



EUROPEAN FOREST INSTITUTE



ANNUAL REPORT

2005



EUROPEAN FOREST INSTITUTE

In 2005...

- EFI became an International Organisation established by eight European Governments.
- The Forest Sector Based Technological Platform was launched and its Strategic Research Agenda was formulated with EFI's active involvement.
- A seventh Project Centre, PHOENIX, joined EFI.

In 2006...

- The largest European forest research project EFORWOOD starts in full speed. Its coordinator is EFI Associate Member Skogforsk from Sweden.
- The Strategic Research Agenda of the Forest Sector Based Technological Platform is published.
- The establishment of the first Regional Office of EFI is on the agenda.



Risto Päivinen



François Houllier

OVERVIEW

There is probably no such thing as a ‘normal’ year, but 2005 will surely be remembered as a landmark in the history of the European Forest Institute. Indeed, EFI has truly become an international organisation, as at the time of going to press it has eleven member countries from different parts of Europe; all necessary decision making bodies have been established and have met; a Host Country Agreement with Finland has been signed; a Director of the new EFI has been selected and appointed; and last, but not least, the role of the Scientific Advisory Board, as a friendly but alert watchdog, has been confirmed.

These developments now seem obvious and fairly natural, but those who inspired and initiated them several years ago and those who spent time and energy in preparing all the necessary steps should be praised for this achievement and its apparent smoothness.

There are a few other things that deserve to be mentioned regarding this process. EFI’s internationalisation was the result of a bottom-up process, that is a form of self-organisation driven by more than 130 forest and forest-related organisations from all over Europe. In terms of staff and budget, EFI still is, and will be, a small structure whose strength and *raison d’être* rely upon its networking capability and its ability to address research issues of a pan-European nature. Being an international organisation is an asset, but it is not the end of the story, nor has it any value by itself: it is the collective use of this new status that will transform this asset into benefits for the European forest sector.

Thus, it is very positive that a seventh Project Centre joined the EFI family in 2005 and that some Members and Associate Members took new initiatives towards creating what might become, in the ensuing years, EFI Regional Offices. It is also a good sign that EFI was active, and welcomed in the establishment of the Forest-Based Sector Technology Platform, and that it was able to cement links with the “Plants for the Future” Technology Platform and participate in the elaboration of its Strategic Research Agenda.

Both the stronger networking and advocating for the European forest research community will be central elements in the EFI activities in the forthcoming years. We will actively continue the discussion with all EFI Member States, Associate and Affiliate Member institutions, Project Centres, staff members and various other partners on the vision of EFI.

FRANÇOIS HOULLIER
Chairman

RISTO PÄIVINEN
Director

ORGANISATION

With its new status, EFI can better serve its member organisations, which are now called Associate and Affiliate Members. The former refers to European member organisations, and the latter to non-European member organisations. By the end of 2005, EFI had 135 Associate Members and 6 Affiliate Members.

EFI's new status brought a new and a very central element to its organisation, namely Members. They are those countries which have ratified the EFI Convention and consequently have a seat in the EFI Council that convenes every three years.

Associate and Affiliate members of EFI at the historical annual conference in Barcelona.



The launch of an international organisation established by European States

The first eight ratifying countries, namely Croatia, Denmark, Finland, Germany, Norway, Romania, Spain and Sweden, convened for the first EFI Council meeting in Helsinki on 5 September. This Council meeting was the first step in the launch of the new EFI. Next, it was time to say good-bye to the old EFI Association.

The Annual Conference of the EFI Association gathered on 8 September in Barcelona, Spain. This was the time for EFI members to decide on the transfer of activities from the EFI Association to an EFI established by Convention. In December, the EFI Association was dissolved at a small dissolving conference. Assets and liabilities of the Association were subsequently transferred to the EFI established by Convention.

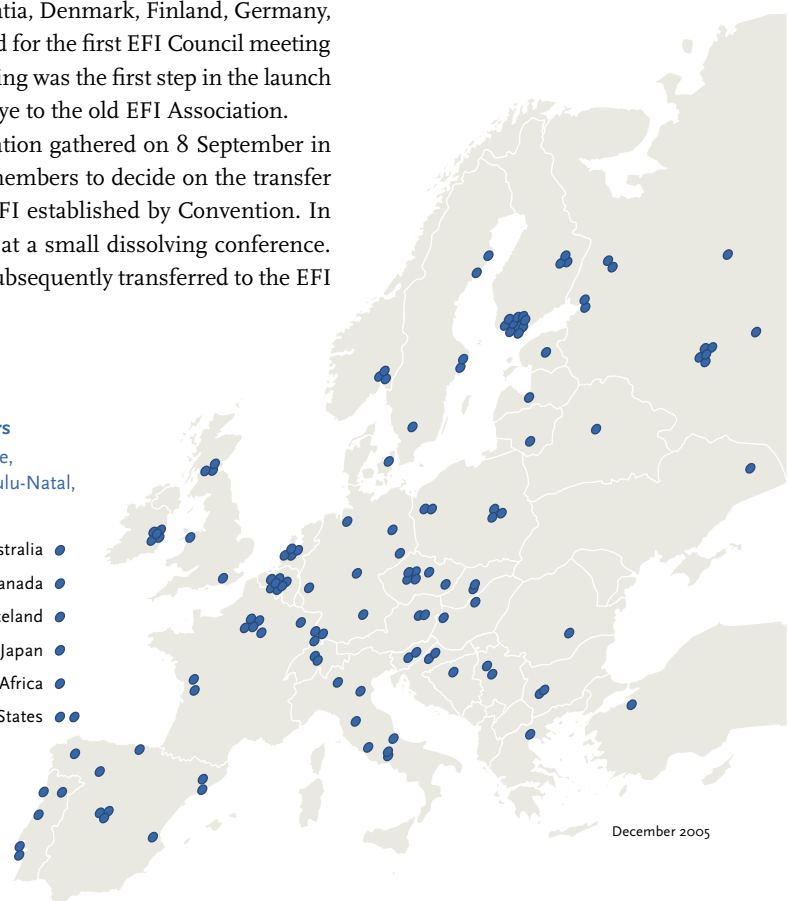
New Associate Members

- European Confederation of Woodworking Industries – CEI-Bois, Belgium
- Faculty of Forestry, University of Banja Luka, Bosnia and Herzegovina
- French Institute of Forestry, Agricultural and Environmental Engineering (ENGREF), France
- Iceland Forest Service, Iceland
- Istituto di Ricerca e Formazione per la Montagna e la Foresta (I.R.M.F.), Italy

New Affiliate Members

- Forestry Programme, University of KwaZulu-Natal, South Africa

- Australia ●
- Canada ●
- Iceland ●
- Japan ●
- South Africa ●
- United States ●●



The Annual Conference of the EFI established by Convention was also held on 8 September 2005, in Barcelona. At this Conference those decisions required to set up the organs of EFI were made.

This historical Conference was chaired by EFI's Honorary Chairman, *Tim Peck*, and closed by the Minister of the Environment of Catalonia, *Salvador Milá*, together with *José Maria Solana*, Head of Forest Planning, and Management for the Conservation of the Biodiversity, from the Environmental Ministry, Spain, and *Josep Ramon Mora*, Chairman of the CTFC.

The Board and the Scientific Advisory Board

To have the organisation fully operational, the Council and Associate Members of EFI both nominated four Board members. After having completed the maximum term of six years on the Board of the EFI Association, it was time to bid a grateful farewell to *Dr. Zoltan Somogyi* and *Dr. Jan Ilavský*.

Member scholarships

EFI offered three scholarships to young and promising researchers in 2005. *Aljoscha Requardt*, University of Hamburg, Department of Wood Science, World Forestry Section, Germany, conducted an 'Analysis and Evaluation of European Information Networking Structures and Information Management regarding Pan-European Criteria and Indicators for Sustainable Forest Management'.

Mirjana Stevanov, University of Göttingen, Forest Faculty, Institute for Forest Policy, Germany, worked on a 'Benchmarking Model: Performance of the State Forest Institution', and *James Walmsely*, University of Wales, School of Agricultural and Forest Sciences, Bangor, UK, conducted research on 'Options for addressing nutrient deficiency in forests harvested for biomass fuel: the potential of wood ash and other waste residues'.

■ www.efi.int/members



The EFI Board as of 8 September 2005, (those elected by the Council and the Annual Conference):

MR. F.XAVIER BALLABRIGA
Spain (Council)

DR. MIROSLAV BENKO
Croatia (Council)

DR. FRANÇOIS HOULLIER
France (Conference)

DR. CECIL KONIJNENDIJK
Denmark (Council)

DR. LIISA SAARENMAA
Finland (Council)

DR. ANDREY SELIKHOVKIN
Russia (Conference)

PROF. DR. BIRGER SOLBERG
Norway (Conference)

PROF. KONSTANTIN VON TEUFFEL
Germany (Conference)

The Chairman of the Board is
François Houllier and the
Vice-Chairman is Cecil Konijnendijk.

The Scientific Advisory Board of the EFI Association was transferred to the new EFI according to its previous composition:

PROF. E.P. FARRELL
Ireland

PROF. DR. DAVID HUMPHREYS
United Kingdom

DR. EEVA HELLSTRÖM
Finland

DR. ANTOINE KREMER
France

PROF. DR. JARI KUULUVAINEN
Finland

PROF. DR. FRITS MOHREN
(Chairman)
the Netherlands

PROF. DAVIDE PETTENELLA
Italy

PROF. DR. HUBERT STERBA
Austria

PROF. GÖRAN STÅHL
Sweden

DR. VIKTOR TEPLYAKOV
Russian Federation

Some SAB members and members
of the EFI Secretariat in the
footsteps of Leonardo da Vinci at
the University of Padova, Italy.



NETWORKING

One of the main pillars in the vision of EFI is to act as a promoter of forest research and to facilitate forest research networking at the pan-European level. In 2005, EFI actively participated in the preparation of the Strategic Research Agenda of the Forest Based Sector Technology Platform in order to show how forest research contributes to the society as a whole. Such participation is always done in collaboration with other representatives of forest research and forest sector in general.

Developing the long-term agenda of the forest sector

On 15 February 2005, the Forest-Based Sector Technology Platform, FTP, was launched, which gathered all the stakeholders of the sector together to define and implement a Strategic Research Agenda for the long-term future. Exactly one year later, on 13 February 2006, a Strategic Research Agenda was published. Over 700 proposals for research topics were received from National Support Groups and other stakeholders. Their aggregation and prioritization at the European level was made according to five “value chains”, forestry, wood, pulp and paper, bioenergy, and specialities / new businesses.

EFI actively contributed to the development of the Strategic Research Agenda by acting as the Secretariat of the Forestry value chain, Risto Päivinen chaired the value chain and also participated in the SRA writing team. This facilitative role was possible thanks to support received from the Nordic Forest Research Co-operation Committee (SNS).

The Strategic Research Agenda is an ambitious initiative. In its twenty-six research areas it stresses sustainability, development and the manufacture of innovative products, resource availability, multiple forest use, biodiversity, the production of bio-energy, and energy efficiency. More info: www.forestplatform.org.

An important element for the future of the Institute lies in strengthening the EFI network by establishing “Regional Offices” at various locations in Europe as integral parts of the Institute. As a first step towards this aim, in 2006/2007, EFI’s first Regional Office will be established in Barcelona, Spain.

The Annual Conference excursion took place at a privately owned forest in Catalonia bringing together private forest owners and researchers.



EFORWOOD project partners around the Viking project plans in Uppsala, Sweden.



RESEARCH PROGRAMMES

EFI carries out comparative studies and other research that focuses on topics that fall under its four research programmes: forest ecology and management, forest products' markets and socio-economics, policy analysis and forest resources and information. The research conducted at the EFI Headquarters is strongly complemented by EFI's seven Project Centres. The leading principles in these activities are independence, objectiveness, high quality and co-operation.

Consistent work rewarded

2005 yielded benefits from the collective efforts of previous years. First, the large EFORWOOD project was launched. It aims to provide methodologies and tools that will, for the first time, integrate a Sustainability Impact Assessment of the whole European Forestry-Wood Chain (FWC), by quantifying the performance of the FWC and by using indicators for all the three pillars of sustainability: the environment, the economy and society. EFORWOOD is an Integrated Project co-funded by the EU's 6th Framework Programme, and involves 38 partners throughout the forestry-wood chain. The project is led by Kaj Rosén, SkogForsk, Sweden. EFI has a large share in the project and many of the EFI Project Centres are also involved. More info: www.eforwood.com

Contract negotiations were also held in 2005 for another 6th Framework Programme Integrated Project in which EFI is a partner: the FIREPARADOX project aims at building scientific and technological bases for new practices and policies for integrated wildland fire management in Europe. The FIREPARADOX consortium includes 32 partners from 12 countries. This project is co-ordinated by the Centro de Ecologia Aplicada, Prof. Baeta Neves, at the Instituto Superior de Agronomia, Lisbon, Portugal. EFI's main task is related to compiling the data management platform for the project. More info: www.mtda.fr/fire_paradox/index.php

Research towards supporting the fight against illegal logging and the image of the forest sector were also among the focal points of EFI's activities in 2005. EFI is collaborating with several government and non-government institutions in this field and has also contributed to ongoing initiatives within the framework of the MCPFE.

In 2005, EFI had 34 projects running. A large part of the funding came as co-funding from the EU Framework Programme for Research. Apart from this, the EEA, ESA, and the Finnish Ministries of Foreign Affairs and of Agriculture and Forestry have also financed EFI projects.

A complete and detailed list of the projects (aims, duration and possible EU contract number) is available in the supplement of this Annual Report.

> www.efi.int/research

EFI Research Programme Managers in 2005:
Marcus Lindner, Ilpo Tikkanen,
Andreas Schuck and Andreas Ottitsch.



FOREST ECOLOGY AND MANAGEMENT

The Forest Ecology and Management research programme has been investigating new research topics. Work on sustainability impact assessments started in two projects in 2005. In the SENSOR project, environmental, social, and economic effects of multifunctional land use in Europe are analysed; and in the EFORWOOD project, a tool for the sustainability impact assessment of the whole forest wood chain will be developed. A study commissioned by the European Environment Agency analysed the environmentally compatible potentials for bioenergy from European forests.

Assessing carbon stocks and their changes

The CarboInvent project was completed at the end of 2005. The project identified, developed and provided methodologies and information that will facilitate assessment of carbon stocks and stock changes in forests at the national and European levels, in order to meet the commitments of Europe to the United Nations Frame-

work Convention on Climate Change (UNFCCC) and the Kyoto Protocol.

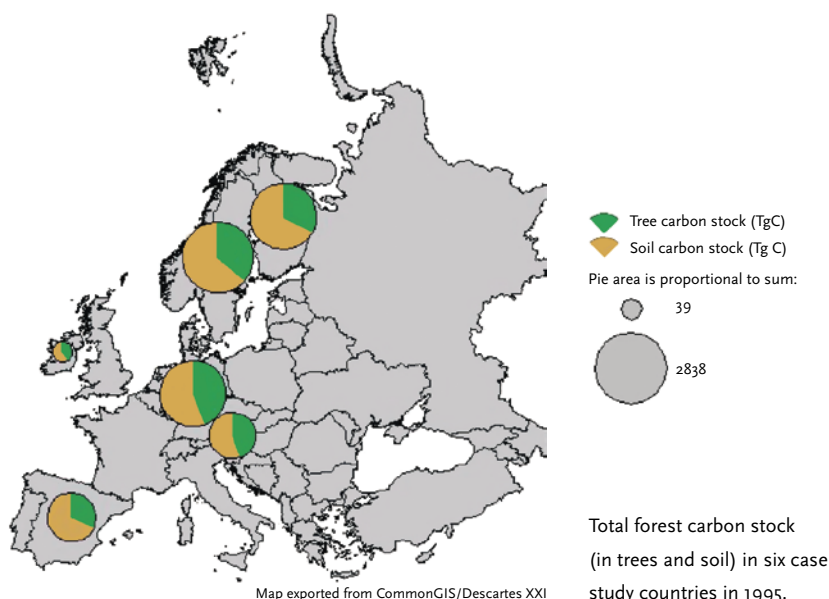
An EFI team carried-out a top-down integrated assessment of the stocks and stock changes for six countries, namely Austria, Finland, Germany, Ireland, Spain and Sweden. It also identified uncertainties associated with these assessments. The top-down approach applied forest inventory data in their aggregated form. Volume estimates were then expanded

to total tree biomass carbon estimates per tree species and age class, using Biomass Expansion Factors (BEFs) identified within the project. Carbon stock changes were calculated using the EFISCEN model for the period 1995–2015.

This approach offers a carbon assessment method which requires less input data compared to other more detailed methodologies. As a result of the CarboInvent work and other parallel research activities, there has been significant progress in the assessment of carbon in tree

“Forest management of today includes environmental ecosystem services such as carbon sequestration as well as the economic and social dimensions of sustainability.”

M. Lindner



biomass compared to the state-of-knowledge at the end of the 1990s. However, the quality of existing BEFs still varies a lot between forest types and regions. A comparison of modeled carbon stocks and stock changes for national results emphasises the importance of realistic harvest data in the top-down integration approach.

The top-down integration approach also includes an assessment of soil carbon stocks and stock changes according to the dynamic soil carbon model Yasso. However, the uncertainties linked with the soil carbon assessment are considerably larger in comparison to the biomass carbon assessment.

The results show that on a per hectare basis, forest stands in Germany and Austria store much more carbon than stands in the other investigated countries. However, because of the larger forest area in Sweden and Finland, their total carbon pools are comparable with Germany, whereas the national totals for Austria, Ireland and Spain are smaller.



Hans Verkerk



Patrick Faubert and Tim Green

► www.efi.int/research/programmes/programme1/

Personnel & visiting researchers

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Total of 4.5 person years

Trainees

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MR. TORSTEN TRITSCHER
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The Netherlands

FOREST PRODUCTS' MARKETS AND SOCIO-ECONOMICS

The Economic dimension of illegal logging and related policies

EFI-GTM scenarios illustrate the impact of illegal logging and related policies. In 2005, EFI finalised its project “the Impact of Reduction of Illegal Logging in European Russia on EU and Russian Timber Markets”. The objective of this project was to analyse the impacts of policies currently discussed in international processes, such as the EU-FLEG Action Program and the ENA-FLEG (Europe and North Asia) Ministerial Conference on European timber markets.

The results show that the overall market impact of wood procurement from unknown sources – possibly linked to illegal logging – from European Russia could be in the range of 5%–10% in reduced prices for both Russian and EU forest products markets. This price differential results mainly from increased supply quantities due to the influence of assessed amounts, 10%–15% of total roundwood consumption, which cannot be explained with officially registered production quantities. If this is assumed to be linked to illegal logging, these figures could result in financial losses in the range of 250 Mill. USD for legal operators and the Russian government, the forest owner in this region of Russia. These and other figures from this study refer to 2002.

In the course of this project, EFI also found at least 75% of all wood imports (roundwood and sawnwood) from Russia into the European Union to be covered by some form of wood tracing system, suitable for proving the legal origin of these wood deliveries. In trade with Nordic countries, this share is even higher, namely more than 90%. This is due to the dominance of a few large scale operators and their suppliers, who have developed such systems over the past decade.

In general, the exact direction of flows of wood from unknown origins has proven very difficult to assess from a mere comparison of statistics. It requires additional research or – as an intermediate solution – the adoption

of figures “by convention”, such as the one used in EFI’s own studies, which postulates that a minimum share of 50% of all material “from unknown sources” is consumed domestically and thus not available for export.

Beneficiaries of policies in the context of the currently discussed FLEGT-processes and related policies would be legally operating forest owners, operators and traders in both “partner”-countries and European importer countries.

The detailed report on EFI’s study, which was also presented in the context of MCPFE, as well as the ENA-FLEG Ministerial Conference in St. Petersburg in November 2005 is available at: <http://www.efi.int/publications/technical-reports/19.html>

EFI-GTM looks at competition for wood in relation to bioenergy

In 2005, EFI-GTM was utilized to calculate competition between energy wood and other forest industries for the European Environment Agency. According to past market prices, it is unlikely to expect that substantial amounts of forest biomass will be utilized for the generation of bio-energy without price subsidies. However, if energy prices continue to rise, this would also improve

the competitiveness of energy wood on the market. One important development in this context is the establishment of emission trading schemes for CO₂ emissions. CO₂ emission credits currently have a mar-

ket value of 20–30 € per ton of CO₂ and this is expected to increase in the long term. By also taking into account the price incentive of substituting alternative fossil fuels in the energy generation, a market value for wood chips was calculated with 54, 78, and 120 € per m³ of dry wood chips (solid wood equivalent, supplied at a local plant) for 2010, 2020, and 2030, respectively.

In the medium term (2010–2020), the majority of the wood chips supply for bio-energy will come from forest residues with the price paid at the mill gate below 50 €

***“Economic Forest Sector Analysis can
now provide key information for current
hot topics in international forest debates”***

A. Ottitsch

per m³ for biomass. In 2020–2030, with the price level for wood chips at 80 € and higher, wood biomass will be able to gain a significant share of wood used by forest industries, and this source will become second largest, after forest residues.

The highest impact of this increased price for biomass is going to be on the EU pulp industry. Since the production of chemical pulp requires a high input of wood fibre, which will compete directly with wood biomass, the increased price for wood fibre due to competition with bioenergy would increase production costs for pulp sharply, thereby reducing the competitiveness of the EU pulp industry on the global market. An increasing market value of energy wood would lead to substantial mobilization of wood biomass resources for bio-energy from other competing industries currently utilizing wood resources. While the conservative cost estimates for 2020 resulted in rather small market replacements equivalent to 5.9 Mtoe, the projected energy potential from competitive use of wood increased to more than 33 Mtoe in 2030. These results demonstrate the great importance of market interactions for the assessment of biomass resource potentials until 2030.

■ www.efi.int/research/programmes/programme2/

Personnel & visiting reseachers

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Total of 6.5 person years



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Markku Husso and Alexander Moiseyev

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MS. EVA SEVILLANO MARCO
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MR. MARTIN WEHRHAUSEN
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Research Associates

MR PHILIP WARDLE
United Kingdom

PROF. DR. UDO MANTAU
Germany

PROF. NIKOLAI BURDIN
Russia

POLICY ANALYSIS

FOPER – for future research capacities in South-Eastern Europe

The EFI-coordinated Forest Policy and Economics Education and Research –project (FOPER) firmly established itself during 2005 in Albania, the former Yugoslav Republic of Macedonia, Serbia and Montenegro, Bosnia-Herzegovina, and Croatia. The first major activity, an assessment of the training needs in the field of forest policy and economics, was implemented and the results are now available on the project website. This assessment provides a firm basis for the development of a training program at the Master level, as well as for professional training. The design of the training program was started in late 2005 and is expected to be finalised in mid-2006.

The Master Program on Forest Policy and Economics will be a joint effort among the six Faculties of Forestry

in the region (Banja Luka, Belgrade, Sarajevo, Skopje, Tirana, and Zagreb). These faculties will provide students and teachers for the program and the teaching will be implemented in rotation at two different locations.

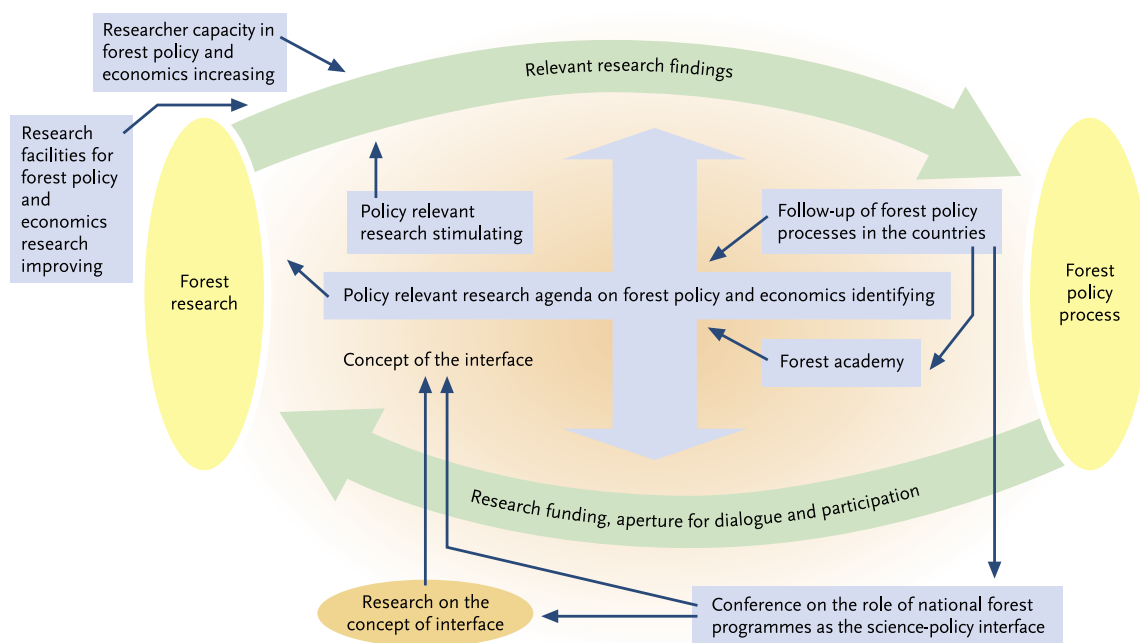
Teaching is scheduled to start in 2007. The graduates are expected to be employed in forest research and education in these countries, thus providing an important improvement in capacity on forest policy and economics.

“The pan-European collaboration between scientists and policy makers is essential for improved knowledge base of decision making.”

I. Tikkanen

New avenues for strengthening the science-policy interface

Co-operation towards strengthening the science-policy interface, through the Ministerial Conference for the Protection of Forests in Europe (MCPFE) Work Programme with Liaison Unit Warsaw and EFI network partners, successfully continued in 2005. The aim has been to



Conceptual framework for Science Policy Interface and the instruments (blue) of FOPER for strengthening it.

provide a platform for science-policy dialogue between policy-makers and the science community by organising and designing several policy relevant seminars and workshops in support of the implementation of Vienna Resolutions. This activity will be vital during 2006–2007, in preparation for the MCPFE Warsaw Summit.

FOPER, for its part, strengthened the interface in its operations. A central element in its strategy is the promotion of a commonly agreed agenda for policy relevant forest research in the region. The FOPER-team is gearing-up towards the initiation of a process which will facilitate the creation of such an agenda. A variety of other instruments (see the figure), such as the training of researchers and a conference on the role of national forest programmes in implementing the interface will also be applied.

Communication is a vital policy instrument

In 2005, EFI carried out a study on European cooperation and networking in forest communication. The results indicate that a general move from reactive to pro-active communication is taking place in forest sector communication – the forest sector is becoming more active when it comes to speaking out in the media. One of the most interesting observations of this study was that the forest sector, especially at the European level, is struggling with the question of what it really wants to achieve with its communication efforts: to boost its image with the public?; to be successful at policy lobbying?; or, to really build relationships and two-way communication processes with other sectors and interest groups?



Tomi Tuomasjukka and Mari Pitkänen



Mirjana Stevanov

The forest sector is increasingly realizing that cooperation (within the sector, with relevant policy-makers, but also with specific groups like constructors, architects, and educational institutes) and networking are the only ways for the sector to strengthen the impact of its communication, for example, through combined expertise, learning from each other's best practices, resources, pool of contacts etc. The added-value of cooperation has to be clearly present, in order for organizations to engage in cooperation with other organizations and to accept a certain degree of "loss of autonomy" over their own communication activities. In relation to networking activities, it is important to realize the importance of social capital, i.e. actors (organizations) need to trust each other, have shared views, and benefit from the information shared.

► www.efi.int/research/programmes/programme3/

Personnel & visiting researchers

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Total of 3 person years

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PROF. PETER GLUCK
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DR. HEIKKI PAJUOJA
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FOREST RESOURCES AND INFORMATION

Missions accomplished

Two EU Framework Projects, one of which was coordinated by EFI, came to an end in 2005.

The description, discovery, communication and sharing of forest information were the topics of the 5th Framework Accompanying Measure 'Network for a European Forest Information Service', NEFIS. It was carried out by a consortium of 16 forestry/environmental information providers and systems developers. The project's main components were: (1) the development of a NEFIS metadata schema for description of forest information resources, including the development of a theme-based vocabulary; (2) initiation of a consultative analysis-design process for outlining a system architecture based on pan-European forest information processes at a generic level that considers national and institutional relationships and information responsibilities; and (3) elaboration of an advanced demonstration tool.

The demonstration tool was based on previous research activities (see EFI News 2002 No. 2 Vol. 10). One particular new development in NEFIS was the

demonstration of simultaneous extraction of data from remotely located servers. The demonstration case used sub-national forest inventory data (forest area from Denmark, Finland, France, Hungary, Italy and Sweden). The target of the exercise was to show the technical possibilities for remote access data retrieval, it was not to harmonize or make comparable data from different sources. Harmonization issues have been and are subject

to other international activities (e.g. COST Action E43: <http://www.metla.fi/eu/cost/e43/>).

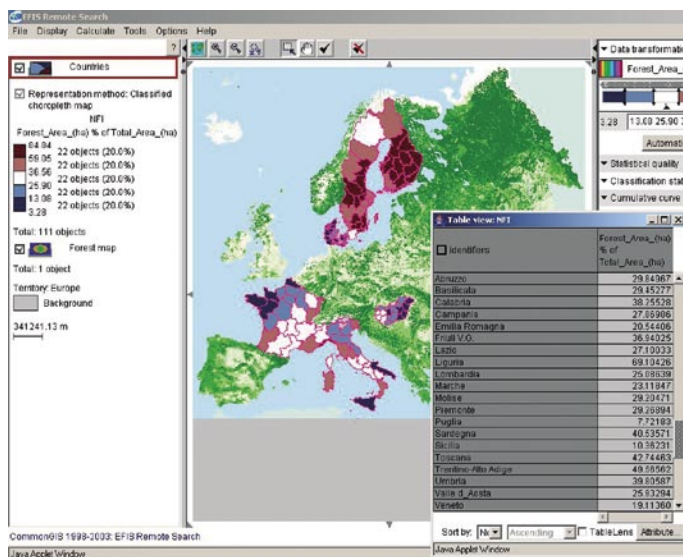
A metadata record was created for the sub-national inventory data, thus allowing users to retrieve forest area data from

remote servers and collate them into one data table. The user was then given the possibility to analyze and visualize the retrieved data by using the CommonGIS software (<http://commongis.jrc.it/>). New analysis techniques and tools were part of NEFIS, thus serving the needs of data providers and users. The advanced demonstrator can be accessed at (<http://www.efi.fi/projects/nefis>).

The 5th FP project 'Carbon Assimilation and Modelling of the European Land Surface, CAMELS' quantified

*"To share the forest information, users
need to unite by improving networks."*

A. Schuck



Percentage of forest area for the six countries supplying inventory data for the NEFIS project. Data for the Italian regions are displayed in the table.

the contribution of European ecosystems and land use to changes in atmospheric CO₂. For the first time, data from a variety of sources were brought together with state of the art models to offer a complete picture of the exchange of carbon between the atmosphere and European land surfaces. The EFI team contributed by providing input on changes over time for forest, agricultural and other land and by elaborating geo-referenced European growing stock and biomass maps.

New activities

During 2005, three new EU 6th Framework Programme projects were favorably evaluated. The first one was the Integrated Project ‘Tools for Sustainability Impact Assessment of Forestry-Wood Chain (EFORWOOD)’ in which EFI as a whole is strongly engaged. The team in this research programme will take on tasks related to (1) user needs assessments and training plan development and (2) the elaboration of a simplified web-based version of the comprehensive tool for sustainability impact assessment of the European forestry-wood chain developed within EFORWOOD.

The 6th FP Specific Targeted Research Project ‘Biodiversity Impact Assessment Using Species Sensitivity Scores (Bioscore)’ aims to develop a tool for linking pressures from policy sectors to the (change in the) state of biodiversity, as measured by the presence and abundance of individual species. EFI will mainly concentrate on applying the BioScore tool for assessing the effectiveness of biodiversity conservation measures and its potential for forecasting the impacts of European policies on biodiversity, based on existing scenario studies. The project is lead by European Centre for Nature Conservation in the Netherlands.



Sergey Zudin, Elena Zudina, Katja Tröltzsch and Jo Van Brusselen

In the Integrated Project ‘An innovative approach of Integrated Wildland Fire Management regulating the wildfire problem by the wise use of fire: solving the FIRE PARADOX’ the EFI team will be responsible for building the information management platform and assist in reviewing policies & practices on a European scale with emphasis on prescribed burning/suppression fire. The project is lead by the Instituto Superior de Agronomia, Portugal and consists of 31 partners.

Last but not least, the European Space Agency funded GSE Forest Monitoring, Stage 2, project is also under way. Besides other tasks EFI acts as the secretariat of the User Executive Body GSE Forest Monitoring, Stage 2. The project is coordinated by GAF AG, Germany.

■ www.efi.int/research/programmes/programme4/

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MR. TIM GREEN
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Research Assistant
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Information Systems
Finland

MR. SERGEY ZUDIN
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Russia

MS. ELENA ZUDINA
Programming Assistant
Russia

Total of 5,5 person years

Trainees

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Germany

Research Associates

PROF. DR MICHAEL KÖHL
Germany

DR. JARI PARVIAINEN
Finland

DR. DOMINIQUE RICHARD
France

PROJECT CENTRES

EFI Project Centres are independent network nodes that carry out research under the EFI research strategy. A co-ordination meeting between all Project Centres and EFI Programme Managers is held annually. In August 2005 this meeting was held in connection with the EFI Annual Conference in Solsona. The co-ordinating and facilitating role of EFI headquarters towards its Project Centres was identified as one of the key challenges for the future.



Representatives from EFI Project Centres met in Barcelona in September:

(From left) Stuart Dedrick (ConForest), Pere Riera (MEDFOREX), Heinrich Spiecker (ConForest), Jasper Schjipperijn (EUFORIC), Jean Michel Carnus (IEFC), Christophe Orazio (IEFC), Gerhard Weiss (INNOFORCE), Francisco Moreira (PHOENIX), (front row from left) Olga Shaytarova (PROCEs), Robert Mavsar (MEDFOREX), Margarida Tomé (IEFC), Marc Palahí (MEDFOREX) and Josep Ramon Mora (MEDFOREX).

At the beginning of 2005, EFI's Project Centre family was complemented by a new, seventh, member – PHOENIX, co-ordinated by ISA in Portugal. The main objective of PHOENIX is to develop decision criteria for preventive post-fire forest management. A sound database on existing scientific knowledge on the fire characteristics of different forest types and respective species and criteria for classifying forest types in terms of their fire hazard resilience will be developed. In addition, the potential and limitations of various post-fire management options are defined and knowledge transfer mechanisms for researchers and end-users will be set up.

➤ www.efi.int/research/project-centres/

EUFORIC coordinates, promotes and develops urban forestry research, practice and education in Europe.

Major achievements

In 2005, EUFORIC published the long awaited reference book 'Urban Forest and Trees'. Almost 60 authors from 21 countries contributed to the book that was published by Springer publishers. Also, the international MSc programme 'Urban Forestry & Urban Greening' was launched in September 2005, and successfully received 95 applications, of whom 20 students were admitted to the course. Additionally, one of the main EUFORIC R&D projects, the development of a planning and management system for the forest greenbelt of St Petersburg, Russia, came to an end with the opening of a demonstration forest and the launch of an official forest greenbelt strategy.

Challenges ahead

EUFORIC will continue its efforts related to research project applications for urban forestry, aims to establish a functional urban forestry information service, and wishes to expand the consortium.

Homepages

➤ www.sl.kvl.dk/euforic

➤ www.efi.int/research/project-centres/euforic.html

Contact person

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Improved Valuation, Assessment and Decision Support Tools for the Sustainable Management of Mediterranean Forests

Major achievements

2005 was an important year for the MEDFOREX network in terms of visibility, scientific publications and the procurement of research projects. An important publication 'Valuing Mediterranean forests: Towards Total Economic Value (Eds. Maurizio Merlo and Lelia Croitoru)' was published. The first annual conference of EFI as an international organization was organised by MEDFOREX in Barcelona. The 2005 MEDFOREX annual meeting took place in Orestiada (Greece), which gathered 40 participants from 15 different Mediterranean countries.

The TEMPUS project MEDFOREM started. It aims at improving higher education in forestry in Syria, Tunisia and Lebanon. Finally, 20 scientific publications were published or submitted for publication in 2005.

Challenges ahead

The main goal of MEDFOREX is to become a main actor in Mediterranean forest research. It will continue its participation in relevant international projects, and facilitate new doctoral research related to its research areas.

Homepages

➤ www.medforex.net

➤ www.efi.int/research/project-centres/medforex.html

Contact person

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Homepages

- www.iefc.net
- www.efi.int/research/project-centres/iefc.html

Contact person

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IEFC – Institut Européen de la Forêt Cultivée

The IEFC network aims to improve research cooperation and transfer of knowledge on sustainable forest management of cultivated forests.

Major achievements

2005 was a fruitful and busy year for the IEFC, during which its membership expanded, rewarding work on criteria and indicators for Sustainable Forest Management was carried out in the FORSEE project and an international conference on Biodiversity and Plantation Forests was organised.

The EU-funded FORSEE project coordinated by IEFC was in its mid-term in 2005. Data for assessing and improving criteria and indicators was collected in all the regional pilot zones of the project on the basis of common protocols. An interim report is available at the IEFC website (www.iefc.net), it describes the selection of the criteria and the protocols for evaluating the indicators. The main results of the project will be presented at an international conference in Porto, Portugal, in December 2006.

The international conference on 'Biodiversity and Conservation Biology in Plantation Forests' sponsored by INRA, IUFRO and WWF gathered 80 scientists from more than 20 countries. Results and recommendations that arose from this conference were presented at the IUFRO World Congress in Brisbane in August 2005.

The writing of the *Pinus pinaster* volume by more than 100 authors has progressed in 2005 and is currently under review.

Challenges ahead

The main goal of 2006 is to complete the FORSEE project on time, and to disseminate its results to different target audiences. 2006 will also be a busy year of events, starting with the IUFRO Congress on Managing the forest ecosystems under the challenge of Climate Change in April in Valladolid, Spain, and culminating in the final conference of the FORSEE project on Indicators for Sustainable Forest Management, in December in Porto, Portugal.

Homepages

- www.efi-innoforce.org
- www.efi.int/research/project-centres/innoforce.html

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The EFI Project Centre INNOFORCE conducts research on innovation and entrepreneurship (I&E) and related policies in both forestry and the forestry-wood chain in order to enhance the sustainability of the forest sector and contribute to rural development.

Major achievements

In 2005, the research report 'Innovation and Entrepreneurship in Forestry' was published as an EFI Research Report. It will soon be followed by a special issue on innovation and entrepreneurship in forestry in the journal 'Forest Policy and Economics', which will also be available on-line.

In May 2005, the first Erasmus Intensive Programme (IP) INNO-FOREST – Integrating innovation and entrepreneurship research in higher forestry education was held in Iisalmi, Finland. Further, a range of research activities was implemented by the partners, e.g. a joint survey on the integration of innovation in national forest policy was conducted in co-operation with UNECE, and a range of case studies on recreational and environmental services in forestry have been collected. A new COST Action, E51, Integrating Innovation and Development Policies for the Forest Sector, was approved and will start in 2006.

Challenges ahead

In 2006, INNOFORCE continues to implement its work plan for 2004–2008. This will include research on policy integration and co-ordination, financial and informational instruments, recreational and environmental services and products, vertical co-operation along the forestry-wood chain, and non-wood forest products innovations. Further, a web-database will be established that will provide information on cases of innovation in the forest sector.

A second IP INNO-FOREST will be held in Zvolen, Slovakia in September 2006 and an international seminar ‘Policies Fostering Investments and Innovations in Support of Rural Development’ will be held in collaboration with MCPFE and EFI in Zvolen, Slovakia in March 2006. The COST Action, E51, Integrating Innovation and Development Policies for the Forest Sector will start in 2006. INNOFORCE will substantially contribute to this action both through partners and through theoretical and conceptual input. INNOFORCE aims to extend the network beyond the forest sector to researchers and practitioners dealing with rural development issues.



St. Petersburg, Russian Federation

PROCES

PROCES aims to advance forest research and education in the Russian Federation.

Major achievements

The project ‘Planning and Management System for the St. Petersburg Forest Greenbelt’ came to a successful close in 2005. Moreover, proposals for new projects were prepared, on topics such as ‘Models of optimal and multifunctional use of forest resources of the Leningrad region’ and ‘Long-term forest growth trends in Northwestern Russia’.

PROCES organised various international events. A session of the Baltic 21 Forest Sector, and the Forest Dialogue Meeting were among the largest ones.

Challenges ahead

PROCES has plans to establish a database of available data on illegal logging for North-west Russia. It will also describe forest hazards, in particular forest fires and storms and their effects on forests with regard to forest types that are mainly affected by such disturbances in the Northwest of Russia.

Homepages

➤ www.ftacademy.sp.ru

➤ www.efi.int/research/project-centres/proces.html

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PHOENIX

Lisbon, Portugal

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- www.phoenix-efi.org/
- www.efi.int/research/project-centres/phoenix.html

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PHOENIX – Fire Ecology and Post-fire management

PHOENIX focuses on I&E research, knowledge transfer and related policies in fire ecology and post-fire management in Europe.

PHOENIX started its activities in 2005, co-ordinated by CEABN/ISA. The first organisational meeting took place during the EUFIRELAB meeting in Aveiro, Portugal in October 2005. During the year PHOENIX organised a workshop in Lisbon for decision makers, public and private organisations, forest planners and citizens, on the knowledge gaps and technical training needs of post-fire management, as well as a similar workshop in Spain. Another is now planned to be held in Italy. A course on post-fire management was arranged in Lisbon, 7-12 November 2005. This course included three main topics: (a) prediction and diagnosis of fire impacts, (b) planning of post-fire restoration and (c) management techniques.

The main goals for 2006 are to enlarge the consortium, to start a large FIREPARADOX project; and to work on a book on fire ecology and post-fire management options.

CONFOREST

Freiburg, Germany

Homepages

- www.conforest.uni-freiburg.de/
- www.efi.int/research/project-centres/conforest.html

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The changing needs of society and the enhanced understanding of forest ecosystems have led to increased research activities on the question of whether the conversion of secondary, pure, even-aged coniferous forests on sites naturally dominated by broadleaf species would benefit ecosystems and society. ConForest, therefore, promotes an understanding of the processes related to conversion measures and investigates this topic for relevant coniferous species in Central Europe. This is done through an integrated evaluation of conversion strategies with respect to the ecological and socio-economic goals of forestry.

Major achievements

ConForest has maintained its tradition of bringing together scientists from all over Europe with the express intention of publishing valuable research on the science of forest conversion.

Over 30 member institutes have signed a Memorandum of Understanding with ConForest. Consequently, more than 70 scientists from 17 countries are participating in the ConForest activities. The launching of a website will improve dissemination of ConForest's research results to a larger audience.

ConForest has been operating without any source of international funding, which is a clear indicator of the dedication of the participating institutes.

Challenges ahead

One of the main goals of ConForest is to organise a joint conference between the EFI Project Centres IEFC and ConForest, which will debate the similarities associated with plantation and conversion forestry. The conference will be held in May 2006 and a summary paper will be published by EFI.

Other major goals of ConForest include the preparation of a COST Action on conversion and the continued work related to complementing the ConForest website.

Kirsi Loisa, Leena Roihuvuo, Brita Pajari, Jelena Muikku, Emi Pesonen, Minna Korhonen, Kaisa Kolu, Jarkko Heikkinen and Anu Ruusila



COMMUNICATION AND RESEARCH SUPPORT

Research Administration manages a versatile array of app. 30 projects annually, and has a significant role in the preparation of project applications. In 2005, EFI research administration was extensively engaged in work for the Forest Based Sector Technology Platform, as well as in the preparation of a successful proposal entitled the EFORWOOD project.

Personnel in the finances and human resources department were occupied with EFI's change of status, which naturally has had consequences for sets of procedure and practices in general. Transition of assets and liabilities from the EFI Association to the new international organisation was, and continues to be, a major undertaking in the EFI administration. EFI Computing support has been closely working together with the Human Resources in order to respond efficiently to various computing needs of the whole staff.

In 2005, our publications unit placed special emphasis on the development of 'EFI News', consequently increasing the number of annual issues from two to three, one of the issues being an electronic version.

In the event unit, a total of 17 events, ranging from small workshops of 20 participants to conferences of over 200 participants, were arranged in close co-operation with EFI member organisations. The most popular events were the European Forest-Based Sector Research Forum: Innovative and Sustainable Use of Forest Resources in Stockholm in November, organised with the Forest Sector Based Technology Platform and other collaborators, and the EFI Annual Conference held in September in Spain.

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MR. JARKKO HEIKKINEN
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Finances and human resources

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Finance & Personnel
Manager
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Accounting Assistant
Finland

MS. EMI PESONEN
Human Resources
Assistant
Japan

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Computer Support Officer
Finland

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(acting)
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Finland

MS. HENNA SNELLMAN
Membership Liaison
Officer
Finland

Total of 11.5 person years

Trainees

MR. TUOMAS HILTUNEN
Finland

MS. ANNA-MARIA HYNENEN
Finland

MR. JOONAS MUUTTORANTA
Finland

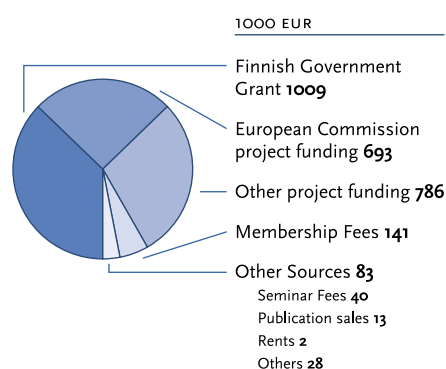
MR. HEIKKI VANNINEN
Finland

FINANCES & HUMAN RESOURCES

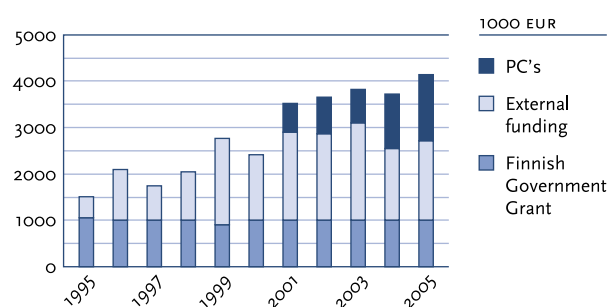
The total funding of the Institute was 2.7 million euros and the surplus of the year was 40 000 euros. The main funding sources were the Finnish Government core funding (1 million euro) and the project funding from the European Commission (1.1 million euro). The share of European Commission funding transferred to the project partners in EFI coordinated projects was 53%, which gives a fair picture of the coordinating role of EFI.

A total of 46 staff members of fourteen nationalities worked at the Institute during 2005, giving a total of 32 person years to the activities of the Institute. In addition 15 young research trainees or scholars from seven different nationalities contributed a total of 4 person years to the research programmes.

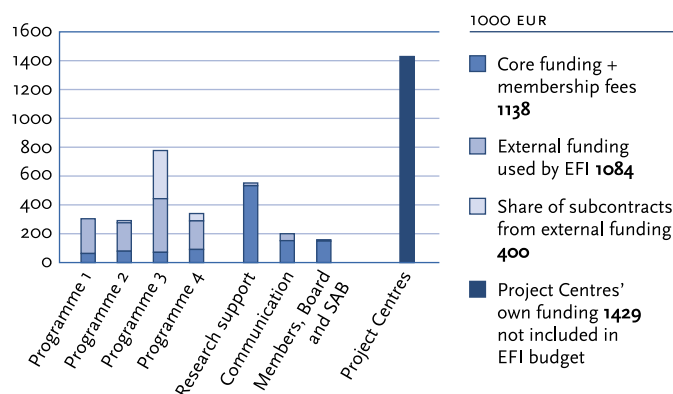
Sources of funding in 2005



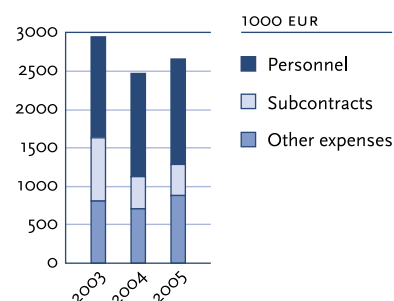
EFI Funding in years 1995–2005



Use of funding between activities 2005



Personnel, subcontracts and other costs in 2005



EFI's mission is to

- promote, conduct and co-operate in research of forestry and forest products at the pan-European level; and to

- make the results of the research known to all interested parties, notably in the areas of policy formulation and implementation,

in order to promote the conservation and sustainable management of forests in Europe.

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