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EFI *news*



Our Changing World PAGE 3

Export of Forest Products from China Expands PAGE 9



Chairman's Column

Forestry is back!

The signs are all there, indicating that the importance of forestry and the production of wood as a renewable resource are more and more recognised throughout Europe. There is clearly a continuously rising demand for wood both for sawn timber as well as energy wood. This recent development meets European forests in a situation where the level of growing stock and figures of annual increment are at a high and unprecedented level. Consequently, forests seem to be able to meet the increasing demands of society to a large extent. The rate of utilisation of timber from Europe's forests has been significantly lower than annual growth rates. In the EU25, one third of the annual increment is left in the forest. This suggests that annual cutting rates can be further increased. On the other hand, we can still see the signs of previous overutilisation of Europe's forests in many places. It is the responsibility of foresters to be the friendly watchdogs at the entrance of the forests and to safeguard the sustainability and further harvesting potentials for the generations to come.

Forests are not just a timber warehouse. They fulfil a multitude of functions vital for human societies. Here forest sciences have an important challenge to meet: by aiming

at an improved understanding of processes inside the forests and related to forests, they enable a more profitable utilisation of the resource and indeed they help safeguard sustainability and protective functions.

More weight on forest science

The increasing importance of forest science can also be read in the 7th Research Framework Programme of the European Union in which the forest based sector is addressed in a multitude of topics. EFI has been active in making this happen. Through the involvement of EFI itself as well as many of its Associate Members, authorities throughout the member states and other organisations the awareness of the importance of forest related issues could successfully be turned into concise wordings in FP7 and its working programmes. In this context, the deepening cooperation between science and industry in the Forest-Based Sector Technology Platform cannot be overemphasised.

True European

EFI is breaking new grounds. The institute has become more mature and well respected as an important stakeholder

in the sector, especially when it comes to questions of a truly European dimension. With the status of an international organisation EFI's responsibility has grown. The recent development to establish "Regional Offices" is a tremendous chance both for the institute on the one side and the Members (countries) and Associate Members (organisational members) on the other. For EFI there is the chance to tighten the net of cooperation in forest science over Europe, with the Regional Offices as nodal or focal points of the network. EFI thus becomes more European in the true sense of the word. For countries as well as Associate Members EFI moves closer and is able to better serve the demands and needs in different regions of Europe. The idea of Regional Offices is still being developed and the Members and Associate Members are invited to give their comments and suggestions in order to improve the instrument for the benefit of all.

*Konstantin von Teuffel
Chairman of the Board*

Guest Editor Frits Mohren | Wageningen University, the Netherlands

Forestry is all about natural resource management under hitherto unknown future conditions while maintaining economic development, sustainability, biodiversity, and, yes, the quality of life: forestry for people, planet and profit. Not a small task!

Our Changing World

Knowledge from research and past experience, professionalism and a bit of luck guide us on this path. But things become complicated when uncertainties increase due to environmental change, unsure political situations, and unpredictable markets. It is good to ponder about what we know and what we do not know, and perhaps even consider the **unknown-unknowns** (as compared to known-unknowns as distinguished by *Donald Rumsfeld*, the now-retired US Secretary of Defense). The effect of climate change was an unknown-unknown 30 years ago when CO₂ was increasing but temperature not yet. Now it is merely a known-unknown...

Winter time is a good period of the year to meditate on some of these issues, and we have asked some key players in their field to provide short statements to give you something to think about. No too much argumentation, just shooting from the hip. Not necessarily truth carved in stone, but **food for thought**. EFI News thanks all the writers for their valuable input!



Original photo: Marja Piila / www.leku.fi
Image manipulation: Jouni Palonen / Kuvaste Oy



Original photo: Philippe Cuéissat / www.leuku.fr
Image manipulation: Jouni Hälönen / Kuusaste Oy

Frits Mohren | Wageningen University, the Netherlands

From Hierarchy to Networking in Research

Concurrent with the spread of internet access, we have seen the development of research communities that are not restricted to existing institutions or buildings. Think of the global campus and the virtual forest faculty.

For the development of research networks in the 1980s and 1990s, essentially three conditions were important: globalisation of our society, increased communication possibilities through the internet, and the demand for professionalisation within our institutions. This development, which is part of the 'information society' has led to formal as well as informal networks that nowadays are indispensable for research and thus also for traditional research institutions. EFI is an outstanding example of this development and it is interesting to see what the consequences of such networking entails for the structure of an organisation such as EFI.

What are the typical characteristics of informal research networks? In terms of structure, networks are pluriform, usually with both a formal and an informal side to it (a double reality). Networks tend to be process-oriented, and by definition are non-hierarchical. There are mutual dependencies within a network, otherwise it disinte-

grates. Networks are open, as members can come and go, and are difficult to intervene with in a hierarchical, top-down manner. They cannot be commanded to do this or that, and therefore are not always liked by the management of hierarchically organised institutions. A traditional research director would say that some research topics are too important to be left to informal networks.

Versatile actors needed

Processes within networks are focused on content, for both activities and results, but procedures can be chaotic. Standardisation is problematic because of the different background of individual members. A typical feature of networks is unclear decision making: decision making occurs in phases and is never final, as actors come and go, and may have different strategic interests. Strategies are being discussed over and over again. There is no clear beginning and

end, as modes of operation are strongly determined by the opportunities provided by the environment of the network (e.g. EU funding!).

Now how can we view EFI in this context? A typical consequence of network globalisation is increased emphasis on regional identity, of which the EFI project centres are a good example. A network organisation should adhere to values and interests of its members and continuously communicate this. This needs actors with different roles: communicators to link the members, facilitators of collaborative action, gate-keepers to ensure communication with the outside world, experts that serve as archives for knowledge and experience, artists for new ideas and dynamics, integrators that create added value and increase efficiency, and finally some wise women to keep it all together. An organisation such as EFI should ensure that all these are represented and active within the network. Now, which role is yours in the next few years?



Javier Arevalo and Paavo Pelkonen | University of Joensuu, Faculty of Forestry, Finland

New Funding Possibilities from Erasmus Mundus

The EU's first Erasmus Mundus programme (2004–2008) intends to strengthen European co-operation and international links in higher education. So far, the programme has mainly focused on supporting and funding European Masters Courses that are offered by a consortium of at least three universities in at least three different European countries, providing that the Masters Courses are “integrated” (jointly designed and with study periods at different universities) and that they lead to the award of a recognised double, multiple or joint diploma.

Higher competition for top students

How has this programme affected European forestry higher education? So far, three MSc Courses in forestry have been selected by the Erasmus Mundus programme. These are the MSc European Forestry (selected in 2004 and coordinated by the University of Joensuu), and Master's Course in Sustainable Tropical Forestry (SUTROFOR) and Sustainable Forest and Nature Management (SUFONAMA) (selected for 2006 and 2007, respectively, and both coordinated by KVL-Denmark, see p. 18), involving a total of 12 European forestry universities. For the participating universities, the process of setting up and running such courses involves a deep level of cooperation and partnership at both academic and administrative levels.

All together, these three MSc Courses offer, each year, 75 scholarships for non-European students (i.e. from non-EU/EEA-EFTA countries), as well as scholarships for non-European academics to carry out teaching and research at European universities. Furthermore, other action of the Erasmus Mundus programme funds the creation of

international partnerships between the European consortia and non-European universities, giving grants to European students and scholars for periods of mobility at partner universities outside Europe. Thus, new Masters' Courses mean higher competition among universities for enrolling top-quality students interested in international degree programmes, both at European and global level.

For the benefit of European higher education

What is the future and direction of the Erasmus Mundus programme? From the discussions of the latest Erasmus Mundus Conference held in Brussels on 28–29 November 2006, it seems that the European Union will continue funding the Erasmus Mundus programme and enlarging its scope. Some of the actions will aim to consolidate the best Erasmus Mundus Masters' Courses, which are considered as the visible flags of the programme. But since the primary aim is to enhance the quality and attractiveness of European higher education

world-wide, many more actions and projects will be stimulated and funded for the benefit of the whole European Higher Education (not only linked to Erasmus Mundus Masters Courses), aiming at improved visibility, mobility, interconnectedness, competitiveness and quality of the education. New actions may include mobility grants at all higher education levels (BSc, MSc, PhD and post doc), but also exchange of senior researchers and academics. An example of this is the recent “Erasmus Mundus External Cooperation Window” call for proposals, which will fund cooperation and mobility programmes in higher education between Europe and neighbouring areas.

To conclude, all universities and organisations (networks, institutions etc.) in the field of higher education in forestry that aim to strengthen their international dimension will find new funding possibilities from the emergent Erasmus Mundus programme, and therefore should keep an eye on their present and future calls for applications.

Further information
eacea.cec.eu.int/static/en/mundus/



Jaboury Ghazoul and Jochen Jaeger | Institute of Terrestrial Ecosystems, ETH Zurich, Switzerland

Risk Reduction Rather than Yield Provision

The future of European forests is inextricably tied to climate change, which will force forest managers and users to re-evaluate traditionally accepted notions of forests as relatively stable landscape features. New accessible information on the implications of climate change is beginning to change public perceptions.

An informed public is necessary for efficient and effective management, but forest managers remain in the unenviable position of having to digest and apply a prolific amount of scientific information. The combination of scientific uncertainty, long lag periods for the resolution of decision making, and complex social and economic pressures makes the task of forest managers among the most challenging but underappreciated of all professions.

Risk reduction

In northern and central Europe, warmer temperatures, higher precipitation and elevated atmospheric CO₂ will favour faster growth rates, but increasing frequency of extreme summer droughts in central Europe may weaken stands rendering them vulnerable to winter storms and pest and pathogen outbreaks. Shorter rotations, more frequent thinnings, and a return to coppicing and pollarding, would reduce the vulnerability to physical and natural disturbances and improve biodiversity values, though more frequent summer droughts may necessitate

careful species selection. Increased fires in the Mediterranean area may cause forest managers to consider wider spacing between trees to reduce water stress and fuel loads. Thus trade-offs in forest functions need to be recognised and managed. Emphasising biodiversity may undermine yield production efficiency, while homogeneous single-purpose forests may lack resiliency.

The balance between the integration and segregation of forests functions at different spatial scales has to be evaluated in the context of vulnerability to future disturbance regimes, and the capacity to recover from disturbances. Forest management in central and southern Europe will therefore be more about risk reduction than yield provision, particularly considering the potential for more cost-effective wood production from boreal zones. Taking economic and environmental changes into consideration, we may have to revise the current concepts of forest sustainability.

Science and practice reunited

To address these challenges forest science and practice need to be reunited. Also better

coordination among forest managers across national boundaries will advance adaptive management by promoting information exchange. Forest science is largely disconnected from the needs of practitioners: despite considerable empirical and theoretical research, scientists remain incapable of advising forest managers of the practical interventions necessary to resolve longstanding problems, such as regeneration failure. This reflects the complexity of forest management issues (decision-making is affected by public perceptions, government policy, etc.), but is also related to limited support for applied research and the lack of appropriate information and implementation pathways.

Thus, the future of successful forest management rests on a revision of forestry concepts in the light of climate and other environmental changes, a recognition of new concepts of sustainability in which risk management and forest resilience are prioritised, and improved dialogue among scientists, managers and the public that transcends national boundaries.



David Humphreys | The Open University,
Milton Keynes, United Kingdom

The UNFF Non-legally Binding Instrument on Forests

The new international arrangement on forests could create some important new opportunities for the European Forest Institute and its associate members. The United Nations Forum on Forests (UNFF) has agreed to introduce a regional structure. Rather than meet every year, the UNFF will now meet every two years.

Every second year a series of regional and sub-regional processes will take place. This constitutes a recognition that the UNFF as a purely international process has not lived up to expectations, and that the involvement of regional processes is essential for effective international cooperation on forests.

This has ramifications for Europe. Regional processes could be structured around the UN regional economic commissions or the FAO regional forestry commissions. The Ministerial Conference for the Protection of Forests in Europe could emerge as the principal forum for European regional cooperation in support of the UNFF. But irrespective of the organisational focus, a vibrant European regional structure on forests will present opportunities for the EFI. This would augur well not only for the EFI as an institution, but for the EFI as a pan-European network. A leading role for the EFI within the UNFF's regional structure for Europe could leverage open new research and funding opportunities for EFI project centres and member organisations.

Catalyst or lost opportunity

All this will depend in part on the content of the non-legally binding instrument (NLBI) that the UNFF is tasked with negotiating in April 2007. In the past the negotiation of soft law on forests has reinvigorated international cooperation and research on forests. Most notably, the agreement in

1997 of the Intergovernmental Panel on Forests proposals for action catalysed work on national forest programmes, including the "Six Country Initiative" (sponsored by Finland, Germany, Honduras, Indonesia, Uganda and the United Kingdom) and a major pan-European research programme, COST Action E19 (chaired by Prof. Peter Glück, Austria). A NLBI on forests could have a similar catalytic effect.

However, a note of caution should be sounded; most of the resolutions that the UNFF has negotiated to date are weak and ambiguous in content. There is nothing intrinsic to an NLBI on forests that will make it necessarily stronger than the soft law on forests that has previously been agreed. A weak NLBI would represent a lost opportunity. Indeed given the opposition to anything that resembles "international regulation" on forests from some key countries, notably the United States and Brazil, both of which blocked an agreement on time bound and quantifiable targets at the UNFF's fifth session, a weak NLBI is the most likely outcome from the UNFF negotiations. Such an outcome would leave the political initiative on international forest cooperation firmly with the regional processes.

Antoine Kremer | INRA, France

Which Shifts – Species' Distribution or Bioclimatic Envelopes?

A series of papers have recently been published predicting the shift of the bioclimatic envelope of European tree species as a response to climate change. The delineation of the "bioclimatic envelope" is based on the modelled association between current climatic conditions and today's geographic distribution of a species. The geographic distribution of the envelope is then projected

in the future using various predictions of climatic conditions in 50 to 100 years from now, assuming that it remains stable over time. To sum up, these investigations have shown that the envelope of most species will be shifted from 100 to 400 km northwards and eastwards. These predictions were very rapidly interpreted as likely shifts of the distribution of the species, not only in the media but also in scientific journals.

Such straightforward conclusions raised concerns about the extinction of species in areas located outside their envelope. It is time to stop the drift on the inferences drawn from the predictions of "bioclimatic envelopes". The method assumes that species and populations are stable genetic units, and their ecological niches are conservative concepts. There is no experimental or scientific basis to such strong assumptions. However, there is ample evidence coming from more than fifty years of provenance research that tree populations can undergo rapid evolutionary changes.

Immigrant genes

One of the driving forces of evolutionary change is the large genetic variation that exists within populations, and that is regularly maintained by gene flow. Genes move through pollen, and local populations can evolve as a result of immigrant genes, and get adapted to new environmental conditions. This was obviously the case during interglacial periods when global warming occurred over longer periods. It is striking to notice that the southern limit of species distribution has only slightly been shifted northwards. During interglacial periods, changes of distributional areas were merely characterized by expansion keeping the southern limit almost constant rather than entire latitudinal shifts. An interesting suggestion to test the assumption of conservative "bioclimatic envelope" would be to apply it to retrospective data: construct the bioclimatic envelope on species distribution data of the mid 20th century and compare it to the today's distribution of the species.

Petri Vasara | Pöyry Forest Industry Consulting

The Next Forest Industry Fibre Decade: Scenarios 9 and 7

The unknown Chinese inventor of paper surely did not know the unknown Chinese scholar who compiled the famous treatise “The Secret Art of War: The Thirty-Six Stratagems”. Yet, his descendants in the Chinese paper industry have probably read the work, over and over.

Shell only has its famous three scenarios, whereas the Thirty-Six Stratagems easily characterise thirty-six futures for value creation out of fibre – and the forest industry’s role in it.

Stratagem 9 is “Watch the fire across the river”, i.e. avoid any involvement at the present time, if circumstances are not clear. This stratagem can provide a wonderful excuse for business-as-usual. When the forest industry looks at the war for fibre resources, it cannot see an obvious outcome. There is a global war for fibre cost and availability, where South America, Russia and South-east Asia would seem to have the advantage. There is a European war for biomass, where both wood and recovered paper are at a crossroads between several end uses. Will value creation from fibre continue to be the domain of the forest industry? Are forests to become the locus for recreational use? Will energy use dominate? Will the chemicals to be extracted from fibre make the sum of the whole less than the sum of

its (chemical component) parts? There is no “conventional wisdom” for those who want to follow it. It might even seem wise to wait and see; to act only when the obvious course is crystal clear.

From a forest industry point of view, there is one major problem with this scenario. It might become the literal truth: the forest industry’s closed-down mills watch across the river, while the biomass fires release the energy in wood and recovered paper.

Do the unexpected

Stratagem 7 is “Create something out of nothing”. This could mean exaggerating or completely fabricating value. That is what the IT-sector did during the internet boom at the turn of the millennium. Never has such a large balloon of hot air deflated so quickly. Value was not created; value was

used as input, and out come a reduced amount, redistributed to very few people. New fads on the markets are used in attempts to create value by hyping technologies and services (be they nanotechnology, wireless, Web 2.0 or bioethanol?). It seems that rumours are a renewable resource. However, the truly renewable resource is of course fibre, which actually is something concrete out of “nothing”. The Forest-Based Sector Technology Platform (FTP) is an attempt to add another renewable resource (ideas) to fibre, thereby multiplying the value created by the forest industry.

It might very well be that these two scenarios represent the most likely outcomes for the forest industry. Do nothing new with the fibre supply, and it is taken away; add ideas, and it comes back many times over. One should also note that the interpretations above do not conform to the usual Chinese ones for the stratagems. Perhaps that is the way forward for a European industry uneasy at the rise of China: do the unexpected.

The remarkable expansion of China's economy over recent years has been accompanied by an equally dramatic growth in commodity trade. These developments have been mirrored by the development of the country's manufacturing capacity for forest products which, because of the limited extent of its own forest resources and strict control of removals, has required massive increases in imports of wood raw materials of all kinds as well as some semi-processed products such as sawnwood, wood-based panels and woodpulp. The result has been that China is now a principal trading partner with exporters especially around the Pacific Basin but also in other regions, such as Africa and even Europe.

Export of Forest Products from China Expands

What has taken many people by surprise, however, has been the speed and extent to which China has also become a major exporter of forest products, notably of wood manufactures, notably wooden furniture. While a major part of its domestic production and imports of forest products has been directed to the domestic market, feeding the demand from its massive and increasingly affluent and urbanised population for housing and other buildings and consumer goods, a growing proportion of output has been for export markets, above all the USA followed by Europe.

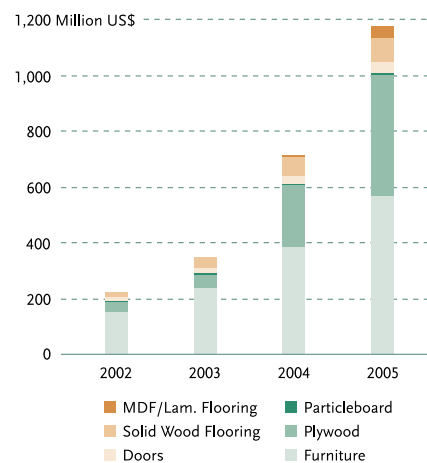
These developments were examined in depth at the 64th session of the UNECE Timber Committee in Geneva in October 2006.

Further substantial growth in China's production and trade in forest products can be expected in the coming years, with corresponding shifts in countries' shares of world production and trade. Europe's imports from China of semi-processed products such as plywood and manufactures such as furniture will continue to expand, with noticeable impacts on European production of these products as well as intra-European trade and

trade with third countries. It will be important to continue to monitor future changes closely, including such features as:

- Competition and prices for wood raw materials, especially as affected by the trade between Russia and China;
- Efforts to reduce corrupt practices and the illegal production and trade in roundwood and processed products and to increase the proportion of certified products moving along the chain of custody from producer to consumer;
- Chinese government policy favouring the expansion of industry in order to absorb the huge numbers of job-seekers moving into urban areas;
- Possible changes in the scale and direction of direct foreign investment in wood-processing towards lower cost production areas, not only China but other countries such as Vietnam;
- Possible impact of rising costs of energy, raw materials, labour, transport, etc. on China's and competing countries' production and trade;
- Possible trade action, e.g. tariffs and quantitative restrictions, by countries with industries vulnerable to low-cost imports;
- Possible appearance of similar trends as in China, though perhaps not on the same scale, in India and some other emerging economy countries.

Exports from China to Europe, trends between 2002–2005



Source: China Customs cited by Mr. R. Taylor and Ms. Jane Guo, International Wood Markets Group, at UNECE Timber Committee Market Discussions, 2006.

Further major changes in world markets for forest products seem inevitable in the coming years, and Europe will not be spared. To remain viable, industries will have to monitor developments closely and be ready to adapt to them by seeking out new markets and products and opportunities for cooperation. In helping them to do so, research institutions should have an important role to play.

This article is based on the information available at www.unece.org/trade/timber





Wikis and Conflicting Ethics in Science

Minna Korhonen | EFI

In the ongoing discussions on the importance of science communication and knowledge management, the increasing role of freely available pools of knowledge and information has been acknowledged by many actors. One of the most visible phenomena are the wikis, including the Wikipedia. But can the scientific community rely on wikis and what is the role of ethics in science delivery?

What's in a wiki?

In the wiki way of thinking knowledge management means simply that anyone can add, remove or edit the content resulting in collaborative authoring of entries following the philosophy that makes it easy to correct mistakes, rather than difficult to make them. This does not mean that for example the most well know wiki-product, Wikipedia, runs wild; there are mechanisms to control the contents such as the history of each article and, more importantly, the control of the wiki-community itself. Among the contributing users, there are also administrators who may prevent articles from being edited, delete articles, or block users from editing as agreed in the with community policy. As *Eric Möller*, a board member of the Wikimedia Foundation, points out, anyone who uses their free time to

work on an article, will want to keep their work at the highest possible level.

In 2005, Nature¹ used a peer review process to compare Wikipedia and Encyclopaedia Britannica in their coverage of science and noted numerous errors in both. However, among the 42 entries reviewed, the average science entry in Wikipedia contained around four inaccuracies and Britannica about three.

Möller encourages the scientist to participate in the different forms of wikis, and to acknowledge the possibilities of bringing people from different disciplines together. Many scientists nod eagerly “yes, we use the Wikipedia”, but at the same time shake their heads in disapproval “no we will not contribute”. For most scientists, assuming the role of a collaborating author is nothing new. The suspicions arise when the ownership and credit issues of the wiki articles are discussed, along with the lack of a peer-review process in the form that the world of science acknowledges it. “Wikis probably do as good a job as any other encyclopaedia at presenting credible science in areas where a consensus exists. In developing fields, very specialized fields, and where controversy exists, the lack of rigorous peer-review may be problematic”, comments *John A. Stanturf* from USDA Forest Service.

Ethical concerns of the cyber age

Sometimes the new internet solutions of knowledge management may contribute not only the loss of credibility of science but also the erosion of self-regulation leading scientists to publish opinions as scientific inference on websites, blogs, etc. as well as citing un-reviewed websites, as Stanturf points out. He also sees that there are direct ethical concerns such as abusing intellectual property rights and disseminating science fiction as science fact. Stanturf suggests that websites could be certified and a credibility index introduced to enable the

users to find well-referenced, up-to-date, peer-reviewed information from credible sources. He noted results from a survey of Australian natural resource decisionmakers, that they judged the reliability of online sources by the reputation of the site owner and the amount of free downloads of pdfs of articles and reports.

Wikis in forestry

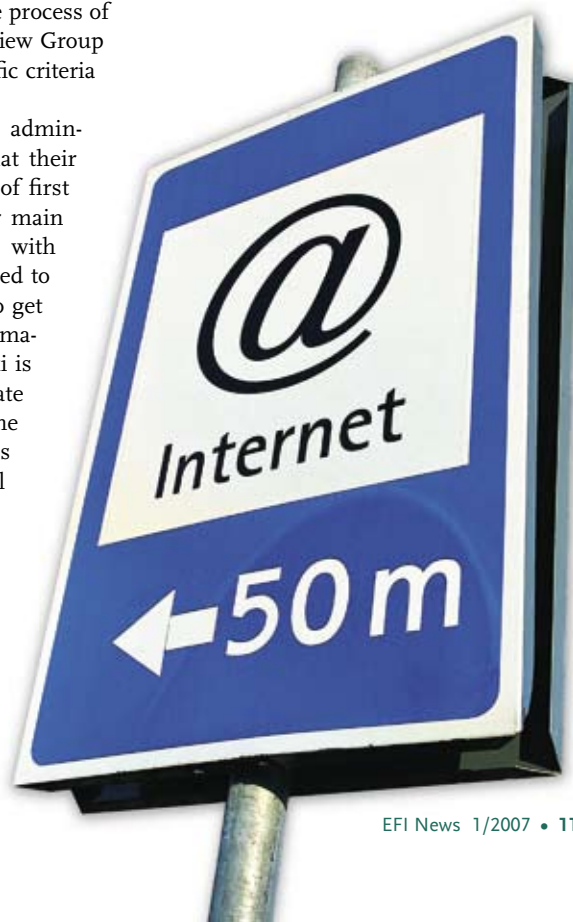
Some actors in the forestry science community have recognised the uses of the wiki technology, e.g. the German National Support Group of the Forest-Based Sector Technology Platform (FTP). One of the more established wikis in forestry is the Forest Policy Education Network (FPEN) initiative by the International Forestry Students' Association (IFSA). Aiming at raising the awareness on forest policy among forestry students the network's wiki has almost 900 registered users. FPEN is in the process of establishing a Quality Peer Review Group to ensure that the basic scientific criteria are met.

Matthias Baldus, one of the administrators of the FPEN, says that their aim was to establish a source of first overview information for their main target audience, the students, with the understanding that they need to look for the primary sources to get the best and most reliable information. But the benefit of the wiki is that it is easy to keep up-to-date and thus to guide the users to the most recent information sources elsewhere. “One of the original ideas to use the site as a virtual writing lab for scientific articles to be published in peer-reviewed journals was rather soon dismissed”, says Baldus and continues “we thought that in forestry it would not work like it does in e.g. computer sciences”.

Eric Möller and John A. Stanturf were among the over 40 experts who presented their work in the ForestXchange conference in Freiburg in October 2006. During the conference more than 120 participants discussed the various aspects of knowledge management with the focus on the interdisciplinary approach between forest science, social sciences and media science. Matthias Baldus from globalwoods AG was involved in the IFSA activities during his studies and has had an active role in the FPEN since.

www.forestxchange.org/
www.forestplatform.de/
www.forestpolicy.net/wiki/index.php/Home

¹ www.nature.com/news/2005/051212/full/438900a.html



Changes in the climate system are expected to have a strong impact on the prevailing disturbance regimes of forest ecosystems. Particularly damages by insects may be affected by warming due to a possible combination of increased habitat range and higher reproduction potential, as well as increased host susceptibility (e.g. as a result of increasing drought stress).

Will Climate Change Bug Our Forests?

A recent study carried out at EFI looked at the potential implications of these interactions at the regional scale using Austria as a case study. The main scope of the work was to improve the simulation of bark beetle (*Ips typographus* L. Scol. Col.) damages within the large scale scenario model EFISCEN and to study the possible impacts of climate change on bark beetle disturbances.

Simulations of the hybrid forest patch model PICUS v1.4, including a detailed module of Norway spruce mortality from infestations by *Ips typographus*, were used to parameterise statistical meta models of probability as well as the intensity of bark beetle induced damage. Temperature, precipitation, host tree share, stand age and volume were used as predictors. The approach was evaluated against observed bark beetle damage data from Austria for the period 1990 to 2004. For this period the improved EFISCEN version including bark beetle disturbances was found to reproduce the observed total amount and province-level pattern of bark beetle damages well.

March of the bark beetles

In a scenario analysis the impacts of a transient climate change scenario (increase in temperature approximately 1.0°C until 2050, limited precipitation changes) were

studied. Simulated average damage in the five-year period 2045–2049 more than tripled compared to the average damage of the evaluation period (1990–2004), increasing from 1.33 mill. m³/yr to 4.32 mill. m³/yr. Moreover, the share of salvage from bark beetle damage at the country level increased from 11.1% to 24.0% of the total harvested timber. Besides high damages in the pre-alpine Norway spruce forests, a particular strong increase in bark beetle damages was found for the inner Alps, an area with only limited bark beetle outbreaks in the past. Studying several adaptive management strategies (i.e. species change to a higher share of mixed and deciduous forests) revealed a considerable time lag between the implementation of adaptation measures and a positive signal on the disturbance regime, but showed high long-term potential in reducing damages from bark beetles.

Concluding, a considerable increase in damages from bark beetles under climate change for Austria was found, simulating dramatic damages in low elevation Norway spruce stands but also a drastic increase in

disturbance intensity in alpine regions. Potential adaptation measures were found to have considerable lead times, which, considering the climate change predictions for the 21st century, point at the urgent need of adaptive silvicultural practices to maintain the multiple forest functions also under changing climatic conditions.

Further info on the models used:
PICUS v1.4: www.wabo.boku.ac.at/picusv1.4.html?&L=1
EFISCEN: www.efi.int/projects/efiscen/

Rupert Seidl was one of the EFI Associate Member Scholars for 2006 and spent three months at the EFI Headquarters.



New Head in Forestry in the FAO

FAO is currently facilitating the development of two new voluntary "codes", one for planted forests and one for wildland fire. Both codes will be discussed at the 18th Session of the FAO Committee on Forestry (COFO) in March 2007. "The codes are proposed as voluntary instruments for use at a practical level. Both draft codes were developed through a multi-stakeholder process, including review by all six regional forestry commissions", says *Mr. Jan Heino*. "The mandate to work on the Planted Forest Code originated with the FAO Advisory Committee on Paper and Wood Products, a private sector advisory group, in 2004. In 2005, COFO also asked FAO to develop guidelines for best practices for planted forests as well as the guidelines for forest fire management," he continues.



Jan Heino started as the Head of the Forestry Department at the UN Food and Agriculture Organization in June 2006.

Major events beyond 2007 include the XIII World Forestry Congress in Buenos Aires in October 2009. The Government of Argentina with FAO assistance is now planning the event and the official announcement and a first call for papers are expected soon.

At the initiative of Croatia, the Sixth Session of the United Nations Forum on Forests (UNFF, February 2006) recommended an International Year of Forests in 2011. Subsequently, this proposal has been endorsed by the UN Economic and Social Council (ECOSOC) and it is being discussed by the UN General Assembly. FAO plans to assist in implementing the International Year of Forests should it be endorsed by the General Assembly.

FAO Committee on Forestry meets in March 2007

The 18th Session of the FAO Committee on Forestry (COFO) will convene in March 2007 in FAO headquarters in Rome. FAO Director-General *Jacques Diouf* has proposed a Ministerial Meeting on Forests to take place immediately before COFO. Provisional agenda items include:

- Forests and energy (to be discussed by the Ministerial Meeting and COFO)
- The State of the World's Forests 2007 (SOFO 2007)
- Forest protection: forest health and forest fire management
- Putting forestry to work at the local level
- Progressing toward sustainable forest management – including a special seminar on regional action
- Shaping an action programme for FAO in forestry

By popular demand, COFO will feature side events in which FAO and collaborating partners will lead informal discussions on the COFO agenda items and other major issues of the day.

State of the World's Forests 2007

Since 1995, the State of the World's Forests (SOFO) has been launched at COFO. SOFO 2007 will present the results of the global forest resources assessment FRA 2005, as well as other studies, in a regional format. As discussed at "Kotka V," FRA 2005 addressed more factors than did previous global assessments, but it is difficult for most countries to provide reliable data on such important categories as forest health, biodiversity, and forest policies and institutions. Work on the Global Forest Resources Assessment, 2010 has started already. In the case of Europe, FAO is collaborating with the Ministerial Conference on the Protection of Forests in Europe (MCPFE) so that the FRA reports are better integrated with the MCPFE assessments of progress towards sustainable forest management in Europe.

EFI Assists in the Combat against Illegal Logging

The actual implementation of the European Commission's Action Plan on Forest Law Enforcement, Governance and Trade (FLEGT) is starting under a new 4-years' partnership agreement with the European Forest Institute. It will be to implement a wide range of measures to combat illegal logging and the associated trade will be negotiated between the European Commission and wood-producing developing countries. EFI, as a neutral international organisation, will have a task of facilitating these negotiations happen.

The main elements of the Commission's action plan are support for improved governance in wood-producing countries and a licensing scheme to ensure only legal timber entering the EU.

These measures will be adopted through voluntary partnership agreements with wood-producing countries, in the first instance with Vietnam, Cameroon, Ghana, Malaysia and Indonesia.

Developing countries are assisted to enter and implement effective partnership agreements with the EU under the auspices of the EU FLEGT Action Plan. EFI will contribute by providing facilitation services and technical assistance to initiate these processes. It will also verify and monitor the implementation of the programmes.

This action means conquering a new area of expertise for EFI. Recruitment for four experts will start soon as well as the nomination of the Steering Committee.

The Forest-Based Sector Technology Platform (FTP in short) has been bringing together Europe's industry, forest owners, scientists and other stakeholders since late 2004. After the release of its strategic research roadmap early this year, it is now time to create real, workable projects. With this task in mind, 430 participants from 27 countries recently met in Lahti, Finland at the 3rd FTP conference.

Forest-Based Sector Gets Down to Work in Lahti

Innovation is the key

Speeding up innovations was the central theme in Lahti. Speakers such as Finnish Minister of Regional and Municipal Affairs *Hannes Manninen*, and CEO of UPM Kymmene *Jussi Pesonen* stressed that innovation is needed if Europe's forest-based sector wants to remain a competitive, global technology leader. *Christian Patermann* of the European Commission's Research Directorate-General stated that initiatives such as the FTP have an important role to play in speeding up innovations. The FTP had had an early success in raising the profile of forest-based sector topics in the work programme of the European Commission's 7th Framework Programme. The first call, to be issued during January 2007, already contained more opportunities for forest-sector research than the entire 6th Framework Programme. However, Patermann also stressed that it was now up to the sector to prepare good, innovative proposals.

Claes-Göran Beckeman explained the FTP's role in issues such as creation of projects and how it can assist in proposal writing.

Time for projects

Meeting rooms and lobbies at the Sibelius Hall were buzzing with activity during the two conference days in November. Project ideas were being developed and consortia formed or strengthened. The presence of researchers, decision-makers as well as funders from across Europe made discussions effective and realistic. Thematic working sessions were held for each of the four value chains, i.e. forestry, wood products, pulp and paper products, and bio-energy, biorefinery and specialities. Project partners aim for proposals under the first call of the 7th Framework Programme, but other funding opportunities are also being considered. The international WoodWisdom-Net project (www.woodwisdom.net), for example, used the Lahti event to officially launch its first call for proposals. National funding agencies and industry will also be key, as they often provide 90% or more of all R&D funding for the sector.

The high number of participants was a clear sign that the FTP is generating increasing interest across the whole forest sector in Europe.

How the FTP can help

The FTP is not a funding institution, but still it has a crucial role to play in development forest-based sector research in Europe. Project director *Claes-Göran Beckeman* showed how the technology platform can facilitate R&D networking, provide advice to consortia, and promote research topics that are of strategic importance to the sector. A project database, which will be launched at the start of 2007, will provide an up-to-date overview of R&D activities in Europe. The next FTP conference, to be held in Hannover, Germany during 15–16 May 2007, will indicate how successful implementation activities have been.

All presentations from the Lahti event, as well as further information about the Forest-based sector Technology Platform, is available from www.forestplatform.org.

Cecil Konijnendijk is a member of the FTP communication group.



FTP Expands to Russia

Anu Ruusila | EFI

During this autumn, the Forest-Based Sector Technology Platform was brought to the attention of Russian forest sector at a seminar in St. Petersburg. The interest in the FTP was high. Before the seminar, all EFI's Associate Members in Russia, among others, had been approached with a questionnaire as to what topics in the Strategic Research Agenda are most relevant to them.

By now 34 scientific institutions and universities as well as many companies have expressed their interest to be involved in the FTP together with Federal Agency of Forestry and Regional Agencies of Forestry. Industry, especially some small and medium sized enterprises, are eager to join in. The aim of the activity now is to identify the common priorities for joint research and to launch the common European-Russian projects in the 7th Framework Programme.

Dr. Natalia Lukina coordinates the forestry activities of the FTP in Russia. 'Expectations to be involved in the successful 7th Framework Programme projects are high in Russia,' states Dr. Lukina.



Anu Ruusila

National Research Agenda ready soon

Russian National Research Agenda (NRA) is currently being prepared. According to forest sector representatives in Russia, the most relevant topics of the Russian Research Agenda are the following:

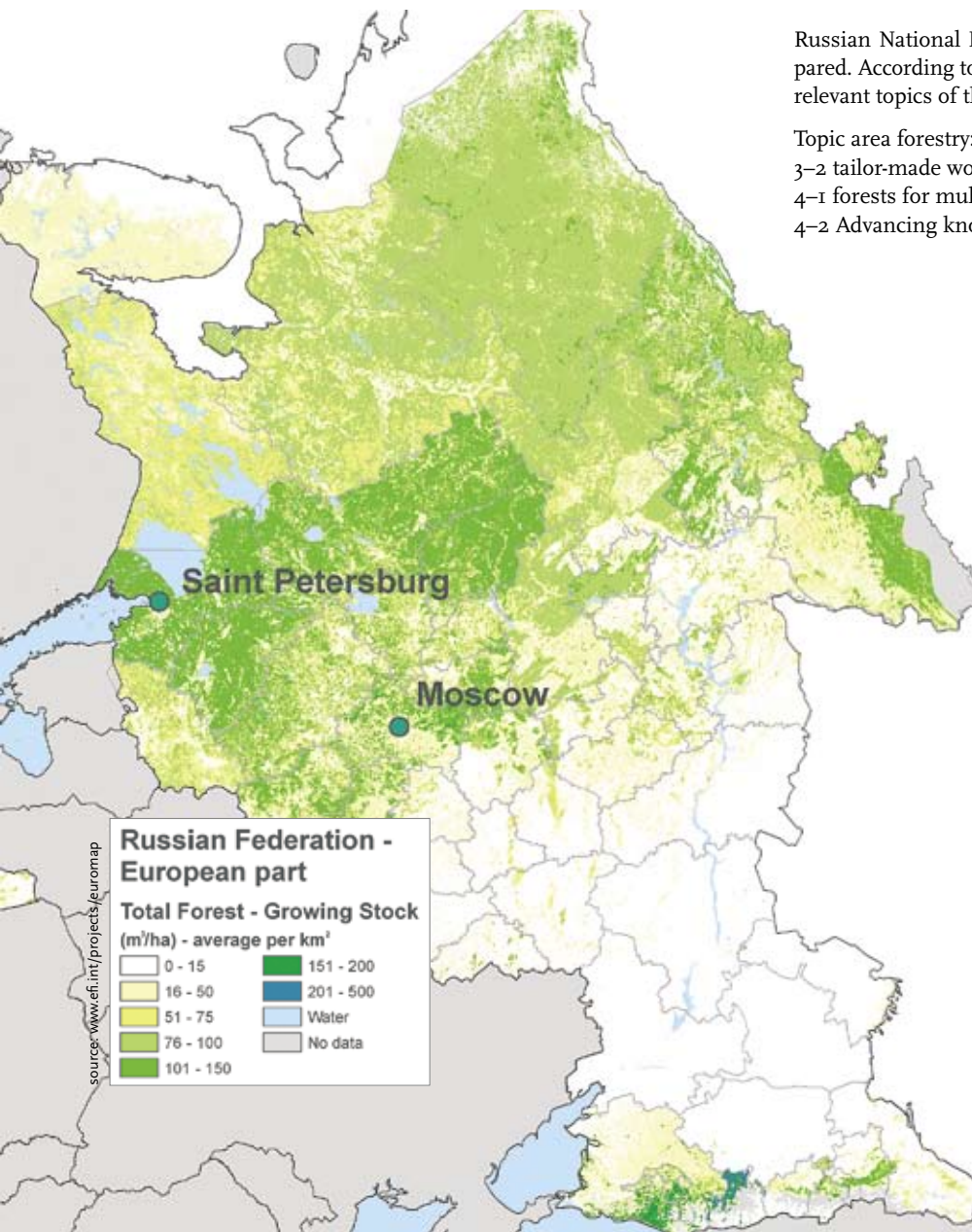
Topic area forestry:

- 3-2 tailor-made wood supply
- 4-1 forests for multiple needs
- 4-2 Advancing knowledge on forest ecosystems

One of the main directions of the FTP's activity is to facilitate the identification of common priorities for joint research. Currently among main candidates for the topics having both Russian and European interest are the following:

1. Northern Eurasia's land cover assessment using moderate resolution Earth observation data.
2. Decision support system for sustainable forest management strategies on Landscape Level in Central and Eastern Europe.
3. Interactions between forestry activities and other land uses on abandoned agricultural lands in Eastern Europe.
4. Upgrading natural organic matter of wood and non-wood origin to value-added "green" chemicals and composites: from molecular understanding to innovative applications ("GreenNOM").

Russia is the most forested country in the world with its 828 million hectares of forest land (source: EFI Research Report 11).



EFI Annual Conference 2007: Experience Polish hospitality!

The EFI Annual Conference 2007 will be held prior to the IUFRO European Congress on 5 September in Warsaw, Poland. This event is open to EFI associate and affiliate member representatives and invited observers. We expect to have a day full of strategic decision making by the associate members of EFI and an opportunity to meet close collaborators from the EFI network. The venue and the main host of the EFI Annual Conference is the Warsaw Agricultural University.

Zapraszamy na konferencję!



Warsaw Agricultural University



At the Conference venue old meets new. The focal point of the Old Campus is the Rector's Palace (left) while the Faculty of Forestry is located in one of buildings located in the new part of the campus.

Research Scholarships for EFI Member organisations in 2007

EFI welcomes applications from young researchers or PhD students who are employed by, attached to or registered with EFI associate or affiliate member institutions.

The scholarships will be awarded on a competitive basis. The topic of the research work should fit in EFI priority areas in research: (i) forest ecology and management (ii) forest products markets and socio-economics (iii) policy analysis and (iv) forest resources and information. More information on the research priorities is available at www.efi.int/research/.

The selection criteria are the relevance of the research topic for Europe, multicountry applicability (i.e. the research addresses several countries or can be applied in several countries of Europe), the applicant's previous academic success and the quality of the research plan. The candidates should be PhD students or young scientists with maximum four years research experience.

Each scholarship will be for three to five months, and the successful candidate will be resident in Joensuu at EFI for that time. The amount of scholarship is 500 €

per month tax free. EFI will also cover the travel expenses in economy class as well as accommodation.

We expect that the offer will appeal to those who have a particular task to complete in an international working environment.

Deadline for applications:
31 March 2007

More information:
www.efi.int/organisation/open-posts/scholar07.html

Forests and Forestry in the Context of Rural Development

IUFRO European Congress 2007, in conjunction with the EFI Annual Conference 2007



6–8 September 2007

Forests and forestry contribute to rural development in multiple ways. Policy makers and practitioners alike are confronted with growing and increasingly diverse social, economic and environmental demands of modern societies on forests and forestry. In addition, global developments such as climate change and urbanization influence and transform the ways in which forests are perceived, managed, conserved and used as elements of the rural landscape. More scientific knowledge is needed to better understand the complex relations between forests and other land-uses and to overcome the different constraints to forestry in the context of rural development. The role of research as a foundation for the development of forestry and urban policies, planning and managing natural resources will be central.

The IUFRO European Congress aims to take a comprehensive and integrated view on the key issues inside and outside the forest sector that shape and influence the role of forests and forestry as a means of rural development. The current state of knowledge will be presented, and further research priorities will be identified. The Congress will focus on four main themes:

- Policies supporting rural development
- Forests and rural development in the light of global change
- Social aspects of forests and forestry in the rural landscape
- Economic role of forests in rural development

The Congress will be aimed at forest researchers from IUFRO or EFI member organisations as well as scientists from related research fields, forest and natural resource policy-makers, land-use planners and forest practitioners, stakeholders and researchers from related fields.

The Congress is organised by Faculty of Forestry, Warsaw Agricultural University, International Union of Forest Research Organizations (IUFRO) and the European Forest Institute (EFI).

Call for Abstracts

Abstracts for both oral and poster presentations should be prepared, using the guidelines available at the Congress website. The abstracts should be submitted by March 15, 2007.

Follow this link:

conference2007.wl.sggw.pl

Annual Conference venue in 2009 now open!

KERKRADE 2006 | BARCELONA 2005

BANGOR 2004 | JOENSUU 2003

COPENHAGEN 2002 | BORDEAUX 2001

LISBON 2000 | ITTINGEN 1999 | ZVOLEN 1998

GEMBOUX 1997 | FREIBURG 1996

TAMPERE 1995 | JOENSUU 1994

The EFI Annual Conferences are organised in co-operation with EFI Associate or Affiliate member organisations. If your organisation would like to host the 2009 Annual Conference of EFI, you can find the application form at www.efi.int/members/annual_conferences

The deadline for applications is 15 March 2007.

Further information:

Ms Brita Pajari, Conference Manager,
email: brita.pajari@efi.int

EFI Office in 'Forestry House', Brussels

As of the beginning of the 2007, EFI will have an office in Brussels. This move was made possible thanks to an establishment of a so called 'Forest House' in the very heart of the city at Place de Luxembourg. The other occupants of the Forestry House will be CEPF and newly established EUS-TAFOR.

The EFI office will be occupied by the Forest-Based Sector Technology Platform (FTP) Project manager for the next three years. The main sponsors of this activity will be the German organisations of Forest Owners, Woodworking Industry, and Pulp and Paper Industry, with the EFI being a co-sponsor.

This is one effective way for EFI to offer its associate members a clear contact point to FTP. There will be a free desk for EFI associate members to use at the office during their visits to Brussels. Also, EFI's advocacy role will gain more impetus especially towards the European Commission.



Event Calendar

Events organised / co-organised by EFI and its Project Centres

■ National Forest Programmes – A Tool for Strengthening Science – Policy Interface in Practise

Note the new date: 20–21 February 2007
Zagreb, Croatia

■ EFORWOOD week

7–11 May 2007 • Brussels, Belgium

■ EFI 2007 Annual Conference

5 September 2007 • Warsaw, Poland

■ IUFRO European Congress Forests and Forestry in the Context of Rural Development

6–8 September 2007 • Warsaw, Poland

■ EFORWOOD week

12–16 November 2007 • Zvolen, Slovakia

Further information

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European Forest Institute

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Fax +358 10 773 4377

Email: brita.pajari@efi.int

www.efi.int/events

New staff members



Mr. Lauri Vesa
Project leader,
EURO-Forest Portal



Dr. Antoni Trasobares
Senior Researcher,
EFORWOOD



Mr. Jerker Brolén
Human Resources
Assistant (acting)

Varpu Heiskanen

News from EFI Associate Members

University of Wales, Bangor

During 2006 there was an academic restructuring at the University of Wales, Bangor. Forestry programmes continue to be a major part of the university's activities and are now provided in the School of the Environment and Natural Resources.

In September we welcomed 15 students from European and tropical countries to a new two year masters course in Sustainable Tropical Forestry. The course is part of

the Erasmus Mundus programme of the European Commission and is run jointly with the Royal Veterinary and Agricultural University in Copenhagen, the Dresden University of Technology, the Institute of Forestry, Agricultural and Environmental Engineering at Montpellier and the University of Padova. Participants study at two centers over the two years. Further details are available on www.senr.bangor.ac.uk/courses/pg/index

The European Landowners' Organization, ELO

ELO is a non-profit non-governmental organization based in Brussels which represents the interests of private forest and land owners (52 member associations in the Member States and 4 affiliated member associations in acceding countries) at the European level and to provide them information on European issues.

Since the beginning of this year, the Forest Department has been working more intensively. The Forest Department contributed to the discussion on

the EU Forest Action Plan, submitted two projects on biomass energy and promoted Natura2000 through the project "From Belgium to Europe with Natura 2000". ELO's Forest Department actively participates at MCPFE process, in FAO meetings and applied for consultative status with UNECE. Meetings of the "European forestry working group" consisting of representatives of ELO member associations are organized every three months. More at: www.elo.org

Ukrainian Research Institute of Forestry and Forest Melioration

The Laboratory of Forest Monitoring and Certification of the Institute is currently working on the development of using of

advanced technology for forestry field data. Do check www.techinles.org.ua for further details.

Two Erasmus Mundus MSc programmes organised by a consortium of five EFI Associate members

SUFONAMA (Sustainable Forest and Nature Management): The overall objective is to qualify graduates to deal with the challenges of modern natural resources management in Europe and other temperate regions, that is, sustainable management of forests and nature areas in an integrated landscape context.

SUTROFOR (Sustainable Tropical Forestry): The overall objective is to qualify graduates to deal with the challenges

in contemporary tropical forestry, that is, sustainable tropical forestry management is becoming increasingly complex due to improved knowledge and a growing demand for products and services.

Full descriptions of the two Erasmus Mundus MSc programmes, inclusive of application procedure and forms, are found on: www.sufonama.net and www.sutrofor.net

EFI Associate and Affiliate members can send short communications to the EFI News. Please contact publications@efi.int.

European Forest Information Portal makes progress

EFI is developing a user-friendly web portal on European forests. The European Forest Information Portal (EURO-FOREST Portal) will meet demands for better access to state-of-the-art information on European forests and forestry in an easily accessible and user-friendly form. It will represent a web based entry point – a portal – and will act as a “first-stop-shop” source for European forest information, allowing easy and consistent access to forest and forestry information on the site, and point to other relevant information sources throughout Europe.

Mr Lauri Vesa, the project leader, says that the first few months of the project work have been busy as the team has been not only studying the existing portals but also planning the basic structure for the EURO-FOREST. “The requirements for the portal are studied and identified. First, we need a technical platform to collect information. Second, we will focus on gathering information about selected topics, such as ‘forest resources’, ‘forest policy’, ‘sustainable forestry’. We also co-operate with SILVA Network to get information about forestry education in Europe. The portal will not be a ‘traditional portal’ with a massive collection of www-links, but rather a collection of descriptive metadata, equipped with advanced search functions”, says Vesa.

Further information
lauri.vesa@efi.int or tim.green@efi.int

Implementing EFI Vision

To ensure that the newly announced vision of EFI will be rooted among the staff, a new project will be launched in 2007. EFISION – Efficient implementation of the EFI Vision – aims to improve the efficiency of work, work motivation and job satisfaction of the staff through rooting strategic goals, through participation and education as well as through clarifying work processes, by improving personnel management skills, and with the help of internal communication. The three year project has received funding from the Workplace Development Programme – TYKES – under The Ministry of Labour in Finland.

Grant of the Foundation for European Forest Research 2007

The Foundation for European Forest Research awards a Research Grant of 5,000 € to a senior forest researcher for independent research work (minimum 1 month) at the European Forest Institute (EFI) headquarters in Joensuu. The topic of the research work should fit in EFI Research Programmes: (i) forest ecology and management (ii) forest products markets and socio-economics (iii) policy analysis and (iv) forest resources and information.

The selection criteria are the applicant's previous merits in research and the research plan's scientific quality and relevance to EFI's scope and activities.

The deadline for the applications:
30 April 2007

More information
www.fefr.org/grant.html

Tim Peck Young Scientist Award 2007

The Tim Peck Young Scientist award is awarded to a young scientist who has made or is making a significant contribution to research on the field of forestry and forest industries. The research can be an EFI project or part of one and should be aimed at an EFI priority. The nominee should be working at Joensuu or at Regional Project Centre or with a partner institution involved in a project together with EFI. Also, nominees working at an EFI member institution on a project relevant to EFI's mission are eligible.

The design and execution of the project should clearly show that the nominee has taken into account the target information users' needs and how to meet them and the way in which the results should be applied.

The amount of the annual award is 2,000 €.

Nominations may be made by representatives of EFI members, research colleagues or members of the EFI secretariat.

The deadline for nominations:
30 April 2007

More information
www.fefr.org/tim_peck_award.html

Ponsse Fund Grants for 2007

Forestry operations and environment related management are under continuous development. New technologies are needed to improve the cost-efficiency and sustainability impacts of forest regeneration, silvicultural treatments, wood harvesting, and biomass collection for generation of bio-energy. Mechanised and automated solutions have been developed in all work phases of forest management operations. The competitiveness and sustainability of the European forest sector can be further improved by promoting innovations in forest management. The grants of the Ponsse Fund, awarded by the Foundation for European Forest Research, aim at promoting such innovations.

The Foundation for European Forest Research welcomes applications for research scholarships, prizes, and other grants on the following topic: *Contribution of modern forest management technologies to sustainable and competitive forestry in Europe within the following research areas.*

Deadline
31 January 2007

More information
www.fefr.org/ponsse_fund.html

EU Forest Action Plan: Not Only Rhetorics

The EU Forest Action Plan is a soft instrument, but aims for forceful action. Of course, as with all soft instruments, there is always a risk of stopping at a level of rhetoric only.

Forest policy in the European Union is based on the principle of subsidiarity, meaning that the member states retain the main responsibility over national forest policies. At the European Community level, actions in the field of forest policy require voluntary and coordinated effort by the member states. The implementation of the EU Forest Action Plan, even though largely to be driven by the Commission, will also have to be supported by the commitment, active participation and involvement of national forestry authorities and relevant stakeholders, including the research community. "Only with a coherent, coordinated and proactive approach, we will be able to successfully work through the Work Programme for implementation of the EU Forest Action Plan 2007–2011," says *Hilkka Summa*, Head of Unit, Bioenergy, Biomass, Forestry and Climate Change, DG Agriculture and Rural Development. The first draft of the Work Programme was discussed in the meeting of the EU Advisory Group on Forestry and Cork on 29 November 2006.

The fear of the "rhetoric only" appears to be unfounded because some of the activities related to the key actions of the Action Plan have already started. For example, studies on the effects of globalisation on the economic viability of EU forestry (Key Action 1), on main factors influencing forest condition (Key Action 9), and development of a European Forest Information and Communication Platform (Key Action 18), were reported at the meeting by Marius Lazdinis, DG Agriculture and Rural Development.



The 18 key actions

1. Examine the effects of globalisation on the economic viability and competitiveness of EU forestry
2. Encourage research and technological development to enhance the competitiveness of the forest sector
3. Exchange and assess experiences on the valuation and marketing of non-wood forest goods and services
4. Promote the use of forest biomass for energy generation
5. Foster the cooperation between forest owners and enhance education and training in forestry
6. Facilitate EU compliance with the obligations on climate change mitigation of the UNFCCC and its Kyoto Protocol and encourage adaptation to the effects of climate change
7. Contribute towards achieving the revised Community biodiversity objectives for 2010 and beyond
8. Work towards a European Forest Monitoring System
9. Enhance the protection of EU forests
10. Encourage environmental education and information
11. Maintain and enhance the protective functions of forests
12. Explore the potential of urban and peri-urban forests
13. Strengthen the role of the Standing Forestry Committee
14. Strengthen coordination between policy areas in forest-related matters
15. Apply the open method of coordination (OMC) to national forest programmes
16. Strengthen the EU profile in international forest-related processes
17. Encourage the use of wood and other forest products from sustainably managed forests
18. Improve information exchange and communication

Research community concerns over competitiveness

For the research community the most interesting and relevant Key Action seems to be "Encourage research and technological development to enhance the competitiveness of the forest sector". Short-term actions, such as taking stock of forestry research activities and exploring the possibilities of establishing a Community forest-science forum are among possible activities under this

Key Action. A longer-term activity reaching out to 2011 is to have new research projects launched in individual research areas identified under the Forest-Based Sector Technology Platform Strategic Research Agenda.

The EU Forest Action Plan for the years 2007–2011 was adopted by the European Commission in June 2006 and supported by the member states of the European Union in the Council Conclusions produced later during the autumn.



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Mission

The purpose of the European Forest Institute is to undertake research on the pan-European level on forest policy, including its environmental aspects, on the ecology, multiple use, resources and health of European forests and on the supply of and demand for timber and other forest products and services in order to promote the conservation and sustainable management of forests in Europe.

