the EUFORGEN Coordinator attended the 12<sup>th</sup> Regular Session of the FAO Commission on Genetic Resources for Food and Agriculture (CGRFA) in Rome. On 17 October 2009, he was invited to contribute to a panel discussion during a special information seminar on policies and arrangements for access and benefit sharing issues. He also contributed to the preparation of two background study papers on forest genetic resources for the CGRFA meeting (see Annex 1).

The CGRFA meeting focused on access and benefit sharing for genetic resources for food and agriculture, and it adopted a resolution on related policies and arrangements. The resolution invites the ongoing negotiation process for the International Regime on Access and Benefit-sharing to consider the specific nature of genetic resources for food and agriculture for achieving food security. Furthermore, the resolution calls for inclusion of flexible mechanisms in the International Regime to ensure continued access and exchange of genetic resources for food and agriculture.

Regarding forest genetic resources, the Commission then discussed the preparation of the SoW-FGR report. It stressed that the process for preparing the report should be based on country reports, supported by thematic studies and reports from international organizations, as well as inputs from other relevant stakeholders. The Commission decided to establish a new Intergovernmental Technical Working Group on Forest Genetic Resources to oversee the development of the report. It elected a total of 27 members to the working group, including five European countries (Finland, France, Italy, Norway and Spain). The first meeting of the working group is likely to take place in late 2010. The full report of the CGRFA meeting is available at the FAO website (http://www.fao.org/nr/cgrfa/cgrfa-home/en/).

### 2.4.5. Staff changes

As of 1 January 2010, Lidwina Koop (EUFORGEN Programme Assistant, half-time) started working full-time for the European Cooperative Programme on Plant Genetic Resources (ECPGR) and the AEGIS initiative (European Genebank Integrated System) at Bioversity's Regional Office for Europe. Lidwina's responsibilities have been taken over by Ewa Hermanowicz, who has been working as Programme Assistant (half-time) to the EUFGIS project since August 2007.

#### 2.5. Wider influences of EUFORGEN

# 2.5.1. Training programme on forest biodiversity

Since 2005, Bioversity International has been implementing a project on 'Developing training capacity and human resources for the management of forest biodiversity' in collaboration with the Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW), Austria. During this five-year project, funded by the Austrian Government, Bioversity has organised five two-week training workshops and provided five two-year research fellowships. Both the workshops and the fellowships have focused on a different region of the world in each year.

In 2009, the EUFORGEN Secretariat continued to provide inputs to the implementation of the project and particularly to the development of a training manual on conservation and use of forest genetic resources. The training manual is designed to be a tool for both teaching and self-learning, and it is targeted to a broad audience to raise awareness and increase knowledge on forest genetic resources. The manual is will be based on case studies from different regions and its learning modules will also encourage discussion on how to improve practical management of forest genetic resources.

#### 2.5.2. EVOLTREE Network of Excellence

In 2009, EUFORGEN also continued collaboration with the EVOLTREE project (EVOLution of TREEs as drivers of terrestrial biodiversity), which is a consortium of 25 research institutes (including Bioversity International) from 15 European countries. EVOLTREE is coordinated by INRA (France) and funded by the European Commission under the sixth framework programme for research. Bioversity International is leading the dissemination activities of EVOLTREE.

EVOLTREE organized the second meeting of the stakeholder group in Eisenstadt, Austria on 16-17 September 2009 and the EUFORGEN Coordinator presented the activities of EUFORGEN and EUFGIS during the meeting. This group was created by inviting representatives of different stakeholders, such as forest managers, conservation agencies, associations of forest owners and forest industry, non-governmental organizations and others, to discuss results of the EVOLTREE research efforts. EUFORGEN was identified by EVOLTREE as one of the key stakeholders.

In 2009, the EUFORGEN Secretariat also provided inputs to the preparations of an international conference on forest ecosystem genomics and adaptation, which will be organized by EVOLTREE in San Lorenzo del Escorial, Spain on 9-11 June 2010. The conference includes a stakeholder session during which the implications of the new research findings for developing relevant policies and implementing sustainable forest management will be discussed. Further information on the project and the conference can be found on the EVOLTREE website (<a href="https://www.evoltree.eu">www.evoltree.eu</a>).

## 3. EUFORGEN Advisory Committee

The Advisory Committee provides technical and management advice to the EUFORGEN Secretariat. It meets usually once a year and, between the meetings, its members interact with the Secretariat as needed. In 2009, the FAO Forestry Department was represented in the Committee by Oudara Souvannavong (Senior Forestry Officer, Biodiversity and Conservation) and Bioversity International by Laura Snook (Director, Understanding and Managing Biodiversity Programme). The Committee met at Bioversity International on 24 April 2009 and discussed the EUFORGEN activities as well as exchanged information on the FAO and Bioversity activities on forest genetic resources at global level. The continuous inputs and advice of the Committee members are gratefully acknowledged.

# 5. Financial report 2005-2009

At the beginning of Phase III in January 2005, the opening balance of the trust fund was US\$ 189,990. For the years 2005-2009, Bioversity International received a total of US\$ 1,733,393 (as of 31 March 2010) as financial contributions from the member countries (Annex 2). The outstanding financial contributions for Phase III total US\$ 75,057 (Belgium (Flemish Region), France, Georgia, Iceland, Italy, Macedonia FYR, Moldova, Portugal and Serbia) (Annex 3). The Secretariat has reminded these member countries regarding their outstanding financial contributions.

In January 2009, the opening balance of the trust fund was US\$ 27,514 negative. During 2009, Bioversity International received a total of US\$ 404,854 for the years 2006-2009 as financial contributions from the member countries. The total expenditure in 2009 was US\$ 326,530 (Annex 4). The closing balance of the trust fund was US\$ 50,810 on 31 December 2009 (Annex 4) and it has been carried forward for Phase IV.

The estimated total budget for Phase III was US\$ 1,864,538 while the actual total expenditure for Phase III was 1,876,680 (Annex 4). The total budget of Phase III was exceeded by US\$ 12,142. The costs of the Secretariat staff, meetings (Steering Committee and species-oriented Networks) and Newsletter were higher than estimated for Phase III. Savings were accumulated by lower than estimated costs of Secretariat staff travel, thematic Network meetings, publications and public awareness actions.

**Annex 1.** List of EUFORGEN and other relevant publications in 2009.

### **Technical Guidelines**

Ducci, F. and Tani, A. 2009. EUFORGEN Technical Guidelines for genetic conservation and use for Italian alder (*Alnus cordata*). Bioversity International, Rome, Italy. 6 p.

Kandemir, G. and Kaya, Z. 2009 EUFORGEN Technical Guidelines for genetic conservation and use for oriental beech (*Fagus orientalis*). Bioversity International, Rome, Italy. 6 p.

Vakkari, P. 2009. EUFORGEN Technical Guidelines for genetic conservation and use for silver birch (*Betula pendula*). Bioversity International, Rome, Italy. 6 p.

von Wühlisch, G. 2009. EUFORGEN Technical Guidelines for genetic conservation and use for Eurasian aspen (*Populus tremula*) Bioversity International, Rome, Italy. 6 p.

# Under development (drafts available):

Alexandrov, A.H. and Andonovski, V. 2010. EUFORGEN Technical Guidelines for genetic conservation and use of Macedonian pine (*Pinus peuce*). Bioversity International, Rome, Italy. 6 p.

Alizoti, P.G., Fady, B., Prada, M.A. and Vendramin, G.G. 2010. EUFORGEN Technical Guidelines for genetic conservation and use of Mediterranean firs (*Abies* spp.). Bioversity International, Rome, Italy. 6 p.

Bordács, S., Zhelev, P. and Schirone, B. 2010. EUFORGEN Technical Guidelines for genetic conservation and use of Hungarian oak (*Quercus frainetto*). Bioversity International, Rome, Italy. 6 p.

Bordács, S., Zhelev, P. and Schirone, B. 2010. EUFORGEN Technical Guidelines for genetic conservation and use of pubescent oak (*Quercus pubescens*). Bioversity International, Rome, Italy. 6 p.

Ducci, F., Malvolti, M.E., and Russell, K. 2010. EUFORGEN Technical Guidelines for genetic conservation and use of common walnut (*Juglans regia*). Bioversity International, Rome, Italy. 6 p.

Ladislav, P. and Gömöry, D. 2010. EUFORGEN Technical Guidelines for genetic conservation and use of English yew (*Taxus baccata*) Bioversity International, Rome, Italy. 6 p.

Palancean, I., Alba, N., Sabatti, M. and de Vries, S.M.G. 2010. EUFORGEN Technical Guidelines for genetic conservation and use of white poplar (*Populus alba*). Bioversity International, Rome, Italy. 6 p.

Simeone, M.C. and Ducousso, A. 2010. EUFORGEN Technical Guidelines for genetic conservation and use of false cork oak (*Quercus crenata*). Bioversity International, Rome, Italy. 6 p.

Simeone, M.C., Zhelev, P. and Kandemir, G. 2010. EUFORGEN Technical Guidelines for genetic conservation and use of Turkey oak (*Quercus cerris*). Bioversity International, Rome, Italy. 6 p.

## Other publications

Vinceti, B., Dawson, I., Koskela, J. and Jamnadass, R. 2009. Tree genetic resources: international interdependence in the face of climate change. In: Fujisaka, S., Halewood, M. and Williams, D. (eds.). The Impact of Climate Change on Countries' Interdependence on Genetic Resources for Food and Agriculture. Background Study Paper No. 48 prepared for the 12th Session of the FAO Commission on Genetic Resources for Food and Agriculture, 19-23 October 2009. FAO, Rome, Italy, pp. 18–26. (<a href="ftp:fao.org/docrep/fao/meeting/017/ak532e.pdf">ftp:fao.org/docrep/fao/meeting/017/ak532e.pdf</a>)

Koskela, J., Vinceti, B., Dvorak, W., Bush, D., Dawson, I., Loo, J., Kjaer, E.D., Navarro, C., Padolina, C., Bordács, S., Jamnadass, R., Graudal, L. and Ramamonjisoa, L. 2009. The use and exchange of forest genetic resources for food and agriculture. Background Study Paper No. 44 prepared for the 12<sup>th</sup> Session of the FAO Commission on Genetic Resources for Food and Agriculture, 19-23 October 2009. FAO, Rome, Italy. 74 p. (<a href="ftp:fao.org/docrep/fao/meeting/017/ak565e.pdf">ftp:fao.org/docrep/fao/meeting/017/ak565e.pdf</a>)

Annex 2. Financial contributions received for EUFORGEN Phase III (as of 31 March 2010).

Country	Annual contribution (US\$)	Contributions received (US\$) during Phase III						
		2005	2006	2007	2008	2009*		
Austria	11,000	11,000	11,000	11,000	11,000	11,000		
Belgium Flemish Region	6,875	6,875	6,875	6,875	6,875			
Belgium Walloon Region	6,875	6,875	6,875	6,875	6,875	6,875		
Bulgaria	5,500	5,500	5,500	5,500	5,500	5,500		
Croatia	5,500	5,500	5,500	5,500	5,500	5,500		
Cyprus	5,500	5,500	5,500	5,500	5,500	5,500		
Czech Republic	7,500	7,500	7,500	7,500	7,500	7,500		
Denmark	11,000	11,000	11,000	11,000	11,000	11,000		
Estonia	5,500	5,500	5,500	5,500	5,500	5,500		
Finland	11,000	11,000	11,000	11,000	11,000	11,000		
France	33,000	33,000	33,000	33,000	33,000	32,530		
Germany	33,000	33,000	33,000	33,000	33,000	33,000		
Greece*	11,000		11,000	11,000	11,000	11,000		
Hungary	7,500	7,500	7,500	7,500	7,500	7,500		
Iceland	5,500	5,500	5,500	5,500	5,500			
Ireland	7,500	7,500	7,500	7,500	7,500	7,500		
Italy	33,000	33,000	33,000	33,000	33,000			
Lithuania	5,500	5,500	5,500	5,500	5,500	5,500		
Luxembourg	5,500	5,500	5,500	5,500	5,500	5,500		
Norway	11,000	11,000	11,000	11,000	11,000	11,000		
Poland	7,500	7,500	7,500	7,500	7,500	7,500		
Portugal	7,500	7,500	7,500	7,500				
Romania	5,500	5,500	5,500	5,500	5,500	5,500		
Serbia	5,500	5,500	5,500	5,500	5,500	4,488		
Slovakia	5,500	5,500	5,500	5,500	5,500	5,500		
Slovenia	5,500	5,500	5,500	5,500	5,500	5,500		
Spain	13,750	13,750	13,750	13,750	13,750	13,750		
Sweden	13,750	13,750	13,750	13,750	13,750	13,750		
Switzerland	13,750	13,750	13,750	13,750	13,750	13,750		
The Netherlands	13,750	13,750	13,750	13,750	13,750	13,750		
Turkey	7,500	7,500	7,500	7,500	7,500	7,500		
United Kingdom	33,000	33,000	33,000	33,000	33,000	33,000		
Total per year	361,250	350,250	361,250	361,250	353,750	306,893		
Total Phase III						1,733,393		

<sup>\*</sup> joined EUFORGEN in 2006.

Annex 3. Outstanding financial contributions for EUFORGEN Phase III (as of 31 March 2010).

Country	2005	2006	2008	2009	Total outstanding (US\$)	
Belgium Flemish Region				6,875	6,875	
France				470	470	
Georgia*	2,200	2,200			4,400	
Iceland				5,500	5,500	
Italy				33,000	33,000	
Macedonia FYR*	2,200	2,200			4,400	
Moldova*	2,200	2,200			4,400	
Portugal			7,500	7,500	15,000	
Serbia		·	·	1,012	1,012	
Total	6,600	6,600	7,500	54,357	75,057	

<sup>\*</sup> The outstanding financial contributions of Georgia, Macedonia FYR and Moldova for 2005-2008 (US\$ 8,800 each) were reduced to US\$ 4,400 by the Steering Committee in June 2009.

Annex 4. EUFORGEN Phase III budget (US\$) and a summary of expenditures (US\$) in 2005-2009.

Details	Phase III budget*	Total expenditure	2005	2006	2007	2008	2009	Budget balance
Coordinator at Bioversity International	496,220	540,317	99,479	99,471	109,196	118,332	113,839	(44,097)
Secretariat scientific support (50%)	159,255	204,928	34,673	36,917	42,272	45,993	45,073	(45,673)
Secretariat administrative support (50%)	144,559	153,040	27,529	29,147	32,742	35,700	27,922	(8,481)
Secretariat staff travel	65,000	58,087	15,678	15,451	13,643	6,013	7,302	6,913
Steering Committee (meetings)	90,000	90,883	0	0	38,594	495	51,794	(883)
Thematic Networks (meetings and operations)	200,000	140,106	19,550	50,327	41,443	28,786	0	59,894
Species-oriented Network (meetings)	300,000	371,192	122,140	99,898	39,917	85,963	23,274	(71,192)
Publications and dissemination of information	100,000	25,112	5,672	7,333	6,068	3,175	2,864	74,888
Newsletter (50%, two issues per year)	20,000	24,885	2,975	5,090	6,423	3,656	6,741	(4,885)
Public awareness tools/action	25,000	2,229	1,173	223	450	229	155	22,771
Communication and office consumables	50,000	50,000	10,000	10,000	10,000	10,000	10,000	0
Sub-total	1,650,034	1,660,780	338,869	353,857	340,748	338,342	288,965	(10,745)
Overhead (13%)	214,504	215,901	44,053	46,001	44,297	43,985	37,565	(1,397)
Total	1,864,538	1,876,680	382,920	399,858	385,045	382,327	326,530	(12,142)

<sup>\*</sup> Phase III budget approved at the fourth Steering Committee meeting in 2004 for the years 2005-2009

Opening balance in Jan 2005

Total contributions received

Phase II contributions received in Phase III

Phase III contributions received in 2004

189,990

1,733,393

10,001

-5,894 (included in the opening balance)

Phase III expenditure -1,876,680

Closing balance in Dec 2009 50,810