Annexes

Annex I: Technical report of EUFORGEN Phase II (2000-2004)³

1. Introduction

EUFORGEN is a collaborative programme among European countries to promote conservation and sustainable use of forest genetic resources. It was established in October 1994 as an implementation mechanism for Resolution 2 (Conservation of forest genetic resources) of the First Ministerial Conference on the Protection of Forests in Europe (MCPFE), held in Strasbourg in December 1990. This resolution called for the development of a functional but voluntary instrument of international collaboration to promote and coordinate *in situ* and *ex situ* conservation of forest genetic resources, the exchange of reproductive material and monitoring of progress in these areas.

The Programme is fully financed by its participating countries. The EUFORGEN Steering Committee is composed of National Coordinators from all participating countries and it has the overall responsibility of the Programme. EUFORGEN has been operating through species-oriented Networks which bring together scientists and managers to exchange information, discuss needs and develop conservation methods for priority tree species. Countries' financial contributions are used for the overall coordination of different activities, Network meetings, publications and dissemination of information while the Network members in participating countries carry out agreed activities with their own resources as inputs in-kind.

During its second meeting in Austria in November 1998, the Steering Committee recommended the continuation of the Programme into Phase II and endorsed a proposal for it. The Steering Committee also invited the International Plant Genetic Resources Institute (IPGRI) to make necessary preparations for Phase II and to coordinate the Programme in technical collaboration with the Food and Agricultural Organization of the United Nations (FAO). The preparations for Phase II were completed during 1999 and Phase II formally started on 1 January 2000 for a period of five years.

The fourth meeting of the EUFORGEN Steering Committee will take place in Židlochovice, Czech Republic, 26–29 May 2004. The purpose of this meeting is to evaluate the progress made by the Programme during Phase II and make recommendations and decisions regarding Phase III (2005-2009). National Coordinators from all participating countries were invited to attend the meeting. In addition, Focal Persons from associated, non-participating countries of the European region were also invited to attend as observers. Representatives of IPGRI and FAO will attend the meeting in their capacity as coordinating agencies of the Programme. During the first day of the meeting (26 May 2004), representatives from the European Commission (EC), the MCPFE Liaison Unit Warsaw and the European Forest Institute (EFI) will also provide their contributions during a seminar on forest biological diversity and sustainable forest management.

This document provides highlights of the progress made during Phase II. Financial contributions provided by the countries, a summary of the audited financial reports for 2000-2003 and a budget forecast for 2004 are also presented.

³ Presented by Jarkko Koskela, EUFORGEN Coordinator, at the fourth EUFORGEN Steering Committee meeting, Židlochovice, Czech Republic, 26–29 May 2004.

2. Progress made during 2000-2004

2.1. Implementation of Resolution S2 and participation in the MCPFE process

In 1994, EUFORGEN started its activities by creating four pilot Networks for black poplar, cork oak, noble hardwoods and Norway spruce to implement Resolution S2. A fifth Network was initiated for social broadleaves (temperate oaks and beech) in 1997. For Phase II, the Steering Committee maintained the mode of operation through species-oriented Networks while the scopes of the Networks were broadened. The current Networks are 1) Conifers; 2) Mediterranean Oaks; 3) Noble Hardwoods; 4) *Populus nigra* (including work on white poplar, *P. alba*); and 5) Temperate Oaks and Beech. The name of the last Network (earlier Social Broadleaves) was changed at the third Steering Committee meeting held in Jönköping, Sweden in 2002.

During the third meeting in Sweden, the Steering Committee evaluated the mid-term achievements of Phase II and concluded that the activities developed within all the Networks reflected the common needs. The Steering Committee also endorsed the interest of the Networks to increase cooperation with countries outside of geographic Europe and encouraged the Networks to develop or continue cooperation with non-governmental organizations. Furthermore, the Steering Committee discussed the practical implementation of gene conservation strategies and established a task force to develop a EUFORGEN strategy for future activities. Based on the output of the strategy task force, the Steering Committee prepared a brief statement for the MCPFE Expert Level Follow-up meeting held in 2002. The statement highlighted the implementation of the Strasbourg Resolution S2 and outlined the perspectives for future collaboration in Europe. Subsequently, the MCPFE process again recognized the importance of forest genetic resources during the fourth Ministerial Conference in Vienna in April 2003.

Under the Vienna Resolution V4 (Conserving and enhancing forest biological diversity in Europe), the Signatory States and the European Community undertook a commitment to "promote the conservation of forest genetic resources as an integral part of sustainable forest management and continue the pan-European collaboration in this area". Resolution V4 recognized the achievements of EUFORGEN in promoting international collaboration on forest genetic resources and broadened the EUFORGEN mandate from Resolution S2.

Following the Vienna Ministerial Conference, the MCPFE held an Expert Level meeting in October 2003 to develop a new Work Programme for the implementation of the Vienna Resolutions. Forest genetic resources were identified as a separate focus area under Resolution V4 in this Work Plan. The MCPFE agreed to "promote the conservation of forest genetic resources as an integral part of sustainable forest management and continue pan-European collaboration in this area through the EUFORGEN Networks" and assigned IPGRI and FAO as leading organizations for this specific action. Several countries such as Austria, Estonia, Greece, Poland and Sweden supported the inclusion of forest genetic resources into the new Work Programme during the meeting.

In January 2004, following the outputs of the MCPFE process, the EUFORGEN Steering Committee initiated the development of Phase III for 2005-2009. The Secretariat requested feedback from all National Coordinators in participating countries as well as Focal Persons in non-member countries. The Steering Committee also established a task force to develop ideas for Phase III and to draft a proposal for further discussion. The Phase III task force met at IPGRI on 26 April 2004 and discussed the draft proposal, which was then finalized for the Steering Committee meeting in May 2004.

According to the feedback received from National Coordinators, participating countries consider that EUFORGEN has met its objectives for Phase II and that it has been useful in promoting collaboration at pan-European level. The feedback also indicated that national activities have also benefited from the Programme during Phase II. Regarding the mode of operation for future activities, the majority of National Coordinators considered that Phase III should be built on a mixture of species-oriented and thematic Networks. Thematic areas highlighted in the feedback were related mainly to policy issues, practical implementation of gene conservation, sustainable forest management and information management.

The Steering Committee is expected to make decisions regarding Phase III during its fourth meeting in the Czech Republic in May 2004. The detailed survey feedback and the draft proposal for Phase III are made available for the Steering Committee as background documents for this meeting.

As of April 2004, EUFORGEN has 32 member countries that have been providing both technical and financial inputs to the Programme (Table 1). A country is considered a member of EUFORGEN when it has signed the official Letter of Agreement to join Phase II with IPGRI and then paid its annual financial contribution regularly. Most of the member countries joined Phase II when it was launched in January 2000 and others joined soon after that. The most recent country to join EUFORGEN Phase II was Iceland that signed the Letter of Agreement in February 2004.

Most countries have regularly paid their financial contributions while some countries have experienced difficulties in fulfilling their financial commitments. During Phase I, several eastern European countries were participating EUFORGEN using funds through donor-funded projects but faced difficulties in making their payments once these projects ended. In other countries, the problems have often been related to administrative changes and the pending payments for a given year have usually been paid in the following year.

The overall commitment of European countries to the MCPFE process has increased during the past decade. The process has also been recognized globally and it enjoys an important role in the global dialogue on forests. Most of the countries who signed the Strasbourg Resolution 2 in 1990 also signed the Vienna Resolution 4 in 2003 (Table 1). This indicates countries' continued commitment to and interest in forest biological diversity. Most of the countries participating in the MCPFE process were also among the first ones to sign the Convention on Biological Diversity (CBD) after the Rio Conference in 1992. Later, the CBD also addressed forest genetic diversity in its Extended Programme of Work on Forest Biological Diversity, which was adopted during the Sixth Conference of Parties in The Hague in 2002. This CBD Programme encourages development of information systems and strategies for *in situ* and *ex situ* conservation and sustainable use of forest genetic diversity. Many of the MCPFE Resolutions build on various CBD decisions and subsequently EUFORGEN can also be considered a mechanism through which the participating countries contribute to the implementation of their CBD commitments.

Table 1. List of countries involved in the MCPFE process and their participation in EUFORGEN during Phase II (2000-2004). The table also shows the signatories of the Strasbourg Resolution 2 (Conservation of forest genetic resources), the Vienna Resolution 4 (Conserving and enhancing forest biological diversity in Europe) and the Convention on Biological Diversity (CBD).

Country	EUFORGEN Phase II	Resolution S2	Resolution V4	CBD
Albania	Х	Х	Х	
Andorra				
Austria*	Х	Х	Х	Х
Belarus		Х	Х	Х
Belgium*	Х	Х	Х	Х
Bosnia and Herzegovina				
Bulgaria	Х	Х	Х	Х
Croatia	Х	Х	Х	Х
Cyprus*	Х	Х	Х	Х
Czech Republic*	Х	Х	Х	Х
Denmark*	Х	Х	Х	Х
Estonia*	Х	Х	Х	Х
European Community		Х	Х	Х
Finland*	Х	Х	Х	Х
France*	X	X	X	X
Georgia			X	-
Germany*	Х	Х	X	Х
Greece*		X	X	X
Holy See				
Hungary*	Х	Х	Х	Х
Iceland	X	X	X	X
Ireland*	X X	X	X	X
Italy*	X	X	X	X X
Latvia*	X	X	X	X X
Liechtenstein		X	X	X X
Lithuania*	Х	X	X	X
Luxemburg*	X	X	X	X X
Macedonia FYR	X X	~~~~	~~~~	Λ
Malta*	X	Х	Х	Х
Moldova	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~	~~~~	X
Monaco		Х	Х	X X
Netherlands*	Х	X	X	X X
Norway	X	X	X	X X
Poland*	X X	X	X	X X
Portugal*	X X	X	X	X X
Romania	Χ	X	X	X X
Russian Federation		X	X	X X
Serbia and Montenegro	X			
Slovak Republic*	X	X X	X X	X X
Slovak Republic	X	X	X	X
Spain*	X	X	X	X
Sweden*	<u> </u>	X	X	× X
Switzerland	X	X	X	X
	X X			
Turkey	Ă	X	X	X
Ukraine	V	X	X	X
United Kingdom*	X 20	X	X	X
Total * Mombor of the European Union as	32	39	41	40

* Member of the European Union as of 1 May 2004 (a total of 25 countries)

2.2. Network activities

The EUFORGEN Networks have brought together scientists and other forestry professionals to analyze the progress made in conserving forest genetic resources in Europe and to develop conservation strategies and technical guidelines for various tree species. A total of 17 EUFORGEN Network meetings were held during Phase II and participants from 41 countries participated in these meetings (Table 2). The Networks have also greatly facilitated information exchange among European countries and identified research needs for large European research projects. Between the Network meetings, members from participating countries have carried out jointly agreed workplans with their own resources as inputs inkind to the Programme.

The EUFORGEN Networks have produced a considerable amount of information on forest genetic resources in Europe and developed strategies and recommendations for genetic conservation of a large group of tree species growing in different forest ecosystems throughout the continent. At the end of 2004, the Networks will have achieved their major technical goal for Phase II, i.e. the publication of technical guidelines (see section 2.4.) for more than 30 tree species. All the Networks have made considerable progress during Phase II. The variation in the amount of outputs is due to the fact that the starting points were different for each Network and that the Networks have been working with a highly different number of tree species.

Network/Group	Meeting venue and date	No. of
		countries
Conifers	1 st meeting, Brdo/Kranj, Slovenia, 5–7 March 2000	25
	2 nd meeting, Valsain, Spain, 20–22 Sept 2001	27
	3 rd meeting, Kostrzyca, Poland, 17–19 Oct 2002	25
	4 th meeting, Pitlochry, United Kingdom, 18–20 Oct 2003	26
Mediterranean Oaks	1 st meeting, Antalya, Turkey, 12–14 Oct 2000	13
	2 nd meeting, Gozo, Malta, 2–4 May 2002	9
	3 rd meeting, Ohrid, Macedonia, 6–8 Nov 2003	11
Noble Hardwoods	5 th meeting, Blessington, Ireland, 17-19 May 2001	24
	6 th meeting, Alter do Chão, Portugal, 9–11 June 2002	31
	7 th meeting, Arezzo, Italy, 22–24 April 2004	27
Populus nigra	6 th meeting, Isle sur La Sorgue, France, 6–8 Feb 2000	17
	7 th meeting, Osijek, Croatia, 25–27 Oct 2001	18
	8 th meeting, Treppeln, Germany, 22–24 May 2003	17
	9 th meeting, Frauenfeld, Switzerland, 16–18 Sept 2004	to be held
Temperate Oaks and	3 rd meeting, Borovets, Bulgaria, 22–24 June 2000	24
Beech	4 th meeting, Bergen, Norway, 14–16 June 2001	27
	5 th meeting, Zemplínska Šírava, Slovakia, 21–23 June	21
	2003	
Inter-Network Group	1 st meeting, Antalya, Turkey, 15–16 Oct 2000	6
	2 nd meeting, Vienna, Austria, 26 Feb 2002	7

Table 2. List of EUFORGEN Network meetings during Phase II (2000-2004).

For Phase II, the Steering Committee established an Inter-Network Group composed of Chairs and Vice-Chairs of the five Networks. The objective for this Group is to harmonize priorities and activities among the differently advancing Networks. The Group has met twice during Phase II. One of the main outcomes of the Group was the preparation of the concept regarding the future collaborative work on genetic conservation in Europe. This concept, called 'master plans' (and later 'common action plans') (more details in section 2.3.), was then presented to the Steering Committee in Sweden in 2002.

The contributions made by the following persons in chairing various Networks during Phase II are gratefully acknowledged:

Conifers

- Until March 2000: Veikko Koski, Finland (Chair)
- March 2000 onwards: Csaba Mátyás, Hungary (Chair); Bruno Fady, France (Vice-Chair)

Mediterranean Oaks

- Until October 2000: Maria Carolina Varela, Portugal (Chair)
- October 2000 onwards: Luís Gil, Spain (Chair); Vlatko Andonovski, Macedonia FYR (Vice-Chair)

Noble Hardwoods

- Until May 2001: Gösta Eriksson, Sweden (Chair); Jochen Kleinschmit, Germany (Vice-Chair)
- May 2001 onwards: Mari Rusanen, Finland (Chair); Peter Rotach, Switzerland (Vice-Chair)

Populus nigra

• May 1999 onwards: Sven M.G. de Vries, Netherlands (Chair); Davorin Kajba, Croatia (Vice-Chair)

Temperate Oaks and Beech

- Until June 2001: Antoine Kremer, France (Chair); Thomas Geburek, Austria and Ladislav Paule, Slovakia (Vice-Chairs)
- June 2001 onwards: Ladislav Paule, Slovakia (Chair); Ned Cundall, UK (Vice Chair, moved to Canada in September 2003)

The next chapters highlight some of the concrete outputs of the EUFORGEN Networks during Phase II.

2.3. Development of conservation strategies

The EUFORGEN Networks have developed long-term gene conservation strategies for the individual species or groups of species. The main objective of these strategies is to ensure continuous evolution of European forest trees. *In situ* conservation efforts are given a first priority but it is emphasized that *in situ* and *ex situ* conservation measures should be used in a complementary manner, according to threats and species-specific needs for genetic conservation. The Networks have linked gene conservation activities in various countries and also significantly contributed to the development of a commonly agreed basis for genetic conservation for those species the Networks have been working with.

The conservation strategies for various species have been published in meeting reports or species-specific technical publications. During Phase II, the Noble Hardwoods Network has developed conservation strategies for black alder (*Alnus glutinosa*), walnut (*Juglans* spp.) and elms (*Ulmus* spp.). The *Populus nigra* Network produced a technical bulletin on the *in situ* conservation of black poplar in 2001 and currently the Mediterranean Oaks Network is finalizing a similar bulletin for cork oak. The Temperate Oaks and Beech Network also has a first bulletin draft available for temperate oaks (*Quercus petraea and Q. robur*). The Conifers Network developed a conservation strategy for Norway spruce already in 1997 and this is

also applicable to many other conifers species which were identified as target species when the Network broadened its scope to other conifers.

Following the Steering Committee discussion in Sweden in 2002, several EUFORGEN Networks initiated the development of common action plans, which aim at the sharing of responsibility for conservation of forest genetic resources in Europe. The common action plans are an effort to create pan-European networks of primarily *in situ* conservation units for selected tree species within their entire distribution ranges. *Ex situ* conservation units outside species' natural distribution ranges can also be included if they contribute to dynamic gene conservation. The common action plans do not attempt to create a new European conservation units in various countries and obtain geo-referenced data on these to provide a pan-European picture.

As indicated by the name, these action plans are very much focused on how to implement the conservation strategies in practice. Common action plans can help to identify gaps and overlaps in gene conservation efforts at both national and pan-European level. Subsequently, countries can assess which gene conservation units under their responsibility are the most valuable ones from the pan-European perspective and they can prioritize the use of their human and financial resources accordingly. This will bring long-term benefits for the participating countries and ensure that common goals can be accomplished at minimum cost.

The Conifers Network has started collecting data on *in situ* conservation units of Norway spruce (*Picea abies*) and the Noble Hardwoods Network has initiated a similar effort with Norway maple (*Acer platanoides*) and lime (*Tilia cordata*). In April 2004, the Noble Hardwoods Network also established a working group to define criteria and minimum requirements for the gene conservation units to be included in the common action plan. The Mediterranean Oaks Network decided to continue with developing additional distribution maps for the oak species, and the *Populus nigra* Network is drafting a density map for natural black poplar stands along European rivers as a first step in developing a common action plan for the species.

2.4. Technical guidelines

In addition to the above-mentioned conservation strategies and technical bulletins, the EUFORGEN Networks have also developed species-specific technical guidelines that are targeted specifically at practical forest managers. These six-page guidelines provide summarized species-specific information on biology and ecology, distribution ranges, importance and use, genetic knowledge, threats to genetic diversity and guidelines for genetic conservation and use. The guidelines present commonly agreed recommendations based on the available knowledge of the species and on widely accepted methods for the conservation of forest genetic resources.

The Conifers Network has published five technical guidelines (Aleppo pine/Brutia pine, Maritime pine, Norway spruce, silver fir and Swiss stone pine) and it is currently developing seven additional ones (black pine, Bosnian pine, common yew, European larch, Italian stone pine, Macedonian pine and Scots pine)(see Appendix 1).

The Noble Hardwoods Network has finalized 10 technical guidelines for black alder, chestnut, common ash, European white elm, limes, oriental sweet gum, service tree, sycamore, wild apple and pear and wild cherry. The Network is now preparing new guidelines for four species (common maple, Italian alder, walnut and wild service tree).

The *Populus nigra* Network has produced the guidelines for black poplar and is now developing the same for white poplar. The Temperate Oaks and Beech Network is developing the guidelines for pedunculate and sessile oaks and beech while the Mediterranean Oaks Network has also drafted recommendations for cork oak. It is expected that the EUFORGEN Networks will have finalized a total of 31 guidelines by the end of 2004.

The published guidelines have been widely distributed and the Secretariat has received several requests for additional copies. The Secretariat has also advertised the guidelines through an Italian forestry magazine and this pilot public awareness effort revealed a strong interest among practical forest managers. Once all guidelines have been finalized, the complete set will be distributed to relevant forestry magazines in different countries in Europe. The Secretariat encourages the participating countries to translate the guidelines into their national languages and will provide a template for this purpose, upon request.

2.5. Descriptors and databases

Standardized descriptors are commonly used for *ex situ* conservation of genetic resources (for their documentation and exchange) but they are also needed for *in situ* conservation. The EUFORGEN Networks have also made efforts to develop these standards, as a necessary step in ensuring minimum genetic conservation requirements for target species in the long term. In 2000, the *Populus nigra* Network finalized a standardized list of descriptors for inventories of black poplar stands. Other Networks had already developed similar descriptors for inventories of conservation stands of various species during Phase I.

The *Populus nigra* Network has further developed a database on clonal collections of black poplar in different countries. This database is currently hosted and maintained by the Istituto di Sperimentazione per la Pioppicoltura (ISP), in Casale Monferrato, Italy. It is available through ISP's Web site (http://www.populus.it/nigranet.php?lingua=EN) and is also linked to the EUFORGEN Web site. A total of 13 countries have provided information on their national collections for the database, which now contains more than 3100 entries. Each country has also been given a password for on-line access to update the information on its national collection. ISP also hosts and maintains another database on the black poplar core collection (see next chapter for details). Following the black poplar database, the Network is now developing a similar database for white poplar clonal collections in various European countries. This database will be hosted by Spain.

During Phase II, the various grey literature databases created by the Networks were merged into a single EUFORGEN grey literature database. Some overlapping references have been removed from the database and currently it includes nearly 2000 references. The database is available through the EUFORGEN Web site.

2.6. Exchange of genetic material

The core collection for black poplar established by the *Populus nigra* Network includes material provided by more than 20 countries. It is maintained by ISP in Italy and duplications are held in eight other countries (Austria, Belgium, France, The Netherlands, Portugal, Spain, Turkey and Ukraine). However, the duplications are not fully complete since the core collection is continuously being developed. During Phase II, efforts have been made to receive new entries from additional European countries (Bosnia and Herzegovina, Greece, Ireland, Moldova and Slovenia) as well as outside Europe (Algeria and China).

The *P. nigra* Network was involved in an EU-funded research project (1997-2001) on genetic diversity of black poplar populations in Europe. After this project, the Network initiated the development of a population collection, which is held in Hungary. In addition to Hungary,

this collection also contains material from five other countries (France, Germany, Italy, The Netherlands and Spain). The Network has also initiated the development of a core collection for white poplar. This collection is hosted by Hungary with a duplicate in Germany. However, the white poplar core collection contains less material than the black poplar one and the Network members have put more effort into increasing the material available in the white poplar core collection.

The Mediterranean Oaks Network facilitated the exchange of cork oak genetic material within an EU-funded research project during 1996-2000. Many of the Network members collaborated within this project during which acorns of cork oak were collected from seven countries (Algeria, France, Italy, Morocco, Portugal, Spain and Tunisia). Subsequently, a total of 17 field trials were established in all these countries (except Algeria) within the project. This network of trials holds a unique collection of cork oak genetic material as it contains material throughout the species' natural range in the Mediterranean basin.

2.7. Exchange and dissemination of information

The EUFORGEN Networks have been actively exchanging information during their meetings and other joint efforts. The EUFORGEN Web site has been the main tool for information dissemination and it has been one of the most visited pages within the whole IPGRI Web site. In June 2003, the EUFORGEN Web site went through a major restyling and several additional features were made available to further improve the accessibility to relevant information. The EUFORGEN homepage can be accessed through the IPGRI Web site (http://www.ipgri.cgiar.org/networks/euforgen/euf_home.asp) or directly at www.euforgen.org. EUFORGEN also has an electronic listserver but its use has been sporadic during the past few years.

A good example of exchange of information is the development of species distribution maps which have been published as part of the EUFORGEN Technical Guidelines. The Secretariat prepared draft maps based on readily available information on a given species. Subsequently the maps were circulated to the Network members who then amended or revised the draft distribution areas in their own countries. The development of these distribution maps has also involved many partners outside Europe, e.g. in North Africa and West Asia.

EUFORGEN publications are regularly distributed to the Steering Committee and Network members, as well as to other interested parties. The EUFORGEN Secretariat often receives other kinds of information requests and these are redirected to the specific Networks for their attention or action, as needed.

2.8. Publications and public awareness material

A list of EUFORGEN publications during Phase II is presented in Annex 1. Most of the publications consist of technical guidelines or meeting reports, which contain country introductory reports, country updates, different Network outputs and discussion or review papers on various topics. The EUFORGEN Networks have also published or are currently developing several technical bulletins, which include a glossary of terms on forest genetic resources. In addition, the *Populus nigra* Network published an identification sheet for black poplar during Phase I and it was later translated into Dutch, French, German, Italian, Russian and Spanish. Similar identification sheet was developed for white poplar.

For public awareness purposes, the EUFORGEN Networks and the Secretariat have developed posters and other similar material, such as general information brochures on EUFORGEN and Network-specific leaflets. All the Networks have also developed CD-ROMs or image collections containing photographs on various aspects of the species they are

working with. In some countries, the EUFORGEN Network meetings have received a wide coverage in the local press and, in some cases, even in national TV broadcasts. In 2000, the EUFORGEN Secretariat also produced a press release to mark the 10th year since the adoption of the Strasbourg Resolution S2 on conservation of forest genetic resources in Europe.

2.9. Wider influences of EUFORGEN

EUFORGEN has been able to harness its extensive links throughout Europe to enhance collaboration among European countries and with relevant European Union programmes and policies during Phase II. Furthermore, the Programme has collaborated with several other international organizations on relevant issues and also contributed to the work on forest genetic resources at a global level.

The EUFORGEN Networks have created an effective platform for the European forest genetic resources community to identify research needs and develop research projects for calls within the EU Framework Programmes for research. Results have then been disseminated through the Networks once research projects have been completed. The Networks have also incorporated new knowledge into the development of the technical guidelines and other outputs. This has facilitated the implementation of research findings. The Networks have also enhanced the overall collaboration and exchange of information on forest genetic resources between the EU Member States and non-EU countries.

EUFORGEN has also contributed to the development of new programmes and policies at the EU level. In April 2004, after several years of preparations, the European Commission established a new programme for genetic resources in agriculture and EUFORGEN was frequently consulted during the process. This programme will support conservation, characterization, collection and utilization of genetic resources in agriculture during the period 2004-2006.

EUFORGEN has facilitated the development and implementation of bilateral projects on forest genetic resources in Europe. The Noble Hardwoods and Temperate Oaks and Beech Networks have had a direct influence on the extension of a four-year project on the conservation of broadleaved forest genetic resources in southeastern Europe, financially supported by the government of Luxembourg and implemented through IPGRI.

Similarly, EUFORGEN contributed to a training workshop on forest genetic resources that was jointly organized by the Federal Ministry of Agriculture and Forestry, Environment and Water Management of Austria and IPGRI, in technical collaboration with the FAO Forestry Department. This two-week workshop, held in Austria in May 2001, was targeted for young scientists and practitioners from 15 countries mainly in Eastern Europe. The workshop has lead to the development of training material and a new multi-year training programme on forest genetic resources to be funded by Austria and implemented by IPGRI together with Austrian institutes. A similar training course was also organized by the Spanish National Institute for Agricultural Research for participants from Latin America in November 2002. This training course is expected to be organized again in 2004. The role of EUFORGEN in facilitating these training initiatives has been to provide information and relevant products from the different Networks and assisting countries in identifying participants.

During Phase II, EUFORGEN has also intensified its collaboration with several international organizations such as the European Forest Institute (EFI) and the International Union of Forestry Research Organization (IUFRO). EUFORGEN collaborated with EFI, IUFRO and several other research organizations in developing a joint statement for the Multi-stakeholder Dialogue, which was organized as part of the Vienna Ministerial Conference in

April 2003. Furthermore in 2003, EFI requested EUFORGEN inputs for the development of criteria and indicators for assessing forest biological diversity in Europe. This work was contracted to EFI by the European Environment Agency (EEA) and EUFORGEN is expected to provide additional inputs in 2004.

In September 2003, EUFORGEN contributed to a symposium on forest genetic resources and sustainable forest management, organized by the North American Forestry Commission and IUFRO prior to the World Forestry Congress in Quebec, Canada. During the Congress exhibition, IUFRO and IPGRI/EUFORGEN also shared a joint public awareness booth.

IPGRI and FAO have used EUFORGEN as an example for similar regional initiatives on forest genetic resources in other parts of the world, namely the Asia Pacific Forest Genetic Resources Programme (APFORGEN) and the Sub-Saharan Forest Genetic Resources Programme (SAFORGEN). EUFORGEN has also provided advice and experience with networking (lessons learned) to these programmes, as well as relevant contacts for them in Europe.

3. Staff changes in the EUFORGEN Secretariat

During Phase II, several staff changes have taken place in the EUFORGEN Secretariat. In January 2003, Jarkko Koskela started as the new EUFORGEN Coordinator following Jozef Turok, who had coordinated the Programme since its establishment. Simone Borelli worked as Scientific Assistant (50% of his time) for EUFORGEN during September 1999–October 2001. Michele Bozzano started in this position in January 2002. In February 2004, with the support from IPGRI, the temporary position of Scientific Assistant was changed to a position of 'Programme Specialist, Forest Genetic Resources' and Michele Bozzano was selected for this new position. EUFORGEN covers 50% of the costs of this position. Since March 2001, Lidwina Koop has been providing excellent support as Programme Assistant (50% of her time) for EUFORGEN.

4. EUFORGEN Management Committee

The Management Committee provides technical and management advice to the EUFORGEN Secretariat. During Phase II, the Committee has held its meetings once a year while other interactions between the Committee and the Secretariat have been more frequent. The Committee has been composed of four members; Christel Palmberg-Lerche and Pierre Sigaud from the FAO Forestry Department, and Jan Engels and Weber Amaral from IPGRI. In February 2003, Christel Palmberg-Lerche retired from FAO and therefore also from the Committee. The continuous support and advice of the Committee members are gratefully acknowledged.

2004

- Ulber M., F. Gugerli, G. Bozic. 2004. EUFORGEN Technical Guidelines for genetic conservation and use for Swiss stone pine (*Pinus cembra*). International Plant Genetic Resources Institute, Rome, Italy.
- Vančura K., B. Fady, J. Koskela and C. Mátyás, compilers. 2004. EUFORGEN Conifers Network, Report of the second meeting (20-22 September 2001, Valsain, Spain) and the third meeting (17-19 October 2002, Kostrzyca, Poland). International Plant Genetic Resources Institute, Rome, Italy. (in press)

2003

- Alan M. and Z. Kaya. 2003. EUFORGEN Technical Guidelines for genetic conservation and use for oriental sweet gum (*Liquidambar orientalis*). International Plant Genetic Resources Institute, Rome, Italy.
- Alía, R. and S. Martín. 2003. EUFORGEN Technical Guidelines for genetic conservation and use for Maritime pine (*Pinus pinaster*). International Plant Genetic Resources Institute, Rome, Italy.
- Bozzano M. and J. Turok, compilers. 2003. EUFORGEN Mediterranean Oaks Network, Report of the second meeting, 2-4 May 2002, Gozo, Malta. International Plant Genetic Resources Institute, Rome, Italy.
- Collin E. 2003. EUFORGEN Technical Guidelines for genetic conservation and use for European white elm (*Ulmus laevis*). International Plant Genetic Resources Institute, Rome, Italy.
- Fady, B., H. Semerci and G. Vendramin. 2003. EUFORGEN Technical Guidelines for genetic conservation and use for Aleppo pine (*Pinus halepensis*) and Brutia pine (*Pinus brutia*). International Plant Genetic Resources Institute, Rome, Italy.
- Fernandez-López J. and R. Alia. 2003. EUFORGEN Technical Guidelines for genetic conservation and use for chestnut (*Castanea sativa*). International Plant Genetic Resources Institute, Rome, Italy.
- Kajba, D. and J. Gracan. 2003. EUFORGEN Technical Guidelines for genetic conservation and use for Black alder (*Alnus glutnosa*). International Plant Genetic Resources Institute, Rome, Italy.
- Pliûra, A. and M. Heuertz. 2003. EUFORGEN Technical Guidelines for genetic conservation and use for Common ash (*Fraxinus excelsior*). International Plant Genetic Resources Institute, Rome, Italy.
- Rotach, P. 2003. EUFORGEN Technical Guidelines for genetic conservation and use for Service tree (*Sorbus domestica*). International Plant Genetic Resources Institute, Rome, Italy.
- Rusanen, M. and T. Myking. 2003. EUFORGEN Technical Guidelines for genetic conservation and use for Sycamore (*Acer pseudoplatanus*). International Plant Genetic Resources Institute, Rome, Italy.
- Russel, K. 2003. EUFORGEN Technical Guidelines for genetic conservation and use for Wild cherry (*Prunus avium*). International Plant Genetic Resources Institute, Rome, Italy.
- Skrøppa, T. 2003. EUFORGEN Technical Guidelines for genetic conservation and use for Norway spruce (*Picea abies*). International Plant Genetic Resources Institute, Rome, Italy.

- Stephan R., I. Wagner and J. Kleinschmit. 2003. EUFORGEN Technical Guidelines for genetic conservation and use for wild apple and pear (*Malus sylvestris* and *Pyrus pyraster*) International Plant Genetic Resources Institute, Rome, Italy.
- Svejgaard Jensen J. 2003. EUFORGEN Technical Guidelines for genetic conservation and use for lime (*Tilia spp*) International Plant Genetic Resources Institute, Rome, Italy.
- Vanden Broeck A. 2003. EUFORGEN Technical Guidelines for genetic conservation and use for black poplar (*Populus nigra*) International Plant Genetic Resources Institute, Rome, Italy.
- Wolf H. 2003. EUFORGEN Technical Guidelines for genetic conservation and use for silver fir (*Abies alba*). International Plant Genetic Resources Institute, Rome, Italy.

2002

Turok, J., G. Eriksson, K. Russel and S. Borelli, compilers. 2002. EUFORGEN Noble Hardwoods Network, Report of the fourth meeting, 4-6 September 1999, Gmunden, Austria and fifth meeting, 17-19 May 2001, Blessington, Ireland. International Plant Genetic Resources Institute, Rome, Italy.

2001

- Borelli, S. and M.C. Varela, compilers. 2001. EUFORGEN Mediterranean Oaks Network, Report of the first meeting. 12-14 October 2000, Antalya, Turkey. International Plant Genetic Resources Institute, Rome, Italy.
- Borelli, S., A. Kremer, T. Geburek, L. Paule and E. Lipman, compilers. 2001. EUFORGEN Social Broadleaves Network, Report of the third meeting, 22-24 June 2000, Borovets, Bulgaria. International Plant Genetic Resources Institute, Rome, Italy.
- Lefèvre, F., N. Barsou, B. Heinze, D. Kajba, P. Rotach, S.M.G. de Vries and J. Turok, compilers. 2001. *In situ* conservation of *Populus nigra*. International Plant Genetic Resources Institute, Rome, Italy.
- Turok, J., C. Mátyás, B. Fady and S. Borelli, compilers. 2001. EUFORGEN Conifers Network, Report of the first meeting. 22-24 March 2000, Brdo/Kranj, Slovenia. International Plant Genetic Resources Institute, Rome, Italy.

2000

- Borelli, S., S. de Vries, F. Lefèvre and J. Turok, compilers. 2000. EUFORGEN *Populus nigra* Network, Report of the sixth meeting. 6-8 February 2000, Isle Sur La Sorgue, France. International Plant Genetic Resources Institute, Rome, Italy.
- Turok, J. and T. Geburek, editors. 2000. International collaboration on forest genetic resources: the role of Europe, second EUFORGEN Steering Committee meeting, 26-29 November 1998, Vienna, Austria. International Plant Genetic Resources Institute, Rome, Italy.
- Turok, J., A. Kremer, L. Paule, P. Bonfils and E. Lipman, compilers. 2000. EUFORGEN Social Broadleaves Network, Report of the second meeting, 3-6 June, Birmensdorf, Switzerland. International Plant Genetic Resources Institute, Rome, Italy.